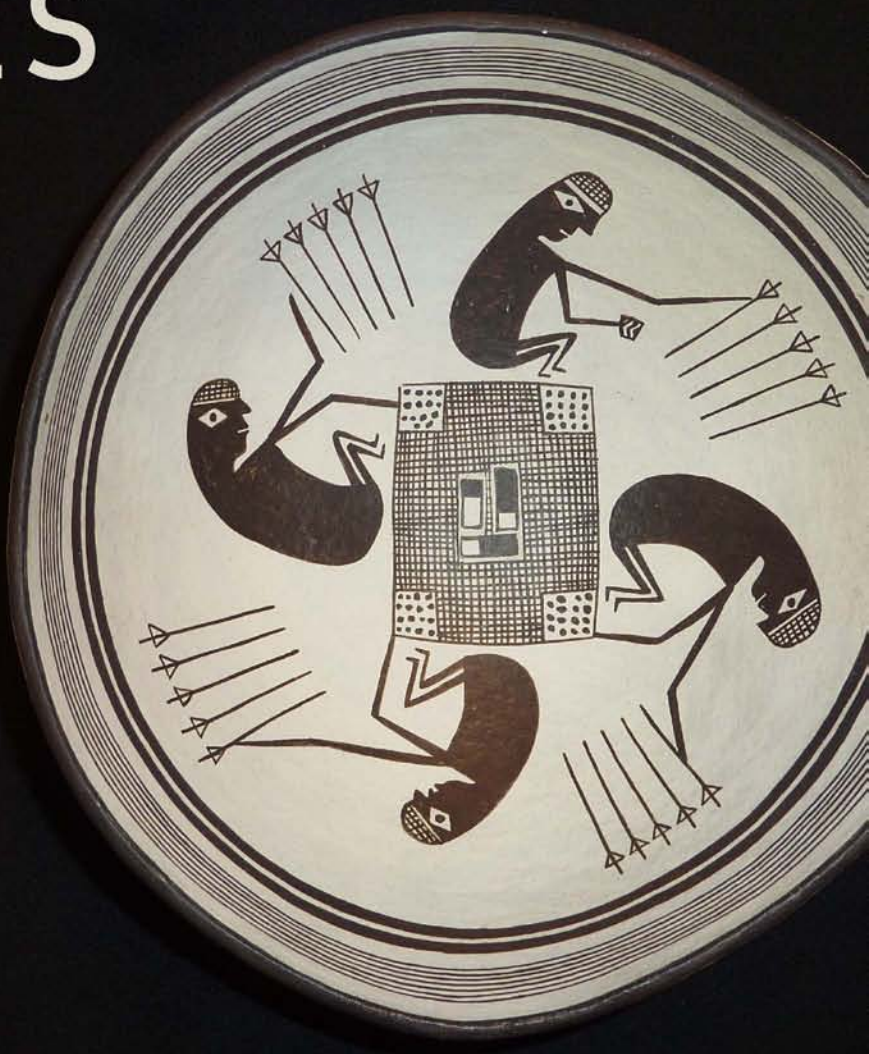


PREHISTORIC GAMES

OF NORTH
AMERICAN
INDIANS



SUBARCTIC
TO MESOAMERICA

edited by BARBARA VOORHIES

Prehistoric Games of North American Indians

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*This book is dedicated
to the late Dr. Mark Harlan,
who diligently and passionately pursued his research
with a rare critical eye and sophisticated grasp
of the analytical process.*

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Foreword

Consideration of North American Indian sports and gaming reveals the complexities of maintaining tribal cohesion, aspects of competition between individuals and groups, and in some instances the means to conflict resolution.

Many of the traditional games from the archaeological or ethnographic record continue to the present day, albeit often in modified form. Among the Seneca of New York State, for example, the contemporary playing of box lacrosse is very much alive and well. The various Iroquoian communities in New York State and Canada are in fierce lacrosse competition, and Iroquois teams have also played in Europe and Asia. The original popularity of various forms of lacrosse among a wide geographical range of tribal groups extended to the U.S. Southeast and the plains. Today, lacrosse is a major competitive game in high schools, colleges, and universities.

Gawa:sa' (snow snake) is another traditional and less well-known competitive winter game among the Seneca and other Iroquois tribal groups. The playing of the well-honored snow snake game constitutes one of the activities sanctioned in the *gai wiio* (the good word), the traditional Iroquois religion established by Ganeodiyo (Handsome Lake, ca. 1735–1815), the Seneca prophet. Dependent upon accumulation and freezing temperatures, snow is piled up in a long, straight line, sometimes a mile or more long. A log is dragged along the middle of the line to create a trough. Water might be poured along the trough to make a slippery route for the snake.

The actual snow snake, made from hardwood, is a slender, six- to seven-foot-long cylindrical shaft with a slightly larger point, the snake's head. The head is tipped with a lead cover, and the base is slightly notched for a finger

grasp. *Swagum*, a special individual concoction, is applied to the shaft to increase the slickness of the shaft and increase the speed of the snow snake. A player runs at the start of the trough and throws the snake with all of his ability into the end of the trough. As the shaft speeds down the trough, it has a wiggling motion, hence the term "snow snake."

The object of the game is to throw the snake for distance, individuals and teams competing usually with wagers. Oftentimes the bets placed on the results of individual outcomes add to the loud vocal responses by the audience. The speed of the lead-tipped snow snake poses a real potential danger, since some snakes can jump out of the trough. For this reason, observers are encouraged not to stand near the edge of the trough. Reputedly, a snow snake once shot out of a trough to pierce the side of an automobile.

A much shortened form of the traditional long snow snake is called a "mud cat," which has a shaft usually three to four feet long. Mud cats are used for practice and as an instructional implement, as well as in competition.

In the early 1960s, the U.S. Army Corps of Engineers recovered a mud cat from a Seneca grave during cemetery relocation during construction of the Kinzua Dam on the Allegheny River. It would not have been unusual to have other examples of traditional game equipment interred with athletes and aficionados. Unfortunately, the cemetery excavations were not conducted under controlled conditions or by archaeologists, resulting in the potential loss of much scientific information regarding grave goods.

The esteemed place that snow snake plays in traditional Seneca culture is exemplified by the honorific *Gawasowaneh* (Big Snow Snake) being

ceremonially conferred upon Arthur C. Parker (1881–1955), the respected anthropologist and museum director, who was of Seneca ancestry.

Dice games in various forms are played among contemporary Seneca in various forms across the Northeast. These games are thought to be of great antiquity. The two related Seneca versions, described here, continue to be played among the tribes in the wider area, with local variations between Iroquois communities.

Gus-ga-e-stah-ta (deer buttons) is played with a *ga-jih* (wooden bowl) and eight deer-horn dice as part of a traditional religious ceremonial cycle in the longhouse. Individuals play against each other. The buttons are smooth on both sides, with one side blackened and the other side left natural or white. Players kneel or sit on the floor around a blanket. One player takes up the button dice, places them in the bowl, and bounces them onto the blanket. Each succeeding player then throws the buttons on the blanket. Beans are used as counters, which ebb and flow between players with each play. Encouraging shouts accompany each effort. A somewhat elaborate counting system eventually determines the winner. Differing values of light versus dark with each attempt determines the number of beans

won by each attempt. Ultimately, the winner has acquired all of the beans.

Another variety of this dice game is played with six carved *gus-ga-ah* (peach stones) and is called the “dish game.” It too is played with a wooden bowl, and the smooth peach stones are bounced out onto the blanket. The stones have been hollowed out and burned on one side. Here, two sides representing Seneca kinship moieties compete. I have participated in the game as a representative of the Great Blue Heron Clan. Again, between 50 and 100 stones are used as counters. Scoring is similar to the deer button game. It is said that Tadadaho, one of the traditional originators and culture heroes of the Iroquois Confederacy, invented this game.

The extent of indigenous games, both archaeologically and ethnographically, presents a picture of the great variety of competitive contests in Native American societies. Importantly, while some gaming forms became extinct, often only evident in archaeological sites or as burial goods, other forms of early games continue to the present day. Gaming appears to have been an important part of human culture from very early times, providing both recreation and organized competition between individuals and groups.

— George H. J. Abrams
San Buenaventura, California
March 2016

CHAPTER 1



Introduction

BARBARA VOORHIES

Anthropological interest in games began in the early years of the discipline, when scholars thought they could be used to investigate the origins and spread of cultures (Culin 1894:355; Norbeck 1977:2). Tylor's (1879) argument about similarities between the Aztec game of *patolli* and the East Indian game of *Parcheesi* is a good example (see Chapters 12 and 15). Tylor was convinced that the correspondences were so great between these two geographically widely separated games that they necessarily must have resulted from direct contact. Interest in the diffusion of games waned as anthropologists' fascination with cultural diffusion of isolated traits became discredited in favor of considering evidence for wholesale cultural packages (Phillips 1966).

From an anthropological perspective, games are defined as a recreational activity that involves organized play, competition, two or more sides, criteria for determining the winner, and agreed-upon rules (Roberts et al. 1959:597). Based upon the classic article by Roberts et al. (1959), anthropologists generally find it useful to distinguish games whose outcomes are determined mainly by physical skill, strategy, or chance (Chick 1998:186). In fact, even earlier, Culin (1907) implicitly used these three categories in his monumental study of games of indigenous people of North America (see below). More precisely, he organized his text under the headings of "Games of Chance" and "Games of Dexterity," having

concluded that games of strategy are absent in the societies he investigated (Chick 1998:188). We recognize today that such categories should not be considered mutually exclusive, because games in which the dominant attribute places them in one category often contain attributes of another category. For example, games of physical skill, such as the traditional North American games of lacrosse and hoop-and-pole, clearly also involve strategy and sometimes chance. Likewise, in Western games of strategy, such as chess or poker, physical skill is not relevant, but chance may or may not be involved. Finally, games of chance, such as dice games, are defined as those where physical skill and strategy are absent. Accordingly, in terms of presence or absence of features, "[T]here are three defining attributes for games of chance, two for games of strategy and one for games of physical skill" (Roberts et al. 1959:598).

A widely mentioned but underappreciated fact is that games are ubiquitous in human societies (Murdock 1967), or very nearly so. Perhaps like language and religion, games are so uniquely human that it is easy to infer they meet basic human needs (Roberts et al. 1959:598). Of course, other animals engage in play, but games as defined above are uniquely human. In fact, Plato recognized play as uniquely human, at least in its institutionalized form (i.e., games; Csikszentmihalyi and Bennett 1971:57). Still, the way that games function within societies varies greatly.

In general, Roberts et al. (1959:598) stress that games have many associations cross-culturally; in some societies, they are inextricably linked to religion, whereas in others they are associated with activities such as hunting, warfare, or social hierarchies. One reason for this, of course, is that games provide models for various other cultural activities (Roberts et al. 1959:599). Many chapter authors in the present volume are concerned with how specific games function within their societies, a perspective that is particularly characteristic of American anthropology.

Some anthropologists interested in developing a general theory of games seek correspondences between the types of games favored by societies with different levels of sociocultural complexity. For example, both Roberts et al. (1959) and Chick (1998) interrogate cross-cultural data to identify significant patterns. They find that games of chance and those of physical activity are common in all types of societies, whereas games of strategy are most frequent in socially complex societies (Chick 1998: 197–98; Roberts et al. 1959:601).

Roberts et al. (1959) suggest that often members of a particular society perceive their *games of chance* as intimate interactions with the supernatural. That is, winners are perceived to have received supernatural or magical aid (Roberts et al. 1959:601), or alternatively that the game serves to prognosticate the wishes of supernatural forces (Roberts et al. 1959:599). These authors propose that games of chance are most prevalent in societies with benevolent, nonaggressive deities, presumably because game players in societies whose cosmos is replete with capricious and malicious beings lack faith that the deities will provide luck (Roberts et al. 1959:602). Chick (1998:195) was unable to test this intriguing idea using a cross-cultural sample of societies, because the relative benevolence or aggressiveness of supernatural beings was unavailable. However, it is likely that even in societies under the patronage of capricious supernatural beings, for example the Aztecs, games of chance such as the *patolli* dice game serve to divine the intentions of the supernatural powers rather than presume to influence them.

Anthropologists generally surmise that games of chance emerged from the divinatory aspect of religious ceremonials (Csikszentmihalyi and Bennett 1971:47; Culin 1894:355). Indeed, the indigenous games of North America are often played during religious ceremonies. Divination is a way “to secure guidance from the unpredictable powers that rule over the destiny of man and fill him with anxiety over the future. It is performed in order to discover the probable course of natural events and the outcome of human efforts such as war, hunt, planting and fertility” (Csikszentmihalyi and Bennett 1971:47). The Mopan and K'ekchi' Maya game of *bul*, discussed by Walden and Voorhies in Chapter 12, is an excellent example of a game of chance played in a religious context associated with planting. Csikszentmihalyi and Bennett (1971:47) also note that the Micmac (Mi'kmaq) dice game, discussed in Chapter 2 by Leonard, was played with the same ceremonial bowl used for divination. Others note similarities between the Aztec dice game of *patolli* and Aztec divination (e.g., Evans, Chapter 15).

In many societies, rituals such as fasting, sexual abstinence, or food taboos precede games of chance. These activities are exactly what Culin (1907:106), citing Charlevoix about the Huron in the mid-eighteenth century, describes for Huron activities prior to the bowl-and-dice game. In contrast, the Conestoga pre-bowl-and-dice game ritual involved singing, dancing, and burned offerings of tobacco (Culin 1907:105; citing Loskiel 1794). The Spanish chronicler Diego Durán provides a detailed description of pregame ritual activities conducted by Aztec *patolli* players, quoted by Evans in Chapter 15.

Some indigenous games of chance were protracted affairs. For example, Williamson and Cooper (Chapter 4) mention that the game of straws, played by the Iroquoian and Anishinaabeg people of the Great Lakes region, might last for several days. So, too, the Conestoga dice game, mentioned above, lasted eight days (Loskiel 1794, cited in Culin 1907:105), although it was played only during daylight. And the Tarahumara stick-dice game could last a fortnight or even a month (Lumholtz 1902:278).

Roberts et al. (1959) noted that games of *physical skill* were widespread and found in all types of societies, a finding later confirmed by Chick (1998). Moreover, these authors suggest that there might be a correlation between the number of games of skill and a society's distance from the equator, with societies in high latitudes exhibiting more games of skill than those of low latitudes (Roberts et al. 1959:604). However, the data were insufficient to rigorously test this idea.

Games of skill, such as wrestling, foot races, ball games, and archery contests, depend upon the players' physical prowess and dexterity, but as Csikszentmihalyi and Bennett (1971:52, citing Mooney 1890) remind us, among North America natives such games were often infused with religious significance. They mention the extensive food taboos and sexual abstinence required by Cherokee athletes prior to lacrosse contests (Culin 1907:575–76; Williamson and Cooper, Chapter 4) and that the hoop-and-pole game associated with ritual activities accompanied every Apache festival (Culin 1907:449–57).

Games of skill are played more by men than by women because the attributes required align more often with masculine gender roles than with feminine ones. These attributes are similar to those needed in hunting and warfare, which are mainly masculine endeavors. Some of the athletic games of traditional North American societies could be very rough, depending, of course, on various circumstances surrounding the game. Here, Mooney (1890, cited in Culin 1907:586) describes Cherokee lacrosse: "It is a very exciting game, as well as a very rough one.... Almost everything short of murder is allowable in the game, and both parties sometimes go into the contest with the deliberate purpose of crippling or otherwise disabling the best players on the opposite side. Serious accidents are common."

However, in some societies women participate in their own gender-specific games of physical skill. For example, double-ball, a women's ballgame, was played widely throughout the eastern United States and the Plains (Culin 1907: 647).¹ In this game, two balls or other similar objects are joined by a short thong and thrown using a curved stick. Here is a brief description of

the game played by Cree women as described by J. A. Mitchell and reported by Culin (1907:652):

The game is played by women only, any number, but not by the old women, as great powers of endurance are required. It is in many respects similar to lacrosse. The players are given various stations in the field and carry sticks. The goals are usually a mile or thereabouts apart.

Players gather in a circle at the beginning and the double-ball is thrown aloft from the stick of one of the leaders, when the scrimmage commences and is kept up until one side passes the ball through its opponent's goal.

The game is very interesting and develops much skill.... As with all other Indian games, this game is invariably played for stakes of some kind.

Games of strategy, like the modern backgammon and chess, appear to be models of social interaction. For this reason, some anthropologists (e.g., Chick 1998; Roberts et al. 1959:600) predict they should be present only in socially complex societies and absent in more egalitarian ones. This expectation is supported in the cross-cultural studies conducted by Roberts et al. (1959), with Chick's (1998:193) larger and more detailed study confirming the prior results of Roberts and coauthors. This shows why Culin (1907:31) failed to find evidence of games of strategy in his extensive study of games of indigenous peoples of North America, where complex socioeconomic systems are rare except in Mesoamerica, an area that Culin barely covered. Roberts et al. (1959:601) allege that the Aztec, one of the complex societies discussed in this volume (Chapters 14 and 15), did have games of strategy as predicted but fail to identify them. In contrast, Chick states that no games of strategy are reported for the Aztec (1998:202).

Csikszentmihalyi and Bennett (1971:49) take issue, however, with the idea that there are no games of strategy in the known corpus of indigenous games of North America. They recognize, of course, that games such as chess, the game

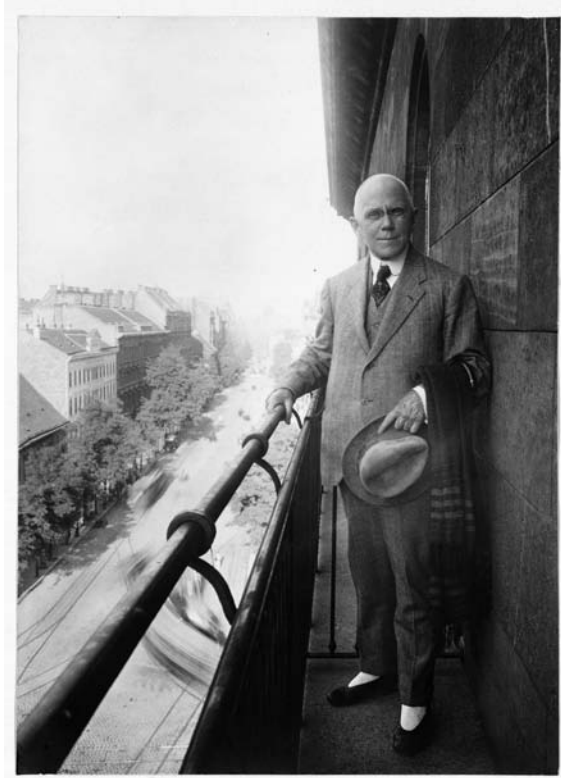


FIGURE 1.1. Stewart Culin ca. 1920. (Brooklyn Museum Archives, Culin Archival Collection.)

of strategy par excellence, have not been identified, but they note that strategizing is very much present. At issue, as discussed above, is “our way of defining games” more than an accurate reflection of reality (Csikszentmihalyi and Bennett 1971:49).

Investigators interested in studying games in traditional societies of North America with whatever particular objectives in mind are inevitably reliant on the antecedent scholarship of Stewart Culin, as I describe briefly in the following section.

Stewart Culin and the Cross-Cultural Study of Games

Serious study of indigenous games in North America is hardly imaginable as a topic of investigation without the pioneer work of Stewart Culin (1858–1929; Figure 1.1). Culin’s prodigious 1907 publication, *Games of the North American*

Indians, is an encyclopedic treatment of the subject that he compiled when traditional Native North American customs remained strong, especially in the western and southern regions of the continent. This was the height of the “museum age” (1875–1925; Culin Archival Collection), when museum curators were avidly obtaining artifacts for display and anthropology was crystallizing. Culin was active in both historical developments: he was a founding member of the American Folklore Society and the American Anthropological Association, two professional societies that remain active today.

Between the years of 1900 and 1928, Stewart Culin made almost yearly journeys to collect artifacts for museum display. Several were major expeditions to the American West when he was curator of ethnology for the Brooklyn Museum (1903–1928) and that young institution had embarked on an era of collecting antiquities. By

1911, Culin had collected more than 9,000 objects for the Brooklyn Museum, accompanied by meticulous documentation that set standards in the field. Culin attempted to fully document information about an artifact's maker, its provenience and use, and the circumstances of its purchase. He is also credited with being among the first museum curators to exhibit ethnological artifacts as art objects rather than as mere curiosities (Culin Archival Collection).

Culin had no formal training in anthropology. His earliest professional interest was in Asian-American (mainly Chinese) workers in Philadelphia, as reflected in several early articles (published in 1887) on religious ceremonies, social life, and the practice of medicine by Chinese immigrants. While employed at the University of Pennsylvania as director of the Museum of Archaeology and Paleontology (1892–1903), his interests expanded to Native American cultures: he became an experienced collector and exhibitor who organized ethnographic material for the World's Fairs in Madrid (1892) and Chicago (1893).

As assistant curator at the World's Columbian Exposition in Chicago, Culin was charged with putting together exhibits on games of the world (Culin 1894). Apparently he had already developed an intense interest in the subject because prior to the exposition he had published on Chinese dice games (1889), gambling games of Chinese in America (1891), street games of Brooklyn boys (1891), East Indian dice games and fortune telling, and Syrian games with knucklebones (1892).

Culin's interest in games from a comparative cross-cultural perspective either originated with, or was stimulated by, his encounter at the Chicago World's Fair with the ethnographer Frank H. Cushing (Culin 1907:29). Cushing, at the time a prominent anthropologist, was employed by the Bureau of American Ethnology, Smithsonian Institution. He is recognized as one of the few archaeologists of his day who sought functional explanations of ancient artifacts by comparing them to ethnographic objects (Willey and Sabloff 1980:79). A keen professional and personal friendship developed between the two

anthropologists, who optimistically resolved to publish a definitive book on traditional games of the world. Cushing would be responsible for North American games, with Culin in charge of Old World games (Culin 1907:29). The two were working on an article about arrow games when Cushing became ill. He died in 1900, leaving Culin to carry on compiling the North American information.

Before the publication of his magnum opus on North American games, Culin published articles on Chinese dice games (1889), Chinese games of dice and dominoes (1895), chess and card games (1896), American Indian games (1898, 1903), Hawaiian games (1899), Philippine games (1900), and the African game of *mancala* (1894). Culin also published a small book, called *Korean Games* (1895), comparing Korean games to those of other Asian cultures. Although after the publication of his book on North American indigenous games Culin's interests expanded to topics in the decorative arts (fashion, furniture, and costume), his fascination with games remained undiminished to the end of his professional life: among his last publications he wrote about mah-jongg (1924), Japanese swinging bat game (1925), and Japanese games of battledore and shuttlecock (1925). A full bibliography of Culin's works is available at the Culin Archival Collection, Brooklyn Museum.

Games of the North American Indians (1907) was published in an annual report of the Bureau of American Ethnology to the Secretary to the Smithsonian Institution, where it comprised the bulk of a thick volume, accompanied only by a short review of the institution's activities for the fiscal year 1902–1903, written by the chief of the Bureau, W. H. Holmes. Culin's contribution comprises 809 pages of detailed descriptions of games and game equipment, generously illustrated with 1,112 figures and 21 plates. The book focuses exclusively on adult games that employed gaming implements, which means that games without paraphernalia and children's games are excluded. Culin, a consummate and self-described museum man, systematically recorded game-related objects curated in museums—especially in North America but also

beyond. “Pretty much all my life,” he said, “I have had to do with a museum and with museums. I have visited in my professional work the principal museums of the world and with not a few I have had the privilege of intimate collaboration” (Culin 1927, Culin Archival Collection). In addition to researching museum collections for his book, Culin gathered descriptions of native North American games from travelers, explorers, missionaries, and traders. He rather immodestly introduces his book in the preface as “a classified and illustrated list of practically all the American Indian gaming implements in American and European museums, together with a more or less exhaustive summary of the entire literature of the subject” (Culin 1907:30). This herculean project was only 14 years in preparation—the time between the Chicago World’s Fair and publication—and not an entire career as might be supposed given the breath and comprehensiveness of its coverage.

Culin organized the book into the broad categories of games of chance and games of skill, having decided, as I mentioned above, that games of strategy were not found among the native peoples of the North American continent. He also included some miscellaneous games, or “minor amusements” (e.g., cat’s cradle, stilts, jackstraws, shuffleboard). Within the two broad categories, Culin organized his information hierarchically by type of game (e.g., dice games), language group (e.g., Uto-Aztecan), and then ethnic group (e.g., Pima). The original 1907 publication has been reprinted many times, and an electronic version appeared in 2012.

A Brief Introduction to This Book

My own interest in games was developmentally delayed; as a child, I was attracted to solitary types of play rather than structured games. This changed many years later as a consequence of an eureka moment, when I realized that certain archaeological features, whose purpose had eluded me for 20 years, strongly resembled gameboards used by native peoples in the Greater Southwest. This revelation came from finding analogous material—especially drawings—in Culin’s book.

Actually, the idea that the puzzling archaeological features might be game related had immediately come to mind in 1988, when I found the first enigmatic feature imprinted into a living surface (floor) deeply buried within a shellmound on the outer coast of Chiapas, Mexico (Voorhies 2004, 2013, 2015). The feature, an undisturbed open circle formed by 24 small holes, with a central rock imprint, reminded me of games of marbles. However, I quickly discounted that idea under the impression, wrongly it now seems (drawing by Christoph Weiditz in Cline [1969:74]), that there was no reason to think that ancient Mesoamericans had a game resembling marbles. At any event, further work exposed more such features on this floor and the floor immediately below it. Some features were superimposed on one another, indicating that the Chantuto people, who occupied the Chiapas coast between 7000 and 3500 years BCE, repeatedly returned to the same spot to engage in the activities that required such features. The idea that these people, who had a subsistence base combining wild resources and some farming, made repeated visits to the site was fully consistent with my prior interpretation that the shellmounds were logistical sites used for the temporary processing of a suite of aquatic resources (clams, fish, and probably shrimp).

The strong resemblance between the archaeological features, dating to the third millennium before the current era, and some of the ethnographically documented gameboards reported by Culin (1907) convinced me that the ancient Chantuto people most likely played dice games while sojourning at the shellmound sites positioned within the tidal zone of the coast. Movement through the waterways of this broad zone is ordered by tidal action, as is resource availability and, by necessity, resource procurement. The procurement activities of the Chantuto people would have been regulated by the tides and the diurnal cycle: clams are collected during low tide from lagoonal shoals and shrimp and fish are best captured at dawn and dusk. Ancient people in the past, like residents in the wetlands today, would have had plenty of down time

during which game playing would be a welcome distraction.

Which members of Chantuto society would have been present at the shellmounds? We can't say for certain, given the lack of direct evidence, but my colleague Douglas Kennett and I (Voorhies and Kennett 2011) have postulated that both women and men were probably present and engaging in separate procurement activities for most of the time the shellmounds were forming, but that over time men began to stay away, being engaged in conflicting farming-related tasks farther inland.² Yet women continued trekking to the wetlands, presumably accompanied by their young children. Since the game features are within deposits with evidence suggesting the presence of both women and men, I am unwilling to guess whether the postulated dice games were played by men, women, both sexes, or even children.

If the games involved gambling, what could the Chantuto people possibly have wagered? Of course, I have no way of knowing if gambling actually took place, but it is reasonable to assume it did, since it is so pervasively associated with dice games throughout the continent (e.g., Culin 1907). What becomes evident from cross-cultural data is that native North Americans practiced both low-stakes and high-stakes gambling depending on the bettors' gender and the circumstances of play, a theme that Yanicki develops in Chapter 7. Closely related women players betting against each other in intimate settings were apt to bet items of relatively little value or labor tasks, as Yanicki discusses. Men, who were competing in large, public settings and perhaps playing or betting with men from another, possibly antagonistic group, were prone to engage in high-stakes gambling in which the consequences of losing were potentially catastrophic. For example, the loser might forfeit his entire winter's provisions or even his family or himself (Chapter 16). There is no direct evidence about what might have been gambled at the shellmound sites, if it even occurred. Cross-culturally, just about anything could be wagered. Emanuels (1990:96) states that missionized Indians at Mission Dolores in California wagered

dried fish (citing Choris 1822), so something similar is possible for the Chantuto people.

The inference that gaming may have taken place at the Mexican shellmounds piqued my curiosity regarding what was known about games in prehistory, especially on the North American continent, where I suspected this question had not been pursued systematically, although at the time I was far from certain that such was the case. Encouraged by interest from several publishers, I went trolling on the Internet for archaeologists who might be engaged in game-related research. To my surprise, after a month or so of detective work, enough researchers had come forward that I was confident I could compile an edited book on the subject that would highlight this previously neglected subject.³ Hence, the present volume was conceived.

Exploring the Role of Games in Prehistoric Societies

Multiple lines of evidence are potentially available to scholars investigating whether particular cultural traits, such as games, were practiced in the prehistoric past. Indeed, the contributors here use a variety of approaches to support their contentions that certain games extend back from historic into prehistoric times. One potential but rare source of information comes from prehistoric eyewitness depictions of the games in action. Such depictions might be painted narrative scenes—for example, the Mimbres vessel showing a gameboard and four players (Figure 16.1)—or modeled sculptural scenes, like that of a ballgame in progress from West Mexico (Figure 1.2). In addition, some useful images date to first contact between indigenous peoples and foreign observers who left written or pictorial records of mesmerizing native games. A good example lies in the written records left by Spanish friars observing various games of the Aztecs (Evans, Chapter 15; Gutiérrez, Chapter 14). Also useful are scenes produced by contemporary artists, such as the painting on a folding screen showing acrobatic entertainments at a colonial Mexican wedding (Figure 1.3) and drawings of the game of dish published by Father Joseph Francois Lafitau (Figure 4.4).



FIGURE 1.2. Ceramic model of ballcourt with game in progress from Nayarit, Mexico, ca 200 BCE–500 CE. (Los Angeles County Museum of Art Collections, M.86.296.34.)

Another useful source of information about the traditional games of Native Americans can be gleaned from recorded observations collected after initial contact but when traditional cultural traits remained strong. Scholars of ancient games rely heavily on this line of ethnographic evidence, which includes eyewitness observations of games in action and, frequently, drawings or photographs. Due caution needs to be exercised, of course, since culture is extremely malleable, and the nature and meaning of games in historic times may not be exactly the same as they were prior to the social upheavals of culture contact. Nonetheless, ethnographic information undergirds all the chapters in this volume. To illustrate

the value of ethnographic information for archaeologists, I include a delightful photograph, dated around 1900, that conveys the excitement of a stick dice game being played by two Mojave women (Figure 1.4).

The most widely used type of evidence represented in these chapters is the survival of artifacts interpreted as game paraphernalia—for example, the worked sherds that may be dice shown in Figure 1.5.⁴ Additional examples are the charred, worked plum pits recovered from an ossuary in the Maritimes discussed by Leonard in Chapter 2 (Figure 2.2), attesting to the bowl-and-dice game, and the well-preserved implements of various sorts found in dry caves



FIGURE 1.3. Two panels of a painted folding screen showing a wedding scene from colonial Mexico, ca. 1690. The wedding guests are being entertained by *voladores*, a log juggler, and a clown. (Los Angeles County Museum of Art Collections, M.2005.54.)



FIGURE 1.4. Two Mojave women enjoying a game of stick dice. Photograph ca. 1900 by Charles C. Pierce. (C. C. Pierce Collection of Photographs, photCL Pierce 02500, the Huntington Library, San Marino, CA., used by permission.)



FIGURE 1.5. Worked potsherds that may be gaming pieces such as dice. These artifacts are from the Mazatán area in southern Chiapas, Mexico and are curated at the New World Archaeological Foundation, San Cristóbal de las Casas, Chiapas. (Photograph by Barbara Voorhies.)

of the West as reported by Janetski (Chapter 8) and Yanicki and Ives (Chapter 9), documenting an extraordinarily rich collection from the Promontory caves in Utah. Stone disks found in the Mississippi watershed provide evidence of the *chunkey* game, as discussed by Zych (Figure 5.1). Figurines are used by Harlan (Figure 11.8) to make a case for socializing play at the Preclassic period site of Chalcatzingo and by Dye (Figure 6.6) to anchor game-related myths in the prehistoric past of the Mississippi Valley.

Another potentially rich type of evidence shedding light on ancient games comes from archaeological features. These include formal architectural constructions, such as the ballcourts of the ancient Maya, which are the focus of the chapter by Stoll and Anderson (Figure 13.3), as well as more informal constructions, such as a stone circle interpreted by Seymour as a game-

board used by the Ancestral Apache (Figure 10.3). The features that I described for shellmound floors (Voorhies 2013) and incised geometric figures (Figure 12.1) found mainly on plaster floors of Classic Maya buildings and inferred by Walden and Voorhies (Chapter 12) to be dice gameboards are other examples of archaeological features that are considered to be game related.

Linguistics also provides a line of evidence used by some authors in this book to investigate ancient games. For example, Yanicki (Chapter 7) examines the names used by several regional language groups to refer to a particular river next to which a lost intertribal playing field had been located. He deduces that the local Black-foot name for the river refers to the playing field and that other language names are derivatives. Seymour (Chapter 10) mentions that in the Southwest certain names for game locations are

the places where the mobile Ancestral Apache convened on special occasions. Gutiérrez (Chapter 14) employs linguistic comparisons to drive home the idea that the concept of sport as we know it is absent in Mesoamerican cultures, where related concepts are better translated as “dance.”

Lest the reader be misled into thinking that prehistorians are able to reliably infer the presence of games in ancient societies, it is crucial to note some limitations. In addition to the well-known biases in archaeological data stemming from issues of preservation potential and sampling bias, some games lack associated material items thus precluding expectation that remains could occur in archaeological deposits. For example, the three Salishan women’s endurance games (staring, hopping from a squatting position, and breath holding) reported by Ray (1933: 160) would leave no archaeological trace. In other cases, games may employ ordinary material items that are not distinctive. For example, the hand game, a widespread guessing game described by Janetski (Chapter 8) and Yanicki and Ives (Chapter 9), employs small, usually hollow, cylindrical bones, which are used in pairs: one bone is marked and one is unmarked. The object of the gambling game is to guess which hand holds the marked or unmarked game piece (Figure 1.6). I suspect that most archaeologists would interpret the small objects used in this game as tubular beads, and it would be very difficult to prove otherwise. As another example, consider the museum collection of balls shown in Figure 1.7. Although identified as Pima kicking balls, an archaeologist would be hard pressed to tell from the artifacts alone whether they were used as kicking balls, foot-cast balls, juggling balls, or handballs. The pottery disk and gaming stones shown in Figure 1.8 would also elude confident identification as game pieces, but they are so identified in the museum collection.

This Book and Its Contents

From the onset, my goal in assembling this book has been to cover the topic as completely as possible in terms of geographic coverage, societal type, types of games (e.g., ballgames,

hand games, dice games, etc.), women’s games, men’s games, and more theoretically oriented functional issues concerning ancient gaming. Of course, this was not fully attainable, as I knew from the beginning. Nevertheless, the range of coverage is reasonably good given the limited number of chapters.

Geographically, chapter topics span the width of the continent (Figure 1.9), with contributions from the Atlantic Seaboard (Chapter 6 for the Maritimes; Chapter 3 for Florida) to the Southwest (Chapter 10), the Great Basin (Chapters 8 and 9), and the Plains/Plateau (Chapter 7). Noticeably absent, regrettably, are contributions for the Pacific coast and the Arctic. From north to south, again the span is wide, ranging from southern Canada (Chapters 2, 4, and 7) to southern Mexico (Chapters 12 and 13). This geographic span mirrors the range of societal types from hunter-gatherers at the north end of the range (Chapter 7) to kingdoms (Chapters 12 and 13) and empires (Chapters 14 and 15) at the south.

Moreover, some chapter authors focus solely on a particular type of game: types of ballgames are discussed in the chapters authored by Stauffer and Reilly for the Apalachee (Chapter 3) and Stoll and Anderson for the Maya (Chapter 13); dice games are the principal focus in chapters by Dye for the Mississippi Valley (Chapter 6), Leonard for Mi’kmaq society (Chapter 2), Seymour for the Ancestral Apache (Chapter 10), and Walden and Voorhies (Chapter 12) for the ancient Maya; racquet/stickball games are the main concern of Zych (Chapter 5) for the American Bottoms and Yanicki (Chapter 7) in the Plains/Plateau interface.

Several of the chapters focus on specific societies and their games rather than on a particular game. For example, Williamson and Cooper (Chapter 4) discuss eight separate games played by the Iroquoian and Anishinaabeg people of the Great Lakes region. These include the men’s racquetball game of lacrosse and a similar women’s game (Maiden’s Game), as well as the dish/bowl dice game, straws, snow snake, javelin, moccasin, and cup-and-pin. Janetski (Chapter 8) discusses the game-related implements that have been recovered from archaeological sites,



FIGURE 1.6. Southern Paiute playing the hand-guessing game. One player is pointing to the hand of the opponent he suspects is holding the game implement. Photograph by J. K. Hillers taken during the Powell expedition, 1871–1875. (Utah State Historical Society (14524), used by permission.)

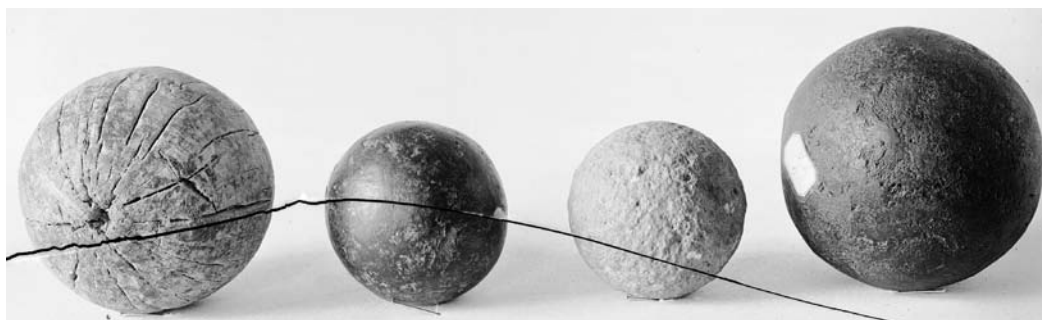


FIGURE 1.7. Kicking balls, Pima Reservation, Arizona. Collected by the Bureau of American Ethnology, 1850s–1930s. National Anthropological Archives, Smithsonian Institution. (Photograph by De Lancey W. Gill [Negative 2675 A].)



FIGURE 1.8. Pottery disk (*left*) and gaming stones, Pima Reservation, Arizona. Collected by the Bureau of American Ethnology, 1850s–1930s. National Anthropological Archives, Smithsonian Institution. (Photograph by De Lancey W. Gill [Negative 2645 D].)

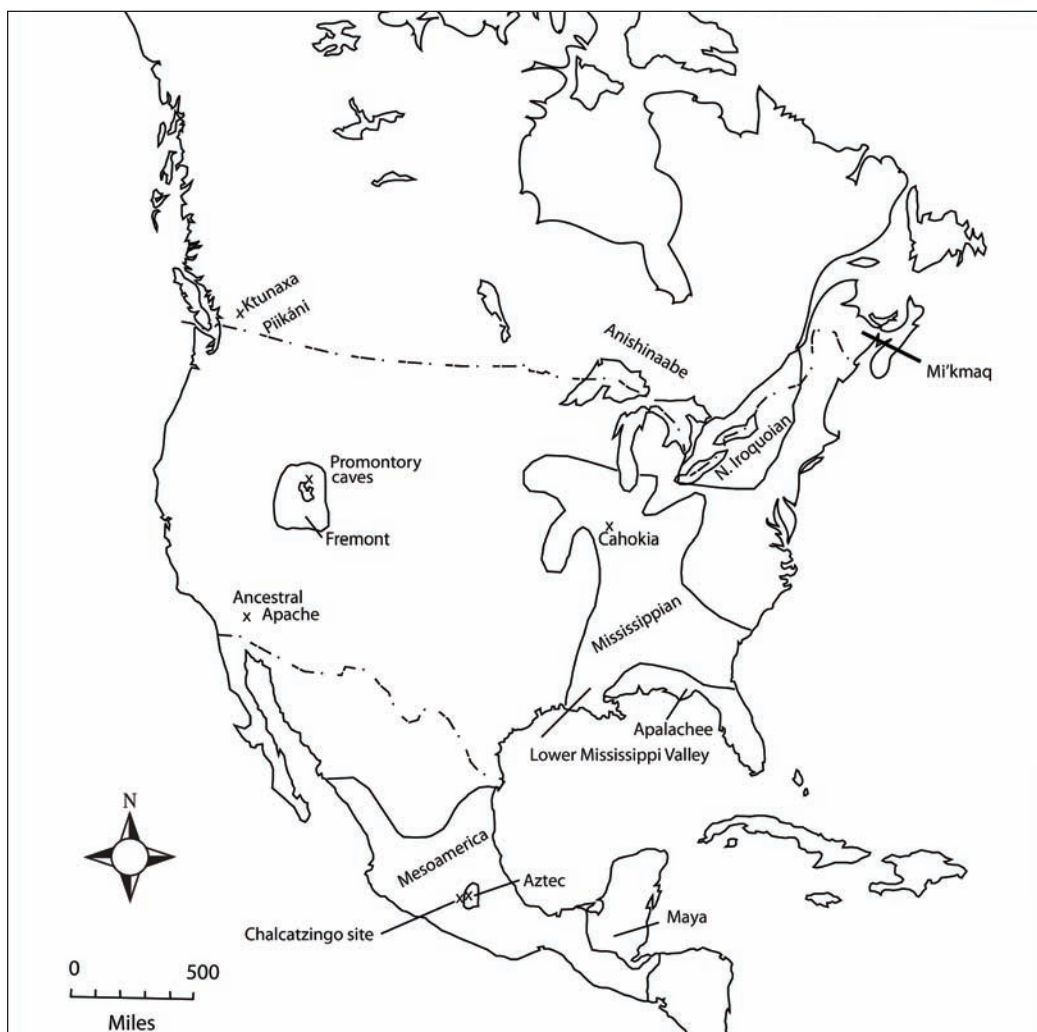


FIGURE 1.9. Map of North America showing the location of the principal indigenous societies discussed in this book. (Drawn by Barbara Voorhies.)

especially dry caves, of the Great Basin Fremont people (0–1300 CE). These include worked and decorated bones and stones, worked discs, painted sticks, stone balls, cones made of bone and antler, and bone tubes with pins. Janetski discusses the games that likely were played with these implements, including hand-guessing games, dice games, various games using stone balls, and the ring-and-pin game.

Yanicki and Ives (Chapter 9) report on the remarkably large assemblage of gaming implements that have been recovered from the dry Promontory caves just north of the Great Salt Lake in Utah. These implements, the material remains of several different games, invite a consideration of the importance of gaming in a social environment characterized by hunter-gatherers intruding into an area populated by agrarian people.

In terms of games and gender, the topic emerges in several chapters but perhaps most directly in the chapters by Dye (Chapter 6), Seymour (Chapter 10), and Leonard (Chapter 2). Overall, a pattern emerges that women's and men's games often serve rather different societal functions, which is not at all surprising given the fact that in traditional North American societies dualistic gender roles are the foundations permitting societal survival and replication. Dye's chapter showing how myth undergirds gender-linked gaming is particularly compelling.

Gambling as an accompaniment to games is touched upon by most of the volume authors. Gambling was ubiquitous across the continent at contact and remains singularly important today. Thus, it is logical to assume it was a very ancient activity among North American natives. As I mentioned above, identifying gambling in prehistoric times is exceedingly difficult given the scarcity of direct evidence. Indirect evidence is gleaned from myth, language, and ethnohistoric reports. It is the main focus in two chapters of the present volume. Evans (Chapter 15) discusses the pervasive role of gambling in Aztec society, which is exceptionally well described in the ethnohistoric literature about a dice game and a ballgame. The chapter by Cameron and Johansson (Chapter 16) focuses on the utmost

dire consequences in North American indigenous societies: high-stakes gambling leading to slavery. They also rely on ethnohistoric sources and find that slavery was not an uncommon outcome but that it occurred mainly in specific social situations—namely, in male, intergroup gambling contests.

Finally, some of the book's authors tackle the question “what good are games?” or “what roles do games serve for people both as individuals and as embedded members of particular societies?” This question has been approached from multiple perspectives. A useful comprehensive overview of some of these approaches is found in Sutton-Smith's (1997) *The Ambiguity of Play*. Sutton-Smith, a psychologist whose career-long professional interest focused on the nature of play, organizes the literature on play theory according to predominant discourses (rhetorics, in his terms) that are proposed about the meaning of play. He argues that these different narratives have unique histories, are applied to specific play forms, and align with particular academic disciplines.

Sutton-Smith's concern is with the concept of play, which is much broader than the concepts of games and amusements that are the focus of the present volume. Nevertheless, since games and amusements are particular forms of play, much of the narratives about play as a general topic apply to our topics. However, since in this book the authors are concerned with non-Western, preindustrial societies, some of the narratives about the forms of play in modern Western societies lack relevance here.

One narrative about play (games) is that it is a waste of time, associated with idleness, triviality, and frivolity and therefore unworthy of serious study. This narrative, which Sutton-Smith labels *frivolity*, has its roots in the Protestant work ethic in which the valued activity of work is contrasted with the devalued activity of play. According to Sutton-Smith (1997:201ff) this long-standing view experienced a major impetus from the development of the urban industrial separation of work time and playtime, thus counterposing the two concepts. Clearly, social scientists and others reject this notion

wholesale in favor of play as a fully legitimate object of study.

Still, in both popular thought and academic literature, some forms of play (games) are devalued compared with others. For example, in modern Western culture, games of chance and associated gambling (e.g., roulette, cock fighting, lotteries) have until recently been associated with the underclass and thus devalued by the upper class and academics. However, chance and gambling as play forms are nearly universal (Sutton-Smith 1997:67), have a priority over other forms of play in many cultures (Sutton-Smith 1997:205), and recently have moved to the center of the entertainment culture in American society.

This kind of denigration of certain play forms is tied to narratives of power about play, which I will address shortly. But we can see that in some instances the games of less powerful groups are implicitly excluded and sometimes ridiculed, whereas games of the dominant group are idealized. In modern societies, this can be seen in narratives about how the games of girls or minorities are given diminished status, although at least in academic and educational circles this is beginning to change (Sutton-Smith 1997:151, 206).

Shifting the focus away from the still prevalent Western view of play as trivial, we can see that in examples from other societies *folly* can have a more central place (Sutton-Smith 1997: 210). Here, Sutton-Smith is talking especially about folk festivals as rites of inversion where cultural norms are upended. Anthropologists have long been fascinated with this phenomenon, which is so prevalent in many traditional festivals (e.g., Bricker 1973; Parsons and Beals 1934; Steward 1931). These are the comedians, clowns, trickster figures, and cross-dressers so common in folk festivals today. Ritual humor is quite common in indigenous societies across North America (Bricker 1973:167), where according to Steward (1931:189), the themes tend to ridicule public officials, parody important ceremonies, and mock foreigners. Female impersonators are also quite common (Bricker 1973: 171–72) in festive occasions (Figure 1.10).



FIGURE 1.10. Anthropologist Timothy J. Knab dancing with a female impersonator at a Mayo festival, Tehuaco, Sinaloa, Mexico. (Photograph by Barbara Voorhies.)

In the present volume, Gutiérrez comes closest to engaging this topic in his survey of performers/entertainers in ancient Mesoamerican societies (Chapter 14). Gutiérrez shows how acrobats, contortionists, and other performers were present in several different societies, including that of the Aztecs, where they mesmerized the chroniclers. However, his analysis is hampered by the apparent lack of context in the ethnohistorical literature upon which he is necessarily reliant.

Sutton-Smith includes a second set of narratives about play under the rubric of *fate*. Various forms of this view include that the gods are at

play and we are creatures of the play of fortune and luck, as exemplified by games of chance (Sutton-Smith 1997:53). Games of chance—in particular, dice games—are well represented in this volume and include Leonard's discussion of the Maritime plumstone dice game (Chapter 2), Seymour's Apache dice game (Chapter 10), and the Aztec *patolli* game discussed by Walden and Voorhies (Chapter 12) and Evans (Chapter 15).

This approach has particular salience for societies where the premises of play are embedded in and integral to the organization of the cosmos. Although several authors touch on the topic of games in societal myths, Dye (Chapter 6), discussing dice games of the Lower Mississippi Valley, makes the strongest case for the intimate connection in some traditional societies between gaming and the supernatural realm and why it is so imperative for gamesters in the living world to honor game players of the supernatural realm. Although this perspective is less relevant to most games in the nonmythic times of Western secular societies, the recent rise in popularity of games of chance in the United States is a clear exception.

In many games of chance, there is an understanding that the winner is more favored by fortune than the loser (Sutton-Smith 1997:65), but it seems that this is not always the case even in games of chance. The present-day dice game of *bul*, described by Walden and Voorhies in Chapter 12, is reportedly about knowing fate rather than attempting to control or influence it.

A third set of narratives promoted by play theorists concerns *power*. The general idea is that play (games) has to do with some kind of contest and reflects a struggle for superiority between two groups (Sutton-Smith 1997:75). These discourses are focused primarily on contestive play, which is often viewed as uplifting and civilizing. Thus, play expressions can be viewed as either uncivilized, irrational expressions of power or civilized and rational. Most of these theories pertain to contests involving physical skill, intellectual strategy, or both.

Contestive physical games are generally restricted to males and celebrate certain masculine traits prioritized in some societies.⁵ The con-

tests involve males seeking to gain superiority over other males, but in societies where women are excluded from these games, the hegemony of men over women is implicit (Sutton-Smith 1997:87).

One form of the power narrative is the view promoted by Turner (1969) that play's social function is to reduce conflict. The idea is that contestive games may substitute for warfare or other means of conflict resolution. This is the perspective embraced by the chapter authors who focus on the brutal physical games such as *chunkey*, discussed by Zych (Chapter 5), and lacrosse, discussed by Williamson and Cooper (Chapter 4).

Another form of this rhetoric of power concerns the situation when a more powerful group somehow induces a subordinate group to accept its forms of play and the underlying ideological system. As Sutton-Smith (1997:96) points out, the "history of play in the twentieth century is largely the history of colonial or subordinated people shedding their own folklife for imitations of play identity of their conquerors." As an example, he mentions the case of missionized Maori children in New Zealand who continued to play only those traditional games that resembled those of the Europeans.

This brings us to another of Sutton-Smith's rhetorics about the concept of play, which he labels *identity*. These are views most often applied to "parades, celebrations, carnivals and the use of play as sanctions for community." They "focus on the use of play forms as forms of bonding, including the exhibition and validation or parody of membership and traditions in a community" (Sutton-Smith 1997:91). Of concern here are those playful activities that promote cultural integration. Sutton-Smith goes on to note that the discourses about power and identity in play theory tend to be difficult to separate analytically, because the purpose of most contests is to prove the superiority of one's own identity, community, and traditions. But in general, contestive games are theorized as expressions of power, whereas festivals, parades, and other mass spectacles are held as expressions of traditional identity and community (Sutton-Smith 1997:91–92).

It is also the case in American and other societies that girls' play is more about inclusion and cooperation than the aggressive power tactics typical of boys (Sutton-Smith 1997:103). Sutton-Smith (1997:104) speculates that it is more likely that in small-group societies, where cooperation is essential for survival, cooperative games are more likely than competitive games.

Several chapter authors highlight the importance of games among present-day First Nations people in maintaining cultural identities in the face of overwhelming cultural pressures from the dominant society. Stoll and Anderson in Chapter 13 subscribe to this perspective about communal identity and bonding. They suggest that within two ancient Mesoamerican societies (Formative period Yucatec Maya and Postclassic period Oaxaca) the ballgames of the "folk," as materialized archaeologically by ballcourt constructions, had a very different social function compared to the ball-playing spectacles held by elites at major centers. The authors emphasize the unifying nature of these games but also are cognizant of the divisive attributes inherent in contestive play, an inherent paradox recognized by play theorists.

The four kinds of narratives about play (games) summarized so far—frivolity, fate, power, and identity—are concerned with understanding communal play. Three of the chapter authors take a somewhat different tack and address the experience of players. Harlan (Chapter 11) takes the perspective that object play at Chalcatzingo is *imaginative*, another rhetoric that Sutton-Smith identifies as a major theme in play scholarship. This perspective, historically rooted in romanticism, presents play (games) as a way of thinking about culture and as a text to be interpreted (Geertz 1973b; Sutton-Smith 1997:128). The perspective is applied principally to children's play: "all the children of the world who are pretending and making believe" (Sutton-Smith 1997:129). Harlan proposes that the figurines at Chalcatzingo are cultural stimuli promoting children's fantasy and active theatric play about their social world.

Evans (Chapter 15), in turn, takes the approach of evolutionary psychology to consider

how games and gambling reflect fundamental aspects of our species' unique cerebral makeup. Yanicki (Chapter 7) also discusses the biological basis for games and gambling and the physiological roots of gambling addiction. Accordingly, these two authors are less concerned with the historical and anthropological contexts of communal play and more on the subjective experience of players. Thus, their perspectives fall within Sutton-Smith's rhetorics of *self*. These are the interpretations that focus on the player's subjective experience, for example by stressing that play is good because it is "fun" (Sutton-Smith 1997:174). Several chapter authors refer to this aspect of gameplay. It is important to recognize that in some traditional societies the motivation for individual gameplay is culturally proscribed, not individually driven, and may or may not be fun. As Sutton-Smith (1997:175) notes, the discourses about the imaginary and the self "are relatively Western, relatively modern, and relatively utopian discourses about individualized forms of play."

In summary, the chapter authors are concerned principally with finding tangible evidence of ancient games in the prehistoric record of North America. However, the authors also strive to see how games and gaming fit into the social logic of ancient societies. Games may at times be fun, but for anthropological archaeologists there is much more to investigate, such as the influence of games on the economy of a society (fostering either economic equality or inequality), promoting alternatively cooperation or competition, assuring the smooth functioning of the cosmos, or reinforcing gender roles. The particular role of games within societies varies cross-culturally, and as societies change, so too will the role of games, since societies and their component institutions are infinitely labile. Ancient indigenous North American games are as relevant today as ever, which Abrams illustrates in the Foreword. Many ancient games discussed in this volume are still avidly played, and some have an important role as identity markers for First Nations people, who use games as opportunities to celebrate their heritage.

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I am greatly indebted to the staff of the University of Utah Press who worked so diligently and professionally to shepherd this book to publication. I give a special call-out to Rebecca (Reba) Rauch, acquisitions editor, for her encouragement and assistance in the early stages of publication. I also acknowledge with grateful awe the exceptional dedication expended by Jeff Grathwohl, copyeditor par excellence. Finally, I thank my colleagues, the chapter authors, for their responsiveness to editorial suggestions and prompt attention to the various deadlines along the way.

Notes

1. In northern California, only men play double-ball (Culin 1907:647).
2. This interpretation is based upon evidence that bones of big fish (high trophic-level species) and small fish (low trophic fish) are out of phase in

the deposits and must have been fished with different techniques. We assume that men caught the big fish and women the little fish based on an ethnographic analogy. Bones of fish of both sizes are present in the lower deposits, whereas in the upper deposits, bones of big fish are missing but bones of the little fish are abundantly present.

3. Most authors in the book participated in a symposium on prehistoric games at the 80th Annual Meeting of the Society for American Archaeology in San Francisco in April 2015.
4. I examined 133 ceramic disks from the Mazatán area in coastal Chiapas, Mexico within the size range of 1.65–5.99 cm in diameter, which are curated at the New World Archaeological Foundation, San Cristóbal de las Casas, Mexico. Eighty-two percent were marked on one side only, as would be expected of gaming pieces.
5. The women's game of double-ball (Maiden's Game) is an example of a contestive game played exclusively by women. Williamson and Cooper (Chapter 4) note that like lacrosse, this was a rough game, played to assist the healing of a sick person, and was an exciting spectacle for observers.

CHAPTER 2



Why *Waltes* Was a Woman's Game

KEVIN LEONARD

In 1923, when Elsie Clews Parsons (1926:463) recorded Mi'kmaw folktales on Cape Breton Island, Nova Scotia (Figure 2.1), she observed that the normally reserved women became very vocal and animated while playing *waltes*, the Mi'kmaw version of the dice-and-bowl game. At midsummer gatherings of the bands, there always seemed to be an afternoon or evening game of *waltes* underway in one wigwam or another. It was their favorite pastime. Women owned the game sets, and *waltes* was regarded as a woman's game, despite the fact that it was played by people of all ages and both sexes.

To understand why *waltes* was a woman's game, I examine women's role in the evolution of Mi'kmaw culture. Cooperation through sexual division of labor was crucial to the survival of the Mi'kmaw, and one of the many responsibilities that fell to women was gathering, tending, and cultivating plants—except tobacco, which was cultivated by men (Lescarbot 1914 [1609], III:252). I examine the possibility that the cultivation of Canada plum (*Prunus nigra* Ait.—hereafter without the author epithet) was introduced to the Mi'kmaw domain on Canada's Atlantic coast in conjunction with the women's bowl game. This tree is a source of plum pits, from which *waltes* dice were formerly made. Six charred plum pits, rounded like dice (Figure 2.2), and found together at the CbDd-1 archaeological site, address women's involvement in the introduction of *waltes* to Mi'kmaw society by at least

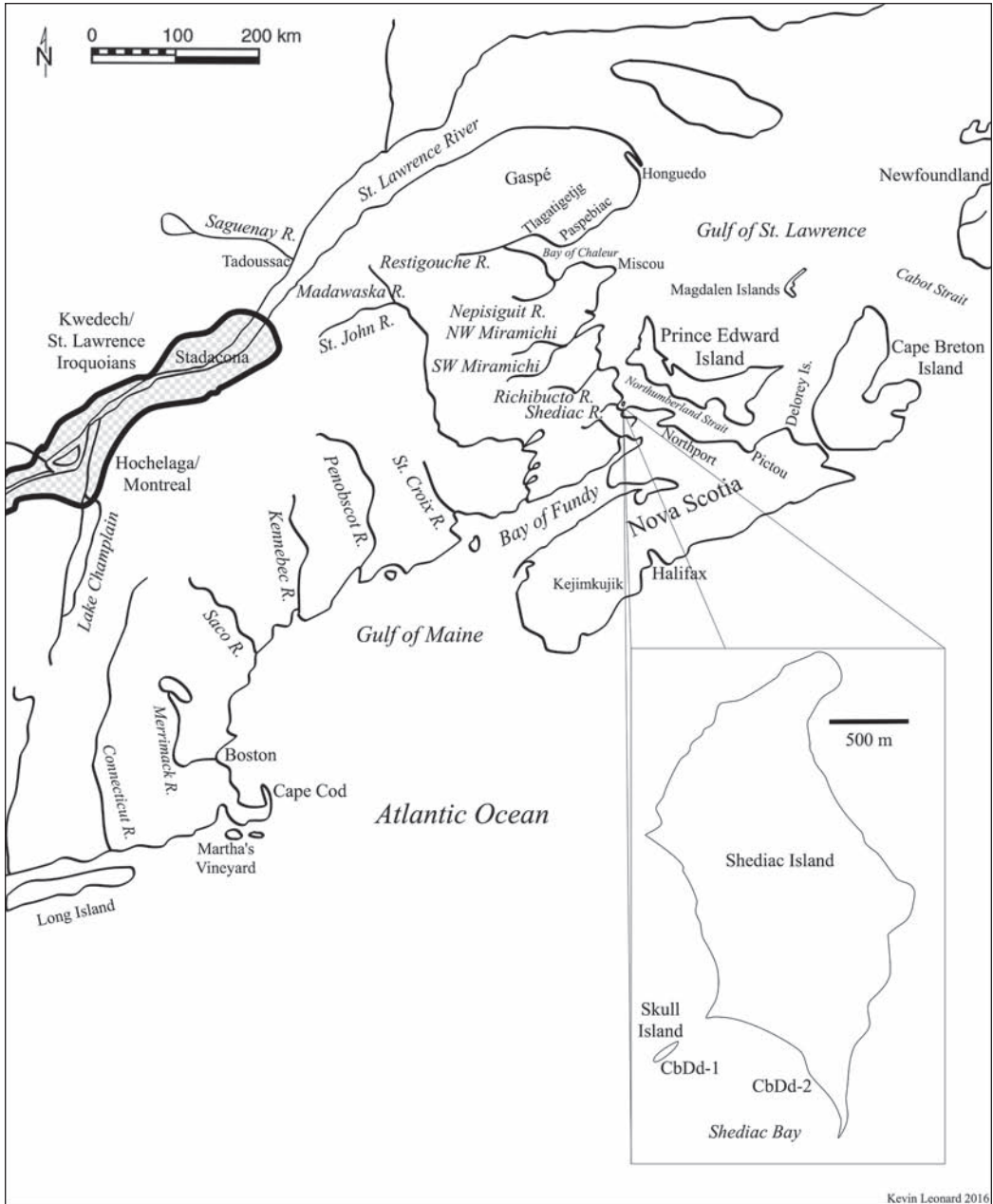
AD 1320 \pm 54 (CalPal_2007_HULU), coinciding with the Late Woodland period (Table.2.1).¹

Women's thoughts and actions that animated the Mi'kmaw cultural system are central to this chapter. A review of the archaeological record provides information on social organization, emphasizing gender roles. I discuss women's relationship with plants, games, copper, and pottery. I evaluate possible drivers of female centrifugal movement in the Northeast. This chapter highlights how gaming, as a fundamental component of women's lives, influenced cultural evolution in the Northeast.

Mi'kmaw Dice Games in Historical Context

Wapnaqn is known as the men's dice game, but no one plays it anymore. *Woltestakun*, or *waltes* (the name of the wooden bowl used to toss and catch the six dice), is the women's game, and it remains popular in Mi'kmaw communities. While the women's game, and its meaning for Mi'kmaq culture, is my focus, examining the men's game is important because *wapnaqn* may have been part of Mi'kmaw culture before *waltes* was introduced.

The meaning of the word *wapnaqn*, “the white dice game,” may refer to the color of the dice, as traditionally they are made from walrus ivory (Hager 1895; Speck 1922). The only surviving *wapnaqn* dice are a set of four collected by Frank Speck for the Penn Museum and another



Kevin Leonard 2016

FIGURE 2.1. Location of sites mentioned in Chapter 2. (Drawn by Kevin Leonard.)

set of four purchased by Harry Piers for the Nova Scotia Museum (NSM; Figure 2.3). The NSM dice have the uniform grain and white color of ivory, while those at Penn have small fracture lines, like sections of mammalian long bones.

In shape, *wapnaqn* dice are plano-convex,

with the flat side marked and the rounded side plain. During play, they are held in the hand, marked sides up, and then cast upon a padded surface with a flick of the wrist. Two sources describe the game, but they differ. Based on 1912 fieldwork, Speck (1922:80) describes “the

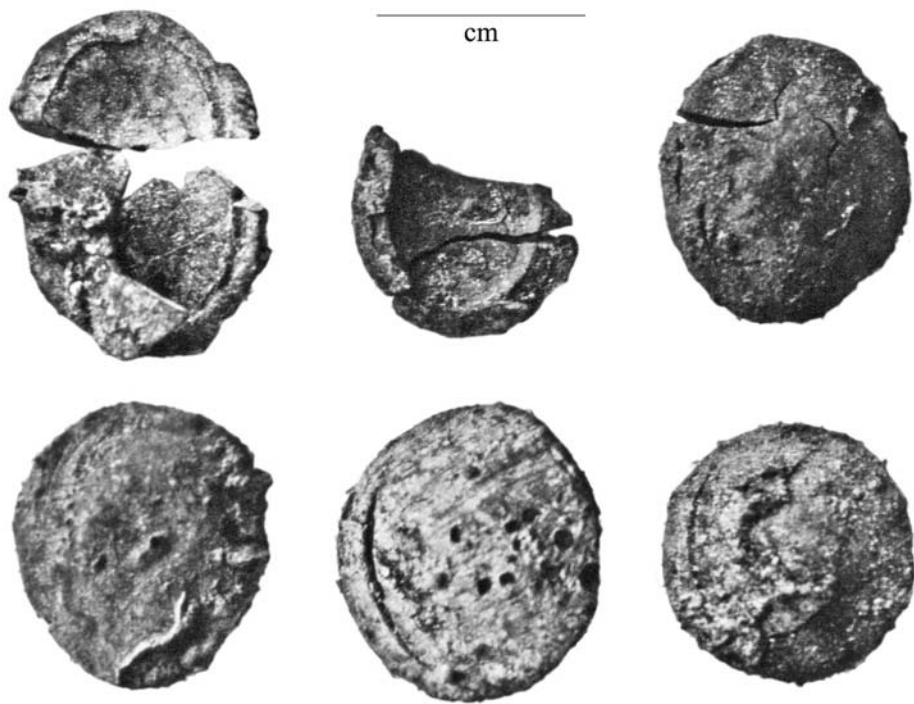


FIGURE 2.2. Charred plum pits, modified for use as dice, CbDd-1 site, Skull Island, New Brunswick. (Photograph by Kevin Leonard.)

TABLE 2.1. Major time periods of the Maritimes with influential events.

Time period	Date range	Cause/Correlation
Historic	AD 1600–1867	Canadian Confederation
Protohistoric	AD 1500–1600	Western European fishers and explorers
Late Woodland	AD 900–1500	Little Ice Age, AD 1250–ca. 1850 Medieval Warm Period, AD 900–1250
Middle Woodland	2000 cal BP–AD 900	Frequent flooding
Early Woodland	2900–2000 cal BP	Wetter
Late Archaic	4200–2900 cal BP	Late Holocene cooling
Middle Archaic	8200–4200 cal BP	Laurentide Ice Sheet collapse, then mid-Holocene Warming
Early Archaic	11,200–8200 cal BP	Glacial Lake Madawaska drainage
Late Paleoindian	11,600–11,200 cal BP	Rapid warming
Early Paleoindian	12,500–11,600 cal BP	Younger Dryas

manner in which it is played in Cape Breton.” Stansbury Hager provided Culin (1907:77) with a description of *wapnaqn* that includes only six dice, in contrast to the eight in Speck’s report. However, both sources agree that any number of players could participate, and anything could

be wagered on the outcome. Getting all the dice to land with the unmarked side up is the goal; this fortuitous throw is called “turtle eggs.” In Mi’kmaw mythology, Turtle, a companion of the culture hero Glooscap, invented and owned *wapnaqn* (Hager, in Culin 1907:76).

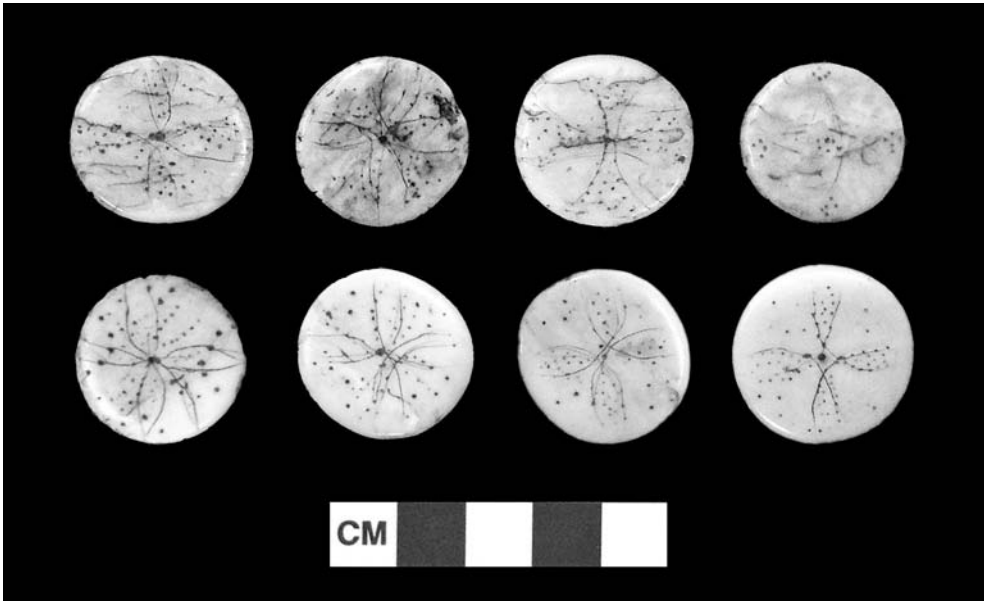


FIGURE 2.3 Dice used for Mi'kmaw men's dice game *wapnaqn*. (Photograph courtesy of the Ethnology Collection, Nova Scotia Museum.)

The *wapnaqn* game was played primarily, if not exclusively, by males. Ivory was obtained from hunting sea mammals, a masculine activity with roots in the Early Archaic period (Table 2.1; Tuck and McGhee 1976). Men may have made dice from the object of their pursuit as a form of sympathetic magic to improve the odds of hunting success. In *wapnaqn*, no wooden bowl was required, just a hide onto which the dice are cast. In fact, the large deciduous trees from which *waltes* bowls are carved were absent in the Maritimes during the Early Archaic (T. Anderson 1980). The relative portability of *wapnaqn* meant it could be played at a hunting camp, whereas women's *waltes* requires a wooden platter the size of a very large dinner plate, making it more suited to play at a base camp, where women kept the home fires burning.

The possibility that the men's game, *wapnaqn*, may be very ancient is not proven archaeologically, however. At Maritime Archaic Tradition sites in Newfoundland and Labrador where bone is well preserved, nothing resembling a *wapnaqn* die has been found (Tuck 1976; Tuck and McGhee 1976). Nevertheless, Howley (2000 [1915]:340) illustrates two “small and

well-formed discs of ivory” that are like *wapnaqn* dice except that both sides appear unmarked. Although presented as Beothuck material culture, these ivory discs (Howley 2000 [1915]: Plate XXIV, no. 50) are of unknown provenience. However, some artifacts in the same plate are from Port aux Choix, a multicomponent site with excellent preservation conditions (Tuck 1976), so the discs could be from any Precontact time period, including the Archaic.

Wapnaqn is only known from the Historic period, when it was falling into disuse. No one knows why it was abandoned, but it seems to have happened after contact. The Little Ice Age (ca. AD 1250–1850) spurred European demand for furs and felt, and the arrival of European fishing fleets in the early 1500s provided the Mi'kmaw with a new market for one of their commodities. The new emphasis on men's solitary life tending traplines likely disrupted hunting camp social gatherings where *wapnaqn* filled the time, leading to its abandonment.

Although unambiguously considered a men's game, no one is sure whether *wapnaqn* was played exclusively by men or if women could also play. DeBoer (2001:226) finds that 7 percent

of dice games surveyed by Culin (1907) were played by men only, 12 percent by both sexes, and 81 percent by women only, so *wapnaqn* is in the minority, even if both sexes played.

Curiously, early seventeenth-century accounts of Huron dice games mirror the Mi'kmaw arrangements. Sources, including Nicolas Perrot and Gabriel Sagard, make the same observation, summed up by Bacqueville de la Potherie: "The women sometimes play at platter but their ordinary game is to throw fruit stones with their hands, as one plays with dice" (Culin 1907:109). Later, he says that this *wapnaqn*-like game is the women's only game. This reversal of the type of dice game played by each gender may be attributable to the differing subsistence modes between the Huron and Mi'kmaw. As dedicated agriculturalists, Huron women spent considerable time in their vast fields from spring until fall, and carrying a platter to toss the dice in was impractical. The same applies to male hunting parties in nonagricultural societies, such as the Mi'kmaw, as I noted. Tossing dice, either plum pits or ivory discs, on a blanket is a more convenient arrangement where players are mobile. Seen in this light, it is the subsistence strategy that determines which gender plays which game.

Whether six or eight dice are thrown and whatever they were made from, *wapnaqn* dice are two-sided and are tossed on a blanket or hide. Another constant, and possibly a human universal, is the gestures and incantations made by players and bettors on each throw, beseeching the powers that be for good luck in the game's outcome.

Wapnaqn's near invisibility in the archaeological record is not proof of its absence, however, since the only potential archaeological signature for the game would be the dice made of ivory or bone. However, both materials are easily eroded by the acidic soils of the Northeast and therefore are not expected to preserve except under exceptional conditions.

Accordingly, no proof exists that *wapnaqn* predates the bowl game. All that can be said with certainty is that it requires less equipment (i.e., no bowl) and can be played by more than two people, making it more serviceable for certain

situations than the bowl game. This Mi'kmaw-Huron role reversal in dice games illustrates the pitfalls in ascribing the presence of archaeological dice to game play of one gender or another.

Unlike *wapnaqn*, the Mi'kmaw women's dice game is the subject of renewed interest in Indigenous communities. In 2016, new *waltes* sets are being made, and elders are teaching children how to play the game. In this chapter, I refer to *waltes* in the past tense, because I am focused on its past, but it is worth noting, before the following description, that *waltes* continues to be a vital part of Mi'kmaw culture.

Considering how many cultural practices were lost to acculturation, it is remarkable that a complicated game like *waltes* was not abandoned. From the subtle tactics of the seventeenth-century missionaries to undermine the power of Mi'kmaw shamans to the brutality of forced assimilation in the residential schools in the early twentieth century, *waltes* has withstood enormous pressure to disappear. Its survival may reflect the relative importance of games to cultural identity.

Two people play *waltes* at a time. The game is fast paced, so a third party often keeps score with tally sticks to avoid lulls in the action (Caplan 1973). The game is named after the bowl (Figure 2.4), actually a shallow platter carved out of rock maple or a maple burl, thicker at the base than near the edges to withstand the pounding that it must absorb during play. Six two-sided, plano-convex dice, with markings etched on the flat side, are used. Dice collected in the nineteenth and twentieth centuries are made from bones of ungulates (moose, caribou, and cattle), walrus ivory, and even coat buttons. Dice were kept in a drawstring bag of soft leather or velvet. Score was kept with 51 plain counting sticks, along with four elaborate sticks representing three women and a man. Wagering was part of every game, with bets ranging from responsibility for household chores to the entire household itself, including the wife, when men bet against men (Lescarbot 1914 [1609] III:197). As observed by DeBoer (2001:233) and repeated elsewhere in this volume, there is an inverse relation between the affinity of opponents and the value of goods

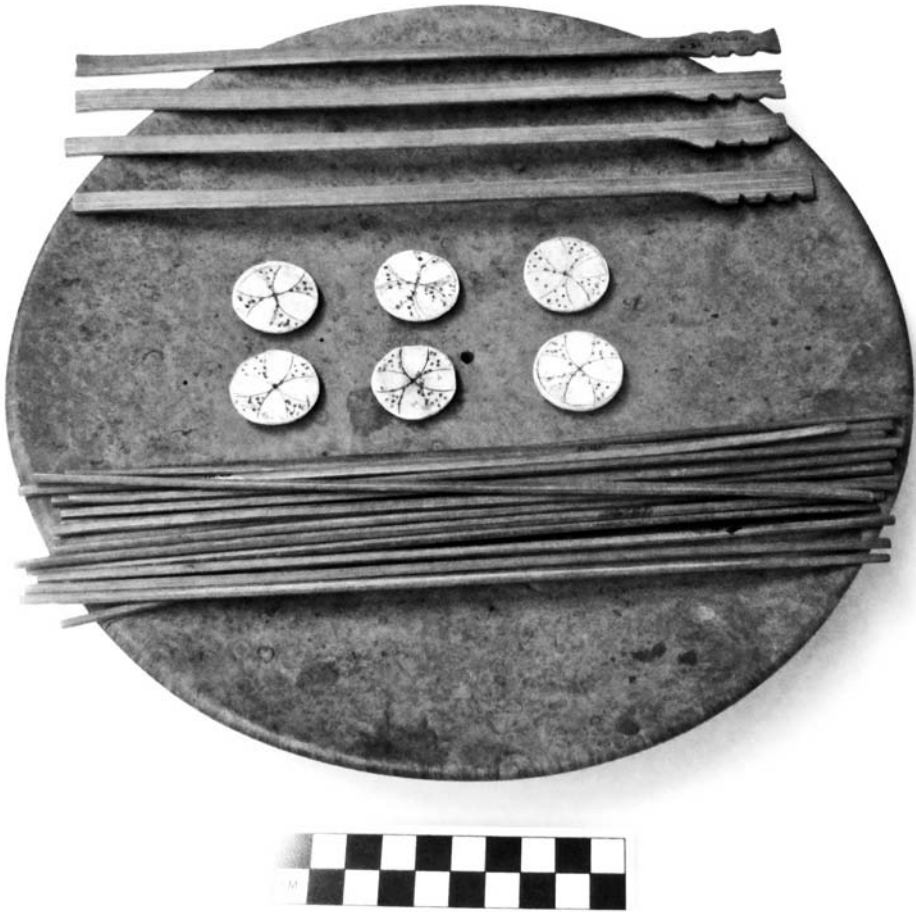


FIGURE 2.4 *Waltes* set at Nova Scotia Museum (accession #285 01.36). (Photograph by Kevin Leonard.)

wagered, so women who lost in a *waltes* wager probably had to move to distant locations.

Waltes plays a key role in a Mi'kmaq myth told to a Recollet missionary, Chr stien LeClerc (1910 [1691]), in northeastern New Brunswick. A grieving father voyages to the Land of the Souls where he encounters a fearsome personage: Papkootparout, Keeper of the Souls. Papkootparout does not appear in the Glooscap culture-hero myths, although Bernard Hoffman (1955:404–08) cites parallel characters in Huron and Algonquian mythology that hints he may be Glooscap's evil brother. In the legend, Papkootparut plays *waltes* against the Mi'kmaq voyager, losing to him maize, tobacco, and “certain fruit...the food of these souls” (LeClerc 1910 [1691]:211). After the father returns to his people, he tells them

that Papkootparout, magnanimous in defeat, “commanded them to plant these in Gaspesia, assuring them that the nation would receive therefrom inconceivable advantage.” Elsewhere (Leonard and Tenass 2011), I offer an exegesis whereby the “certain fruit” may have been the fruit of the Canada plum.

Likewise, observations of a missionary to Cape Breton from AD 1736 to 1749, Antoine Mailard, show that *waltes* was deeply embedded in Mi'kmaq spirituality. He begins a letter by stating that a bowl filled with water, used as a divinatory device in a shamanic ceremony, allowed Mi'kmaq shamans to inveigle their way into the minds of the populace. Nineteenth- and early twentieth-century accounts of the *waltes* bowl being used as a vessel to hold water—its appear-

ance in the morning being used as an oracle—suggests that the bowl, or *orakin* (Maillard 1758: 36–42), was indeed a *waltes* bowl (Hager 1895; B. Hoffman 1955:457).

Based on these brief descriptions, it is evident that while the dice games were a critical part of Mi'kmaw culture, they do not leave much of an imprint on the archaeological record. No permanent features are associated with them, nor is the use of fire associated with the game. All the game implements are organic, not lithic or ceramic, so preservation is poor in most soil conditions. Alkaline matrices prevent acidic dissolution of bone dice or counting sticks, but my review of literature on shell middens in the Maine–Maritimes region shows no dice have been found (Leonard 1996). In any case, valued possessions like dice would not be discarded intentionally in a trash midden, at least under normal circumstances.

A more likely resting place for dice is in the grave of their owner. The same may be said of the wooden bowl and counting sticks. Charring in a funeral pyre or crematory fire can lead to preservation of organic material. If heated above 800°C, bone is calcined, enhancing preservation in soil (Ubelaker 1989:36). Likewise, contact with copper artifacts inhibits bacterial growth, allowing preservation of organic substances. In the Maritimes, all known Woodland period burials contain copper artifacts. Many have associated funeral pyres, and one is a crematory ossuary (Leonard 1996). Consequently, opportunities exist regionally for *waltes* dice, bowls, and counting sticks to be preserved in burial sites. Before turning to the scanty evidence of the Woodland period, an examination of the more numerous finds from the more recent Protohistoric period is in order.

Plum-Pit Dice in the Protohistoric Period

In the Maritimes, the term *Protohistoric period* is synonymous with the sixteenth century (Table 2.1). The Historic period begins in 1603, with the first voyage of Samuel de Champlain (Biggar 1922), after which the French colonizers kept extensive records.

A literature review conducted by DeBoer (2001:238–39) with the intent of identifying archaeological occurrences of dice across North America highlights just how rare they are in the Eastern Woodlands. The greatest numbers of recovered dice in the Northeast are from Protohistoric Seneca burials near Rochester, New York, where Wray, Sempowski, and Saunders (1991: 145) found 16 plum pits (*Prunus nigra*) at the Tram site (AD 1575). Like the earlier Late Woodland period specimens at CbDd-1, the pits were worked into roughly circular shapes. The nearby Adams burial site also contained worked plum pits. About AD 1625, an adult male was interred a little farther west at the Kleis site, a Niagara Frontier Iroquois village, in Erie County, New York. Among the grave goods were “12 fruit stones (probably wild plum pits) worked to a uniform diameter of 15 mm” (Tooker and White 1968:1). Several of the modified plum pits “appear to have been darkened on one side,” strengthening the case they are dice.

The only comparable finds in the Maritimes are nine plum pits in a small leather bag, found among grave offerings in a Protohistoric period burial (Whitehead 1993) at Northport, Nova Scotia (Figure 2.1), about 80 km southeast of CbDd-1. Based on the associated copper kettle, obtained by trade with Basque fishermen (Turgeon 1990), the deceased woman was interred about AD 1575, contemporaneous with the burials at the Adams and Tram sites in the Finger Lakes area of New York.

However, unlike the Seneca finds, it is not obvious that the plum pits in the Northport burial functioned as dice: they are not worked into circular shapes, nor are they blackened on one side. No residue from flesh adheres to the Northport pits, and the nine specimens to the naked eye are smoothed, if not polished. Given their condition and context, these fruit stones may have been blanks for dice, ready to be worked and colored on one side as needed, furnished for the deceased woman so she would have spare dice in the Land of the Souls.

It is unclear whether the Northport plum pits are the native species, *Prunus nigra*, or an introduced European plum species. This uncertainty

arises from the fact that exotic European goods are prevalent in burials dating to the Protohistoric period. Moreover, precedence for switching from native to exotic exists in Iroquoian societies, including the Seneca, where in the seventeenth century peach pits replaced *P. nigra* as the preferred raw material for dice. Similarly, sloe plum could have been transplanted to Nova Scotia, providing a source of exotic fruit stones, but only after Champlain arrived in 1603, a quarter century after the woman was buried at Northport. If sloe plums arrived before Champlain, it would have been as prunes, dried in Europe for export. However, this is unlikely since Asian hybrid plum varieties were used for commercial prune production in medieval Europe. Thus, the Northport plum pits are probably the North American species, *Prunus nigra*.

By virtue of their easternmost mainland location, the Mi'kmaw enjoyed a monopoly in the sixteenth-century fur trade (Bourque and Whitehead 1985). Their accumulated material wealth is exhibited in the burial sites from that time, the hallmark of which is the copper kettles that the mourners placed in the grave with the deceased. Such was the case at Northport, where the copper salts ensured the plum pits and their leather bag were preserved. Beads and other European items found in the Seneca graves mentioned above may have arrived there by down-the-line trade, initiated by Mi'kmaq middlemen traders.

The existing evidence is consistent with the inference that the Mi'kmaw supplemented their stores of food hunted and gathered by gardening in favorable ecological niches. Subsistence practices changed at the onset of the Protohistoric period, a combined effect of the availability of European foodstuffs and the economic shift to trapping fur-bearing mammals. In addition to the myth recounted to the Recollet missionary LeClercq, mentioned above, the French lawyer Marc Lescarbot, who accompanied Samuel Champlain, provides the following:

In the countries where they use tillage, as in that of the Almouchiquois,² and farther off [Maine and southwards], the men make earthen pots, in the shape of a nightcap, in

which they seethe their meats, flesh, fish, beans, corn, squashes, &c. Our Souriquois [Mi'kmaw] formerly did the same, and tilled the ground; but since the French bring them kettles, beans, peas, biscuit, and other food, they are become slothful, and make no more account of those exercises. But as for the Almouchiquois, who have yet no commerce with us...they till the ground. (Lescarbot (1914 [1609] III:194–95)

Both Lescarbot and LeClercq state that the Mi'kmaw had previously cultivated the maize-beans-squash trio—as it was part of oral tradition related to Lescarbot by a Mi'kmaq individual in Nova Scotia—just as the Papkootparout myth was told to LeClercq about 75 years later in northern New Brunswick. If the mysterious fruit that the myth indicates as the Food of the Souls is the Canada plum, it suggests that introduction occurred at the same time, and by the same mechanism, as the three famous New World cultigens (LeClercq 1910 [1691]).

Tobacco, the only true Pan-American drug in the Precolumbian era, was still cultivated in the Maritimes when Lescarbot was there, but by men. As I argue elsewhere (Leonard 1996), tobacco was the only one of the American cultigens retained in Protohistoric times, primarily because it is addictive, but also because it was, and is, sacramental to the Mi'kmaw. Moreover, through its millennia of cultivation, it has retained the dehiscent seed capsules that enable it to be self-sowing, so even if stored seeds retained for the following year's crop are lost, odds are good that new seedlings will sprout next spring anyway. The traditional edible cultigens, on the other hand, were easily replaceable by European food obtained by trade, as Lescarbot's informant related to him.

Additionally, the onset of the Little Ice Age about AD 1250 spelled the end of the Medieval Warm Period's (AD 900–1250) amenable climate for cultivation this far north (Spooner et al. 2014: 1155). Even so, Mi'kmaw in Shediac, where the CbDd-1 plum pits were found, were growing maize in “gardens” in 1714, at the age's most severe cold (Arsenault 1714; Kobashi et al. 2011).

This shows the hardness of the maize cultivar. It also demonstrates the flexibility of rudimentary cultivation, which should be viewed on a continuum, as opposed to a nonreversible step process (Harris 1989). But how did cultivation come about the first time around? For that we have to turn to the Late Woodland period.

Plum Pits and Precontact Mi'kmaw Culture

As I mentioned in the introduction, the earliest evidence for dice games is the feature dating from the Late Woodland period that contained worked charred plum pits interpreted as dice. Because of the rarity of this discovery, it is useful to describe it briefly. The feature was found in 1990 within an erosion face at Skull Island, Shediac, New Brunswick.³ A layer of charred birch bark 80 cm below the surface lined a circular pit. Fragments of calcined human mandible hanging by root hairs above the birch bark confirmed that the feature was a human burial pit. After contacting a local Mi'kmaq chief, I secured permission for a salvage excavation on the condition that the bones would be reburied after study. I began the salvage of this feature by trimming the erosion face to create a vertical profile, but about two-fifths of the burial feature had already been lost to coastal erosion. I excavated the entire feature and in 1995 the bones were reburied in a historic Mi'kmaw cemetery.

The people who prepared the original burial dug a circular pit two m in diameter, to a depth of 80 cm. They lined the pit with sheets of birch bark, the outside of the bark facing down, and built a small fire in the center using mainly oak for fuel. On this they placed the bones of at least 10 individuals, ranging in age from a neonatal infant to an adult. Fracture patterns indicate that the bones were dry before cremation, meaning that the cremation and burial was the final stage of a mortuary process (Leonard 1996:221).

Mi'kmaw mourners placed a wide range of food and belongings in the CbDd-1 grave. White quartz flakes were scattered over the birch bark base layer. Ceramic vessels were concentrated in the central area, thrown in so they would break and release their spirit to join the souls of the

departed in keeping with animistic belief. Some bifacial stone tools were broken before burial as well, as shown by the differential burning of conjoined fragments. Unifacial scrapers and a groundstone adze were added, but no hafts survived. Copper nuggets, hammered nuggets, rods, and a blank for beads that had been intentionally broken were also in the grave. The mourners added plants for food and medicine. Wing bones of the common loon and wrist bones of a black bear were intermingled with fragmented human bones. A use for the loon wings is drawn from LeClercq (1910 [1691]:98), who noted that Mi'kmaw men wore "a crown from the two wings of the birds which they have killed in their hunting."

This early fourteenth-century burial feature is consistent with seventeenth-century Mi'kmaw funeral practices as observed by the merchant Nicolas Denys (1908 [1672]) and missionary Chr stien LeClercq. The mortuary cycle began with wailing and grieving followed by funeral orations and a feast. Then, women went to select birch bark to make a bier to support the corpse on a 3-m high scaffold. After a year, the desiccated body was taken to a cemetery and placed in another birch bark coffin and buried along with items the deceased person would need in the afterlife. If the deceased were a woman, the items would include "her collar for use in dragging the sled or in carrying wood, her axe, knife, blanket, necklaces of wampum and of beads, and her tools used for ornamenting and painting the clothes, as well as the needles for sewing the canoes and lacing the snowshoes" (LeClercq 1910 [1691]:301). *Waltes* dice sets would be expected as grave offerings too.

Except for the absence of a cremation fire, this seventeenth-century ceremony is very similar to the one performed when the CbDd-1 burial was created. However, at the Hopps site Copper Kettle burial dating 80 years before Denys made his observations, two fires were lit directly over the filled-in grave: first, one that was covered with sand, and then a second fire, which was buried as well (Harper 1957:16). Lescarbot adds that in one of the first acts of mourning after Chief Panoniac was killed in a New England raid,

all his possessions, including dogs, were burned at his wigwam (Lescarbot 1914 [1609]:279). Over time, the role of the funeral pyre changed from cremation to burning possessions, to symbolic fire lit over the grave.

In addition to evidence just described for funeral practices during the Late Woodland period, what else is known about the ancestral Mi'kmaw for this time? In the following, I provide a brief description of Late Woodland Mi'kmaw economy, gender roles, and socio-political organization.

During the Late Woodland period, the Mi'kmaw had a mixed subsistence economy that depended upon hunted and fished animals—principally men's work—with husbanded animals (dogs) and wild and cultivated plants—principally women's work.

The contribution of plant foods to the Mi'kmaw diet—women's work—was relatively great during the early portion of the Late Woodland period, as it coincided with the climatic amelioration of the Medieval Warm Period (MWP, AD 900–1250), when warm and dry conditions prevailed in the Maritimes (Spooner et al. 2014:1155). Such conditions were favorable for farming the cultigens mentioned, which presumably resulted in enhancing the importance of the cultigens and possibly other plant foods in Mi'kmaw economy compared to earlier and later times.

Although paleoethnobotanical data is limited in this region, there is convincing evidence that Mi'kmaw women were managing the native groundnut (*Apios americana*), whose tubers (rhizomes) are edible (Leonard 1996). The taste and texture is remarkably similar to cassava, and they are very nutritious (Walter et al. 1986). All the groundnut plants north of Massachusetts are infertile, due to the fact that the sterile plants have an extra set of chromosomes—33 instead of the two pairs of 11, or 22, found in the fertile plants (Seabrook 1973). Since these northern plants do not produce seeds, they are dependent on vegetative reproduction. Seabrook (1973) surmised that Indigenous people had transplanted them, expanding their original range. She found them growing near former riverside Indigenous

occupation sites, especially along portages, reinforcing her belief in the anthropogenic origin of the plant's range north of Massachusetts. This suggested to her that the native tubers were planted at convenient locations where they could be easily dug up and eaten by people traveling along waterways (Seabrook 1973). Eleven fragments of charred *Apios americana* rhizomes from a feature dated to 3560 ± 70 BP at the Bob site in Maine, identified by Nancy Asch Sidell (Mack et al. 2002:86), suggest that Susquehanna Tradition women brought the original sterile-seeded groundnuts north with them. If so, the abundant finds of charred groundnut in the CbDd-1 Late Woodland period burial site were the legacy of almost three millennia of women cultivating this root food in the Maine–Maritimes region (Leonard 1996:144).

It is also entirely likely that women were managing wild plum trees. This inference is supported by the observation that plum trees are often found growing preferentially on archaeological sites. During a provincial survey of aphid infestation, Raymond P. Gorham noted the singular distribution of *Prunus nigra* in New Brunswick around abandoned historic cellars and “in or near Stone Age village sites” (Gorham 1943:62).⁴ Hedrick makes the same claim for *P. nigra* trees that he observed on Iroquoian villages in New York State (Hedrick 1988 [1950]). Gorham argued that the Canada plum came to the Maritimes from the St. Lawrence lowlands, an inference that is substantiated by modern botanists Harold Hinds (2000:283) and Gleason and Cronquist (1991:261). Havard suggests that both *P. nigra* and its neighboring analog, *P. americana*, were cultivated, and furthermore, the existing 26 horticultural varieties of the two species were the product of artificial selection processes attributable to Indigenous arboriculturalists (Havard 1895:103–04).

Domestic plums of Eurasian origin are called *plumsuk*, an English borrow word, but the Mi'kmaw call the Canada plum *maktawemenitck* (Rand 1902:90). This name contains the Mi'kmaq root for “black,” like its Latin species epithet *nigra* and its alternate common name, the Black plum. In contrast, the root in the Maliseet–

Passamaquoddy name, *meh-kwe-wi-djik*, is *meh-kwe*, or “red” (Adney 1944:105), showing that the Mi'kmaq word is a descriptive term, not a loanword. The ripe plums are red, so the Maliseet–Passamaquoddy term, translated as “the Red Family” (the plums grow in pairs, like a married couple), refers to the actual fruit. The highest score in the Mi'kmaq game of *waltes* is achieved by getting all six dice to land with the marked sides up, and to this day, the marked side of a *waltes* die is called the black side (Howard and Glukeman 1962:207). So, does the Mi'kmaq name for the tree derive from the blackened side of a plum-pit die? If so, it suggests that the tree was introduced primarily—or at least highly valued—for its role as a source of dice for the bowl game.

Dogs were highly valued as hunting companions but were also used as feast food. Medium sized, the dogs emitted a muted howl but did not bark and were a Mi'kmaq hunter's most prized possession (Lescarbot 1914:221). When a feast was held, presenting the guests with simmered dog was the highest form of respect (Denys 1908: 430; Maillard 1758:5–6). A charred dog femur found in CbDd-2, a Late Woodland shell midden site in Shediac (Leonard 1996:146), and 54 dog bones and teeth (F. Stewart 1986:121) from the contemporaneous Delorey Island shell midden in Nova Scotia (Figure 2.1) demonstrate the antiquity of dog consumption in Mi'kmaq territory. The dog feast is a shared trait with the Iroquoians, including the Huron, who in turn, may have acquired the custom from their northern neighbors, the Algonquin, since sacrificial dog remains have been dated at a site on Lake Nipissing to about AD 1000 by Brizinski and Savage (1983:39). In 1641, Jesuit missionary Jerome Lalemant attended an intertribal gathering of Hurons and Central Algonquians, where dances were performed and games played as part of a spectacle during the final stage of a mortuary process overseen by women (Thwaites 1896, 23:217). Dog ceremonialism, with its link to funerary practice, typically within the feminine sphere of influence, is an ancient trait common to the Mi'kmaq (as noted earlier) and their neighbors.

The Late Woodland Mi'kmaq made copper

artifacts from nuggets collected at several spots around the Bay of Fundy (Leonard 1996:89). The use of native copper was common to all Eastern Algonquian peoples, as revealed in accounts of early explorers (Biggar 1911, 1922) and in the archaeological record (Bourque 2001). Since native copper was abandoned as soon as copper in the form of kettles could be obtained by trade, no one is sure whether men or women were the copper-smiths. Men are presumed to use hammerstones in the process of flintknapping. Equally, women are traditionally believed to have used manos for milling seeds and grains, and they were also the ones who maintained the hearths where the nuggets were annealed before being hammered again in the copper artifact production sequence (Leonard 1996). The long-tube copper beads produced in this manner during the Late Woodland period would have adorned women's clothes and possibly hair, so by any measure, women are the odds-on favorites to have been tasked with copper working.

Another likely craft of Mi'kmaq women is pottery. The cord-wrapped-stick decorated pottery made by Mi'kmaq women especially for interment in the CbDd-1 crematory ossuary is interchangeable with pottery sherds recovered from shell midden sites as far south as Martha's Vineyard (Figure 2.5; Byers and Johnson 1940). The homogeneity in ceramic tradition—at the transition between a warm, dry climate and the cold of the Little Ice Age—included the use of shell temper as well as the decorative style.

Throughout the range of the paper birch, including the Maine–Maritimes area, birch bark was used for making designs (Densmore 1928: 394). The picture-writing expert, Garrick Mallery, compiled a hefty tome on the subject equivalent to Culin's 1907 compendium on games (Mallery 1888). Fortunately, Mallery visited Maine and Nova Scotia, where he interviewed elders who made drawings on birch bark that were used in a mutually intelligible system of picture writing for all the Wabanaki tribes in the Maine–Maritimes region (Mallery 1888:379). While there, he recorded petroglyphs on the shore of Kejimikujik Lake, in the national park by the same name in west-central Nova Scotia

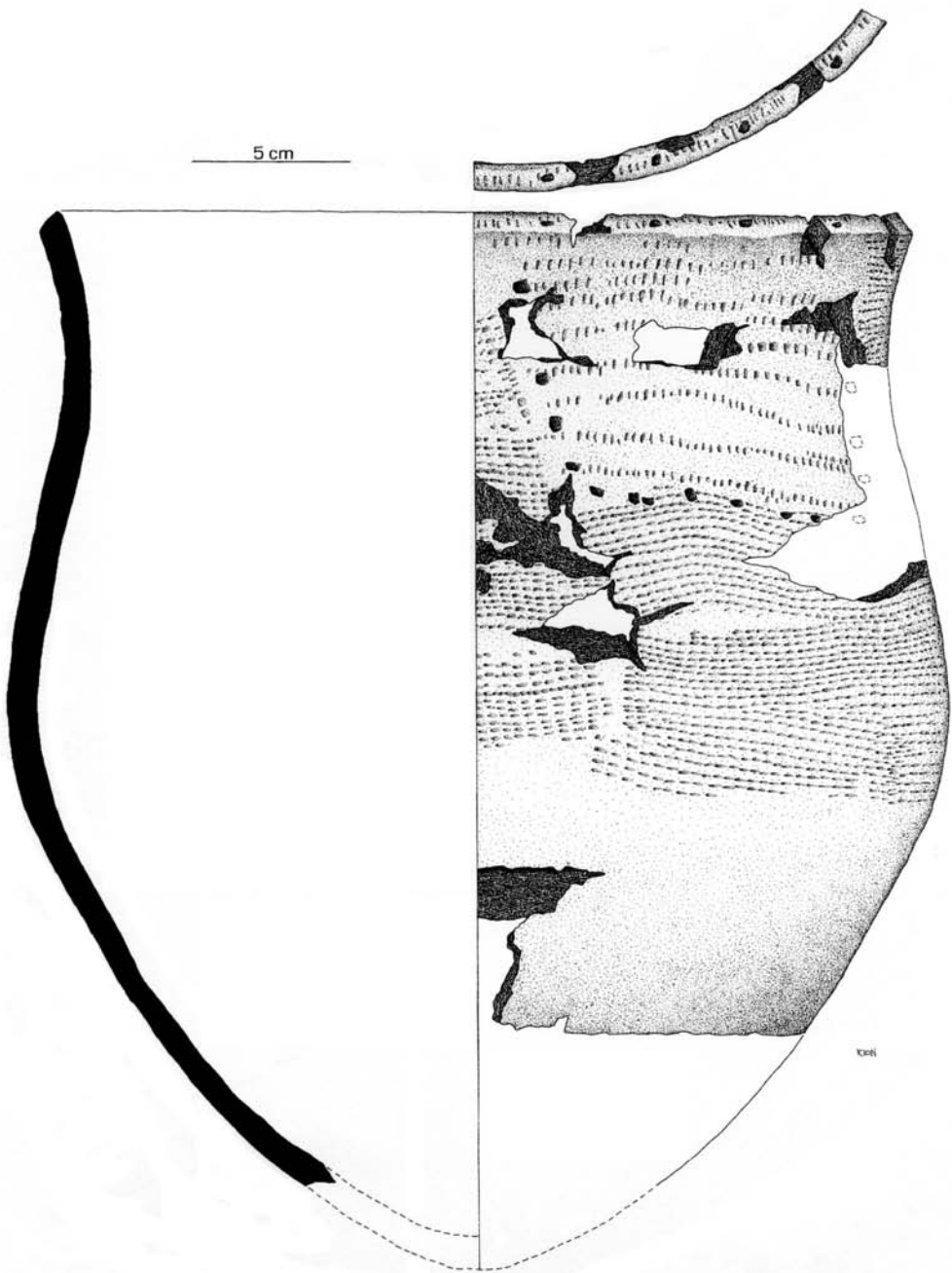


FIGURE 2.5. Shell tempered, cord-wrapped, stick-decorated earthenware Vessel 6 from the CbDd-1 burial site. (Drawn by Rion Microys.)

(Figure 2.1). Among them were depictions of ceremonial women's hats, known to be worn by Maliseet women possessing shamanic power, as well as by Mi'kmaw and Abenaki women who "are or were of special authority and held positions in social and religious ceremonies" (Mallery 1888:425; Wherry 2003). It can be inferred from the depictions that female shamans were present in these Eastern Algonquian-speaking societies of the Northeast.

During the Late Woodland period the Mi'kmaw were semimobile. From spring to fall, the Mi'kmaw traveled the network of inland and coastal waterways in birch bark canoes of different capacity, from 3 to 5 m in length (Martijn 1989). In winter, the same routes could be traveled on snowshoes, using a toboggan or sled to transport belongings. However, greater distances could be covered in summer, when raids were undertaken and intertribal meetings were held. Indeed, from Middle Woodland times on, ancestral Mi'kmaw canoed over 80 km of open sea to the Magdalen Islands, in the middle of the Gulf of St. Lawrence (Figure 2.1), possibly in pursuit of sea mammals and bird's eggs (McCaffrey 2015).

Scholars think that the basic Mi'kmaw socio-political unit was the summertime band, just as in the early twentieth century (Martijn 1989:210), when those individuals who made a summer camp their home identified with that band. The Mi'kmaw band that Jacques Cartier encountered and traded with in 1534 at Tlagatigetjg (Figure 2.1) comprised 300 people (Biggar 1924:56). Similarly, Cartier tells of meeting 300 St. Lawrence Iroquoians (Kwedeche) in a mackerel-fishing camp at Honguedo (Figure 2.1) (Biggar 1924:60). This suggests that 300 people was the optimal size for regional summer aggregation, especially since observations were made on two separate sixteenth-century linguistic groups. However, the carrying capacity of the environment likely waxed and waned as the climate changed.

Band decision-making likely was by consensus and elder consultation, but a sagamore led each band. In 1600, the Mi'kmaw had a chief of chiefs (V. Miller 1983), a role filled by Membertou, but a lack of documentation about how Mi'kmaw society changed during the sixteenth century im-

pedes us from knowing whether that political office is a product of the events of the Protohistoric period or a legacy of the Late Woodland period. After the Medieval Warm Period in the early part of the Late Woodland period, Little Ice Age cooling from AD 1250 on (Kobashi et al. 2011) may have resulted in population contraction and concomitant reduction in social complexity. Social ranking, noted in seventeenth-century Mi'kmaw society, might have been a holdover from the first half of the Late Woodland period (B. Hoffman 1955, M. Miller 1983).

Reconstructing intertribal relations for the Late Woodland period is challenging. We know that after contact there was fierce animosity between the Mi'kmaw and the Kwedeche based on tales of massacre, revenge, and raiding (B. Hoffman 1955:96). But was this always so? A ceremonial feast site on the frontier between these two populations, at the existing provincial border between New Brunswick and Quebec, suggests this may not always have been the case (Burke 2006). A feast of roasted beaver is inferred from the remains in a large, rock-filled hearth, which also held three massive ceremonial bifaces of Ramah chert, broken before being placed in the large communal hearth (Burke 2006:34). The site is on the bank of the Madawaska River (Figure 2.1), near the confluence of a stream that bisects a vast, flat plain. It was an ideal setting for a meeting between the Mi'kmaw and Kwedeche: the camps were separated by the stream and the alluvial plain could have served as a playing field for ballgames and a dance venue after the feast (compare Chapter 7, this volume, for another example of a playing field at a cultural frontier). Since the Iroquoian versions of the dice-and-bowl game were very similar to the Mi'kmaw version (Beauchamp 1896), it follows that if the Mi'kmaw and Kwedeche did meet on the Madawaska floodplain, the bowl game would have been played intertribally. By this means, along with the more widely known raiding for wives, women could have passed from one social group to the other.

Iroquoian-speaking Mohawks at Cagnawaga, near Montreal, uttered an incantation over the toss of the dice that suggests the use of plum

pits as dice, since *honnesta* means dried plums: “hits, hits, hits, honnesy, honnesy, rago, rago... calling for black or white or what they wish to turn up” (J. Smith 1870:46). It is likely that the St. Lawrence Iroquoians (Kwedeche) were using the same game implements, and possibly similar incantations. If a Kwedeche man staked his wife and spoke those words in vain after the decisive slam of the bowl on the blanket, the wagered wife could have brought to her new Mi’kmaq husband (polygyny was optional according to Biard 1897 [1616]) all the accoutrements of life, including, as Cartier observed, maize and *honnesta*, or dried plums. After eating the prunes, she would have probably planted the pits near her new residence, in accordance with the Eastern Woodland tradition of women as bearers of foodways and plant propagation (Briggs 2015).

Of course, that women may have circulated among social groups within the New England–Maritimes region as a result of high-stakes wagering is completely speculative. Women acquired by Mi’kmaq raids on St. Lawrence Iroquoian villages may have been more numerous than those obtained by intertribal gambling, but by virtue of their hasty, violent departure, the likelihood that they brought plum pits with them is less than in the setting of an intertribal feast or trade fair.

To summarize, the circulation of women is well documented for the Late Woodland period in the New England–Maritimes region that is home to the Eastern Algonquians. It is manifest archaeologically by the spatial distribution and uniformity of copper and ceramic artifacts and by archaeobotanical data, along with petroglyphic depictions of high-ranking women’s hats, supplemented by ethnohistoric observations.

Although, as I have proposed earlier, the dice-and-bowl game may have been an important vector for diffusion of women throughout the area, no direct evidence of gaming has been found in the Maine–Maritimes region before the Late Woodland period. In fact, the CbDd-1 samples (Figure 2.2) are the only plum-pit dice in North America from an archaeological site that predates the Protohistoric period. Charred plum pits, probably *Prunus nigra*, have recently been

identified about 30 km southeast of Montreal in a midden at the Droulers–Tsiionhiakwatha site, a fifteenth-century village occupied by St. Lawrence Iroquoians (Trottier 2014:178). The plum pits exhibit natural plum-pit morphology and have not been worked, supporting the 1534 observation of Jacques Cartier, who lists “prunes or *honnesta*” only after maize among the provisions of the St. Lawrence Iroquoians he met at Honguedo as they arrived from the Quebec City area (Stadacona in Figure 2.1).

After digging several Nova Scotia shell middens between 1911 and 1913, Harlan Smith questioned the “absence of the discs of bone used in the bowl game, so characteristic of the modern Micmac and their neighbours” (H. Smith and Wintemberg 1929:89). He notes that bone *waltes* dice were so ubiquitous in Mi’kmaq communities that they should also be found in local archaeological sites. Observing that there were no bone discs in any collections he saw in Nova Scotia, he concluded that *waltes* “is probably new to the Micmac; or the disks are new and replace some such objects as plum pits in the 16th century” (H. Smith and Wintemberg 1929:89). Eighty years after Harlan Smith’s pioneering work, his postulation about plum-pit dice was proven at CbDd-1, a Late Woodland burial site, where charred, worked plum pits were found (Leonard 1996). The spatial circulation of women due to intertribal gaming potentially could explain how plumstones came to be out of the tree’s natural range.

Why *Waltes* Was a Woman’s Game

For a Mi’kmaq husband on the losing end of an intertribal *waltes* game, the consequences were worsened by the wife mocking the gambler, as Lescarbot (1914 [1609]:197) reveals: “True it is as to women lost at play that to hand them over is full hard, for often they make mock of the gambler and point the finger of scorn at him.” Wallis and Wallis interpret this to mean the gambled wife “was no great profit to the victor” because she would “greet the winner with jeers and mocking gestures” (Wallis and Wallis 1955: 244). My parsing of Lescarbot’s observation is the finger of scorn pointed at the loser. Wallis

and Wallis also misunderstand the rules of *waltes* (Howard and Glukeman 1962).

But sticking to the point, for a wife unhappy in her marriage—for example, if she were the most recent member of a polygynous wife-set, burdened with the heaviest workload—being gambled away might be a dream come true. She might even apply whatever magical power—*keskamizit*—she possessed to will the dice to fall in favor of her husband's opponent (Bock 1978:117).

Acknowledgments

Many thanks to Roger Lewis, curator of ethnology at the Nova Scotia Museum, for helpful discussions about Mi'kmaw games. Donna Augustine of Elsipogtog First Nation clarified linguistic matters, for which I thank her. However, I owe my greatest debt to Barbara Voorhies, who brought order to my thoughts. I alone am responsible for any errors or omissions.

Waltes was a women's game because in its prototypical form it was probably played with plum-pit dice (DeBoer 2001), and women were the ones who collected and, in the case of *Prunus nigra*, tended the plum trees. That the plum-pit dice game also served to diffuse women throughout the Northeast when gambled away by their husbands enables us to see a culture-nature symbiosis at play, whether the move was dreaded or welcomed.

Notes

1. Paleoenvironmental data from Kobashi et al. (2011); Spooner et al. (2014); Walker et al. (2012); and Wanner et al. (2008).
2. Native inhabitants of southern Maine.
3. Skull Island, so named after a 1938 storm unearthed historic human bones.
4. The trees still grow there, although stricken with a fungus that turns the plums into black, hollow orbs. As Terry Tenass, of Metepenagiag First Nation, discovered (Leonard and Tenass 2011), commercial fungicide eliminates the disease and restores good fruit crops.

CHAPTER 3



Playing the Apalachee Ballgame in the Fields of the Thunder God

Archaeological and Ideological Evidence for Its Antiquity

J. GRANT STAUFFER AND F. KENT REILLY III

Whether they are played in the context of the prehistoric American Southeast, ballcourts in the great cities of ancient Mesoamerica, or modern NFL football fields in the United States, games lie at the center of their respective societies over time (Day 2001:65; Vennum 1994). For better or for worse, players and observers risk their wealth, social status, political positions, and personal well-being to participate in events whose outcomes result from a combination of chance and feats of athleticism (Hann 1988:74). For the Apalachee of Protohistoric North Florida (Figure 3.1), *juego de la pelota* bore additional ideological significance. Not unlike other variations of stickball and lacrosse that exist among Native American tribes today, the observable motions of this game served as metaphors for the movement of celestial bodies and timeless heroes from a primordial past (Aveni 1989; 2010). As a distinct time marker, the seasonal occurrences of this sport were incorporated into agricultural cycles, as well as dualistic perceptions of annual time phases that were attributed their own conception of gender and preternatural identities (Aveni 1989; 2010; Bolfiging 2012:14; Hann 1988; Swanton 1928b:549). As such, the *juego de la pelota* served as an impetus for historical change, tied to militaristic mobilization and shifts in the political order of participant communities. In this chapter, we examine the archaeological, historic, iconographic, and folkloric evidence for the game's antiquity and identify social tran-

sitions brought about by its termination at the hands of the Spanish in the late seventeenth century.

According to Mircea Eliade's *The Sacred and the Profane* (1987), our relatives in ancient, non-literate cultures rarely distinguished between past and present. Gods and ancestors of the mythic past were alive and remained influential through the reenactment of their past achievements (Aveni 1989:56; Eliade 1987). While their behaviors may seem unusual, Apalachee beliefs are consistent with those of many ancestral peoples worldwide. In addition to their ferocious exercise routines, *juego de la pelota* athletes also acted as performers who prominently fulfilled the roles their lineage-based responsibilities demanded (DeBoer 1993). Before and after each game, a number of ceremonies were held that involved processions, consumption of ritual medicine, and costumes appropriate for reenacting the folkloric past (Hann 1988: 335–38). With props and costumes painted red, black, and white, the entertainment afforded by this tradition quickly surpassed those of other games like *chunkey* (DeBoer 1993:85; C. Hudson 1976:424–25; Vennum 1994:215). Among the Apalachee, fully equipped players dressed to resemble “panthers, wolves, and bears...deer and fox” because “it was their understanding...that these were their very ancestors” (Hann 1988:334). Especially for Native American games that were inextricably tied to politics, one team's victory

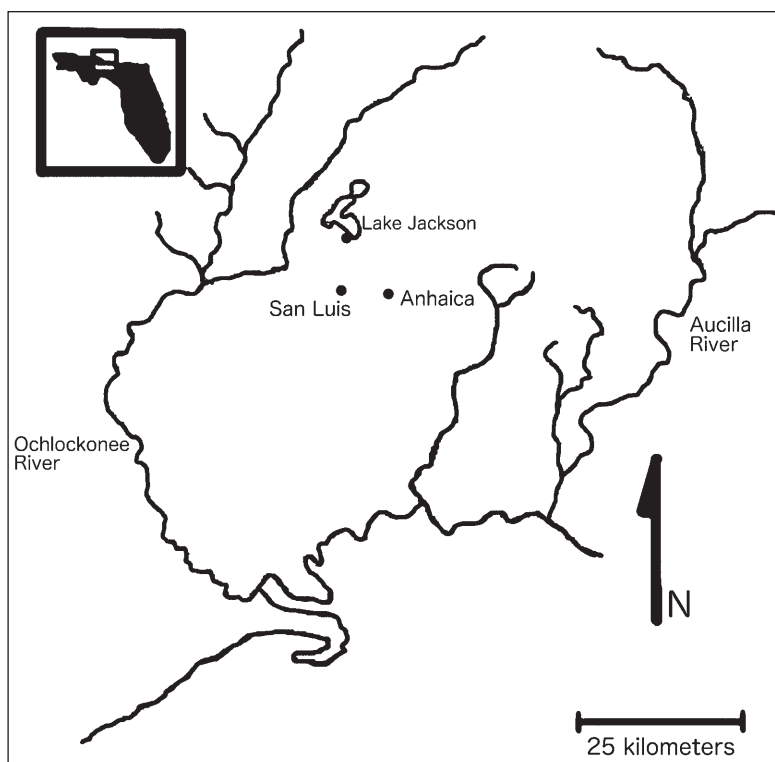


FIGURE 3.1. Map of the Apalachee capitals. (Drawn by J. Grant Stauffer and adapted from Ewen 1996:Figure 1.)

over another was equated to an act of theogony (Aveni 1989:57). Therefore, in the minds of indigenous observers, to witness these competitions equated with witnessing creative acts in primordial time. It is our contention that the Apalachee ballgames were no exception to these belief-oriented perspectives.

The players, bedecked in the insignia of their prescribed social roles, would comprise two teams that attempted to strike a central pole with a ball or land it in a basket at its apex. Two strikes were awarded to team players who made baskets, while only one strike was given to those who struck the pole with the ball. Play continued until a team had accumulated 11 strikes (Hann 1988:76). Along with the actual gameplay, off-court observers participated in gambling that stimulated the circulation of massive amounts of wealth and valuable objects—even winter food stores that were vital to Apalachee survival (Hann 1988:74). On court, teams ranged from

40 to 50 players in size and often played without the use of the ballgame sticks that are typical among the Muskogee Creek and Miccosukee tribes (Hann 1988:75–76; Vennum 1994:214).

The Apalachee occupied the northwest panhandle of Florida, descendants of the Fort Walton archaeological culture (Hann 1988:96–97; Lankford 2008:139; Milanich 1995:93; Milanich and Fairbanks 1980:227). Situated between the Aucilla and Apalachicola Rivers in the Tallahassee Red Hills region, these Muskogean-speaking people encountered both the Narváez and de Soto expeditions in the sixteenth century, followed by Spanish missionaries and colonists in the seventeenth century (Milanich and Fairbanks 1980:227). In fact, thanks to French chroniclers who began mapping the landscape in the 1560s, the Appalachian Mountains received their name from the Apalachee (or “Apalatci”; Milanich 1995:94). During the 1600s, however, what was left of the Apalachee chiefdom existed in and

around the San Luis site, a military outpost and mission that lasted from 1633 to 1704 (Milanich 1995:93; Milanich and Fairbanks 1980:228). Like the Creek, who occupied regions directly north of them, the Apalachee spoke a dialect of Hitchiti that facilitated interaction among several indigenous communities inhabiting the Greater Southeast (Hann 1988; Milanich and Fairbanks 1980:228). It is with great likelihood that these interactions included participation in the *juego de la pelota*, whose modern variants still exist among Muskogean speakers today. As the first to record these events in 1676, Father Juan Paiva, a Spanish monk stationed at Mission San Luis, documented the games' proceedings, relevant folklore, and discernable history among the tribes that occupied *La Florida* (Hann 1988:328–31). Although this ambitious friar was the only one to record these accounts, he, along with Juan Mendoza (a parish interpreter and Apalachee leader) and Diego Salvador (a royal interpreter), was ultimately responsible for the game's abolition (Hann 1988:328). Beginning in 1639, this decision was likely tied to ongoing Spanish efforts toward the elimination of conflict between the Chatot, Amacano, and Apalachicola who lived farther west (Milanich 1995:96).

Among contemporary Muskogean-speaking tribes of the Southeast, the *juego de la pelota* is now referred to as *hottí icósi*, which translated means "little brother of war" (Hann 1988; Vennum 1994:213). As a form of gameplay, its purpose is to mitigate conflicts that arise between various groups, whether they consist of clans, village bands, or tribes. On the other hand, while the game is intended to preserve peace, the competitions it involves are violent by nature. In fact, modern Cherokee, Chickasaw, Creek, and Choctaw groups use sticks that not only bear a significant resemblance to war clubs, but also share names with them that are synonymous in meaning (Vennum 1994:214). Not unlike today's players, the Apalachee engaged in play that Father Paiva describes in the following way:

"They crowd together like clumps of pinecones.... And they fall upon one another at full tilt. And the last to arrive climbs up over

their bodies, using them as stairs... while still others have their mouths filled with dirt." (Hann 1988:333)

Despite the imposition of sanctions on this form of social negotiation, the practice has always been perceived as warfare (Vennum 1994:214). Given this, it is no surprise that only the *usinulo* (son of an incumbent chief) was qualified to oversee ceremonies tied to the ballgame (Hann 1988:104). Being the "favored son of the chief," this same person was also expected to lead troops in defense of home territory as an official of war (Hann 1988:105). Although chieftainship was often inherited, this principle was "not an ironclad rule" (Hann 1988:103). Rather, it has been frequently perceived as a desired prerequisite, reinforced by trophy-taking practices during warfare (Dye 2009:144). Provided that indigenous men gained status and authority through accomplishments in battle (Dye 2009:84–87, 144), we propose that the *juego de la pelota* provided the same opportunities in peacetime.

Cosmology in Motion: Iconography and Folklore of the Game

The fact that political roles tied to the ballgame were reinforced by kinship and prowess in war-related practices is prominently illustrated by Apalachee folklore and earlier, Mississippian period (AD 1000–1500), iconography. Being the progenitors of the oldest recorded myth in North America to date, Father Paiva's Apalachee informants have provided a unique glimpse into the ideology that undergirds their traditional sport (Hann 1988:328–29). Moreover, tales of hero-deities earning their socially prescribed roles through supernatural acts of athleticism is not limited to prehistoric northwest Florida. Originating from Siouan-speaking tribal traditions, it has been demonstrated that the Morning Star myth cycle, which describes conquests carried out in ballgames and footraces, are also tied inextricably to Mississippian iconography (Brown 2007b, 2011; Brown and Dye 2007:286; Radin 1948). The recurring warfare theme is also prominent in the Morning Star myth that is displayed in Mississippian period iconography

(Brown 2007b; Brown and Dye 2007; Radin 1948). The connection these myths have with the beliefs and practices of Muskogean-speaking tribes through iconographic media has also been established (Brown 2011:39). As a whole, these embedded iconographic themes have been tied to a prehistoric art tradition that was adopted by Fort Walton people—the archaeological culture that existed in northwest Florida prior to historic times—and referred to as a Southern Cult or Southeastern Ceremonial Complex by archaeologists (Dye and King 2007; B. Jones 1982:3, 6; A. King 2007a, 2007b; Waring and Holder 1945, 1965).

The mythology in Father Paiva's reports documents ancestral history and describes rituals that revitalized their memory for the Apalachee of the seventeenth century (Hann 1988:331–53). In particular, it offers an account of a hero who overcomes adversity by utilizing information received from his grandfather, a thunder deity named Ochuna Nicogvadca (Hann 1988:331–32). Carrying out the tasks that contribute to his ascension, Nicogvadca employs official terms of office that have been recognized in known descriptions of Apalachee events and studies in Muskogean linguistics (Hann 1988:101–02; Milanich and Fairbanks 1980:222). Moreover, his most prominent achievement involves victory over a rival in a series of games, one of which is described as the *juego de la pelota* (Hann 1988:336–37). The narrative concludes with a list of requirements that must be fulfilled in order to achieve Nicogvadca's political position as high chief, before he is ceremonially boiled in a pot at his funeral (Hann 1988:343). Father Paiva's manuscripts portray multiple forms of rituals, political protocols, and ceremonial games. Carefully examined for the purpose of this analysis are rituals involving the mounting of the ceremonial ball pole, the nature of the games played by Nicogvadca and Ytonanslaq, and the rites fulfilled during the ending funeral.

According to V. James Knight (2013), the ballgame myth in Apalachee society accomplishes three things. First, it establishes a pantheon of gods who act as higher authority. Second, it charts an elite human status with divine origins.

Finally, it fulfills an etiological function by chartering the ballgame as a formalized institution (Knight 2013:145–46). Clearly, this example of Apalachee storytelling is also a case of indigenous myth-history, where folklore is intermixed with accounts of oral history as a mnemonic method. As with other forms of folklore, such as Johnny Appleseed or George Washington and the Cherry Tree, the characters described in this narrative may represent once-living people who influenced undocumented Apalachee history. If so, then the fact that these individuals achieved their ranks through accomplishments in the ballgame is of great significance to this study.

In addition to Apalachee folklore, an iconographic analysis of shell gorgets and comparison with similar artifacts from the Mississippian period are offered to recognize the *juego de la pelota*'s antiquity (Muller 1991). Often referred to as "spaghetti gorgets," these objects have been found in Alabama, Florida, Georgia, and Tennessee, including burials in a Fort Walton mound center called Lake Jackson (Hann 1988:96–97; B. Jones 1982:15; Lankford 2008:139; Muller 1991; J. Scarry 2007). As described by George Lankford (2008:154–62), Spaghetti-style shell gorgets have been interpreted as a series of thunder god depictions (Figures 3.2a, b). Considered to be possessions of revered individuals, the gorgets identify people of elite status and divine origin. In connection with the ballgame myth that describes the *juego de la pelota* as a politico-religious institution, these objects and others undoubtedly reflect their owner's political rank.

Assuming Apalachee leaders were often participants in the ballgame, it is possible that Spaghetti-style gorgets exhibit portraits of both folkloric characters and leaders who lived among the indigenous community. Lankford (2008:156) proposes that the Spaghetti-style subjects are Lodge Boy and Thrown Away, twins from Muskogean tales who become deities associated with lightning and thunder. Although prominent in Creek traditions, their identities are not restricted to Muskogean names (Lankford 2008:156–57; Swanton 1928b, 1995 [1929]). These "riders in the sky" have alter egos in Siouan and Caddoan lore as well (Lankford 2008:156).



FIGURE 3.2a. Spaghetti-style shell gorget from the Field Museum. (CNHM 68554; drawn by F. Kent Reilly III.)

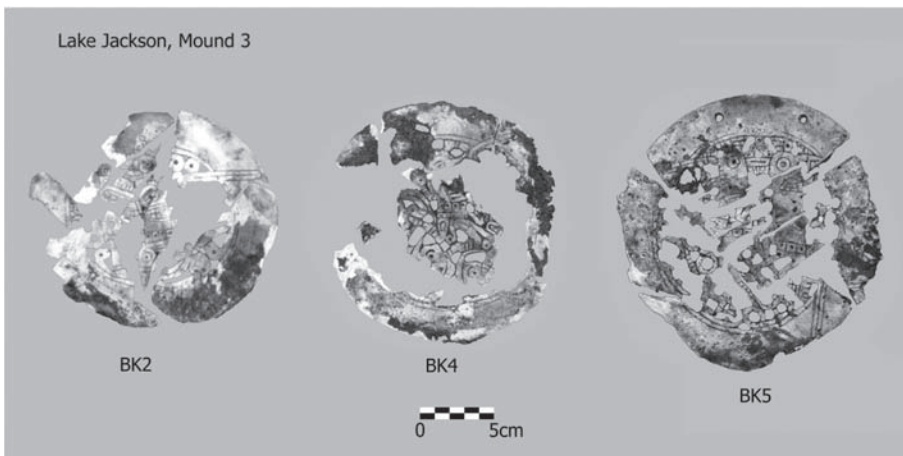


FIGURE 3.2b. Spaghetti-style shell gorget from the Lake Jackson site (8LE1), Florida. (Courtesy of the Florida Division of Historical Resources.)

Having previously recognized this archetype from Native American oral traditions, the widespread distribution of this hero-twin story and its elaborations have led Paul Radin (1948) to call it “the most basic myth of the North American Indians” (Lankford 2008:156). Given their multi-cultural background, we suggest that their mem-

ory is also preserved in stories about Nicoguada and Ytonanslaq (Hann 1988:328–37).

Based on the results of recent structural analyses, there are additional features of the gorgets that support our incorporation of Father Paiva’s narratives into their interpretation. Because these indigenous compositions are “two-dimensional

[perspectives] of what was understood as a three-dimensional reality,” reconstructing them out of individual motifs has provided visual evidence of their relationship with Apalachee lore (Lankford 2011:255). As it appears in Figure 3.3, the reconfigured engraving reveals a scene reminiscent of Nicoguadca’s funeral, where his body was boiled in a pot (Hann 1988:343). This interpretation is further supported by archaeological evidence from Mound 3 burials at Lake Jackson, where the arrangement of these iconography-laden artifacts in tableaux indicate their relevance to the Apalachee ballgame. More specifically, one female burial (BK5) included both a Spaghetti-style gorget and a pot (B. Jones 1982; Lankford 2008:159; Storey 1993). Although speculative, the idea that the pot and gorget from BK5 together reference this mythic episode is a tantalizing possibility. Nevertheless, the Lake Jackson site has long been understood as a former Apalachee–Fort Walton ceremonial capital (Ewen 1996:43; J. Scarry 1994:162; Payne 1994). As such, it is likely that several of the individuals given special mortuary treatment in Mound 3 were somehow involved in chiefdom politics connected to subsequent Apalachee history.

Although their origin of production has been tentatively placed in the Tennessee Valley, the widespread distribution of these gorgets attests to the permeation of their symbolic content beyond Apalachee territory (Hally 1999, 2007; Lankford 2008:152–53; Muller 1991:13). Moreover, Muller has argued that the Spaghetti-style developed from the Hightower-style gorgets (also originating from the Tennessee Valley), and King notes that the former eventually replaced the latter before the sixteenth century (A. King 2011:292; Muller 1991:9, 2007:35). Together, the date ranges for these objects fall within Middle and Late Mississippian times (AD 1250–1550) and have been attributed to SECC behaviors (Brain and Phillips 1996:395–97; Hally 2007:190, 195; A. King 2007a:4). Additionally, shell gorgets may be symbols tied to lineage-oriented events that include funerals, marriages, and political ascensions, due to patterns in their geographic and temporal distributions (Brain and Phillips 1996:398–401; Hally 1999, 2007:227; Lankford 2008;



FIGURE 3.3. Three-dimensional reconstruction of Spaghetti-style imagery, based on the specimen from the Field Museum (see Figure 3.2a). (Drawn by F. Kent Reilly III.)

Sawyer 2009). In particular, Swanton claimed that as respected leaders, clan mothers were afforded such treatments (Swanton 1928a:157, 169). Assuming that men actually earned the right to use these gorgets in prehistory, the fact that several women were buried with them suggests that ownership was transferred prior to burial (Lankford 2008:159). For the Spaghetti-style gorgets specifically, evidence suggests that they were transferred during marriages that solidified political alliances (Lankford 2008:159; Wesson et al. 2001:145–46). Therefore, these iconographically laden objects were linked to one’s lineage membership in myth-histories that celebrated deified figures and earned through conquests that evoked their memory. In fact, we propose that it is during ballgame events that these



FIGURE 3.4. Hightower-style gorget recovered from Mound C at Etowah. The scene depicts two anthropomorphic figures wielding flint blades. (Courtesy of the McClung Museum of Natural History and Culture.)

objects were earned and exchanged according to the gambling and ceremonial protocols, or both, documented by Father Paiva.

Upon further investigation, it becomes clear that shell gorgets were not the only objects that linked the ballgame to Apalachee politics and kinship. Unlike the Spaghetti style, the Hightower style depicts subjects who wield blades as political symbols and lineage heirlooms that reference episodes in myth-history (Figure 3.4; Marceaux and Dye 2007:165–68). Representations of these objects on the incised shell gorgets conform to the appearance of artifacts that have been archaeologically recovered from Mississippian contexts. Among these are chipped flint blades and raptor-talon effigies from the Tennessee River valley, as well as multilayered flint effigies made from wood, shell, and copper that were recovered from the Spiro site (Lankford 2008:157; Marceaux and Dye 2007:175–76). Related to the gorgets by symbolic function, these

objects can thus act as substitutions for each other in unaltered iconographic and ritual contexts. Consequently, their symbolic relationships with indigenous folklore, politics, and kinship are not only similar but are equally capable of being communicated via material exchange. With greater attention to the archaeological contexts in which such transactions may have occurred, scholars can gain a greater understanding of the behaviors that involved such forms of communication. For the purposes of this investigation, we focus on one archaeological context in particular: the ballcourt at Mission San Luis.

Gaming in the Apalachee World Center: Archaeology of San Luis

Although the earliest archaeological evidence for the ballgame was recovered from the Mission San Luis site, it is important to note that the Apalachee and their prehistoric ancestors

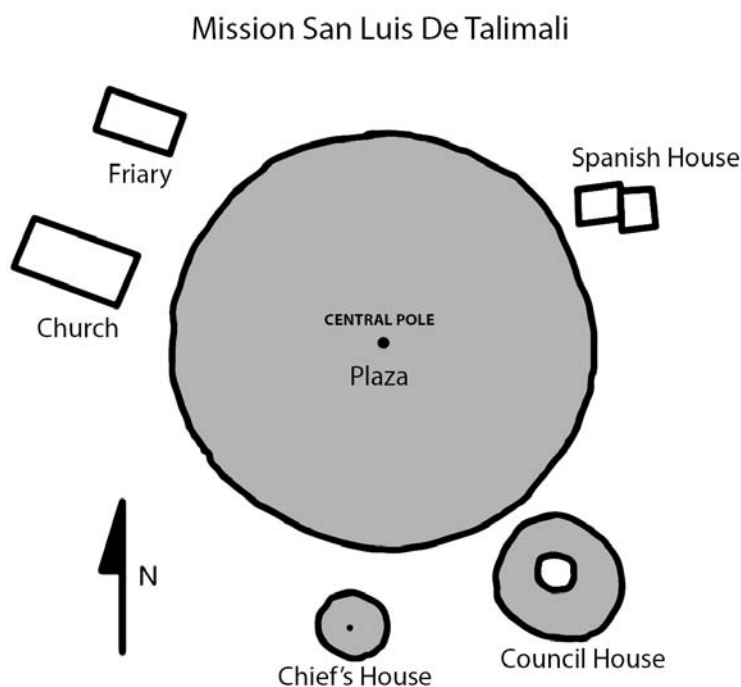


FIGURE 3.5. Mission San Luis site layout around the central plaza. (Drawn by J. Grant Stauffer and adapted from Hann and McEwan 1998:72.)

may have created ballcourts at earlier sites such as Anhaica and Lake Jackson (Ewen 1996:43; Hann 1988:71–73; McEwan 1991:41; Scarry and McEwan 1995:487). At Mission San Luis, it is clear that games were played in a central plaza (Figure 3.5), near the site's geographic center (Hann 1988; McEwan 1991:Figure 4; Scarry and McEwan 1995:487–88). Overall, the organization of the village appears to be arranged in relation to the ballcourt, and, considering recent studies on Apalachee architectural geometry, it is possible that the building locations satisfy a symmetry that is reflected in both house architecture and prehistoric copper artifact designs (Shepard 2003). While such a hypothesis has yet to be tested, the intentional placement of the ballgame plaza in the most active area of the Mission site, where it would attract public attention, seems obvious.

Much like modern sports facilities are often juxtaposed with gaming arenas, both the chief's house and council house were found adjacent

to the central plaza (Scarry and McEwan 1995: 487–88; Shepard 2003:165). Engineered for hosting a variety of events tied to the ballgame, the council house stood a staggering 16.76 m tall and exhibited a diameter of 36.58 m, dimensions that are roughly three times those of other council houses from the Apalachee Province. Correspondingly, the chief's house was 21.64 m in diameter and 13.11 m tall (Hann 1988; Hann and McEwan 1998; Shepard 2003:167). Constructed with large pine posts, the council house was plastered with heated clay, lined with two concentric rows of benches, leveled at its base with a clay-capped platform 10–20 cm thick, and supported by eight massive central posts (McEwan 1991:41; M. Scarry 1991). Mission San Luis currently features a reconstruction of the council house, as part of an interactive portrayal of the site.

The fact that the San Luis council house hosted a variety of ceremonial and domestic activities is undeniable. In particular, the large hearth at the very center of the structure yielded

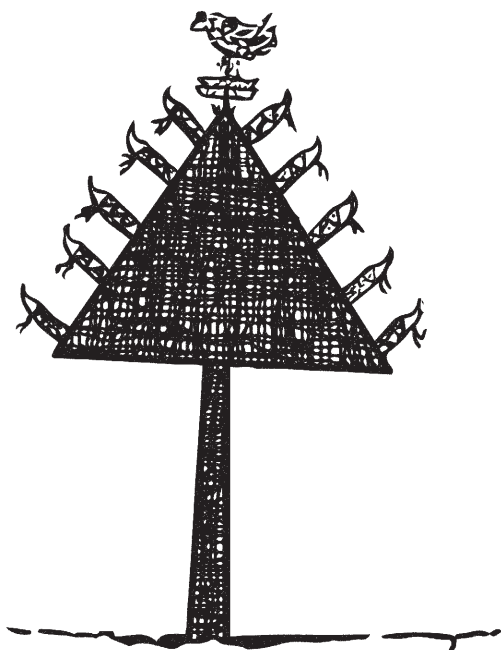


FIGURE 3.6. Sketch of the ball pole provided in Father Juan Paiva's reports. (Drawn by J. Grant Stauffer and adapted from Hann 1988:Figure 3.2.)

a plethora of evidence for food and medicinal preparation, as well as general refuse disposal (McEwan 1991:41–43). Consistent with Paiva's descriptions of medicinal substance consumption, seeds from the *Ilex vomitoria* (a common black drink, or *cassina*, ingredient) were collected from the hearth, along with wheat and watermelon remains that indicated the presence of several European cultigens (Hann 1988:78, 335; McEwan 1991:42; M. Scarry 1991). Other unusual materials from the council house include the following: several kaolin pipe stems, a copper alloy medallion, local and exotic vessel fragments with Fort Walton (AD 1000–1500) decorations, and numerous forms of quartz crystal objects (McEwan 1991:45–47, Table 1). Given the kaleidoscopic array of artifact types recovered from the council house, it is safe to say that the building's functions were not unlike those of other indigenous council houses in the Southeast generally. Such functions included dances, ceremonies, civic meetings, and guest lodging (McEwan 1991:42; Shapiro and Hann 1990).

The central plaza undoubtedly hosted some of the most important events in undocumented Apalachee history. The feature has been identified archaeologically as a large circular depression that exists as an artificial alteration of the site's natural topography. Thanks to a series of mapped auger tests, the distribution of artifacts and location of unpredicted features could be analyzed (McEwan 1991:40–41). Among these features was a "slightly elevated, circular platform" in the southeastern corner of the plaza that evades explanation (McEwan 1991:41). While such a feature bears resemblance to ceremonial mounds or a "chief's bed" used during annual Busk ceremonies at historic Creek Square Grounds, little evidence exists to substantiate any connections that these may have among each other (Swanton 1928b:566–67, 607, 609). Even though such characteristics of the plaza remain enigmatic, the absence of artifactual remains indicates that this centering town feature was routinely swept clean (McEwan 1991:40). Contemporary members of the Creek Nation carry out similar maintenance efforts at ceremonial grounds today, in preparation for events held annually according to their ritual calendar.

Although remains of a ball post in the central plaza have yet to be recovered, historian John Hann (1988:70–95) has investigated detailed descriptions of events that involved such structures in Paiva's accounts. Perhaps the most exciting feature of these documents is an actual sketch of a ball pole that the friar included with invaluable accounts of its construction and erection ceremonies (Figure 3.6; Hann 1988:75, 79, 339–40, Figure 3.2). Several characteristics of the pole that can be discerned from the sketch and its accompanying descriptions are of interest here, such as its sassafras pegs, bird-nest basket, and spiral shell tokens (Hann 1988:79). Despite the lack of material evidence, Paiva's reports account for several of these objects with enough detail to make important relationships between them recognizable.

In its most basic form, the ceremonial ball pole is an erect post with a triangular-shaped apex upon which a stuffed eagle, bird-nest basket, and various adornments were strung (Hann 1988:

74–75, 79). Humbly described as “sassafras pegs,” these adornments bear a striking resemblance to bird-talon effigies constructed from wood and stone (Dye 2004; Hann 1988:79). Moreover, these may have also been related to the staffs or clubs that belonged to Talpagana Luis, an Apalachee native who was described as Nicogwadca by Paiva’s native informants (Hann 1988:343). Based on Father Paiva’s sketch, it is clear that these objects were also wrapped with tassels, a treatment that is only selectively afforded to ceremonial artifacts by indigenous practitioners. Common forms of regalia that were hung from both the ball pole and accoutrements of respected Apalachee leaders included scalps taken in battle (Hann 1988:343). In addition to highly ritualized erection protocols that oriented it toward the east, the observation that the pole was frequently struck by lightning reinforces its perception as a supernaturally endowed construct, associated with those deities that control life-sustaining rainfall and destructive thunderstorms (Hann 1988:74–75, 79). Such images evoke visions of incidents where lightning bolts struck ceremonial poles at Mission San Luis and other nearby villages after Talpagana Luis’s (or Nicogwadca’s) funeral (Hann 1988:343).

When examined with the historical knowledge about the ballgame’s ritual equipment, the relationship between objects depicted in the previously examined iconographic themes and the sport becomes clear. In particular, objects held by anthropomorphic figures rendered in the Hightower style have been regarded as status identifiers with material correlates (Dye 2004; Dye and King 2007). The material subjects of these iconographic forms closely resemble elaborately crafted flint blades and effigies constructed from wood, copper, and shell (Brown 1996; Dye 2004; Dye and King 2007; Henry Hamilton 1952). As forms of hypertrophic weapons, flint blades and effigies perform symbolic functions rather than practical ones (Dye 2004:194). Artifacts like these were often wrapped together, as is the case for those unearthed from the Spiro site (Brown 1996:639–50; Hamilton 1952:40–45, 55). Moreover, recent studies have shown that the act of wrapping is a means of designating

the sacred in Native American cultures (F. Reilly 2006; Steponaitis et al. 2011). This was especially true in the prehistoric Southeast, where bundling was not only a means of storing ceremonial objects but also a method of human interment in north Florida (Milanich et al. 1997; Turner et al. 2005). Much like the royal mace that sits in Great Britain’s House of Commons as the Queen’s substitute, hypertrophic weapons from indigenous prehistory served as substitutes for authoritative individuals. Consequently, we contend that Paiva’s talon-shaped “sassafras pegs” that adorned the ball posts fulfilled similar functions among the Apalachee.

European Invasion:

Colonial Interactions with the Apalachee

By 1690, relations between the Spanish and indigenous peoples of northwest Florida were stressed even before the burning of four settlements along the Chattahoochee River (Hann 2006:121). Early attempts at missionizing tribes west of Apalachee territory and along the Apalachicola had proven difficult, considering that disputes among the Chisca, Guale, Chacato, and Chichimeco led to conflicts that drew in the Spanish in 1675 (Hann 2006:52–59, 95). Not only did these conflicts occur at a strategic point before the ballgame’s recording in 1678, but Father Paiva’s initial opinion that the ballgame be permitted among the Apalachee was swayed after consultation with the governor of the region, Juan Marques Cabrera (Hann 1988:229, 345–46). This occurred the year after an exceptionally dramatic ballgame season, marked by a frequency of intertribal disputes after several games (Hann 1988:71). In fact, many of these conflicts occurred because of a lack of communication between indigenous ambassadors and the Spanish, who frequently disapproved of the tradition (Hann 1996:75).

In the late seventeenth century, several native towns along the Chattahoochee River began to resemble the Creek Confederacy that became solidified by Scottish–Creek relations, reinforced by marriages and influential figures like Alexander McGillivray (Hann 1996:66; Pryor 2010:23–50). The resemblance was so

close that even John Swanton suggested that the Creek Confederacy existed during de Soto's expedition in his work, *Early History of the Creek Indians and Their Neighbors* (M. Smith 1987:129). Nevertheless, Vernon J. Knight has definitively argued "no documentary evidence of any such political centralization prior to the eighteenth century [exists] to explain the relationships that developed among the Lower Creeks in the late seventeenth century" (Hann 1996:73; Knight 1994:374–75). Consequently, the political environment of the *juego de la pelota* was marked by an increase in the territoriality of indigenous groups whose existence was later determined by colonial interactions.

One of the terms that John Hann has employed to describe the native ambassadors is *osinolo* (or *usinolo*), the same term used to designate war chiefs and ballgame officials (Hann 1988:78, 1996:67). In fact, Ysfane Juan, an *osinolo* of the Sauocola in 1685, acted as both interpreter and head messenger who spoke both "the Apalachina and Apalachecole tongue," according to a Spanish captain at Mission San Luis, Domingo de Leturiondo (Hann 1996:67; Leturiondo 1685). In the Spanish mission contexts, these officials commanded militias from Apalachee villages and often became captains in the Spanish infantry (Hann 1988:105; Fernández de Florencia 1678;¹ Leturiondo 1678). They "were sometimes able to accumulate considerable quantities of foodstuffs," perhaps through gambling practices connected with the ballgame that circulated wealth among Apalachee people (Hann 1988:105). The *osinolos* exclusively received special forms of tribute from the Spanish such as guns and particular forms of clothing (Hann 1988:105). These individuals were largely responsible for maintaining sociopolitical and military networks that connected the Spanish missions with surrounding villages and distributing forms of tribute among Apalachee relations.

Unlike the English, the Spanish referred to the tribes along the Chattahoochee River as the Apalachicoli. According to Diego de la Peña (1716, 1717:134), this group spoke Yamasee, a Muskogee dialect similar to Hitchiti (Hann 1996:66). As proficient communicators in Hitchiti,

Yamasee, and Spanish, the *osinolos* were not mere backwoods farmers but effective diplomats who could bypass the language barriers that frequently hindered authoritative Europeans (Hann 1988:101, 1996:67). In the case of the Apalachee in Mission San Luis de Talimali, the *osinolos* acted as the mediators between their villages east of the Apalachicola and the chiefdoms that existed north of the Chattahoochee and Flint River confluence (Hann 1996). Due to the seasonality of indigenous warfare and ballgame practices, we infer that the *osinolo's* role transcended both spheres of cultural activity because of their close association and the title's function within a lineage-based hierarchy. Perhaps this is why William Bartram (1955:390) notes, "There are many of these war chiefs in a town or tribe, who are captains or leaders of military parties." All of them were subservient to the *mico*, the indigenous head of the chiefdom that the villages comprised. Due to the linguistic diversity of the several tribes in northwest Florida, south Alabama, and south Georgia, it comes as no surprise that the *osinolo* was referred to in several ways by the Spanish, including *hinija*, *henihi*, *jinija*, *enija*, and *inixa* (Hann 1988:101). Consequently, the relationships between villages were directly reflected in the relationships between individual *osinolos*, whose disputes were pacified by their participation in the *juego de la pelota*.

By eliminating the *juego de la pelota* and traditional practices associated with it, the Spanish effectively neutralized the vehicle through which the Apalachee established alliances with neighboring tribal communities and initiated military actions. Moreover, the incorporation of indigenous leaders into the Spanish military served as a means of subjugation by which the latter exercised control over the former. Perhaps, it was the subjugation of Apalachee *osinolos* that enabled the Spanish to maintain control in Mission San Luis with a garrison of only 30–50 soldiers at a time (Hann 1988:205). The political stability maintained at Mission San Luis was particularly fortuitous for the Spanish because of the rising threat of British occupation in South Carolina and the increasing activity of their traders along the Chattahoochee River (Hann 1988:203). How-

ever, while this stability was maintained at San Luis and other mission sites to the east, several attempts at establishing missions among the Apalachicola farther west failed (Hann 1996). The Sauocola mission in Apalachicola territory between villages along the Chattahoochee and Mission San Luis is a noteworthy example (Hann 1996:72). The Timucuan Rebellion of 1656 also disrupted the Spanish mission network (Milanich 1995:187). Ultimately, the conflicts that ensued pitted the Spanish and Apalachee against native polities that were allied with British-Carolinian colonists (Milanich 1995:223).

The short-lived political stability at Mission San Luis between the Apalachee and the Spanish weakened between 1682 and 1702 (Hann 1988:227). Hann (1988:227) argues that this development resulted from five causal factors: the irrational conduct of Antonio Matheos (the governor's deputy in Apalachee); demands for Apalachee labor; growing economic competition between the Apalachee and the Spanish; failure to alleviate Spanish abuses of Apalachee villagers; and a failed attempt to avenge the Apalachicola attack on the Timucua village of Santa Fé that resulted in the deaths of three Apalachee traders. Perhaps the most pivotal of these events was Francisco de Florencia's attack on 24 native traders who were en route to Apalachee from Taisquique, which resulted in the deaths of 16 traders and the acquisition of their trade goods (Hann 1988:233). While reporting the outcomes of these occurrences to Don Antonio Ponce de León, the chief of Ivitachuco stated, "The deed is such that all of us will have to pay" (Hann 1988:233; Boyd et al 1951:26–27). This daunting prophecy was fulfilled when only 300 of the initial 800 Spanish and Apalachee soldiers returned from a disastrous ambush at the hands of the Apalachicola in 1702, dissolving Spanish control over Mission San Luis (Hann 1988:233). Moreover, the elimination of the *juego de la pelota* prevented the acquisition of additional forces from surrounding villages and eliminated the means of mitigating disputes with the Apalachicola through ballgame ceremonies.

After the unfortunate series of events that culminated in the failed Spanish military operations in 1702, the vulnerable Apalachee re-

gion as a whole experienced rapid depopulation and "the greatest slave raid ever to occur in the South" (Wright 1981:141). In 1704, Colonel James Moore, former British governor of Carolina, ravaged the territory that contained Mission San Luis over a period of seven months, effectively destroying the Spanish-Apalachee mission network (Hann 1988:164; Milanich 1995:225). Subsequently, resilient Apalachee refugees were displaced into modern-day Pensacola, Florida, and Mobile Bay, Alabama (Hann 1988:265; Milanich 1995:227). Those refugees obtained by the groups that later comprised the Lower Creeks, such as the Chiscas, Apalachicolas, and Yama-sees, were either exterminated or enslaved (Milanich 1995:183, 227). From historic times into the present day, Apalachee refugees eventually escaped to Rapides Parish, Louisiana, where 300 descendants recognize their identity today (Horowitz 2005).

Despite the mass exodus of the Apalachee after Colonel Moore's attack in 1704, the legacy of the *juego de la pelota* survives in variations of stickball practiced by the Muskogee Creek tribes who carry on the game and many of the historic ceremonies associated with it (Bolfing 2012; Hudson 2010; Swanton 1928a, b; Vennum 1994). The Apalachicolas, Hitchitis, Killigees, and Tallushatchees later united under the Tallassee King, a *mico* of the tribes that were situated along the Chattahoochee River before 1704 (Hann 1988; 1996; Hudson 2010:12–13). Even after many groups were displaced to Oklahoma in response to the Indian Removal Act of 1830, the game served as a means of pacifying family feuds. George Catlin created visual records of the sport from the 1830s through 1850s (Hudson 2010:12; Treuer 2014:59, 78–81; Vennum 1994:230). During the annual Green Corn ceremony, the game continues to be seen as an act of divination and sympathetic magic oriented toward a successful growing season (Adair 2005 [1775]; Bolfing 2012; Swanton 1928a, b). Operating according to similar forms of social protocols, Muskogee Creek stickball shares several common characteristics with the *juego de la pelota* and exists as an independent cultural phenomenon in many ways.

Survival of the Apalachee Ballgame: Summary and Conclusions

As reenactments of events from myth-history, Apalachee ballgames provided the mechanism through which players could become their deified ancestors and contest others in order to claim their lineage-based titles as political leaders. Donning objects laden with symbolic representations of these deities, the athletes simultaneously fulfilled roles as actors on a cosmic stage where the laws of nature could be temporarily suspended. Based on Father Juan Paiva's accounts of the ballgame's associated rituals and myths, it has become clear that the *juego de la pelota* did not merely function as a recreational activity. Rather, the ballgames provided an outlet for politico-religious initiation ceremonies, chartered by selectively transmitted narratives from Apalachee oral history (Knight 2013:145–46). By examining this folkloric record and the iconographic content of Mississippian period shell gorgets from the Greater Southeast, we demonstrate that these artifactual residues from late prehistory serve as pictorial records of the sport's celebrated history. In the minds of indigenous observers, to witness these competitions was equated with witnessing creative acts in primordial time "played out" by living ancestors.

From the archaeology of Mission San Luis, remnants of feasting and ritual activity have been recovered from the council house, which sat alongside the central ballcourt that also functioned as a plaza (McEwan 1991; Scarry 1991; Shapiro and Hann 1990; Shepard 2003). Upon examining the botanical remains excavated from the central hearth of the council house, trace amounts of yaupon holly (*Ilex vomitoria*) have been recovered that suggest the brewing and consumption of *cassina*, a local referent to the black drink (McEwan 1991; Scarry 1991). Described by the site's monastic inhabitants, such concoctions were often consumed as part of divination practices before an important ballgame to maximize their good fortune during gameplay (DeBoer 1993; Hann 1988). Other ceremonial practices connected to the *juego de la pelota*, such as the raising of the ball pole, include those documented by Father Paiva and examined by

John Hann (1988:70–95). By synthesizing what is known about Apalachee political history and the archaeological remains recovered from Mississippian period sites in the Southeast, it is possible to identify the material symbols that were used to identify important community figures, such as the *osinolo* or even the *mico*. More specifically, comparing the sketch provided by Father Paiva (Figure 3.6) and examining hypertrophic weapons recovered from the Tennessee River valley has revealed important ceremonial functions for the ball pole, whose "sassafras pegs" strongly resemble wrapped, talon-shaped flint effigies. Perhaps these were the objects wielded by prominent players and overseers as indicators of their prominent status.

Through an examination of the historical developments that occurred between the Apalachee and the Spanish during the Mission period, the *juego de la pelota* can be seen as a social institution that existed at the core of indigenous cultures. Given that the sport exhibited close ties with warfare practices, it is reasonable to suggest that many of the militaristic proceedings in early Colonial period history occurred in response to these games or because the game's absence prohibited the forms of social negotiation it engendered (Hann 1988; Vennum 1994). This was clearly the case in acts of vengeance killing on the part of the Apalachicola, who could not fulfill their obligations in the context of the ballgame. Moreover, the game's absence restricted the maneuvers of Apalachee *osinolos*, whose ballgame networks once connected them to the ancestors of the Lower Creeks via the Sauocola mission, as well as the villages that comprised the Apalachee chiefdom (Hann 1988, 1996; Milanich 1995). Conversely, under the guidance of Colonel James Moore, the indigenous allies of the British carried out the destruction of Mission San Luis at the onset of Queen Anne's War, mobilized through their own stickball networks (Milanich 1995:227, 1996:62). Consequently, the Spanish mission was eliminated, limiting influences of the mission network to the St. Augustine area until the region was ceded to the British in 1763 (Milanich 1995:229–31, 1996:62). Nevertheless, variations of the game continued their existence

among Muskogee Creek tribes, as well as the Timucuan who occupied modern-day Amelia Island (Hudson 2010:12; Milanich 1995:204).

As a social institution that transcended cultural boundaries, the *juego de la pelota* and variations thereof survived beyond the mass exodus of the Apalachee people and the impacts of colonialism. However, the game's abolition at Mission San Luis was followed by consequences that not only affected the Apalachee but the Spanish as well. By removing a tradition that served as the conduit for social cohesion and political negotiation, the Spanish had effectively destabilized the Apalachee hierarchy and eliminated a crucial method of pacifying foreign political entities. Moreover, this decision also marked the end of gambling practices associated with the

ballgame, which provided a vehicle for wealth distribution throughout the chiefdom (Hann 1988:74). For the Spanish, the decision may have reduced the threat of an Apalachee uprising, but it also prevented them from bolstering their military operations with indigenous supporters. Ultimately, the history of interactions between the Spanish and Apalachee, marred by a series of misfortunes from their outset in the sixteenth century, precipitated in the conflicts that led to the end of the mission network at the beginning of the eighteenth century (Hann 1988, 1996; Milanich 1995, 1996; Shapiro and Hann 1990). It is at this transition point in the late 1600s, when the *juego de la pelota* was abolished, that the social structure of the Apalachee began to fall apart.

Notes

1. Juan Fernández de Florencia: Letter to Governor Pablo de Hita y Salazar, San Luis de Talimali, August 30, 1678. "Report Which the Principal Leaders Who Went to Make War on the Chiscas, Who are Juan Mendoza, Matheo Chuba, Bernardo, the Cacique of Cupayca, and Bentura, the *Inija* of San Luis, Made in the Presence of Captain Juan Fernández de Florencia and Concerning How the War against the Chiscas Originated." In Hita Salazar, 1678, AGI SD 226 WLC, vol. 9.

This report by the Indian leaders was taken down by Florencia in the Apalachee language when the expedition returned to San Luis on October 5, 1677. A year passed before Florencia translated it into Spanish to forward to the governor. An English version of the report is available in Swanton 1922, with a Spanish version in Serano y Sanz 1912.

CHAPTER 4



“He Must Die Unless the Whole Country Shall Play Crosse”

The Role of Gaming in Great Lakes Indigenous Societies

RONALD F. WILLIAMSON AND MARTIN S. COOPER

In this chapter, we examine the ethnohistoric and archaeological evidence for gaming in the Great Lakes region and explore the roles these games played in people's lives. For the Iroquoian and Anishinaabeg peoples of northeastern North America, indigenous games, such as lacrosse, the maiden's ballgame, dish/bowl, straws, snow snake, javelin, moccasin, and cup-and-pin, represented much more than sport. They involved aspects of physical prowess, warfare, prestige, gambling, dreaming, mourning, curing, and shamanism. Gambling, in particular, was an important cultural activity that, according to seventeenth-century accounts, resulted in serious consequences. In the winter of 1623–1624, for example, Gabriel Sagard, a Recollet friar, witnessed a Huron-Wendat man returning to his village naked and singing after having left everything in the hands of a Frenchman, including his clothing, moccasins, wife, and children, although his family members were later returned.

Lacrosse, like other games, was a game played, however, by not only the Wendat but by all the Northern Iroquoians and many of their Algonquian neighbors. The region occupied by Northern Iroquoians constitutes most of what is now known as southern Ontario, southwestern Quebec, New York State, and northern Pennsylvania (Figure 4.1).

The Wendat were the northernmost of the Iroquoians, historically inhabiting the land between Georgian Bay on Lake Huron and Lake Simcoe. The relatively small Tionontaté (Petun)

Nation lived immediately to the southwest and resembled the Wendat in most linguistic and cultural respects. The tribes of the Neutral Confederacy (called Attiwandaron by the Wendat) lived farther to the south between the west end of Lake Ontario, lower Grand River Valley, and the Niagara River. The Erie were a group relatively unknown to early European visitors, inhabiting the area of the southeastern end of Lake Erie. Even less is known about the Wenro (Oneronon), also a small group that lived in western New York State, between the Neutral and Seneca. The five tribes (Seneca, Cayuga, Onondaga, Oneida, and Mohawk) of the Iroquois Confederacy (Haudenosaunee) lived in tribal clusters across central New York State; the tribes were culturally distinctive due to their long, separate developments, as reflected in language and material culture differences, as well as clan organization, kinship terms, and mortuary patterns. The Susquehannock lived to the south of the Iroquois, on the lower Susquehanna River, and their linguistic relationship to the other Northern Iroquoian languages is unclear. There were also Iroquoian-speaking communities living in the sixteenth century (and earlier) in the St. Lawrence River valley west of Quebec City. Encountered by Jacques Cartier in his 1534 and 1535 visits to eastern Canada, they had moved elsewhere by the time of Samuel de Champlain's visit of 1603.

Northern Iroquoians relied on horticulture for subsistence and inhabited often-fortified

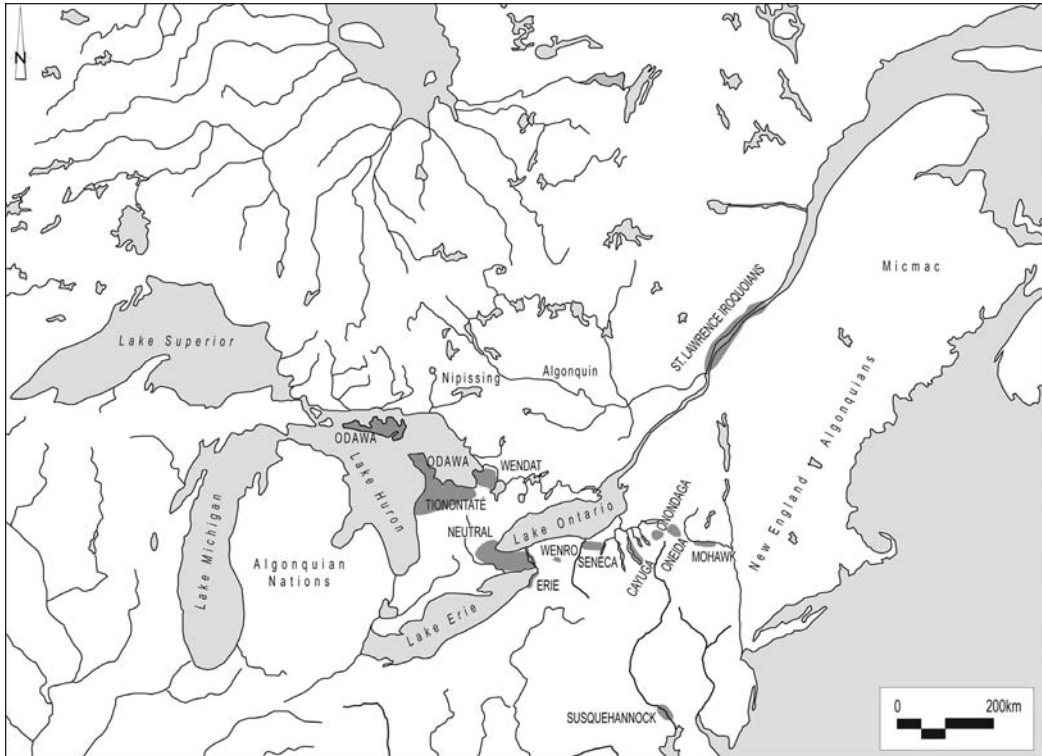


FIGURE 4.1. Locations of select Great Lakes indigenous societies. (Drawn by Archaeological Services Inc.)

villages containing bark-covered longhouses shared by extended families. They had matrilineally defined membership in clans that extended beyond each village to other communities, thereby integrating villages within tribes and confederacies. They shared a set of religious beliefs and social values and attitudes; and they participated in ritualized warfare and prisoner sacrifice (Trigger 1976:91–104).

There is also a rich seventeenth-century documentary record of the lives of Northern Iroquoians. These include the works of Samuel de Champlain, an experienced soldier and explorer who recorded his observations during a winter spent with the Wendat in 1615–1616 (Biggar 1922–1936); the account of Gabriel Sagard, a Recollet friar, who spent the winter of 1623–1624 with the Wendat (Wrong 1939); and the annual accounts of the Jesuit priests who lived among the Wendat from 1634 until 1650 and among the Iroquois from 1654 to 1667 (Thwaites 1896–1901).

The ancestral Tionontaté and Wendat were closely tied economically and politically to

their Algonquian or Anishinaabeg neighbors: the Tionontaté with the Odawa and the Wendat with the Nipissing. The Odawa, or Ottawa, were situated on the Bruce Peninsula, Manitoulin Island, and the eastern shore of Georgian Bay, while the Nipissing inhabited the region of the lake by the same name, situated on the historic route between Quebec and the Wendat country. Throughout the 1640s, the Mississauga and Ojibwa Nations were situated along the shores of Georgian Bay and the north shore of Lake Huron, near what is now Sault Ste. Marie (Michigan and Ontario). There were also Algonquian nations, such as the Potawatomi and Fox, who, at the time of contact, lived immediately south of the Great Lakes in Michigan and Ohio.

Lacrosse

Lacrosse is a traditional men's team sport in which players use long-handled sticks to propel a ball into the opponent's goal area. The first Europeans who witnessed the game thought it resembled a stick-and-ball game played in France

known as *crosse*, thereby explaining the origin of the term. It has erroneously been attributed to Brébeuf, who purportedly named it for a crook or bishop's crosier (Vennum 1994:71).

In 1636, the Jesuit Jean de Brébeuf reported in his annual account to his superior, Paul Le Jeune in Quebec, that there were three kinds of games among the Wendat (Huron)—“*crosse*,” “*dish*,” and “*straw*,” the first two of which were best for healing. He went on to describe a dying man with a severe fever, for which the shaman ordered, as a cooling remedy, a game of *crosse*, noting that the ill sometimes dreamed that they would die unless the whole country played *crosse*. What would follow was a game in a cleared field, village contending against village, with betting on the outcome, thereby creating great interest in the contest (Thwaites 1896–1901, 10:185–89).

The following year, in the face of an epidemic, a hunchback shaman named Tonnerauanont prescribed a game of *crosse* to heal the sick and rid the country of the disease. The game was announced, and all the young men were entreated to do their duty and play, otherwise many would die and a great misfortune would befall the whole country (Thwaites 1896–1901, 13:130). The game was played to no avail. Within days, more than a dozen individuals were severely ill; the shaman, not the game, was blamed for the calamity.

Another one of many subsequent games of *crosse* played in Canada occurred over two centuries later in Montreal in celebration of Canadian Confederation. Played between the Montreal Lacrosse Club and a team from the Mohawk community of Kahnawake, which won the match, it represented an important cultural exchange. *Crosse* and other indigenous games that have survived the generations are part of the reason that Canada can be described as a Métis (mixed blood) society, shaped from four centuries of interaction with indigenous populations who instructed and enabled the first European visitors to live in the Canadian environment (Saul 2008). Lacrosse is now recognized in Canadian law as “Canada’s National Summer Sport.”

The Game and Its Contexts

Among the Wendat, it was the shaman who explained to the ill the extent and nature of their sickness, thereafter prescribing a dog feast, a game of *crosse* or *dish*, sleeping on a particular skin, or some other remedy (Thwaites 1896–1901, 10:197). Lacrosse was also played to influence the weather (Thwaites 1896–1901, 14:47) and in memory of an excellent player on his death (Thwaites 1896–1901, 15:179). On May 19, 1637, for example, one shaman’s reputation was challenged after nearly half a foot of snow had fallen and then frozen very hard, likely threatening a newly planted crop. There had been a rigorous match two days previously, as the shaman had asserted that the weather depended only upon a game of *crosse*. He was charged with being a charlatan and an impostor (Thwaites 1896–1901, 14:47). Many courses of action were also informed through dreams during which a bird, flame, or ghost would appear and dictate to Wendat people the occasion of their feasts; their success in hunting, fishing, war, or trade with the French; and when to employ dances and games (Thwaites 1896–1901, 15:179).

Whatever the impetus for playing the game, it seems that all of the Northern Iroquoian groups and their Anishinaabeg neighbors played a similar game—Algonquians referred to it as *baggataway*, the Wendat as *kahwendaë*, and the Mohawk as *tewaarathon*. In all cases, it was far more than a leisure activity, being spiritually embedded in their respective cultures. Rather than simply a game, it was ceremony. The Iroquois, for example, refer to it as the Creator’s Game; the Cayuga Nation today continues to play a ceremonial game every spring to honor and entertain the Creator and Thunder Entities and to thank them for clearing the air (Dao Jao Dre [Delmor Jacobs] 2011:28). Algonquians view the game with equal reverence, having been given the game by the Manitou long ago along with the responsibility to play in the same way as their ancestors; and it was prominent in mourning among the Fox (Michelson 1925:38).

A match was seldom played before noon and usually involved two parties of equal numbers. The game sometimes involved hundreds

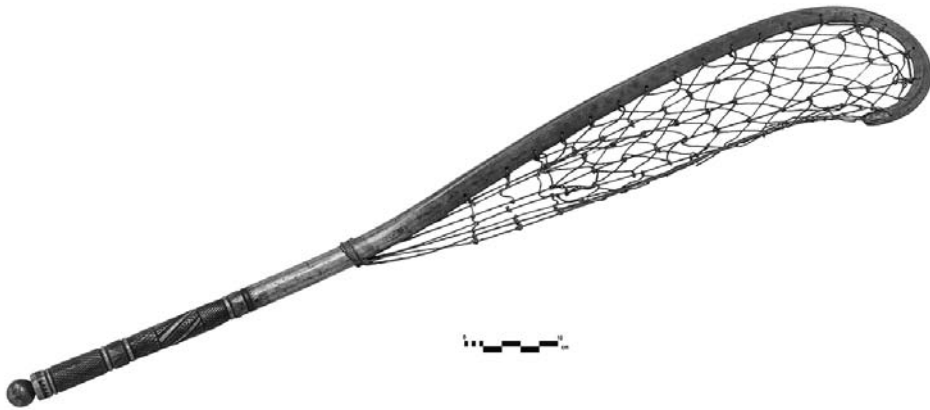


FIGURE 4.2. Example of an indigenous lacrosse stick, Six Nations, Ontario. (Royal Ontario Museum. Photographed by John Howarth for Archaeological Services Inc.)

of players, especially in those cases where the match was between nations. More often, it was between adjacent communities or clans within one or more communities. The players were next to naked but were elaborately painted and ornamented (Hewitt 1892:191).

Games would be played on extensive meadows or grass plains with natural boundaries and goal lines hundreds of paces apart and might continue for several days. The basic game played at the time of contact survived into the early nineteenth century largely unchanged, after which it was modernized. The objective of the game was to pass a ball through the opposing team's goal area by any means. In the eighteenth and early nineteenth centuries, fields were 180–360 m (600–1,200 ft) in length and the goalposts—3–4.5 m (10–15 ft) in length—were set 5–15 paces apart. Clearly, the game required considerable endurance. Footraces, at least among the Iroquois, were an event held at the conclusion of mourning or other civic councils, with runners dressed in the same manner as for lacrosse (Morgan 1972:307). Perhaps these races were regularly undertaken with explicit intent to maintain fitness levels for the game.

Early playing sticks appear to have been 3–5 ft long and formed with a curved end. Later varieties, depending on their nation of origin, could have nets on their ends drawn sufficiently taut to allow the player to carry the ball through

opposing players or throw it a great distance, even up to 91 m (300 ft; Figure 4.2). The sticks were made of hickory, a traditional wood also favored for the carving of false face masks and traditional canes. Even today, Iroquois sometimes use wooden sticks, while other teams play with composites. The wood is considered alive; infant boys are given a miniature version, team members sleep with their playing sticks nearby, or even in bed, and take one with them into the grave (S. Price 2010). The balls were reportedly made of hair-stuffed deerskin, knotted leather strips, or wood (the latter often from knots or burl) and varied in size from that of tennis balls to softballs (Blair 1911; Fisher 2002; Hewitt 1892; Vennum 1994).

It appears that in earlier forms of the game, players were permitted aggressive physical contact of any nature in order to move the ball down the field. This resulted in many injuries to players, both minor and so severe as to cause permanent deformity or even death. Players would rarely complain for fear of being considered weak (Copway 1972 [1850]:45). In this way, and in the use of the stick almost as a weapon, young men were engaged in training as warriors, some societies even referring to such games as “the little brother of war” (Blair 1911:95; Fisher 2002:13–14). Vennum notes that the butt ends of some lacrosse sticks, like war clubs, were carved with balls held in the mouths or talons



FIGURE 4.3. Butt end of lacrosse stick with carved ball, Six Nations, Ontario. (Royal Ontario Museum. Photographed by John Howarth for Archaeological Services Inc.)

of a bird of prey or snake's jaws (Figure 4.3; Vennum 1994:xiii). The ball would then be released symbolically to fly through the air to strike the enemy. Lacrosse was even used in June of 1763 as a ruse to gain entry into Fort Michilimackinac, with an errant ball pursued by players and spectators through the open gate. They then laid waste to the fort (Henry 1809).

As in all other public games of these nations, spectators were important participants, and a match presented an opportunity to bet on the outcome. The stakes and gambling were considered as important an aspect of the ceremony as the game itself.

Maiden's Ball Play

Another game recorded among the Anishinaabeg in the mid-nineteenth century is noteworthy in its similarities to aspects of lacrosse; it too was known to have been played as a curative event at the request of an ailing individual (Copway 1972 [1850]:49–50). Called Maiden's Ball Play or *pah-pah-se-kah-way*, it was played mainly by young women with a ball made of two deerskin bags, each about 13 cm (5 in) long and 2.5 cm (1 in) in diameter, tied together at a distance of 18 cm (7 in) from one another.¹ The ball was thrown

with a stick 1.5 m (5 ft) long. Played in the summer, the young women of the village would try to run home with the ball.

As in the men's game, pandemonium existed, with crowds rushing to follow the ball and participants chanting, stumbling, and injuring themselves. Worked garters, moccasins, leggings, and vermilion were generally the articles at stake, although the chief of the village might send a parcel prior to the game, the contents of which were distributed among the women when the game concluded.

Dish/Bowl

Dish is another game that was prominent in healing ceremonies among Great Lakes groups and beyond, especially if the ill person had dreamed of its use in his or her case (Blair 1911; Thwaites 1896–1901, 10:187–89, 13:131–32, 17:159, 201–07; Wrong 1939:97). Once decided, several times each winter, the civil chiefs in the village called a council to arrange the time and invitation for the opposing village, an envoy being sent with the invitation. If accepted, players in both villages made preparations, which included fasting and abstinence from sexual intercourse, as well as feasting and singing the evening before.



FIGURE 4.4. Game of dish as portrayed in Lafitau, *Moeurs des Sauvages Américains* (1724).

They also displayed their charms and exhorted them, hoping for favorable dreams; they then collected the things they had dreamed would bring them good luck and took them to the game in their pouches. Even an old man thought to bring luck could be brought to the game on the shoulders of young men. One man was known to rub the game pieces with a certain ointment that hardly ever failed to result in a win. The man chosen to hold the dish in the game, however, was someone who had dreamed that he would win.

The game was as a simple one, played among the Wendat with six plumstones, white on one side and black on the other. Play consisted of striking a dish very hard against the ground so that the stones rose and fell, white or black side up. The one who held the bowl cried, “tet, tet, tet, tet” in order to effect a favorable outcome (Figure 4.4). Communities often played against each other; the two players—one for each side—and observers gathered in a longhouse, along with the sick person wrapped in a blanket. The two groups took their places on opposite sides of the house, filling it from top to bottom. Everyone bet

heavily on the outcome, shouting and gesturing to attract good luck and uttering contrary words and gestures to bring bad luck to the other side. Participants only departed after the patient had thanked them for the health he or she had recovered through their help.

Cures were attributed to the play. One Wendat Christian convert, recovering seven or eight days after the bowl game had been played in his house for two or three days, had to explain himself to the Jesuits for the “sin” (Thwaites 1896–1901, 14:81). In one case, however, a young woman, daughter of one of the most important and richest persons in the country in terms of the number of charms he possessed, was requested to attend a game of dish with these charms. At the game, she bet heavily but was suddenly overtaken by the illness that had led to the game in the first place. When she died, this misfortune was attributed to defects and omissions in the forms and details of the ceremonies.

A similar Wendat game, using five or six fruit stones blackened on one side, was usually played by women and girls, although men and boys sometimes played. They held the dice in their

hands and tossed them onto a piece of leather or skin stretched on the ground for that purpose. The stakes were collars, earrings, and other such possessions (Wrong 1939:97).

Among the Iroquois, the bowl game was called *gus-kä-eh* and was played with blackened (on one side) peach stones after the introduction of that fruit. In nineteenth-century accounts of the game, it was the concluding event on the last day of the Green Corn and harvest festivals and also of the New Year's jubilee. It is traced by tradition to the formation of the league and was also thought to be a game enjoyed in the future life in the realm of the Great Spirit. It is still played today in midwinter, midsummer, and at maple syrup time between clans with items such as turtle rattles, lacrosse sticks, wampum, and traditional clothing wagered and held by the Faithkeepers of each side. Frank Speck notes that some people viewed the bowl game as a struggle between the Good and Evil Twins (Speck 1955:83; see also Blau 1967; Engelbrecht 2003:50). In the nineteenth century, it was played in a public council house by a succession of players, two at a time, under the supervision of managers appointed to represent the two parties, usually tribes or clans.

The game might be played for more than one day. Once the betting was concluded, a platform was constructed a few feet above the floor and covered with blankets. The two initial players were seated across from one another, each with five bean counters that were lost or gained from each shaking of the bowl, depending on whether five or six of the fruit stones showed the same color. Once an individual player's counter beans had been lost, the player was replaced by another; all surplus counters being in the care of the team managers. When one of the parties had lost all her beans, the game was concluded. Despite its simplicity, the games generated a great degree of excitement, and when finally decided, the victors celebrated loudly (Morgan 1972:307–12; Dao Jao Dre [Delmor Jacobs] 2011:24–25), although both the winners and losers in one game witnessed in the late nineteenth century were subdued at the end of the game, having been admonished by a chief (Boyle 1900:36–39).

A similar game among the Iroquois, recorded in the nineteenth century, was called *gus-ga-e-sa'tä*, or deer buttons (Morgan 1972:303–04). Played only at fireside, or occasionally during religious councils, the people divided into clans, betting upon the results. Played by two at a time, like the peach-stone game, eight rather than six buttons were employed. They were about 2.5 cm (1 in) in diameter, manufactured of elk horn, rounded and polished, and slightly charred upon one side to blacken them. The game was played on a blanket where the buttons were shaken in the player's hands and then thrown down, the scoring being based on the number of the same color appearing. Like the bowl game, scorekeeping was with beans and concluded with all of the available beans having been taken up by the players.

The bowl game is certainly ancient, given the discovery of wild plum pits, darkened on one side, in pouches placed with adult burials at the late sixteenth-century Seneca Tram and early seventeenth-century Fugle sites (Figure 4.5; Leonard, Chapter 2 this volume; Wray et al. 1991: 136, 145, 653). One antler disc was found with a burial on the late-sixteenth-century Seneca Cameron site and 53 discs were found with female and child burials at the early seventeenth-century Seneca Dutch Hollow site (Sempowski and Saunders 2001:62–63). Discs made of stone, bone, shell, and, more frequently, sherds of ceramic vessels, occasionally decorated on one side, have also been found on numerous ancestral Wendat and St. Lawrence Iroquoian sites dating from the thirteenth through sixteenth centuries (Figure 4.6).

Straws

Gabriel Sagard also noted that the Wendat were addicted to the game of straws, called *aescara*, for which somewhere between 51 and 201 (always an odd number) white reeds of uniform length, 15–25 cm (6–10 in) long, were divided through a number of quite complicated conventions (Wrong 1939:96–97; Blair 1911:1:96–101). Nicolas Perrot provided a detailed yet incomprehensible account of the game in 1680, noting that players and their comrades often lost all that

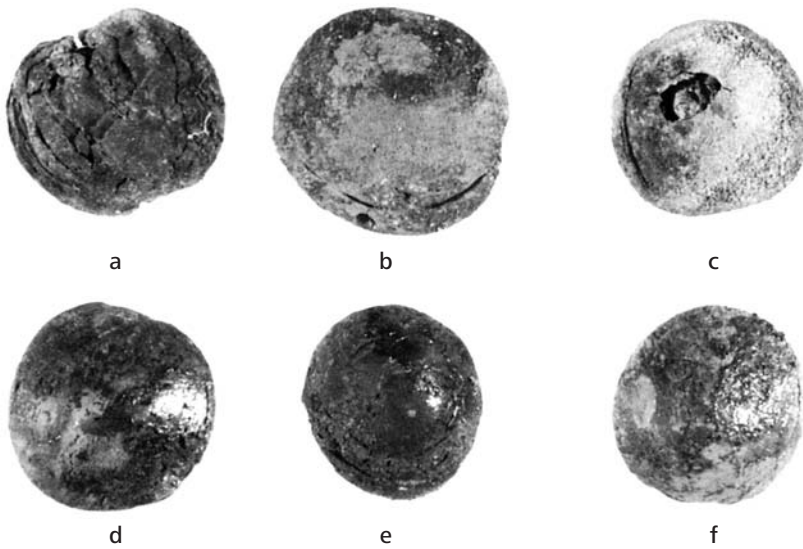


FIGURE 4.5. Worked plum pits, probably used as dice, from the early seventeenth-century Seneca Fugle site. Diameter: 1.3 cm. (Rochester Museum and Science Center, courtesy of the Rock Foundation.)



FIGURE 4.6. Ceramic gaming discs from the early sixteenth-century ancestral Wendat Mantle site on the north-central shore of Lake Ontario. (Canadian Museum of History. Photographed by John Howarth for Archaeological Services Inc.)

they possessed. Perrot's editor and other French observers could not understand the game either, other than to note that both skill and chance played a role.

The game began in a chief's cabin, with all the reeds laid on a skin or blanket and the initial player chanting and contorting his body while thrusting an awl or pointed bone object into the pile of straws, thereby drawing away a number of them. The opponent then took those that remained, counting them with incredible speed in

lots of ten. The individual holding the uneven number won that division and the wagered bet. The complexity of the game increased when different values were given to the actual odd number of remaining straws (1, 5, 7, 9), with the holder of nine always sweeping the board and all bets.

Betting occurred with seeds, stones, or beans, as in the Iroquois bowl game, which were laid on the blanket beside the straws, some representing different values of the wagered goods

and the various combinations of odd numbers of straws. The game often lasted for several days, with players affording credit to opponents who had already lost all their goods. It ended when one side had lost everything, although the desire of the losing side to continue playing often led to hostility. When there was a suspicion of cheating, a recount was undertaken by two of the spectators.

Snow Snake

Another game played by nations in the Great Lakes region is snow snake. While there is only one obscure reference to it in an early seventeenth-century account, it is better known by nineteenth-century accounts among the Iroquois and Anishinaabeg. Like lacrosse, it is still an important cultural practice.

The game involves sliding a stick along a prepared iced track or the surface of a frozen lake and was played by individuals or teams. The main objective was to slide the snow snake the farthest. Players cast these sticks with considerable skill over the ice, sometimes from a small, gently rising incline of frozen snow, such that they “dart from the edge of the snow mound like arrows” (Kohl 1860:401).

Lewis Henry Morgan (1972:304) argued the game was primarily designed as a diversion for the young; but it was occasionally a public game between the nations and always aroused excitement and involved the usual amount of betting.

The earliest documented reference is that of Gabriel Sagard, who in the winter of 1623–1624 observed that the Wendat “play a game with curved sticks, making them slide over the snow” (Wrong 1939:132). Much later descriptions of the practice include those of J. G. Kohl (1860), who described the mid-nineteenth-century use of elegantly carved snow snakes called *shosheman* among the Ojibwa (Chippewa) living on the Apostle Islands in western Lake Superior; Lewis Henry Morgan, who described the Iroquois game in his pioneering 1851 ethnography of the Iroquois; Seneca historian Arthur Parker (1909), whose Seneca name was Gawaso Wanneh or Big Snowsnake, and who observed the game at the turn of the last century and provided a detailed

account; Frances Densmore (1929:68), who observed the game among the eastern Chippewa in the early twentieth century; and a contemporary account by the ethnologist Craig Macdonald, who recorded late twentieth-century use of the snow snake among the Anishinaabeg Temagami First Nation, who reside on Bear Island in Lake Temagami, northern Ontario.

There are notable differences between the Iroquois and Anishinaabeg forms of both the snow snake and the way in which it was thrown. Also, use of a prepared ice track appears to be associated generally with the Iroquois, although use of a track has also been observed among the Eastern Chippewa residing in Minnesota and Wisconsin.

The Anishinaabeg sticks, which could range in length from 56 cm for a young man to 91 cm (22 in to 3 ft) for an adult, were slightly bent with a heavy knob gradually tapering to a handle (Densmore 1929:68). The Iroquois snow snake, referred to in Seneca as *gowasa*, was considerably longer: 1.5–2.7 m (5–9 ft) in length and 2.5 cm (1 in) broad at the head, tapering to 6 cm (.25 in) at the tail. It was often decorated at the end with inlaid lead as a protection and to provide weight to propel it farther. The ends were fire hardened and polished in earlier times. Several of the snow snakes examined in the Royal Ontario Museum collection were decorated with eyes and a mouth to resemble the head of a snake (Figure 4.7). Parker recorded that the Seneca snow snake was made of a suitable hardwood, usually maple or walnut, although Morgan noted they were typically made of hickory (Parker 1909:250; Morgan 1972:304). The wood was selected according to whether snow conditions were light and fluffy or crusted. A typical set consisted of three snow snakes, but a complete set for all snow conditions may have included as many as fifteen pieces, which were carried in a compartmentalized cloth bag. Each snow snake had a distinctive design or mark that identified the owner, placed just before the head of the snow snake in a flattened area. The Bear Island snow snake style is symmetrical, with pointed ends, painted a bright color such as yellow, and often has black ends, which resemble porcupine quills (Figure 4.8). The bright colors

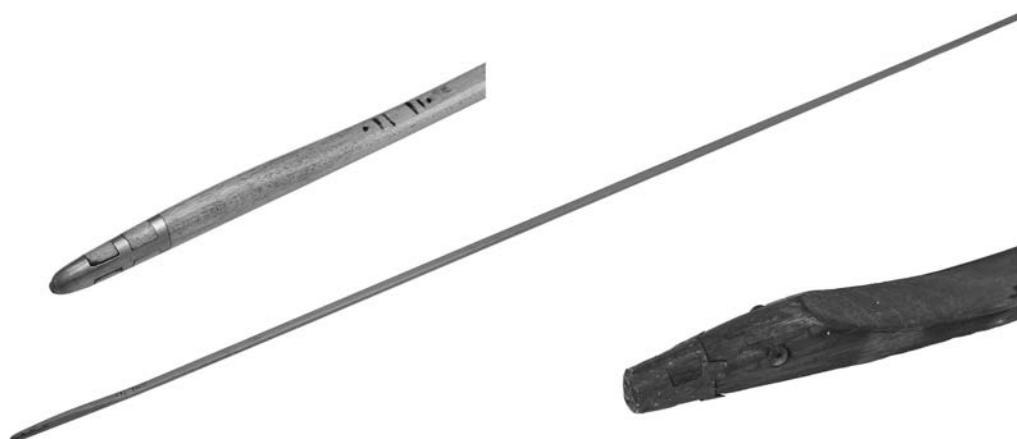


FIGURE 4.7. Snow snakes with inset lead tips, Six Nations, Ontario. Example on lower right is further decorated with eyes and a mouth to resemble the head of a snake. (Royal Ontario Museum. Photographed by John Howarth for Archaeological Services Inc.)

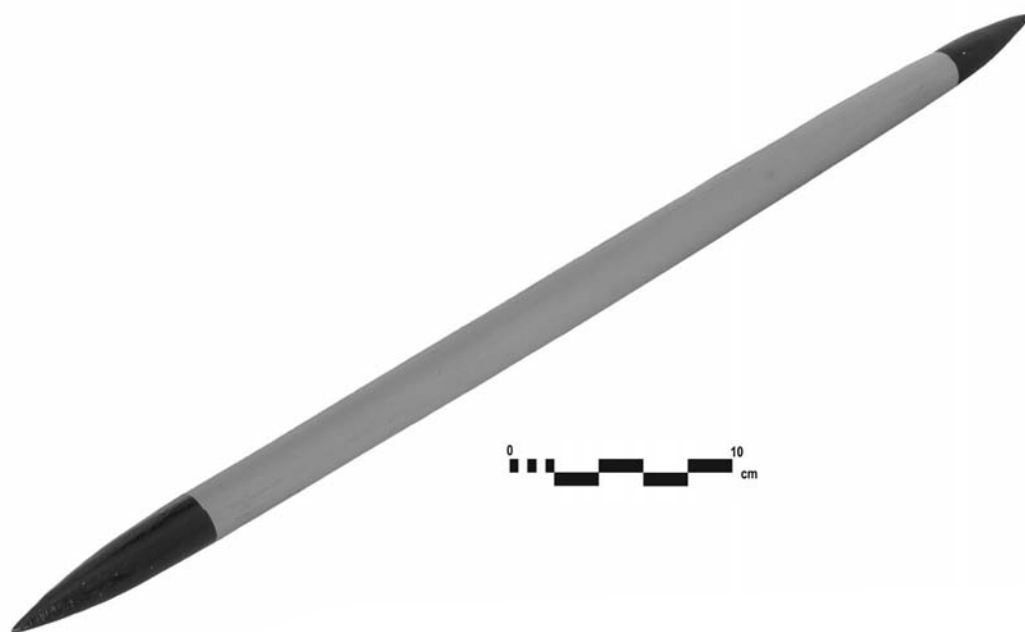


FIGURE 4.8. Contemporary northern Ontario Anishinaabeg-style snow snake. (Crafted by Craig K. Macdonald. Photographed by John Howarth for Archaeological Services Inc.)

not only help identify the owner of the snow snake but make it easier to find in the snow.

The Iroquois snow snake was thrown like a spear, with the player grasping his snake by the tail, thumb, and middle finger on the sides, two or three inches from the end, and index finger bent and tightly pressed against the grooved end.

The player hurls it into the trough, using all of his skill to throw accurately and steadily (Parker 1909:253). Opponents might attempt to startle or throw the player off by jumping toward him at the moment of release, though contact was not allowed. Alternatively, the Anishinaabeg snow snake was sometimes thrown in a sidearm

fashion so that it tumbled end over end. Ideally, it would travel under a thin layer of new snow so that one could observe the snow snake as it moved along the lake ice. When it hit a bump in the ice it would “leap up” and continue along its way.

The Iroquois snow snake was played, among other games such as the bowl game, during important events, such as the Midwinter Ceremony (*gānāyūs’ta*), when the two phratries or rival brotherhoods or clans sought to outdo each other. The clans of the Wolf, the Bear, the Turtle, and the Beaver entered their best players against the skilled experts of the Deer, Snipe, Heron, and Hawk (Morgan 1972; Tooker 1970: 29) clans. Ordinarily, two teams from different reservations played the game. According to Frederick Waugh’s Cayuga informant, David Jack, deer tallow was applied on snow snakes as special medicine (Waugh (1916:134). Parker also provided detail indicating that the type of medicine used depended on the snow conditions and that the medicine, referred to as *swagum*, was often applied by a snow snake doctor, or *hawazō’gas*, who was well paid for his services (Parker 1909:253). The serpent is often represented on other forms of Iroquois material culture such as pipes and is thought to represent a powerful being (Engelbrecht 2003:52–53). Parker also noted considerable missionary effort directed toward discouraging the sport because of the gambling that seemed an integral part of it (Parker 1909:250).

Javelin

Another throwing game recorded among nineteenth-century Iroquois involved the use of javelins, *gā-na’-gā-o*, thrown at a ring as it rolled upon the ground.² It was played between the clan groups or between neighboring communities, who gambled on the outcome.

The javelin was 1.5–1.8 m (5–6 ft) in length by 1.9 cm (.75 in) in diameter and was usually made of hickory or maple. It was finished with care, sharpened at one end, and featured a revolving stripe down the shaft. The ring was about 20 cm (8 in) in diameter, either a hoop or solid like a wheel in form. Sometimes the javelin was

thrown horizontally by placing the forefinger against its end and supporting it with the thumb and second finger; in other cases it was held in the center and thrown with the hand raised above the shoulder.

On either side, from 15 to 30 players were arranged, each with three to six javelins, the number of both depending upon the interest in the game and the time they wished to devote to the contest. The losing team’s javelins were forfeited to the winners. Another version of the game entailed throwing javelins made of sumac through the air toward a target, the winner being the one who threw it the farthest (Morgan 1972:299–302).

Moccasin

In the summer of 1773, the leisure activities of the Ojibwa, Wyandot (Wendat), Potawatomi, and Ottawa in Detroit were recorded. While most were present to exchange furs from their year’s hunt for various goods, others were simply spending the summer enjoying “fun and frolic” in the form of ball play, footraces, wrestling, evening dog feasts (a religious practice among the Chippewa), and dances of every kind (Connelley 1915:370). One of the games played was “moccasin,” which involved two individuals seated face to face on a piece of buffalo hide or deerskin with four new moccasins placed equidistant from one another and a musket ball between them. The first player took the ball and while chanting executed a series of confusing moves to hide the ball under one of the moccasins. The second player had to find the ball, scoring different points depending on whether it was his first or subsequent look. Days might be spent in a match betting pelts acquired during the winter hunt.

Interestingly, a version of this game was played among the nineteenth-century Iroquois as a mourning practice at wakes (Boyle 1900: 38–39). It was to comfort those present and did not involve gambling or excitement, the latter of which was actively discouraged. A pebble or marble, or later a bullet, was hidden in one of four moccasins held on the lap of one of the mourners; opponents in a ritualized fashion would guess which one held the piece. The game would be accompanied by drumming and the



FIGURE 4.9. William Moore of Mattagami Reserve demonstrating the *nabahon* game—spearing moose toe bones threaded on a leather thong—1958. (Archives of Ontario, 10000408, John Macfie fonds; John Macfie, miscellaneous photographs of northern Ontario.)

singing of one of three Wake Songs used only for that purpose, stopping and starting as guesses were made. The game was played throughout the night and ceased in the morning, when all of the components of the game were burned, including the counters distributed to those who had guessed successfully.

Cup-and-Pin

The cup-and-pin game, known as (*nabahon/pepenggunegun*) among the Anishinaabeg, consisted of a bone pin with a number of modified deer phalanges and a piece of hide attached to a thong. The players held the pin in one hand and swung the phalanges, attempting to catch them on the pin (Figure 4.9). Two individuals or groups played the game. The phalanges had their exterior surfaces tapered by cutting and grinding to a cone shape that facilitated stacking. Culin (1907) grouped the game within his category of ring-and-pin games in his landmark inventory of games among indigenous societies in North America. He found it to be relatively widespread throughout the northern portion of North America and noted it was common to Algonquian, Athapaskan, and Siouan language families

(Culin 1907:529–57). It appears, however, not to have been common among Iroquoian-speaking cultures; Culin could not find a single ethnohistoric reference to an Iroquoian analog.

Francis Densmore (1929:117–18) provided a detailed description of the game, noting that usually 10 phalanges were used and that the pin was manufactured from the leg bone of a doe. In at least one case, the pin is known to have been manufactured from a lynx leg bone (Guilday 1963; also Copway 1972 [1850]:48–49). Densmore noted that the game required a great deal of dexterity, since scoring usually meant catching the closest cup to the pin and balancing the rest on top of it.

We examined implements from a cup-and-pin game curated at the Royal Ontario Museum collection (8083). It was donated to the Provincial Museum (later the Royal Ontario Museum) in 1890 by J. E. Wood, who had collected it from the Mississaugas at their New Credit reserve. It consists of a bone pin and seven phalanges. It is likely the same cup-and-pin gear described and illustrated by David Boyle (1891:55–56) in his annual archaeological reports and reproduced in Culin (1907:Figure 701). There are parallel

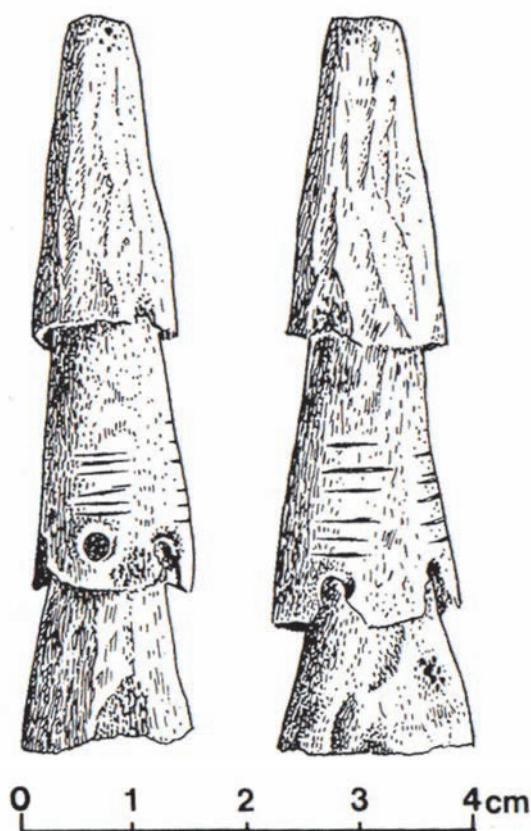


FIGURE 4.10. Late eighteenth-century Ojibwa cup-and-pin game implements recovered from the Bellamy site, southwestern Ontario. (Illustrated by Tim Kenyon, Ferris et al. 1985.)

incisions on the first phalange. This piece often has holes drilled in it that, if skewered by the pin, gains additional points.

In terms of archaeological evidence, modified deer phalanges are relatively common on Great Lakes and St. Lawrence Iroquoian sites and are sometimes referred to as cup-and-pin-variety modified phalanges. These appear to be different from phalanges modified for the cup-and-pin game, however, in that they are not tapered to facilitate stacking. The modified phalanges appear to be either clothing fasteners or bangles that were fastened to clothing, although few bone examples are polished, as might be expected from wear against hide clothing (Engelbrecht 2003:50–51; Fitzgerald 1990:503–04).

Modified phalanges relating to the game, however, have been identified archaeologically. The late eighteenth-century Ojibwa Bellamy site in southwestern Ontario produced six modified deer phalanges that appear to have been used as part of a cup-and-pin game (Figure 4.10; Ferris et al. 1985). The Bellamy pieces, three of which were found stacked, had been clearly whittled into cone shapes. One of the pieces was drilled and scored. A modified deer metacarpal from the site, which displayed notching at the proximal end of the bone (Ferris et al. 1985:9), likely represents the pin. Boyle's set in the Royal Ontario Museum has a hickory stick for a pin. Ferris et al. noted that their notched and drilled cups from the three articulated pieces were exceedingly similar to the specimens described by Boyle, but, unlike his example, the Bellamy piece was drilled in four locations, all four holes being marked by six notches. They attributed the similarity to the close cultural affinity of the Mississauga and the group represented at the Bellamy site. At least four other specimens have been found archaeologically from historic period Anishinaabeg sites in northern Ontario (Ferris et al. 1985:10).

Gambling

Accompanying almost all of these games was gambling, which at times seems to have caused participants and onlookers to abandon rational behavior. One Wendat individual, having played away all his wealth, staked his hair, which the winner cut off close to his scalp when he lost that too. Some even waged the little finger of their hand and, losing the bet, gave it to be cut off, without showing any sign of pain. While the Jesuits could understand exacting this prize from an individual from another nation, they could hardly believe that one would accept this cruelty towards any man of their own country (Thwaites 1896–1901, 16:201).

One game of moccasin at Fort Detroit in 1792 is known to have gotten out of hand, with a Chippewa losing all of his furs and his firearm to a Wyandot. The Chippewa then offered to stake his life on the game, which was initially refused but eventually accepted because of the rage and

indignation of the Chippewa. When the Chippewa lost again, he immediately fled toward the fort, with the Wyandot, affronted by his cowardice, in pursuit. He eventually caught the runaway and plunged a knife into his heart, thereby killing him. This necessitated a joint meeting of the two councils to negotiate an accommodation. Despite numerous offers of payment by the Wyandot and even intervention by the British, the affair was only settled at the funeral of the Chippewa man when the Wyandot man, moved by the words of the mother of the Chippewa man, accepted the responsibility of caring for her and her grandchildren for the rest of his life (Connelley 1915:371–73).

In terms of material culture stakes, losses might entail as many as 30 wampum collars, each having 1,000 beads (Thwaites 1896–1901, 17:77, 205). When losing, bettors further staked tobacco pouches, robes, shoes, and leggings, simply all that they possessed. Ojibwa playing the moccasin game were even known to wager their children (Vennum 1994:108). In the game of dish, beads, tobacco pouches, robes, shoes, and leggings were bet. The Jesuits witnessed such heavy losses, including a case in which individuals returned to their village barefoot one winter from a game, having lost their moccasins at a time when there was nearly three feet of snow. They noted, however, a cheerful disposition regardless of the outcome.

While a regular and accepted practice, the loss of all personal material goods occasionally led to dire consequences, especially if the person suffered from mental illness. The Jesuits recorded a case, for example, where a man, having lost his beaver robe and a collar of 400 wampum beads at a game of straws, hanged himself from a tree rather than face his relatives. He had attempted suicide before, but a little girl had caught him in the act. When asked why he had done it, he replied, “I do not know, but someone within me seems always to be saying, ‘hang yourself, hang yourself’” (Thwaites 1896–1901, 10:81). The Jesuits argued that gambling never led to anything good, noting that the Wendat themselves remarked that it was almost the sole cause of assaults and murders in their country.

It was no different among the nineteenth-century Iroquois. Lewis Henry Morgan (1972: 293) observed that the practice was never rejected by their religious practitioners but in fact was encouraged, frequently leading to the most reckless indulgence. He stated that people often gambled away all of their possessions and that the excitement and eagerness with which they both participated and watched was at times uncontrollable.

Anthony Aveni (2010) has argued that gambling in these societies should be viewed as a social leveler, where wagering aided in the redistribution of material wealth and that general parity of talent and skill ensured stability between nations—the loss of one’s goods today might be regained, at least in part, during the next game. In Precontact times, a prized garment or weapon that was lost could likely be replaced, and the more that gambling thrived, the lower the odds that anyone would accumulate too much personal property.

Conclusions

One of the most interesting aspects of games played among Great Lakes societies is their connection with curing and mourning ceremonies and their inherent structure involving redistribution of material goods. Much of the curing seems to have been centered on the effort to honor the Creator by playing these games and to set things right spiritually for the individual or community. The games were also played in preburial wake and commemoration contexts. Ventur has noted that institutionalized mortuary games, particularly wake games, are predominantly an Iroquoian–Algonquian phenomenon, mostly deriving from an Iroquoian origin (Ventur 1980b:84). Their cultural and spatial proximity, perhaps due to common ancestry, along with the influences of Iroquoian agricultural commodities, led to widespread sharing of ideologically based practice; they were sacred games (Pfeiffer et al. 2014). While Culin (1907:339) considered the moccasin game derivative of the western hidden-ball game, Ventur notes that its association with funeral wakes is restricted to Northern Iroquoians, Eastern Algonquians, and

the Delaware, where the moccasin game became exclusively associated with mortuary rites (Speck 1937:99–101; Ventur 1980b:86). Whatever the context, the outcomes of these types of games were based on more than chance; it was a matter of successfully propitiating the spirits.

Although infrequently found in mortuary contexts, the presence of dice and dish gaming pieces in Iroquois graves at late-sixteenth- and seventeenth-century Seneca sites perhaps links these games to the afterlife. The contexts of dozens of purported gaming pieces on ancestral Wendat sites, however, are predominantly middens, pit features, and plow-zone deposits. It is becoming evident that the interpretation of the role of gaming in these societies relies far more heavily on ethnographic rather than archaeological data.

Many of these ceremonial games and the associated gambling serve a number of important social, economic, and ritual purposes. These include redistributing funeral wealth, along with the personal property of the deceased; promoting unity among the living by reinforcing friendship and kinship; providing comfort to either the ill or bereaved survivors; and honoring the dead in burying their favorite possessions, including game pieces, with them (Salter 1972b:189; Ventur 1980b:87–88).

The excitement and loyalty to the teams, displayed by both participant and onlooker and enhanced by aggressive competition in ball-games and other activities, engendered group solidarity among phratries, communities, and even nations, much like the dance competitions

at powwows today. Games like lacrosse and javelin, with their obvious benefits for honing hunting and warrior skills, seem to have been ubiquitous among groups that existed in climates of endemic conflict involving blood and honor feuds. Seneca lacrosse legends even describe the decapitation of losers, reminiscent of the supposed sacrifice of losing ballplayers in Meso-america (Vennum 1994:312–16).

Gambling on the part of both participants and the community also promoted integration of men and women and represented a culturally acceptable way for nonparticipants to express their allegiance to the team. In this way, regardless of the outcome of the match or the wager, the objective of identification and solidarity with the team was achieved, and people were able to return home seemingly undisturbed by a negative outcome. Simply, it was never about winning or losing in either the game or the wager; it was about rooting for one's team. This is not surprising at all and remains a part of life for both indigenous and nonindigenous communities today. All of this was ably captured in the famous Tin Pan Alley song penned by Jack Norworth and Albert von Tilzer, entitled "Take Me Out to the Ball Game." The protagonist, Katie Casey, was baseball mad, had the fever and had it bad, and wanted just to root for the hometown crew, wagering every cent she had on the game. The sentiment expressed in the chorus of "I don't care if I never get back, let me root, root, root for the home team" is not in need of "situating" in a theoretical context; it's simply tribalism born in the ancient past.

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Notes

1. Culin (1907:647 ff) refers to this game as "double ball."
2. Culin (1907:420 ff) uses the term "hoop and pole" to refer to this game.



Chunkey and the Historic Experience in the Mississippian World

THOMAS J. ZYCH

Across North America, museum displays, curation shelves, and countless private collections retain a number of small stone disks that embody a once-popular game played for more than eight centuries prior to European contact. Typically, these are rounded stones with an average diameter about the size of an adult's palm, roughly two to three fingers wide. These stone disks are frequently referred to as discoidal stones in archaeological literature and more commonly known as *chunkey* stones, used in a game of great skill and endurance, a game often designated by the same name: *chunkey* (Figure 5.1). Numerous historic accounts written by early Euro-American travelers document the playing of the last few centuries (Adair 2005 [1775]; Catlin 1989 [1841]; Culin 1907; Halbert 1897; Swanton 2001). Yet the archaeological record affords a deeper history to the game of *chunkey*, entangling its roots with the ancient Native North American city of Cahokia, located near modern East St. Louis, Illinois. Scholars have posited that the *chunkey* game reached a level of elite professionalism during the height of the Middle Mississippian period (AD 1050–1400) in the greater Cahokian region (Alt and Pauketat 2007; DeBoer 1993; Pauketat 2004, 2005, 2009a, 2009b). With the start of the Mississippian period, ca. AD 1050, the archaeological record suggests the game of *chunkey* transformed from a household game of recreation to one increasingly associated with elite social activities (DeBoer 1993).

Encountering *chunkey* stones in the course of scientific archaeological investigation is rare, especially if one were to compare the frequency of “collected” pieces in museums and private collections to those recovered through *controlled* archaeological investigation. Where broken flint pieces, pottery fragments, and animal bones tend to dominate the material record of past societies, game pieces such as these stones are undeniably unique. Game pieces represent a particular series of activities and events practiced by earlier peoples. All human experiences, including games, have the ability to change the course of relationships between people, whether through direct engagement as participants or as spectators. Today, when such artifacts are rediscovered, they establish for us (here in the present) a relationship outside ourselves, one that extends beyond merely connecting these stone objects with some ascribed archaeological value. These *chunkey* stones (like all objects) also maintain relationships between the “game pieces” and the material they are made from, the source of that material, where the stones are found, the places they were used, how they were used, those who used them, and those who saw or knew of them being used (Olsen 2010). Through an anthropological lens, archaeologists aim to explore such relationships and characterize the meanings, practices, and histories surrounding them (Meskell 2005). In doing so, we must acknowledge that such objects are also (social) actors in the world. That is, like



FIGURE 5.1. Middle Mississippian *chunky* stones from Cahokia. (Courtesy of the Cahokia Mounds State Historic Site.)

all objects (and/or beings), *chunky* stones relate themselves and other animate beings (living and nonliving) to a world intertwined with humans, games, social movements, social maintenance, identity, place, etc.—worlds that actively, continually engage one another.

The Game We Know

Seldom does the archaeological record provide direct evidence of the Precolumbian *chunky* game, save for the stones themselves. The stones now in modern museum and personal collections are rarely recovered where they were left centuries earlier. It is also rare to find other accoutrements associated with the game that would allow us to conceive of the game as it may have been played centuries prior to Euro-American accounts. Thus, to better understand the connection of these objects, people, and the places where the game was played, we must also consider those written accounts, penned

by Euro-American travelers traversing North America between the sixteenth and nineteenth centuries, engaging indigenous groups who played the *chunky* game, or versions of it. While we cannot directly extend these historic accounts to the distant past, the similarities of indigenous practices observed among social groups in the recent past likely share a deeper history extending into Precontact North America. Thus, such accounts provide a basis for us to begin to explore the *chunky* game through time and extend our understanding beyond analogy to illustrate a clearer view of cultural and historical changes in the past (Pauketat 2004:23).

The *chunky* game shares strong affinity with a widespread game frequently noted by early Euro-American travelers called hoop-and-pole. This game is described as typically played by two male participants who hurl a pole (i.e., spear, javelin, or dart) at a rolling wheel, often described as a netted- or webbed-hoop (Yanicki,

Chapter 7, this volume). The goal is to cause the rolling hoop and one's propelled pole to stop near one another, ideally with the hoop on the pole or, better yet, the pole thrust through the hoop. Markings on the pole such as carvings, tassels, or paint are used to assign points to a player.

In the historic record, a separate name is often attributed to the version of hoop-and-pole that utilizes a stone ring as opposed to a wooden, netted hoop. Not unlike hoop-and-pole, the aboriginal name of the game using stones varies among native groups known to have played it. However, in archaeological literature it is commonly known as *chunkey* (Alt and Pauketat 2007; DeBoer 1993; A. King 2007a; Manley 1970; Pauketat 2004; Perino 1971a), a term that derives from several reported Native American terms for the game using a stone ring. The closest linguistic relationship derives from the Choctaw in Mississippi, who name the game *chungke* or *chunkey* (Adair 2005 [1775]; Culin 1907). However, other sources note the Choctaw referred to the game as *achahpih* or a similar derivation, and the stone ring used during game play as *tali chanaha* (Halbert 1897; Swanton 2001). The Mandan use the term *tchung-kee*, though this term more directly reflects the pole used during their game (Adair 2005 [1775]; Catlin 1989 [1841]; Culin 1907). John Lawson, a surveyor general, observed Eno Siouans were habitually engaged in a sport they called *chenco*, played with a pole and a "bowl made of stone" (Culin 1907:510; C. Jones 1873:346; Swanton 2001). Cherokee groups were known to call the game *nettecawaw* (Lt. Henry Timberlake, cited in Jones 1873:346). Stewart Culin (1992:241 [1907]) (see Voorhies, Chapter 1, this volume) described the hoop-and-pole game as played using a stone ring among the Santa Barbara, Choctaw, Muskogee, Bellacoola, Mandan, and Kwakiutl. Clearly, by the end of the eighteenth century, versions of the hoop-and-pole game played using a stone disk or ring were known from coast to coast. The naming variation for the game can be rationalized by the varying languages and dialects used across the continent, but consideration must also be made for varying rules or interpretations associated with this and other North American games. What the Pre-

columbian populations of eastern North American may have actually called the game of *chunkey* will likely remain unknown, though Pauketat (2009b:47) suggests the relative similarity of the terms used for the game, when vocalized, suggest they share a common ancestry or heritage.

Like many games, *chunkey* (and hoop-and-pole) is linked to a broader cosmological significance. Origins and broader meanings associated with this game are intertwined with the hoop or disk element appearing as a feature of various native mythological beliefs. Among the Puebloans, where objects related to this game are also found, the netted hoop is associated with the shield of the twin war gods and, simultaneously, the shields of Puebloan warriors (Baldwin 1969; Culin 1907; Cushing 1896; Fletcher 1915). Cross motifs that adorn such netted hoops, as well as occasional *chunkey* stones, are suggested to represent the four corners of the universe (Pauketat 2009b:43). The Arapaho associate the hoop with the sun, and the wooden frame that bounds the netting (interior of the hoop) represents a water snake, together highlighting a connection with water or water creatures surrounding the earthly world (G. Dorsey 1903, cited in Oxendine 1988). Pauketat (2009b:43) posits that the movement of the hoop or stone as it is rolled across the ground cites the movement of the sun as it travels across the sky. By engaging in these games, individuals actively engaged those cosmologies and ancestor-deities, thus bridging the space between life *here* and *there*, if such a gap actually exists (Fletcher 1915). Thus, the various meanings associated with these objects are not innate, but rather meaning is (re)created through their invocation in a game that bears broader cosmological and historical connections (Cheska 1979; Jervis 2014; Latour 2005).

The Playing Field

Typically, *chunkey* was played on open, specially constructed courts set within or on the edge of towns and villages, providing a prescribed locale for spectators and participants to enjoy this pursuit (Figure 5.2). The *chunkey* courts were located on an open piece of ground made as smooth and level as possible (Halbert 1897).



FIGURE 5.2. Artist's interpretation of the *chunky* game in action. (Courtesy of Bernard C. Perley.)

Culin (1907:421–22) describes a variety of playing surfaces built and maintained by various groups. The Mandan played on timber floors roughly 150 ft long. Apache players prepared a leveled piece of ground 100 ft long, often oriented north-south, with a large stone set in the center from which players propelled their javelins toward the rolling disk (also Seymour, Chapter 10, this volume). Creeks played within enclosed courts bounded by earthen berms atop which spectators gathered. Caddoan groups played in long, narrow alleys, roughly 9 ft wide by 90 ft long, while groups in Florida utilized courts roughly 200 ft in length (Culin 1907:461). William Bartram, traveling through the southeast in the eighteenth century, notes that playing fields were called “chunky-yards” among historic Creek and Cherokee populations (C. Jones 1873: 178; “chunk yards” in Culin 1907:487). American painter-historian George Catlin observed that the Mandan of the upper Missouri River played

“on a pavement of clay, which has been used for that purpose until it has become as smooth and hard as a floor” (Catlin 1989:134 [1841]). Bartram described *chunky* yards in the Southeast as rectangular areas typically situated in the center of the town, with a “chunk pole” standing in the middle of this yard set in a low, circular mound or prominent rise. In each corner of the yard smaller single poles were placed. However, Bartram never saw the game played. At the time of his travels, many Cherokee yards had fallen into disuse and were abandoned, built upon, or converted into garden plots. Notably, he remarks that these *chunky* yards were of an “ancient date” and not constructed by the natives present at the time of his visits; and further noted that some Creek “chunky yards” still in use were regularly maintained, “swept clean every day, and the poles kept up and decorated” (Bartram in C. Jones 1873:181).

In *The History of the American Indians*, James

Adair (2005 [1775]:394) describes a Choctaw *chungke* field adjacent to their “state house” as “a square piece of ground well cleaned, and fine sand is carefully strewed over it . . . to promote swifter motion to what they throw along the surface.” However, playing fields were not always situated in the center of town, as other groups, such as the Apache (Seymour, Chapter 10, this volume), engaged in similar public games in spaces set away from the main village.

The Game in Action

Most accounts of the game action describe two male participants, each with a wooden pole in hand, standing beside one another at the edge of the playing field. As noted, these poles would have marks positioned at predetermined intervals along their length to score the game (see also Williamson and Cooper’s description of *javelin*, another variation, Chapter 4, this volume). One individual, or perhaps a third, would hurl the stone, on edge, toward the other end of the playing field (Figure 5.2). Both players then simultaneously ran forward several yards and threw their poles after the rolling stone disk, aiming to have the pole and the stone stop beside one another, ideally with the pole of one closer to the center of the stone than the other. The player whose pole stopped closer, or had a particular mark or tassel of his pole closest or touching the inside of the stone, scored the points for that round.

Catlin (1989 [1841]:134) regarded the physical performance of the game as played by the Mandan as “a beautiful athletic exercise, which they seem to be almost unceasingly practicing whilst the weather is fair, and they have nothing else of moment to demand their attention. This game is decidedly their favourite amusement.

The variety of descriptions in historic accounts of this and similar games likely reflects differing negotiations of the rules of play, including various scoring methods, pole lengths, and even a third individual rolling the stone (Catlin 1989 [1841]; Culin 1907). H. M. Breckenridge makes a notable distinction between the game played with a wooden hoop versus a stone disk, specifically remarking that the latter version of

the game was a “much more violent exercise than the [wooden hoop version]” (Culin 1907:461). The Creek variation used similar rounded stones rolled down the length of a clay alley into compartments positioned perpendicular to the alley—like a sideways version of modern skee-ball. Here, the player’s objective was to curve their stones into the compartments, with the farthest compartment scoring the most points (Manley 1970:216). Williamson and Cooper (Chapter 4, this volume) describe another variation of a hoop-and-pole game among the Iroquois with up to 30 players on either side of the field attempting to strike a rolling ring.

Several authors in this volume highlight that in addition to the social aspect of observing or participating in the *chunkey* game (or its hoop-and-pole equivalent) gambling also played a central role. Historic accounts often note that participants in such games or sports, were known to gamble away all their possessions (Catlin 1989 [1841]; Reagan in Culin 1907:454), from jewelry and clothes (Adair 2005 [1775]:394) to weapons (Romans in Culin 1907:486), wives, children (Culin 1907:454), and even themselves (Catlin 1989 [1841]:135).

The gaming disks used in the games were likely wagered as well, being held in high esteem by their curators. Historically, these items were greatly valued by the individuals, who not only used the stones but were indirectly associated with stones from particular towns.

The hurling stones they use at present were time immemorial rubbed smooth on the rocks, and with prodigious labour; they are kept with the strictest religious care, from one generation to another, and are exempted from being buried with the dead. They belong to the town where they were used, and are carefully preserved. (Adair 2005 [1775]: 394–95)

A great amount of labor must have been required in making the *achahpih* stones, as they were handed down from one generation to another as precious heirlooms. (Halbert 1987:156)

Adair's comment that the stones were not interred with burials is somewhat challenged by the archaeological record. Several stones are associated with burial mounds at Cahokia, as well as with individual burials at several sites in the Illinois River Valley (M. Fowler et al. 1999; Perino 1971a, b). Halbert's comment suggests that many communities undoubtedly treated the game with some regard, as the stones were passed on to successive generations. If we extend that these objects may have been curated in such a manner in Precolumbian times, at least for a handful of generations, it puts some emphasis on the ability of these objects to act as retainers for shared social memories. That is, shared histories, whether histories of past competitions, former owners, famed athletes, or even those tied to the physical spaces in which the stones were used, thereby connected the past with the present. One group's adoption of the game thus becomes intertwined with the construction of shared social memory and identity. By the time of European contact, versions of the *chunkey* game were present across the eastern half of the continent, only to be mostly forgotten during the later historic periods. Thus, the *chunkey* stones, in many cases, are all that remain of this once great game played across eastern North America.

Oxendine appropriately points out that there are consistent irregularities between the historic accounts of the hoop-and-pole/*chunkey* game(s), including the rules, type, and size of playing field, and significance of the games to the individual groups (Oxendine 1988:112). It is possible to attribute this to a case of misunderstanding of both the rules and the game's significance on the part of Euro-American writers. However, the various ways *chunkey* and similar games spread from group to group across the continent undoubtedly introduced a considerable amount of variation, based on physical and social settings. Modern baseball too is subject to considerable variation: specific rules, implements, and the number of players may vary from each grass field, cul de sac, sandlot, or major-league ballpark where the game is played. Still, similarities among these variations of *chunkey* and games using similar implements suggest a common ancestry. Likely,

this ancestry extends deep into the history of the indigenous North American past but over time became filtered through different societal interpretations, requirements, and histories as the game was engaged in people's lives and passed on to each successive generation.

The Archaeology of the *Chunkey* Game

The earliest evidence for *chunkey* appears in the American Bottom region, a wide floodplain in the central Mississippi River Valley adjacent to modern St. Louis, Missouri, during the Late Woodland period, ca. AD 600 (DeBoer 1993; Pauketat 2004, 2009a; Perino 1971a). The rolling disks took on different shapes and sizes over time and were made of various materials, including clay, limestone, and more durable igneous and metamorphic rocks. Regional studies on *chunkey* stones have demonstrated widespread distribution across the midcontinent.

Shape of *Chunkey* Stones

A general chronology of *chunkey* game-piece variation was first laid out by Gregory Perino (1971a). He established a regional chronology and typology for *chunkey* stone varieties, based on different morphological styles and the context in which they were found. These *chunkey* stone types include the Salt River, Jersey Bluff, Cahokia, and Bradley styles (Figure 5.3). The Salt River and Jersey Bluff varieties are associated with the Late Woodland period in the American Bottom and lower Illinois River Valley regions. Salt River-style *chunkey* stones are marked by their prominent V-shaped, or pointed, outer rim surface (rolling surface). They peak in frequency in the greater American Bottom region around AD 775–850, overlapping somewhat with the Jersey Bluff-variety stones, prevalent between AD 600–800. Jersey Bluff stones waned during the subsequent tenth and eleventh centuries (DeBoer 1993:88, Figure 6).

The more widely recognized biconcave *chunkey* stones, with distinctly sharp breaks between the concave and rolling surfaces, are attributed to Perino's (1971a:112) Cahokia style. This variety emerged rapidly during the Early Mississippian period of the tenth and eleventh centuries

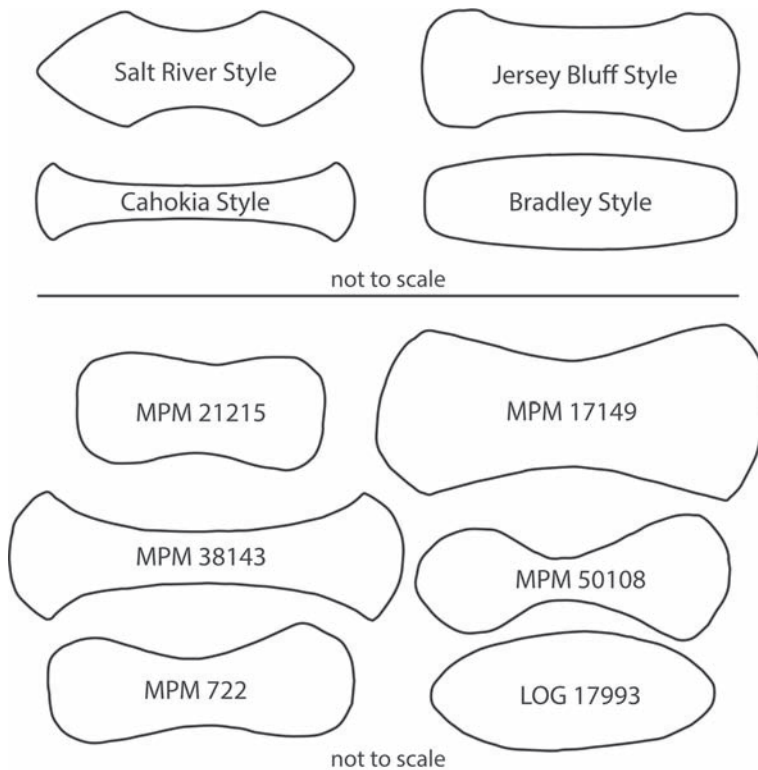


FIGURE 5.3. *Chunkey* stone types: above, after Perino (1971a); below, select western Great Lakes discoidals. (Recorded and drawn by Thomas J. Zych.)

(DeBoer 1993:Figure 6), a period of rapid social movement and population coalescence in and around Cahokia (Alt 2006, 2012; Emerson 1997; Pauketat 1997, 1998, 2002; Pauketat and Lopinot 1997). Cahokia-style *chunkey* stones are often described as “well made” compared to earlier stones and frequently exhibit thin midsections (sometimes perforated) with distinct, sharp rim ridges and uniformly shaped, arched outer rolling surfaces. Materials from which these stones were made vary but include quartzite, sugar quartz, marble, diorite, granite, limestone, sandstone, and baked clay (M. Fowler et al. 1999; Perino 1971a).

Perino’s Bradley-style stones are marked by their flat-to-convex sides and are named for the *chunkey* stones found at the Bradley site in Arkansas (Perino 1971a). At the onset of the fourteenth century, the deep-cup, biconcave form of the Cahokia style throughout the greater American Bottom region wanes in popularity, and

the biconvex form emerges (DeBoer 1993:Figure 6). Perino suggests this style appeared as the game possibly changed form (Perino 1971a:116). Notably, its emergence coincides with a time of major socio-politico-religious shifts at Cahokia and throughout the American Bottom region (Baltus 2014; Bareis and Porter 1985; Emerson 1997; Milner 1990; Pauketat 1997; Pauketat and Emerson 1997; Trubitt 2000).

Kelly and colleagues (1987) identified another style based on excavations at the Range site, a few miles south of Cahokia, referred to as Prairie du Pont. This variety was *only* observed at the Range site and seems to be coeval with the Jersey Bluff and Salt River varieties during the Terminal Late Woodland period (ca. AD 900–1050; DeBoer 1993). It is likely that the Prairie du Pont style is simply a variation of Jersey Bluff, a popular variety found at Range.

The Prairie du Pont variety underscores the problem with typologies in the archaeological

record. Perino differentiated the stones largely by their morphological attributes, though, arguably, the assignment of these stones to a particular style, or “type,” as defined, boils down to subjective observations (Perino 1971a). A cursory look at the variety of shapes of midwestern *chunkey* stones highlights some of the difficulty of assigning a stone to one type versus another; and creating a new “type” is hardly a solution (Figure 5.3). Typological classification of archaeological materials provides researchers with useful tools that aid in organizing the material record and provides a means to make comparisons between “reasonably” different groups of materials. Simultaneously, however, these typologies perpetuate the need to constantly *classify everything*, leaving us vulnerable to perhaps blindly attributing particular materials to specific chronological periods, or even specific cultural groups. Similar concerns have been made with regard to ceramic typologies in the midcontinent, with Emerson et al. (2007:110) cautioning that the use of well-defined “types” outside the region they were first defined conflates our understanding of material relationships and thus should be avoided or minimally used with great caution. Undoubtedly, many other archaeologists agree and subscribe to this view.

Previous Syntheses

Warren DeBoer provided a significant contribution to the study of *chunkey* game pieces through his use of materials uncovered in the 1980s during major highway excavations in the area around Cahokia. This study further cemented the particular associations of *chunkey* stone styles with temporal periods for the broader region. *Chunkey* game pieces are found in various contexts over time, typically in fills containing refuse from the seventh to mid-tenth centuries, and increasingly so during the latter two centuries leading up to the Mississippian florescence at Cahokia (DeBoer 1993). A significant number of *chunkey* stones found at the Range site date to the late ninth and tenth centuries AD. The Range pieces frequently were recovered whole in refuse-laden fills adjacent to larger structures and open courtyards (Fortier and Jackson

2000). Such large structures and courtyards are interpreted as high-status or public structures and spaces, suggesting these objects belonged to particular individuals, social groups, or kin groups within the community (Pauketat 2004). Their association with public structures and spaces may also point to their association with the entire community.

Additionally, DeBoer highlighted a shift from including *chunkey* game pieces with child/young adult burials during the fifth through tenth centuries to more common inclusion in adult male burials during the Early Mississippian (mid-tenth through eleventh centuries). This change in deposition coincides with a shift in social practices, political reorganization, and movement of outside populations into the American Bottom region (Alt 2006, 2012; Emerson 1997; Pauketat 1997, 1998, 2002; Pauketat and Lopinot 1997). This depositional shift during the rise of the Cahokian polity suggests the game itself attained some social importance among the members of the larger community and likely grew rapidly in popularity. Particular stones may have become associated with particular players, households, or even towns (Pauketat 2009a). During the height of the game’s popularity, these stones likely became status symbols for both individuals and villages alike.

Chunkey stones like those found at and around Cahokia are found also in various parts of eastern North America in contexts coeval with the rise and apex of Middle Mississippian society at Cahokia. Richard George studied a variety of *chunkey* stones from the upper Ohio River Valley associated with Fort Ancient and Monongahela groups of the tenth through sixteenth centuries (George 2001). Notably, several Fort Ancient sites yielded biconcave *chunkey* stones, including some with a central perforation, a common feature on Middle Mississippian-variety stones found around Cahokia (George 2001; Pauketat 2009b; Perino 1971a). Of the Monongahela sites in southeastern Pennsylvania that George reviewed, just under half exhibited perforated stones (George 2001:5). The majority of the stones found in the Monongahela region are smaller than counterparts found at contempora-

neous sites in the greater southeast portion of the continent (Griffin 1966:72). Although the game was present in the upper Ohio River Valley by the thirteenth century AD, larger stones made from exotic materials do not appear among Monongahela artifact assemblages until later (George 2001:13).

South of the American Bottom, Cahokia-like *chunkey* stone varieties turn up in Southeastern Missouri (Griffin 1952) and the Tennessee–Cumberland region, as well as in western Tennessee around the Obion site (Perino 1971a). They are reported in numbers from the Angel site of southern Indiana (Black 1967), and several are found throughout Arkansas (Perino 1967, 1971a), as well as at the Spiro site in Oklahoma (H. Hamilton 1952). North of the American Bottom, this *chunkey* stone variety has been recovered from sites in the Illinois River Valley, including Schild and Norris Farm (Perino 1971a; DeBoer 1993). Cahokia-like *chunkey* stones also have been recovered from the Aztalan site in southern Wisconsin (S. Barrett 1933).

Apart from identifying specific lithic resources, a flint clay effigy pipe found in Muskogee County, Oklahoma, is evidence of these items' long-distance movement. The effigy depicts a kneeling male holding a biconcave Cahokia-style *chunkey* stone in his right hand and pair of what are likely *chunkey* staffs, or sticks, in his left. The individual's hair is tied in a bun atop his head, and he wears ear spools and a necklace, items that seem to suggest higher status. Researchers have established that this pipe and many similar figurines were made from Missouri flint clay found just 20 miles west of Cahokia (Emerson and Hughes 2000; Emerson et al. 2002, 2003). Undoubtedly, these figurines were made in that area, or perhaps at Cahokia itself, and distributed out to various communities, much like other items such as Ramey Incised pottery and Mill Creek chert hoes dispersed to various parts of the Mississippian world.

Assorted shell gorgets found in Perry County, Missouri; Eddyville, Kentucky; and the Spiro Mound area in Oklahoma depict a similar scene of an individual holding a *chunkey* game piece in one hand and a staff, stick, or pole in

the other (Fundaburk and Foreman 2001). Such items found outside of Cahokia and the American Bottom demonstrate that its political and religious ideals flowed outward across the mid-continent, yet the manner in which they were received and interpreted is debatable. (See Stauffer and Reilly, Chapter 3, this volume, for a more substantial discussion of the varied significance of shell gorgets from the Southeast.) Though presence of Mississippian-themed gorgets in the South and East may suggest Cahokian ideas reached those regions, their presence does not necessarily mean the message was understood in the same way.

Those "Rolling Stones"

Pauketat has repeatedly posited that the widespread nature of the game, as marked by "Cahokian style" game stones found well outside Cahokia, demonstrates the "pervasive influence" of Cahokian elites across eastern North America (Pauketat 2004, 2005, 2009a:25, 2009b). Thus, we might perceive the game of *chunkey* as one of the primary movers of new, intentionally spread, Cahokian political and religious ideologies (Pauketat 2009b). No doubt the game was politically (and religiously?) significant during the rapid materialization of Cahokian society, playing a strong role in the development of social and political power and perhaps unity at Cahokia. This is arguably demonstrated by the interment of 15 well-made Cahokia-style *chunkey* stones during the elite burial rites at Mound 72 at Cahokia (M. Fowler et al. 1999). Association of *chunkey* stones with so-called elite burials further perpetuates the notion that the *chunkey* game and stones were strongly tied to such identities within society and interwoven into political and religious aspects of Mississippian life. The interment of these stones in the burial mound perhaps referenced real or historical ancestors (embodied within the stones?) associated with the deceased. Their inclusion with the dead likely also served to construct the deceased as ancestors, creating or linking them with historical narratives in which the game features. Alternatively, the *chunkey* stones placed in the mound may simply have served as commemorative

accoutrements from particular individuals or communities incorporated into the burial rites as a means of tying individual or group identities to history, enacted in the mound. Pauketat (2009a:20) notes the *chunkey* game had become more than a local pastime and was used to “win the hearts and minds of distant people” in an effort to establish and maintain what he calls the spread of a *pax Cahokia*.

To what extent does this *pax Cahokia* reach into the greater Cahokian hinterlands? The archaeological record of the southern and southeastern continent demonstrates the perpetuated history of Mississippian society, at least until European contact. However, to the north of Cahokia’s immediate influence, the lasting impact following the spread of Cahokian lifeways into the western Great Lakes region remains somewhat unclear. Several sites and localities exhibit clear influence, if not direct contact with Middle Mississippian peoples from the Cahokian region. This includes the palisaded Aztalan site in southern Wisconsin, where previous excavations provide evidence of interaction and cohabitation of Middle Mississippian and local Late Woodland populations (Barrett 1933; Birmingham and Goldstein 2005; Goldstein and Richards 1991; Richards 1992; Zych 2015). In western Wisconsin, near the modern city of La Crosse in the upper Mississippi River Valley, archaeologists unearthed evidence of Middle Mississippian outposts at the Fischer Mounds and Trempealeau localities (Benden et al. 2010; Green and Rodell 1994; Pauketat et al. 2015; Stoltman et al. 2008). The Middle Mississippian reach extends at least as far as the Red Wing and Cambria localities in southeast Minnesota and south-central Minnesota, respectively (Gibbon 1991; Holley 2008; E. Johnson 1991; Maxwell 1950; Rodell 1991). Notably, these sites, and those within their broader regions, have yielded numerous *chunkey* stones, as well as other Middle Mississippian or Middle Mississippian-influenced objects. Some evidence clearly suggests the influence originates from the Cahokia metropolis, yet many Middle Mississippian contact sites in the North demonstrate little continued Middle Mississippian presence or association after the middle of the thirteenth century AD. Markedly,

dozens of *chunkey* stones have been recovered throughout the western Great Lakes at locations *without* direct evidence of Middle Mississippian occupation, influence, or interaction.

Chunkey Stones in the Midwest

As noted, the primary markers of the *chunkey* game in the archaeological record are the gaming pieces themselves. What insight do archaeologists glean from these objects beyond merely documenting when and where the game may have been present in the past? DeBoer (1993:83) has urged further exploration into the role *chunkey* stones (and, by extension, the *chunkey* game) played “in the changing social and political landscapes of the past.” One obvious, though essential solution DeBoer put forth includes the synthesis of a broader temporal and geographic survey of these game implements in the archaeological record.

A handful of regional studies have provided a starting point from which to understand the variation of the game across the landscape. They are employed here for some (very) preliminary explorations of the broader regional variation present among these objects. Published datasets explored herein consist of 236 individual *chunkey* game pieces, including 51 from Monongahela sites in the upper Ohio River Valley (George 2001), nine from Mill Creek sites in western Iowa (Reisdorf 2012), and 114 *chunkey* stones from the greater American Bottom region. The American Bottom dataset consists of items reported by DeBoer (1993) and M. Fowler and colleagues (1999), as well as others recorded by this author from collections at the Illinois State Archaeological Survey. Additionally, a series of 62 *chunkey* stones recorded by this author from various parts of the western Great Lakes (i.e., Wisconsin) are included. These latter pieces are curated in several private collections, as well as the Milwaukee Public Museum (MPM); Henschel’s Indian Museum in Elkhart Lake, Wisconsin; the Logan Museum at Beloit College; the Lake Mills Aztalan Historical Museum in the town of Aztalan, Wisconsin; the Sheboygan County Museum located in Sheboygan, Wisconsin; and the Galesville Public Library in Galesville, Wisconsin. These items demonstrate a wide dispersal of

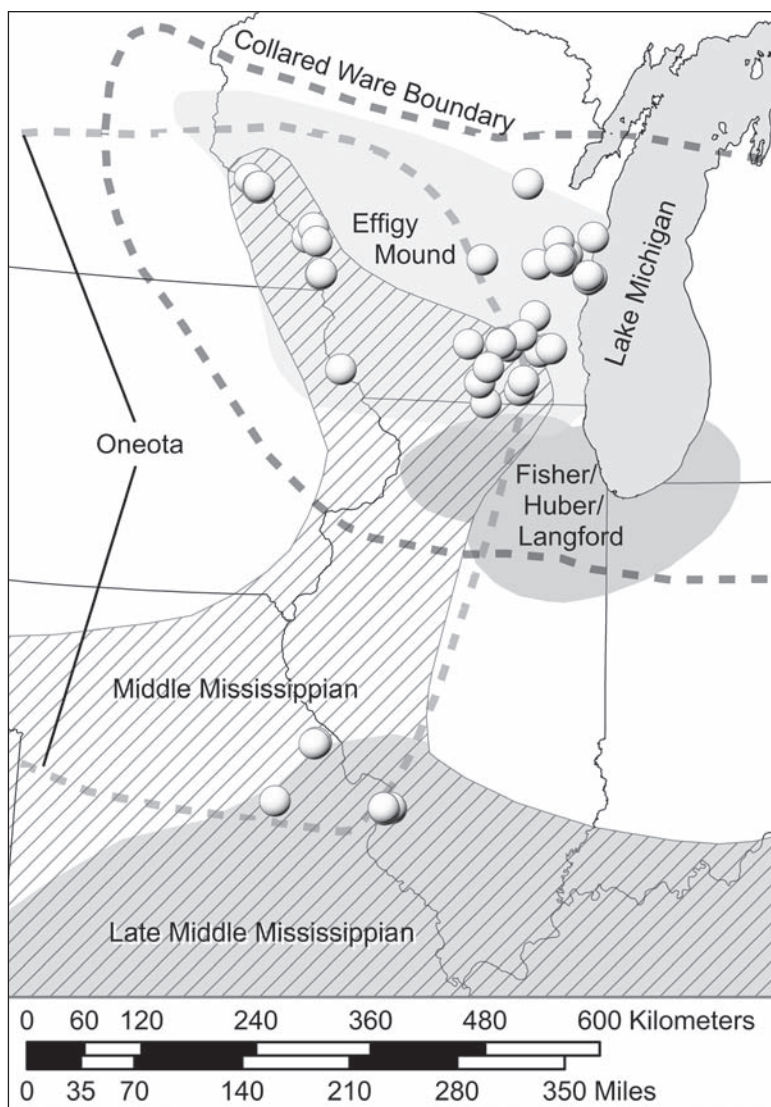


FIGURE 5.4. Distribution map of *chunkey* stones recorded from the western Great Lakes and greater American Bottom region. (Prepared by Thomas J. Zych.)

the *chunkey* game throughout the region (Figure 5.4). Objects recorded by the author are summarized in Table 5.1.

One notable shortcoming within this dataset is a lack of precise provenience for many of the gaming pieces. *Chunkey* stones located in museums and private collections often lack sufficient (if any) detail with which to explore more the specific contextual details of this game as DeBoer (1993) has previously, and successfully done. Specific data regarding the variety of

contexts in which these items are found, the frequency they appear in particular time periods, and thus how standardized the objects may become during those periods are difficult to determine from such collections. With these limitations, the following case study serves only as an initial exploration into regional variations of these gaming pieces. More precise explorations of well-provenienced items are still necessary to fully meet DeBoer's challenge to synthesize data already available in the archaeological record.

TABLE 5.1. *Chunky* stone data from the western Great Lakes and American Bottom regions.

Object ID	Prov.	Max. dia. (cm)	Max. width (cm)	Concavity							Perf. size (cm)	Outer rim shape	Wt. (g)	Material
				Shape	Dia. (cm)	Dia. of base (cm)	Depth- side 1 (cm)	Depth- side 2 (cm)	Rim shape	Rim width (cm)				
AZT I	47JE1 — Aztalan	6.2	2.60	sides and base	5.0	2.7	0.5	0.4	sharp	0.2	n/a	even arch	147.5	quartzite
AZT II	47JE1 — Aztalan	6.5	3.00	arch	4.5	—	0.7	0.7	rounded	0.3	n/a	flat area in center	168.7	granite
AZT III	47JE1 — Aztalan	—	3.20	sides and base	—	—	0.9	0.6	sharp	0.1	n/a	ind.*	173.2	quartzite
AZT IV	47JE1 — Aztalan	10.5	2.20	sides and base	7.1	4.7	0.4	—	flat	1.6	n/a	uneven	204.8	sandstone
AZT V	47JE1 — Aztalan	—	2.40	n/a	—	—	0.5	—	rounded	0.3	n/a	even arch	215.1	sandstone
GAL I	Marinuka Lake, Galesville, WI	6.2	2.60	arch	4.1	—	0.5	0.5	rounded	0.3	n/a	flat area in center	169.3	commerce quartzite
Henshel 11	Sheboygan Marsh, Sheboygan Co., WI	6.9	4.00	n/a	—	—	—	—	n/a	n/a	n/a	pointed	288.3	basalt
Henshel 472	Sheboygan Marsh, Sheboygan Co., WI	7.9	3.90	n/a	—	—	—	—	n/a	n/a	n/a	pointed	299.9	basalt
Henshel I	Sheboygan Marsh, Sheboygan Co., WI	4.9	2.60	arch	3.4	—	0.3	0.2	sharp	0.1	n/a	even arch	95.1	granite
ISAS 1418-4	11S1232 — Janey B. Goode	5.2	2.50	n/a	—	—	—	—	n/a	n/a	n/a	flat area in center	118.9	rhyolite
ISAS 1999-18	11S1232 — Janey B. Goode	5.8	3.00	arch	3.2	—	0.5	0.5	rounded	0.3	n/a	even arch	177.3	diabase
ISAS 204-30	11S1232 — Janey B. Goode	5.3	2.60	arch	3.3	—	0.4	0.5	rounded	0.3	n/a	even arch	125.0	quartzite
ISAS 4255-4	11S1232 — Janey B. Goode	7.8	4.10	sides and base	3.8	2.5	0.5	0.5	rounded	0.3	n/a	pointed	>305	quartzite
ISAS 578-2	11S1232 — Janey B. Goode	6.8	2.80	arch	3.6	—	0.3	0.3	rounded	0.3	n/a	pointed	194.7	quartzite
ISAS 649-9	11S1232 — Janey B. Goode	4.6	2.40	convex	—	—	—	—	n/a	n/a	n/a	even arch	90.4	diorite

ISAS 6750-1	1151232 — Janey B. Goode	8.7	3.90	arch	5.5	—	0.6	0.6	rounded	0.4	n/a	even arch	>305	granite
ISAS 7213-7	1151232 — Janey B. Goode	5.5	2.50	perforated	3.9	—	—	—	sharp	0.1	1.5	even arch	77.6	limestone
ISAS 7289-14	1151232 — Janey B. Goode	14.4	6.30	arch	9.0	—	1.4	1.4	flat	1.6	n/a	flat area in center	>305	quartzite
ISAS 908-48	1151232 — Janey B. Goode	8.2	2.80	n/a	—	—	—	—	n/a		n/a	flat area in center	275.1	limestone
ISAS-1120-11	115706/5 — East St. Louis	8.1	3.10	arch	5.5	—	0.5	0.4	rounded	0.4	n/a	even arch	242.7	diabase
LOG 17871	Delevan, Walworth Co., WI	8.9	3.70	arch	1.7	—	0.1	—	rounded		n/a	flat area in center	>305	diorite
LOG 17874	Delevan, Walworth Co., WI	9.8	3.80	n/a	—	—	—	—	n/a		n/a	flat area in center	>305	black diorite
LOG 17877	Princeton, Green Lake Co., WI	8.0	3.50	arch	6.2	—	0.6	0.7	sharp	0.1	n/a	even arch	>305	sandstone
LOG 17993	Beloit, Rock Co., WI	5.9	2.30	n/a	—	—	—	—	n/a		n/a	pointed	105.7	granite
LOG 18491	Rock Co., WI	8.7	4.20	arch	3.5	—	0.4	—	rounded	1.41	n/a	flat area in center	>305	sandstone
MPM 00708	Russell, Sheboygan Co., WI	5.2	3.00	n/a	—	—	—	—	n/a		n/a	even arch	117.8	syenite
MPM 00709	Manitowoc, WI	8.3	4.80	arch	3.6	—	0.3	0.4	rounded	0.5	n/a	flat area in center	>305	granite
MPM 00710	Kiel, Manitowoc Co., WI	5.7	2.70	n/a	—	—	—	—	n/a		n/a	pointed	132.2	syenite
MPM 00711	Charlestown Township, Calumet Co., WI	10.6	5.20	convex	—	—	—	—	n/a		n/a	even arch	>305	rhyolite
MPM 00713	Wisconsin[?]	9.1	3.00	sides and base	7.3	2.5	0.8	0.8	sharp	0.2	n/a	flat area in center	>305	silicified sandstone
MPM 00714	Russell, Sheboygan Co., WI	13.7	3.80	perforated	13.1	—	1.9	1.9	sharp	0.2	1.9	flat area in center	>305	basalt
MPM 00715	Wisconsin[?]	9.9	4.80	arch	5.6	—	0.8	0.7	sharp	0.1	n/a	flat area in center	>305	granite
MPM 00718	47JE1 — Aztalan	7.5	3.10	arch	4.4	—	0.5	0.5	rounded	0.4	ind.	flat area in center	280.2	basalt

TABLE 5.1. (cont'd.) *Chunkey* stone data from the western Great Lakes and American Bottom regions.

Object ID	Prov.	Max. dia. (cm)	Max. width (cm)	Concavity							Perf. size (cm)	Outer rim shape	Wt. (g)	Material
				Shape	Dia. (cm)	Dia. of base (cm)	Depth- side 1 (cm)	Depth- side 2 (cm)	Rim shape	Rim width (cm)				
MPM 00719	47JE1 — Aztalan	6.9	3.60	arch	4.4	—	0.9	0.8	rounded	0.4	n/a	even arch	255.4	basalt
MPM 00721	47JE1 — Aztalan	7.0	3.20	arch	3.8	—	0.6	0.7	rounded	0.3	n/a	even arch	287.3	basalt
MPM 00722	47JE1 — Aztalan	6.3	2.50	arch	4.2	—	0.5	0.3	rounded	0.4	n/a	even arch	156.4	basalt
MPM 00723	47JE1 — Aztalan	7.7	3.70	convex	1.5	—	0.2	—	flat		n/a	even arch	>305	basalt
MPM 13339	Sugar Creek Township, Walworth Co., WI, 7.5 mi north of Delavan, Sugar Creek Township	7.3	3.30	arch	4.0	—	0.9	1	rounded	1.2	n/a	even arch	284.2	basalt
MPM 13386/2757	Prairieville, Pike Co., MO	7.1	4.10	arch	3.7	—	0.4	0.4	rounded	0.5	n/a	pointed	>305	granite
MPM 13387/2757	Prairieville, Pike Co., MO	7.9	2.40	arch	6.7	—	—	—	rounded	0.2	.9	even arch	234	silicified sandstone
MPM 14820	Lake Winnebago, Fond du Lac Co., WI	6.1	3.20	arch	3.3	—	1.4	1.4	rounded	0.7	n/a	flat area in center	179.5	basalt
MPM 17149/4394	Leeman, Outagamie Co., WI	8.9	2.70	sides and base	7.8	2.0	0.9	0.8	sharp	0.1	n/a	even arch	289.6	quartzite
MPM 21215/6115	Rubicon River, between Rubicon and Hartford, Dodge Co., WI	5.2	2.30	arch	2.1	—	0.2	0.2	flat	0.7	n/a	even arch	107.3	quartzite
MPM 21534/6115	Gasconade Co., MO	7.3	3.50	arch	4.1	—	0.3	0.3	rounded	0.2	n/a	even arch	277.6	granite
MPM 23976/6543	Wisconsin	8.9	4.80	n/a	—	—	—	—	n/a		n/a	even arch	>305	diabase
MPM 32168	11534 — Cahokia	6.2	3.80	arch	3.21	—	.39	.52	rounded	0.42	n/a	pointed	174.3	limestone
MPM 32169	11534 — Cahokia	6.68	3.07	arch	3.04	—	0.8	0.8	rounded	0.95	n/a	even arch	144.7	limestone
MPM 33922	11534 — Cahokia	6.77	3.42	n/a	—	—	—	—	n/a		n/a	even arch	>305	diabase
MPM 34722	La Crosse, Co., WI [poss. Holman TWP?]	—	3.50	perforated	—	—	—	—	rounded		ind.	flat area in center	212.2	basalt
MPM 36782/9955	Second Lake, Trempealeau Co., WI	7.2	3.10	arch	5.5	—	0.6	0.7	rounded	0.2	n/a	even arch	268.1	basalt

MPM 38028	Ixonia, Jefferson Co., WI	6.9	3.70	sides and base	4.8	.3	.7	.7	sharp	0.3	n/a	even arch	281.6	basalt
MPM 38143/10375	Grant Co., WI	8.3	2.60	arch	6.6	—	0.8	0.8	sharp	0.2	n/a	even arch	287.5	granite (dark gray)
MPM 39564/10714	47JE1—Aztalan	11.5	4.60	arch	8.5	—	0.2	—	flat	1.2	n/a	even arch	>305	granite
MPM 39565	47JE1—Aztalan	8.9	3.30	sides and base	7.3	3.8	0.3	0.3	sharp	0.3	n/a	even arch	>305	basalt
MPM 49783	Jefferson Co., WI (Jefferson TWP, Sec. 31)	8.5	4.40	arch	5.9	—	2.1	2.1	rounded	0.5	.9	even arch	>305	basalt
MPM 49875	47JE1—Aztalan	—	3.20	n/a	—	—	—	—	sharp	0.1	ind.	even arch	35.2	quartzite
MPM 50104/17043	47PE0026/ PE114—Goose Lake/Cerres Mound	—	2.90	n/a	—	—	—	—	n/a	0.3	ind.	even arch	41.7	granite
MPM 50107/17063	47PE0026/ PE114—Goose Lake/Cerres Mound	—	5.40	n/a	—	—	—	—	n/a	—	ind.	flat area in center	303.5	diorite
MPM 50108/17063	Pepin Co., WI	6.6	2.80	arch	—	—	—	—	rounded	0.3	n/a	even arch	78.9	basalt
MPM 50109/17063	47PE0026/ PE114—Goose Lake/Cerres Mound	—	2.60	arch	—	—	0.2	0.2	rounded	0.3	ind.	even arch	73.0	silicified sandstone
MPM 50110	47PE0026/ PE114—Goose Lake/Cerres Mound	—	1.70	n/a	—	—	—	—	rounded	0.2	ind.	even arch	13.6	silicified sandstone
MPM 50111	47PE0026/ PE114—Goose Lake/Cerres Mound	6.7	2.20	arch	3.2	—	0.4	0.3	rounded	0.8	ind.	even arch	79.7	silicified sandstone
MPM 50112	47PE0026/ PE114—Goose Lake/Cerres Mound	7.1	2.50	arch	5.7	—	0.5	0.5	rounded	0.3	n/a	even arch	103.6	diabase
MPM 50113	47PE0026/ PE114—Goose Lake/Cerres Mound	5.2	2.30	arch	2.7	—	0.2	0	rounded	0.4	n/a	even arch	57.6	sandstone
MPM 5360/20299	47JE1—Aztalan	7.3	2.20	sides and base	6.3	4.5	0.5	0.5	sharp	0.2	n/a	even arch	145.0	syenite

TABLE 5.1. (cont'd.) *Chunky* stone data from the western Great Lakes and American Bottom regions.

Object ID	Prov.	Max. dia. (cm)	Max. width (cm)	Concavity							Outer rim shape	Wt. (g)	Material	
				Shape	Dia. (cm)	Dia. of base (cm)	Depth- side 1 (cm)	Depth- side 2 (cm)	Rim shape	Rim width (cm)				Perf. size (cm)
MPM 56461	"Tearsville" [sic], WI	6.9	4.00	perforated	4.5	—	2.0	2.0	rounded	0.3	0.9	even arch	248.2	sandstone
MPM 56653	Wisconsin	7.3	3.10	arch	6.2	—	0.3	0.3	sharp	0.2	n/a	even arch	304.1	basalt
MPM 56849	Waukesha Co., WI	7.58	3.78	perforated	4.02	—	2.3	2.0	rounded	0.45	1.43	even arch	>305	sandstone
MPM 56850	Waukesha Co., WI	5.89	3.20	perforated	3.97	—	1.2	1.2	flat	1.17	1.29	flat area in center	127.3	rhyolite
MPM 56851	Waukesha Co., WI	4.59	1.74	arch	2.45	—	.79	.88	flat	0.45	.85	even arch	60.5	diabase
MPM 57498	Blooming Grove, Dane Co., WI	7.5	3.50	convex	—	—	—	—	n/a		n/a	flat area in center	>305	basalt
MPM 57637	47RO43—Pierce Village	7.5	3.10	arch	1.9	—	0.1	0.1	rounded	1	n/a	even arch	281.8	rhyolite
MPM 57891	47SB225—Hafler 3	9.1	4.10	arch	4.1	—	0.3	—	rounded		n/a	even arch	>305	rhyolite
MPM 57923/25576	Sheboygan, WI (Emil Fischer Farm)	5.9	3.00	arch	2.2	—	0.2	0.1	rounded	0.9	n/a	even arch	168.8	basalt
MPM 57935/26576	Sheboygan Marsh, Sheboygan Co., WI	8.8	4.30	arch	2.2	—	0.3	—	rounded		n/a	flat area in center	>305	granite
Private Collection	47VE825—Fisher Mound Group	6.2	3.00	arch	3.9	—	0.8	0.8	flat	0.4	n/a	flat area in center	213.9	diabase
Private Collection	Stoddard, WI	7.5	3.50	arch	5.5	—	1.1	1.0	rounded	0.4	n/a	even arch	unk.*	diabase
SHB 3240.113	'Sand Dunes' site Sheboygan Co., WI	7.3	3.50	n/a	—	—	—	—	n/a		n/a	even arch	>305	rhyolite/diorite (bluish gray)
SHB 3240.13	'Sand Dunes' site Sheboygan Co., WI	8.9	3.60	perforated	3.9	—	1.8	1.8	rounded		2.3	even arch	>305	sandstone

* ind. = indeterminate; unk. = unknown

TABLE 5.2. Metric summaries for American Bottom and western Great Lakes discoidals.

		Max. dia. (cm)	Max. width (cm)	Dia. at base of concavity (cm)	Max. depth of concavity (cm)
Concave rim shape					
Flat	Mean	8.498	3.5322	4.600	.666
	Median	7.700	3.2000	4.600	.790
	N	9	9	2	9
	Std. deviation	3.3677	1.46675	.1414	.4469
Rounded	Mean	7.380	3.2819	3.250	0.711
	Median	7.300	3.2500	3.250	0.500
	N	43	47	2	43
	Std. deviation	1.0393	.65289	1.0607	.5325
Sharp	Mean	8.082	3.1643	3.408	0.774
	Median	8.100	3.2000	3.650	0.800
	N	19	21	12	19
	Std. deviation	1.8626	0.56039	1.4743	0.3709
Convex/ no rim present	Mean	7.176	3.5075		
	Median	7.100	3.4600		
	N	14	16		
	Std. deviation	1.7924	.96904		
All rim shapes	Mean	7.622	3.3184	3.538	.722
	Median	7.500	3.2000	3.700	.600
	N	85	93	16	71
	Std. deviation	1.7475	0.79898	1.3584	0.4791

The data-recording scheme utilized herein follows that of Melvin Fowler and colleagues (1999). Metric attributes recorded include diameter, width, diameter of concavity, diameter of base (if a flat area was present in the concavity), depth of concavity (for each side, if present), ridge width, and weight (in grams). Variation in the width of individual stones was noted as present or not, as was the presence of any use wear. Observations were made regarding the shape of the stones, including the shape of the concavity (arch or sides and base present), concave rim shape (sharp, rounded, or flat), and shape of outer rim or rolling surface (pointed, even arch, or flat in center). These shape categories generally parallel the morphologic *chunkey* types described above. For example, the morphology of the concave *chunkey* stones with flat rims corresponds closely with Perino's (1971a) Jersey Bluff style described above, while the stones exhibiting a sharp outer rim surface are more typical of the

Cahokia style. However, by following Fowler and colleagues' schema, the assignment of predefined overarching "types" of *chunkey* stones (e.g., Cahokia style, Jersey Bluff style, Bradley style, etc.) is omitted so as to avoid obscuring morphological variations among these objects. Classification of the individual attributes of the gaming pieces offers a means to highlight and examine the variation within and among the assemblages.

A Midwest Region Perspective

Unfortunately, few researchers have previously employed this schema for qualifying each object's shape (with key exceptions: M. Fowler et al. 1999; J. Kelly et al. 2007). Thus, the particular morphologic features of only 93 items recovered and recorded in the regions between the greater American Bottom (n=31) and western Great Lakes (n=62) are highlighted in this study. The metric summaries for this subset of data are listed in Table 5.2. Figure 5.5 illustrates the

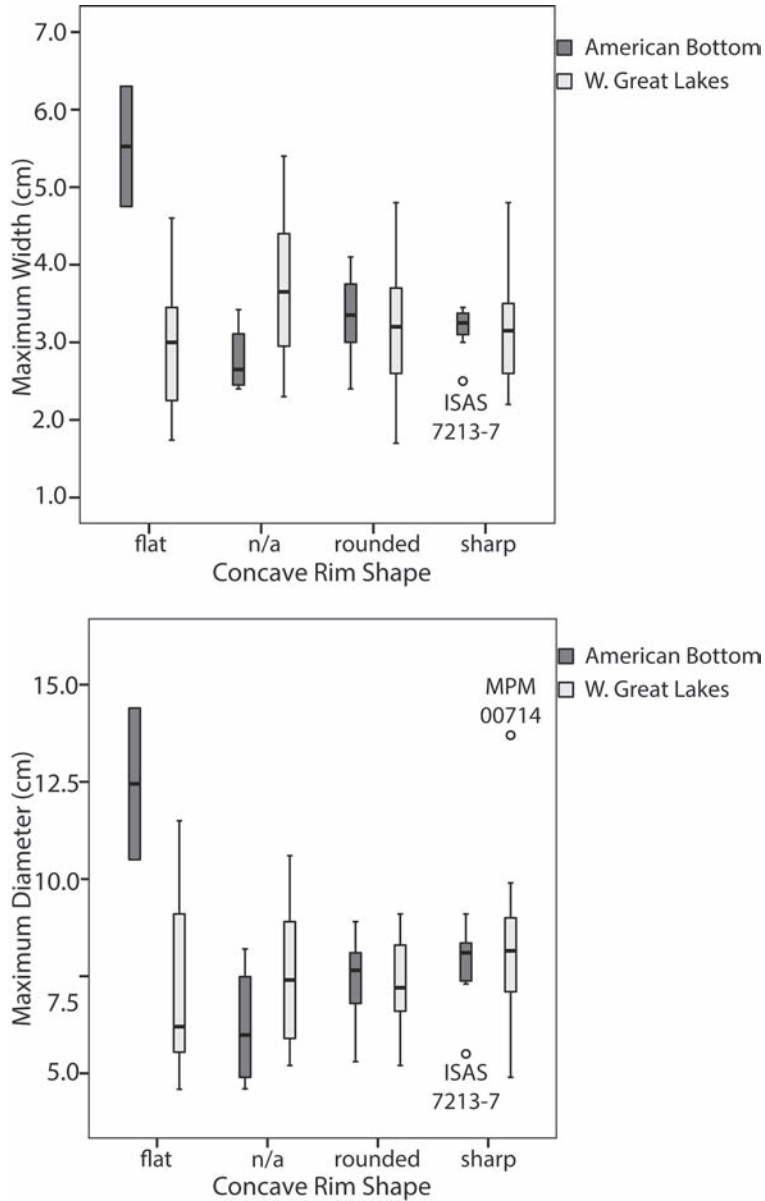


FIGURE 5.5. Boxplots illustrating trends of width (*above*) and diameter (*below*) measurements of *chunky* stones from the greater American Bottom and western Great Lakes regions. (Drawn by Thomas J. Zych.)

conformity of average *chunky* stone width and diameter between these two regions with respect to the shape of the rim observed at the edge of the concavity.

Comparison of the average diameter and average width measurements of these objects,

respective to their particular morphologic attributes, highlights no statistically significant differences ($p > 0.05$) between the greater American Bottom and the western Great Lakes regions. Stones exhibiting rounded outer rim surfaces are the most prevalent in both datasets ($n=43$). These

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TABLE 5.3. Metric summaries for discoidal diameter and width across all regions in study.

		Max. dia. (cm)	Max. width (cm)
American Bottom	N	109	100
	Mean	6.367	2.915
	Median	6.200	2.850
	Std. deviation	2.0213	1.0017
Mill Creek	N	9	9
	Mean	5.706	2.821
	Median	5.666	2.921
	Std. deviation	0.7467	0.5956
Monongahela	N	51	51
	Mean	7.964	3.097
	Median	7.600	2.600
	Std. deviation	2.1912	1.2321
Western Great Lakes	N	54	62
	Mean	7.590	3.292
	Median	7.300	3.200
	Std. deviation	1.7349	0.8198
All regions	N	223	222
	Mean	7.002	3.058
	Median	6.900	3.000
	Std. deviation	2.0905	1.0093

are typically smaller, on average, than the formal Cahokia-style stones often attributed with a sharp rim at the edge of the concavity, though the difference is still not significant ($p=0.0621$). Stones exhibiting flat or convex sides—the latter of which are characteristic of the so-called Bradley style—are also smaller on average, compared to the flat- and sharp-rimmed stones, but again, not significantly ($p=0.1706$).

Comparing *chunkey* stone attributes across the American Bottom, Mill Creek, Monongahela, and western Great Lakes regions (Table 5.3), shows that average diameters for the *chunkey* stones vary significantly ($F_{3,223}=30.245$, $p=0.000$). Post hoc statistical testing highlights differences between the following regions: Mill Creek sites and the western Great Lakes ($p_{\text{adj}}=0.013$), Mill Creek sites and Monongahela sites ($p_{\text{adj}}=0.005$), the American Bottom and western Great Lakes ($p_{\text{adj}}=0.001$), and the American Bottom and Monongahela sites ($p_{\text{adj}}=0.000$).

Width measurements across the same regions also vary significantly ($F_{3,222}=8.414$, $p=0.038$). However, supplementary post hoc testing highlights a significant difference only between the American Bottom and western Great Lakes regions ($p=0.041$).

Eight of the nine Mill Creek region *chunkey* stones may be attributed to the Bradley style, with convex sides and a more pointed/rounded outer rolling surface. When the Mill Creek sample ($n=9$) is removed from the region-wide comparisons, a significant difference in diameters remains across the remaining three regions ($F_{2,214}=23.669$, $p=0.000$). Post hoc testing highlights a difference between the American Bottom and western Great Lakes ($p=0.001$) regions, as well as the American Bottom and Monongahela samples ($p=0.000$). Notably, no significant difference in diameter is apparent between the Monongahela stones and those from the western Great Lakes in either series of post

hoc tests ($p > 0.05$). Again, when removing the Mill Creek samples, a significant difference is present for *chunkey* width among the remaining regions ($F_{2,213} = 7.930$, $p = 0.019$). As above, post hoc tests only highlight a specific difference in width between the American Bottom and western Great Lakes ($p = 0.045$).

Discussion

Despite the morphological variation of the stones, it seems the spread of the game across the landscape included little cause for alteration of the stone implements in use between the American Bottom and the western Great Lakes regions. The movement of Middle Mississippians into the northern hinterlands during the tenth through thirteenth centuries AD is well documented (Benden et al. 2010; Boszhardt et al. 2012; Green and Rodell 1994; R. Hall 1962; J. Kelly 1991; Pauketat et al. 2015; Richards 1992; Riley and Apfelstadt 1978; Stoltman et al. 2008). Thus, we can link such movements of persons as an impetus for the spread of the game into those regions and, simultaneously, as a possible argument for a common perception of how to make those game pieces (i.e., what size and shape). Similarity of implements, including the poles and stones, as described in the ethnographic record, further underscores the notion of a shared way of “how to play the game.”

A limited number of stones from *well-provenienced* contexts in the regions explored above are readily available in the archaeological literature. Not surprisingly, the result is a less than comprehensive understanding of the prehistoric game of *chunkey*. To meet DeBoer's quest to analyze the broader archaeological record and explore the widespread nature of this game, more vigilant inquiry into often obscure archaeological technical reports is needed. Knowledge of precise spatial and temporal contexts is necessary to better understand the active role these objects and the game played in indigenous societies before European contact (DeBoer 1993). Attribute-based analyses highlighting the morphologic variation of these items, tied with information regarding archaeological context,

can only provide a richer understanding of these gaming pieces. Yet we must still question what role these objects play for the archaeologist: Are *chunkey* stones mediators of the past, informing us of the presence of a former game, or are they active participants in changing the game, changing the practice of the sport itself? Certainly the presence of variation in the shape and size of the stones noted above suggests the game was likely (re)negotiated and (re)interpreted by new populations as it continued to spread across the Eastern Woodlands.

Concluding Discussion

While Cahokian–Middle Mississippian culture spread throughout the midcontinent during the eleventh and twelfth centuries AD, the *chunkey* game became grounded in the movement of people and objects through meaningful physical and social landscapes. The spread of the game created opportunities for individuals and communities to engage in the shared experiences of this game. Stone discs survive in the archaeological record as remnants of this sport; objects of a material practice that facilitated the creation of new social memories and identities every time the game was played. Through these objects and the spread of *chunkey*, spectators and players incorporated new collective (or possibly diverging) mythic histories into this game, perhaps tied to the distant place of Cahokia. Citing past events in which the game was played, these histories reconfigured and united communities within a common historical identity and simultaneously constructed differences between opponents, spectators, and larger societies.

Social Mobility

Given the widespread occurrence of these game pieces in the archaeological record throughout eastern North America, the *chunkey* game, or some version thereof, was undoubtedly just as prevalent. In addition to the movement of the game across the landscape, the *chunkey* game also provided opportunities for *social* mobility. While social actors transported the stones, the game affected people, undoubtedly through vic-

tory as a player or even gambling as a spectator but also through the performative/theatrical aspects of the game and quite possibly the history behind the game, including knowledge of the biographies of particular stones. The possession of specialized knowledge about the *chunkey* game and its origins likely provided certain individuals an opportunity to gain prestige and influence within society through the custody of such information. Considering the similarity and differences regarding the sizes and shapes of the stones themselves, knowledge of what implements the game was supposed to be played with would also be valued and shared across the midcontinent.

Winning the game was undoubtedly prestigious. Players could profit socially from their victories and suffer socially in their losses. Yet, winning the game was only a small part. Wagering on the game's outcome provided a means of social mobility for players as well as spectators. From ethnohistoric accounts we learn that players were known to have gambled away all their possessions on a single match (Adair 2005 [1775]; Catlin 1989 [1841]; Culin 1907). Victory combined with earnings from side wagers likely added more prestige than winning alone. Considering that players may have traveled to other settlements to compete, victory at a rival's venue likely would have garnered the winners additional praise at home.

Spectators would gather to watch the game and place their own wagers on the outcome. They too may have traveled to neighboring settlements to watch games, support their favorite players, and place wagers. Similar to the modern Olympics, individual communities perhaps hosted games, encouraging people from other settlements to visit, watch the events of the day, gamble, and engage in other forms of exchange during their stay. Communal feasting may have accompanied these games. A host community could thus gain prestige through its gracious display of hospitality to visiting players and spectators and in so doing create a social debt and future obligations for the visitors. The game also held opportunities for social mobility

among players, spectators, communities, and hosts while creating social relationships across distances—connecting people through shared experiences and memories.

Games as Opportunities

Perhaps it is a modern Western conception to think of games as being only “played for fun,” but outside of Western society, this is not necessarily the case. As Voorhies observes in the opening chapter of this volume, games serve different purposes in different societies. Oxendine notes that Indian games had goals, but not the kind used for scoring (Oxendine 1988:6). Games requiring skill and dexterity were likely engaged for some broader significance to the community. Minimally, beyond amusement or grand entertainment, such games provided opportunities for individuals to hone particular skill sets, including skills and qualities beneficial to daily life and practices (Cheska 1979). Games of dexterity, endurance, and patience would certainly be productive for a successful hunter or warrior (Macfalan and Macfalan 1958). Ethnohistoric accounts provide ample insight into cosmological origins of the hoop-and-pole/*chunkey* game (as noted), frequently noting that games have magico-religious connections that can be further associated with mortuary practices, sickness, shifting climatic conditions, and fertility (Salter 1972a, 1972b). Such a perspective is perhaps colored by an overemphasis on the religious association of games as portrayed in such accounts. In turn, these perspectives are often influenced by Western views of “work ethic” juxtaposed with notions of “play and amusement” resulting in a preoccupation among ethnohistorians with religious-cosmological connections to illustrate an ideal image of native peoples (K. Blanchard 1981; Blanchard and Cheska 1985; Oxendine 1988).

Place and Memory

Specific places on a landscape can also retain significance, since they are often tied to historic events as part of communal social memories. Sporting venues are no exception. As *chunkey*

spread, stories of former games, victories, and defeats would likely be tied to the places where they occurred. While every settlement may not have had a formal *chunkey* field, it is likely that many of the larger settlements had a sanctioned space where the game was played, comparable to the “chunk-yards” described in several ethno-historic accounts. A formal location for these gaming fields and their continual maintenance (noted above) further underscores the game’s importance to the community. Likewise, daily interaction with these spaces would serve to reinforce memories associated with the space, as well as the game or other activities that took place there. Several archaeologists have suggested that Precolumbian plazas (places where *chunkey* may have been played) were not simply plots of land that were left open but were instead intentionally designed and constructed, requiring significant planning and resource administration (Dalan et al. 2003; Holley et al. 1993; Pauketat and Alt 2003). It is possible that such constructions integrated a series of myths and meanings into the landscape from some past history (Pauketat and Alt 2003) and equally possible that the introduction of the *chunkey* game into mainstream society played a role in this history-building as well.

Performance

The traditions and ideologies that a community identifies with are fixed to the *real images* and *actions* that all individuals can experience in the living world (Inomata 2006a:805). Like most games, *chunkey* could have been played without an audience. However, the large size and central location of many prehistoric Mississippian plazas suggests it was played in these spaces surrounded by spectators whose presence thus provides the game with a sense of entertainment and theatricality.

Chunkey was an activity in which individuals could share in a common experience. By watching the *chunkey* game, which at the height of Cahokian society had been played for over 400 years, spectators saw the past recreated in each match, a perspective akin to that held by many fans of American baseball. By watching

the games and going to the playing fields and stadiums, we revive the past, its players, those who previously sat in the stands, the sights, the sounds, and the smells—whether consciously or unconsciously.

Theatricality also incorporates material images to express and communicate histories and identities (Inomata 2006a). Ideas, traditions, and meanings of Mississippian life associated with *chunkey* were not manifested only through playing the game or inferred by the mere presence of *chunkey* stones. Items such as shell gorgets and flint clay figures that depict scenes of the *chunkey* game also expressed those ideas and identities. Such depictions may have been created and used to reinforce the authority of the group that controlled the material forms of the game (DeMarrais et al. 1996). These depictions also could serve to emphasize specific cultural meanings associated with the game or cite a specific historical narrative.

The most obvious (preserved) physical symbols of *chunkey* are, of course, the stones themselves. Evidence of the long-distance movement of stones has not been clearly documented. Such a claim requires more exact sourcing of raw materials from which the stones were made. Still, it remains likely many stones were transported from place to place. Some stones stand out as being extraordinary and may have been created with no intention of ever being used in a game.

For example, an unusually large *chunkey* stone, measuring approximately 14 cm in diameter and 6 cm thick, was found inside the post mold of an early Mississippian supradomestic structure at the Janey B. Goode site in the American Bottom floodplain (Figure 5.6). Constructed with single-set wall posts, this building was marked by a linear depression on the floor that trended diagonally southwest to northeast. An almost identical building, also with a linear floor depression, was unearthed at the Pfeffer site in the uplands east of the American Bottom and has been tied to particular celestial phenomena centered on lunar events that bear broader cosmological significance (Pauketat 2013). If the Janey B. Goode structure is interpreted in the same manner as the one at Pfeffer, the celestial



FIGURE 5.6. *Chunkey* stone in a post mold of a Mississippian structure at the Janey B. Goode site. (Courtesy of the Illinois State Archaeological Survey, University of Illinois.)

and cosmological association further highlights the significance of the placement of this *chunkey* stone. The item's large size and interment in a posthole of this structure suggests a purpose beyond mere use in a game. In this instance, it may have served to both physically and meta-physically support the structure.

If we look at our modern sporting events, vast crowds gather to watch and experience such games. The spectating public, individually and as groups, often identify themselves with particular teams or communities and may take on additional, even imagined identities as a result. Again, the modern Olympics provide an analog for the incorporation of mythic histories and identities into games. Such histories attempt to recreate and unite communities in a common identity through playing and watching the games. These games, or series of events, simultaneously unite and divide, as each community

(both athletes and spectators) displays its own historical identities. In this modern example, the “traveling” aspect of the Olympic games allows various host nations to evoke their own histories and incorporate them into the events.

It may be the case that large-scale communal identities were weaker in the past and focused on more tightly knit, smaller social or kinship groups (Inomata 2006a). The connection that I propose here is that the peripatetic nature of the *chunkey* game across the continent offered communities the opportunity to incorporate their own history into the game, either through local variations in rules of play, differences in court locations, or through accompanying feasts and celebrations for the participants and spectators. Each game likely influenced the individual and collective histories and identities of those actively involved, as well as members of the audience. Undoubtedly, *chunkey* played a significant

role in the spread of Mississippian society (DeBoer 1993; Pauketat 2009a).

The archaeological data described here suggest some similarities among the stones as they are found across the midcontinent. No doubt, future studies will aid in highlighting additional variability of these objects across time and place that can add to the narrative of shared histories and (re)negotiated identities. As we come to understand this and similar games as events, tied to social life, the *chunkey* game provided

opportunities for individuals to gather and share in common and varied experiences. Social memories were created and recreated every time new populations adopted the game and each time the game was played. *Chunkey* introduced new opportunities for social mobility within and between existing populations. The biographies of *chunkey* stones and the game itself became grounded in the movement of people and things through meaningful landscapes.

CHAPTER 6



The Sacred Role of Dice Games in Eastern North America

Implications for the Protohistoric Lower Mississippi Valley

DAVID H. DYE

At the time of Hernando de Soto's *entrada* in the lower Mississippi Valley (LMV), the region was home to some 50,000 to 75,000 Tunican speakers who were organized as a series of competitive and ethnically diverse chiefly polities (Figure 6.1; Michael Hoffman 1995; Jeter 2009; Mainfort 2001; Rankin 1993). De Soto's entry in 1541 marks the beginning of the Protohistoric period, which lasted until 1673, when French missionaries and traders began exploring the lower reaches of the Mississippi River. This shadowy span of time between initial Spanish and French contacts is a virtual dark age, because the profound political, religious, and social transformations that took place are so poorly documented.

The archaeological record for the LMV, on the other hand, provides important evidence to support the inference that a sea change occurred in Tunican belief systems and religious institutions over the course of the Protohistoric period. For example, numerous sites include new exotic ritual paraphernalia that were introduced into the region: calumet disk pipes (Figure 6.2); copper headbands and raptor plates; engraved marine shell facemask gorgets;¹ marine shell "buttons" (Figure 6.3);² and spatulate celts. Moreover, novel styles of ceramic effigies are found, including headpots (Figure 6.4; Cherry 2009); female "hunchback" bottles (Figure 6.5; Dye 2014); water spirit "cat serpent" bowls (Dye 2016a); and "conehead" bowls (Figure 6.6; Lankford and Dye 2014). These new styles of ritual

wares were the latest of a long tradition of materialized religious themes that are also present in charter myths or foundation narratives recorded by ethnographers and ethnohistorians in eastern North America.

As part of the influx of these novel ritual items and innovations in ceramic styles, astragali (or talus) bone objects, also make their debut in the Tunican homeland (Figures 6.7 and 6.8; Table 6.1). Based on North American ethnographic accounts, astragali dice were used in gambling throughout much of North America (Culin 1898, 1907; Davis 1885, 1887). Accordingly, the sudden appearance of these artifacts in the archaeological record suggests a surge in popularity of dice gaming and, by extension, an increased interest in ritual gambling by the Tunican people in the late sixteenth to early seventeenth centuries.³ In this chapter, I consider the implications of the above-mentioned astragali dice. To do so, I examine how dice games are portrayed in eastern North American charter myths and their cultural context, based on archaeological, ethnographic, and ethnohistoric sources. First, however, it is necessary to describe the astragali bones inferred to be dice.

Modified Astragalus Bones as Dice

Animal astragali from large ungulates (bison, elk, and white-tailed deer) were crafted into "dice" by grinding two or more of the six talus-bone surfaces into a flat-sided, cuboid shape and

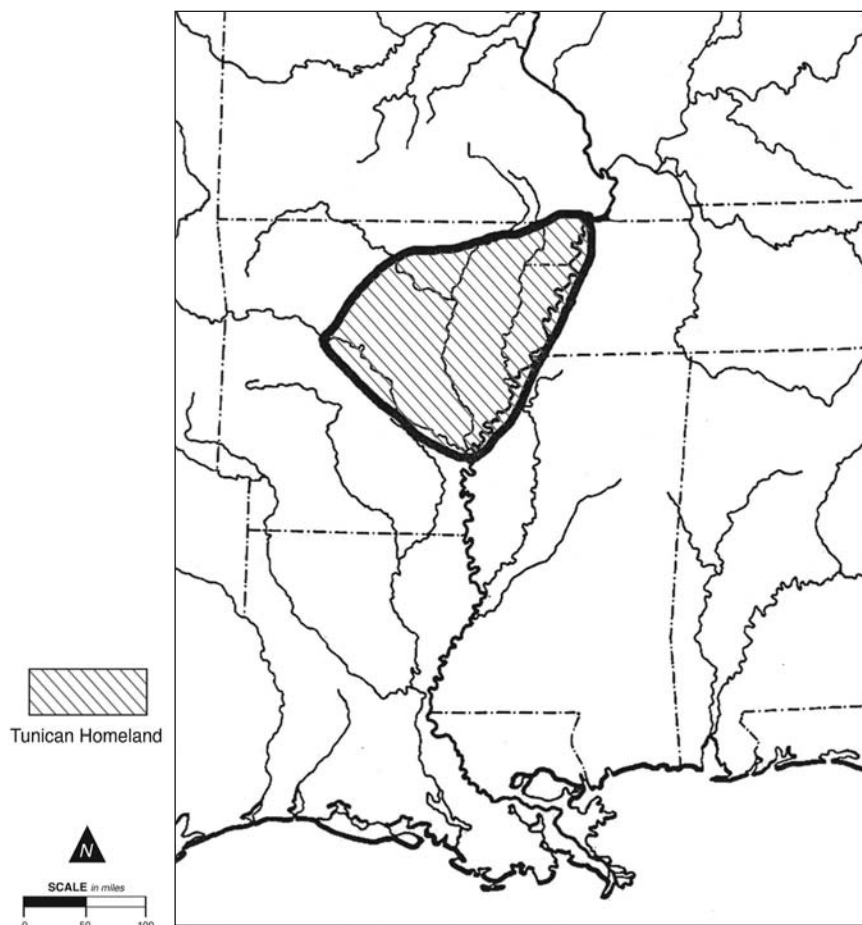


FIGURE 6.1. The sixteenth-century Tunican homeland, based on the Hernando de Soto expedition accounts. (Map by David H. Dye.)

then polishing them. Some luster appears to have resulted from repeated handling and long-term curation. Their close proximity to one another in graves as mortuary furniture further suggests the dice were stored in bundles or placed in wooden bowls to accompany the deceased. Barry Lewis (1988:760) has proposed that astragali dice should be considered a sixteenth-century horizon marker, representing the indirect cultural effects of Spanish expeditions such as the De Soto *entrada*. However, his argument has been challenged based on the recovery of numerous worked astragali in Late Mississippian period contexts (AD 1400–1550) east of the Tunican homeland (Black 1967; Eisenberg 1989; Fisher-Carroll and Mainfort 2004; Griffin 1952:235;

Lewis 1988; Mainfort 2001; Moore 1911:449–55; Morse and Morse 1983:Figure 12.4; Ventur 1980b:86; Wesler 1991; S. Williams 1980). Virtually all Tunican examples of astragali dice are found on LMV sites with Protohistoric components.⁴ For this reason, I suggest the majority of astragali dice in the LMV date from the late sixteenth to the early seventeenth centuries and are of indigenous rather than European origin but nevertheless apparently introduced from farther east. Although the possibility exists that some LMV astragali dice are slightly earlier, even so, they increase substantially in popularity in the Protohistoric period. A radiocarbon date obtained from a bison astragalus found at the Big Eddy site (3SF9) produced a calibrated age

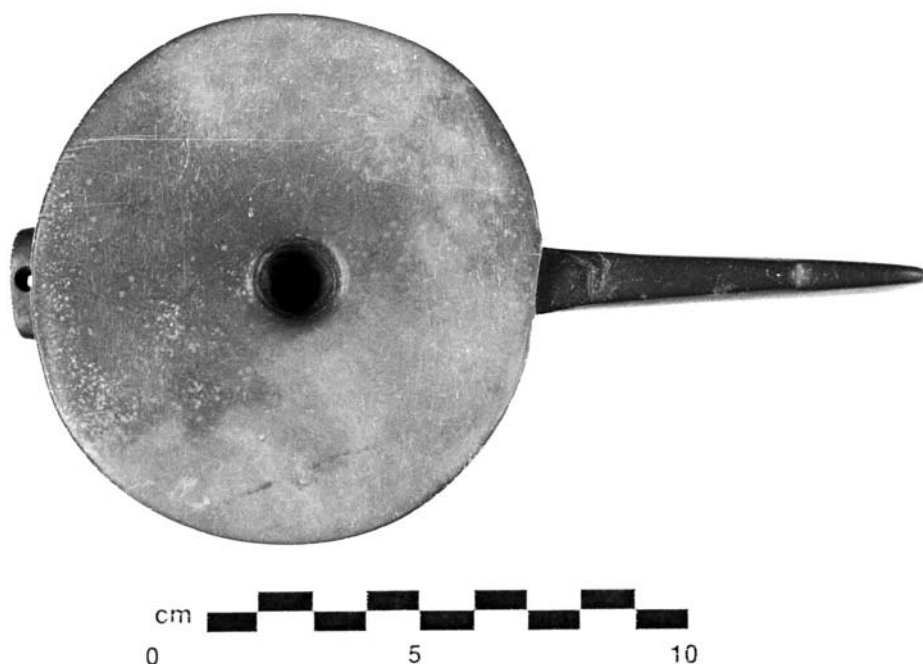


FIGURE 6.2. Calumet disk pipe, Chickasawba site (3MS5), Mississippi County, Arkansas. (Photograph by David H. Dye.)

range of AD 1440–1640, supporting a Protohistoric period age for astragali dice in the LMV (Cherry 2009:95).

Most astragali dice recovered by archaeologists from Mississippian sites co-occur with subadult burials (Cherry 2009:95; Eisenberg 1989; Fisher-Carroll and Mainfort 2004; Lewis 1988:761; Moore 1911:451–55, 476; 1916:495; J. Williams 1972:106). Lewis (1988:761) notes, “there is a clear, strong archaeological association of this artifact class with children and adolescents.” At the Averbuch site (40DV60), a mid-fifteenth-century Mississippian cemetery located in the Middle Cumberland Valley, modified astragali dice were “recovered only from grave contexts, where they were found solely in association with juveniles” (Eisenberg 1989:345). At the Herman site (40DV2), a Middle Mississippian cemetery and village located on the Harpeth River, an infant interment (Burial 20) contained marine shell beads and an elk astragalus cube (Moore et al. 2016:128). Clarence B. Moore (1911:431–55) excavated four burials (Nos. 13, 40, 104, and 171)

at the Pecan Point site (3MS78), each of which contained astragali dice; all were adolescents or children. The Pecan Point burials were interred with considerable ritual regalia. For example, Burial 104 was a child accompanied by a snow goose wing bone (feathered fan?), ceramic vessels, a shell bead necklace, and other artifacts, in addition to three astragali dice (bison, deer, and elk; C. Moore 1911:Figure 63). At the Stoffle Place (a.k.a. Turnage; 3MS17), Clarence Moore found two unmodified astragali dice with a child (Burial 12; Moore 1911:476). At the Big Eddy site (3SF9), a child burial contained twenty pottery vessels, including a headpot and a bison astragali die (Cherry 2009:95). Finally, at the Denton Mounds (23PM549), a juvenile (Burial 6) was accompanied by a pair of astragali dice at the left humerus (J. Williams 1972:106). The accompanying mortuary furniture at these sites suggests children buried with dice were especially prominent members of the community, with perhaps some degree of aristocratic standing and importance. This association of astragali dice with

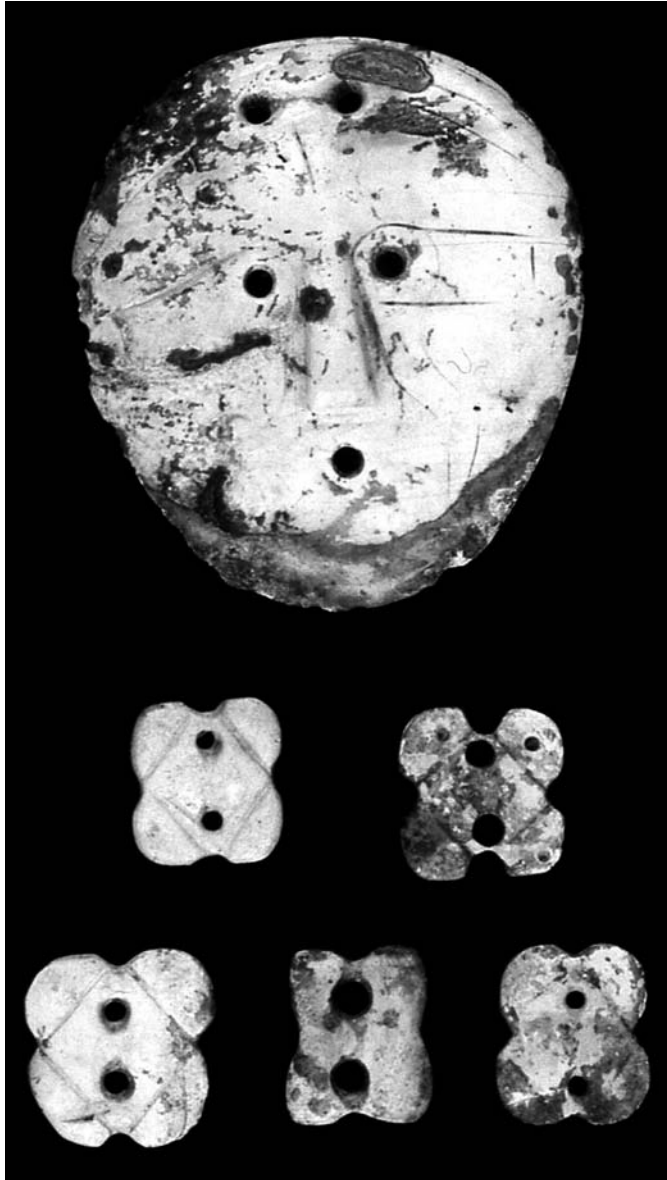


FIGURE 6.3. Engraved facemask gorget and associated marine shell "buttons," Vernon Paul site (3CS25), Cross County, Arkansas. (Photograph by David H. Dye.)

subadults prompted Rita Fisher-Carroll and Robert Mainfort (2004:73), and Barry Lewis (1988:761), to suggest dice were gaming pieces employed in children's games. In the following section, I discuss how Tunican religion was materialized in ceramic crafting, especially anthropomorphic effigy forms representing culture heroes and transcendent beings.

Protohistoric Tunican Religion

The archaeological record provides insightful clues concerning the Tunican belief system and cosmology. For example, the iconography of whole pottery vessels reflects the Tunican veneration of animals and deities, including major culture heroes or transcendent beings such as cardinal direction spirits, the Earth Mother, the



FIGURE 6.4. Headpot associated with astragali dice, Big Eddy site (3SF9), St. Francis County, Arkansas. (Photograph by James F. Cherry.)



FIGURE 6.5. Female effigy bottle, Chickasawba site (3MS5), Mississippi County, Arkansas. (Photograph by David H. Dye.)



FIGURE 6.6. "Conehead" effigy bowl, Belle Meade site (3CT30), Crittenden County, Arkansas. (Photograph by David H. Dye.)

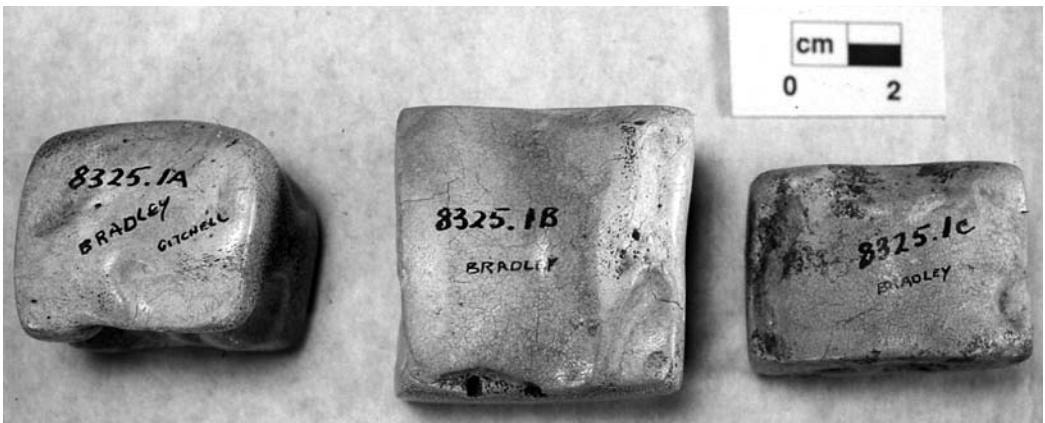


FIGURE 6.7. Cut and polished astragalus dice, Bradley site (3CT7), Crittenden County, Arkansas. (Photograph by David H. Dye.)

Great Serpent, the Hero Twins, and Morning Star. According to Father Gravier, the Tunica acknowledged "nine gods—the sun, thunder, fire, the gods of the east, south, north, and west, of heaven and of earth" (Haas 1942:532). Each

culture hero or deity, and its ceramic representation, may have been the focus of numerous competitive and generally short-lived sodalities, variously referred to as medicine societies or religious sodalities. Members of such religious or-

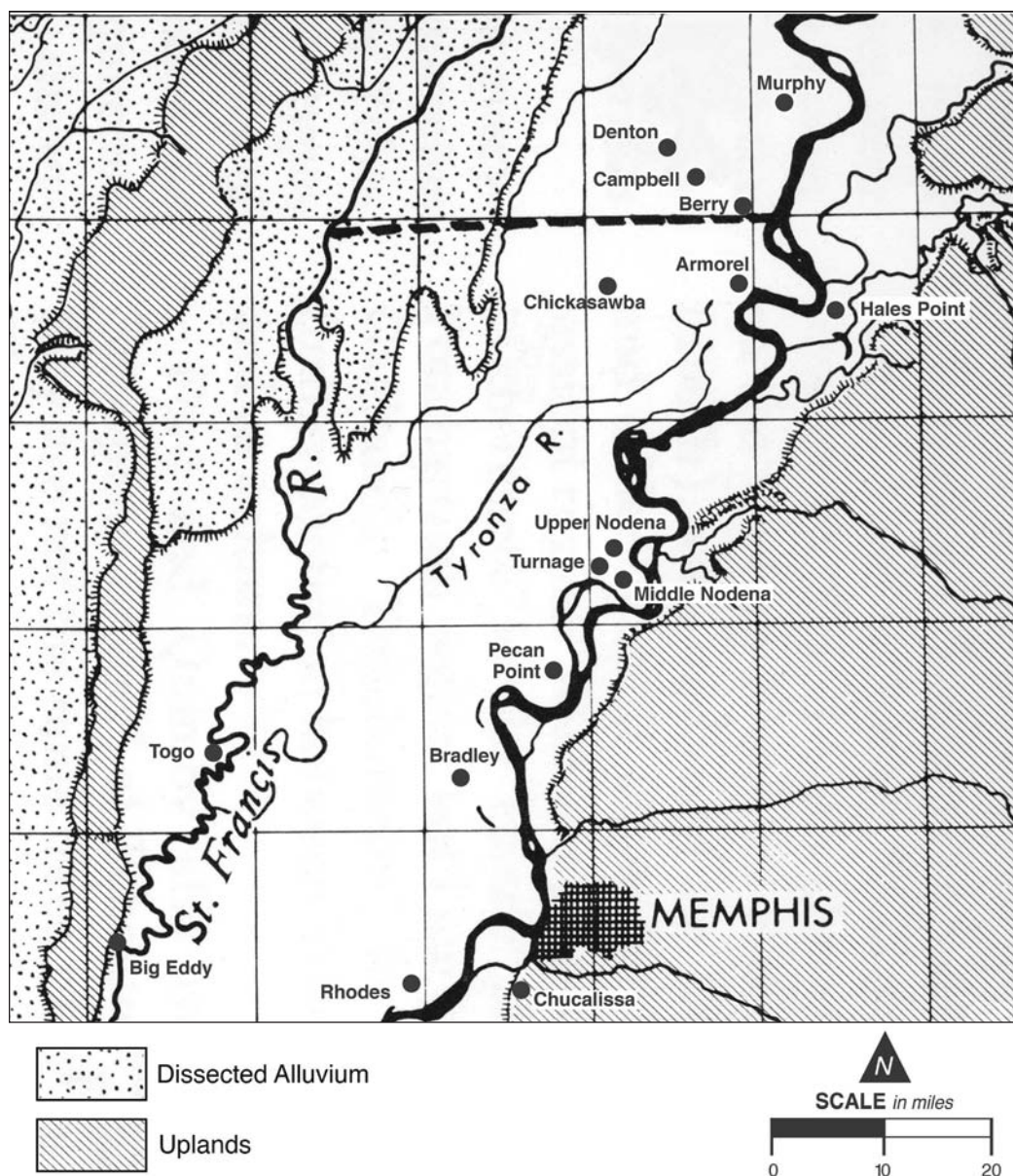


FIGURE 6.8. Lower Mississippi Valley sites with astragali dice. (Map by David H. Dye.)

ganizations supplicated specific culture heroes or tutelaries through the materialized imagery of its focal deity, resulting in a wide variety of ceramic effigy styles and themes.

Religious mythic charters explicated the origin and purpose of the various medicine societies, the nature of their founding deity, the required paraphernalia and regalia, and the

proscribed ritual protocols. An important society perquisite for its members may have been gambling, played out as a dedicatory, honorary, or supplicatory act on behalf of the society's venerated, transcendent being. Folklorists and linguists recorded several Tunica charter narratives, including the Flood myth (Swanton 1907), the Solar myth (Haas 1942), and the Thunder

TABLE 6.1. Lower Mississippi Valley astragali dice.

Site name	Site number	References
Togo	03CS028	Univ. of Memphis, Dept. of Earth Sciences, photo on file.
Rhodes	03CT003	Moore 1916:495; Univ. of Memphis, Dept. of Earth Sciences, photo on file.
Bradley	03CT007	Fisher-Carroll and Mainfort 2004; Lewis 1988; Mainfort 2008:Figs. 136 and 137; Moore 1911:429, 431; S. Williams 1980.
Middle Nodena	03MS003	Bogan 1974:24; Lewis 1988; S. Williams 1980.
Upper Nodena	03MS004	Fisher-Carroll 2001; Lewis 1988; Morse 1973:Fig. 10g and h.
Chickasawba	03MS005	Univ. of Memphis, Dept. of Earth Sciences, photo on file.
Turnage (Stoffle)	03MS017	Moore 1911:476.
Armored	03MS023	Bogan 1974:11.
Pecan Point	03MS078	Fisher-Carroll and Mainfort 2004; Lewis 1988; Moore 1911:451–56, Fig. 63; S. Williams 1980.
Big Eddy	03SF009	Cherry 2009:92–95; Lewis 1988; Morse and Morse 1983:309; S. Williams 1980.
Campbell	23PM005	Fisher-Carroll and Mainfort 2004; Holland 1991; Lewis 1988; O'Brien 1994:Fig. 32; J. Price and Price 1979:4.
Berry	23PM059	Univ. of Memphis, Dept. of Earth Sciences, photo on file.
Denton Mounds	23PM549	Lewis 1988; J. Williams 1972:106.
Hales Point	40LA001	Moore 1916:495; S. Williams 1980.
Chucalissa	40SY001	Parmalee 1960:358.

myth (Gatschet n.d.; Haas 1950; Swanton 1907, 1911). These religious narratives originated as medicine-society charters for specific culture heroes such as the Thunder Being, but over time the sacred chartering and often secret elements were either purposely omitted or abandoned because of political disruptions and social transformations. For example, Greg Keyes (1994:110–11) points out that the protagonist of the Tunica Thunder myth, collected by Albert Gatschet in 1880 (Swanton 1911:319–22) and again by Mary Haas in 1943 (1950:24–61), exists in a political, religious, and social vacuum. Tunica Thunder narrative motifs are similar to earlier sixteenth-century motifs and originally would have empowered and underwritten aristocratic social positions and legitimized political and specific religious institutions. But by the late nineteenth century, when the mythic narratives were recorded, the plot structure had become substantially modified and reshaped, with the dramatic motifs that underwrote political legitimacy being reframed and reshuffled.

I argue that the Tunica deities recorded by French missionaries in the early eighteenth cen-

tury correspond to Tunican ceramic iconography, expressed as Protohistoric effigies that had been crafted only a few generations earlier than the late-seventeenth-century French presence. For example, cardinal direction guardians, the Earth Mother, the Great Serpent, the Hero Twins, and Morning Star have been identified as ceramic effigy wares (Dye 2012, 2015a, 2015b, 2016a, 2016b; Lankford and Dye 2014; F. Reilly 2011). As venerated celestial beings, cardinal direction spirits, Earth Mother, and Morning Star culture heroes may have been associated with dice games, since gambling was one of their important activities (Curtin and Hewitt 1918; Densmore 1931, 1932; G. Dorsey 1905, 1906; Harrington 1921; Howard 1965; Libby 1907; Skinner 1913). The appearance of astragali bones as gaming pieces during the Protohistoric period signals a restructuring or transformation in religious organization, due to the social changes discussed above and the need for political mechanisms to bind and cement relationships in the newly emerging and expanding exchange nodes that arose in the late sixteenth and early seventeenth centuries (Dye 2015b, 2016b).

Women's Sacred Dice Game and Transcendent Beings

The ethnographic and ethnohistoric record for dice games in eastern North America provides important insights into the role of dice gaming in the LMV. That the ritual function of dice gaming was deeply embedded and ingrained in native societies is made clear by Mary Schneider (1990: 119–21), who observes that the ceremonial gaming functions of baskets in the ubiquitous Plains bowl-and-dice games continued long after domestic uses for baskets had declined. While both men and women participated in dice games, for the most part they played them separately and perhaps for different reasons in distinct religious and social spheres. In 1701, John Lawson, visiting the Congaree Indians on a tributary of the Wateree River, noted that while the men were away from the village hunting game in preparation for an upcoming feast, the women were “busily engag’d in Gaming” (Lawson 1967:34). Where we have detailed ethnographic and ethnohistoric accounts, women generally played dice games in honor of their female personal guardian spirits, who bestowed upon a woman health and well-being in return for being honored and venerated through feasting, offering tobacco, and playing dice games. Sacred narratives chartered the practice of dice gaming as one form of supplication for the benevolence of cardinal direction sky spirits.

In this section, I investigate the cultural context of dice gaming as practiced by three eastern North American groups: Menominee, Pawnee, and Winnebago. I selected these groups because they provide key insights into the cultural, ritual, and social milieu of dice gaming as recorded by ethnographers, who observed that dice gaming was deeply embedded in the religious and social fabric. For example, throughout nineteenth-century eastern North America, government officials, missionaries, and preachers banned the bowl-and-dice game because of the presumed idleness and loss of property associated with gambling; but groups such as the Seneca-Cayuga continue to play dice games with ritual overtones (Freeman-Witthoft 1992:37; Howard 1961:24).⁵

Menominee: Sacred Sisters of the Sky Realm

The Menominee, part of the widespread family of eastern North American Algonquian speakers, traditionally lived in Wisconsin and Michigan's Upper Peninsula. Dreams and visions for the Menominee were important for acquiring a personal guardian spirit, but the tutelary spirit must be appreciated, honored, and supplicated in order to provide the crucial benefits sought by the supplicant (Benedict 1923). For example, the Thunder Beings protected boys who played lacrosse in their honor, and in return, they served as a boys' guardian spirits. Girls, on the other hand, were aided and protected by the Sky Sisters, powerful medicine women who lived in lodges in the sky at the four cardinal directions. In some respects, the Sky Sisters are comparable to the Lenape (Delaware) *manitowuk*; as both are associated with the cardinal directions, dice gaming, medicine lodges, shamanic healing, success in women's personal undertakings, and transcendent beings (Densmore 1932; Skinner 1913).

Of the Sky Sisters, it was the southern ones who gifted the bowl-and-dice game to the Menominee women and instructed them to play in honor of their Sky Sister guardians. In return, the Sky Sisters protected the solicitor or supplicant from misfortune—especially sickness—and they bestowed good health upon those who dreamed of and venerated them. The sacred Sky Sisters, as personal guardian spirits, had an important influence over a girl or woman's destiny. To honor them, a girl was obliged to play at least one sacred dice game each year. If she should neglect to play the game, catastrophe and misfortune would be the inevitable price for such a lapse in veneration. When a person was sick, a shaman ascertained which malevolent agents or powers had sent the disease and then would conjure the Sky Sisters for their help by playing the bowl-and-dice game. Once summoned, the Sky Sisters aided the shaman or “juggler” in the medicine lodge or the shaking tent to mitigate a curse or release the spell of witchcraft (Skinner 1913:38). Menominee shamans often worked individually, but they also could be members of the Grand Medicine Lodge society (G. Spindler 1955:42; L. Spindler 1978:715).

The Menominee observed that Spirit Women played the dice game early in the morning and that the color in the eastern sky was the red color of the Spirit Sisters' faces. When a woman dreamed of the Spirit Sisters, she might be instructed to play the bowl-and-dice game once a year. If she complied, the Spirit Sisters would come to her aid whenever she was sick or beset by anxiety or trouble. Every morning in the eastern sky, the Sky Sisters played the dice game to help their sisters on earth. In return, the Sky Sisters asked that their earthly sisters look at them in the morning sky, host a feast in their honor, and play the dice game as a tribute. Through dreams, the Sky Sisters would tell a woman that if she made them happy, the earthly sister's troubles would vanish and her health would be restored.

The Sky Sister charter myth for the bowl-and-dice game describes important details for the sacred nature of the game (Skinner 1913). According to the Menominee, many years ago there was a family of girls who lived lives so pure and holy that when the time came for them to die, they were permitted to ascend into the sky and live there forever. Four girls had their lodge in the eastern sky and four girls had their abode in the southern sky. Powerful male spirits also lived with them. Sometimes, as the Sky Sisters looked down from the sky realm, a great longing to be reborn and return to Earth would overcome them. This they did by descending and entering a woman's body to be born as a Sky Child.

When a Sky Child was born to an earthly couple, they at first believed they were the child's parents, but the parents soon realized that their child was different from other children. For example, on some occasions, the Sky Infant might cry at a time when an ordinary baby would not cry out. When this happened, the parents would send for an elderly person—presumably a shaman—to interpret the child's desires. Later, when the child was a few years old, she might exhibit unusual characteristics or traits, such as stopping suddenly when playing or sitting alone in a state of melancholy or sadness while other children played. Also, the little girl might accurately forecast changes in the weather, a sure sign she was from the sky realm, as sky inhabitants would know such things. Lastly, when the child

was older, she might inform her parents of her true identity as an incarnated Sky Sister.

When the parents of the girl learned she was a Sky Sister and that she was under their protection, they would give their daughter a bowl and a set of dice in order for her to play the game in honor of the four southern Sky Sisters. The parents might also be told by a shaman, in the case of a crying baby, that the child belonged to the Sky Spirit Women and that unless the bowl-and-dice game were played, the Spirit Women would take the child back (Densmore 1932:32). I suggest that child burials accompanied by dice in the LMV may reflect the burial of children believed to have been recalled by the Sky Sisters. In this case, the dice would be interred with the child to alert the Sky Spirit Women that the child was a sky spirit to be welcomed as such in the sky realm.

The eight dice used in the Menominee game correspond in color and number to the eight sisters of the sky realm. Of the eight dice, six were round, but two were effigies. One effigy was a crescent moon and the other was a mud turtle. The Menominee reasoned that if two dice have to be different from the rest, the moon (Elder Brother) and the turtle (a symbol for Mother Earth), being powerful *manitous*, should be chosen as models. The mud turtle was said to represent the "great spirit-turtle that soars through the sky" (Densmore 1932:33–34). Sometimes the dice were carved to represent the Thunder Beings, powerful Upper World war- and weather-related transcendent culture heroes.

Menominee dice might be crafted from antler, bone, plumstones, or wood and painted black, blue, green, or red on one side to invoke the colors associated with the various Sky Sisters and left plain or white on the other side to portray the sky realm. In other instances, the disks might be marked red on one side, symbolizing day, and black on the other side, representing night. Some Menominee accounts note that the four Sky Spirit Women play the bowl-and-dice game in the northern sky and that their dice are the eight stars in a circle, the Northern Crown (Corona Borealis).

Playing the bowl-and-dice game proclaimed to the community that the hostess was under the

protection of the Sky Spirit Women. To explicitly recognize the sacred nature of the game, the woman organizing it usually related the dream she had, acknowledging her dependence upon the Sky Sisters for their assistance, guidance, and protection (Densmore 1932:28–32). For example, a Menominee woman might play a ceremonial game every summer for her health and success. In ritual context, such games would be played in multiples of fours, with four being a sacred number representing the four cardinal directions and the associated four Sky Sisters. A woman might have several names, one of which would be that of her personal Sky Spirit guardian. If a young girl's health was not good, she could strengthen her connection with the Sky Spirit Women by attending a performance of the game at which a shaman would conjure the Spirit Women to enter the medicine lodge. When present, the Spirit Women made an audible, wind-like whistling sound from which women received their personal guardian spirit songs in the healing ritual (Densmore 1932:32–39). Once they appeared in the medicine tent, the Sky Sisters instructed the shaman. Part of the healing ceremony involved a small, round stone, dappled or spotted light and dark and shaped like a woman humped over, which was used to invoke the Spirit Women (Densmore 1932:31). This “humped over woman” may be similar to LMV kneeling “hunchback,” female pottery effigies. As celestial objects were important to the Menominee, so the moon and stars were also active agents supplicated and venerated by the Pawnee, as I discuss below.

Pawnee: Basket Woman

The Pawnee are Caddoan speakers whose traditional homeland was located along the Missouri River tributaries in Nebraska and northern Kansas. Woman-Cleanse-the-People, a Skull bundle keeper, recited the Skidi charter myth for the basket (bowl-and-dice) game to George Dorsey in the early twentieth century (G. Dorsey 1906:44–46). The story describes how at the time of creation the deities formed mud images of a boy and a girl. One day the boy, now a grown man, went into the forest, where he found a lodge and a small cornfield. He later returned with his wife. As they approached the lodge, a woman came

out, greeted them, and invited them to enter. Inside the lodge, they saw four old men with faces painted red sitting at an altar. The woman who acted as host was Basket Woman (Moon) and the four old men were weather spirits: Clouds, Lightning, Thunder, and Wind. Evening Star, the culture heroine of storms, danced in the west before the four male spirits. Only with Evening Star's permission could the four weather spirits create storms with their clouds, lightning, thunder, and wind. While Evening Star danced, she held the bowl-and-dice game basket, which symbolized the moon, the mother of the stars. Four additional dancers were also star women, who danced in a line, moving from the east toward the west. Two of these Sky Women placed swan neck skins, symbolizing the Upper World, into Evening Star's basket, and the other two added fawn skins, symbolizing the fulsome earth (This World; G. Dorsey 1905:73, 1906:44–46). Thus, the bowl-and-dice game served as a metaphor for the Above World (celestial realm), This World (earthly realm), and the Beneath World (night sky or watery realm). Casting the dice (stars) from the basket (moon) brought about varying outcomes in the relationship among these three realms and was a metaphor for conception and rebirth.

The man and woman were given the basket and some plumstones to be used as dice for the bowl-and-dice game. The woman was later told to mark the plumstones to symbolize the seven stars of the Pleiades. According to the Pawnee the twelve counting sticks, employed in the game, represent the twelve stars that form the Northern Crown (Corona Borealis; the number of associated stars varies from one group to another). The bowl-and-dice game was given to the Pawnee to remind them that Tirawa had sent the stars in a basket. The stars had fallen to the earth and assumed humanlike forms to teach the man and woman all that humans were to know and do on earth. When the star spirits saw that the man and woman now knew what they must do in this life, they returned to the sky realm in Moon's basket.

The Pawnee reasoned that dice possessed spiritual powers, being metaphors for celestial beings and transcendent spirits personified as

stars (Weltfish 1937:46). Thus, success in life depended on obtaining the blessings and protection of these sacred sky powers, which could be solicited by playing the bowl-and-dice game. While religious power in general could be obtained from both animals and stars, it was the stars that were the most powerful beings. The acquisition of power was a central theme in the life of every Pawnee, because it was vital to success and survival (Logt 2008:81–82). Playing dice was one way to garner or petition power from the celestial culture heroes and deities.

The last group I discuss is the Winnebago, for whom the bowl-and-dice game as a mortuary rite was requisite to provide a spirit trail companion to escort a departed relative to the realm of the dead.

Winnebago: Spirit Women of the Morning Sky

The Winnebago are Siouan speakers whose traditional homeland was Minnesota, Wisconsin, and parts of Illinois and Iowa. In 1931, Frances Densmore observed the bowl-and-dice game as part of a Winnebago funeral ritual during which Winnebago World War I veterans assigned the spirits of slain German soldiers they had taken in combat through scalping to Mrs. Tom Thunder. According to Winnebago social logic, warriors could snare and then control the spirits of their enemies by appropriating body parts, especially heads and scalps (Densmore 1931:659–60; R. Hall 1997; Lurie 1966). These Winnebago veterans, during the funeral ritual, told of their war experiences and how they would command the German spirits to aid Mrs. Thunder's life force as it journeyed along the Milky Way. The German soldiers were to provide food, fuel, and tobacco; build a fire each night so Mrs. Thunder might have light and warmth and be able to cook her evening meal; and ensure her every comfort until the funeral entourage joined her friends, who would then escort her into the spirit realm. After the funeral feast, Andrew Black Hawk addressed Mrs. Thunder's spirit, telling of the four difficulties she would encounter on her sojourn along the Path of Souls to the realm of the dead.

The next morning, when the sun reached the top of the trees, the funeral party ate again and then played the bowl-and-dice game, which had been given to the Winnebago women by the morning Sky Spirit Women.

When the bowl-and-dice game was played in a ritual manner, such as Mrs. Thunder's funeral, many benefits were promised to the players by the Sky Spirit Women. For example, when everyone joined in the bowl-and-dice game, the process of playing helped their friend's life force on her journey to the afterworld. While the funeral party played, Mrs. Tom Thunder's life force departed, accompanied by the spirits of the German soldiers who would serve as her spirit trail companions (Densmore 1931:660). Here, the bowl-and-dice game acted as a supplication to the morning Sky Spirit Women who assisted the spiritual funeral cortege, consisting of Mrs. Thunder's life force and the German soldier's spirits, as they traveled along the Milky Way to the path of souls.

Culture Heroes and High-Stakes Gaming

The charter myths and ethnographic accounts that I have just discussed underscore the sacred nature of eastern North American dice games for women. Another theme that emerges from consideration of dice games, as recorded in charter myths, is their role in high-stakes contests in which men and, to a lesser extent, women emulated the activities of culture heroes. Less is known about men's dice games than women's games, but gaming, often with dice, was a crucial component of high-stakes gambling between culture heroes and their adversaries. Thus, men may have honored their culture heroes through dice gaming, analogous to women's duty to their sky guardian spirits. For example, in Winnebago charter myths, culture heroes engaged in high-stakes gaming that involved life-and-death contests with cannibals, giants, and monsters. In one account of the Red Horn mythic cycle, Red Horn and his companions aid humans by defending them from giants in a variety of contests, including dice games (Radin 1956:119).

In a second story, giants challenge Otter, Red Horn, the Thunder Being (Storms as He Walks), Turtle, and Wolf to several deadly contests, one of which is a dice game. The giants lose but win a wrestling match and then kill Turtle and his friends (Radin 1948:123–29). In a third episode, Red Horn, Storms as He Walks, Turtle, Wolf, and other warriors are invited to a feast at which Turtle plays dice with a bear and wins. Subsequently, Storms as He Walks kills the giants with lightning (Radin n.d.). In a fourth story, Turtle befriends a village. After he marries the chief's daughter, the giants challenge him to a series of mortal contests, including a dice game. Turtle wins the contest and then kills the giants (Dieterle n.d.; Radin n.d.).

In these stories, the losers of high-stakes gaming, including dice games, suffer dire consequences. The winner earns war honors as well as snares the defeated person's spirit through decapitation. That life force may be manipulated by the one who possesses the head or body part (Dye 2016c). Alice Fletcher (1915:67) notes that among prairie villagers, the word to designate a point scored in a dice game is derived from the same root as the word for a war honor won in combat, another example of high-stakes competition. Decapitation often results from high-stakes gaming in these dawn-time contests between culture heroes and their antagonists (Lankford 2008:163–90). As an example, in Iroquois stories, the losers are often beheaded. In one account, the Hero Twins, Lodge Boy and Thrown Away, engage in a competition that results in their opponents being decapitated (Curtin and Hewitt 1918:Episode 34). In a second story, the son of Thunder and his companions are defeated in a dice game, and they are subsequently beheaded (Curtin and Hewitt 1918:Episode 68). In an Osage version of the Twins' tale, Lower World spirits defeat their uncle, Morning Star, in a gambling game, and he loses his head. Though not dead, Morning Star cannot rise into the eastern dawn each morning and usher the sun's daily journey across the sky. Therefore, the Upper World is plunged into perpetual darkness. For the cosmos to be returned to its state of bal-

ance and order, the Twins vanquish the Lower World beings, revivify Morning Star's head, and return it to him (Duncan 2015:228).

Dice gambling could be a high-stakes event for women as well. In a Hidatsa charter myth, a sacred dice game took place between a good Hidatsa woman and an evil old woman. At risk were the lives of the villagers, the woman, and her nine brothers. The good woman, substituting seven ducks for the seven skulls used as game pieces by the old woman, won the death match when the ducks flew up and then settled in the basket, thus saving everyone's lives. When the good Hidatsa woman returned home, she made a basket and carved six bone dice to commemorate the contest (Libby 1907; Schneider 1990:121).⁶

Among the Ponca, only persons of the same age and sex played the bowl-and-dice game with one another, with two players making up a side (Howard 1965:128). When played by women, the game provided health and longevity to the game's host and the team of players. Ponca men, on the other hand, may have played the game to honor culture heroes who, when engaged in high-stakes gaming in the dawn time, either lost life forces through gaming or gained them through trophy taking, especially decapitation. For male players to receive the benefits of the game, the donor culture heroes must be supplicated by their clients, who are obliged to play the game in ceremonial mode. Religious institutions, such as dance and medicine societies, were expressed in many forms in eastern North America and may have been the context within which men's and women's dice games were played out.

Charter Narratives, Dice Games, and Medicine Societies

As noted, North American dice games had a sacred component expressed in charter myths, cosmological symbolism, medicine society rituals, and transcendent beings. Charter myths for gaming detail how cardinal direction spirits and culture heroes bestowed dice games to men and women through dreams and visions. In these dramatic narratives, important structural motifs

underwriting aristocratic positions of authority and rank are often missing. The ethnographic examples outlined above indicate how charter myths established the game, explained how the game was introduced to humans from culture heroes, and prescribed rules for not only playing the game but also when it should be played. These charter myths also established the institutional setting, the rationalization for the game, and the benefits that would accrue from playing. For example, Ukiabi, a shape-shifting Ponca culture hero who founded the Fire/Thunder clan—a clan associated with rainmaking and Thunder rites—gave the bowl-and-dice game to a young woman he wished to marry. He used five plumstones to charm the woman and after seducing her told her to keep the dice for gambling so she would always win and would live for many years (J. Dorsey 1886:399, 1890:617).

Charter myths were restructured over time as the cultural context and social requirements became transformed in the face of disrupted power structures (Keyes 1994). Although charter myths associated with gambling illustrate a game's celestial origins as reflected in the cosmological symbolism for the basket, counters, and dice, the myths have been stripped of their status-conferring social logic and legitimizing cosmology that underwrote an aristocratic and powerful elite segment of society. Yet the essential elements, though disconnected from the legitimizing narrative, remain embedded in the charter myth and still maintain some degree of cultural resonance (Keyes 1994). The associations with astral and lunar references suggest that chartering myths once conferred authority to an elite through cosmological connections. Celestial donors of games included cardinal direction spirits, the moon, planets, stars, and the winds, each of which could be the focus of a charter myth and the object of veneration by specific medicine societies. James Dorsey (1884:334–35) notes that Omaha, Oto, and Ponca dice, made from flat, orbicular bone or plumstones, were generally painted black on one side and white, or unmarked, on the other side, reflecting the duality of the Above World (day) and the Beneath World (night). Also, dots

or lines marked on both sides reference culture heroes and transcendent beings. Plumstone dice might also have a star on one side and a moon on the other, reflecting astral and lunar spirits. The Omaha and Ponca regard celestial bodies such as stars as ancestors, culture heroes, or deities (J. Dorsey 1894:379). Dice often represent deities who had become apotheosized or materialized as celestial objects once they had acted on behalf of humans, as seen in the Pawnee charter narrative discussed above.

High-stakes contests, often taking place during the dawn time, comprised an important component of dramatic mortal combat between teams of protagonists (culture heroes) and an opposing side comprised of antagonists (cannibals, giants, etc.), as narrated in gaming charter myths. Players who received the game through dreams or visions enjoyed a covenant with these protagonist deities who, if sufficiently honored, supplicated, and venerated, acted as personal guardian spirits for their earthly beneficiary or client. Dice games, based on ethnographic examples, are typically women's games, although men are known to have played dice games, but their playing may have been structured differently in past times.

Acts of legerdemain were institutionalized through religious sodality charter myths and actualized through dramatic performances involving skillful sleights of hand. Prestidigitation took place in performances in which medicine society members demonstrated their healing powers and ability to control death and life. Medicine society ceremonies and rituals typically centered on health and rebirth, as well as performing life and death contests exemplified in various acts of legerdemain, magic, and prestidigitation (Fortune 1932; Radin 1945). For example, Lenape and Menominee medicine people conjured through the shaking tent ritual for advice in promoting health and overcoming illness (Feest 1986; W. Hoffman 1896); Winnebago shamans prayed to the Rabbit, the transcendent founder of the Medicine Dance society, for longevity and power (Radin 1911); and Pawnee priests venerated the stars for their healing powers through medicine societies and sacred bundles (Murie 1914).

Guardian Spirits and Morning Star Medicine Societies

Based on the archaeological record, dice gaming in the LMV employed cubit-shaped, hand-thrown astragali dice rather than the two-sided gaming pieces used in the bowl-and-dice game. While these differences in gaming paraphernalia are apparent, I suggest that the fundamental motivations of dice gaming were essentially the same for the two games, especially the emphasis on supplicating culture heroes and guardian spirits through religious sodalities. These medicine societies may have been widespread in the Mississippian world but suffered a rapid demise in the face of European contact. Howard (1965:113) notes that with Prairie-Plains religious societies, new sodalities were continually being formed as older ones passed out of existence. If new religious societies were unable to maintain themselves given stringent emphasis on esoteric knowledge, membership restricted to a fragile cohort, and steep gift payments, then they may have died out in the LMV within a generation of the Tunican population collapse in the early seventeenth century.

I suggest that two medicine societies in the LMV employed dice gaming as a way to honor their respective culture heroes: a guardian spirit society that honored women's Sky Sisters and a male-oriented, military-type Morning Star society. They were restructured or transformed during the Protohistoric period, although these two societies were well established in the LMV as early as the fourteenth century based on stylistic changes in the human head and female figures. If dice gaming held the same ritual significance for Tunicans in the LMV as it did among the Menominee, Pawnee, and Winnebago, then the material correlates for specific culture heroes provide a proxy for ritual gambling that was introduced or became transformed in the LMV during the Protohistoric period.

One example of these medicine societies venerated a transcendent personal guardian female being—an Earth Mother associated with the Beneath World realm or a cardinal direction spirit found in the sky realm. Either of them may have represented the invisible female life force,

conceptualized in ceramic form as a hunchback, kneeling female figure (Dye 2012, 2015a; Emerson 2015; Prentice 1986; Sharp et al. 2011). The Earth Mother, for example, bestowed agricultural crops, including beans, corn, gourds, squash, sunflowers, and tobacco, upon humans and brought seeds from the Beneath World in sacred containers: bundles, gourds, packs, and *petaca*.⁷ She gave plants to humanity with specific instructions and taboos for their propagation and harvesting and mediated the critical connective link between Above World and Beneath World forces. As a guardian spirit, she enabled shamans to cure the sick, and to those who venerated her through supplications, she provided rituals and prayers and bestowed aid, beneficence, fecundity, and longevity. A guardian spirit for those who respected her and abided by her rules, she could also dispense punishment through illness to those who violated her taboos. The kneeling female effigy vessels may have been a Tunican manifestation of the various cardinal direction celestial or sky spirits and as such may have been associated with the astragali dice game (Dye 2015a).

Another medicine society venerated the Morning Star (birdman) deity, who personified the male aspect of the life-giving forces of the Above World (Brown 2007b). Morning Star, as well as other culture heroes, is known to have engaged in high-stakes gaming, including dice games. George Lankford (2008) argues that LMV headpots were part of a cultural institution that included high-stakes gambling between culture heroes and giants. Likewise, Chet Walker (2004:228) connects headpots with the Morning Star ritual cycle based on the presence of Morning Star motifs. Headpots from the LMV have a number of cardinal direction, raptor, and star motifs placed on the face, especially the forehead (Cherry 2009; Walker 2004). Two burials with accompanying headpots from the Big Eddy site (3SF9) include astragalus dice. One burial may have been an adult male who had two bone dice placed at the feet, as well as a shallow bowl located at the head. The headpot has “birdman” motifs consisting of a right eye surround comprised of three “tail feathers,” while the left eye

has two. Both eyes also have raptor claw motifs (Figure 6.4; Cherry 2009:92). The other headpot from Big Eddy had one bison astragalus die, associated with a child burial, which also included some 20 pottery vessels. Both the headpot and the bison die were placed near the child's feet. This burial produced a calibrated radiocarbon date of AD 1440–1640, based on a sample taken from a bison astragalus (Cherry 2009:95).

Conclusions

The dice game represents an important ritual in eastern North America, played by men and women to establish and maintain covenants with celestial culture heroes, personal guardian spirits, and transcendent beings. One form of dice hardware, astragali bones, is found in the Tunican homeland of the LMV. They are similar in form to dice found in other areas of North America (Culin 1898, 1907). Based on ethnographic accounts, dice gaming is associated with men and women in distinct but complementary forms. Women gambled with dice to honor their individual guardian spirits, especially cardinal direction Sky Women who provided health, longevity, and protection. The association of dice gaming with men is not as clear, perhaps because dice gaming had been a component of warfare rituals that began to be transformed in the early seventeenth century due to the initial fur trade. Men may have emulated the high-stakes gaming of culture heroes such as the Hero Twins, Morning Star, Red Horn, Storms as He Walks, and Turtle, all of whom battled powerful antagonists—especially cannibals, giants, and monsters—during the dawn time and engaged in trophy taking behavior. Appropriating life forces from one's enemies or capturing spirit trail companions for mortuary programs was a prominent feature of eastern North American religious charter myths. With warfare being terminated by the mid-nineteenth century due to government interdiction, population collapse, and migration, many war-related rituals were in decline or had become transformed by the time of ethnographic investigations.

The degree to which dice gaming was linked to guardian spirits, culture heroes, and one's fate

may be seen in the way in which the Crow understood the role of the dice game.

They believed that each man's fate was determined by the luck and the magical power of his dream guardian, the animal spirit with whom he had entered into mystical alliance during his puberty vision quest. Everything that happened to him depended upon the fortune of his guardian spirit in a stick-dice game. In the Other World a game was being played. On the one side were the guardian spirits. On the other were anthropomorphic gods. As the dice went, so went a man's career. When one of the spirit guardians lost the game, his man died. The fatalism that was rationalized about the supernatural stick-dice game went deep into Crow life and behavior; their recklessness in war and the enormous losses in population which they sustained during the 19th century were believed due to the shifting play of the celestial dice game. (Eyman 1965:43)

Charter myths associating dice with the various contests of culture heroes may have served to restrict membership in religious sodalities, such as medicine societies, to an aristocratic segment of the population. Two LMV ceramic effigy types, perhaps reflecting religious sodalities, have a long tradition of materializing culture heroes. One is associated with women's guardian spirits, symbolized as hunchback kneeling-figure effigies. A second ceramic assemblage may have been associated with men, who used headpots to materialize Morning Star. Both ceramic themes may have been crafted as ritual containers for creating sacred medicines and serving as religious sodality figurines or statuary (Dye 2007, 2015a). Celestial culture heroes or deities would have been venerated by playing the dice game, as ordained through dreams and visions.

As indicated earlier, guardian spirits might recall children to the spirit world if the protocols of dice gaming were not properly followed. Archaeological examples of dice are typically found interred with children. I argue that gaming hardware was placed with these subadults

as an accompaniment to the afterworld and not because dice gaming was a children's game. Such funerary rituals are often associated with beliefs in reincarnation, which was a core component of the belief system throughout native North America (Mills and Slobodin 1994).

While it is possible that subadult burials include astragali dice as mortuary furniture because they were components of children's games, the ethnographic evidence suggests that gaming pieces accompanied children because they were already members, or slated to be members, of medicine societies and that they were "recalled" by cardinal direction spirits. Rather than the

archaeological signature of children's games, the presence of astragali dice in subadult graves alerts us to the presence of religious sodalities in the LMV that venerated guardian spirits and emphasized rebirth and reincarnation. In this sense, dice games are seen as ritual and supplicatory acts that brought transcendent beings and humans into a covenant of guardianship, which bound culture heroes and supplicants in expressions of honor, protection, and reverence. Ethnographic accounts suggest that religious beliefs were materialized as ceramic effigies in use during the Protohistoric period in the LMV, if not considerably earlier.

Acknowledgments

I appreciate Barbara Voorhies's invitation to contribute to this volume and her editorial advice. Warren DeBoer, George Lankford, and Kevin Leonard kindly provided critical information concerning Mississippian iconography and North American gaming. Their suggestions are greatly appreciated. I also thank Jim Cherry for permission to use the photograph for Figure 6.4. Finally, I am indebted to my sister Leigh Ann for her help in drafting the two Lower Mississippi Valley maps.

Notes

1. Gorgets are planar ornaments of various shapes and materials, often with perforations to allow suspension or attachment to clothing. In the Southeast they are often found on the chests of deceased individuals. Mississippian gorgets are commonly circular, made from molluscan marine shell, and bear incised or engraved designs on the convex side that may signify membership in clans or religious societies. Facemask gorgets typically have two round eyes, a long excised nose, and zigzag eye surrounds. Unlike other gorgets, shell masks are generally found with male burials.

2. Shell buttons were crafted from marine shell and have two central perforations. The face of the square button usually has four lines engraved in a diamond shape. A small excision is frequently found in each lobed corner.
3. The age of these artifacts is poorly known because most examples result from nonscientific excavations.
4. In the LMV, astragalus dice have rarely been located through modern archaeological excavation techniques and thus are not well provenienced. That they are typically associated with Protohistoric sites suggests they date to the late sixteenth and early seventeenth centuries on Tunican sites.
5. The bowl-and-dice game was played across the continent. In its basic form, dice were tossed in a basket or bowl.
6. A similar gambling game took place between a young Oto woman and an old woman, but here turtles were used as dice (Curtis 1930:169; Schneider 1990:121).
7. *Petaca* are suitcase-like, double-woven, lidded cane baskets. Archaeological examples of *petaca* containing ritual regalia and symbolic weaponry have been recovered from the Spiro site in eastern Oklahoma (Brown 1996:Figure 2-44a).



Reinventing the Wheel Game

Prestige Gambling on the Plains/Plateau Frontier

GABRIEL M. YANICKI

When Hudson's Bay Company surveyor Peter Fidler arrived at the headwaters of the Oldman River, in the Rocky Mountains of what is now southern Alberta, on December 31, 1792, his Piikáni guides brought him to the river's namesake (Hudson's Bay Company Archives [HBCA] E.3/2, fo. 17; Figure 7.1). These were the playing grounds where Napi (literally "Old Man"), the Creator and Trickster figure in the traditions of the Siksikaitsitapi, or Blackfoot peoples, taught the various nations how to play a game as a way of making peace. Old Man's Playing Ground is remarkable among First Nations cultural heritage sites in Canada in that traditional knowledge of it has been recorded in the accounts of travelers, adventurers, and scholars from the 1700s, 1800s, and 1900s, and stories of it are still told today (W. Clark 1885:69–71; Dawson 1886: 80; Ewers 1958:157; McClintock 1910:392–93; Schultz 1919:63; Wissler and Duvall 1995 [1908]: 24; Yanicki 2012, 2014:7; Yellowhorn 1973).

Oral traditions, historic accounts, and ethnography relating to the playing ground and *it-se-wah*, the "wheel game" that was played there, demonstrate inextricable links among gaming and gambling, cultural interaction, and trade in societies of the northwest Plains and the Interior Plateau (Grinnell 1892:183; McClintock 1910: 393; Yanicki 2012, 2014). Reckoning of kinship and social distance played a direct role in determining partners and stakes in intergroup contests, reflecting aspects of social identity theory

in which in-group cooperation and out-group competition are the expected norms (DeBoer 2001; Flannery and Cooper 1946; Hogg 2006; Sahllins 1978; Tajfel et al. 1971; Turner et al. 1987). These records form part of a much broader phenomenon of intertribal competition within the socially mediated context of play that reoccurs in myriad accounts of gambling games across North America.

Old Man's Playing Ground

The earliest record of Old Man's Playing Ground—and the only firsthand account where the site was observed intact—comes from Peter Fidler's journal. Historian James MacGregor (1966) called Fidler "Canada's forgotten explorer," overshadowed by the likes of David Thompson and Alexander MacKenzie, his more famous peers. But it was Fidler's maps (included in Arrowsmith 1802) that Lewis and Clark consulted when planning their route up the Missouri River in 1804 (Belyea 1997; Johnson 1967: 319–20; Lewis and Clark 1814:253). In November of 1792, Fidler was assigned to overwinter with a band of Piikáni who had come to trade at Buckingham House, a Hudson's Bay Company post on the North Saskatchewan River east of modern-day Edmonton (HBCA E.3/2, fo. 1). The Piikáni were traveling farther south than they had in recent years, and Fidler's task was to make a thorough description of their territory and the people he met.

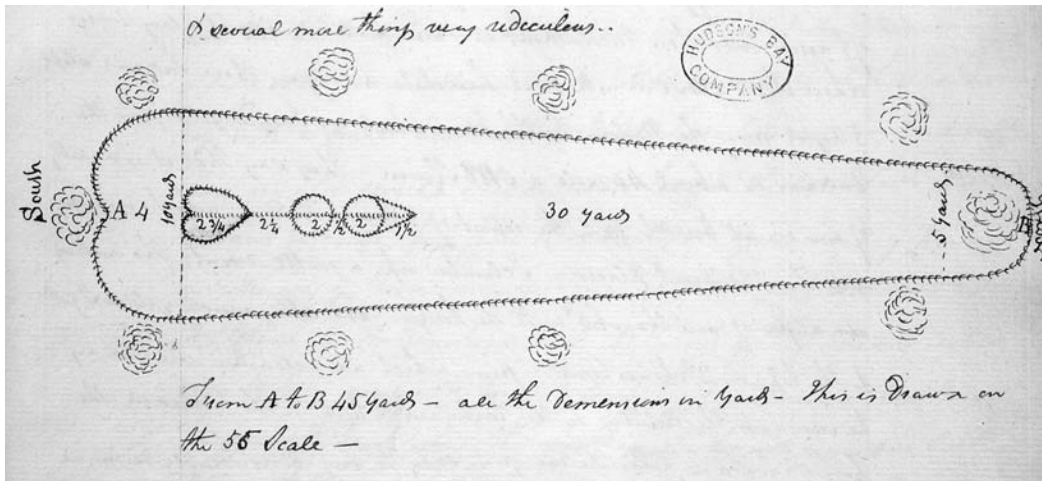


FIGURE 7.1. Sketch of Old Man's Playing Ground from Peter Fidler's 1792–93 journal. Note effigy of an arrow passing through a hoop, or hoops, at south (left) end of playing field; the parallel-spaced cairns may have marked distances pertinent to the rules of play (Hudson's Bay Company Archives, Archives of Manitoba, E.3/2, fo. 17; Yanicki 2014:53–56).

The end destination of this journey was the Gap of the Oldman River, where the river emerges from the Rocky Mountains into the prairies beyond (Figure 7.2). Fidler's journal entry for December 31 provides a striking account of his visit, brought on by reports from Piikáni scouts that a band of Ktunaxa—a group Fidler had heard of but no European fur trader had yet met—was encamped there. Traveling out to meet them, the Piikáni proceeded to purchase all that the Ktunaxa owned, including many fine horses, in exchange for scraps of metal and other used goods. The Ktunaxa, Fidler noted, still used stone-tipped arrows, kettles made of wood, and axes made of sharpened antler (HBCA E.3/2, fo. 18). The Piikáni profited considerably from their role as middlemen and their control of access to the trading posts far out on the Plains.

While this moment of first European contact with the Ktunaxa is noteworthy, Fidler also wrote extensively of the meeting place itself, which he described thus:

A place here called Naw peu ooch eta cots from whence this river Derives its name. It is a place where Indians formerly assembled here to play at a particular Game with by rolling a small hoop of 4 Inches diameter

and darting an Arrow out of the hand after it and those that put the arrow within the hoop while rolling along is reckoned to have gamed. This is on a fine level grass plain, very little bigger than the enclosed space. One side is within 10 yards of the river and the direction of this curiosity is directly one North and South. All those pieces that compose the outer and inner parts are small stones set close together about the bigness of a persons fist above the ground, and they are so close set and neatly put together that it appears one entire ledge of stones. There are 11 piles of stones, loosely piled up at regular distances along the out sides, about 14 Inches in Diameter and about the same height. These I imagine to have been places for the Older men to sit upon to see fair play on both side and to be the umpires of the Game. On my enquiring concerning the origin of this spot, the Indians gave me a surprising and ridiculous account. They said that a White man (what they universally call Europeans) came from the South many ages ago, and built this for the Indians to Play at, that is different nations whom he wished to meet here annually and bury all anamosities betwixt the different Tribes, by assembling here and playing

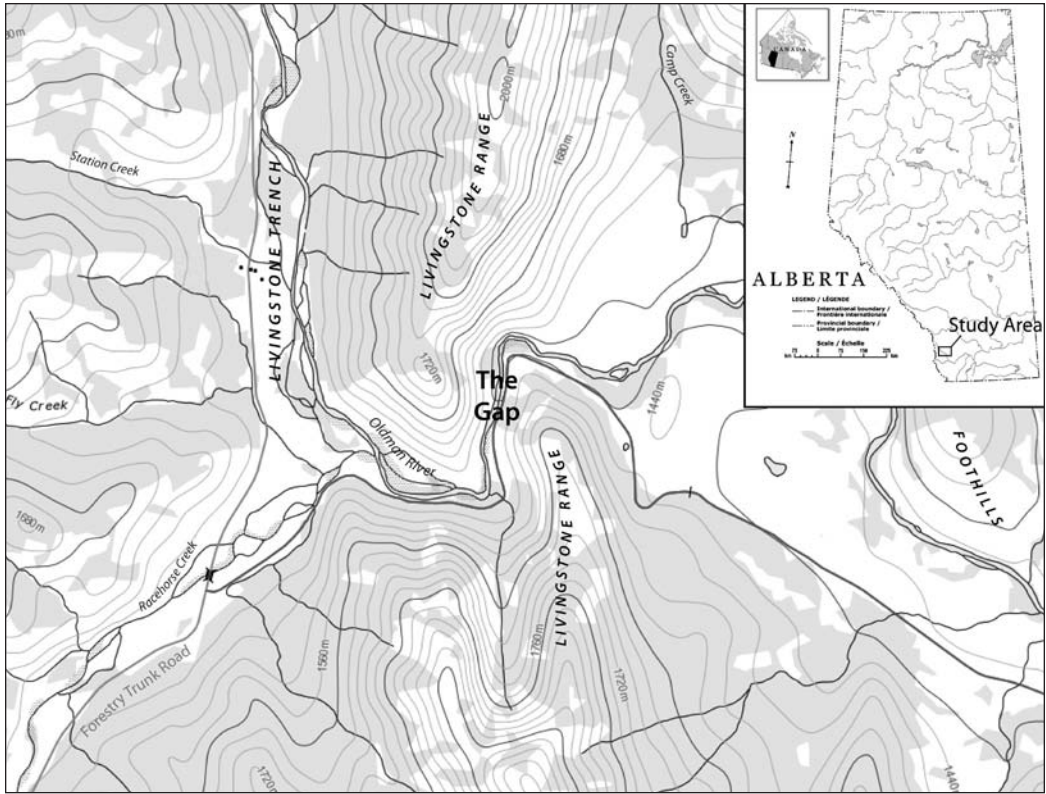


FIGURE 7.2. The Gap of the Oldman River (Yanicki 2014:Figure 1.2; maps adapted from Natural Resources Canada 2002, 2009).

together. They also say that this same person made Buffalo, on purpose for the Indians. They describe him as a very old white headed man and several more things very ridiculous. (HBCA E.3/2, fo. 17; spelling as in original)

The “very old white headed man” is recognizable as *the* Old Man, Napi, whose name appears as “Naw peu” in the toponym of Fidler’s account. Napi’s arrival from the south as he created the world is a detail that appears in stories told both by Spotted Eagle to Walter McClintock (1910:338) and by George Bird Grinnell (1892). Fidler’s conflation of “White man” and “white headed man” is enigmatic, but David Thompson used the term “white headed” to refer to the hair of a rather spry, elderly man he encountered during his voyage down the Columbia River on July 8, 1811 (Nisbet 1994:192–93). The “several more things very ridiculous,” as Fidler put it,

is doubtless a reference to the ribald nature of many stories about Napi, which McClintock (1910:337) likewise felt were too “vulgar and even obscene...[to] appear in a book for general circulation.” Other statements from Fidler’s account about the location of the site, its name, and the game that was played there stand up to further scrutiny, offering insight into who may have met at the playing ground and why.

Meeting on the Frontier

It is no coincidence that this is where Fidler made the first European contact with the Ktunaxa. The playing ground is situated in the heart of a natural transportation corridor through the ethnographically attested Ktunaxa–Piikáni frontier (Coues 1897; Grinnell 1892; Kidd 1986: 8; D. Thompson 1916:238, 345–47; Turney-High 1941:23; Wissler 1910; Yanicki 1999:42). With the impact of smallpox epidemics in the seven-

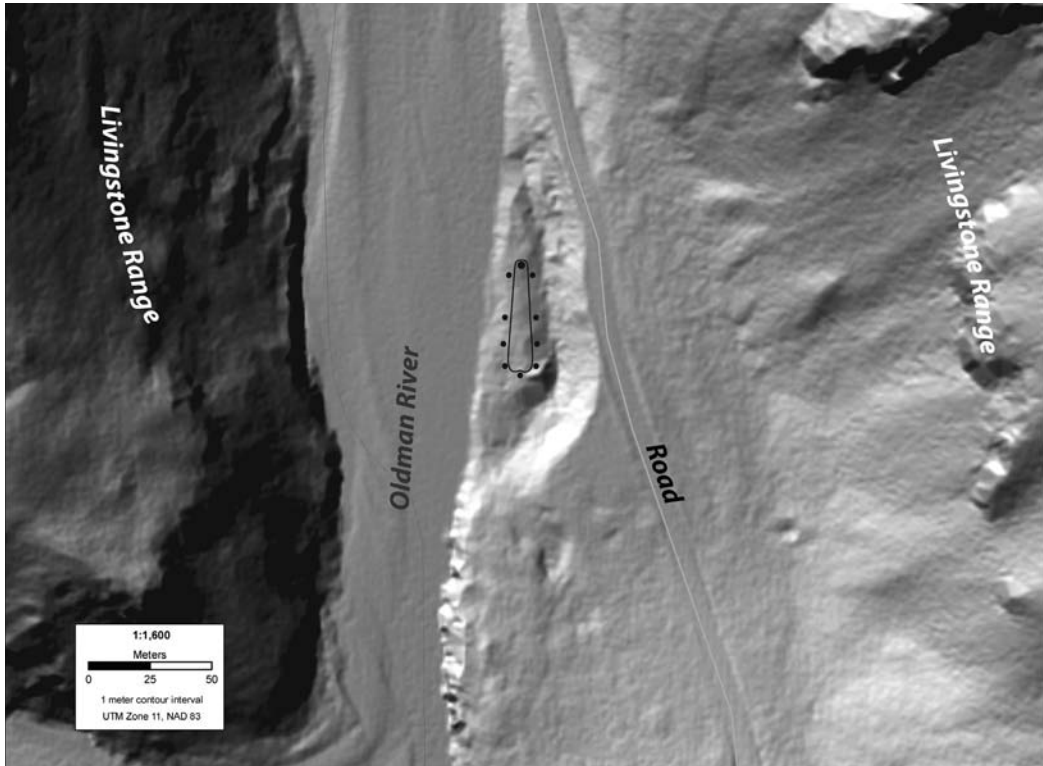


FIGURE 7.3. LiDAR-generated digital terrain model (DTM) of low terrace in Oldman Gap with Peter Fidler's 1792–93 sketch of Old Man's Playing Ground overlain to scale (Yanicki 2014:Figure 3.11). (DTM courtesy Robin Woywitka, Archaeological Survey of Alberta.)

teenth and eighteenth centuries, political and economic changes brought on by the arrival of the European fur trade, and severe restrictions to movement and ceremonial life following implementation of the reserve system, the playing ground was effectively abandoned. This process was likely already underway by the time of Fidler's 1792 visit (Yanicki 2014:24–34). The playing ground was observed in a derelict state by George Dawson in 1883 and was known to ranchers who reported that it had been destroyed by floodwaters of the Oldman sometime prior to about 1960, when archaeologists first began looking for the site (Dawson 1886; MacGregor 1966: 76; Yanicki 2014:61–110). Several First Nations continue to tell stories of the playing ground, but its location is referred to only in general terms (Jack Crow, cited in Yellowhorn 1973:2; Allan Pard and Henry Holloway, cited in Yanicki 2014:21–23).

LiDAR-generated imagery for the Oldman Gap reveals a landform that closely corresponds both with the location and dimensions of the playing ground as Fidler described it (Figure 7.3; Yanicki 2012, 2014). This low river terrace has been periodically scoured and rebuilt by high-energy flooding events. No archaeological evidence of the rock alignment remains. However, the river terrace immediately above is a significant Precontact site (DIPo-8). Early occupation of this upper terrace, ca. 2670 BP, is characterized by evidence of residential activity, including processed faunal remains, substantial quantities of fire-broken rock interpreted as roasting or boiling pit debris (Yanicki 2014:125–26), and considerable quantities of locally sourced lithic raw material. Notched-cobble net sinkers, microblades, and a groundstone vessel fragment made of pumice are atypical of the northwest Plains but are relatively common in much of the Plateau

area. They suggest the presence of groups ancestral to the Ktunaxa, whose oral tradition points to a seasonal or permanent presence in much of southwestern Alberta prior to their decimation by smallpox (Brunton 1974:20–21; Coues 1897: 703–5; Schaeffer 1940; Teit 1930a:306–18, 1930b: 625–28; Turney-High 1941:18–19). Later occupations, ca. 1350–150 BP, show a marked decrease in residential debris such as bone and fire-cracked rock, increased diversity in projectile point styles and exotic lithics sourced from both sides of the Continental Divide, and the regular occurrence of pellets of red ochre and other pigments. These differences between early and late occupations suggest a timeframe for the onset of heightened interaction between groups from east and west of the Rocky Mountains and a shift from residential use to ceremonial activity and long-distance trade. They coincide with cultural and technological changes taking place on the northwest Plains at the onset of the Late Prehistoric Period, perhaps linked to the emergence of the Old Women's phase and archaeologically recognizable ancestors of the modern Siksikaitsitapi (Yanicki 2014:202–03; cf. Peck 2011). While the playing ground itself is gone, a record of the intergroup meeting and trade Fidler described appears to be preserved at DIPo-8.

Oldman River as a Calque

Fidler commented that the playing ground is the source of the Oldman River's name, but in the modern Piikáni and Kainai dialects of Siksikaitsipowahsin, the Blackfoot language, as well as in the Nakoda and Tsuut'ina languages, the river at first seems simply to be named after Old Man (lit., "Old Man River" or "Old Man's River" in each; Bastien 2004; Mistaken Chief 2004; Yanicki 2014: Table 1.1). However, transliterations of the river's name from historic sources show subtle differences. George Dawson, a geologist who visited the Gap in 1883, recorded the name of the Oldman River in both the Nakoda and Nehiyaw (Cree) languages—here, the morphemes for "playing ground" or "game" are present (i.e., Nakoda *is-sa-goo-win-ih-ska-da-wap-ta*, "Old Man's Playing Ground River"; Dawson 1886:79). Fidler's transcription of the Piikáni name for the river also includes the verb "played" (i.e.,

"Where-Old-Man-Played River"; Allan Pard, in Yanicki 2014:10).

Only in Siksikaitsitapi tradition is "Old Man" the name of the Creator. In Nakoda tradition, it is Trickster—Sičányuški—who made the world and who is associated with the playing ground. The term used in the river's name, *išéguin*, refers to any ordinary "old man" (Henry Holloway, in Yanicki 2014:16–17). The same dichotomy is evident in Dawson's (1886) Nehiyaw terms: *Wisahkeâhk* is the culture hero term, but *kisey-inew*—"old man"—is in the river's name (LeClaire 1998). In Tsuut'ina tradition, Raven and Coyote were formerly more prominent, while stories of Xalítsà-tsi ("Old Man") were adopted from their Siksikaitsitapi neighbors (Bruce Starlight, in Yanicki 2014:17). Missing from this discussion are terms from the Ktunaxa. Attempts to identify traditional knowledge holders with stories and geographical knowledge of this area were unsuccessful (Yanicki 2014:15).

In linguistic terms, literal translation of meaning from one language to another, as evident in the Nakoda, Nehiyaw, and Tsuut'ina names for the Oldman River, is known as a calque (Crystal 2008:64). The name is probably of Siksikaitsitapi origin. Other groups from whom the river is known by the same name are relative newcomers to the region. Reflecting a process noted by Linea Sundstrom (1996:187–88), groups entering new territories "gradually adapted their belief systems to their new physical environments.... The development of a sacred landscape thus was a process of... incorporating new beliefs borrowed from groups with whom they were coming into contact."

A likely mechanism by which a specific meaning—but not phonetic morphemes—could have been transferred is Plains Standard Sign Language, used to communicate between groups who did not share a common tongue. In the late 1870s, U.S. Army officer William Philo Clark compiled a volume entitled *The Indian Sign Language* that drew together the sign terminology of peoples from the breadth of the Great Plains. Though he did not speak a word of their language, he wrote a brief entry on the Blackfoot (likely Piikáni) based entirely on conversations that were signed. This included two accounts of

Old Man's Playing Ground. The name of its location, in Plains Sign Language, was, as expected from other early accounts, "The River where the Old Man played" (W. Clark 1885:69–71). This shared reference to the playing ground across several languages suggests a widespread familiarity with the place in antiquity. Similar support for Fidler's note that different tribes gathered to play there can be seen when looking at accounts of the game he described.

The Wheel Game

Fidler's comments about a game involving a small rolled hoop should sound familiar to anyone familiar with Stewart Culin's *Games of the North American Indians* (1907). This is what Culin termed the hoop-and-pole game, mentioned in many early accounts of exploration, including John Lederer's travels in the Carolinas in 1669–1670 (Lederer 1672:18), the Sieur d'Iberville's expedition to the mouth of the Mississippi in 1698–1699 (Margry 1880:261), and the Comte de La Pérouse's visit to the Monterey coast of California in 1786 (La Pérouse 1798:223). Scores of historic and ethnographic records from across the continent describe a game in which opponents threw a dart-like projectile at a rolling target, usually a hoop or stone disc. Variations in the game are almost as numerous as the accounts themselves (Yanicki 2014: Appendix II). The relation between the game on the northwest Plains, the gaming stones of the Mississippian *chunkey* game (Zych, Chapter 5, this volume), and other variants such as those played with sinew-netted or bark-wrapped hoops in the Great Basin and Southwest (Yanicki and Ives, Chapter 9, this volume) is beyond the scope of this chapter, but suffice it to say that the game as played on the northern Plains is regarded as very old (Ewers 1958:157).

Among the Siksikaitsitapi—that is, the Siksika, Kainai, and Piikáni—accounts by David Thompson (1916:359), George Bird Grinnell (1892:183), John MacLean (1896:55), Walter McClintock (1910:393) Edith Stow (1923:45–47), and John Ewers (1958:156–57) are consistent with Fidler's report. A small ring, about 4 in in diameter and usually set with many colored beads, was rolled toward a wooden backstop, usually of logs

or beams, positioned a short distance away. Two contestants, always male, gave chase as it rolled. Before the ring hit the backstop, each threw an arrow-length dart at it, with the goal being either to pierce the ring or have their dart land so that the target came to rest on top.

Several Kainai and Piikáni wheels were collected by ethnologists around the turn of the last century (Figure 7.4; Culin 1907:443–44). These are remarkably consistent in size and appearance. The color of the bead touching one's dart determined the score (Ewers 1958:157; Turney-High 1941:160; E. Wilson 1889:246). Piikáni ceremonialist Allan Pard (in Yanicki 2014:44) explained that using a finger width for measurement, a "four-finger hoop" was used in the game.

Virtually identical accounts were made for the wheel game among the Nakoda (MacLean 1896:26) and Tsuut'ina (E. Wilson 1889) in southern Alberta and the A'aninin (Gros Ventre) and Apsálooke (Crow) in Montana (Flannery and Cooper 1946:395; Hayden 1862:408). In southeastern British Columbia and down the Columbia River into Washington, the game was also observed among the Ktunaxa and several Sahaptin and Interior Salish peoples, with the only difference being beads set in the rim of a small wheel instead of on spokes (Figure 7.5; Culin 1907:490–95; Kane 1855:276, 1859:310; Teit 1900:273; Turney-High 1941:160).

Using the distinctive small, beaded hoop as a guide, when the geographic distribution of accounts from the northwest Plains and Interior Plateau are compared to other historic and ethnographic accounts of the hoop-and-arrow game from across North America, a regional variant with Old Man's Playing Ground at its center can be seen (Figure 7.6). This variant also includes the use of arrows as darts and a prepared playing field with wooden boards or logs placed at either end and suggests a regional network of people who shared a common gaming tradition.

Discussion

The question of who played the wheel game, and by extension who could have been gaming with whom, is an important one. Though Culin explicitly mentioned it only in passing, the accounts he collected are filled with hundreds of

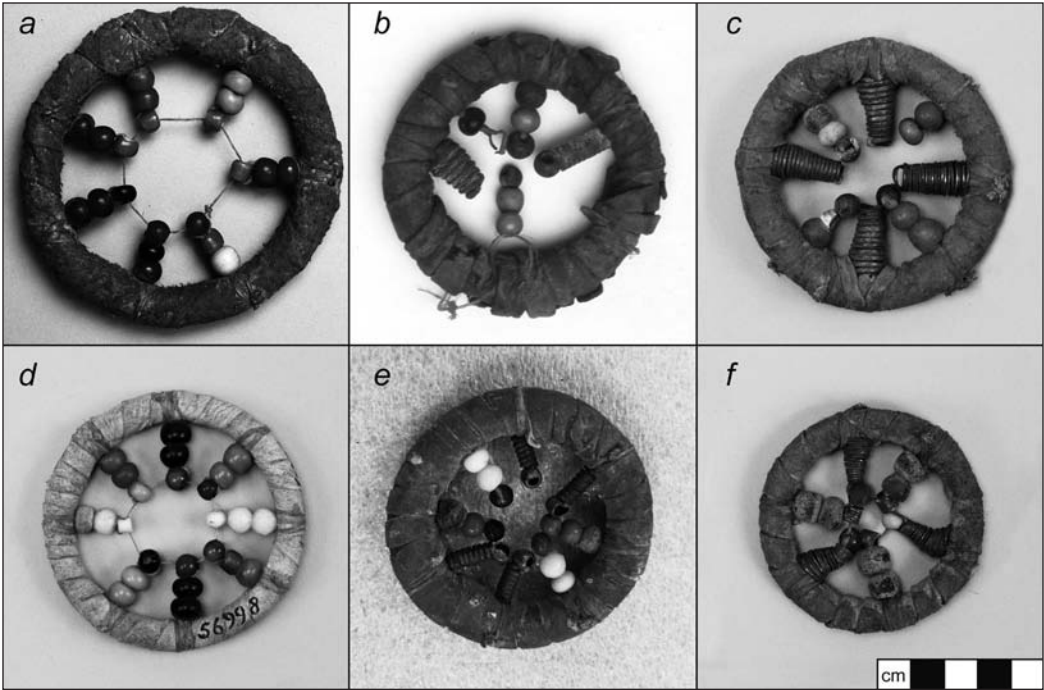


FIGURE 7.4. Wheels used in the Siksikaitsitapi hoop-and-arrow game (Yanicki 2014:Figure 2.2). Items *a–c*, Kainai; *d–f*, Piikáni. Sources: *a–b*: British Museum Am1903-.124.a–b, collected by Frederick Deane-Freeman and associated with Eagle Arrow, ca. 1884–1901, King and Wood 2002, © Trustees of the British Museum; *c*: Field Museum of Natural History no. 51642.1, collected by George Dorsey, May 1897; *d–e*: Alberta; Field Museum 56998 and 69351, collected by R. N. Wilson, ca. 1897, Van Stone 1992:3, courtesy of the Field Museum of Natural History, Dept. of Anthropology; *f*: Montana; Field Museum T2002.9.480, collected by George Dorsey, 1900, courtesy of the Field Museum of Natural History, Dept. of Anthropology.

references to spectators and often the players themselves gambling, betting, or wagering on the results of almost any game (Culin 1907:45; Gabriel 1996). In the many accounts from the Interior Plateau and northwest Plains, both of the playing ground and the hoop-and-arrow game, Fidler's is the only one that doesn't explicitly also reference some form of gambling. Oftentimes, however, the term "gambling" is used in Siksikaitsipowahsin more or less interchangeably with "gaming" and "play," including in reference to the playing ground as Old Man's Gambling Place—an alternate translation of the name Fidler himself transcribed (Allan Pard, in Yanicki 2014:22; Wissler and Duvall 1995 [1908]:25; also W. Clark 1885:71; Grinnell 1892:183).

Gambling games were no simple recreation. They were strictly an adult affair, and children were often actively excluded (Desmond 1952:26; R. Orr 1915:32; M. Smith 1940:208; summarized

in DeBoer 2001). As explained by Culin (1907:31), "Children have a variety of other amusements, such as top spinning, mimic fights, and similar imitative sports, but [games of chance and skill] are played only by men and women, or youths and maidens, not by children, and usually at fixed seasons as the accompaniment of certain festivals or religious rites."

Those games of chance or skill that are played by children occur in "toy" or practice forms—for instance, toy dice (Reagan 1919:29) and large netted hoops used in a children's form of the Siksikaitsitapi wheel game (Ewers 1958: 157). Just as toy bows and arrows facilitated play hunting and dolls facilitated play parenting, play gaming in part served to prepare children for gaming as adults. Many games do, of course, require considerable physical coordination or cognitive powers, but a functionalistic argument that their purpose might be as training for other



FIGURE 7.5. *Flathead Indians Playing Ring, a Popular Men's Gambling Game*, by Gustavus Sohon, ca. 1854. (National Anthropological Archives, Smithsonian Institution MS #385690)

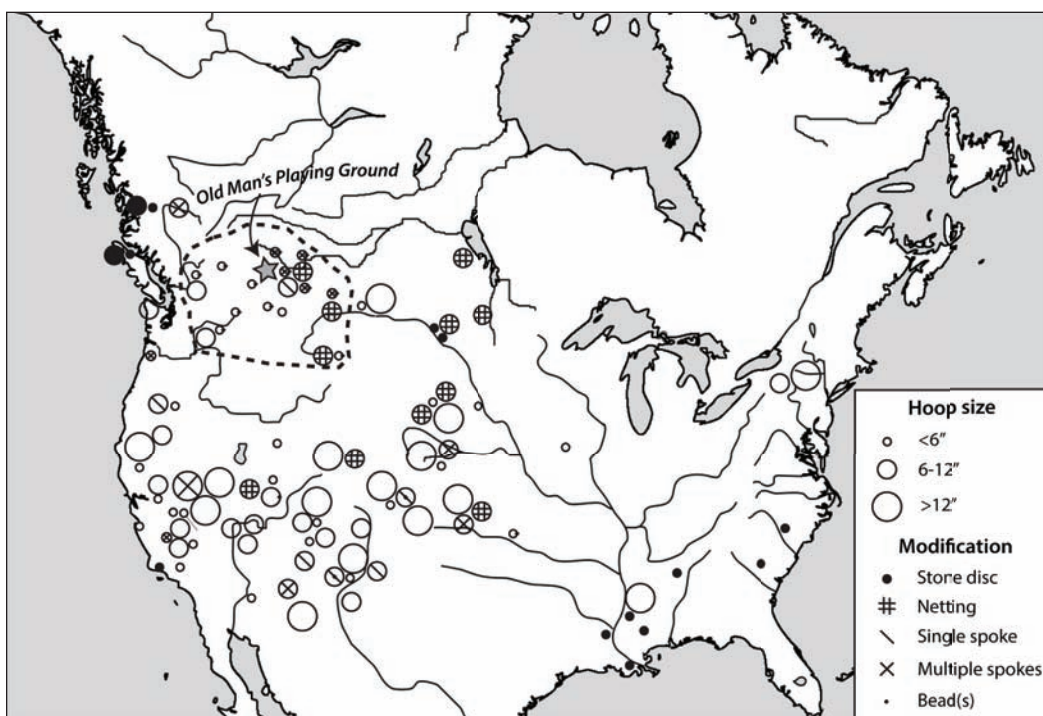


FIGURE 7.6 Geographic distribution of hoop styles from historic and ethnographic accounts of the hoop-and-pole game. Regional variant involving a small, beaded hoop is indicated with a dashed outline. (Adapted from Yanicki 2014:Figure 2.6, after DeBoer 2001.)

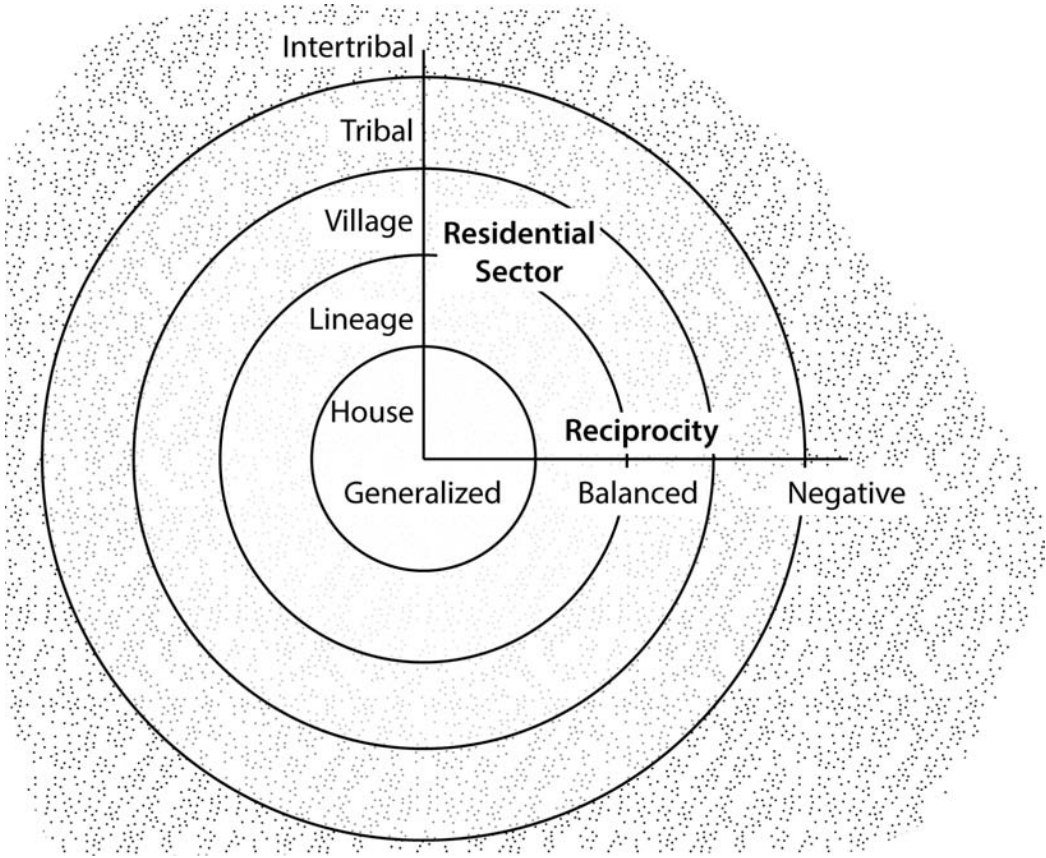


FIGURE 7.7. Reciprocity and kinship residential sectors. (Redrawn from Sahlins 1972:Figure 5.1.)

activities would be a derogation of the importance of these same games in adult life. Speaking of the Ktunaxa, Bill Brunton (1998:573) said that gambling was “a major part of special occasions such as inter-group economic gatherings” and “central enough to social life that it should be considered a cultural theme.” Looking at historic accounts of trade fairs, festivals, and other social gatherings on the Plains, Ray Wood noted that “gambling was rampant” and Joel Janetski has suggested that gambling was an important mechanism in down-the-line trade (Janetski 2002; Wood 1980:106).

Gambling Affines: The In- vs. the Out-Group

In his model of reciprocity in traditional economies, Marshall Sahlins predicted the equitability of trade to be increasingly unbalanced with increased kinship and social distance (Figure

7.7; Sahlins 1972:Figure 5.1). Elaborating on the concepts of Malinowski and Mauss by defining reciprocity as generalized at the household level, balanced within the local community, and negative at the intertribal level (beyond a point, relations would be too hostile for trade to be possible), Sahlins effectively offers a continuum of social actions based on the degree of relatedness that can be recognized as *altruism*, *mutual benefit*, *selfishness*, and *spite*. These four categories of social action, borrowed from the biological literature on social evolution, define the relationship between ego and alter in terms of a net fitness cost or benefit to each (A. Bourke 2011; A. Gardner et al. 2011; West et al. 2007). In an altruistic relationship, ego willingly pays a cost for an action while alter gains (–,+). In a mutually beneficial relationship, both ego and alter gain (+,+). In a selfish relationship, ego

willingly benefits at the cost of alter (+,-). In a spiteful relationship, both ego and alter are negatively affected by an action (-,-). Altruism and mutual benefit can collectively be referred to as *cooperation*. Selfishness and spite can be referred to as *conflict* (Krupp et al. 2010). Gambling is a selfish social action: paraphrasing Sahlin's "negative reciprocity," ego tacitly attempts to get something from alter for nothing with impunity (Sahlins 1972:195). While the potential to lose as easily as win is not quite as self-destructive as all-out hostility, it is certainly far removed from the altruistic sharing expected among close kin.

Sahlins's socially ordered continuum of reciprocity is a very literal manifestation of the in-group cooperation and out-group competition addressed in social identity theory (Tajfel et al. 1971; Turner et al. 1987), going so far as to recognize multiple, contextually relevant levels of group identity that may be salient to an individual at different times (i.e., family or sibling core, kin group, clan, moiety, society, village, tribe, etc.; cf. Hogg 2006:115). A similar understanding appears in recent biological reevaluations of kin selection, wherein reciprocity is considered an adaptive behavior operating at multiple levels of positive and negative relatedness (A. Bourke 2014; Foster et al. 2006; A. Gardner 2015; Gardner and West 2004; cf. W. Hamilton 1963, 1964), although it must be noted that kinship relatedness in human societies is defined in social terms that can operate independently from direct genetic ties.

Sahlins suggested that intertribal out-groups would provide an appropriate degree of social and kinship distance for gambling partners to be found. This is exactly what we see for groups such as the Ktunaxa and the Nakoda, for whom ideal gambling opponents were from other tribes. In the case of close relations, gambling was frowned upon or even taboo (Brunton 1974; Henry Holloway, in Yanicki 2014:58). In their study of the social parameters of gambling in A'aninin society, Regina Flannery and John Cooper proposed several reasons why this should be the case: gambling between individuals who practiced some degree of altruistic sharing, be it a family or clan (i.e., an in-group

of closely affiliated kin), "would be 'like winning [property] from yourself'" (Flannery and Cooper 1946:414, citing Goodwin 1942:375). Furthermore, gambling with close kin or community members—the in-group in slightly broader terms—could lead to potentially fractious conflict. Stated preferences for out-group gambling affines have been noted across a number of studies. Flannery and Cooper listed the following examples: "Among the Navaho no gambling occurred between relatives or between members of the same clan" (citing B. Haile, pers. comm., 1944); among the Sinkaetku (Southern Okanagan), it was "not right to gamble except with 'strangers'"; among the Kalispel, "[g]ambling is mostly between teams from different villages or tribes" (Flannery and Cooper 1946:415). DeBoer also listed evidence for intervillage and intertribal gaming from the Hopi, Klallam, Ojibwa, Nisena, Okanagan, Yakima, Puyallup-Nisqually, Modoc, Kootenay, and Flathead (Beals 1933:354; Brunton 1998:582; DeBoer 2001:233; Desmond 1952:28–30; Gunther 1927:273; Landes 1971:22; Parsons 1996:10; Ray 1963:124; M. W. Smith 1940:209; Spier 1938:186–87). The occurrence of gaming in frontier areas (Leonard, Chapter 2, this volume; Yanicki 2012, 2014) and in trade fair settings (Janetski 2002; W. R. Wood 1980) reinforces how "gambling can be seen as an in-between or liminal activity, one playing out the ambiguities inherent in alliance, exchange, warfare, marriage, and other relations... who are typically situated far, but not too far, away" (DeBoer 2001:235).

It is this same preference for out-group opponents that we see reflected in the remarkable intersocietal lacrosse contests the earliest American colonists observed in early New England in which Algonquian peoples played "towne against town" (R. Williams 1963:194) or "country against country" (Wm. Wood 1634:97). In terms of the wagers made in these out-group affairs, William Wood (1634:96) wrote, "It would exceed the beleefe of many to relate the worth of one goal, wherefore it shall be nameleffe." Roger Williams (1963:197), the founder of the Providence colony, clarified this point: stakes could include "stringed money [i.e., wampum], clothes, house, corne, and themselves." Stories

of debt slavery arising from gambling losses surface across North America, ranging from a Dakelh tale of a hapless man who wagered and lost his wife and children (Morice 1894:78, cited in Culin 1907:237–38) to Navajo traditions of the Great Gambler who enslaved entire populations (Matthews 1889b, 1897; Cameron and Johansson, Chapter 16, this volume).

Though stories of high-stakes gambling reinforce the necessity of socially distant gambling partners, the reality of traditional gambling was likely somewhat messier than such a simplified model would imply. Numerous cases can be seen of catastrophic losses not just through out-group gambling but through in-group gaming as well. David Thompson (1916:359), who overwintered in a Piikáni camp in 1787–1788 (Tyrrell 1916:xxx), wrote that the Piikáni were, “almost to a man, more, or less given to gambling day and night,” while Flannery and Cooper (1946) struggled to reconcile ambivalence among the A’aninin for intragroup gambling despite its potential for fractious discord. Wood’s (1634:96) observation among New England Algonquian groups that “[t]hey are so bewitched...that they will loofe sometimes all they have” is echoed in Warren Ferris’s (1940:79) observations of the Bitterroot Salish hand game in 1831: “Instances of individuals losing everything they possess are by no means infrequent.... The women are as much addicted to gaming as the men.” Describing Native American gambling on the Montana frontier in 1857, Granville Stuart (1925:127–29) wrote “It is no uncommon thing to see one man in camp with about everything in his possession and the next day perhaps be almost naked, having lost one day what he has won the day before.” Stories of catastrophic in-group gambling losses might allude to the addictive nature of gambling and its potential to override social constraints. Even so, they do not reach the extremes of wagering away wives and children or becoming a slave oneself. Nor do they speak of gambling for scalps, a life-or-death aspect of Siksikaitsitapi stories of intertribal hoop-and-arrow contests that is made salient by the synonymy of the terms for gambling and warfare in ceremonial language (Allan Pard, in Yanicki 2014:27; see Flannery and

Cooper 1946:395 for a similar example from the A’aninin).

One might suppose that winnings and losses could balance out over the long term with in-group gambling, if not approximating mutual benefit, then at least a zero-sum game. Such reasoning veers dangerously close to the gambler’s fallacy—the belief that previous losses or wins have any bearing on future contests—and rests on a further unsound supposition that the games being played were balanced toward an equal probability of outcomes. In practice, scores in games of chance such as dice were not necessarily weighted in accordance with probability (DeBoer 2001). Games of skill such as hoop-and-pole would tend to be won by more skillful contestants, and outcomes could be affected by sleight of hand or cheating—an expected practice in virtually any game, and perhaps part of what defined one as a good game-player, so long as a person admitted it gracefully when caught (Cliff 1990). Contestants also had differing perceptions of personal or supernatural power that would add further inequalities to contestants’ expectations of winning (Brunton 1974). In effect, there is little reason to presume that all gamblers would win as often as others. Instead, it must be stressed that definitions of what constitutes an in-group or out-group identity are fluid. Especially within larger communities, numerous individuals could possess relationships of sufficient social distance or constitute themselves according to varying social classes (i.e., clans, age-graded societies, etc.) so as to normalize intragroup competition.

Flannery and Cooper (1946) meanwhile noted that in-group gambling among the A’aninin—especially between women—was usually for lower stakes: small personal articles or cooking duty, for example. Samuel Hearne’s description ca. 1770 of a day-to-day hand game in a small Deh Cho group seems to be of this order:

When playing at this game, which only admits of two persons, each of them have ten, fifteen, or twenty small chips of wood, like matches, and when one of the players guesses right he takes one of his antagonist’s sticks

and lays it to his own; and he that first gets all the sticks from the other in that manner is said to win the game, which is generally for a single load of powder and shot, an arrow, or some other thing of inconsiderable value. (Hearne 1795:335)

Smaller stakes are a means of minimizing the selfishness of gambling—that is, the capacity to benefit oneself while harming an opponent—and offer another pathway for in-group gambling to be acceptable.

Prestige Gambling

It may be that individuals often competed not for wealth, but for status—a fundamental aspect, Johan Huizinga (1955:63) argued, of play in any form. There are, after all, numerous parallels among Plains societies between war honors and demonstrations of in-group gaming prowess, both of which could be counted as coups (Loy and Hesketh 1995). Flannery and Cooper stressed precisely this point: not only were high-stakes wagers at the in-group level made exclusively by men but by rivals within a camp. Rather than resources, they competed for prestige. The “enemy friend” relationship they described between two members of the same community was complex and involved teasing, mentoring, and mutual protection when at war. It was also between enemy friends—especially unrelated men who had entered into such a compact—that wagers reached their apogee, the outcome familiar from other accounts where “the betting between... two players would result in the loss by one of the last bit of his property.... A comparatively wealthy man could thus become a ‘pauper’ in a day. Often, too, the relatives of the players would win or lose almost as heavily in backing their respective kinsmen” (Flannery and Cooper 1946:398).

It is of some interest that spectators’ bets were wagered along familial lines, a type of co-operation based on kinship ties, but very much more was at risk between the contestants. Describing a hoop-and-arrow game contested between two enemy friends, Flannery and Cooper noted,

[T]he “social” stakes were as important as or more important than the property ones.... Two prominent men, enemy friends to each other and at the same time rivals for prestige and status in the tribe, would on a given day play... *à outrance*. The winner’s status and prestige would be greatly exalted; the loser’s proportionately lowered. A man’s whole career of advancement to prominence in the tribe... could be brought to ruin in a single day’s gaming.... He might lose not only his property and so have to begin accumulating again from scratch, but might at the same time lose as well his standing in the tribe and become a defeated and disgraced nobody, of a low standing from which it was very difficult to rise in the scale. (Flannery and Cooper 1946:398–99)

While the concept of the enemy friend may be particular to the A’aninin, the idea of competitors gaining or losing status is familiar in other forms—for instance, among subarctic Dene hunter-gatherer groups such as the Dane-zaa (Beaver), in what Robin Ridington (1968) termed “medicine fights.” To the Dane-zaa, success in hunting, itself a highly uncertain prospect, is seen as greatly affected by one’s supernatural ability to control events. Because of its scarcity, “[T]he concept of supernatural power, *ma yine*, literally ‘his song’ or ‘his medicine’” is more valued “than the actual physical resources over which it is exercised” and is the ultimate measure of social standing (Ridington 1968:1153). For young men in particular, the ability to demonstrate power comes through hunting prowess: “In a system of generalized reciprocity (cf. Sahlins 1965) the hunter distributes meat to other members of his residential group, and these gifts lay an obligation on the recipients, who in turn recognize the power of the giver... effect[ing] an exchange of food for status” (Ridington 1968:1153). This sets the stage for medicine duels between individuals jockeying for social standing, where “the norm of ‘sharing’ food may be used aggressively as a demonstration of superior supernatural power” (Ridington 1968:1157). This is *prestige hunting* in the most

nuanced sense of the term—a form of costly signaling in which hunting success transmits information to potential mates, allies, and rivals about abilities, knowledge, leadership, and generosity (McGuire and Hildebrandt 2005:698; see also Hawkes 1990, 1991, 1993; Kaplan and Hill 1985). As explained by Kristin Hawkes and Rebecca Bliege Bird (2002:61), “If men hunt to display their relative quality, then the benefits they earn for that effort come not from exchanges of meat for other goods and services, but from the different ways that others treat them in light of the quality they reveal.”

Precisely such a demonstration of supernatural power as a status-affirming quality appears in association with gambling. Consider the following Kiowa and Plains Apache “medicine game” recorded in a Kiowa winter count in 1881–1882:

This winter is noted for a great *dó-á* [hand] game played under the auspices of two rival leaders.... [T]he Kiowa leader... was recognized distinctively as having “medicine” for this game, and it was said that he could do wonderful things with the “button,” making it pass invisibly from one hand to another while he held his hands outstretched and far apart, and even to throw it up into the air and cause it to remain there suspended invisibly until he was ready to put out his hand again and catch it; in other words, he was probably an expert sleight-of-hand performer. His Apache rival... is known as a medicine man as well as a chief, and is held in considerable dread, as it is believed that he can kill by shooting invisible darts from a distance into the body of an enemy. On this occasion he had boasted that his medicine was superior for the *dó-á* game, which did not prove to be the case, however, and as the Kiowa medicine man won the victory for his party, large stakes were wagered on the result and were won by the Kiowa. (Mooney 1898a:347–48)

Several themes just discussed are reiterated in this account: leaders of distantly related kin groups engaging in a high-stakes gambling con-

test; the game being a demonstration of superior supernatural power with implications of status rivalry between the contestants; and the gambling stakes being wagered and distributed along kin-group lines. Such contests can be considered *prestige gambling*, a term proposed here as a parallel to prestige hunting and connoting a form of costly signaling where the enhancement of personal status may be one principal objective. As the exchange of gambling winnings demonstrates, however, the pursuit of direct material gain is both overt and inseparably intertwined. Prestige gambling also has the effect of reinforcing relevant social identities, with in-group cooperation and out-group conflict making clear the socially ordered structure inherent to the continuum of altruistic, mutually beneficial, selfish, and spiteful behaviors that gaming relationships can prohibit or embrace. These behaviors take the form of *kin bias*—that is, the differential treatment of groups implicitly varying in kinship relatedness, howsoever these groups are constructed and defined by group members themselves (Penn and Frommen 2010:59–60; Sherman and Holmes 1985).

Status vs. Resources:

Decision-Making under Risk

Discussions of gambling winnings and gains in status both overlook one very important point: games are fun. But what is perceived as “fun” has a neurobiological basis: gambling stimuli, in particular, are linked to dopamine release and feelings of reward—in some cases leading to pathological behavioral addiction (Nestler 2005; Potenza 2008). Gameplay itself also triggers the brain’s mesocorticolimbic “reward” system, especially in men, and has been identified as an addictive behavior (Clark 2009; Hoefl et al. 2008). Gaming and gambling are, in other words, in our blood: a neurobiological response signifies an evolutionarily derived mechanism that may help explain a human predisposition to play. Patterns of prestige gambling exemplify this pursuit: not only can status be attained but material commodities change hands, effectively doubling the reward. Understanding this cycle of

motivation and reward—that is, the pleasurable pursuit of status and material gain—is essential to understanding why people play games.

Acquisition of material resources and social status are complementary goals in a developmentally ordered hierarchy of needs: they both enhance prospects for acquiring mates and, by extension, reproductive success (Kenrick et al. 2010). In an evolutionary model of decision-making under risk (risk-sensitivity theory), individuals are motivated to “engage in risk-taking when needs cannot be met with safe, low-risk behavior” (Mishra 2014:288). Interpersonal competition in the form of gambling and warfare is precisely the type of aggressive, risk-accepting behavior expected of young men who often perceive social access to resources, status, and mates as being unequally concentrated in the hands of others, a phenomenon that has been referred to as *young male syndrome* (Wilson and Daly 1985). In the case of in-group gaming, the imagined benefits of success may outweigh any concerns about social disapproval or other consequences. As aging individuals meet their resource, status, and mating goals, risk-taking behavior tends to decrease (Mishra and Lalumière 2008). It is expected, then, that out-group competition would be encouraged by older, more established members of the community, deflecting inevitable tensions against members of other groups while still allowing group members to meet their status and resource needs.

If gaming and gambling have the capacity to fulfill basic needs and are pleasurable to the point of being addictive, it is reasonable to question how much effect social norms or controls against selfish in-group behavior could have. Indeed, two sets of values—one promoting social identity and group cooperation, the other seeking personal pleasure and individual fulfillment—seem diametrically opposed. The term “addiction” implies that a behavior has reached the point where it is a problem for the individual or society. Indeed, there is some evidence that problem gambling could be a concern for hunter-gather societies. Two contrasting accounts illustrate this point. In a Dakelh story

recounted by Adrien-Gabriel Morice about *atlih*, a once-popular stick game,

A young man was so fond of playing *atlih* that, after he had lost every part of his wearing apparel, he went so far as to gamble away his very wife and children. Disgusted at his conduct, his fellow villagers turned away from him and migrated to another spot of the forest, taking along all their belongings, and carefully extinguishing the fire of every lodge so that he might perish. (Morice 1894: 79–81)

Only when his predilection for gambling affected his family did it earn a strong degree of social opprobrium.

Conversely, in his account of the Piikáni wheel game, David Thompson described an incident where a Piikáni camp had prohibited hunting so as not to drive bison herds farther away: “While we were there...[t]wo tents which had gambled away their things, even to their dried provisions, had to steal a march on the Soldiers [a warrior society composed of recently married men] under the pretense of looking after their horses....” They returned on “the evening of the second day...with their horses loaded with meat which the Soldiers seized...and left nothing to the owners.... Not a murmur [sic] was heard; every one said they had acted right” (Thompson 1916:358–59).

It may thus be that attitudes towards gambling are tied to a society’s economic base. In prestige hunting societies such as the Dakelh, where independent hunting success was likely the foundation for status, a competent hunter could replace much of his gambling losses with a successful hunt (Ridington 1968). One’s family, however, could not so easily be replaced. A counteracting pressure existed for communal hunters who, while engaging in prestige-based competition, also relied on bison herds to feed large groups. Freelance hunting to recoup gambling losses could have deleteriously affected the entire camp, and there are some indications that gambling was more actively policed. According

to David Thompson (1916:359), the same Soldier society that made sure hunters did not act independently spent much of their time monitoring gambling matches to ensure things did not get out of hand.

Conclusions

The distinctive Plains/Plateau variant of the hoop-and-arrow game is a potent symbol for intergroup relations that struck a restive balance between peaceful interaction and strife. The necessity of competition for status and resources—especially by young men—may explain sometimes-ambivalent attitudes toward in-group gambling. Social groups could find many ways of mitigating the ensuing risk by playing for lower stakes, gambling only against members of rival factions balanced against one's own, and distributing winnings, where demonstration of

personal power (and the concomitant increase in status) was the true object.

Nevertheless, the potential remained for gambling to devolve into hostility with potential to harm social cohesion. Particularly on the northwest Plains, where large communal bison-hunting populations were dependent on a resource that required group coordination and could in fact be jeopardized by independent action, out-group gambling may thus have been preferred. Coupled with highly desirable rewards that could include both material and status gain, the risk-taking behavior exemplified in stories of intertribal meeting and gaming at Old Man's Playing Ground, and of the hoop-and-arrow game that was played there, contribute to understanding the role of gaming and gambling as evolutionarily adaptive behaviors constrained by multiple levels of group identity and the mediation of conflicting goals and desires.

Acknowledgments

This chapter is dedicated to the memory of Allan Pard, a great mentor, teacher, and friend. I am indebted to Allan and all those who helped guide my MA research on Old Man's Playing Ground, especially Henry Holloway, Bruce Starlight, and the late Art Calling Last, as well as my supervisor, Jack Ives. I am grateful to

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Gaming in Fremont Society

JOEL C. JANETSKI

[The] Provo River region was the great gathering place of all Ute tribes of central Utah valleys, too.... While these Bands of Indians met each spring for fishing, they engaged in good sporting... horse-racing, trading, gambling, foot racing, wrestling, etc.

George Bean (1945:51–52)

Gaming, trading, and feasting commonly accompanied social gatherings in North American aboriginal societies. Such gatherings were times of excitement, sociability, and renewal for the hunting and gathering peoples of the Great Basin, as well as Puebloan farmers to the south. Historic descriptions of these activities provide useful analogues for positing insights into archaeological residues of past human behaviors, especially those less visible in the archaeological record.

Sports or games of skill blended with gambling, as nearly all such activities in aboriginal North America seem to have been accompanied by wagering (Culin 1907). Social gatherings in the Intermountain region of western North America typically included betting on competitive events, as noted in the introductory quote, and this pattern continues into historic times. I personally experienced this tradition in the summer of 1995 during archaeological research at Fish Lake in central Utah (Janetski 2010). Members of the Koosharem and Kanosh bands of the Southern Paiute/Ute of central Utah par-

ticipated in that project, adding insights to our findings. Celebrations, such as a Sun Dance, had occurred here in historic times, and surface finds documented Protohistoric occupations, suggesting ancestors of our native partners may have camped in the very places we were excavating.

As we discussed interpretations of surface features at one of the sites, Rick Pikyavit, a Native American from nearby Kanosh, speculated that large charcoal scatters seen in several places were generated by roasting rock chucks (marmots), which he had experienced as a boy in Fort Hall, Idaho. He offered to demonstrate to field-school students and others how roasts were traditionally done. Two of our native partners, Ganaver Timican of the Koosharem band and Rick's wife, Rena, took it upon themselves to invite more band members for a festival to celebrate the occasion. Rick and Rena moved their tipi to the ceremony area and, with much effort, built a shade house of aspen logs for the sole purpose of providing a place for the hand game.

The hand game was played much the way Culin described for the Southern Paiute



FIGURE 8.1. Paiute partners and BYU students playing the hand game, Fish Lake, central Utah, 1995. (Photo courtesy Brigham Young University, Museum of Peoples and Cultures, Photo Negative #2012MS.88.6.8.)

(1907:312; see also O. Stewart 1942). Players sat facing each other, and one held the bones and sang the traditional hand game chant while Rena's daughter drummed (Figure 8.1). The "bones" in this case were wood, one marked with a dark band. Peeled sticks were used as counters. Each guess at which hand contained the marked bone was accompanied by much laughter and, ultimately, an exchange of dollar bills.

The positive social interaction and enjoyment by the participants stood out in this activity. It was the reason for the shade house. It facilitated a positive, joyful mood during a very traditional moment among other traditional activities: feasting, singing, and gaming. And it is this aspect of life in the past that the gaming paraphernalia represent and which is seldom seen in technical reports focusing on numbers and rote descriptions of things recovered from the ground (Simms 2010 is an exception). Still, in some cases, gambling was much more than joyful exchange or amusement. At times, players risked serious loss of personal property, wives, or even lives to slavery (Culin 1907; Judd 1954; Cameron and Johansson 2015, Chapter 16, this

volume). I explore this aspect of gaming in the present chapter's discussion section.

Analogues such as the one just offered provide insight, albeit limited, to otherwise enigmatic remains found at sites dating deep in prehistory, where ethnographic patterns are stretched thin. One such case is the archaeologically defined Fremont culture in the arid West of North America. Centered along Utah's Wasatch Front of the eastern Great Basin and northern Colorado Plateau, Fremont is recognized by a distinct artistic style expressed in rock art, figurines, ceramics, and ornaments (figures 8.2, 8.3). Elements of this style spilled west, north, and east into neighboring states and persisted in the core area from shortly after the time of Christ until about AD 1300 (Madsen 1979b, 1989; Janetski et al. 2011; Talbot and Wilde 1989). Farming was central to Fremont livelihood, and corn remains are abundant in most structural sites in the region, although some occupations are in locales where farming could not have been practiced (Janetski 2010; Madsen et al. 2005; Simms 1986). Farming as a viable strategy may have varied in importance over time and space in

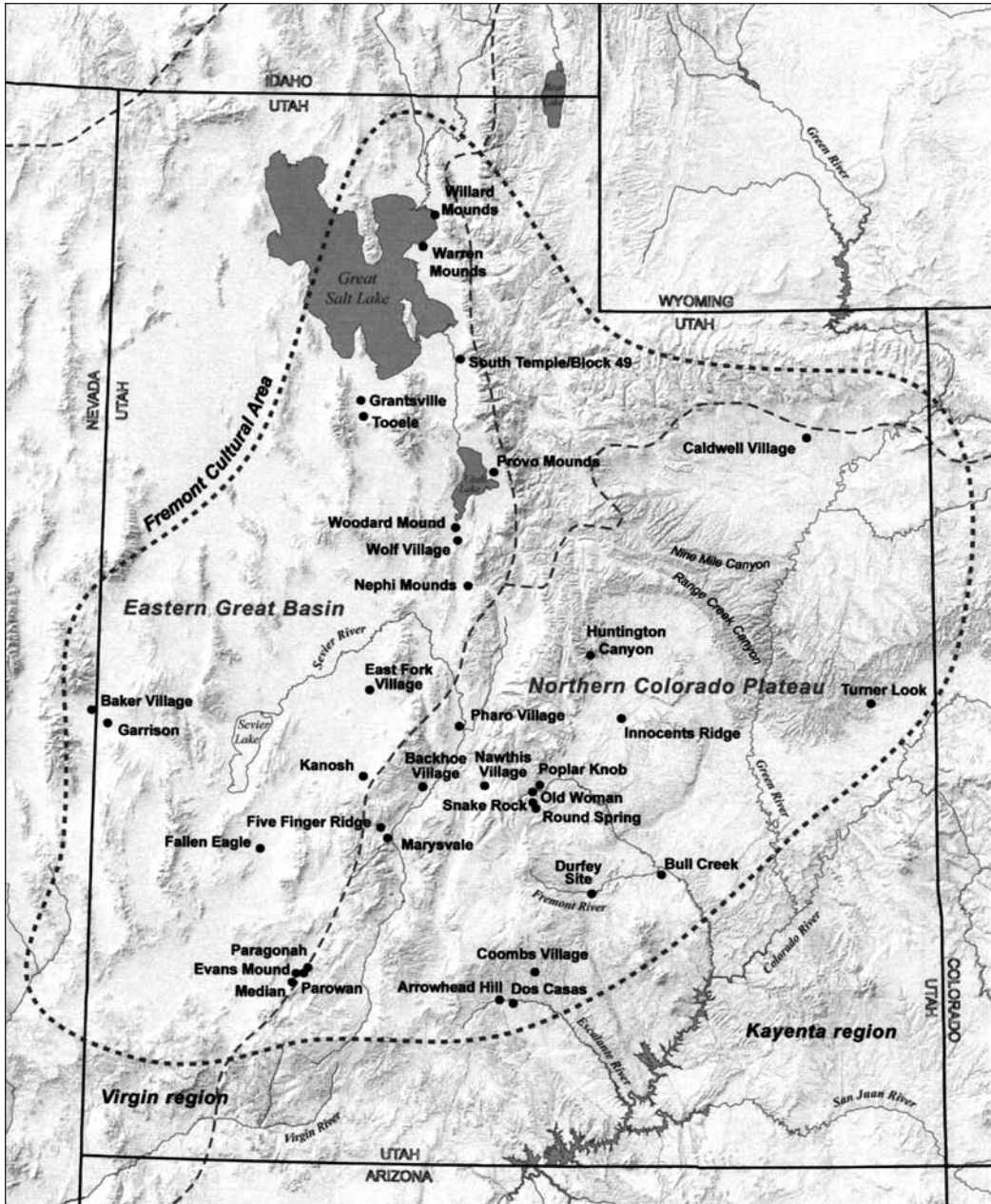


FIGURE 8.2. Map of Fremont area with selected sites. (Drawn by Scott Ure.)

certain areas given vagaries of climate, but farming as a fundamental strategy persisted for well over a millennium (Madsen and Simms 1998).

Complicating our understanding of Fremont lifeways is the absence of farming in the Fremont core at the time of European contact in the late eighteenth century and arrival in

the mid-nineteenth century. Rather, early Utah explorers and settlers encountered pedestrian and mounted Ute and Shoshone peoples, all of whom were hunters and gatherers, not farmers (Calloway et al. 1986; Janetski 1991; O. Steward 1938; Stewart 1942). Consequently, Ute behaviors do not provide continuous analogues for



FIGURE 8.3. Fremont-style rock art panel, Clear Creek Canyon, Utah. (Photo courtesy Brigham Young University, Museum of Peoples and Cultures, Photo Negative #2013MS.886.)

the prehistoric Fremont people (see e.g., Gould 1980). In southwestern Utah, however, historic Southern Paiute in the 1820s farmed small plots of corn along the Virgin River drainage and its tributaries (G. Brooks 1989). To the east and south on the Colorado Plateau, Puebloan peoples relied heavily on corn, beans, squash, and other crops. Further, genetic studies have shown that an ancestral relationship exists between Fremont and modern Puebloan peoples (Carlyle et al. 2000). For that reason, the latter may offer appropriate analogues for the enigmatic Fremont. Nonetheless, ethnographic patterns documented in the Fremont core region offer a starting point for interpreting often puzzling materials.

Early Thoughts on Gaming-Related Objects

Conjecture regarding the function of unusual artifacts recovered from Fremont contexts date to the earliest reports. Neil Judd, for example, during his work at Paragonah, a large Fremont

site in southwestern Utah, recovered numerous bone artifacts “employed as dice or counters in various games.” He described these as varying in degree of finish from “rudely chipped” to “neatly polished, perforated, and ornamented with drilled dots or incised lines... [many with] traces of red paint on the under or concave side” (Judd 1919:16). He mentions specifically 10 such objects, “charred,” found in the “ashes of a fireplace in Kiva IV” (Figure 8.4).¹ Occurring with these 10 dice or counters were 14 bone pendants, suggesting all had been strung as a necklace. Judd also recovered “gaming balls” and in an explanatory footnote states, “Small stone balls, usually encrusted with a softer material, were employed by southwestern tribes in games for both adults and children. The recent expedition collected 75 of these and, in addition, two specimens of adobe. To one of the latter was still attached a fragment of its original clay covering” (Judd 1919:17). Later, he refers to bone gaming counters as “characteristic” of Parowan Valley Puebloan [Fremont] sites and mentions, “they



FIGURE 8.4. Charred bone dice and pendants collected in 1917 by Neil Judd from a pithouse hearth at Paragonah, Utah. (Photo courtesy Cady Jardine and Scott Ure; Dice Catalog #305147, Smithsonian Institution.)

do not appear...in our collections from ruins [Anasazi sites] south of the Great Basin” (Judd 1926:145).

Judd’s intriguing and insightful comments regarding both bone dice and stone balls anticipate subsequent discoveries of artifacts thought to be gaming related. Important for this discussion are the observations of Noel Morss, who came to southern Utah in the late 1920s as part of the Harvard-sponsored Claflin-Emerson expedition (Gunnerson 1969). His work in or adjacent to what is now Capitol Reef National Park resulted in naming the ancient site occupants “Fremont” after the Fremont River, along which much of his work was carried out (Morss 1931). At Site 27, a dry cave on Oak Creek, Morss recovered four discs made from soft aspen wood (*Populus tremuloides*; Morss 1931:63). The discs, which he referred to as “obviously gaming counters,” measure 31.8 mm (1.25 in) in diameter and 3.2 mm ($\frac{1}{8}$ in) thick and are painted black on one side and retain the natural light color of the wood on the other. Morss compared them to pieces in a Navajo game that used seven disks, also painted black on one side (Morss 1931:63n1).

Contemporary with Morss’s work is that of Julian Steward at the University of Utah, who, in the early 1930s, excavated Fremont mounds along Utah’s Wasatch Front and in the Uintah Basin to the east. In a summary paper on Puebloan material culture, he describes numerous

“small, flat, polished bone chips” under the heading Gaming Bones (Steward 1936:31). He noted a tendency for gaming bones to be more abundant in the southern Fremont area than in the north and concluded they were likely used as dice or counters in the hand game. Like Judd, Steward found stone balls, about the size of “golf balls,” at several Pueblo sites in the eastern Great Basin. Although he states that the function of these balls is unknown, he speculates they may have been “kicked with the foot in a ball race similar to that played by many modern tribes” (Steward 1936:38).

Steward also describes gambling paraphernalia from Promontory Cave 1 (one from Cave 2), located at the north end of Great Salt Lake, including “cane dice,” “gambling bones,” and a beaver incisor “dice” (Steward 1937:23–26). These are all from the upper cave levels, which are now well dated to the post-Fremont period (Ives et al. 2014; G. Smith 2004; Yanicki and Ives, Chapter 9, this volume). The cane dice are short (~2–6 cm long [0.79–2.36 in]) segments of *Phragmites* reed split longitudinally with multiple diagonal cut marks on the outer or convex surface. The gambling bones resemble the many so-called gambling bones found in Fremont sites. Steward described them as “flat pieces of bones with rounded ends...from long bones of large mammals,” decorated with horizontal or diagonal incisions; one had traces of

TABLE 8.1. Quantities of gaming-related objects from Fremont components/sites.

	Material						Totals
	Bone	Antler	Cane	Stone	Wood	Ceramic	
Dice	2,666	13	2	22	7	0	2,710
Balls	3	0	0	347	0	0	350
Discs	5	0	0	21	0	31	57
Cones	23	0	0	0	0	0	23

red paint on the “back side” (Steward 1937:25–26). He considered these bones, along with those from Puebloan (Fremont) sites, as about the right size and shape as the ones native peoples use in the hand game. These probable gaming pieces suggest gaming persisted from Fremont times into the late pre-European era, despite some differences in materials. The pieces provide additional credibility for the use of ethnographic analogues to understand Fremont gaming.

Fremont Game-Related Artifacts

The preceding references make clear that by the 1930s small, rectangular or lenticular polished bones—sometimes decorated, and often with red hematite on one face—along with small stone balls were common at Fremont sites. Wormington lists both “smooth stone balls” and “rectangular bone gaming pieces” as distinctive traits that differentiated Fremont from the Southwest (Wormington 1955:172; Jennings 1956:103). Efforts to assign function to these items typically invoked ethnographic analogues from southwestern and Great Basin indigenous societies. Over the decades, Fremont researchers have added greatly to the numbers of such objects and have recovered additional pieces considered gaming related: bone pins, bone cones, discs, and painted wooden sticks. The role such objects played in the lives of these ancient farmers is seldom explored, however. In the following section, I address them by object category or class, followed by an attempt to identify games in which they may have been used. The dataset is hindered by the scarcity of dry sites wherein organic components of games such as cane and wood might have been preserved.

Painted/Polished/Decorated Bones and Stones

As noted, small bones worked into a rectangular shape and decorated with dots, incised lines, drilled, and often smeared with hematite on the concave surface are ubiquitous at Fremont-era sites (Table 8.1; see M. Hall 2008, 2009 for summaries). Sizes and shapes tend to be fairly standard with some exceptions (figures 8.5a–d). Hall analyzed over 1,000 specimens from Parowan Valley, including possible preforms that were roughly shaped but with red ochre rubbed on the marrow side (M. Hall 2008:63). Decorations include dots or incisions (10–12 percent) in addition to the red hematite (90 percent), and many (40 percent) are centrally drilled, perhaps for stringing (M. Hall 2008:67). At other sites, such as Wolf Village in Utah Valley, percentages of drilled specimens and the degree of finish are much lower (Robbins 2013). Speculation on how these artifacts functioned has focused on gaming, as reflected in the terms used to refer to these objects, usually either “dice” or “counters” (Dalley 1970a) or simply gaming bones or gaming pieces (M. Hall 2009).

Similar objects were made of wood and stone. Hogup Cave, for example, yielded a single wood “counter” from Fremont levels described as “identical in form to...Fremont bone...counters” (Dalley 1970b:171). This find suggests that wood counters may have been common but not preserved at open sites. Hogup Cave also yielded nine bone objects referred to as gaming counters (Aikens 1970:88). One is a finely crafted bipoint with painted horizontal lines on each end. Six of the nine are from Fremont levels dated to AD 400–1350; three are provenienced to the Late Archaic.

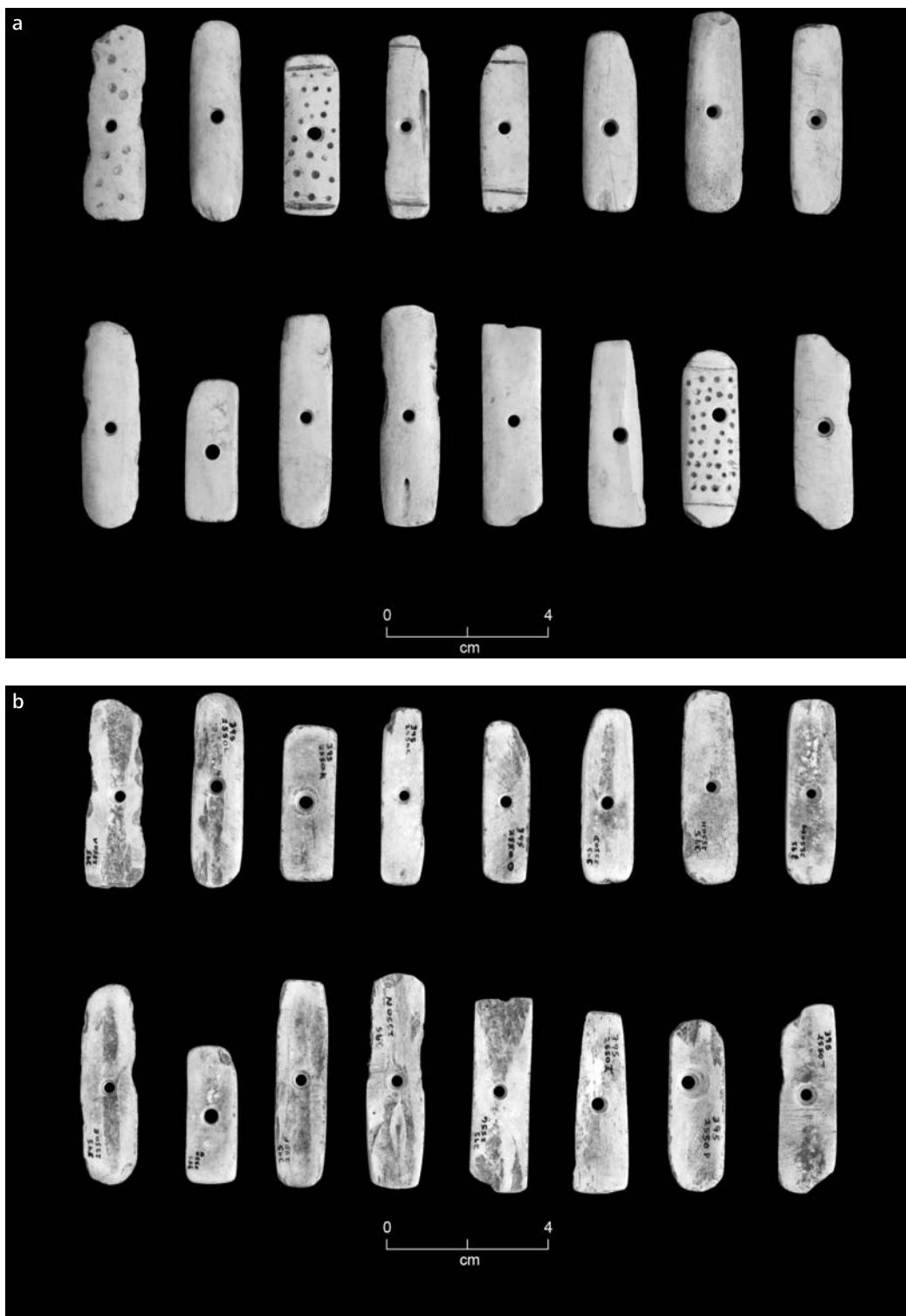


FIGURE 8.5a,b. Gaming bones from the Evans Mound in Parowan Valley, Utah; (a, b), "set" recovered by UCLA, front and back (from M. Hall 2008:Figures 3.14-17).

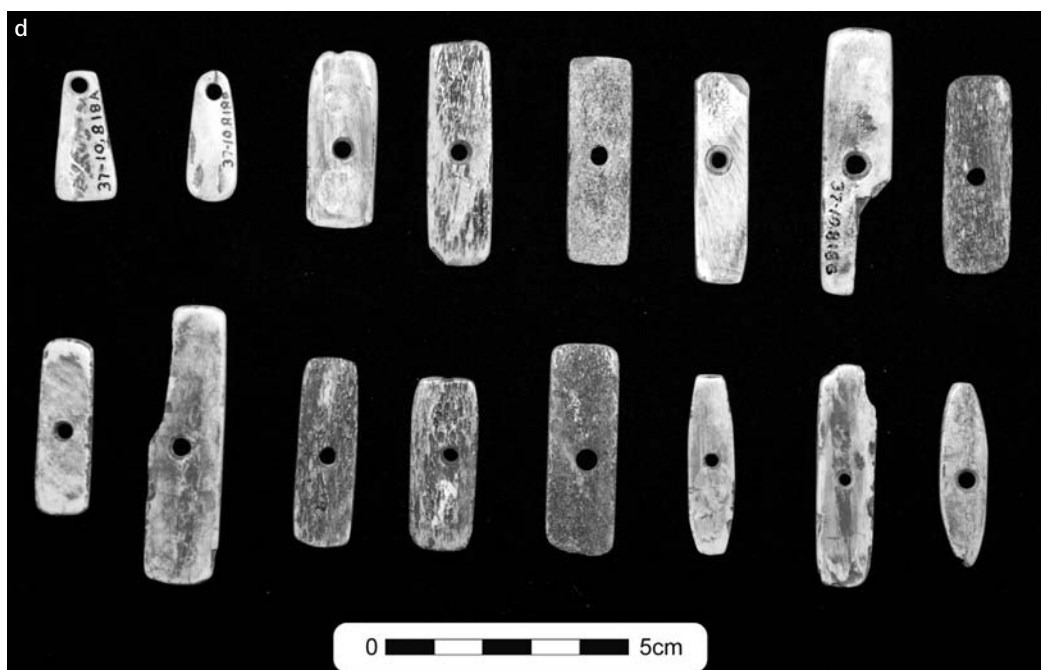
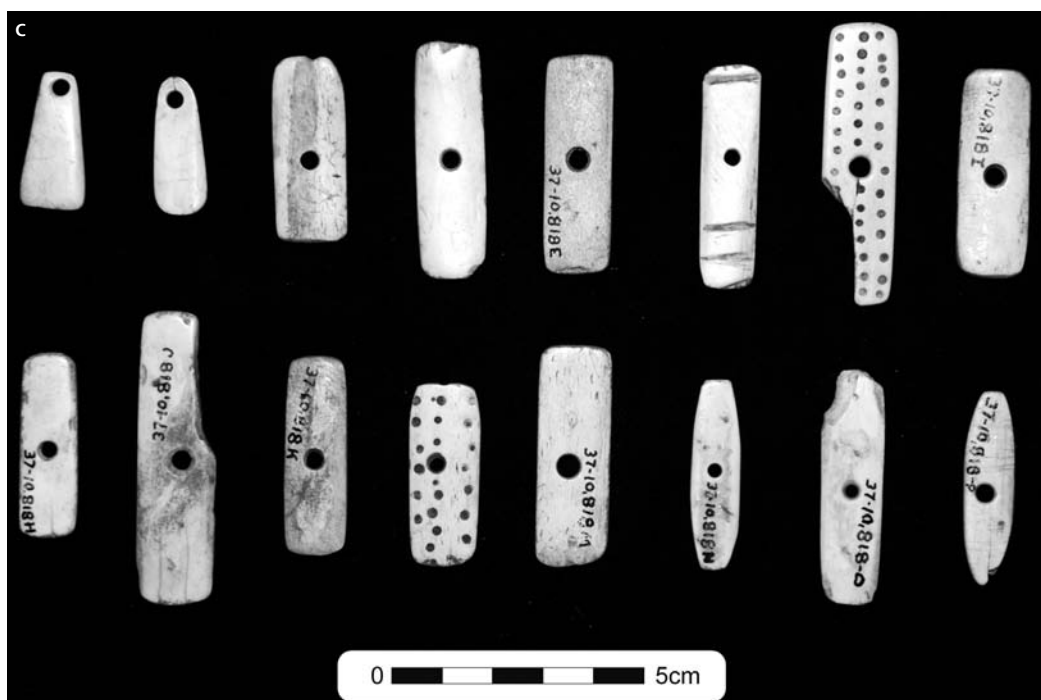


FIGURE 8.5c,d. (cont'd.) Gaming bones from the Evans Mound in Parowan Valley, Utah; (c, d), "set" recovered by College of Southern Utah, front and back (from M. Hall 2008:Figures 3.14–17).

Gaming in Fremont Society

TABLE 8.2. Quantities of gaming objects from Parowan Valley, southern Utah.

Site	Bone dice	Stone balls	Reference
Evans Mound	176	38	Alexander and Ruby 1963; Berry 1972; Dodd 1982.
Median Village	76	50	Marwitt 1970; Dalley 1970a.
Parowan	418	?	M. Hall 2008.
Paragonah	313	50	M. Hall 2008.
Summit	822	?	M. Hall 2008.
Totals	1,805	138	

Several researchers have referred to possible “sets” of gaming bones, based on context: several found together or similarities in size and shape, although the logic behind using the term “set” is seldom pursued beyond context and form. Set numbers range from four to 16 (various, but see Ambler 1966:59; Dalley 1970a:101; Judd 1919:16; Sharrock and Marwitt 1967:38; M. Hall 2008:56–57). Wormington reported a set from her work at Turner-Look, a Fremont site in eastern Utah near the town of Cisco (Wormington 1955). Here she exposed nine circular surface structures roughly walled with coursed sandstone slabs. On the floor of Structure H, she found 14 bone “gaming pieces” described as “carefully smoothed and polished” and “remarkably uniform in appearance” (Wormington 1955:58). Eleven were undecorated, but all were smeared with hematite on one face. In addition, the site yielded another 160 gaming pieces from site “refuse.” These were variable in decoration with striations, dots, and hematite on one face (Wormington 1955:60). Thirteen of these gaming pieces were of antler, a unique material in Fremont collections.

Burgh and Scoggin report possible sets of bone and slate gaming pieces from Mantles Cave (Burgh and Scoggin 1948:86). They judge these objects to be Fremont, due to associated corn and ceramics similar to Morss’s (1931) findings on the Fremont River. These included “one set of 17 small square and rectangular pieces [of slate] crudely roughed out suggest[ing] gaming pieces” (Burgh and Scoggin 1948:54). In addition, they describe “thin rectangles of polished bone” numbering “16 more or less,” resembling the slate objects just described (Burgh and Scoggin 1948:65).

The Nephi Mounds in central Utah con-

tained 46 rectangular bone objects called “dice” in the report (Sharrock and Marwitt 1967:38). Most are roughly shaped with red ochre on the concave surface and several are incised. One group of eight found in Occupation 3 of Mound 1 and labeled a “set” is unusual in that all are painted with hematite on both faces. One of the eight was incised with transverse striations on the convex surface.

Parowan Valley in south-central Utah at the southern extreme of the Fremont region was home to perhaps the largest Fremont communities known (Marwitt 1970; Talbot 2000). Excavations there yielded over 1,500 rectangular bone artifacts (Table 8.2). As a consequence, I include some detail on the history of work and the collections.

The three largest sites in the valley—Paragonah, Parowan, and Summit—are also the names of adjacent modern towns. Paragonah was first investigated late in the nineteenth century by Henry Montgomery (1894) and later by Neil Judd (various, but see M. Hall 2008; Judd 1919, 1926; and Marwitt 1970 for reviews). Later, Clement Meighan of UCLA held several field schools there and at the Parowan site, but the work was never fully reported (but see Meighan et al. 1956). Several mounds are present near the town of Summit, and archaeologists from the University of Utah extensively excavated two: Median Village (Marwitt 1970) and Evans Mound (Alexander and Ruby 1963; Berry 1972, 1974; Dodd 1982), which is one portion of the Summit site (Dalley 1970a:103). Archaeologists from the College of Southern Utah (now Southern Utah University [SUU]) also excavated at Evans Mound (M. Hall 2008). In the 1990s, Brigham Young University (BYU) borrowed Meighan’s Parowan

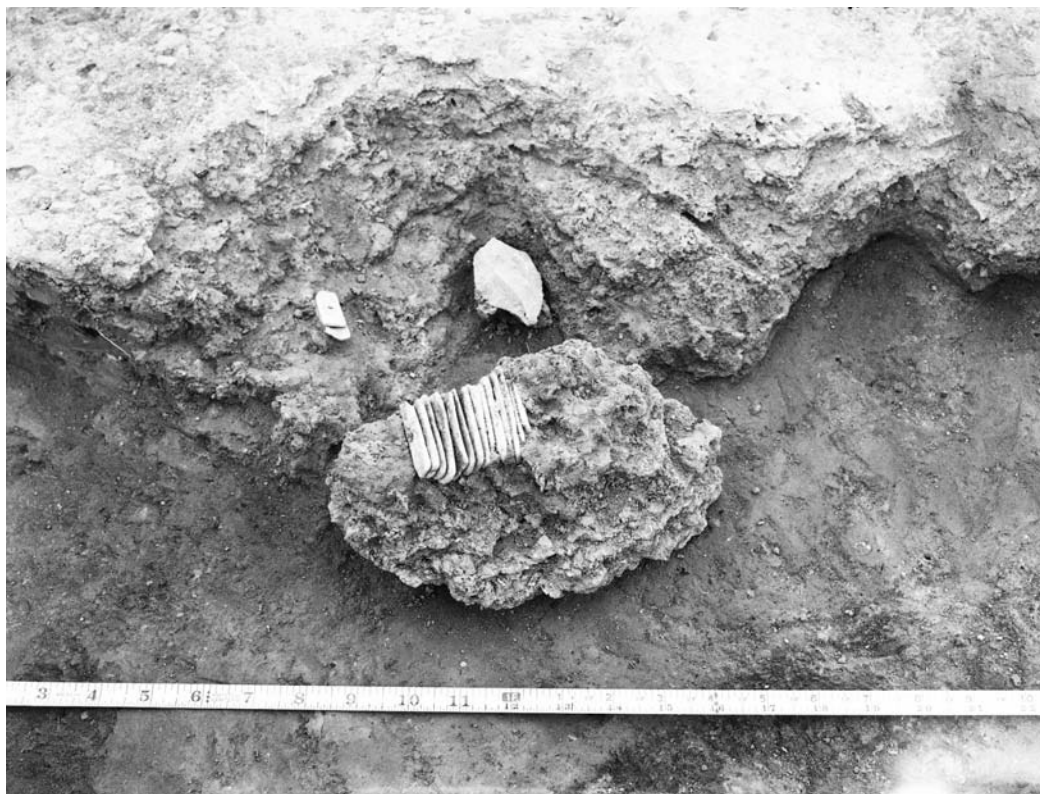


FIGURE 8.6. Set of gaming bones in situ, Evans Mound. (Photo courtesy Richard K. Talbot, Office of Public Archaeology, Photo Negative #395-4013, Fowler Museum, UCLA.)

Valley collections from the Fowler Museum at UCLA to analyze and report on these important Fremont materials (M. Hall 2008; Jardine 2007; Watkins 2006; Woods 2009). Most of the SUU collection was also loaned to BYU.

As mentioned, Molly Hall's master's thesis (2008) focused on the gaming pieces in the UCLA and SUU Parowan Valley collections and their role in Fremont society. She described two sets from the Evans Mound: one recovered by UCLA, the other found by excavators from the College of Southern Utah (CSU) (Hall 2008:57). The UCLA set consists of 16 bones, all with a center-drilled hole; 14 were found together and two were side by side about 10 cm away from the larger group (Figure 8.6). While the context is unclear in the field notes, the bones were apparently not found in a structure or other defined feature (M. Hall 2008:56–57). The CSU group is similar to the UCLA set in that 16 objects are

present, but, unlike the UCLA example, two are pendants. These came from the Evans Mound. The provenience of this set is blurred by the passage of time and lost notes and photos (Gardiner Dalley, personal communication 2015). Among the numerous gaming pieces Dalley (1970a:101) described from Median Village are four “relatively large specimens (ca. 7.5 by 1.3 cm)” that are well finished but undecorated, all found in the same general area. He speculates that these could be a part of a set, while recognizing that what constitutes a set is unknown. A final set from Parowan Valley is the one described earlier from the Paragonah site (Judd 1919:16).

Stone, Ceramic, Wood Discs

Stone discs, both ground and chipped, are common in Fremont sites (Table 8.1) but are not always identified as gaming related (e.g., Jennings 1978:Figure 179 a–d; Steward 1936:39). However,

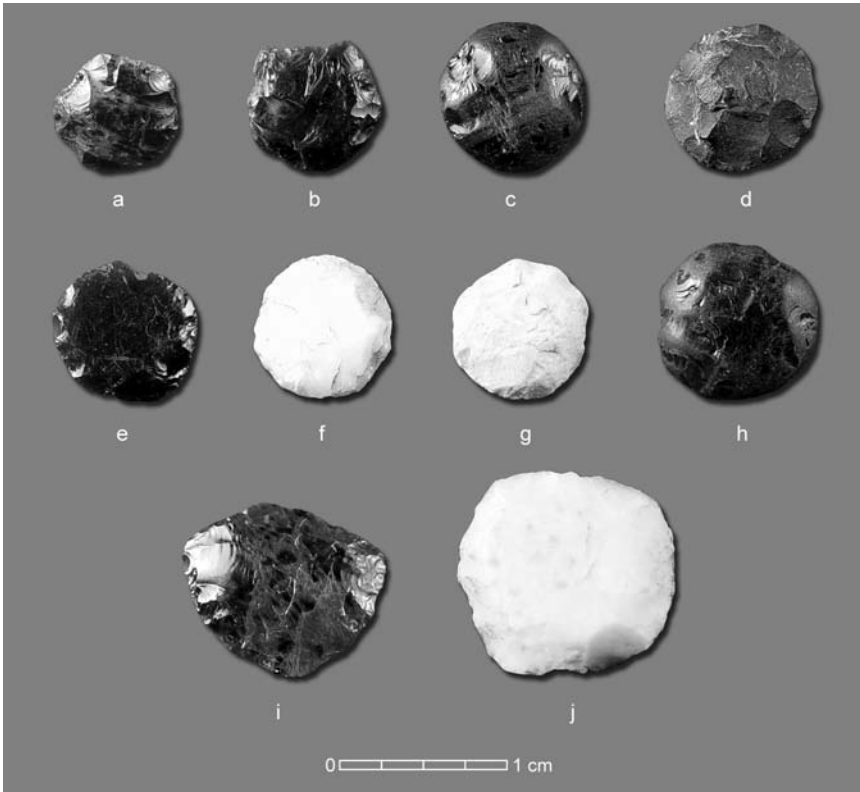


FIGURE 8.7. Chipped stone discs from Mickey's Place, a high-altitude Fremont site in central Utah (from Janetski 2010:Figure 2.8).

the Nephi Mounds in central Utah yielded a groundstone disc that the authors identify as a “gaming piece,” although they didn’t explore how it might have functioned (Sharrock and Marwitt 1967:33). The disc measures 27 mm (0.87 in) in diameter and 10 mm (0.39 in) thick and is “polished, possibly from use.” This disc is similar in size to the wooden discs reported by Morss (1931:63) from Site 27 (see above) but in no other way. The lithology of the stone was not identified.

At Mickey’s Place, a high-altitude Fremont wickiup site examined during the Fish Lake project mentioned in the introduction, excavators recovered 10 chipped stone discs (Figure 8.7; Janetski 2010:34). The bifacially flaked stone discs are of white chert ($n=3$), black obsidian ($n=6$), and dark chert ($n=1$). With one exception, all are round in plan and elliptical in cross section. Two discs exhibit obvious wear that could

result from transport in a bag or heavy use. The size is regular, between 1.2 cm (0.47 in) and 1.4 cm (0.55 in) in diameter. Three were found inside the wickiup; the others came from outside the structure. The obvious selection of contrasting colors (black versus white) suggested to our Native American partners that these discs were part of a gambling game but offered no details.

Ceramic discs with and without central perforations are present in a number of Fremont collections (Steward 1936:21), although they are typically reported as worked sherds used as scrapers to finish pottery vessels rather than gaming paraphernalia (e.g., Dodd 1982:52; Madsen and Lindsay 1977:59). Centrally drilled specimens are thought to have functioned as spindle whorls (e.g., Wormington 1955:62). Undrilled discs vary in size from as small as 0.7 cm (0.28 in) to 7 cm (2.76 in) or 8 cm (3.15 in) in diameter and may be painted or plain gray ware



FIGURE 8.8. Painted “gaming sticks” from Danger Cave, Utah. (Photo courtesy Natural History Museum of Utah, NMHU Catalog #AR-948, Photo #237/3.)

(see Jennings 1978:Figure 223 a–d for examples). Ceramic discs recovered at the Paragonah site are roughly shaped and unsmoothed on the margins, suggesting they were unfinished pieces and were manufactured there (Cady Jardine, personal communication 2011). The ceramic disc associated with the bone pieces from Turner-Look is important in this discussion as it suggests association of these discs with gaming paraphernalia. Wormington (1955:62) also identifies ceramic and groundstone discs as gaming pieces. The discs (nine are grayware and the others are of shale, hematite, limonite, and alabaster) are small, ~2 cm (~0.70 in) in diameter and smoothed and polished. No mention is made of whether alternate faces are differentiated.

Painted Sticks

As noted, perishable items that might be related to gaming are rare, since wood or cane does not preserve in open-air sites. Dry caves do preserve such artifacts, however, and Jennings (1957:186–87) recovered a bundle of six smoothed and painted greasewood sticks from Danger Cave and returned to them as “gaming sticks” (Figure 8.8). These objects are of roughly equal length (24.13–27.31 cm, or 9.25–10.75 in) and diameter

(0.64–0.95 cm, or 0.25–0.37 in). Each displays encircling bands of red/brown paint. Four sticks display three sets of equally spaced bands, while the other two have continuous bands along much of the stick length. Being bound together with thick, coarse, cliffrose cordage suggests they constitute a gaming set. The bundle is provenienced to Stratum DV, the uppermost level in Jennings’ profile, but a date of 4901 ± 27 BP (cal 3680 ± 20 BC, D-AMS 010245) on one of the painted sticks places the bundle in the Middle Archaic of the eastern Great Basin (Jennings 1978).

Stone balls

Well-crafted stone balls are found throughout the Fremont area and are occasionally numerous (Table 8.1). They vary in size and material. Steward (1936:38) lists sandstone, granite, lava, pumice, flint, and obsidian as materials used; sizes range from 2.5 cm (0.98 in) to 5.7 cm (2.24 in), with an average of 4 cm (1.57 in; $n=40$). Round Spring in central Utah yielded 13 stone balls made of basalt, quartzite, chert, and sandstone, ranging in size from 1.6 cm (0.63 in) to 5.4 cm (2.13 in; Metcalf et al. 1993:65). Stone balls are typically pecked and smoothed to form an almost perfect sphere. A highly smoothed



FIGURE 8.9. Polished stone ball from the Old Woman site (42SV7) in central Utah. (Photo courtesy Natural History Museum of Utah, NHMU Catalog #42SV7FS77, Photo #274/11.)

and polished specimen from the Old Woman site is unusual and suggests considerable labor investment (Figure 8.9; D. Taylor 1957:130; see also Madsen 1989:66). Similar stone balls have been found in the Mogollon region, suggesting Fremont contact or even ancestral relations (Jennings 1978:156). Judd's report of stone and adobe balls, at least one of which retained remnants of a clay covering, is notable here given the possible uses of such balls in games discussed below (Judd's 1919:17).

Bone/Antler Cones

Several sites have yielded small artiodactyl bones shaped into highly polished cones. At Danger Cave, for example, two "conical bone tubes," perhaps shaped from pronghorn astragali, were recovered from Stratum DV, the uppermost level reported by Jennings (1957:Figure 182), who proposes the cones were used as jingles. Fremont affiliation is problematic, however. Similar specimens from Fremont sites (Table 8.1) measure

roughly 3 cm (1.18 in) long and are perforated. Similar cones are in Judd's Paragonah collections in the Smithsonian, although numbers aren't available (Cady Jardine, personal communication 2011). Cone-shaped artifacts of antler come from Five Finger Ridge in central Utah. These specimens consist of antler tips, several of which are hollowed out and drilled at the distal end (Janetski 2000:420). Sooty residue is present in some, however, suggesting use as pipes; one is smeared with hematite.

Bone Tubes with Pins

Only one such object is identified in published reports. It consists of a highly polished tube attached with a leather thong to two similarly polished and sharpened bone "pins" found in the dry contexts of Hogup Cave (Aikens 1970:Figures 58c–d). The two bone pins are bound together in parallel and were inside the bone tube when found. Aikens (1970:91) refers to this composite artifact as representing a variant of

the ring-and-pin game. The bone tube length is roughly 8 cm (3.15 in); the pins are about 5 cm (1.97 in) long. This item came from Stratum 4 at Hogup, which dates to the early Archaic (~6000–8000 BP), but I include it here to provide an analogue for later open-air sites where polished bone tubes, cones, and pins are not attached by leather thongs.

Functions of Gaming Pieces

Just how were the various items described above used in Fremont societies? The difficulty in answering that question lies with the discontinuous nature of the Fremont pattern. Specifically, farming and its concomitant material patterns—high-investment residential and storage structures, abundant ceramics, and a pervasive style—had disappeared in the Fremont core by the time of European arrival. Verification that the objects were used in games relies heavily on analogy. The following discussion considers possible associations of objects labeled gaming pieces with known Native American games or amusements.

Hand Game

Early Fremont scholars were quick to invoke ethnographic study as a means to assign function to the many oft-decorated and hematite-stained bones recovered from excavations (Judd 1919; Morss 1931; Steward 1936; Wormington 1955). Steward suggested they were hand game paraphernalia but didn't critically examine that conclusion. A closer review of the very popular hand game and related paraphernalia demonstrates that these distinctive bones were not part of the hand game (Culin 1907). Ethnographies focused on Great Basin native peoples (e.g., Fowler and Matley 1979:159; I. Kelly 1964; A. Smith 1974; Steward 1941), make clear that the central objects in the hand game are a pair of bone or wood cylinders, either solid or hollow, one of which is marked in some way, and roughly measuring 5–7 cm (2–3 in) long. The only other items are counters, usually wood sticks varying in number from five to as many as 16. Counters are 25 cm (9.84 in) to 30 cm (11.81 in) long, in some cases decorated with fletching, and, continuing the arrow theme, sharpened on one end or painted

various colors or both (various in Culin 1907). The goal is to guess which hand contains the unmarked or, in some cases, the marked cylinder. With the Southern Paiute, the game is known as *hi-aung-pi-kai*, or Kill the Bone (Fowler and Fowler 1971:62).

No bone or wood cylinders or counters matching these descriptions are known or recognized from Fremont contexts, as most Fremont sites are open where wood does not preserve. The painted sticks from Danger Cave may have served as counters but at a much earlier time than the Fremont occupation. Most importantly, the flat, rectangular bone pieces have no parallels in the hand game objects just described.

Dice Games

Several Fremont scholars have suggested that the "gaming bones" from Fremont sites were used as dice in some way. Gunnerson, for example, cites a Hopi example wherein dice were thrown and markers moved along a course much like a modern board game and the Aztec *patolli* game described in Chapters 12 and 15 of this volume (Gunnerson 1969:141). Wormington tended to agree and passed along insights from a Cheyenne woman regarding the group of bones from the Turner-Look site (Wormington 1955:93–94). Her informant provided details of how the game would have been played with those pieces and stated that a basket was used to "turn the pieces over." Others (e.g., Janetski 2000:85; Sharrock and Marwitt 1967:38) agree that these enigmatic objects were most likely used in some kind of dice game. Exact parallels or analogues to the Fremont dice are difficult to identify, however.

Like the hand game, dice games were widespread among aboriginal peoples, including those of the Great Basin (A. Smith 1974; Steward 1941; O. Stewart 1942; various in d'Azevedo 1986) and the Southwest (various in Ortiz 1983). Culin notes that 130 different tribes played such games (Culin 1907:45). All involved tossing dice—objects with two contrasting faces—to determine the numbers on each face showing after a throw. The majority of the Fremont bone pieces have contrasting faces, either due to the presence of hematite or decorations on one side. Materials

used ethnographically as dice or to make dice ranged widely but included wood, cane, stone, and bone, and the form of the dice was most commonly rectangular, lenticular or, less often, circular. In addition to the dice, counters were important to track successful throws or to keep score. The number of dice used in games played in the Great Basin or adjacent areas varied, with four, six, eight, 12, and 16 documented (Culin 1907; Kelly 1964). In the eastern Great Basin, stick dice were common: straight, wooden, or reed sticks 15 cm (5.9 in) to as much as 30 cm (11.81 in) long. Numerous “sets” of “gambling sticks” and canes in the John Wesley Powell collection in the Smithsonian consist of five and up to 10 sticks, often with red paint on one side and lengths similar to that just mentioned. The Powell collection is also referenced in Culin (1907:166; Fowler and Matley 1979; Kelly 1964:114). Some wood and cane specimens in the Powell collection are sharpened on one end and undecorated. Although all are referred to as “gambling sticks” in the documentation for the Powell collection, the latter were likely tally sticks rather than dice and were stuck in the ground to mark players’ status. Once again, wood or reed counters are not known from Fremont sites. Additionally, bone dice appear to be rare among historic Great Basin peoples, although an intriguing set of six lenticular bones decorated with incisions and painted red or green on one side are attributed to the Comanche, who are Uto-Aztec speakers related to the Great Basin Numic speakers (Culin 1907:160). The decorations consist of numerous horizontal incised lines intercepted by an undecorated vertical band and are quite unlike the Fremont specimens.

The ceramic, wood, and chipped or ground-stone discs from Fremont contexts may have also functioned as dice. A Wind River Shoshone game used fragments of china plates ground into circular disks about 2 cm (0.79 in) in diameter. The attraction of using china was that it was decorated on one side and plain on the other. Like most basket-dice games, women generally played this game (Culin 1907:45). It isn’t clear how discs without contrasting faces, such as the plain gray ceramic discs or the chipped stone

discs from Mickey’s Place, would have functioned as dice, however.

The Hopi game using cane dice thrown to advance a marker on a flat, incised stone, as Gunnerson (1969) mentions, has little archaeological support, for no such incised stones are known from the Fremont period. Cane dice, or what are assumed to be cane dice, are known from Hogup Cave (Aikens 1970:168) and Promontory Cave 1 (Steward 1937:23), although these objects are associated with the Promontory Phase, which postdates Fremont presence in the eastern Great Basin (Ives et al. 2014; Janetski 1994; Steward 1937:122; see also Chapter 9, this volume).

The fact that a significant percentage of the bone dice from Parowan Valley are drilled and that dice were found with pendants in a hearth at Paragonah has suggested to some that drilled specimens were ornaments (Dalley 1970a; Judd 1919:16). For example, both “sets” from the Summit site, one of which also included two pendants, were drilled. A more logical explanation, however, may be that they were strung to keep sets together (see M. Hall 2008:73 for an excellent discussion of this topic). Why they were strung or occurred with pendants is perhaps a factor of convenience. Drilled dice are less common in other areas, however; only 3 percent of the dice from Wolf Village are drilled, for example (Robbins 2013:14).

If the two sets from the Summit site are complete, one might expect to see similarities when comparing the two. Indeed, there are similarities, but the sets are not identical. Both the UCLA and the CSU groups have 16 total items and two pieces with dots. The UCLA set has two pieces with horizontal lines on each end, while the CSU group has but one piece with horizontal lines. Of course, the obvious difference is that the CSU group of 16 includes two pendants, and the UCLA group has none. Nonetheless, these two artifact groups come closest to being considered complete sets due to the find contexts (Dalley 1970a; M. Hall 2008). Hall (2008:57), however, notes that within the sets of 16 are two sets of eight. The UCLA set contains two with dots, two with horizontal lines on the ends, and the rest plain, which could be divided into two sets of

eight. The CSU set is different, as it consists of two pendants, two pieces with dots, two lenticular pieces, and nine undecorated pieces. There is only one piece with horizontal lines incised on each end, so the CSU sets of eight are not identical. Further, the CSU group includes two broken pieces, one with dots and one without, but they are broken in the same way and clearly used as is. Hall has gone further in comparing the two sets by counting dots on those so decorated with no clear patterns. Nonetheless, these two groups provide the best possibilities for understanding the Fremont dice game.

Hall's (2008, 2009) conclusion that bone gaming pieces were produced in Parowan Valley is based on the presence of bones roughly formed to the size and shape of finished bones but are neither ground nor decorated. Many crude specimens have hematite on one side, however. If these were preforms, why would the makers smear red ochre on the concave face? One possibility is that red ochre served some nonfunctional purpose during the manufacture process such as bringing luck. Or, more simply, they were used as is, especially if scores were contingent on counts of red and non-red faces with each throw, as described (see also Robbins 2013). Regardless, the number of these objects recovered in Parowan Valley is orders of magnitude beyond what has been found in other Fremont sites, with only Turner-Look and Wolf Village yielding over 100 dice.

Games with Stone Balls

The abundance of finely crafted stone balls demands some functional explanation. Wormington briefly describes a game in which stone balls were tossed to land in small, cup-shaped pits carved into level bedrock such as those observed in the Cub Creek area of northeast Utah (Wormington 1955:93–94). Her description is based in large part on Albert Reagan's interpretation of a rock art panel in Nine Mile Canyon (Reagan 1933:Figure 5). Stone balls are found in many areas where no such cups are known, however.

It is possible the stone balls were used in juggling. Juggling balls of dried clay, sometimes

colored red, was both an amusement and an occasion for wagering, especially by women of the Ute, Bannock, and Southern Paiute (A. Smith 1974:236; see also D. Anderson 1967). Participants bet when a juggler would drop the ball as she walked to some prescribed spot. In some cases, the balls were stone and variable in size ranging from 3–7 cm (1.18–2.76 in) in diameter. Neither Smith nor Culin mentions manufacturing stone balls. Clay balls of this size are largely unknown from Fremont contexts with the exception of some marble-sized specimens (e.g., Talbot et al. 1999:95). Stone balls from Fremont contexts were not colored.

The most reasonable analogue for the use of stone balls in a game is in foot races in which racers were required to kick a wooden or stone ball across a finish line as suggested by Stewart (1936:38). These balls were about 6 cm (2.36 in) in diameter and covered with pitch or gum. Such games were popular among the Pima and Papago people of the American Southwest (Culin 1907). Judd's reference to stone balls covered with softer material being used by southwestern peoples may also refer to this game (Judd 1919:17).

Finally, Madsen and Lindsay (1977:66) speculate that stone balls may have functioned as grinding tools, since they occurred with other grinding objects at Backhoe Village. They suggest that the small balls may correspond to the small depressions on Utah metates. The suggestion has some support from the specimens from Round Spring, as a broken ball from there shows clear evidence of grinding, and another has a ground facet (Metcalf et al. 1993:66). Montgomery and Montgomery (1993:398) also found "some [stone balls] with flat-ground facets." These examples are unusual, however, and may suggest opportunistic or multiple functions of stone balls after use in games.

The highly polished stone ball from the Old Woman site in central Utah is unique in the context of the larger collection. The labor investment appears much greater than seen in others and may suggest special significance similar to that of the elaborated *chunkey* stone Zych describes in Chapter 5.

Ring-and-Pin

Several objects may have been part of a game of skill called “ring-and-pin,” practiced by a number of aboriginal groups (Culin 1907:527). This was played using long, thin bones, or pins, and one of various objects that served as “rings,” depending on the group. Rings included hollowed-out phalanges (Algonquian, Athapaskan, Siouan), salmon bones (Umatilla), rodent skulls (Eskimo, Paiute), and hair, bones, and hide rings (Tewa). A thong of vegetal cordage or other material is attached to the proximal end of the pin and threaded through the bones or other rings. At the far end of the thong is a series of loops or a hide flap with various holes.

Evidence of ring-and-pin games, such as those described by Culin, is rare at Fremont sites, perhaps due to the failure of analysts to recognize evidence of these games of skill. The most obvious candidate is the tube with pins described earlier and dated to Archaic levels at Hogup Cave. Although bone tubes and thin bone artifacts are present in Fremont sites, no morphological parallel to the Hogup specimen has been identified. Hollowed-out bones or antlers are known from the upper levels of Danger Cave and various Fremont sites, however, including the bone cones from Paragonah (Table 8.1). Jennings (1957:200) refers to these objects as “tinklers” or decorative items, perhaps attached to garment fringes that “tinkled” as the wearer walked. In this sense, they may have been analogous to metal cones used as tinklers available during the historic era via European traders (DeVore 1993:12–13).

Discussion

Fremont researchers have identified several types of objects thought to have played some role in gaming or amusements. Only two occur with regularity, however: bone dice and stone balls. Others—discs of varying material and bone tubes—occur rarely, and their role in gaming activities is difficult to identify. But rectangular bone dice, along with the stone balls, are omnipresent in Fremont-era contexts. In some places (e.g., Parowan Valley sites, Turner-Look, Wolf

Village), they number in the hundreds or even thousands. The surprising numbers recovered from Parowan Valley sites have been largely unknown until recently given that Judd (1919, 1926) did not always provide detailed site reports and Meighan’s work was largely unreported (however see Meighan et al. 1956; Alexander and Ruby 1963). Both excavated significant portions of Parowan Valley sites, hence the large numbers recovered. Hall’s analysis of the Parowan Valley collections and her effort to identify the role of gaming in Fremont culture—more specifically, her attempt to understand why exceptional numbers of gaming bones occur in Parowan Valley—is important as it provides these data for the first time (M. Hall 2008, 2009). She concludes that Parowan Valley was the site of “intensive gaming activities” that occurred during social gatherings (M. Hall 2008:91).

Few other Fremont scholars have considered the implications of recovering objects related to gaming. Exceptions include Wormington (1955:93), who concluded realistically that the games being played using dice or stone balls cannot be known, though she provides some speculation. Likewise, Aikens (1966:71) recognized that “whistles, counters, and shell ornaments probably functioned in social rather than economic contexts” but does not go beyond those comments.

The implications of intense gaming activities require discussion beyond stating that some sites were a hub of trade and interaction. I have proposed that certain locales such as Parowan and Utah Valley hosted annual festivities like the trade fairs of the Southwest, which drew populations from surrounding regions similar to the ethnographic example in the introductory quote for Utah Valley (Janetski 2002). These areas are marked by greater than expected concentrations of exotics (marine shell ornaments, turquoise) and, in some cases such as Parowan Valley, large numbers of bone dice.

An anecdote from Judd provides insight into the importance of gambling among ancient native people. In 1927, during the excavations of Pueblo Bonito, a Navajo elder, Hosteen Beyal,

offered an explanation of why Chaco was abandoned that involved a mythical hero figure, Noqoilpi, “the Gambler.”

Noqoilpi lived in Pueblo Alto on the cliff north of Pueblo Bonito. He was head man over all the other pueblo villages in this vicinity and was a great gambler. In rude watchtowers placed at intervals along the canyon rim, watchmen were stationed night and day. When strangers were seen approaching, these watchmen passed word from one to the other and thence to Noqoilpi who immediately made preparations for gambling.

The people who lived in the several towns had come from all directions: they belonged to different tribes and spoke different languages. They had arrived at Chaco Canyon singly or in groups; Noqoilpi had gambled with them, won all their possessions and finally their very lives. Thus, he forced them to remain and work for him as slaves. (Judd 1954:351–52)

Noqoilpi was proficient in several games, including the basket game, in which six wooden dice, black on one side and white on the other, were tossed from a basket and the number of each side was counted. The dice in this story seem similar to the wooden discs Morss found in Cave 27 (1931:63).

More importantly, this narrative makes clear that gambling could lead to significant loss or gain (e.g., Eyman 1965). In some aboriginal societies, such as those along the Northwest Coast, gamblers could lose their freedom (Cameron and Johansson 2015, Chapter 16, this volume). Early travelers in North America noted that some native peoples were addicted to gambling. The Pawnee, for example, were observed playing the hoop-and-pole game for “five or six hours, in the mid-heat of an August day without intermission [and would] “lose guns, blankets, and even one or two horses in a morning” (Culin 1907:465). Objects won or lost in the hand game among Plains tribes varied widely from trinkets to horses, wives, and children. Such serious loss

of goods and the potential for subsequent conflict is a reason some societies forbade gambling with close kin (see Chapters 9 and 16, this volume). In this sense, gambling restrictions mirror similar restrictions on sharp trading (Janetski 2002:345; Sahlins 1972).

Despite the obvious material goals of many games, gaming also played a role in rituals. In his gaming volume summary, Culin (1907:809) states that North American Indian games were “either instruments of rites or descended from ceremonial observances of a religious character.” The importance of games in aboriginal lives is exemplified by the Zuni Bow Priest Society, whose members played *sholiwe* to foretell the future, and by members of Plains tribes who played stick dice games with dice carved to symbolize arrows that, in turn, were related to success in hunts (Eyman 1965:44).

The possibility that gaming blended with ritual in some cases is suggested by both context and degree of finish on dice recovered from Wolf Village in Utah Valley, central Utah. Robbins reports at least 280 dice recovered, with 232 or 82 percent found in the fill of Structure 2, one of nine structures excavated (Robbins 2013; Johansson et al. 2014). Structure 2 is unusual as it is the largest pit structure currently known in the Fremont region and has associated unique features. Additionally, many of the gaming pieces appear expediently made, with little attempt at the shaping, smoothing, or decorating so characteristic of other such assemblages (see illustrations in Robbins 2013). It isn’t clear how many are roughly made, but at least 124 (44 percent) of the 280 recovered are classified as “unground,” although 87 percent of those are painted with hematite. The deposition of well over 200 of these objects in the homogenous fill of this unique structure hints they were thrown in as part of structure infilling, perhaps as one aspect of ritual activities. It is possible that the expediently made specimens were specifically created to be thrown into the structure fill as one part of such a ritual. Nearby Woodard Mound contrasts sharply with Wolf Village, as it yielded only 10 dice: five ground and five unground. All but one have a hematite wash on one face (Richens 1983:105).

Origin of the Fremont Dice Game

Antecedents for the bone or wooden dice recovered from Fremont contexts are murky. Aikens hints that wooden counters, and therefore the related game, may have had antecedents in the Great Basin Archaic, although bone specimens are essentially nonexistent in Archaic sites (Aikens 1970:194; see also Jennings 1978:162). Bone dice are found to the south, however, in pre-Fremont contexts. They are present in the Basketmaker II levels of Kinboko Cave 1 in the Marsh Pass region of northeastern Arizona (Kidder and Guernsey 1919:189), Talus Village in southwestern Colorado (Morris and Burgh 1954:63), and in Sand Dune Cave in southern Utah (Lindsay et al. 1969:58). These sites date to 2,000 years ago or earlier (Coltrain et al. 2007). Basketmaker II dice are lenticular or circular in form, smooth on one side, and crosshatched on the other. The circular dice are small, 1–1.5 cm (0.39–0.59 in) in diameter, and often have a central dimple on the smooth, convex surface. These circular bone pieces may have been part of compound dice such as those found in White Dog Cave (Guernsey and Kidder 1921:106; see also Plate 43).

The lenticular pieces are flat, measuring 2.5–3 cm (0.98–1.18 in) long, and carefully ground and polished. At Sand Dune Cave, Cache I yielded a leather bag containing 10 lenticular pieces and three circular pieces, perhaps a set. Gaming pieces are present in later Puebloan sites as well. At Pueblo Bonito, Judd (1954:280) recovered rectangular and lenticular gaming bones (Figure 8.10) nearly identical to bones from Caldwell Village (Ambler 1966:58) and Huntington Canyon (Montgomery and Montgomery 1993:417), both Fremont sites. Shutler (1961:Plates 73 and 74) reports rectangular and oval bone dice, at least one with incising, from Lost City, an Anasazi settlement in southern Nevada. Red ochre is not mentioned in either the Chaco specimens or those from Lost City. These few examples suggest dice games may have traveled north along with farming and ceramics (Janetski 2003). If so, the importance of these games grew geometrically in the Fremont period. It is likely that dice or other games existed

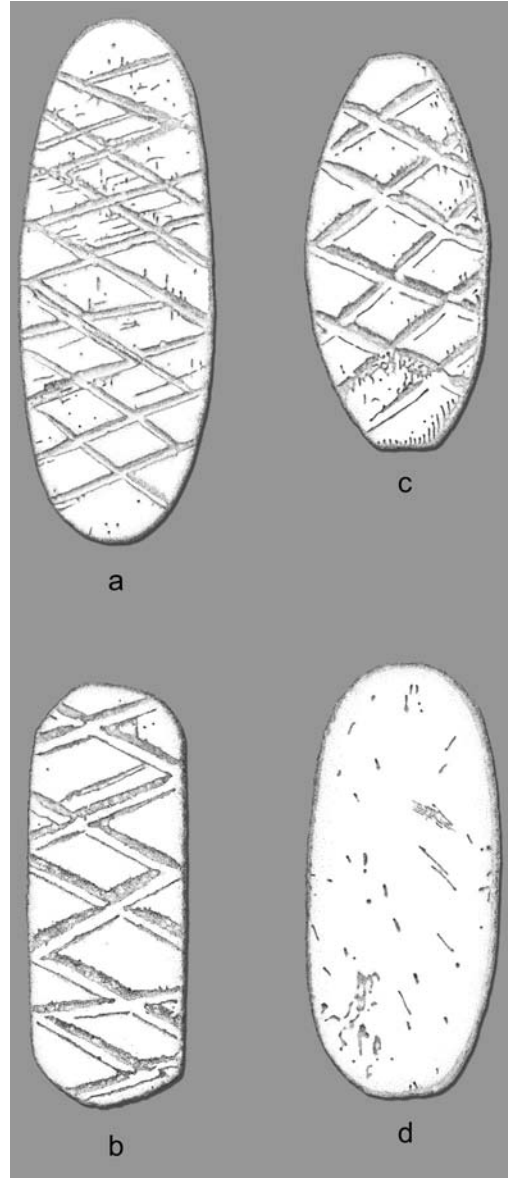


FIGURE 8.10. Bone dice from Pueblo Bonito, Chaco Canyon, New Mexico. (Drawn by Scott Ure, after Judd 1954:Figure 80).

in the Archaic as well, although evidence is slim or unrecognized.

Dice games involved wood or cane counters to track scores, as noted in the introduction of this chapter (various in Culin 1907). The absence of such counters may or may not be significant. Fremont structural sites—those with

houses—are nearly always in the open, where wood and cane are not preserved. The fortuitous recovery of a bundle of painted wooden sticks from Danger Cave, on the far western fringe of the Fremont region, may represent what such counters looked like, despite the Archaic age of those sticks.

Origin of Stone Balls

Jennings (1978:156) noted that stone balls are unique in Utah prehistory but are present at early Mogollon sites. Stone balls were also present in Lost City, dating to the Pueblo II period (AD 1000–AD 1150). Consequently, they are contemporary with the Fremont rather than earlier (Lyneis 1992:5). Shutler (1961:35) reports 22 stone balls that vary in size from 1.2–5.3 cm (0.47–2.09 in) in diameter and states that similar balls have been recovered from contemporary Anasazi sites in the Virgin River region of extreme southwest Utah and southern Nevada. He speculates that they may have been used in a game. These examples do not date earlier than Fremont specimens, however.

Ballgames were, of course, an important component of social and political life in portions of the American Southwest, especially during the

Colonial phase of the Hohokam (Lekson 2008). The ball used in those games was rubber, and the game was played in formal ballcourts. Neither has been found in the Fremont area.

Conclusions

Decades of archaeological research has recovered hundreds of objects Fremont researchers have classified as gaming related. These include thousands of shaped and decorated bone, stone, and wood pieces; hundreds of stone balls; as well as other possible gaming paraphernalia. Ethnographic analogy strongly argues that the bone and stone specimens were used as dice in games of chance, although details for the Fremont era are perhaps unknowable (see also Wormington 1955). Stone balls were likely used as a component of foot races, although other possibilities exist. The sheer quantity of these items suggests the importance of games and amusements in Fremont society, and likely the stakes for which the games were played went beyond the secular. Success in gaming insured success in social and economic endeavors as well (Culin 1907:809; Eyman 1965). Good luck in gaming insured health and fertility, beliefs that may have great time depth in the Americas and beyond.

Notes

1. Judd's "kivas" are now more accurately referred to as pithouses.



Mobility, Exchange, and the Fluency of Games

Promontory in a Broader Sociodemographic Setting

GABRIEL M. YANICKI AND JOHN W. IVES

Since the excavation of Utah's Promontory Caves by Julian Steward in 1930 and 1931 (Figure 9.1), questions have existed about the relationship between the caves' big-game hunting inhabitants—the forebears of the Promontory phase peoples who lived along the front of the Wasatch Range until AD 1500—and the farming and foraging Fremont Complex peoples who resided in the Great Salt Lake area until about AD 1300 (Aikens 1966, 1967a, 1967b; Dean 1992; Forsyth 1986; Gunnerson 1956, 1960; Ives 2014; Janetski 1994; Janetski and Smith 2007; Johansson 2013; Madsen 1979b; Madsen and Simms 1998; Simms and Heath 1990; Simms et al. 1997; G. Smith 2004; Steward 1937). Our recent work on Promontory Point has elaborated Steward's (1937:86) observation that a number of traits of the Promontory people are unmistakably northern in character, suggesting they were a migratory population with roots in Dene (Athapaskan) communities of the Canadian Subarctic, well acquainted with a Plains bison-hunting lifestyle, and in the process of adapting to the Desert West (Ives 2003, 2014). Steward was remarkably prescient in arguing that the Promontory and Fremont peoples were contemporaries. Bayesian modeling of dates from Promontory Cave 1 shows a tightly constrained period of occupation between AD 1240–90, prior to the end of the Fremont era (Ives et al. 2014). Prospects for Promontory-Fremont interaction are supported by our identification of an unreported Fremont settlement nearby, Chournos

Springs (42 BO 1915; Figure 9.1), occupied when the Promontory culture peoples arrived.

Generally overlooked in discussions of the Promontory phenomenon is the rich array of gaming material present in the caves, especially the large and more intensely occupied Promontory Cave 1 (42 BO 1). The ethnographic and historic literature on the games of indigenous North Americans provides ample basis for their consideration in interactions both within and between groups of diverse social, linguistic, and genetic composition. Rather than mere recreation, games were a core aspect of social and ceremonial life. The gambling that almost universally accompanied them was often preferred between individuals with some degree of social and kinship distance, best found at the intertribal level (Culin 1907; DeBoer 2001; Flannery and Cooper 1946; Janetski 2002; Sahlins 1978; summarized in Yanicki, Chapter 7, this volume).

The ubiquity of gaming materials in the Promontory assemblage compels us to examine what this may mean for the group composition and internal and external social dynamics of the Promontory people. Fluency in shared gaming traditions would be required for intergroup relations on both a local and regional scale. Gaming materials from the Promontory context can serve as a proxy for sociodemographic interaction, offering a unique perspective on shifts in cultural identities in the northern Great Basin at the end of the Fremont era.

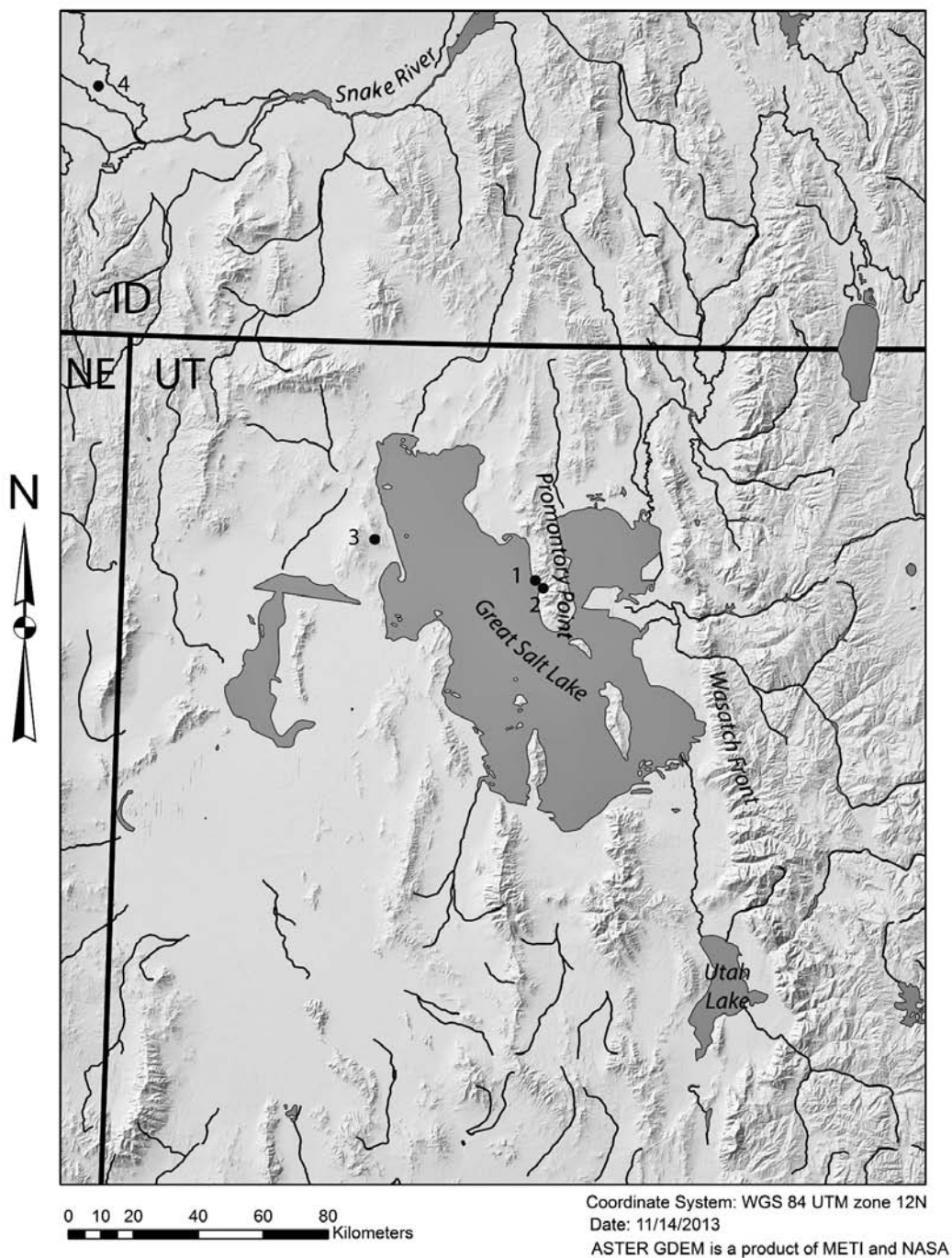


FIGURE 9.1. Map of northeastern Great Basin showing location of sites discussed in text: (1) Promontory Caves 1–3; (2) Chournos Springs; (3) Hogup Cave; (4) Wilson Butte Cave. (Drawn by Gabriel M. Yanicki.)

Background

The degree of preservation of perishable cultural materials at the Promontory Caves is remarkable: nestled amidst layers of juniper bark strips laid out as ground cover—nearly 2 m in thickness at some locations—are perfectly preserved artifacts of hide, sinew, wood, cane, and reed. Even porcupine quills, fur, twisted fiber cordage, and feathers are recovered intact. Promontory Cave 1 stands out from other sites in the Great Salt Lake area for the reliance of its inhabitants on hunted game, with a conspicuously Plains-like emphasis on bison (Johansson 2013), and for the absence or rarity of maize, foraged plant foods, or groundstone tools associated with their preparation that would typify a Fremont complex occupation (Rhode 2016).

Fremont and Proto-Apachean Cultural Identities

The Fremont complex—the farming and foraging peoples who inhabited Utah and parts of Nevada, Idaho, and Colorado between AD 700 and 1300—has been an important focus of Great Basin archaeology over the past half-century (Madsen and Simms 1998:277). Given the varied subsistence strategies associated with the complex, the term “Fremont” is admittedly “an umbrella which includes a diversity of human behavior” (Madsen 1989:67). Quite possibly, the term covers a range of polyethnic societies living in close proximity, including indigenous forager groups sharing origins in the Desert Archaic tradition of the modern-day Numic peoples, as well as agriculturalist immigrants affiliated with the Ancestral Puebloans of the American Southwest (Benson et al. 2007:339). Despite this suspected diversity, the peoples of the Great Basin during the Fremont period possessed material culture commonalities ranging from residential structures, ceramic traditions, burials, and rock art to basketry and moccasin styles.

Steward (1937, 1955) was adamant that the material culture was neither Fremont nor Numic in character. Instead, he believed the cave inhabitants constituted a northern bison-hunting population that he further suspected of being proto-Apachean. Our recent research

confirms that Steward was correct. Subsequent ethnological and archaeological research, along with fur trade-era art, has shown that the Bata Shoe Museum (BSM) 2(Bb) moccasin patterns and decorative motifs from Promontory were typical of moccasins made by Dene and Algonquian speakers of the Canadian Subarctic during the nineteenth and twentieth centuries (Brasser 1987; Hatt 1916; Ives 2014; Ives et al. 2014; J. Thompson 1987, 1990, 1994; G. Turner 1976; Webber 1989). A moccasin of very similar construction, AMS radiocarbon dated to 1430 ± 40 ^{14}C yr. BP, has been recovered from a Yukon ice patch, in the region widely regarded as the proto-Dene homeland, suggesting that an antecedent form existed there (Hare et al. 2012). The Promontory moccasins bear no relationship to typical hock-, Fremont-, or Hogup-style moccasins or most other contemporaneous footwear in a larger region, including Idaho and Wyoming. They are clearly an intrusive element of material culture.

These are not the only signs that a proto-Apachean group was present. The Promontory assemblages also include examples of tabular bifaces, or chi-thos, semilunar implements used in softening leather. Apparently unknown in Fremont assemblages, they are characteristic of western Subarctic assemblages and remain in use among Northern Dene women today (R. Le Blanc 1984; Reilly 2015; Workman 1987). As evidenced by obsidian source and other data, an array of external contacts consistent with Apachean migration geography further reinforces this conclusion (Billinger and Ives 2015; Ives 2014; Ives et al. 2014).

While the Cave 1 assemblage cannot be characterized as Fremont or Numic, Fremont artifacts are not absent. As Steward reported, basketry is rare (just 14 fragments have been discovered, 12 by Steward and two in our work). Save for a winnowing basket of Shoshone origin (Ives et al. 2014), the basketry comes in typical Fremont forms, including a one-half (flat side down) rod-and-bundle stacked fragment featuring close coiling with noninterlocking stitch. This is the most frequent coiling structural type at Fremont sites, and its radiocarbon date of

694 ± 24 ^{14}C yr BP (OxA-28441) is apparently the youngest known for its manufacture (Ed Jolie, personal communication 2014; Catherine Fowler, personal communication 2014). Instances of Great Salt Lake Gray pottery, also uncommon, nevertheless occur in the Promontory culture deposits of Cave 1.

Given the timing of the Promontory occupation, and the presence of Great Salt Lake Gray pottery throughout the deposits, instances of Fremont basketry or pottery would not be expected to persist from a single, earlier introduction. It is more likely that individuals—probably women—with detailed knowledge of Fremont basketry and ceramic manufacture joined the Cave 1 population, or that the Cave 1 inhabitants had some interaction with terminal Fremont populations where this knowledge persisted, or both.

This is highly significant given the abundance of gaming pieces in Cave 1: the focus of gaming activities there likely involved interactions between an intrusive, proto-Apachean population and a terminal Fremont population. Gaming within Cave 1 might also have involved an internally differentiated population in which terminal Fremont population members had joined an emerging Apachean society. This last possibility is consistent with genetic evidence for Apachean populations, which have clear mtDNA and Y-chromosome signals for northern origin but also have evidence of extensive intermarriage with southern populations (Achilli et al. 2013; Malhi 2012; Monroe et al. 2013).

Chronology

In previous work with Steward's Promontory Cave 1 and 2 perishable collections, we found that 48 calibrated AMS radiocarbon dates, when Bayesian modeled, yielded a very tight time range for the Promontory culture occupations. The caves were intensively occupied during this era for effectively one or two human generations from ca. AD 1250–90 (Ives et al. 2014)—decades or even centuries earlier than other related occupations (Janetski and Smith 2007; Simms and Heath 1990; G. Smith 2004; differences between early and late manifestations of the Promontory culture are discussed by Johansson 2013:121). We

have since acquired additional AMS age determinations from controlled stratigraphic excavations in Cave 1, bringing the total number of dates to 95 (ranging from 662–886 ^{14}C yr BP, with median calendric dates extending from AD 1220–1321). Bayesian modeling of all AMS dates from Cave 1 affirms the temporal trends noted in our earlier analysis: there is a 95.4 percent probability that the Promontory Cave 1 occupation had a duration of 25–42 calendar years, between AD 1247 and AD 1291 (Figure 9.2). Bayesian modeling of the Cave 1 dates and the Chournos Springs dates also yielded results consistent with the occasional presence of Fremont material culture in Cave 1. Figure 9.2 shows temporal overlap between the later Fremont occupation of Chournos Springs and the Cave 1 occupation.

Steward suspected that a northern bison-hunting group of proto-Apachean affiliation arrived in the Promontory Caves just prior to the end of the Fremont era and began assimilating Great Basin traits (Ives 1990, 2003; Steward 1937). Sapir used linguistic evidence to project that the southward migration of Apachean speakers ought to have initially involved southern Subarctic and pedestrian Plains bison-hunting lifestyles and material culture, followed by a period in which more generalized southerly (non-Puebloan) traits were assimilated (Sapir 1936). Then followed a period of intensive interaction with southwestern (principally Puebloan) societies. In our earlier work, we found that there was a tendency for ages of perishable artifacts uncharacteristic of the eastern Great Basin and characteristic of the north (such as moccasins) to precede objects characteristic of the eastern Great Basin (such as basketry typical of Fremont assemblages; Ives 2014; Ives et al. 2014). This trend is upheld with Bayesian modeling of our expanded sample and is consistent with both Steward's and Sapir's perspectives.

The Fremont decline was underway well before the Promontory peoples' arrival. Coltrain and Leavitt (2002:479) wrote, "At AD 1150, the onset of drought or a shift in the seasonality of moisture either eliminated farming altogether or adversely affected crop yields disrupting social networks to the extent that farming was abandoned." Numerous authors have identified

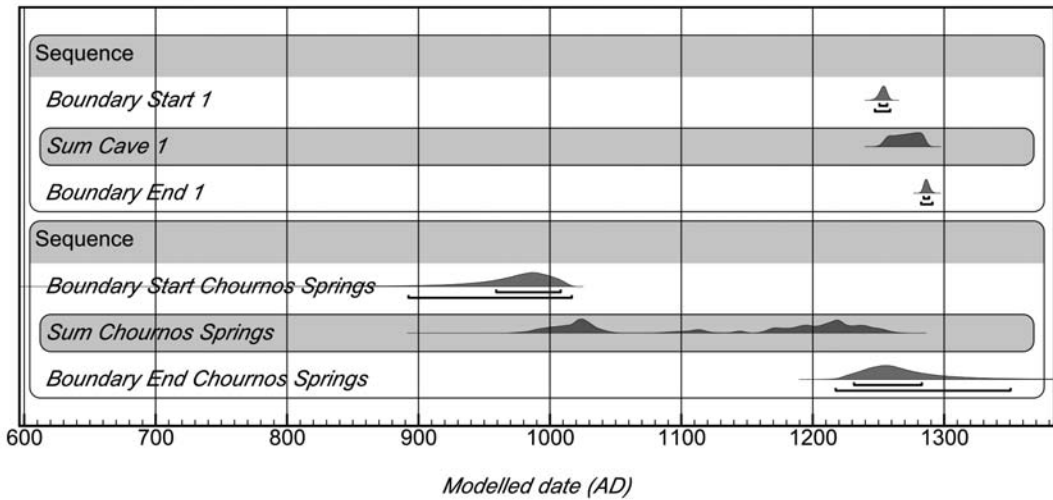


FIGURE 9.2. Bayesian modeled ^{14}C AMS dates from Promontory Cave 1 and Chourmos Springs, Utah. (Model courtesy Christopher Bronk Ramsey using OxCal v4.2.4 [Bronk Ramsey 2013] with the IntCal13 atmospheric curve [Reimer et al. 2013]).

a shift at Fremont sites to a dependence on wild food after this time (Allison et al. 2000; Cannon and Creer 2011; Coltrain and Stafford 1999; Janetski 1994; Janetski and Smith 2007; Simms and Heath 1990). Further drought in the late thirteenth century coincided with the end of Fremont material culture (Benson et al. 2007). Bison populations in the Great Salt Lake area, perhaps always highly variable, declined significantly at about 600 ^{14}C yr BP (Grayson 2006; Lupu and Schmitt 1997). Given fluctuations in atmospheric ^{14}C levels at this time, this could correspond with several periods between 1304 and 1403 cal yr AD (Bronk Ramsey 2013; Reimer et al. 2013). Occurring probably within a century of the peak occupation at Promontory Cave 1, this change is relevant to subsistence and residential occupation patterns seen at later Promontory-affiliated occupations (Forsyth 1986; Janetski 1994; Janetski and Smith 2007; Simms and Heath 1990; cf. Arkush 2014 on the Snake River Plain).

Promontory Cave 1: Space, Demography, and Group Composition

Roughly 350–400 m² of Cave 1 were suitably flat for human use. Because the dense, perishable layer connected with the Promontory culture occupation is readily traced, it is clear that only 200–250 m² was actually used for residential

space (Figures 9.3 and 9.4). This was comprised of a main gallery in the southwest part of the cave, where the ceiling is highest (up to 15.25 m [50 ft]). Here, Steward encountered a large hearth, apparently used throughout the entire Promontory culture occupation. This southwestern area we imagine to be the main focus of social activities in Cave 1: it is well within the drip line, allows a spectacular view to the south, and would comfortably accommodate the hearth along with domestic occupation. The back wall of Cave 1 features some flat areas with late Fremont rock art, but whose deposits appear sterile. In the northeast corner of the cave, behind extensive Late Pleistocene rockfall, a second relatively flat area also has rich Promontory culture deposits. This provided a smaller, secondary locus at which a similar suite of residential activities took place.

Where there are organic-rich Promontory culture deposits, they are (as Steward indicated) roughly 60 cm (2 ft) thick. The exception concerns the front of Cave 1, just beyond Steward's main excavation area. There, our sondage encountered midden-like Promontory deposits nearly two m (6.5 ft) thick. Cane dice were common at this locus. For living purposes, Cave 1 could not house more than 80–100 persons at the very most, with an occupant population of

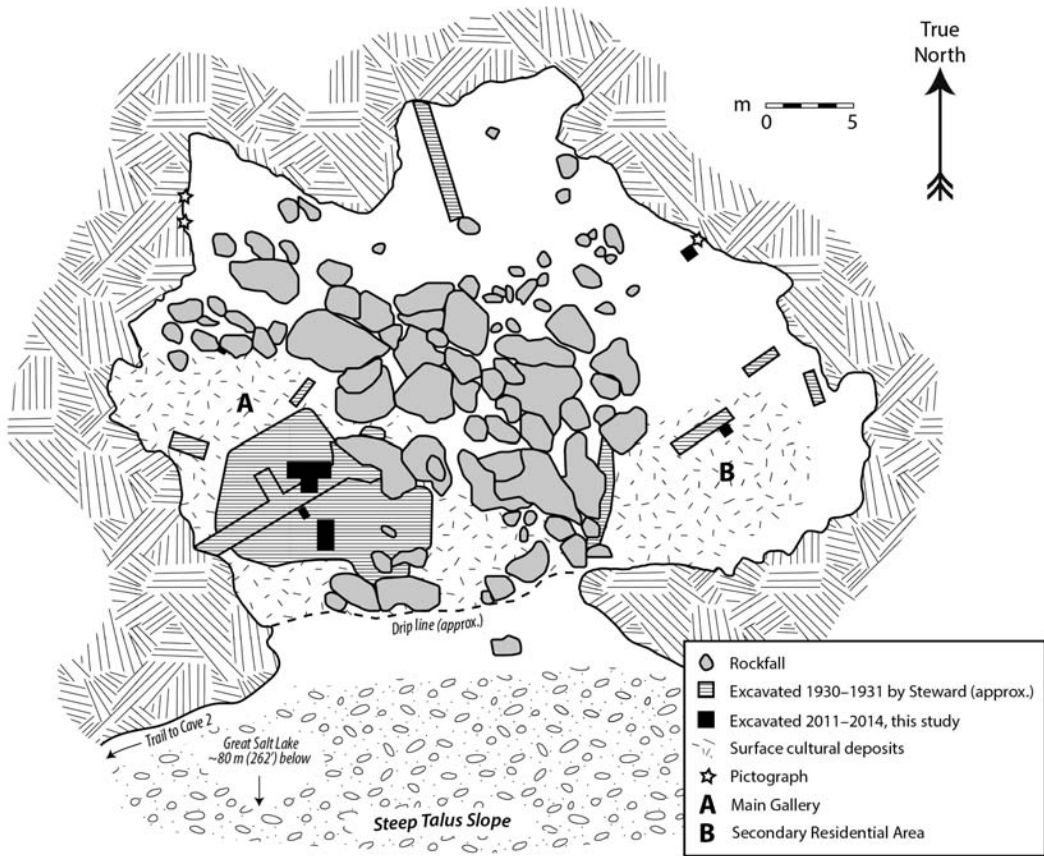


FIGURE 9.3. Plan of Promontory Cave 1 showing areas excavated by Julian Steward (1937, redrawn from Figure 1) and University of Alberta/Brigham Young University. Steward's excavation areas, since trampled and infilled, are approximations only. (University of Alberta/Brigham Young University map data contributed by Jennifer Hallson, Courtney Lakevold, and Scott Ure. Drawn by Gabriel M. Yanicki.)

30–50 persons more likely. In terms of hunter-gatherer demographics, Cave 1 would have been inhabited by a microband or local group (Binford 2001; Ives 1990, 1998). The large, open space toward the front of Cave 1 could, however, allow for perhaps 100 people to be present for briefer periods of time, as might occur with gaming activities.

The abundant moccasins allow further insights into group composition and demographic dynamics. Billinger and Ives (2015) gauged foot size from moccasin length and were able to derive stature and age estimates for the sample of whole or relatively whole moccasins. More than 80 percent of the Promontory moccasins came

from children and subadults, with adult men and women or adolescent males also present. Bearing in mind that we are not speaking of mortuary data, populations with so many youthful members are generally considered to be growing.

The Promontory Gaming Inventory

Although gaming materials are commonly reported at sites in the Great Basin and Southwest, Promontory Cave 1 stands out both for the diversity and quantity of materials recovered. Stewart Culin's (1907) anthology of Native American games remains an excellent guide for identifying objects used in games, allowing cross-cultural comparisons of gaming traditions.



FIGURE 9.4. The large, basin-shaped area Julian Steward excavated in 1930–1931. He expanded an east–west trending trench, where Promontory culture deposits were roughly 60 cm (2 in) thick (being uncovered in our 2014 excavations, in the center of the photograph), into a larger, partially excavated area. The 2 × 1 m (6.5 × 3.25 ft) sondage in the left foreground revealed Promontory culture midden deposits nearly 2 m (6.5 ft.) thick. These likely resulted from hearth-cleaning episodes in the main gallery area, where many gaming activities in Cave 1 took place. (Photograph by John W. Ives.)

The variability of game forms has implications for how gameplay knowledge was transmitted between groups. Table 9.1 lists the gaming materials from Steward’s Natural History Museum of Utah (NHMU) collections and our own excavations, together with a summary of similar forms known from ethnographic, historical, and archaeological accounts.

Bone Gaming Pieces

(Hand Game Billets and Dice)

Steward (1937:25–26) identified eight bone objects as hand game billets or dice. The hand game is a team game with many variants. Usually a pair of billets, one decorated and one undecorated, are concealed in the hands of one contestant, and the captain of the opposing team must guess which hand holds a specified billet. The hand game was perhaps the most popular and widely known game in western North America

(Culin 1907:270–328; Hodge 1907:485), a claim supported by its incorporation into at least one revitalization movement (Kehoe 1996; Lesser 1933). It has remained popular throughout the modern era (Brunton 1974, 1998; Helm and Lurie 1966; Merriam 1955) and continues in intertribal gaming tournaments today (Art Calling Last, cited in Yanicki 2014:273–75; CBC News 2014; Shoshone-Bannock Tribes 2014; Tsong 2010).

In the broadest sense of the hand game, virtually any object can be concealed in the hand, as among the Deh Cho, a Subarctic Dene people, who used “a bit of wood, a button, or any other small thing” (Hearne 1795:335). Culin (1907) also mentions examples of bullets, rocks, strings of beads, and decorated shells. It may not be possible to say whether such opportunistically available items were used in games. However, across the game’s geographic range, the objects hidden in the hand game were

TABLE 9.1. Summary of Promontory gaming inventory and similar types from ethnographic, historical, and archaeological records.

Description	Qty.	Source	Similar forms*	References
Ball				
Juniper bark	1	Cave 3	<i>Hueco Caves, Mesa Verde, Navajo, southeastern Utah</i>	Cosgrove 1947:119; Matthews 1889a:92; C. Osborne 2004:466–67.
Dart				
Wood/feather	1	Cave 1	<i>Aztec Ruin, Mesa Verde, San Juan River area, Paiute, Zuni</i>	Culin 1907:425–28, 495–99; Morris 1919:60, 64; C. Osborne 2004:466; Voth 1903:23, 42.
Dice				
Bone—oval	9	Cave 1	<i>Ancient Puebloan, Fremont</i>	Culin 1907:48; Guernsey and Kidder 1921:108; M. Hall 2008, 2009; Janetski, this volume.
Bone—elongate	4	Cave 1	Hidatsa, Piikáni	Culin 1907:57–58, 84, 186; Wissler 1911.
Cane	177	Cave 1	<i>Daugherty Cave, Hogup Cave, Hopi, Wilson Butte Cave</i>	Aikens 1970:170; Culin 1907:160–67, 191, 210–20; Frison 1968:278; Gruhn 1961.
Wood	2	Cave 1	<i>Grand Gulch, Kiowa, Navajo, San Carlos Apache, White Mountain Apache, Zuni</i>	Culin 1907:48–49, 86–96, 124–32.
Beaver tooth	1	Cave 1	Klallam, Klamath, Kwakwaka'wakw, Kwih-dich-chuh-ahtx, Nisqually, Nlaka'pamux, Nuw-chah-nulth, Nuxalk, Quinault, Secwepemc, Snohomish, Songhees, Tla-o-qui-aht, Tsilhqot'in, Twana	Culin 1907:155–58, 196–98; Lane 1981:402–03.
Hand game billet				
Bone	1	Cave 2	Dakota, Mesa Grande Kumeyaay, Pawnee	Culin 1907:274, 317, 325.
Hoops				
Netted/wood	2	Cave 1	<i>Franktown Cave, Mesa Verde, Southern Paiute</i>	Culin 1907:498; Gilmore 2005:6; C. Osborne 2004:464–65.
Juniper bark–wrapped	11	Cave 1	<i>Cowboy Cave, Hogup Cave, Hopi, Umatilla</i>	Aikens 1970:121; Culin 1907:493, 495–97; Jennings 1980:72.
Incised sticks				
Wood	2	Cave 1	Hupa, Navajo, Sekani	Culin 1907:227, 234, 236; Matthews 1889b:2–3.

* Italicized names denote archaeological collections; noted forms are otherwise from ethnographic and historical observations.

often more elaborate, with cylindrical billets of bone, sometimes polished and decorated with a painted band or wrapping extending around the object's circumference being most common. Such decoration would presumably be necessary so as to be identifiable from any angle when revealed and to deter cheating during a game that otherwise emphasizes skill in sleight of hand. Only one item from Steward's collections comes close to matching this description, a deer rib segment with rows of small, blackened notches along three longitudinal margins (Figure 9.5a). Although this does not match the most common hand game billet style, notched billets are occasionally described—for instance, among the Pawnee, Dakota, and Mesa Grande Kumeyaay (Culin 1907:274, 317, 325).

Nine other bone objects, including seven identified by Steward (Figure 9.5, b–e), fit in a class of what are frequently termed in the Fremont area “gaming pieces” (Gunnerson 1969; Judd 1926; Talbot et al. 2000; Wormington 1955; summarized by M. Hall 2008, 2009:31). But they can readily be recognized as dice: two-sided objects with one convex, often-decorated face and one flat or incurving, undecorated face (see Leonard, Chapter 2, this volume, and Janetski, Chapter 8, this volume). Instances of flattened oval hand game billets are nevertheless known, including among the Piikáni (Culin 1907:271).

Bone dice fashioned from cut, polished, and often decorated longbone segments are ubiquitous throughout the Fremont culture area; these are often perforated with a central hole (M. Hall 2008, 2009; Janetski, Chapter 8, this volume). Like Fremont bone dice, two of the Promontory specimens are decorated on the convex, cortical face, one with several clusters of shallowly incised, ochre-stained transverse lines, and the other with an incised line at one end. However, the bone dice from the Promontory Caves differ from the Fremont pattern in several ways. Most ($n = 9$) are irregularly oval rather than rectangular in shape, and little care seems to have been put into their manufacture beyond some smoothing and shaping of the margins (Figure 9.5, b–d). Oval dice are known from Ancestral

Puebloan collections (Culin 1907:48; Guernsey and Kidder 1921:108), but instead of having a smoothed, flat, or incurving interior face, the Promontory dice all exhibit cancellous bone tissue and appear to be made from split ribs rather than longbones.

Four additional specimens considered here are elongate (9–10 cm [3.5–4 in]) and curve slightly upward in longitudinal profile (Figure 9.5e). While similar in length to bone dice types known on the Plains (Culin 1907:57–58, 84, 186; Wissler 1911), their shape also matches an artifact type known as “spatulas” from that area (Lehmer 1971:88), of which porcupine quill–flattening is the most commonly proposed use (Neuman 1960:101–02; Orchard 1916:9; cf. Wedel 1955; Wheeler 1956).

Cane Dice

Twenty-four split segments of cane (*Phragmites australis*), cut lengthwise in half and squared at the end, decorated with irregular numbers of diagonally or laterally incised grooves on their curved exterior faces, were identified by Steward (1937:Figure 6) as dice, based on numerous ethnographic examples (Culin 1907:160–65, 167, 191, 210–20). Since 2011, we have recovered 153 more from all parts of Cave 1, 86 from a controlled 1×2 m excavation area (Figure 9.5f–aa). Most of the dice ($n = 52$) were concentrated in the upper ~50 cm (19.7 in) of deposits, corresponding with the latest stages of occupation. The remainder ($n = 34$) were found in the next ~170 cm (66.9 in) of deposits, occurring in clusters of one, two, or three in nearly every stratum down to the earliest stages of the Promontory period of occupation. If the observed density in the 2 m^2 (6.5 ft^2) excavation area is reflected in the remaining unexcavated, liveable portions of the cave (dozens of cubic meters of deposit), then even a conservative estimate would put the total number of cane dice in Cave 1 well into the thousands (Jennifer Hallson, personal communication 2014).

No other archaeological site matches the frequency with which cane dice are observed in Cave 1. A single cane die, 2.2 cm (0.9 in) in length and “scribed with thin transverse lines

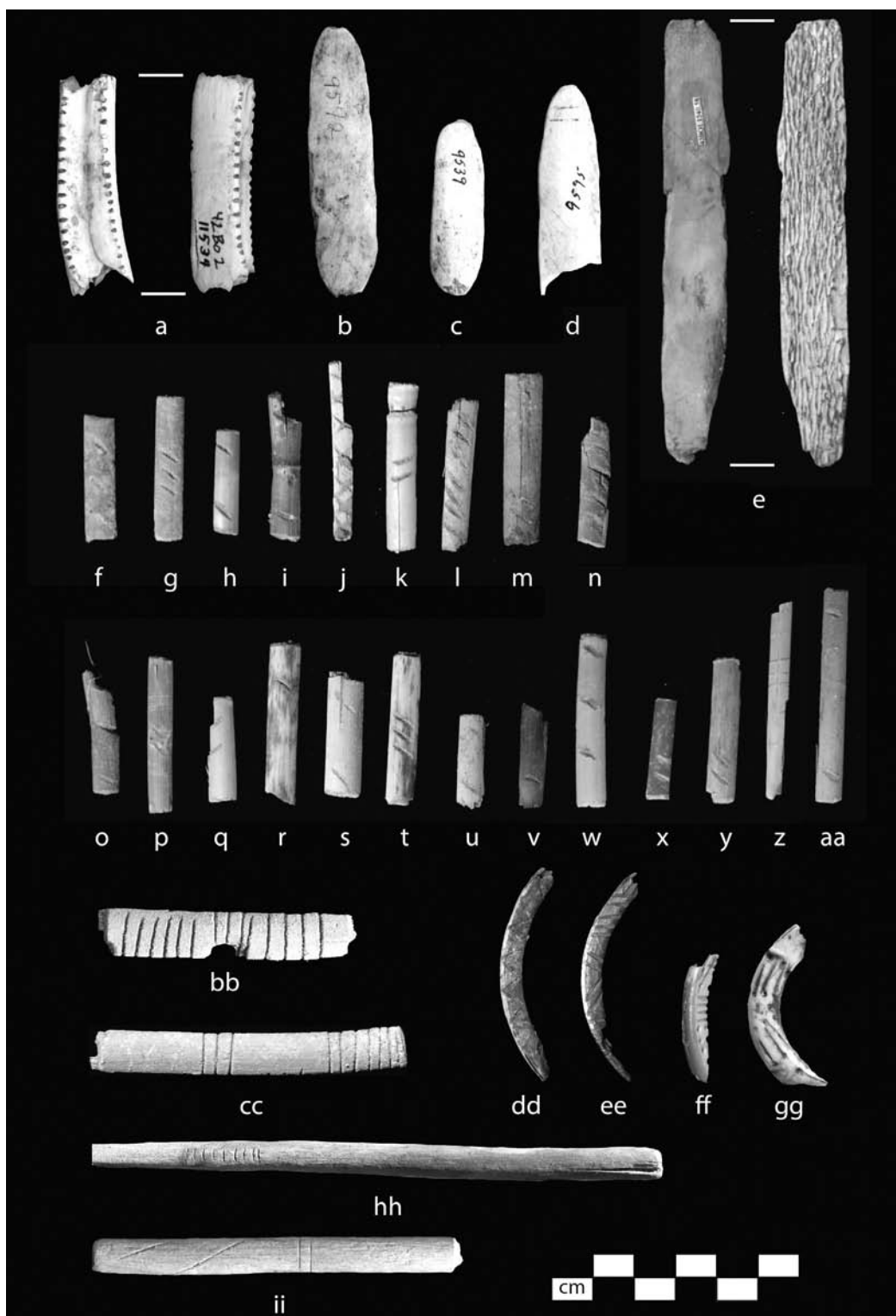


FIGURE 9.5. Promontory-affiliated gaming pieces of bone, cane, wood, and tooth likely used in the hand game (a), dice games (b–gg), and stick games (hh–ii). Sources: a–d, gg courtesy Natural History Museum of Utah, Salt Lake City, photographs by John W. Ives; dd–ff courtesy John Hutchings Museum of Natural History, Lehi, UT, photograph by Lindsay Johansson; all others from 2011–2014 excavations in Promontory Cave 1, photographs by John W. Ives.

and lines of dots” was collected from Hogup Cave (Aikens 1970:Figure 121j). This decoration pattern differs somewhat from the majority of the Promontory specimens. Three small cane dice were found at Daugherty Cave, in the Big Horn Basin of north-central Wyoming (Frison 1968:Figure 7). At Wilson Butte Cave, on the Snake River Plain in Idaho, a single cane die was found with pyrographically incised diagonal lines (Gruhn 1961:96). The diagonal orientation matches most Promontory cane dice, although blackening along the edges of lines is infrequent on the Promontory dice, suggesting that a heated edge was only occasionally used. All the specimens reported by Steward were less than 7.5 cm (3 in) in length, and many were less than 2.5 cm (1 in). The cane dice we recovered, as well as those from Hogup, Wilson Butte, and Daugherty caves, fall in this size range.

Culin described several cane dice games. Dice collected from the Paiute in southern Utah measure between about 15 cm and 35.5 cm (5.9–14 in) in length (Culin 1907:Figures 204 and 205). Zuni cane dice, meanwhile, are also long—typically 15 cm (5.9 in) or more—decorated with lines and rows of dots that are cut, scratched, or marked with ink. Another feature of illustrated Zuni cane dice is that one end of each die is always a constricted joint segment of the stalk (Culin 1907:210–20), a feature that appears somewhat indiscriminately in the Promontory specimens. Hopi dice are small—7.5–10 cm (3–4 in)—and include both diagonally incised lines exactly as seen at Cave 1 (Culin 1907:Figure 195) and rows of dots as at Hogup Cave (Culin 1907:Figure 190). In both cases, Culin noted that the decorations were burned rather than incised.

Cane dice are used in sets, with a distributional gradient of eight dice to a set east of the Mississippi, four on the Plains and in the far West, and three in the Southwest, and with the decoration on each die often varying within sets (DeBoer 2001:223). Cane dice lacking any incised decoration are exceedingly rare in the Promontory collection ($n=1$), while two are cross-hatched (e.g., Figure 9.5j). The remainder have between one and 11 parallel incised lines, with two being the mode ($n=56$) and three the next most common ($n=36$; Table 9.2). Combi-

TABLE 9.2. Frequency of incised marks on Promontory cane dice.

No. of Lines	Count
0	1
1	17
2	56
3	36
4	19
5	9
6	3
7	3
8	2
9	1
10	1
11	1
Cross-hatched	2

nations of one paired pattern and two singletons, such as in the split-cane dice game of the Lemhi Shoshone, yield more distinct combinations than sets of eight identical dice, which DeBoer (2001: 223) suggested can help “maintain an interesting level of scoring complexity.” The overrepresentation of dice with two or three incised lines in the Promontory assemblage suggests that some combination of paired and singleton dice may have been in play.

While the Promontory dice are decidedly similar to some Hopi dice, the Hopi cane dice game Culin described is recognizable as a variant of *patolli*, or quince, in which dice throws determine the advancement of tokens on a playing board (DeBoer 2001:223–24; Walden and Voorhies, Chapter 12, this volume; Evans Chapter 15, this volume). No playing board like the incised stone slabs of the Hopi variant has been found in the caves, but gameboards could also be painted on buffalo robes, as in Zuni and Kiowa versions, and rings of small stones were used to keep score in White Mountain and Chiricahua Apache, Keres, and Zuni variants (Culin 1907; Seymour, Chapter 10, this volume). In Plains variants, dice were commonly tossed in a basket (Jolie 2006), while Navajo accounts describe bouncing them against a flat stone (Matthews 1889a:91; Wetherill 1997:157). As DeBoer (2001) has noted, dice games across North America were most commonly a women’s game, although

the Hopi and Zuni variants are rare examples of those played by men.

Stick Dice

Two split-stick dice also were found in the recent excavations, both of box elder (*Acer negundo*) or Rocky Mountain maple (*Acer glabrum*; Figure 9.5bb–cc; Puseman 2014). One of them is ochre stained and split in half with what appears to be a centrally drilled hole, evocative of the hole in many Fremont bone dice. Parallel-incised lines run transversely across the exterior surfaces of each. Culin suggests that stick and cane dice were interchangeable: a set of four split-stick dice was found with a set of nine cane dice together with wooden cups at Grand Gulch, Utah. A third set from this locale includes both cane dice and stick dice that “appear to be copies of canes” (Culin 1907:48–49). Among the Zuni, Culin remarked, “Many of the wooden dice, which the Zuni call ‘wood canes,’ bear an incised mark on the inner side, corresponding to the inner concave side of the canes.” In addition to cane or stick dice being preferred among modern Puebloan groups, small, similarly decorated dice made of split sticks have been reported among numerous other peoples, including Southern Dene groups (Table 9.1).

A Beaver-Tooth Die

A solitary beaver tooth recovered by Steward (1937:26; Figure 9.5gg), decorated on one side and “wrapped with sinew as if for suspension as a pendant” (this wrapping has since been lost), is identical to beaver-tooth dice used by peoples of the British Columbia Plateau, the lower Columbia River, and the Northwest Coast (Culin 1907:155–58, 196–98; Lane 1981:402–03). In addition to beaver, similar dice were made from muskrat, porcupine, and woodchuck teeth (Castile 1985:210; Culin 1907:137–38; Gatschet 1890:80–81; Howe 1968:60). Used in sets of four (the upper and lower incisors), they were typically dropped against a hard object such as a grinding stone (Klamath, in Culin 1907:137–38; Dorsey 1901:26; Gatschet 1890:81) or onto a robe or blanket (Nlaka’pamux, in Teit 1900:272).

The decoration on the Promontory beaver-

tooth die is unusual, consisting of elongated teardrop shapes. More commonly, “[O]ne pair of dice... bore punctate circles, a design executed with a bipointed stone engraver used in a compass fashion, while the second pair of the foursome was marked with incised chevrons or diamonds” (DeBoer 2001:225). This patterning bore significance: circles and chevrons were, respectively, patterns often associated with women and men (Spier and Sapir 1930:267; cf. D. Osborne 1957:170–72), while the paired larger upper and smaller lower incisors were themselves also distinguished as “male” and “female” by the Klamath (Gatschet 1890:81). While the solitary Promontory die does not clearly demonstrate this opposition, DeBoer noted a variant in which three “female” circle-patterned dice were used with a single “male” sinew-wrapped die (DeBoer 2001:225; Gunther 1927:276; cf. Eells 1877:90; G. Smith 1940:217–18; Teit 1900:272). Here, we see a very clear precedent for the wrapping on the Promontory specimen, which, despite Steward’s supposition, was not tied for use as a pendant. “Maleness” of the die does not relate to men playing the beaver-tooth dice game. The sources examined by Culin and DeBoer are consistent in its being played exclusively by women.

While beaver-tooth dice are not known from excavated Fremont sites, the John Hutchings Museum of Natural History in Lehi, Utah, contains five very similar objects made of porcupine and beaver teeth (Lindsay Johansson, personal communication 2012; Figure 9.5dd–ff). These specimens, donated in 1956, are of unknown provenience, but the area surrounding Utah Lake hosts several Promontory-affiliated sites dating to the fourteenth and fifteenth centuries AD (Janetski and Smith 2007). These dice may represent a previously undescribed artifact class diagnostic of Promontory culture occupation.

Stick Game

Two cylindrical decorated sticks found in Cave 1 may have been used in the stick game, another common guessing game in which contestants either tried to guess which of two bundles contained an odd number of sticks or which bundle contained a specially marked stick (Culin 1907:

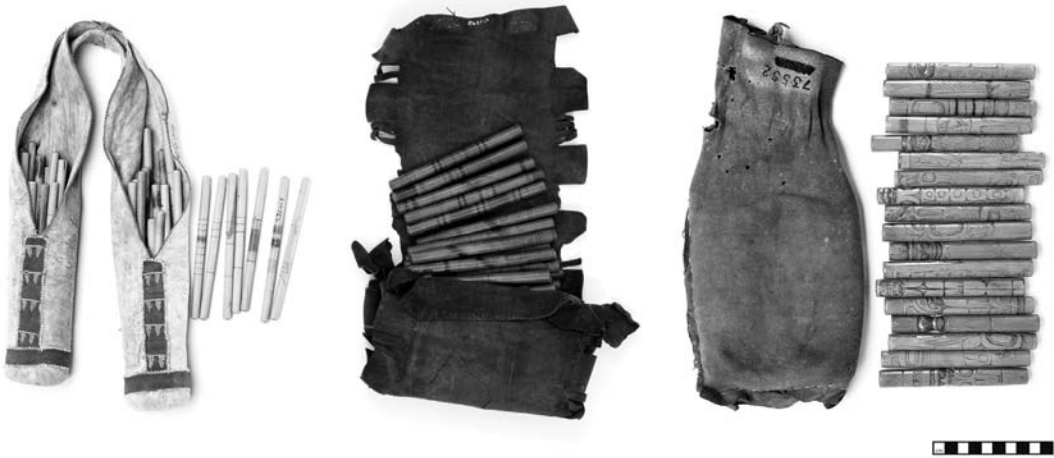


FIGURE 9.6. Subarctic and Northwest Coast gambling sticks and pouches. *Left*: Tahltan, ca. 1904; *middle*: Tahltan or Haida, ca. 1865–1900; *right*: Haida, ca. 1884. Sources: *left*: National Museum of Natural History #E230019; *middle*: McCord Museum of Canadian History #M4201.0-23; *right*: National Museum of Natural History #E073552.

227). One stick is 13 cm (5.1 in) long (Figure 9.5hh) and features a number of short parallel notches midway down its length, a pattern that could easily be concealed when the stick was grasped with others. Similar specimens are known from the Sekani (Culin 1907:236), a Northern Dene people, and the Hupa of Northern California (Culin 1907:234). This could also be a tallying stick, a common aspect of many gambling games (Janetski, Chapter 8, this volume). While harder to distinguish individually, two notched, stick-like counters did appear in the bundles used to keep score in the Navajo moccasin game (Matthews 1889b:2–3).

The other specimen features two incised parallel lines around its circumference and a single line spiraling around one end (Figure 9.5ii). This decoration appears in Northwest Coast and Subarctic stick game specimens, played by obscuring a trump stick and others within shredded cedar bark, with the opponent striving to find the trump stick among others in the bark (Figure 9.6). Shredded juniper bark is, of course, abundant in Cave 1. The piece may also be a decorated hand game billet. Incised bands around the center of the shaft are a very common motif, and the spiral decoration at the end is a very close match for some Klamath pieces (Culin 1907:292;

Dorsey 1901:22; note, however, that these pieces were bone).

Netted/Wood Hoops

A bent sapling hoop, 15 cm (5.9 in) in diameter and tied with the remains of a mesh of sinew netting, was likely used in a hoop-and-arrow game (Figure 9.7a; Culin 1907:441–48, 498; Steward 1937:Plate 6). The object is unique in relation to other archaeological sites in the Great Salt Lake area, though netted hoops of this type are distributed through much of the Plains (Yanicki, Chapter 7, this volume, Figure 7.7). Steward (1937:24) noted a similarity between them and those used in the ethnographically observed Southern Paiute version of the hoop-and-pole game (Culin 1907:Figure 653).

One other prehistoric netted gaming hoop is known from Franktown Cave, on the eastern slopes of the Rocky Mountains in Douglas County, Colorado (Gilmore 2005). Franktown Cave is of interest for a number of reasons, including the presence of a Promontory-style moccasin (Ives 2014; Ives et al. 2014) and Dismal River Grayware, a ceramic style from eastern Colorado and elsewhere on the Central Plains with a noted similarity to Promontory Ware (Aikens 1966; Gilmore and Larmore 2012;



FIGURE 9.7. Sinew-netted hoop and feathered dart (a); juniper bark-wrapped hoop (b); juniper bark ball (c); and typical Promontory-style moccasin (d). (Items a–c courtesy Natural History Museum of Utah, Salt Lake City; photographs by John W. Ives.)

Gunnerson 1956, 1960; Hill and Metcalf 1942; Wedel 1959:597). The Franktown hoop, remarkably similar in appearance to the Promontory specimen except for its smaller size (only 9 cm [3.5 in] in diameter), has been dated to 798 ± 30 BP (1186–1276 cal yr AD; Gilmore 2005:Figure 19). This approaches contemporaneity with the Promontory hoop, which dates to 733 ± 24 BP (1247–94 cal yr AD; OxA-23882).

Two-thirds of a second wood hoop was recovered from Cave 1 in 2014. The sinew ties closing the two ends of the hoop are similar to the netted specimen. Similar lashed twig hoops have been recovered from numerous southwestern sites, including Mesa Verde (C. Osborne 2004: 464–65), and simple hoops of various diameters are ubiquitous in Culin’s collected accounts of the hoop-and-pole game. These also often form

the inner core of more complex bark- or other fiber-wrapped gaming hoops.

Bark-Wrapped Hoops

Also found in Cave 1 were “a number of small rings of juniper bark from *Juniperus utahensis*... which closely resemble the rings commonly used throughout Puebloan cultures of the Southwest as pot rests. They vary from 2.5 in [6.5 cm] to 4.25 in [11 cm] outside diameter, and are bound generally with juniper bark but occasionally with cord” (Steward 1937:Figure 9.7b). A total of 11 such specimens have now been recovered. Similar hoops are known from archaeological contexts in the broader region. These are typically wrapped bark or reed rings, such as occur at Hogup Cave (Aikens 1970:Figure 122). Six specimens, 3–11 cm (1.2–4.3 in) in diameter, were

also found at Cowboy Cave in southeast Utah (Jennings 1980:72).

Fiber-wrapped rings have sometimes been interpreted as hoops for the hoop-and-dart game, based on comparison to ethnological collections (Gruhn 1961:96; Jennings 1980:72). Culin described a larger (28 cm [11 in] in diameter) bark-wrapped stick hoop from the Umatilla of Oregon and a number of similarly wrapped corn husk rings from the Hopi, ranging in diameter from 6–18 cm (2.4–7.1 in; Culin 1907:Figures 643, 648, 650, and 651). At the smaller end of this scale, these match some of the Promontory and Cowboy Cave specimens. The archaeologically recovered hoops are otherwise far smaller than any that Culin described. Steward was of the opinion that these were pot rests. Head-rings, used to stabilize loads when carrying them on the head, are also known from Ancestral Puebloan sites such as Mesa Verde (C. Osborne 2004). Osborne noted that jar rests, used to stabilize heavy pots after removing them from a fire, are typically asymmetrically flattened on one side and bear sooty residue on the opposite side, while head rings are asymmetrically constructed (C. Osborne 2004:302, 354–56, 465). None of the Promontory hoops display sooty residue or exhibit asymmetry and therefore appear consistent with gaming rings.

Feathered Darts

An unspecified number of feathered darts found by Steward in Cave 1 were likely used in the hoop-and-pole game (Steward 1937:Plate 6). One such dart in the NHMU collections is 17.9 cm (7 in) long. Half its length is a blunt-nosed greasewood (*Sarcobatus* spp.) stick, roughly lashed at one end with sinew to a feather of equal length (Figure 9.7a).

Though a wide variety of projectiles are reported in variants of the hoop-and-dart game, stick-and-feather darts have a specific distribution. Very similar examples consisting of “pins of hard wood about 4 inches [10.2 cm] in length, to which single feathers, twisted somewhat spirally, are bound with fiber” are illustrated by Culin from the Paiute (Culin 1907:498–99). The others come from the Puebloan area, where darts con-

structed by tying one or more feathers to the end of a pointed stick, sometimes thrust in turn through a corn cob, were used in a Hopi ceremonial game with a corn husk-wrapped hoop and were included in Zuni War God offerings together with a netted hoop (Culin 1907:425–28, 495–97; Voth 1903:23, 42). Stick-and-feather and stick-and-corn cob specimens are also known from archaeological collections from a number of Ancestral Puebloan sites (Culin 1907:428; Morris 1919:60, 64; C. Osborne 2004:466).

A Juniper Bark Ball

Steward found a juniper bark ball, 3.1 cm (1.2 in) in diameter, in Promontory Cave 3 (1937:21, 41; Figure 9.7c). Similar balls made of yucca fiber are known from Mesa Verde, southeastern Utah (C. Osborne 2004:466–67), and the Hueco Caves (Cosgrove 1947:Figure 112).

While the purpose of such balls would undoubtedly be for play, their precise function is unclear: balls could figure in a large number of games (Culin 1907). Matthews (1889a:92) described a Navajo game intended to see who could kick a ball beyond a marked distance. A ball is also one of the objects that could be used in the moccasin game, in which an object was concealed from an opposing team within one of several moccasins. While the moccasin game is known among Algonquian, Siouan, and Apachean speakers (Culin 1907), the Apachean accounts stand out from those of other societies: in no other case is the oral tradition motif so strongly cast, with a consistent theme. In Navajo as well as Western, Jicarilla, and Chiricahua Apache accounts, for instance, the moccasin game arose as a contest between creatures vying to see whether night or day would prevail (Culin 1907:335–48; Goodwin 1994:148–50; Matthews 1889b; Opler 1994 [1942]:23–27). A game that seesawed back and forth through the night goes unresolved, leaving the world with both night and day. The moccasin game must not be played in daylight, and should a game run late into the dawn, special precautions must be taken to darken the lodge in which players remain. Matthews wrote that there were literally hundreds of moccasin game songs known to experienced

participants. In these respects, the Apachean versions of the moccasin game were strongly integrated in a broader social context that seems to go beyond that of many other societies.

Neither Steward's nor our excavations yielded aligned, partially buried moccasins, as would be characteristic of this game. Yet, we cannot help but observe that the raw materials for this game—discarded moccasins—were in abundant supply. As with ceramics, *Northern* Dene peoples do not have the moccasin version of the hiding game. But somewhere on their southward journey, proto-Apachean ancestors shared in developing rich oral traditions surrounding it.

Discussion

To the list of culture traits that define the Promontory people (i.e., Janetski 1994; Steward 1937), it should be added that they loved to play games—the Promontory gaming inventory is both abundant and diverse. It is important to remember, however, that gaming was, and is, more than mere recreation. Stewart Culin's work showed that the games of Native American peoples were inextricably linked to ceremonial and social life, figuring in everything from origin stories to healing magic and augury. These games were also almost universally gambled upon (DeBoer 2001; Flannery and Cooper 1946; Gabriel 1996) and hence served as a mechanism in prehistoric trade (DeBoer 2001; Janetski 2002).

People's choice of gambling partners was, in many ways, constrained. While amicable in-group contests for relatively low stakes and prestige were common, out-group, exogenous gambling affines—typically at the intertribal level—were preferred in gambling for higher stakes, where wagers included not just everything one owned but one's family or self as debt slaves (Yanicki, Chapter 7, this volume; see also Cameron and Johansson, Chapter 16, this volume).

A Fluency in Games

If people were gambling at the intergroup level, a number of corollary observations are expected. Games represent a social interaction that must be mutually intelligible. Thus, the rules by which

the games were played and trade was conducted had to be understood and accepted by both parties. Archaeological evidence of gaming can be conceived, then, as a surrogate for language: one can achieve a sense of who was able to communicate with whom through a shared fluency in games. Further, the geographic distributions of games will show clusters of commonalities, reflecting populations that participated in shared gaming traditions as they learned them from each other. Molly Hall (2008) noted that differences in the decoration of Fremont bone dice can be seen at subregional levels, which suggests highly localized networks of trade and intersocietal contact. Other clusters can be seen on larger scales—for instance, with the distribution of different styles of dice games (DeBoer 2001:Figure 2). Similar regional variants have been noted for the hoop-and-pole game (Yanicki, Chapter 7, this volume).

If a similar principle is applied to the gaming material from the Promontory Caves—mapping out ethnographically attested variants of games and archaeological sites where similar gaming materials have been found—two trends are apparent (Figure 9.8). First, there is surprisingly little crossover between the gaming inventory of the Promontory people and their Fremont contemporaries. Even at well-preserved Fremont-affiliated sites, items like the split-cane dice that are so abundant at Promontory Cave 1 are absent. Hogup Cave, where a single cane die was found (Aikens 1970:170), is a rare exception, as is Wilson Butte Cave on the Snake River Plain. In the latter instance, a pyrographically incised cane die stands out as highly anomalous in comparison to the more than 100 rectangular bone dice found there (Bryan 2006:102–03; Gruhn 1961, 2006). The Promontory people did use bone dice, but their manufacture from elongated rib segments is sufficiently different from those found in the core Fremont area to reinforce the apparent difference in how these peoples thought dice should be made and, it can be assumed, how dice games should be played.

Second, the gambling connections of the Promontory people, where affinities in game styles can be identified, extend over a wide geo-

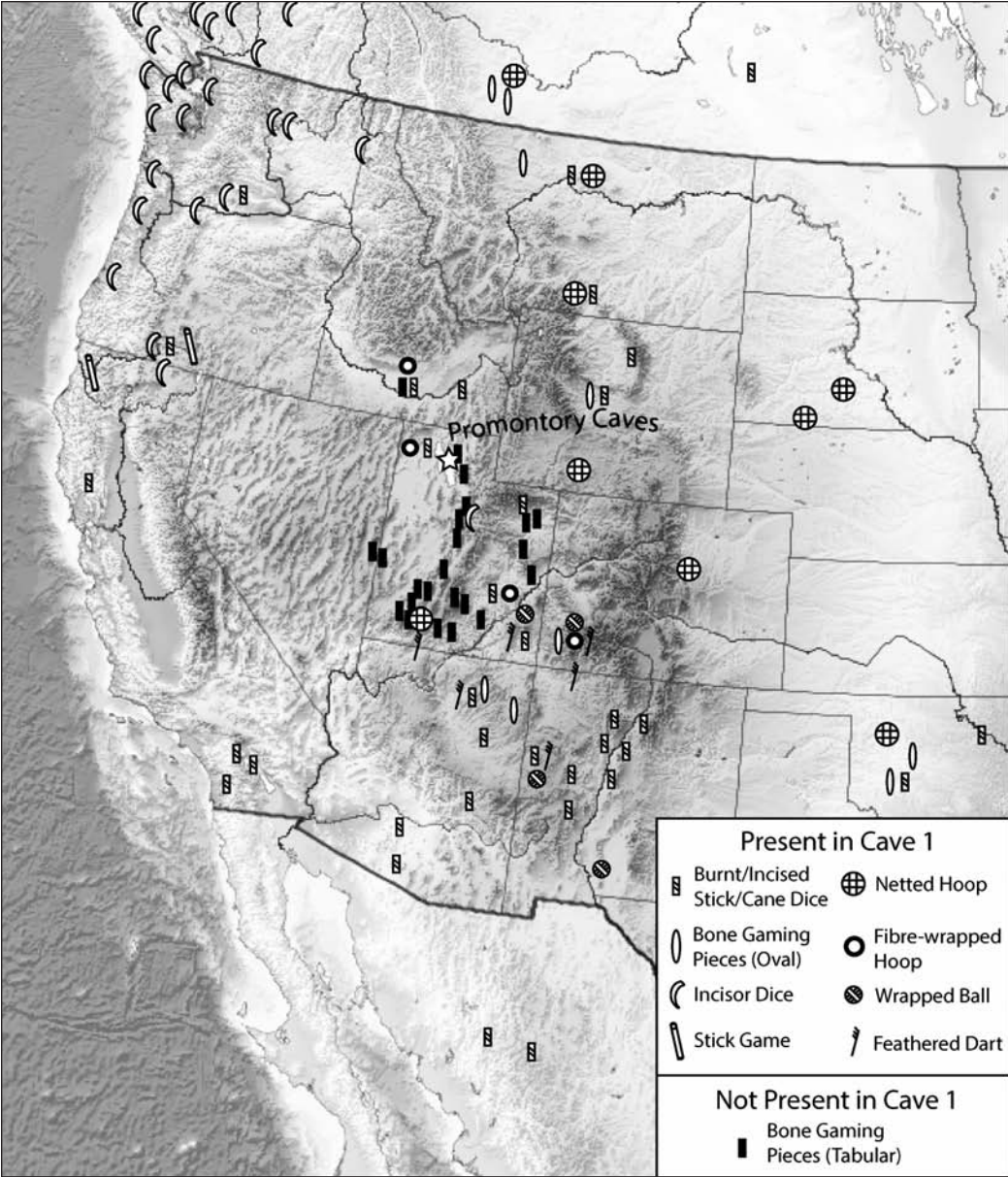


FIGURE 9.8. Distribution of archaeologically and ethnographically attested games similar to Promontory types. (Data adapted from BLM 2014; Culin 1907; DeBoer 2001; M. Hall 2009; and Yanicki 2014. Drawn by Gabriel M. Yanicki.)

graphic range, describing a broad arc with connections to the Plains (elongated bone dice, sinew-netted gaming hoop), the Plateau and Northwest Coast (gaming sticks, beaver-tooth die, bark-wrapped hoops), and the Puebloan world (split-cane and split-stick dice, fiber-

wrapped hoops, feathered darts, sinew ball). We therefore infer that the Promontory people may have traveled great distances and, at the very least, made social inroads into a sociodemographic network far broader than their Fremont counterparts. While historic and ethnographic

observations involve quite different time frames from archaeological specimens, coming after many centuries of significant geopolitical upheaval, we know that some connections, such as the netted hoops at Promontory Cave 1 and Franktown Cave in Colorado, are contemporary, as are the differences between Promontory and terminal Fremont games. The Promontory people's reliance on large artiodactyls and communal hunting may also have required mobility in ways not typical of post-horticulturalist Fremont foragers, making use of a larger geographic range (Arkush 2014; Johansson 2013).

Earlier or later stages in the migration of proto-Apachean peoples may be indicated in the broad geographic distribution of similar games. The striking similarity of the beaver-tooth die from Cave 1 and porcupine-tooth dice from the Hutchings collection, and the presence of Pacific marine shell in the cave record, suggest the Promontory people had some type of social connection far to the west in an area where several Pacific coast Dene peoples also resided. Hints of the Subarctic origin of the Promontory peoples can be seen in the Promontory assemblage: the same spiral-incised stick that could have been used as a hand game piece also invites comparison to stick games from the northern coast and interior of British Columbia.

The stick game of the Tahlтан, a Subarctic Dene group, merits particular consideration here: looking at the incorporation of the term for gaming sticks as root words in the Dakelh (Carrier) language, Morice felt this implied great antiquity to the stick game among the Northern Dene. This, the hand game, and bone dice were all familiar to Northern Dene peoples such as the Dakelh, Tsilhqot'in, and Sekani (Morice 1894: 77–81). Later in his career, Steward worked with the Dakelh of Stuart Lake. Photographs of his ethnographic collections include a netted hoop, a bark-wrapped hoop, and a bark-wrapped ball—all familiar from the Promontory assemblage—as well as several other objects that appear in the caves but are uncommon in the Great Basin, including mittens, a toothed bone flesher, and the distinctive BSM 2(Bb) moccasin style (Taylor and Sturtevant 1991:194–95).

"Of Dice and Women" Revisited

For all the diversity of the Promontory gaming assemblage, dice are by far the most numerous pieces. Ethnographic and historic accounts show that dice are primarily a women's game. In 106 cases (80.9 percent) across North America examined by DeBoer (2001:Table 1), dice games were played by women exclusively. Only rarely were dice games played solely by men (nine cases continent-wide, 6.9 percent). And when men and women both participated in dice games (16 cases, 12.2 percent), they tended to play separately (DeBoer 2001:224). In his survey of women's gaming, DeBoer did note examples of men and women gambling as spectators on the outcome of a women's dice game—for instance, among the Blackfoot (Ewers 1958:155) and the Yakima (Desmond 1952:26). But in other cases, as with the Crow, women played dice games in seclusion. According to Robert Lowie's informant Grey Bull, "the women always went off by themselves in playing it, and he himself does not understand it though he had lived with Crow women all his life" (Lowie 1956:99).

Lowie's example is noteworthy: the Crow practiced mother-in-law avoidance—that is, sons-in-law actively avoided contact with their mothers-in-law. It is small wonder, then, that women gambled in seclusion, or that a male informant could not explain how dice games were played. Mother-in-law avoidance was a widespread practice among Apachean groups (Opler 1937). Among the Chiricahua Apache, a man avoided looking at or speaking with his mother-in-law, and formal language exists for conversation between marital affines (Opler 1941). Similar decorum and avoidance applied between male and female siblings in both Southern and Northern Dene societies (Perry 1991: 209–28). Gambling would emphatically not be one of the activities that fit this pattern of circumspect behavior. In examining the archaeological record of proto-Apachean peoples at the Promontory Caves, it is entirely reasonable to think that mother-in-law and opposite-sex sibling avoidance could have been practiced. While Cave 1 would allow large social gatherings around the large central hearth area, the cave

space is indeed divisible, owing to a large rock-fall in the center. In keeping with expectations should avoidance practices have been in effect, cane dice are ubiquitous both at the front of the cave, including in Steward's excavations and our own from 2011–2014, and at the rear, where even a small expansion of Steward's excavation area in 2013 yielded six cane dice (Figure 9.3c). Not only is ample room available for men and women to have socialized separately, but people did, in fact, take advantage of the more private spaces that Cave 1 offered.

The sheer numbers of cane dice in the caves seem unlikely to have been lost in high-stakes gambling. The very disposability of the gaming material used and then discarded suggests the gambling was casual. For that reason, perhaps it was more likely associated with low-stakes, in-group gaming that included women. The variety of dice present is also suggestive in this regard: given that women's access to out-group gambling partners is highly uncertain, the fact that Promontory people were familiar with radically different forms of what is primarily a women's game may indicate not just intersocietal contact but incorporation of women from different backgrounds into Promontory society itself. Their relatedness (or rather, unrelatedness) might make them very well suited as gambling affines. This carries obvious implications for some of the objects seen in the Promontory Caves. Fremont pottery and basketry, for instance, which appear in low frequencies, may have been the product of trade. Yet, the late persistence of the basketry instances we have dated raises the possibility that they were made by women of Fremont heritage living in Cave 1. Variability in the craftsmanship of characteristic Promontory-style artifacts such as moccasins and ceramics may meanwhile represent younger people or newcomers learning new techniques with differing levels of success.

Feasting With Mine Enemy: The Promontory Economy

Gaming activities are, of course, highly social in character, and it would be an unusual gaming context in which food was not an element we

should consider. The subsistence practices of the Promontory culture are of note in this regard. Steward referred to the Promontory economy as large-game focused, with abundant evidence of bison, elk, antelope, and deer. He retained only a small qualitative sample of faunal materials from his 1930–1931 work, however. Substantial quantities of bison would have been required to provide for the moccasins, robes, and other clothing in the caves. By scaling the volumetric density of recovered artifacts against the extent of the deposits, Reilly (2015) has estimated that between 120–230 bison hides would have been required to account for just the moccasins Cave 1 must have originally held.

A feature near the base of the Promontory culture deposits in our exploratory excavation near the mouth of Cave 1 illuminates both Promontory subsistence and its potential connection with gaming. Here, we encountered a 20–30 cm (7.9–11.8 in) layer of fragmentary bone, 79 percent of which was calcined (and therefore exposed to temperatures in the 650–750°C range), charred or scorched, and only 21 percent was unburned (Johansson 2014). This spatially restricted excavation area (no more than 0.5 m² [5.4 ft²], though the feature was clearly larger) yielded 6,542 specimens from which Johansson calculated an MNI of 25 animals. Bison dominated the identifiable specimens (36 percent), followed by elk (8 percent), antelope (4 percent), and deer (4 percent). Another 20 percent of the assemblage could be attributed to the large artiodactyl category (possibly elk, but more likely bison).

As Table 9.3 indicates, this feature reflects an “event” at ca. 755–60 ¹⁴C yr BP. Debris associated with the burned bone would be consistent with a hearth-cleaning episode. We note that Steward described a central Cave 1 hearth that appeared to have been used throughout the late period occupation of the cave. While it is difficult to know the exact impact of Steward's decision to leave most faunal remains behind, a simple “scaling up” of our small test results just for remaining Cave 1 deposits would suggest that very large quantities of game were procured near the Promontory Caves during this era.

TABLE 9.3. AMS Radiocarbon ages from the Promontory Cave 1 hearth-cleaning event.

Lab #	Site and artifact #	Material dated	$\delta^{13}\text{C}$	^{14}C date	Depth (m b.d.)
UCIAMS-143675	42BO1 FS1584, F66 in F3	Bone	-19.8	760 \pm 25	3.03
UCIAMS-143676	42BO1 FS1605, F67 in F3	Bone	-19.2	760 \pm 20	3.14
UCIAMS-143677	42BO1 FS1591, F65	Bone	-19.5	760 \pm 20	2.86
UCIAMS-143678	42BO1 FS1562, F62 in F3	Bone	-20.1	755 \pm 20	2.95

Because the Promontory culture population had Subarctic and Plains heritage, there is no question that such a group would know exactly how to extract significant nutritional value from fats and greases in these bones through comminution and boiling strategies. Yet, there is no evidence for intense comminution, while a number of the bones have adhering, charred residues strongly suggesting that fats and greases were accelerants in the fire that consumed the bone. The Promontory culture inhabitants enjoyed a plentiful large-game diet and did not feel obliged to extract all possible food value from frequent kills they made in the vicinity of the cave.

This seems in marked contrast to the subsistence stresses many believe that terminal Fremont populations had been experiencing for some time with their twelfth-century abandonment of maize horticulture and subsequent turn to broad-spectrum foraging (Benson et al. 2007; Coltrain and Levitt 2002). The unusual characteristics of the Promontory Cave 1 burned bone feature warrant our serious consideration of the idea that feasting may well have accompanied the various gaming activities so well represented in the Cave 1 deposits. Such interactions may have been unusually attractive to terminal Fremont populations. Preliminary indications from the excavated portion of the Chournos Springs site suggest that bison remains were absent. Smaller artiodactyls, birds, and lagomorphs were heavily processed, while charred ricegrass, goosefoot, and amaranth seeds show consumption of foraged foods that the Promontory Caves' inhabitants, in comparison, eschewed.

Gambling and Proto-Apachean Expansion

In addition to the relationship building and prestige enhancement associated with feasting, the commodities that the Promontory people had in abundance could readily have

been offered as gambling stakes. Historic and ethnographic accounts of gambling frequently describe bettors wagering perishable items, including food stores, clothing, and lodging. The suggestion that commodities of low archaeological visibility—and food in particular—were used as an enticement for the nearby Fremont people at Chournos Springs to gamble offers part of a solution to an otherwise perplexing problem: for all the evidence of gaming activity at the caves, there is little evidence of exotic raw materials, an important means of identifying gambling's role in long-distance, intergroup trade (M. Hall 2008; Janetski 2002). While some exotic trade goods have been found at Promontory Cave 1—most notably abalone (*Haliotis* spp.) shell ornaments recovered by Steward (1937:41)—they are in very low quantities. Other highly visible trade materials seen elsewhere in the Great Basin, such as turquoise and variscite, are absent. This suggests that, despite the Promontory people's penchant for gambling, exotic raw materials were not a significant betting target or that gambling partners did not have access to those materials.

A focus on exotic trade goods as evidence for intergroup gambling may be a misapprehension, however. Flannery and Cooper's (1946) account of high-stakes, intergroup gambling emphasizes competition for status and the sundry goods a person owned, not necessarily rare, nonperishable items that might stand out to an archaeologist. The chief requirements for gambling to take place are that gaming partners have stakes of equal value to wager and, for high-stakes gambling, that contestants not be too closely related. If, as seems likely, high-quality perishable goods were an enticing trade good offered by the Promontory hunters, the nearby Fremont people of Chournos Springs—potential gaming affines, owing to their geographic proximity and

different cultural affiliation—had an invaluable commodity to offer as well: themselves.

Genetic evidence makes it clear that while the initial proto-Apachean population was itself the result of a small population founder effect, many people were eventually incorporated into Apachean populations in the course of their journey southward. In Northern Dene populations, for example, mtDNA haplogroup A occurs at levels of 80–100 percent. A specific mtDNA haplotype (A2a) occurs in high frequencies in both Northern and Apachean Dene populations (Malhi et al. 2003; Malhi 2012; Achilli et al. 2013). For Navajo and Western Apache populations, mtDNA haplogroup A values drop as low as 50–60 percent, with the balance of the mitochondrial signature being made up of haplogroup B varieties common in southwestern contexts (Malhi et al. 2003). This genetic finding is consistent with Navajo oral traditions in which other groups joined the emerging Navajo cultural identity: a number of clan ancestresses were Puebloan women who came from specific Pueblos (Brugge 1994, 2003, 2006; Zolbrod 1984). Monroe et al. (2013) also demonstrated elevated mtDNA haplogroup B and C frequencies in Western Apache populations with Yavapai neighbors. Such interactions played a major role in emergent Apachean societies.

We note that mtDNA haplogroup B is *the* most common genetic signature among eastern Great Basin Fremont burials (Parr et al. 1996). In a scenario where the Promontory people, as an early proto-Apachean group, were newcomers comprising part of a discontinuous population spread over a considerable geographic area, opportunities for access to affiliated groups and marriage partners may have been limited. The remaining option for Promontory people would be recruitment of spouses from other societies, something that could have been socially negotiated through both feasting and high-stakes, out-group gambling that included wagering for human capital.

Stories of men betting their wives and children, and of men and women alike wagering themselves to pay gambling debts, are not unusual, albeit often for a limited period of time or until a relative could purchase their freedom

(Le Jeune 1898:199–201; Matthews 1889a:90; Spinden 1908; for summaries, see MacLeod 1925; Cameron and Johansson, Chapter 16, this volume). The cycle of Navajo creation and migration myths offers a particularly vivid example featuring Noqoilpi, He-who-wins-men (at play), also known as the Gambler (Matthews 1889a:89). The Gambler is variously described as an avaricious Navajo man (Ten Broeck 1860:91), an Apache man (Bancroft 1883:83), or a deity who descended upon the pueblos of Chaco Canyon prior to the Navajos' arrival in that area (Matthews 1889a). In the latter, most detailed account, he wins men's wives and children, then the men themselves, followed by neighboring villagers and entire tribes (Cameron and Johansson, Chapter 16, this volume, Appendix 1). Of the four games Matthews described being played by the hero who eventually liberated the people, three are recognizable from the Promontory Caves: dice, hoop-and-darts, and ball. The fourth involved pushing over a tree, while several more were not treated in detail.

An apocryphal cast to these stories is betrayed by their variability, both in terms of place and actors involved. However, contact between proto-Apachean, Navajo ancestors and Ancestral Puebloans (i.e., Anasazi) figures prominently, as in Matthews's 1889 account. Marietta Wetherill, in interviews about her years operating a trading post near Chaco Canyon after her marriage to Richard Wetherill in 1897, offered a markedly different account of the role of gambling in Navajo origins.

The story finally came out: "There used to be a people that lived north and east that hunted buffalo and they were always fat and they were great raiders. They weren't satisfied with just hunting buffalo, they used to come down into this country and gamble with the Anasazi." I heard that from a number of different people. (Wetherill 1997:176–77)

Wetherill, who had been adopted into the family of a Navajo ceremonialist, spoke both Apache and Navajo and made many inquiries of an anthropological nature (Gabriel 1997:1–13). She had a great interest in this story and inquired

about it on several occasions. The buffalo hunters were known as the Blue Cross people because of the decoration on their buckskin moccasins, which they otherwise made “exactly like the Navajos made theirs” but were different from those made by Puebloans. “The Blue Cross people were so successful at gambling, the Anasazi in desperation traded their wives and children to pay off their gambling debts. The Anasazi got weaker and poorer until finally they had to merge with other tribes because they could no longer support themselves” (Wetherill 1997:176).

Noting that gene flow—at least of maternally transmitted mtDNA lineages—appears to have been almost entirely unidirectional into Dene societies, Malhi et al. (2003:121) speculate “Perhaps Southern-Athapaskans acquired wives through warfare or trade, a circumstance that might have been necessary for the survival of a (presumably) small immigrant group.” That gambling could have played a role in proto-Apachean ethnogenesis is suggested not just in stories of capture or debtor slavery (of Ancestral Puebloan women and children) but by the possibility of episodes where some diminished Puebloan groups were absorbed by other tribes. Certain Navajo clans have ancestral ties to important Ancestral Puebloan sites in the Southwest, including Chaco Canyon, Canyon de Chelly, and Mesa Verde (Warburton and Begay 2005:536–37; cf. Walters and Rogers 2000: 322–25). For Wetherill, the story resonated in its consistent retelling. The interface between big-game hunting, gambling, and the emergence of new social identities also strikes a chord as a pattern reflected at the Promontory Caves, one that we expect would be repeated elsewhere as proto-Apacheans entered the Southwest.

Hinting at this is the appearance of crosses painted with red ochre on the ankle wraps of a pair of buckskin moccasins found by John Wetherill, most probably removed from a burial in Johnson Canyon at Mesa Verde (Figure 9.9c; Osborne 2004:Figures 57 and 58;). Crosses are regarded as four-pointed stars in Navajo iconography and are consistently found as star ceilings and in sandpaintings of celestial figures (Chamberlain 2004). Carolyn Osborne (2004:

77) recognized this as unusual footwear, drawing a comparison to Hatt’s (1916:171) illustration of Tahltan and other northern moccasin types. These are immediately recognizable as the BSM 2(Bb) type seen at the Promontory Caves, with an inverted T-seam at the heel, heel tab, ankle wrap, and a round, puckered toe where the front and sides of the sole piece are gathered up and over the top of the foot to attach to the vamp. The individual these were taken from, in a sealed burial chamber with the mummified remains of four others, was described by Wetherill as a “large skeleton . . . with a bow on one side” (notes, cited in Nordenskiöld 1893:46–47). The bow is wrapped with concentric rings, or trusses, of tissue—gut, esophagus, or heart—as reinforcement and has a thong-wrapped grip (C. Osborne 2004:229–30). Cable-backed bows with such transverse cord wrappings, often with distinctive spiral-wrapped grips, are highly characteristic of Arctic and Southern Dene groups and are associated with the Dene expansion into the Southwest (Driver and Massey 1957:355; LeBlanc 1997; J. Wilson 2011:217–22). This interred hunter offers a tantalizing glimpse at what may be part of a proto-Apachean expansion into the Mesa Verde area.

Conclusions

The Promontory culture occupation of Cave 1 took place over a brief one- or two-generation span in the last half of the thirteenth century. This occupation was of such intensity as to result in massive perishable deposits of sufficient scope to suggest the possibility of a quasi-sedentary presence in Cave 1 (to account for the sheer volume of material). The spatial constraints connected with Cave 1 would lead us to believe that a microband-sized group of perhaps 30–50 persons was present. Among a complete range of daily activities, this group focused almost exclusively on large-game hunting. Bone refuse accumulated to the extent that feasting must be considered as a probable activity. The Promontory Cave occupants were not only well fed, they made high-quality leather, had a refined sewing tradition, left clear signs of personal adornment and ceremonial activity, and featured a popula-

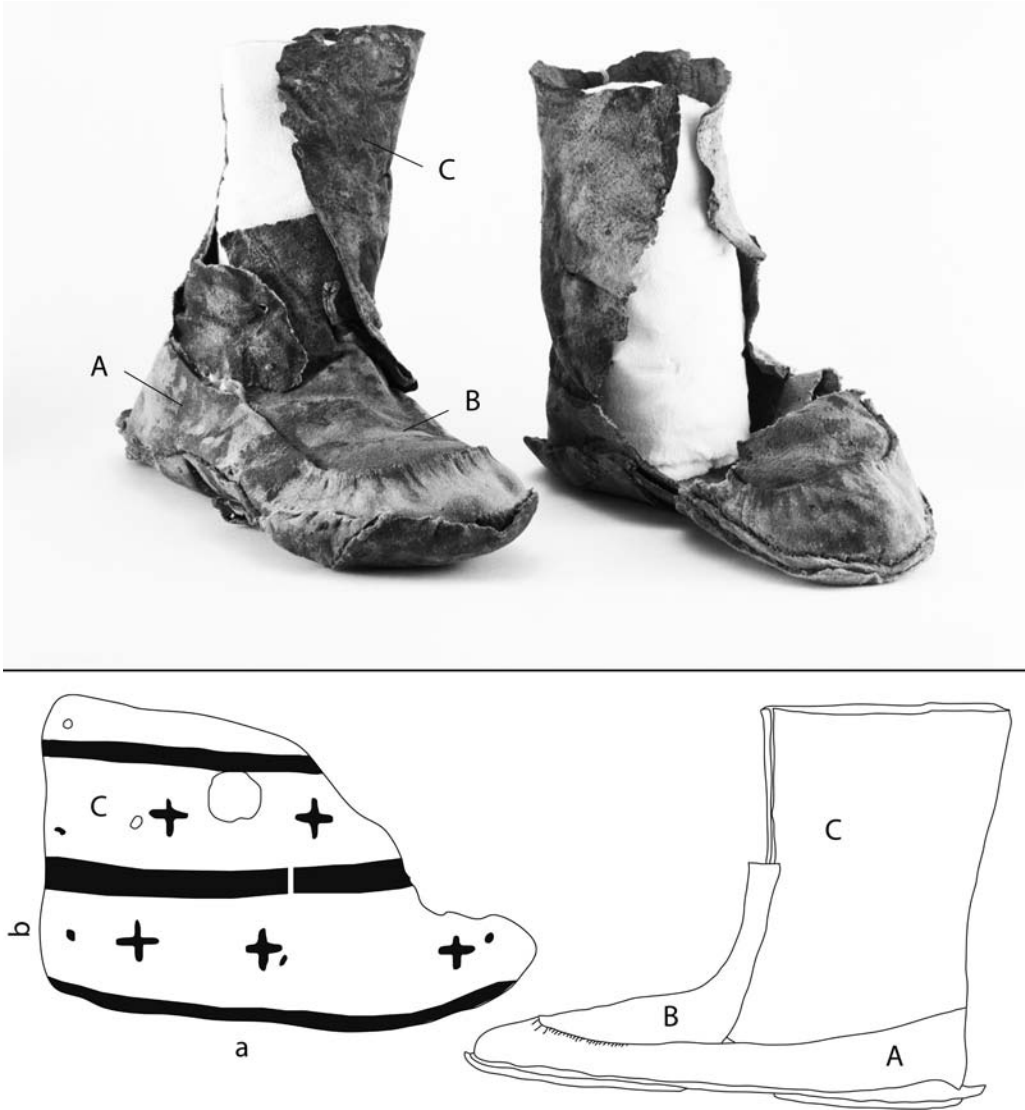


FIGURE 9.9. Promontory-style moccasins, extensively patched, from Johnson Canyon, Mesa Verde, Colorado, with drawn detail of red ochre-painted star motif on ankle wrap at lower left. (University of Pennsylvania Museum of Archaeology and Anthropology, cat. #29-43 705; moccasin details redrawn by Gabriel M. Yanicki from Osborne 2004:Figure 58.)

tion dominated by children and subadults that was very likely expanding.

The Promontory data fit predictions provided by both Steward and Sapir—namely, that a northern-oriented, bison-hunting population arrived in the caves and began assimilating southern traits. The population was clearly in-

trusive, favoring the conclusion that it was proto-Apachean. The presence of late Fremont rock art, rare instances of basketry (such as one-rod-and-bundle) of distinctively Great Basin form (and in this time frame, therefore, Fremont character), as well as examples of Fremont pottery, all suggest that the Cave 1 population incorporated

individuals from—or at least interacted with—terminal Fremont groups. In these respects, the Promontory scenario is consistent with a broad range of modern DNA genetic studies indicating that proto-Apachean populations of northern origin must have interacted extensively with southern populations during their southward migration. Gaming activities in Cave 1 may thus have featured interactions between an intrusive, proto-Apachean population and a waning Fremont population, or they may have involved an internally differentiated population in which terminal Fremont population members had joined an emerging Apachean society.

We note that while the archaeological assemblages are not quite as rich, the Promontory “pattern” is repeated in Franktown Cave, situated south of Denver, Colorado, on the Palmer Divide (Gilmore 2005; Gilmore and Larmore 2012). Franktown has produced a complete child’s moccasin identical to the Promontory form moccasin (BSM 2 [Bb], with heel tab and ankle wrap), other moccasin fragments, fringed and other clothing fragments, a rim sherd very strongly resembling Promontory pottery, and a small gaming hoop. This part of the Franktown assemblage is contemporaneous with the Promontory Cave 1 and 2 dates described above. The Franktown assemblage occurs in a region through which Apachean ancestors might certainly have passed.

Promontory bison hunters with far-reaching social ties thrived in a post-horticultural north-eastern Great Basin, while relatively settled communities of Great Salt Lake Fremont peoples underwent adaptive shifts from farming to foraging. Both societies likely engaged in relationships that straddled a line between mutual benefit (in the form of feasting and forging social bonds) and competition (in the form of gambling). Fremont and Promontory pottery styles have long hinted at some degree of social interaction, as has the presence of Fremont basketry in the Promontory Caves. Genetic

data meanwhile continue to shed light on the recruitment of people from the Southwest into proto-Apachean society—women especially, but perhaps children as well. The abundance and diversity of gaming material at the Promontory Caves, however, offers a glimpse into complex social dynamics that might not otherwise even be imagined: intergroup contests for resources and prestige that speak to a genuine interest on the part of the Promontory people in establishing friendly social relations with their neighbors, principally between women (who appear to have had diverse cultural backgrounds) tempered with competitive intragroup contests in which a person’s affiliation could hinge on the outcome of a contest.

After about AD 1300, settlements in the Great Salt Lake area that are variously considered Fremont- or Promontory-affiliated exhibit the trappings of what may have been a polyethnic culture with considerable proto-Apachean influences. Changes in this area were almost certainly tied to substantive shifts underway concurrently in the Ancestral Puebloan world. Although highly speculative, it is worth considering that population movements of this era were facilitated by preexisting social connections—a network, for instance, of friendly and possibly even related groups—the existence of which is suggested by evidence of the Promontory peoples’ participation in far-flung, mutually intelligible gaming traditions. It is this social role of games that we wish to return to in closing this discussion.

At the Promontory Caves, gaming practices are reflections of, as well as agencies in, migratory processes involving Apachean ancestors. There can be little doubt that both Fremont and Promontory peoples saw the benefit to be gained in playing well with others. Looking beyond the Promontory example, the games people played offer a unique perspective on where people were from, who they met, and how they traversed often precarious, alien social landscapes.

CHAPTER 10



Social Aspects of an Apachean Stave-Dice Gaming Feature at Three Sisters

DENI J. SEYMOUR

Long time ago they say. Coyote was watching some Prairie Dog Young Women playing at staves. They were very pretty and he wanted one of them.... He got his friend Gopher and said,... “[T]unnel over there where she is sitting. Come up and make a little hole right under her.” “All right,” said Gopher, and he did it. Coyote went into the tunnel... and got excited.... This Prairie Dog Young Woman was sitting there playing staves, when she felt something bumping against her underneath.... Prairie Dog Young Woman got the big flat rock from the middle of the stave circle and dropped it on Coyote’s penis. “Do it with this rock,” she said.

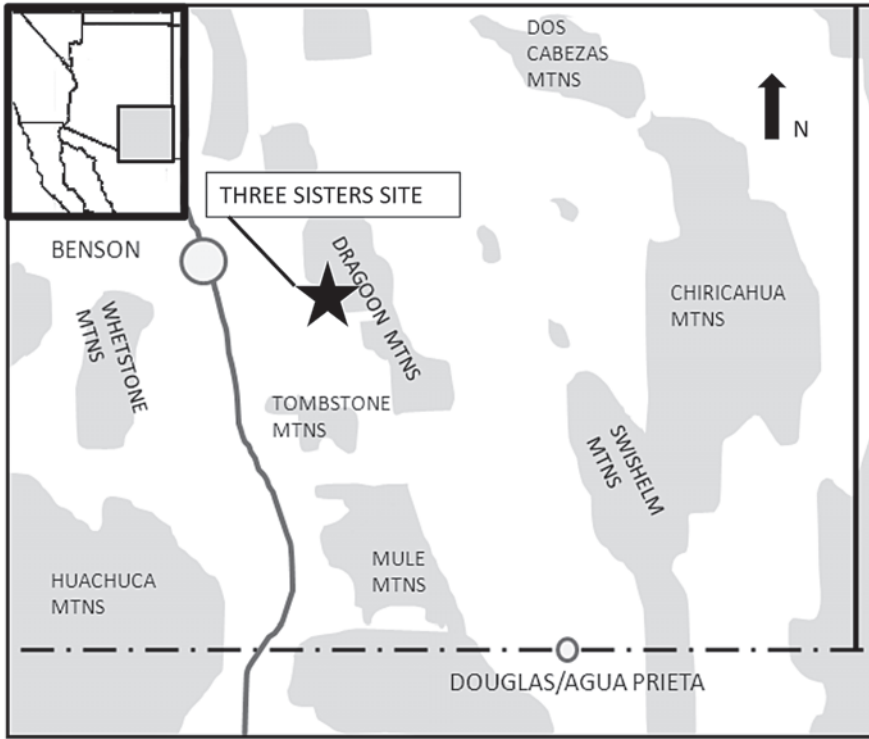
Gopher Helps Coyote Have Intercourse with a Girl,
Chiricahua Apache traditional story (Haley 1997:164)

Awareness of the stave-dice game has been handed down through generations in traditional Chiricahua Apache stories, as referenced in the preceding extract. An archaeological example of a probable gaming board at the Three Sisters site (AR 03-05-01-442) in the Dragoon Mountains of southern Arizona demonstrates the temporal depth of this game (Figures 10.1 and 10.2). This feature and other information from the site provide uncommon insights regarding gender and social group composition. Highly mobile peoples, such as the ancestral Chiricahua Apache (Nde) in the American Southwest, leave an especially light archaeological footprint, particularly in open-air sites where preservation is poor and stratified deposits are not found, as opposed to the rare cave site just described by Yanicki and Ives (Chapter 9). This dearth of preserved data and light footprint can be problematic for in-

terpretation, except at the most basic level, but represents a reality that requires focused consideration. Efforts at socially relevant reconstructions, like gender and household composition, often elude the researcher in such circumstances. Yet, the character of this archaeological gaming feature, when examined in light of ethnographic data, suggests the presence of women—an inference that is reinforced by understandings of the role of women’s gaming and the practice of matrilineal residence in Apachean society.

Engendered Division of Labor and Landscape

As a matter of course, most archaeological studies focus on male-oriented aspects of Apachean life, including conflict, battle, and ambush sites, and male technologies, such as projectile points. In part, this is because many initial or noteworthy



SOUTHEASTERN ARIZONA

FIGURE 10.1. The Three Sisters site in regional context within the heart of ancestral Chiricahua Apache territory. (Drawn by Deni J. Seymour.)

historical encounters were violent and within the purview of men. Thus, stories of them have been passed along to spark our imaginations and research efforts.¹ This bias in information about gender is reinforced by the widely discussed dictum regarding historical divisions of labor that traditionally women are associated with the domestic (household, child-rearing, and food gathering), while men focus on the extra-domestic or political and external (hunting, trade, and political interaction; Rosaldo 1974:17–18).

Apachean landscape use is also often viewed within a decidedly male framework, with defense as the primary consideration. This is perhaps justifiable because the Apache were raiders, which set them at odds with neighbors, and as the Apache lost ground to intruders, safety became their single most important residential site-selection consideration. The basic require-

ment for security determined foraging areas, routes of travel, frequency and tempo of moves, alliances, and alternative strategies. Yet, these factors have meant that the historic Apache have been viewed most commonly through a single lens: serious, ever struggling, evading or engaging the enemy, scrounging for an existence, spiriting from one mountain range to another with painted and enraged faces affronted by the intrusion of a powerful foe. (For exceptions see J. Bourke 1958 [1886]; Cremony 1868; B. Davis 1976 [1929]; Scott 1928; and Wratten, cited in Sonnichsen 1986.) Apache men have been seen as fighters rather than fathers, strategists saving a way of life rather than gamblers, and iconoclastic rebels rather than social beings embedded in local groups that leave identifiable archaeological traces. Consistent with these renderings, Apache women appear on stage mostly as they

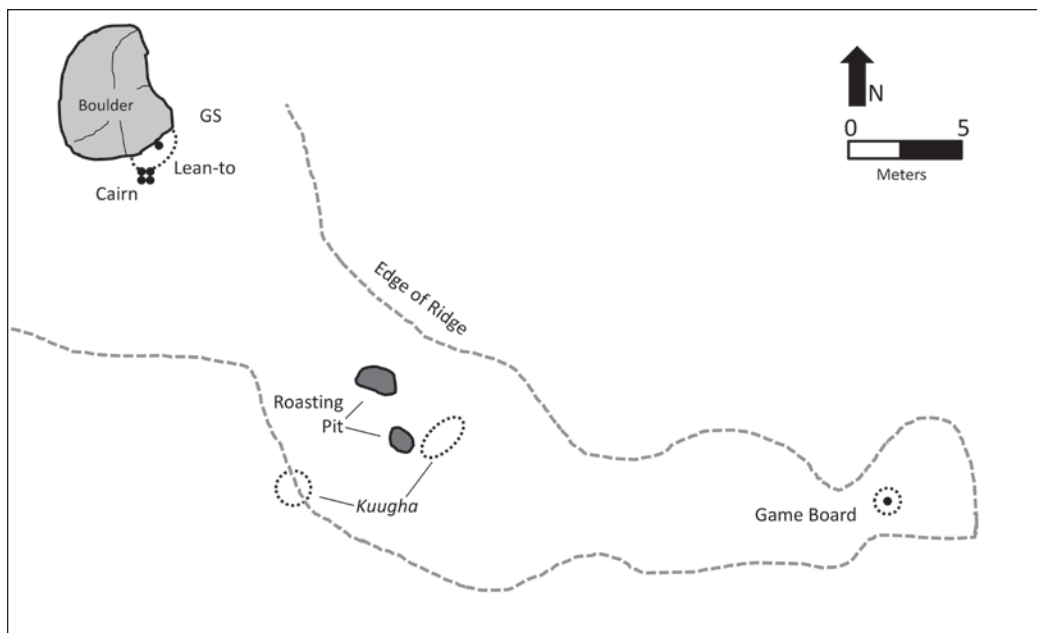


FIGURE 10.2. Site plan for the Three Sisters site showing placement of gameboard relative to structures and roasting pits. (Drawn by Deni J. Seymour.)

lie slain at an ambushed encampment; as they stifle a child's breath to keep secret their location (Betzinez and Nye 1987 [1959]:74); as victims of retribution for adulterous acts (Faulk 1969:52); and as they serve as decoys, human shields, and distractions for male actors (e.g., Mott 1871).

In an effort to expose a more holistic and accurate view of the ancestral Apache, I have tended to focus on women's role in society (as have Boyer and Gayton 1992; Buchanan 1986; Sánchez 2014; Stockel 1991, 2000). The often-invisible ancestral Apache woman's presence is found archaeologically (a) on matriloca residential sites, (b) in housing constructed by women (Opler 1941:22), and (c) in the household space that was framed by women. Women transported wood and water, gathered plants, reared children, tanned hides, and conducted most other household tasks, leaving men to the more dangerous but intermittent tasks of preparing for and participating in hunting, war, and raiding.²

These gendered influences on past peoples can be discussed in abstracted terms as understood from ethnographic and ethnohistoric data,

and even brought to life with effective prose. But the mundane intricacies are revealed in tangible reality in the many encampments recorded in the archaeological record (Seymour 2002, 2004, 2008, 2009a, 2010, 2013a, 2013b, 2017). Some of the archaeological patterns are easily explained and provide valuable insights into gender roles and household organization. Yet, the resulting patterns are not always what they seem and at times may be open to more than one interpretation. For example, while mother-in-law avoidance practices, menstrual prohibitions, and warrior cleansing may be inferred by researchers from the archaeological record by noting the presence of the remains of isolated structures spatially separated from the remains of other shelters, these feasible interpretations are counterpoised against the spatial separation of huts for defense and improvised use of the natural terrain (E. Ball 1970; Seymour 2009a, 2009b, 2010, 2012b). Consequently, we are fortunate indeed when there is agreement between ethnographic accounts, documentary sources, and archaeological data, as seems apparent at the Three Sisters site.

The Three Sisters site provides one especially valuable example of how inferences about gender roles and household composition may be formed from the archaeological record: among the other evidence, there is a gender-specific gaming feature. Opler (1941:99) notes that certain Apache games tend to be played by either men or women: “[M]en gather at the hoop-and-pole ground, while the women play the stave game.” Moreover, several anthropologists have made the connection on a broader level between specific classes of games and gender (Culin 1907; DeBoer 2001; Lowie 1956; Roberts et al. 1959). Using archaeological evidence, Apache-specific ethnographic data, and cross-cultural comparisons, I suggest that Three Sisters provides a rare view into a small family group encampment where the stave-dice game was played in the fourteenth and fifteenth centuries.

Apachean Gaming Contexts

Games were an integral part of Chiricahua Apache social, ceremonial, and economic life, and ethnographic records indicate they were played in a variety of social settings. Games were an attraction in small family circumstances, as at Three Sisters, as well as when many families were united, both (a) in local-group gatherings and (b) when they coalesced into large, multiband encampments. These are the three primary Chiricahua Apachean encampment types that involved family groupings, and games fulfilled additional social roles as group size increased.

Home base for the local group was where between 10 to 100 or more families lived. The local group encampment was a favorite place where they lived for at least half the year. From there, small groups, usually family groups, went out to different parts of their country to obtain provisions. When two or three families went along they camped together (Christian Naiche, cited in Henderson 1957:791, 793, 799, 803). These families “going together” were sometimes relatives, sometimes just friends. They stayed for a week, maybe two, just long enough to get what they wanted, such as fruits in the summer and other seasonal resources (Sam Chino, cited in Henderson 1957:711, 727, 739, 755; Christian Naiche, cited in Henderson 1957:794, 801). They would camp

near the resource, and “they always pick a place where they can get wood and water. Then they go from that place—put their shelter there—it wouldn’t be too far to *inada* [mescal, agave]” (Christian Naiche, cited in Henderson 1957:802).

Games and gambling at gatherings and ceremonials of multiple local groups or bands were also important and were the largest Chiricahua Apache residential places (Opler 1941). These multiband locales were valued for social interaction, and at such gatherings men might plan a raid or hunt (Cortés 1989:65), while at the same time people feasted, danced, and gambled. Communal gatherings and games tended to occur in specific areas—safe places where people could relax and forget defense-related concerns. Ample resources were available in these locations to support large groups, although many times prepared resources were brought to the occasion. Consequently, it was common to return to familiar and safe locations where certain plants, herbs, or other items grew in abundance.

These multiband residential locations were sometimes referenced by the games played there, thus place names reflect the importance of gaming in the overall social occasion. For example, the Chiricahua land claims records mention a place called *klinadacucet*, which means Where They Played That Game... a Game for Day and Night (Henderson 1957:Unidentifiable Place Names, #85).³ This is a reference to the moccasin game, which is explained in traditional stories as a contest arranged between birds and other animals near the beginning of time to determine whether the world would be forever night but ended in the day-and-night cycle (Boyer and Gayton 1992:189; Culin 1907:335–48; Goodwin 1994:148–50; Opler 1994:23–27).

Also, Eugene Chihuahua (Henderson 1957:110) mentioned the name *bícísnámansk?é*, which means Where They Play [the] Long Pole Game on [the] Side of Mountain—a reference to the hoop-and-pole game, the most important game played by Apache men (Opler 1941:448). Because the hoop-and-pole game was so important during ceremonial and large-group gatherings, it should not be surprising that a place would reflect this name.

These Apache places of multigroup coales-

cence were the ones most mentioned in ethnographic sources for gaming and gambling, probably because the high-stakes wagering associated with the hoop-and-pole game and others tended to occur there. The famous leader Geronimo's son mentioned that a place called *pigacitka* or *biga?tsi?ka* (meaning plain, open area on top) was where his particular local group gambled the most. He mentioned the hoop-and-pole game, as well as stave and dice games. Gambling, he noted, was a way to "pass the time away there when [there was] nothing to be afraid of. Great sport there when they come together" (Robert Geronimo, cited in Henderson 1957:397). As the leader Geronimo himself said,

To celebrate each noted event a feast and dance would be given. Perhaps only our own people, perhaps neighboring tribes would be invited. These festivities usually lasted for about four days. By day we feasted, by night under the direction of some chief we danced.... When the feasting and dancing were over we would have horse races, foot races, wrestling, jumping, and all sorts of games (gambling). (Geronimo 1906:26)

Three Sisters Site

While emphasis in the ethnographic literature is on large-group gaming and sports, including dice or stave games—the latter associated with women—these games were played also in more intimate settings (Boyer and Gayton 1992:18). The Three Sisters site represents one of these locations where archaeological evidence of a unique rock circle is inferred to represent a stave or dice gameboard (Figure 10.2).

The site is in southeastern Arizona within the oak-piñon biome of the western slopes of the Dragoon Mountains. This encampment consists of four curvilinear rock alignments (three structural features and one gameboard), two roasting pits, and a relatively concentrated artifact scatter (Seymour 2017).

The archaeological signatures of three residential structures at Three Sisters, marked by curvilinear rock outlines, represent a lean-to positioned against the south edge of a large boulder and two freestanding huts or *wickiups* (i.e., brush

shelters called *kuughu* in Chiricahua and Mes-calero). The two roasting pits are situated between two of the structures in the core of the site and most likely were used to roast agave and other foods. Eighteen artifacts have been preserved in this central portion of the site, despite the evident downslope erosion and artifact looting. These artifacts include a boulder grinding slick, a unifacial scraper, a pounding stone or pestle, and various other items, including a magnetite chunk near the gaming feature. A cache of two manos enclosed between boulders is situated 30 m to the east of the site center on a separate ridge finger, and other roasting pits similar in character to those in the site center are scattered across the landscape (Seymour 2017). On the flat top of the same ridge, only about 20 m away from the edge of the roasting pits and structure outlines, is a rock circle that I interpret as a probable gameboard.

The feature consists of a small (100 cm [39 in] diameter) circle of locally available diorite cobbles with a single cobble in the center. Around 20 rocks form the circle's perimeter. As is visible in Figure 10.3, breaks in the circle's outline are consistent with those shown in historic photographs (Figure 10.4). The rocks forming the feature outline are not fire affected or fire cracked, and there is no other evidence of burning on the ground within the circle, indicating that the feature was not a fire pit. This rock circle is smaller than most regional and on-site curvilinear rock-outlined features interpreted as the remains of structures. Ethnographically described gameboards for the stave-dice game almost invariably have a centrally placed rock (see below), whereas structures usually lack them. There are no other ethnographically known Apache feature types that are consistent with this form of circle. Accordingly, I infer that the circular rock feature at Three Sisters is the material remnant of an ancient version of the counting board for the stave-dice game (Figure 10.5).

As described ethnographically for the Apache and many other southwestern groups, dice consisted of wooden staves that were flat on one side and rounded on the other. The number of stave-dice varied between three and four, and the objective of the game was to advance one's



FIGURE 10.3. The game board at Three Sisters is as unobtrusive as the flimsy structures, or *kuugha*, but is set off from the natural outcrops by the orderly arrangement of cobbles. (Photograph by Deni J. Seymour.)



FIGURE 10.4. Historic photograph of Western Apache women playing the staff-dice game (Field Museum, photo ID CSA9646, photograph by S. C. Simms.)

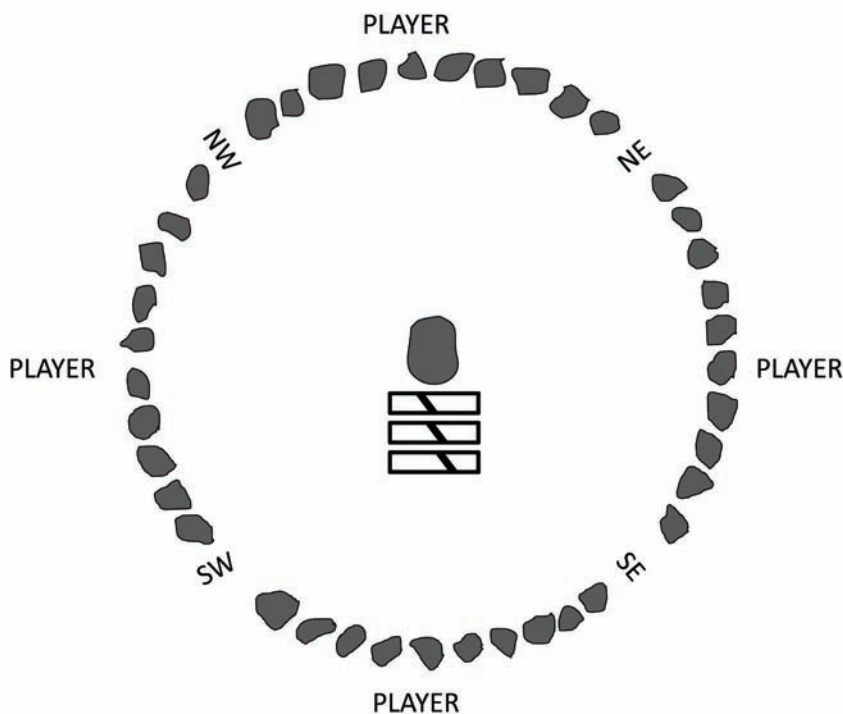


FIGURE 10.5. Schematic drawing of an idealized stave-dice game circuit board from the White Mountain Apache in the nineteenth century. (Drawn by Deni J. Seymour, after Albert B. Reagan, in Culin 1907:Figure 86.)

counter around the circle of stones according to the throw of the stave-dice. The staves were thrown on end against a large flat or big square rock in the center so that they bounced off and were tallied depending on whether the flat side of the stave landed up or down (Boyer and Gayton 1992:401; Haley 1997:163–64; Opler 1941:451–53). Most often, the game board is described as consisting of 40 small stones arranged in a circle with gaps in the four cardinal directions, called rivers.⁴ Rocks forming the circle were used for counting, with each player's position or score marked by a small stick placed between rocks. The rules of the game and number of players varied considerably depending on family tradition, the version of the game being played, and agreements at the time of play (Boyer and Gayton 1992:40; Opler 1941:452).

In the context of ethnographic data, it is reasonable to infer that the Three Sisters site would have been a place where a small group of related families—perhaps three sisters and their husbands and children—exploited locally

available resources, having splintered from the larger local-group encampment. This assessment is based on the three outlines of residential structures and the matrilineal nature of Apachean society, where mothers, sisters, and other female relatives tended to work and reside together in an extended family (Opler 1941:57, 63, 75). The large, matrilineal extended family unit tended to consist of a wife and husband, their unmarried children, married daughters and their husbands, and the children of the latter (Basehart 1959:9).

A relatively diverse array of artifacts is scattered in and around the lean-to, the two wickiup or hut outlines, and the centrally located roasting pits. Artifacts and features are consistent with the Cerro Rojo complex signature (Seymour 2002, 2004, 2008, 2009a, 2009c, 2010, 2012c, 2013a, 2014, 2017). The variety of artifacts suggests that a diverse range of activities took place here, predominately representing women's activities. Consistent with its use as a temporary residential location, it is likely that small family groups returned repeatedly to this location. The

presence of the two cached manos suggests future plans to return to the site.

The two chronometric dates (one AMS radio-carbon and the other thermoluminescence) in the fourteenth and fifteenth centuries of the current era (410 ± 40 BP and 630 ± 40 BP; Seymour 2017) are consistent with other early dates for the ancestral Apache in the region (Seymour 2012a, 2013b). They are consistent also with the interpretation that small family groups revisited this locale periodically over many years, probably because the area was so rich in desirable resources and so well protected from unexpected incursion (Seymour 2017).⁵ Quartz crystals left on the site may have resulted from a cleansing ritual related to the cycle of camp abandonment and reuse, as the Apache were concerned about leaving a structure unattended (Haley 1997:1–82; Opler 1941:427–28).

Evidence for the stave-dice game and the nature of other evidence at the site suggests continuity and temporal depth in a number of aspects of Apache life, including the temporary fission of smaller family groups from the local group encampment (Seymour 2017).⁶ The archaeological context allows us to assess the composition and size of the social group at Three Sisters by the presence of this inferred gaming feature and the outlines of three structures. In aggregate, the data suggest a considerable amount of stability over time in the nature of the family group and other aspects of Chiricahua Apache lifeways.

The data also imply a considerable time depth to the stave-dice game, consistent with continent-wide data concerning the ubiquity of its various forms. Yet the presence of this gameboard indicates both continuity and change because this ancient board is somewhat smaller than later examples. Ethnographic information and photographs illustrate that gameboards tend to be 1–1.5 m (39.37–59.06 in) in diameter, but Culin (1907:87) reports one exceptionally large feature used for multiple players. The smaller size and fewer stones at Three Sisters suggests a possible difference from circle morphology documented ethnographically, perhaps owing to differences in family traditions, on-the-spot modifications to game rules (as

noted above), or number of players involved. A change in the way the game was played might be related to the mode of counting by the early Apache.

Apachean Practice in a Broader Ethnographic Framework

The archaeological record is so meager and subtle on most ancestral Apache sites that it is useful to exploit ethnographic data to assist with interpretation. By such means, evidence for gender can be made less ambiguous, yet, by doing so, we make assumptions regarding the validity of ethnographic analogy and continuity of practice through time. Clearly, not all aspects of culture transform at the same rate, and meanings and social roles attached to practices and material culture may change (Seymour 2012b; see Dye, Chapter 6, this volume, for an example of how social change might have affected gendered gaming). Keeping in mind these caveats, cross-cultural data suggest games tend to assume importance in society at large, and particular classes of games fulfill certain social roles (e.g., Cheska 1979). It is useful to explore these ideas while taking into consideration the Apache-specific aspects of gaming and social life.

An extensive and growing literature examines the place of games of different types in societies, both cross-culturally and within specific social contexts. Consensus centers on the importance of games in socialization and group cohesion, including games of chance such as the dice, stick-dice, or stave game apparently played at Three Sisters. In one particularly relevant study, Cheska (1979) discusses various social processes related to games in societal maintenance. One of these social processes includes sex-role differentiation, including enculturation or child-training, and the reinforcement of the situational appropriateness of behavior.

Games of chance tend to be sex specific in adult play (Cheska 1979:230), and dice games in particular were played primarily by women (Culin 1907; DeBoer 2001:216; Lowie 1956:99; Roberts et al. 1959). This widespread North American pattern is visible in my Apachean example, where women tend to play the stave

game, and it is understood as a women's pastime, even sanctioned by traditional knowledge (see below; Reagan, cited in Culin 1907:88; Mails 1974:423; Opler 1941). While men will play it, "Any man who plays this all the time is laughed at" (Opler 1941:451). Men may have joined the stave-dice game while in this remote and private setting at Three Sisters, but importantly, the selection of the stave-dice game as the medium for entertainment and other possible functions suggests the presence of women.

In contrast, adult men train and form competitions involving activities—such as running—needed for hunting, traveling, and warfare (Cheska 1979:230). Moreover, women are barred from the grounds on which Apache men play the hoop-and-pole game; it is here that strictly male issues are discussed (Opler 1941:49).

The hoop-and-pole ground is as much a meeting place where masculine concerns are discussed and planned as it is a field of play. Here the men come together in easy companionship, free of the inhibitions imposed by the presence of women. It is little wonder that one commentator declared, "The hoop-and-pole ground is like a pool hall." (Opler 1941:450)

Associated with both local group and multi-band encampments, these hoop-and-pole game grounds were separated from the residential areas: "This game is always played at some distance from camp" (Cremony 1868:303). This separation is so that women were not nearby, so any tempers that flared involving gambling did not spill into the encampment at large and because the game required a large flat area.

[M]en take their hoop-and-pole sets out where there is level ground...far from the women. The women...won't go over there. The children never go around the regular grounds either. Even when the men are not playing, the little boys do not go around there. When the little boys play at their hoop-and-pole game, the girls have to keep away. (Opler 1941:50)

Great emphasis is placed on leveling mechanisms within Chiricahua Apachean family and community, as well as in other similarly structured societies. As Mauss (1990 [1950]) noted, the act of giving creates a social bond with an obligation to reciprocate on the part of the recipient. This is true within Apache society, where generosity also bestowed prestige, reputation, and social standing on generous givers (Christian Naiche cited in Henderson 1957:813; Opler 1941:399–400): "Gifts are given because we are sympathetic to one another. If someone needs food, we help him in a material way, for we feel that we are one people. We feel that way to a man who is poor. Giving is a great thing to the Chiricahua. A man can make a great reputation by giving" (Opler 1941:399). Opler adds, "Acceptance of a gift is felt by the receiver as a claim upon him to be adjusted in his own time and way."

The solidarity of the kin group and extended family in material matters means that objects can be easily borrowed, which makes their actual ownership and acquisition by barter of little importance (Opler 1941:398). The same applies to wagering, where goods pass from person to person, but no one goes without.

I once asked *Gian-nah-tah* why the Apaches were such fools as to risk all they had in gaming. "Why," said he, "what difference does it make? They never play with any but Apaches; fortune will not always stick to one person, but continually changes. What is mine to-day will belong to somebody else tomorrow, while I get another man's goods; and, in course of time, I once more own my old articles." In this manner each successively owns the property of all his fellows. (Cremony 1868:304)

While "gifts set up currents of reciprocity which stimulate the exchange and circulation of property," gambling associated with gaming is another mechanism by which wealth is redistributed (Opler 1941:398–400). It's effective in small face-to-face social settings because it represents reallocation of goods without guilt,

resentment, or further obligation. "The wagering of property on games of chance... makes for a great deal of circulation of possessions of all kinds." Furthermore, "Gambling is almost a major occupation for some individuals, and persons of all ages and both sexes show a lively interest in it" (Opler 1941:398).

Among the Chiricahua, most contests of chance (stave games, moccasin game) and skill (racing, hoop-and-pole game) involve betting and so are accompanied by ceremonies for luck (Opler 1941:443–44). "Ceremonies for luck are mostly in connection with racing, the hoop-and-pole game, stave games, and the moccasin game, for these are the big betting games" (Opler 1941:444). Supernatural powers intervene to give luck and determine the outcome (Farrer 1991:123; Haley 1997:161; Opler 1941:214). One calls upon these powers at such times, and win or lose, the result is attributed to fate. Supernatural powers demand gifts and ritual recognition, which, if ignored, risks offending powerful forces due to the selfishness of the winning gambler (Farrer 1991:123). Thus, game playing becomes a mode of redistribution and a confirmation of shared values.

Games of chance also provide mechanisms of decision-making, relegating life events to fate and one's ability to harness power and to the intercession of supernatural powers (Cheska 1979:263). Games can function as a way of decision-making without offense, achieving social and group cohesion. Games of chance inherently involve random and unpredictable redistribution.

In the old days, owning property was gotten through gambling. They win lot of property, like horses, valuable things. Some did it through gambling, and some through working.... Them days, it was all right to accumulate more property than other fellas—considered good fortune. He was looked down upon in good favor by Giver-of-Life. So he's rewarded just like anybody else. (Christian Naiche, cited in Henderson 1957:811)

The stave game, or "gambling with sticks," sometimes involved wagering valuable property,

such as mescal (agave) and horses (Boyer and Gayton 1992:40; Opler 1941:451). At other times, items of lesser value were wagered, such as perhaps the chunk of magnetite situated adjacent to the Three Sisters circle. Yet, whether trifles or valuable property, women were the gamblers in these contexts, while men tended to wager playing other games.⁷

The popularity of games of chance has been attributed by some scholars to the unpredictability of the natural environment (Cheska 1979:235–36; Culin 1907; but see Sahllins 1972:27; Woodburn 1968:2, 53–54). For mobile hunter-gatherers, resource distributions were beyond their control and required management of powers and specialized knowledge to ensure survival. This lack of control except through the intangible and ever-changing nature of power and knowledge would have been amplified for Apache raiders, who were dependent on targets of opportunity and where measured risk was part of the calculation. The dangerous nature of the raid introduced an element of chance, just as the proceeds resulting from the raid were, to some degree, unpredictable. Especially later in time, when confronted daily with the possibility of attack, life was defined by chance: the probability of accessing a particular mescal (agave) collecting area, the likelihood of encountering danger when crossing a valley, and the possibility of losing all possessions when an encampment was overrun by enemies.⁸ For these reasons, effort was made to gain and harness power, but this uncertainty contributed to an easy-come, easy-go attitude that surrounded many of the possessions of the southernmost ancestral Apache, which has sometimes been characterized as thrift. The meta-message in such games is that luck can instantaneously change—for the better or for the worse (Scholastic Inc. 2015). For raiders and hunter-gatherers like the Apache, the message that your luck can change in an instant is one of the most important. In addition to the concept of not giving up, the message is conveyed to be prepared for upset, disaster, and unexpected change. Apache children are trained extensively to prepare for the unexpected (Opler 1941).

Opler (1941:54) notes, "[C]hildren seldom

attempt such adult pastimes as shinny, the stave games, and the moccasin game. They do watch their elders play them, however, and become conversant with the principles involved.” Many popular articles extol the virtues of games as educational and enculturation tools, teaching children to follow rules, communicate verbally, cooperate, learn to count, take turns, share, wait, strategize, interact with and anticipate the needs of others, and face competition in a healthy way. Games enhance memory skills and manual dexterity as well (Gray 2009; Shellenbarger 2015; Scholastic Inc. 2015). Men watch little boys playing, and some count for each side while the boys take lessons. They say, “If you get to be an expert in this, when you get to manhood you can win horses, weapons, everything” (Opler 1941:50).

Games and gambling have long been recognized as a way to connect to others and the larger world (Robinson et al. 2015). Games carried out in the more intimate surroundings of the family or local group encampment functioned as a context for family and group bonding, as participants spent relaxed time together. Gray argues that play and humor lie at the core of hunter-gatherer social structures and mores. Hunter-gatherers use humor to maintain equality, social harmony, cooperation, and to stop quarrels. “Their religious beliefs and ceremonies were playful, founded on assumptions of equality, humor, and capriciousness among the deities”. According to Gray (2009:476–77), play and humor among hunter-gatherers provide a “means of promoting actively the egalitarian attitude, extensive sharing, and relative peacefulness.”

Play and games reinforce socially acceptable behavior, as well as teach cooperation and fair play. Games are important in socialization, promoting systems of interaction, reciprocity, and equilibrium by reinforcing cultural norms and values and playing out beneficial practice (Miracle 1978:177). Games provide a setting to practice and ensure a standardization of values, goals, and behavior. Game contexts provide a useful forum for refreshing values, adjusting behavior, smoothing over and resolving conflict, and diffusing tension.

The role of games of chance in strengthening

group affiliation can be seen in small family-oriented settings, such as is inferred at Three Sisters. Games strengthen the consciousness of unity among members and are a way to forget about the harshness (work and commitments) of life: “My people often gambled to pass the time and forget the misery” (Eugene Chihuahua cited in E. Ball 1980 [1957]:153). Games are an opportunity to be social; relieve stress; keep relationships fresh; bring joy, vitality, and resilience to relationships; heal resentments and disagreements; and learn to trust one another and feel safe (Cheska 1979:232; Robinson et al. 2015). As Apache ethnohistorian Lynda Sánchez (personal communication 2015) notes, “[E]ven in their misery they played to forget or perhaps even to keep the children from only knowing sad times.” She references Carmela, or Bui, the Chiricahua Apache girl who in 1932 was taken in the Sierra Madre, found in a leather dress, moccasins, and a small bag with leather playing cards. Sánchez notes that gambling and this type of worldview shielded people from misery and desperate times” (Lynda Sánchez, personal communication 2015; regarding Apache playing cards, see Bourke 1958; Wayland 1972; Wayland et al. 2006).

Games also reinforce group identity at various other levels. Because the Chiricahua lived in small family and local groups that were spread out throughout a large territory for much of the year, encounters with other Apaches did not routinely take place. Consequently, places were designated where people would converge at specific times of the year, for specific events, or to meet after an attack. Convergence at these favored places allowed people to remain connected to others, find mates outside one’s family group, find solace in social interaction, and find one another in emergency situations (Seymour 2009c). These were occasions of excitement and much pleasure. When Apache consultants indicated specific places where games occurred and mentioned encampments named for the games (see above), they were referencing these multigroup, multiband, or intercultural rendezvous locations—the supersized residential locales that drew hundreds of people for special events in which gaming and gambling were

integral and anticipated parts. Referencing Juh's Nednhi camp, one such large encampment in the late 1800s, Jason Betzinez stated, "There was nothing to do all day long but play games and gamble. Both men and women were devoted to gambling" (Betzinez and Nye 1980 [1959]:77).

Gambling took place between discrete groups at these supersized encampments, and much exchanged hands. Who won wagers mattered a great deal when gambling took place in larger group settings because items did not circulate freely outside the local group or band.

In the old days a band seldom numbered more than fifty and all were related by blood or marriage. That meant ten or twelve men. If one killed a deer everybody ate; the next day someone else would get game and all would share. It was the same with gambling. The women, too, loved it. If one person won nearly all the band's possessions today, somebody else got them tomorrow. So it mattered little who claimed ownership. But in big groups such as were imprisoned in Alabama it made a great difference. (Eugene Chihuahua, cited in Ball 1980:153)

Examined in this way, gambling and competition in games contributed to maintenance of a cohesive identity within large intergroup or interband gatherings. In such settings, kin probably did not wager against one another, as also related for the Gros Ventre by Flannery and Cooper (1946:392; see also Cheska 233; DeBoer 2001:234). But as noted, high-stakes wagering among kin did routinely occur with the Apache in smaller social settings, the effects of which were neutralized by their culture of sharing.

Low-stakes wagering likely also occurred in the more intimate settings of the family and local group encampment, where items wagered would have been shared anyway (Boyer and Gayton 1992:253–54). These might be items of relatively little value (such as the magnetite chunk found near the Three Sisters gameboard) or, as described by Flannery and Cooper (1946:392, 409), lost wagers established a small obligation, such as providing a smoke or cooking. This is consis-

tent with an Apache ethnographer's assessment about women's games and gambling:

"[T]he winner was rewarded with being excused from cooking for a day or two or longer. . . . Women's chores had to be accomplished by the loser" (Henrietta Stockel, personal communication 2015).

Games also play a role in organizing the world, and games and the stories about them provide cohesive explanations of natural and social phenomena that are integral parts of life. This includes myths and ritual (Cheska 1979:236–37). References to games in myths are common in various tribes (Culin 1907:32). For the Chiricahua, three specific games are mentioned in traditional stories: the moccasin game (Opler 1994 [1942]:23–27), the hoop-and-pole game (Opler 1994 [1942]:57, 83, 89), and the stave-dice game (as noted above). These include two games of chance—a dice game and a guessing game—and a game of skill and dexterity, the hoop-and-pole game. None of these game forms is specifically Apachean, since versions are played throughout North America (Culin 1907:420), but the local representations of them are Apachean.

The stave-dice game and the hoop-and-pole game are those mentioned most commonly as gender specific, and their gendered nature is sanctioned by Apache traditional stories. The stave-dice game story, as indicated in the opening quote, gives credibility to the sex-role differentiation of this game. It is women who are playing the game, and Coyote's actions sharpen the focus on gender (Opler 1941:53–54). Similarly, the hoop-and-pole game is mentioned in myths in the context of male activities, including stealing a mule (Opler 1994 [1942]:56–57), hunting, gambling, and punishing an unfaithful wife (Opler 1994 [1942]:88–89). Gambling is normalized, sanctioned, and its deleterious effects conveyed when stories relate playing the game in the afterlife ("Gambling is one of our favorite pastimes, so why not gamble in the Cloud Land?" [Ball 1980:57]) and that Coyote "lost everything over there in that [hoop-and-pole] game" (Opler 1994 [1942]:57, 83)).



FIGURE 10.6. A similar gameboard from a Sobaipuri O'odham site in Josephine Canyon, on a tributary of the Santa Cruz River, may signal the complexity of social networks of the prehispanic era between people who would later become enemies. (Photograph by Deni J. Seymour.)

Games are also important in their conception of seasonal and daily cycles and order within the Apache landscape. As discussed, important named places organize the geographic and mythical world, as in *Where They Played That Game... a Game for Day and Night* and *Where They Play [the] Long Pole Game on [the] Side of Mountain*. These games are important with respect to seasonal and daily cycles in that they are only played at certain times of the year and only in the day or night. The story about the contest for day is told, and the associated hidden-ball or moccasin game is only played “when the leaves fall off” in the winter and at night (Christian Naiche cited in Henderson 1957:812). Opler (1941:438) indicates that *Gopher Helps Coyote Have Intercourse with a Girl* (quoted at the beginning of the chapter), as part of the Coyote trickster myth cycle, can only be told at night and in cold weather, as long winter evenings are the most acceptable time for storytelling and when snake and bear are not abroad (Opler 1941:438). Like the original event conveyed in the story, the moccasin game is only played at night and ends at daybreak (Opler 1941:453). In contrast, the hoop-and-pole game is

played in the warm season until fall. Restrictions of these types do not seem to be associated with the stave game (Opler 1941:451), which in many instances may have been played more casually in family settings.

Gaming as a Mode of Intercultural Interaction

The particular type of gaming feature found at the Three Sisters site may provide hints about the benefits of past social interaction at a much broader scale as well. A similarly designed feature thought to represent a gameboard is present on a remotely situated Sobaipuri O'odham site (AZ EE:5:24, ASM), ideally positioned for contact between groups (Figure 10.6; Seymour 2011:Figure 5.26). The site is located on a tributary drainage of the Santa Cruz River, a few miles from other Sobaipuri O'odham village sites. Gaming involving gambling was a likely mode of interaction between distinct groups, such as the Apache and Sobaipuri-O'odham, who only later became traditional enemies. This game-feature occurrence may signify amiable interaction between these groups, as conveyed in documentary sources and indicated by archaeological evidence

(Flannery and Cooper 1946; Sahlins 1972; also see DeBoer, as well as Yanicki and Ives, Chapter 9, this volume). This might be a forum in which efforts were made to obtain much-needed resources, such as food or raw materials, or to repatriate family members lost through raids.

Gambling probably also explains the overlap and widespread distribution of Protohistoric projectile points associated with one group that are found in the sites of others, as indicated by documentary evidence and archaeological distributions (Seymour 2002:12, 266–96; 2011:85, 93; 2014:139, 202). Arrows were commonly wagered in games in this region and elsewhere. For example, Father Andrés Pérez de Ribas noted in the mid-1600s, “In their games it is the custom of these Indians to wager their bows, arrows, and other small items that they value, in the same way that Europeans gamble money” (Reff et al. 1999:363).

Gaming as a mode of congenial interaction and redistribution between groups, even of different languages, has been mentioned previously (Culin 1907:31; DeBoer 2001:233, 245). Wagering property on games of chance was recognized for the Apache as important in the circulation of possessions of all kinds (Goodwin and Basso 1993 [1971]:112–13; Opler 1941:398–99). Gaming features used more widely suggest that many groups used some form of the dice game and gameboard. This game or a variation on the theme seems to have been played by more than one southwestern group, perhaps suggesting ancient roots or intercultural contact, dispersion, and interaction (Culin 1907; DeBoer 2001; Russell 1975:175–76; Spier 1970:341–42).

Conclusions

The presence of the gaming feature at the Three Sisters site provides information necessary to suggest that women were present at this temporary encampment. The shelter outlines by themselves suggest the presence of small family groupings, as does the diversity of household-related artifacts, but these alone are not as convincing as the presence of a gender-specific gaming feature. The location of the encampment, set within the larger engendered landscape, was

selected because it was ideal as a gathering and processing location with a variety of plants available and water nearby. Gathering and processing these plants was women’s work. The abundance of other economic resources, such as rocks and wood, account for the numerous roasting pits on site and nearby that were used for processing the food resources.

It is easy to imagine a scene similar to those alluded to by Boyer and Gayton (1992:18, 110, 189, 253–54) of people spreading a blanket in the shade, resting, visiting, and gossiping. The women gathered around, checked the roasting pit from time to time, and gambled, shouting with glee when they won and losing themselves in the game, forgetting rigors, dangers, and miseries. We are reminded from cross-cultural examples that adult play is a time to forget—a time for bonding and reinforcing commonly held values and behavior. But the reason these women could forget is because this place was also chosen for its defensibility. The residents would not have continually resided in this gathering area if it was not safe. On the other hand, unless under direct pursuit, there would have been no point in revisiting a defensible encampment if there was nothing to gather.

This type of intimate encampment is described in the ethnographic literature: families left the larger local group camp to obtain resources of specific types in specific areas. Three Sisters seems to be an example of this, where archaeological signatures of an unexpectedly rich assortment of activities are fortuitously preserved. Understandings of gender, household and work-group composition, and seasonal movement among the ancestral Chiricahua allow us to understand the various social contexts of this site, including the residents’ participation in gaming.

The early age of the Three Sisters site suggests considerable time depth to this landscape-use pattern, the seasonal dispersal of family groups, and also the practice of the stave game. Further, this unprepossessing site, with its gameboard, shows that dice games do have ancient roots and are not more recent colonial phenomena (DeBoer 2001:237).

Social Aspects of an Apachean Stave-Dice Gaming Feature at Three Sisters

Notes

1. Women tend to be faceless except for Lozen, a female warrior and shaman in the 1800s, and a few other notable women who broke out of the traditional female role (Boyer and Gayton 1992; Buchanan 1986; Stockel 1991).
2. There is evidence, however, of women playing a role in warfare, including as early as 1698 (Seymour 2014) and continuing in the 1870s and 1880s (Buchanan 1986; Mott 1871).
3. It is unclear whether this is an actual campsite or reference to the original mythical place or both.
4. The Three Sisters circle rivers are intercardinal, if declining to true north, but are more in line with the cardinal directions of magnetic north.
5. Other independently derived data provide hints as to the ancestral Apache affiliation of this site (Seymour 2013, 2017).
6. Of course, there are attendant assumptions in relating this feature to this particular game: (a) that this feature form has a singular function; (b) that the game was played in a similar fashion through time, although with some changes; (c) that the social context of the game remained consistent; and (d) that gender relations remained similar through time.
7. Women were gifted, earned, or, in the case of Lozen (given the name Dexterous Horse Thief), obtained horses through raids (Boyer and Gayton 1992:54; Opler 1941:7, 129, 157, 159; Stockel 2000:71). This contradicts the often implicit assumption that, since horses were gambled during the stave game, the gambling must have been carried out by men. For the alternate view, see DeBoer (2001:227).
8. While mescal in Mexico is a distilled alcoholic beverage and agave is its plant resource, in the American Southwest the agave plant is also called mescal and is the basis for the name Mescalero Apaches.



Serious Play in the Preclassic

The Chalcatzingo Figurines as Guides in a Game of Social Learning

MARK E. HARLAN

Figurines, both anthropomorphic and zoomorphic, are a ubiquitous aspect of material culture in many Formative period village communities. They have received a good deal of attention from archaeologists and others (see Lesure [2011] for a worldwide survey of the incidence of figurines). Many interpretations of figurine function have been offered, the most common being ancestor veneration cult figures, healing and curing figures, supernatural or god figures, initiation figures, and toys (Stinson 2010; Talalay 1993; Ucko 1962, 1968). Although most discussions consider the possibility that the figurines may have been children's toys, that possibility is generally rejected in favor of one of the "more serious" uses (Ucko's work is a notable exception). In contrast, this chapter focuses on the role of figurines in serious play. The variability and distribution of the large collection of figurine fragments from Chalcatzingo, Morelos, Mexico makes most sense when viewed as children's playthings. But far from making these objects frivolous or unimportant, they appear to have been serious tools used in preparing children for adult lives in the community.

In developing my interpretation, I first interrogate the corpus of figurines in order to detect patterns in the depicted attributes, or motives, and then infer what these patterns may mean. Second, I turn to patterns in figurines from ethnographic contexts that are known to have served various distinct functions in their respec-

tive societies in order to derive archaeological expectations for each of the functions investigated. Finally, I compare these archaeological expectations with the data from the Chalcatzingo figurines, leading to the conclusion that they are best viewed as toys. But first, it is necessary to introduce the prehistoric site in which the figurine fragments are found.

Chalcatzingo as Site and Community

The information for this brief summary is taken from Grove (1984). Chalcatzingo is located in the Mexican state of Morelos, just below the central basin that holds Mexico City (Figure 11.1). The site originally became famous after a torrential rain uncovered a series of bas-relief carvings on the Cerro Chalcatzingo, which rises above the site. These carvings are clearly part of the Olmec artistic tradition as found at the Gulf Coast site of San Lorenzo, leading to various speculations concerning whether Chalcatzingo might have been an Olmec outpost. Such speculations were laid to rest by the work of a joint project of the University of Illinois and the Instituto Nacional de Anthropología y Historia conducted in the early 1970s. It revealed the development of a typical central Mexican village Formative period community that grew from a hamlet first occupied around 1660 BC into a large, socially stratified community that became a regional center. It also produced a chronology of the development that is summarized in Figure 11.2.



FIGURE 11.1. Map of central and southern Mexico, showing the location of Chalcatzingo and other sites mentioned in Chapter 11. (Drawn by Mark E. Harlan and Barbara Voorhies.)

The Chalcatzingo Project produced little information on the Amate phase (1500–1000 BC) occupation, which is limited in extent and generally deeply buried. Even during that early time, however, the occupation at Chalcatzingo was somewhat distinct from others in Morelos and elsewhere in central Mexico because the villagers began construction of a large platform mound that would come to architecturally dominate the community throughout the Preclassic occupation.

The succeeding Barranca phase (1000–700 BC), which also is poorly represented in the excavations, was a period of rapid expansion

and change at Chalcatzingo. The community undertook extensive earth-moving projects that converted slopes into flat terraces, creating the configuration seen in Figure 11.3. Population increase (which likely included accretion by immigration from the surrounding region) converted the Amate phase hamlet into a village. It also seems likely that social changes began that resulted in a community stratified into elite and nonelite segments.

Cantera phase Chalcatzingo (700–500 BC) is well documented as a regional center with ties to the Gulf Coast. The settlement was not compact but dispersed to allow for crops on the terraces

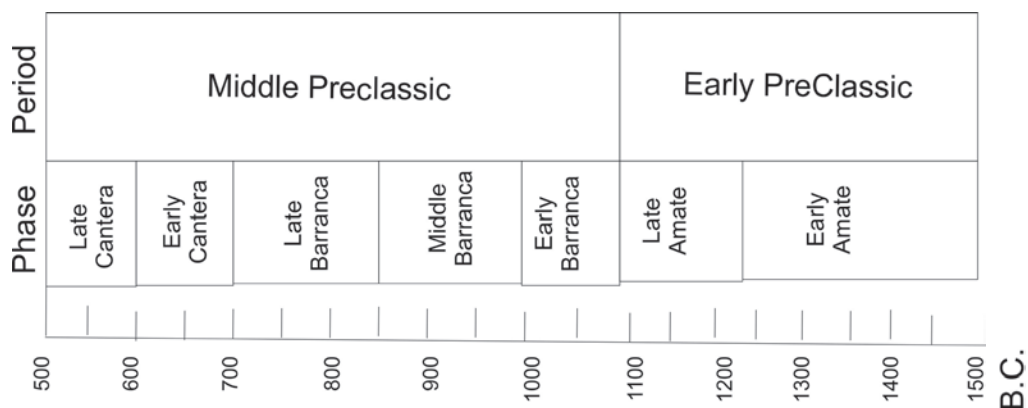


FIGURE 11.2. Chalcatzingo chronology (adapted from Cyphers Guillén and Grove [1987]).

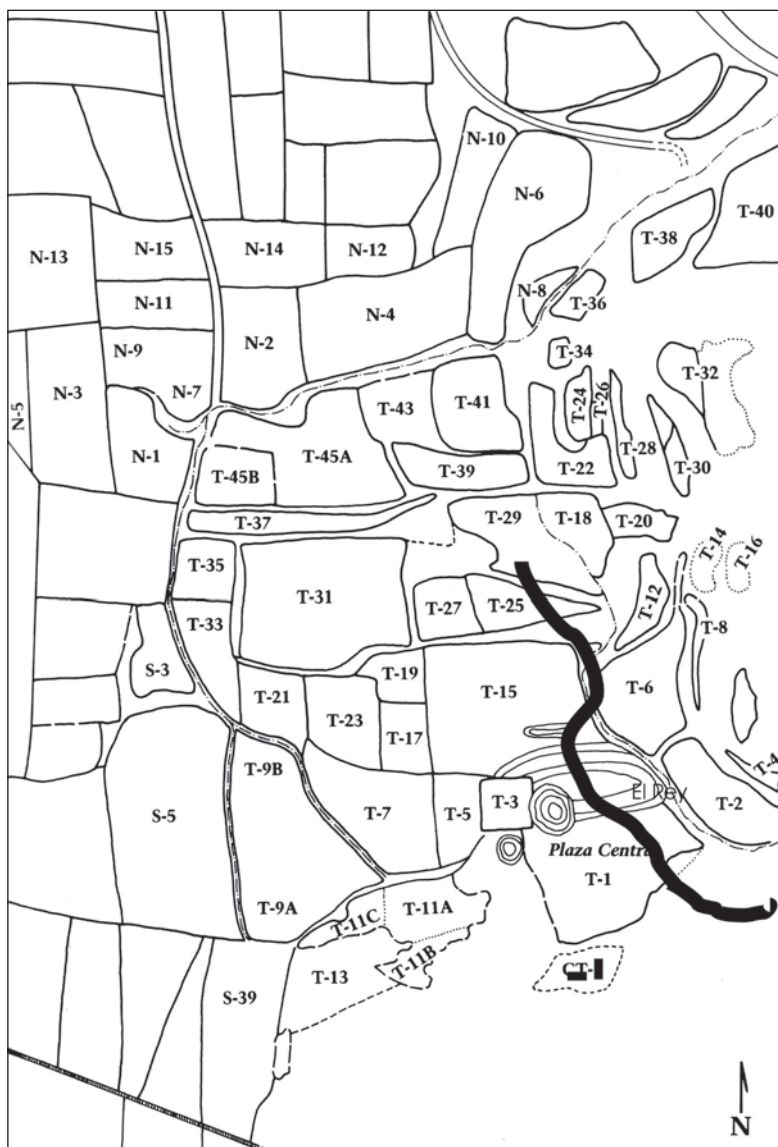


FIGURE 11.3. Cantera phase map of Chalcatzingo showing agricultural terraces. (Adapted from Cyphers Guillén and Grove 1987:23. Reproduced with permission of David C. Grove.)

within the settlement, likely supplemented by produce from fields located farther out. Evidence for segmentation into elite and nonelite components can be seen in differential treatment of the dead, differential access to meat as shown in human skeletal analyses, and residential construction. The most striking example of elite residence is seen in a compound located on Terrace 1 (also referred to as the Plaza Central), which included a residential structure and another structure that may have been a workshop or possibly a combination workshop and residence for attached specialists. Those specialists may have been involved in producing the many figurines found throughout the Cantera phase community, since it contains the densest concentration of figurine fragments anywhere on the site. Other elite residences were constructed on stone platforms, and some included monuments.

In short, the community that created and used the figurines was one undergoing relatively rapid and profound social change as it grew from a small hamlet of egalitarian farmers into a socially stratified regional center influenced by its connections to other regions, especially the Gulf Coast.

What the Figurine Fragments Depict

The approach to figurine variability employed here embraces a fuller range of representations and their distribution than some other studies have attempted. Many scholars who have approached figurine collections in various parts of the world have focused on a subset of objects that most readily catch the eye or that appear to present a coherent narrative. For previous studies of the Chalcatzingo collection, this has led to considering only figurines of the elegantly made Type C-8 (Grove and Gillespie 1984) or to generalizing from depictions that are extremely rare (Cyphers Guillén 1987a). Further, an important part of my analysis through the years has been to address the reality that the objects recovered at Chalcatzingo do not constitute a collection of figurines but of figurine *fragments*, presenting unique analytical problems that have been the basis of much consideration, including

TABLE 11.1. Figurine fragments by context category at Chalcatzingo.

Category	Fragments	Percent
Residential structure	3550	57.7
Near residential structure	377	6.1
Trash	212	3.4
Workshop	275	4.5
Nonresidential structure	453	7.4
Redeposited	184	3.0
Nonstructural area	285	4.6
Unclassified	390	6.3
Classic structures	292	4.7
General surface scatter	11	0.2
Off-Site	120	2.0
Total	6149	100.0

the preparation of problem-specific programs to address a number of methodological issues highlighted by this assemblage. Inferences as to what the original whole pieces might have looked like must proceed with caution, and I have addressed numerous parameters and permutations in my analyses (Harlan 2014).

It is also important to consider the full range of contexts where the figurine fragments occur. Many past studies have limited attention to only those that were recovered near residences. One reason for this is that fragments from a residential context constitute the majority of many collections. See Lesure (2011:119) for a characterization of contexts in which figurines generally occur and Table 11.1 (this volume) for a generalized categorization of the contexts at Chalcatzingo that produced figurines. As Table 11.1 shows, figurines can occur in any context at the site but are concentrated in and around residences, even accounting for the fact that excavation of residential structures was the main focus of the Chalcatzingo Project.

Consideration of variability in the depictions that the figurines convey and their contexts is quite helpful in supporting a general assertion that they were playthings. Deeper understanding, however, also requires consideration of the kind or kinds of games that may have been involved. This issue is addressed here, as are the

TABLE 11.2. Figurine iconic containers, objects, and variants.

Containers	Objects	Variants	Occurrences
Headgear	Turbans and headdresses	16	1,631
	Headgear buttons	4	587
	Other headgear embellishments	8	579
Head	Eyes	14	2,289
	Noses	6	1,594
	Lip ornaments	1	62
	Mouths	8	1,777
	Ear spools and ornaments	7	1,658
Chest	Breasts	6	1,283
	Neck ornaments	4	471
	Body decoration	1	85
Arms	Arm position	7	162
	Finger	2	280
Abdomen	Navel	3	1,038
	Pregnancy	4	467
	Pubic covering	1	282
	Waist bands	3	99
	Body decoration	1	52
Legs	Leg position	9	544
	Knee guard	1	18
	Sandals	4	224

potential game structures and social purposes the games may have served. While these topics are outside of the normal purview of figurine studies, consideration of these aspects of the Chalcatzingo figurines allows for a deeper analysis that addresses the many problems that hang in the background in studies that examine them in a more conventional framework.

All inferences concerning what the figurines depict must be built from the information available in the archaeological context. Consideration of the figurines as objects encountered on the archaeological landscape at Chalcatzingo must take account of how they were created and their condition as encountered when we excavated the site. Looking at the objects themselves, it is useful to view each part of the figurines as a set of “containers” for representational content. In this view, each figurine has a headgear container where three kinds of objects are depicted (head-

dresses, various buttons, and different embellishments), a head container where eyes, noses, mouths, and ear ornaments are displayed, and so on down to the feet (Table 11.2).

Further elaboration is seen in the number of variants for each object. Considering only variants that were observed more than 10 times in this figurine collection, there are 16 different headdresses with 4 kinds of buttons and 8 kinds of other embellishments, 14 kinds of eyes, 8 kinds of mouths, and so on. It is notable that the areas of depiction referred to here as containers may correspond to categories that were important to the figurine’s makers because, for most specimens, each container was modeled separately and appliquéd or tenoned to the rest. Representational containers, objects, and variants are summarized in Table 11.2.

Whether looking at the number of objects depicted in each container, the number of vari-

ants, or the number of occurrences, one aspect of figurine variability is immediately apparent: whatever message the figurines conveyed, the strength and complexity of the signal declines from the figurine's head to its feet. Wobst (1977) has given us concepts that provide a likely meaning for this pattern. He views stylistic variability as functioning primarily as a communication device, asserting further that most stylistic signaling should relate to social integration and social differentiation (Wobst 1977:327). Wobst proceeds from this general discussion to an ethnographic example from Yugoslavia that is particularly apt for the current discussion. The societies in that region are highly segmented, with much tension among groups. Males wear items of apparel that identify their group membership, some of which are visible only at a short distance, others at an intermediate distance, and a third group visible at long distance. Considering items visible at a long distance, Wobst (1977:332–33) then notes, “Headdress, under these circumstances, is singularly appropriate to take a message of social group affiliation, because it is potentially visible to any member of a social group and it enters into most boundary maintaining interactions.”

Assuming that the Chalcatzingo figurines depict, in a general way, the idealized inhabitants of the prehistoric community, they may provide a record of how these people differentiated themselves, either as individuals (facial features) or into groups (headdresses). The placement of the signals—high on the body in real life—shows a concern with identification at a distance. The basic depiction in the figurines, then, appears to be of social personae that members of the community could recognize before actually encountering them. This aspect of each figurine is literally baked into the clay, rendering it unchangeable, regardless of any perishable clothing that may have been added when the figurines were in use.

If the message of social identity in the figurines is the clearest and most powerful, there is still a strong secondary message concerning gender. This inference, of course, assumes that there is a close correspondence between biological sex and gender. While this assumption is reasonable

enough, it is important to acknowledge that the relationship is actually unknown for the prehistoric community and, in any case, is a complex matter (Brumfiel 1991; Busby 1997; Meskell 1998; Strathern 1988). With regard to biological sex, Cyphers Guillén (1987a, 1988a, 1988b, 1993, 1998) has asserted that up to 97 percent of the anthropomorphic figurines produced at Chalcatzingo represent females. This would seem to provide strong support for her view that gender roles are the primary message the figurines carried and her inference that the figurines functioned as cult objects used by female sodalities. In addition to the sex characteristics coded on the figurines, she sees a further dominance of themes associated in most societies with the feminine gender. The themes are pregnancy, nursing and nurturing children, and food preparation (the last based on the co-occurrence of human figurines and depictions of dogs, which she believes were used as feast food).

To examine these sex-role characterizations and my own interpretations of these figurines as conveying other kinds of social identity, it is useful to first consider the condition of the figurines as encountered in the archaeological context, which, as emphasized, is fragmentary. Only 22 of the 6,149 cases recorded have a totally complete set of body parts. Breakage tends to occur along lines of attachment (the weakest points), so the head covering may detach from the head, the head from the body, the limbs from the trunk, and so on. There are 465 theoretically possible combinations of parts, 50 of which actually occur. A reason why more of the possible combinations do not occur is readily apparent when one considers differential survival rates. It is clear that fragments that include a head are preserved far more frequently than fragments that do not. Actually, 2,839 (46 percent) of the fragments found at Chalcatzingo include the head, and 2,228 (36 percent) consist of heads without other body parts, about half with headgear still attached. Fragments consisting of headgear alone account for 394 cases. Figure 11.4 summarizes the frequency of occurrence for figurine fragments consisting of only one major part. How an analyst puts these fragments

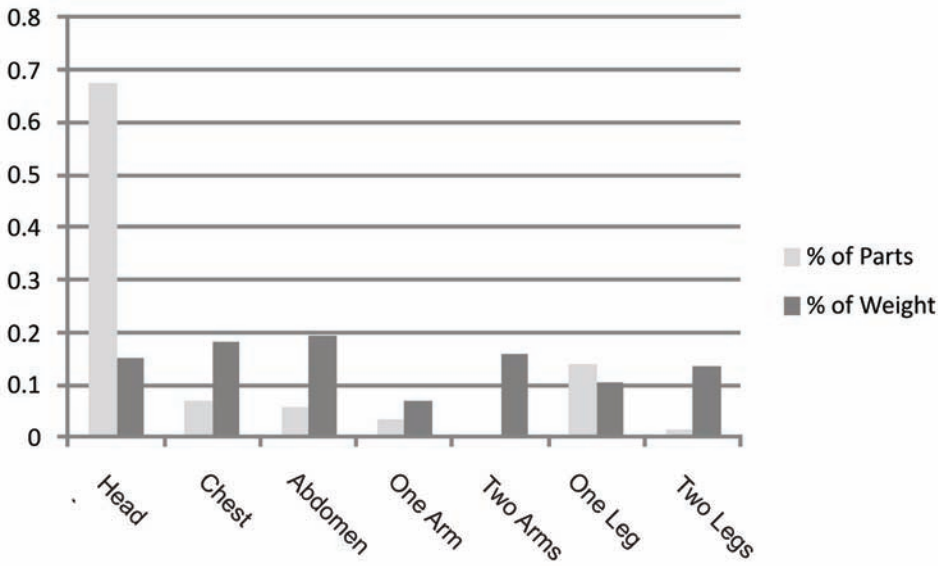


FIGURE 11.4. Histogram showing percentage of parts and percentage of weight for surviving body-part fragments consisting of a single container. (Drawn by Mark E. Harlan.)

together affects interpretation in fundamental ways, and the methodological implications of this aspect of the collection has been an important consideration in my analyses. To consider only the complete and mostly complete figurines limits the sample so substantially that it is not representative of the whole.

Figure 11.4 demonstrates that survival is not merely a function of fragment mass. The most massive fragments—chests and abdomens—have a lower survival rate than heads. Fragments consisting of a detached headdress, among the least massive on average, are more likely to survive than chest and abdomen fragments. Clearly, natural forces do not account for this pattern, suggesting that cultural selection is involved. It would appear that even in fragmentary condition, pieces with a head or headdress, or both, were preserved. As I discuss below, this is most likely because they could still serve their function even after breakage, whereas detached body fragments could not. The iconography associated with social personae and coded on the figurines' heads was the key aspect of figurine variability, with information coded on the figurine bodies—primarily secondary sexual characteristics and pregnancy—running as an undercurrent. This

latter aspect suggests that biological sex, as a determinate for gender, is an important but secondary part of social personae.

The survival rate of chests and abdomens connects to the representation of sex. The makers of Chalcatzingo's figurines observed a complete prohibition on the representation of genitalia, so the only available gender flags are the presence of breasts on a chest fragment or depiction of pregnancy on an abdomen fragment. Therefore, we cannot speak of a ratio of female to male representations, only a ratio of female representations to figurines where biological sex is not indicated. Looking at the 2,617 fragments that have a chest, an abdomen, or both parts, 1,550 (59 percent) of them also display either a breast or pregnancy, whereas 41 percent do not.

Based on the clearest indicators of biological sex, then, there is a bias toward the representation of females but not the clear dominance that would be expected if themes associated with feminine gender were the figurines' primary message. Still, another potential indicator of biological sex needs consideration. Incision in the pubic area, which I interpret as depicting a garment, could possibly be a highly stylized indicator of female genitalia. This would add 158

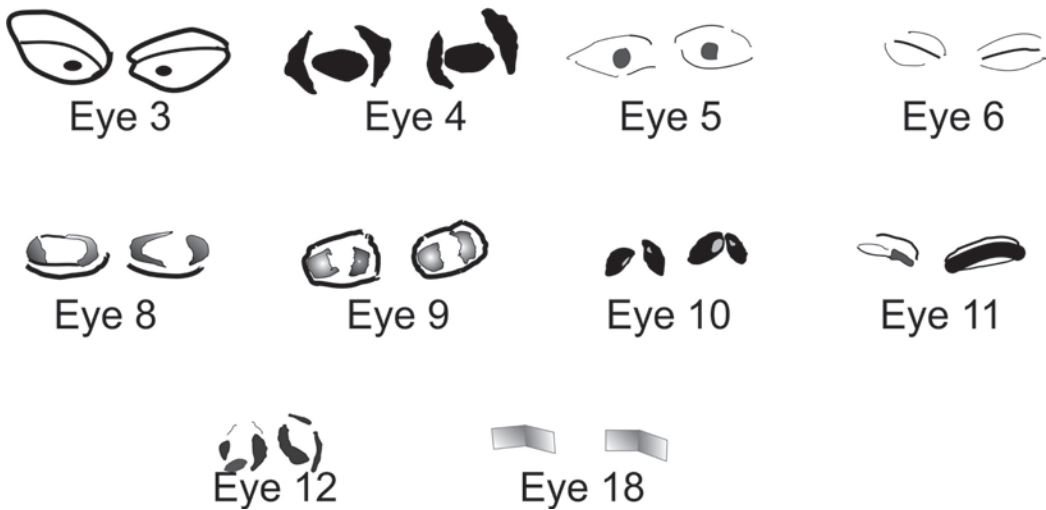


FIGURE 11.5. Drawings of the eye forms listed in Table 11.3. (Drawn by Mark E. Harlan.)

specimens to the group of figurines identified as females, increasing the percentage of female figurine parts to 65 percent of the total. There are other subtle indicators of sex not included in the database, such as displaying a narrow waist and flaring hips, but information on these attributes was not gathered systematically. However, nearly all fragments with the hips preserved would have to display a female aspect to substantially affect the observed percentages.

This leaves for consideration the gender-based themes not tied directly to the biological sex of the person portrayed, such as those I mentioned above (women carrying a baby, carrying burdens, and so on). These representations are exceedingly rare. The 6,149 recorded fragments include only 18 showing a woman carrying or nursing a child, or both, and only 11 other figurine fragments shown carrying anything else. The basic fact is that the Chalcatzingo figurines are generally depicted in a static pose and not engaged in any form of activity. The evidence from actual counts of representations, then, indicates a primary concern with social identity and a secondary concern with female sex and reproduction.

From these observations, I infer that female biological sex—and, by extension, feminine gender—was not a principal message conveyed by

the figurines. Actually, the representation of gender is a gradation from depictions that are clearly female to those where sex is ambiguous. These observations argue strongly against interpreting the figurines as cult objects associated with female sodalities. This conclusion is further supported by the evidence generated by comparing characteristics of the figurine assemblage to the archaeological expectations derived from ethnographic research on figurines of known and different functions, as I will discuss.

The Chalcatzingo figurines, then, generally depict human beings. They tend to represent slightly more females than figures with no sex indicated. The figures are overwhelmingly nude, which may have invited those who deployed them to dress them in some perishable materials. While allowing for that possibility, the presence of a headdress modeled in clay tells us that this aspect could not be varied. This raises the question of whether there was a somewhat limited set of consistent depictions that might correspond to actual social beings in the prehistoric community. My search for such consistent depictions has focused on the most variable aspects of depiction: (a) the eyes and the headdresses for fragments that preserve both head and headdress (Figures 11.5–6), and (b) the breast forms and depictions of pregnancy for



FIGURE 11.6. Drawings of headdresses listed in Table 11.3. (Drawn by Mark E. Harlan.)

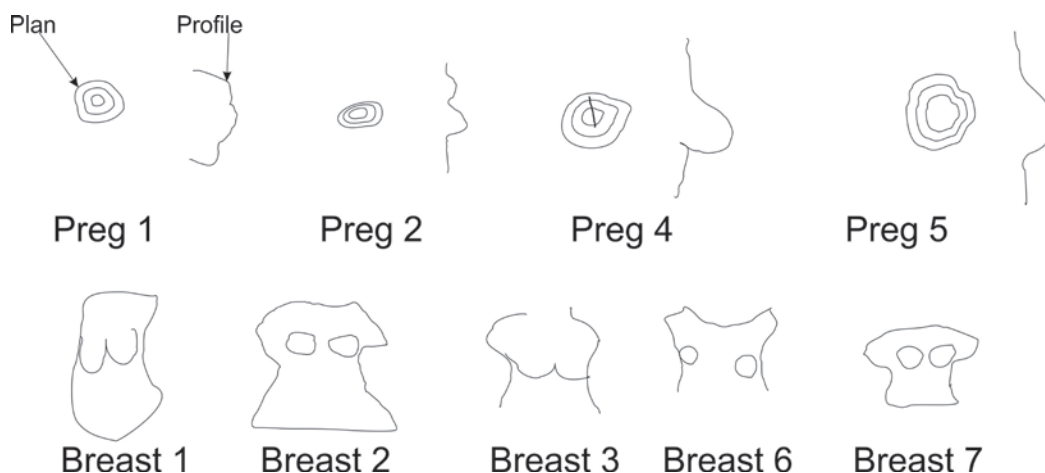


FIGURE 11.7. Drawings of pregnancy and breast forms listed in Table 11.6. (Drawn by Mark E. Harlan.)

fragments that preserve an abdomen and chest (Figure 11.7).

Analytical Search for Meaningful Associations

To some extent, the analytical problem is a straightforward exercise in cross-classification but with an additional wrinkle required by the nature of the data and the question at hand. A basic cross-tabulation of eye forms and headdresses is presented in Table 11.3. All the aspects of figurine variability discussed here have been described and illustrated elsewhere (Harlan 1975; 1987a, 1987b). Figure 11.8 is provided as a schematic comparison for convenience. As shown,

almost any headdress can occur with almost any eye form, so there is no simple code of the form that might resemble, “to depict Social Persona A, combine Eye Form 5 with Headdress Form 1.” However, despite the lack of a rule in this form, the associations are definitely not random: chi-square is 1027.33 for 99 degrees of freedom, leaving a vanishingly small (3.1^{-154}) chance that the distribution could have arisen by chance. Still, there are two problems with this classic contingency analysis. First, the chi-square test is unreliable because more than half of the cells have an expected value of less than five (a very common situation in archaeological data). Second, and more importantly, the contingency test does not

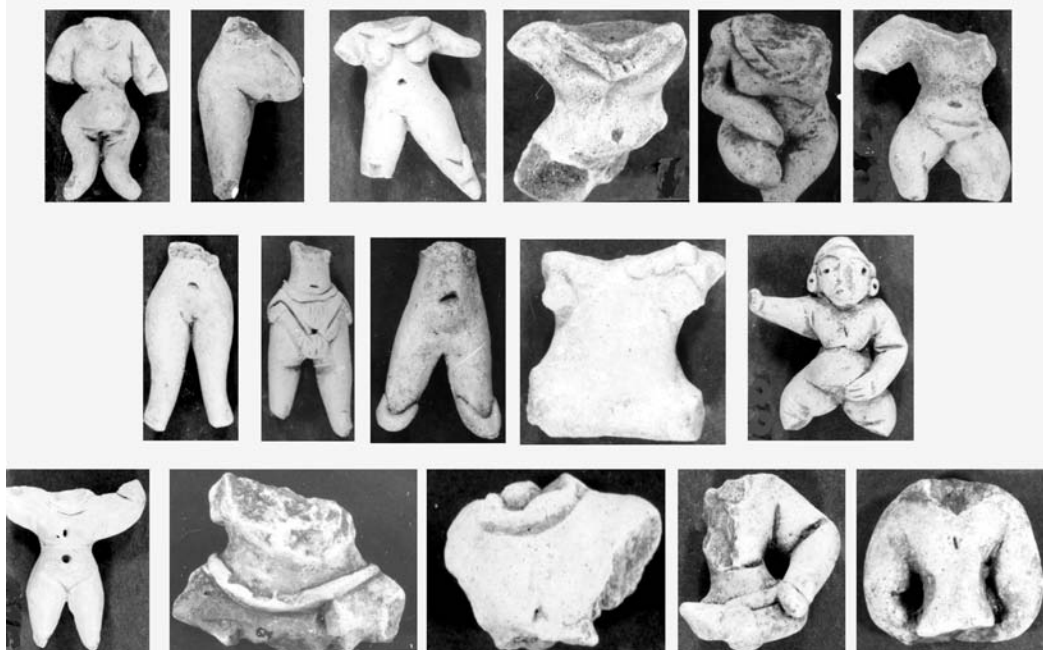


FIGURE 11.8. Figurine body fragments showing a gradation from clearly marked female sex characteristics to unmarked sex. Fragment in top row, far right shows incision in the pubic area that could be a garment or a stylized representation of female genitalia. (Photographs by Mark E. Harlan.)

TABLE 11.3. Cross-tabulation of eye forms and headdress forms. (Numbers refer to fragments in each category.)

Headdress	Eye										Total
	3	4	5	6	8	9	10	11	12	18	
1	160	68	170	10	15	20	5	8	12	9	477
2	65	5	50	4		4		2	1		131
5		1	4	11			1	1	1	1	20
7			5	17		2	1				25
9	3	20	1		1	9	4	1	2		41
11	13	10	24	1		8	2	6	4		68
12	5	10	2		6	4			7		34
13	9	63	11	3	2	34	5	10	24		161
14	3	18	10		2	3		1	18	2	57
16	1	10				10		2	3	1	27
18	4	11	9			2			9		35
25	5	27	5			7	1	5	22		72
Total	268	243	291	46	26	103	19	36	103	13	1,148

TABLE 11.4. Significant associations of eye forms and headdress forms. The numbers are the difference between the observed percentage and the population percentage for that pair. The notation “n/a” indicates that the exact probability of obtaining a difference is equal to or greater than 0.05.

Headdress	Eye									
	3	4	5	6	8	9	10	11	12	18
1	0.182	-0.136	0.169	-0.198	0.161	n/a	n/a	-0.193	-0.299	0.277
2	0.128	-0.094	0.058	n/a	-0.114	-0.075	n/a	n/a	-0.104	n/a
5	-0.017	n/a	n/a	0.222	n/a	n/a	n/a	n/a	n/a	n/a
7	-0.022	-0.022	n/a	0.348	n/a	n/a	n/a	n/a	n/a	n/a
9	-0.025	0.047	-0.032	n/a	n/a	0.052	0.175	n/a	n/a	n/a
11	n/a	n/a	0.023	n/a	n/a	n/a	n/a	0.107	n/a	n/a
12	n/a	n/a	-0.023	n/a	0.201	n/a	n/a	n/a	0.038	n/a
13	-0.107	0.119	-0.102	n/a	n/a	0.190	n/a	0.138	0.093	n/a
14	-0.038	0.024	n/a	n/a	n/a	n/a	n/a	n/a	0.125	n/a
16	-0.020	0.018	-0.024	n/a	n/a	0.074	n/a	n/a	n/a	n/a
18	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.057	n/a
25	-0.044	0.048	-0.046	n/a	n/a	n/a	n/a	0.076	0.151	n/a

really address the question at hand, which is not in the general form of “Is there a relationship between headdress and eye form?” but rather, “Which headdresses are significantly associated with which eye forms?”

Table 11.4 addresses this issue by examining each association individually. The frequencies of headdresses in the dataset as a whole are treated as the population frequency of that headdress. With this population frequency, the exact probability of seeing the observed value was calculated for each cell in the table using the binomial distribution formula. A significance level of 5 percent probability was selected for rejecting chance associations, in line with standard usage. If the observed frequency could be expected by chance 5 percent of the time, the cell contains “n/a.” If that is not the case, then the positive or negative deviation from the expected proportion is reported in the table.

Viewed in this way, the data provide information on what the figurine makers may have been trying to depict. A maker could choose to associate Headdress Form 1 with Eye Form 4, which they seem to have done quite frequently. However, that decision was actually made less frequently than if the headdress forms were pulled randomly from a hat containing all forms in the same proportions as in the population.

Headdress Forms 9, 13, 14, 16, and 25 were associated with Eye Form 4 more often than would occur with a random selection. This situation contrasts with what is seen for either eye form 3 or Eye Form 5. For those eye forms, either Headdress Form 1 or 2 are essentially the rule, although there is a significant association between Eye Form 5 and Headdress Form 11. Again, the associations are nonrandom, whereas other headdress forms occur with those eye forms essentially as expected by chance.

Further examination of Table 11.4 along these lines indicates that the eye forms actually create groups in their associations with the headdresses. For example, Eye Forms 3 and 5 (closely similar depictions) are tightly associated with Headdress Forms 1 and 2, whereas other pairings are random, except as noted above. Eye Form 18 patterns along with them, creating a Group 1 with three eye forms, and two headdress forms. Eye Forms 4, 9, 11, and 12 share associations with Headdress Forms 13, 14, 16, and 25, forming a second group, Group 2. Eye Forms 6, 8, and 10 do not group with any of the others.

Given that almost any headdress potentially can be depicted on the same fragment as almost any eye but is not, it is possible to suggest subgroups of the eye groups based on which headdress the figurine’s creator actually selected.

TABLE 11.5. Eye groups, headdress subgroups, and associations with other features.

Eye groups	Headdress subgroups	Associated features
Group 1—Eye Forms 3 and 5	Subgroup 1—Headdresses 1 or 2	Mouth Form 5
	Subgroup 2—all other headdress forms	Mouth Form 10 Nose Form 5
Group 2—Eye Forms 4, 9, 11, and 12	Subgroup 1—Headdresses 1 or 2	Mouth Form 1 Mouth Form 6 Nose Form 7
		Mouth Form 2 Mouth Form 10 Ear Ornament 7
	Subgroup 2—Headdress 13	Ear Ornament 7
	Subgroup 3—Headdress 25	Ear Ornament 4 Ear Ornament 7
Eye Form 6	Subgroup 4—all other headdresses	
	Subgroup 1—Headdress 1 or 2	
	Subgroup 2—Headdress 13	
	Subgroup 3—Headdress 25	Mouth Form 10
Eye Form 8	Subgroup 4—all other headdresses	Mouth Form 10
	Subgroup 1—Headdress 1	
	Subgroup 2—Headdress 12	
	Subgroup 3—all other headdresses	
Eye Form 10	Subgroup 1—Headdress 1	
	Subgroup 2—Headdress 9	
	Subgroup 3—Headdress 13	
	Subgroup 4—all other headdresses	

Table 11.5 summarizes the groups and subgroups. Tabulating these back onto the other features of the figurine’s heads, some additional trends in depiction are observed. That information is also presented in Table 11.5. The data seem to indicate that some features of the figurines’ faces and ornamentation do vary along with the basic combination of eye forms and headdresses.

The same analysis was performed for the body fragments that include both a chest and an abdomen. For this analysis, specimens with both a chest and an abdomen were selected so that lack of depiction is least likely to result from breakage. The results are presented in Tables 11.6 and 11.7. The overall association is significant with a chi-square of 58.6 for 24 degrees of freedom, giving a probability of 0.0001 that the association would have arisen by chance. But, again, the contingency is ill conditioned for chi-square tests since 31 percent of the cells have an

TABLE 11.6. Cross-tabulation of breast forms and pregnancy forms. (Numbers refer to individual fragments in each category.)

Breast	Pregnancy					Total
	0	1	2	4	5	
0	366	17	31	10	21	445
1	134	9	37	13	21	214
2	288	11	27	10	23	359
3	67	5	11	5	5	93
4	91	3	14		6	114
6	13					13
7	53	1	1	1	4	60
Total	1,012	46	121	39	80	1,298

expected value of less than five. The consideration of individual cell frequencies indicates a fragment displaying Breast Form 1 is more likely to depict a pregnant woman, but the form of the depiction could be any pregnancy form except

TABLE 11.7. Significant associations of breast forms and pregnancy forms. The numbers are the difference between the observed percentage and the population percentage for that pair. The notation "n/a" indicates that the exact probability of obtaining a difference is equal to or greater than 0.05.

Breast	Pregnancy				
	0	1	2	4	5
0	0.019	n/a	-0.087	n/a	-0.080
1	-0.032	n/a	0.141	0.168	0.098
2	0.008	n/a	-0.053	n/a	n/a
3	-0.005	n/a	n/a	n/a	n/a
4	0.002	n/a	n/a	-0.088	n/a
6	n/a	n/a	n/a	n/a	n/a
7	0.006	n/a	-0.038	n/a	n/a

Form 1, which is not significantly associated with any breast form. Except for the association between no depiction of either breast or pregnancy, which could represent a conscious attempt to depict figures that are not female, there are no other notable associations, nor do there appear to be patterns of the type that allowed for grouping the eye forms with respect to headdress depiction. A check for significant associations between the breast/pregnancy form pairs against other variability present on the chest and abdomen (navel form, the Y-shaped element interpreted as a public cover) reveals no significant associations.

These results support and extend the conclusions reached above when examining the pattern of variability of depictions, as indicated simply by complexity and placements on the figurine bodies. The figurines are meant to depict social personae recognizable at a distance by their distinctive headdresses, an aspect of variability that no user of the figurines was allowed to alter. In addition to the headdresses, some aspects of the figurines' faces seem also to have been coded in by their makers. The less complex information coded on the figurines' bodies is also patterned to some extent but not in the same way as the information on the heads. Figures 11.6–8 schematically present the depictions discussed above.

Clearly, any association between the sex/gender of depictions and headdresses would

be potentially informative, but the fragmentary state of the figurines makes this analysis suspect. Of 2,653 fragments that preserve either a chest or an abdomen, only 153 have a headdress. Contingency analysis of that exceedingly small sample gives a chi-square of 25.2 for 20 degrees of freedom with a 19 percent probability that the association could have arisen by chance. In addition to the small sample size, 83 percent of the expected values in the contingency are less than 5. Based on the limited data available, there may or may not be an association between gender and headdress form.

Figurine Function

The Chalcatzingo collection has been the subject of three independent examinations, each of which reached a different conclusion concerning how the figurines may have been deployed. My own initial work (Harlan 1975, 1979) suggested that the figurines might have been used in curing ceremonies, although that was no more than a suggestion and not backed by any specific analysis. David Grove and Susan Gillespie (1984) looked at a subset of the collection—fragments that can be assigned to just one of the types encountered at Chalcatzingo (Type C-8)—and concluded that those particular figurines had been created as portraits of the community's ruling elite and used in connection with a cult of the ruler. In the most extensive reexamination, Ann Cyphers Guillén (1987, 1988a, 1988b, 1993) concluded that the figurines were cult objects used in connection with female sodalities. Her conclusions were based almost entirely on her belief that the primary information encoded on the figurines relates to presumed feminine gender and its roles, a topic I discounted above when considering what the figurines depict. None of these earlier suggestions is based on a consideration of ethnographic analysis and cross-cultural comparisons.

Fortunately, surveys of relevant cross-cultural ethnographic information are available. The initial work in this regard was done by Peter Ucko (1962, 1968) and refined by Lauren Talalay (1993). Between them, these scholars examined 67 ethnographies geographically distributed as

follows: 47 from Africa, eight from North America, two each from South America, Indonesia, and Oceania, and single ethnographies from Turkistan, the Andaman Islands, Formosa, Haiti, Madagascar, Persia, and New Guinea. The geographic distribution is, however, less important than the range of societies addressed, with Africa offering great variety—from hunter-gatherers to small kingdoms—especially since any ethnographically known group is separated from the society that occupied Chalcatzingo by more than 2,500 years. Their findings are summarized here in Table 11.8.

It must be noted that these scholars, working on Old World collections, were primarily concerned with debunking previous interpretations of figurines as sacred objects—most especially as depictions of the mother goddess—making it necessary to ferret out key information from discussions organized rather differently than the information presented in Table 11.8. There, I have grouped the numerous specific uses of figurines into more general entities called “deployments,” based on the social context of figurine use. The three columns labeled “Chalcatzingo” in Table 11.8 contain an “X” if that aspect is observed in the Chalcatzingo collection.

According to the cross-cultural data, figures used in healing and curing are generally made of perishable materials. The forms are usually human beings that are portrayed as male, female, or sexless. They are generally made for a single use and then discarded and hence show little wear. The figures may be intentionally broken at consistent locations, such as the neck or waist, and are then often destroyed by burning and deposited in domestic refuse.

Overall, there is a poor fit between the Chalcatzingo figurines and these criteria noted for curing and healing. The clay figurines of Chalcatzingo are not made of perishable materials. They appear to have been used roughly and may be broken anywhere on the figure, although breakage at the neck is quite common. Moreover, there is no convincing evidence of deliberate destruction; the fragments appear more beat up than intentionally destroyed. In favor of possible use of the Chalcatzingo figures in

curing ceremonies, the concentration of fragments in and near residences is consistent with such a function, but this alone suggests only that the Chalcatzingo figurines were used in everyday contexts rather than in limited ritual ones. Deposition in and around houses is a common characteristic for many figurine deployments.

The suggestion by Grove and Gillespie (1984) that the figurines were portraits of rulers would place them in the general category of ancestor-veneration cult figures, deployed either in sacred worship or as cult images (Table 11.8). According to the ethnographic data considered here, such objects are most often made of common materials such as clay, wax, and other organic substances but may be made of precious materials. They are generally small and portable and represent males, females, or are sexless figures, but the representations are standardized. Whether deployed in sacred worship or as cult objects, they generally show no substantial wear but may exhibit polish or abrasion. Such figures are expected to have been deposited whole in shrines or in domestic structures or habitation debris.

The Chalcatzingo figurines are a poor fit to have functioned as ancestral figures. Made of clay, they are indeed small, portable, and anthropomorphic, as expected. However, the observed wear patterns do not correspond to expectations for this function. In addition to the poor fit to ethnographically derived expectations, assignment to this function would apply only to figurines of Type C-8, which leaves open the question of how the many fragments of other types, found in the same contexts, may have been used.

Cyphers Guillén has not specified exactly the social context in which the Chalcatzingo figurines may have been deployed, except to indicate that they were associated with life-crisis ceremonies of female sodalities. This would mean that they were deployed as cult images or in initiation ceremonies (which are actually somewhat overlapping). Such objects may be made of rare or costly materials or more common materials. The forms are humans engaged in highly variable poses and animals. The variable poses result from the use of figurines to illustrate stories and

TABLE 11.8. Characteristics of figurines according to deployment and use.

Deployment	Specific use	Characteristics	Chalcatzingo	Use wear	Chalcatzingo	Disposal	Chalcatzingo	Other
Sacred worship	Represent deities	Carefully made of common and precious materials		Minimal		In-situ in shrines		
	Represent household deities	Standardized representations				In houses		
Toys	Housekeeping play	Anthropomorphic, primarily female but some male	X	Extensive	X	In houses	X	
	Herding play	Animals	X			Household debris	X	
		Cheap materials	X			Not in ritual context	X?	
		Some examples poorly made by children	X					
		Often have stump arms to minimize breakage	X					
Sympathetic magic	Curing	Generally perishable materials but can be other materials						
		Rare and costly materials, as well as common materials						
		Sexless or both male and female	X	Minimal		Disposal in special locations		
	Witchcraft	Clay or wood						Rare
	Fertility rites	Represent infants				Kept by their owners and buried with them		
Stand-in or representative	Divination					In fields		
	Prevent trespass in fields							
	Representation of killed transgressor							
	Mourning figures					In and near graves		Rare
	Twin images							
	Substitute wife or concubine					In graves		
	Funerary sculptures					In graves		

Cult images	Protective spirits that are petitioned Ancestor images Hexes Fetishes	Ordinary materials	X	Minimal	Domestic structures Habitat debris Pits	X X X
Initiation ceremonies	Illustrations for storytelling Teaching about sexual matters	Common materials or costly materials Wide range of subject matter Consistent skill in manufacture Some degree of individuality in representation	X	Extensive Little or none	Stored in the initiation hut Stored in the residence of the person who leads the ceremony Stored in a cave between ceremonies Thrown into a pool Buried with the afterbirth of the initiate's first child Kept in houses until disposal in special locations Kept for life and buried with owner	 X

make moral points during initiation ceremonies. They are used in groups at single events then stored in special places. Alternatively, they may be given to the initiate, who then either carefully curates them for life so that they can be interred with her or him or buries them with the afterbirth of their first child. These figures generally exhibit only minor wear. They are held as complete groups by the person in charge of the ceremony, deposited in inaccessible locations after use or may be curated as single figurines in the houses of the owners but should then appear as grave goods.

The fit between the Chalcatzingo figurines and criteria for initiation figures or cult figures is poor. Although they are anthropomorphic and made from clay, a commonly available material, their poses are static and they exhibit a great deal of wear. Moreover, the figurine fragments were not carefully deposited in inaccessible locations but rather appear in large numbers in and around domestic structures. Only two of the 159 burials at Chalcatzingo had an associated figurine.

The ethnographic data indicate the following criteria for figurines deployed as toys: generally made of common materials such as clay or wood; portable and may be well or poorly made (since some are commonly made by children); used singly or in groups; may be used for a considerable period of time in the case of more durable figures; handled carelessly and roughly; generally occur in domestic contexts; usually show considerable wear, chipping, abrasion, and breakage at random points; and are treated like all other domestic debris with no patterning of any kind.

The fit between the Chalcatzingo figurine fragments and this set of criteria observed for toys is very good. The wear, breakage, and discard patterns of figurines at Chalcatzingo are exactly as expected for toys found in archaeological deposits. This correspondence is important because, generally, researchers have dismissed the idea that figurines might be toys, perhaps believing they are of less value when perceived in this way. In contrast, one of the most extensive considerations of figurine function, informed by extensive research in the ethnographic record

(Ucko 1968), finds it possible that each of the collections studied may have been deployed in children's play. Further, toys may assume an important role in socialization.

Play with the Chalcatzingo Figurines

Although anthropologists took an interest in games from the earliest days of the profession and formed the Association for the Anthropological Study of Games in 1974, their studies are unhelpful when attempting to understand the most likely game context for the figurines found at Chalcatzingo. Early work focused on adult games, while later work on the socialization of children saw little role for play activities. Further, much of the work on children dealt with rule-based games and used adult informants rather than observation of children at play. Anthropological study of children's play did, however, conclude that it is a preparation for adult life and that role-play by children converts seemingly pointless activities into a means of maintaining social order (Schwartzman 1976).

More helpful material is found in the literature on early child development (Schwartzman 1976). Foundational work by Piaget (1962) posited a developmental sequence of play that manifests during the first six or seven years of life, beginning with sensimotor practice, moving on to pretense, and culminating in games with rules. Interchangeable terms for pretense are imaginative play, make-believe play, and socio-dramatic play. Socio-dramatic play itself undergoes development with increasing sophistication that involves decontextualization of behavior, a shift from self- to other-referencing, and substitution of one object for another (Fein 1981:1098). References to empirical studies are in Fein (1981) and Corsaro (1980).

Although Piaget himself did not attribute a significant developmental role to socio-dramatic play, subsequent work indicates that it is indeed an important part of enculturation (Schwartzman 1976), especially as a way to accommodate change (Cheska 1978). In socio-dramatic play, children do not negotiate topics or plans of action but rather make a series of contributions tied to objects and actions in the play setting

(Corsaro 1980), where they relate to one another in terms of roles assumed in accordance with a dramatic theme (Fein 1981). Investigators have used dolls to guide the dramatic themes and selection of roles, a methodology first introduced into psychological studies to aid clinical diagnosis and treatment of disturbed children. Doll play later extended to studies of early childhood development (Levin and Wardell 1962).

Researchers found that play with dolls mainly replicates real life ("stereotypical play") with wish-fulfillment playing a less important role. Girls show a higher percentage of stereotypical actions than do boys, who tend to use dolls to represent monsters or spacemen, whereas girls tend to use them to represent domestic activities (Fein 1981). Realism is an important factor, with children showing a preference for more realistic toys. Present at the outset, preference for realistic representations increases precipitously between 14 and 19 months of age (Fein 1981:1099–100). Studies also support the didactic value of socio-dramatic play, since symbolic aspects of pretend play allow the child to construct models of itself and its environment by reorganizing symbolic information (Fein 1981:1110).

The empirical studies of socio-dramatic play provide little information on how the play proceeds, since they focus on hypotheses of how socio-dramatic play enhances cognitive development and often involve only one child interacting with the researcher rather than groups of children engaged in play. A sociological study of the adult role-playing game *Dungeons and Dragons* provides an indication of how such role-play actually proceeds (Fine 1982).

In *Dungeons and Dragons*, the Dungeon Master is a referee who creates the setting and moderates the interactions. The players assume characters that are assigned by a roll of the dice and that manifest well-defined attributes such as strength, charisma, and intelligence. In children's socio-dramatic play, these activities are spontaneous but mediated by the play setting, including props like dolls. Like socio-dramatic play, there is no end to the game and no winner. I suggest that at ancient Chalcatzingo the figurines were the props that determined the dramatic theme

and the nature and qualities of the characters the children could assume. The outcome of the game was not determined by such things as a dice roll (which is often ignored in *Dungeons and Dragons*) but instead resulted from interactions among the players (Corsaro 1980:113), keeping in mind the fact that adults generally provide the toys and determine when, how, and with whom children play (Johnson 1986:91; Mergen 1982:105).

Although *Dungeons and Dragons* is theoretically structured by rules, the rules are largely irrelevant: cheating is common, condoned by the players, and often encouraged because it can alter the course of the game in ways that all of the players wish to have occur, allowing for maximum creativity, fun, and cooperation. The Chalcatzingo figurines, then, may have invited children to imagine themselves as various adult social personae in interaction with social personae being imagined by their playmates. They could then spin out scenarios of interaction among those personae and imagine the effects of various interactions and events, remaining tied to the social realities of their real worlds by the hard-wired information encoded on the figurines. In this way, *Dungeons and Dragons* provides a useful modern analogy for the way in which the Chalcatzingo figurines may have been deployed in prehistoric socio-dramatic games.

Ongoing chronological analysis indicates how game socialization may have changed during development of the prehistoric community. Figurines created during the Barranca phase are predominantly types C-1 through C-7 in the Hay-Vaillant typology and type Ch-1 defined at Chalcatzingo. These representations show personae with a wide range of sometimes elaborate headgear and a treatment of facial features that tends to be cursory. Type C-8 became increasingly dominant in figurine production during the Cantera phase. These representations tend to have simple headdresses but show much more attention to facial features. Further, it is C-8 figurines that have a strongly Olmec aspect. Subject to additional work to search for differences across the site's proveniences, it appears likely that, over time, figurine iconography

reflects a homogenization of social differences, increased emphasis on the individual rather than the corporate group, and the emergence of outside influence from the Gulf Coast.

Conclusions

It seems most likely that the figurines found at Chalcatzingo were made for children to use as toys employed in games. Those games fostered learning about social personae in the prehistoric community and how children were expected to

interact as adults. Far from trivializing these objects, this interpretation opens up a world of possibilities for enriching our understanding of how one type of social learning occurred in a prehistoric context. It also allows insights into how people negotiated complex and differentiated social roles as society changed when Chalcatzingo was growing from a simple hamlet to a regional center. As society underwent rapid change, the game may have been a way to express and resolve the conflicts and confusion it caused.



Ancient Maya *Patolli*

JOHN WALDEN AND BARBARA VOORHIES

In this chapter, we investigate evidence suggesting that the ancient Maya played a dice game similar to the sixteenth-century Aztec dice game of *patolli*, a game of chance described by Spanish chroniclers (e.g., Durán 1971; Sahagún 1979b). Our objective is to document features we infer to be *patolli* gameboards that survive in the archaeological record and to use these and other data to illuminate the circumstances surrounding the game.

Patolli first attracted anthropological scrutiny in the context of cultural diffusion, a major topic of interest during the discipline's early years. Edward Tylor (1879) believed *patolli* shared sufficient similarities with the Indian game of Parcheesi to indicate cultural contact between Southeast Asia and the New World, an idea that was later discredited (Erasmus 1950). Today, anthropological focus has shifted away from using games to investigate the mechanics of cultural diffusion to exploring the role of games within societies. Here we pursue this goal with archaeological data.

Aztec *Patolli*

First described by Spanish chroniclers in the sixteenth century, Aztec *patolli* made use of a scoreboard with a cross-shaped track that was divided into small individual squares or boxes (Figure 15.2, this volume). The name *patolli* derives from the *patol* beans with which the Aztec played the game. Four to six uniaxially marked

patol beans (*Phaseolus coccineus* L.) functioned as dice, although sticks or bones were sometimes used. Players would cast the bean dice, and the subsequent arrangement determined the value of a throw. Following this, players used colored pebbles as counters to move along the game-board tracks as determined by the throw (Caso 1925:204; Duverger 1984:44; Miller and Taube 1993:132), although the number of boxes varies in the colonial illustrations (Kendall 1980:11). The *Codex Vindobonensis*, a fourteenth-century Mixtec manuscript, depicts *patolli* games being played on a cross-shaped board (Culin 1907; Swezey and Bittman 1983:377), and the sixteenth-century Aztec version of the game is illustrated by Durán (1971:Plate 32) and Sahagún (1979b: Figure 63). Surviving pictorial manuscripts produced by Aztec scribes before or shortly after the conquest illustrate other forms of dice gameboards, which we discuss below.

The ethnohistorical record clearly indicates that the Mesoamerican nobility played *patolli* in the Late Postclassic period. For example, Sahagún states explicitly that the game was a pastime of Aztec nobles (Sahagún 1879:122, cited in Kendall 1980:42). The *Codex Xolotl* (a postconquest cartographic Aztec manuscript) depicts a nobleman from the town of Maxtla playing with two noblemen in the town of Tlalnepantla (Dibble 1980:Plates 9 and 10; Gallegos Gómora 1994:19). The *Relación de Michoacán* (Tudela 1956:261) relates that the *cazonci*

(Tarascan ruler) returned to play Michoacán *patol* after his meeting with Cortez.¹

The ethnohistorical record, although biased toward elite lifeways, suggests that commoners also played *patolli* (Durán 1971; Sahagún 1979b; Motolinía 1971; see also Gallegos Gómora 1994: 20). Accounts identify professional players who traveled with their gaming implements in search of opponents, but they were renowned for squandering their wealth (Durán 1971:316–17). Both the itinerant players and onlookers gambled on the game's outcome. Durán (1971:220) even notes that a parishioner of a fellow Dominican scratched lines on the church floor and counted pebbles during the sermon. The game was popular despite negative connotations associated with the recklessness of those who gambled excessively. Durán (1971:303) states, "When this game was played, such a crowd of onlookers and gamblers came that the players were pressed against each other around the mat, some waiting to play and others to bet. It was a remarkable thing to see." Accounts depict a lively, bustling spectacle with symbolic undertones, similar to Balinese cockfights (Geertz 1973a).

The sources consistently identify the players as men (Durán 1971). Whether women played this game remains uncertain, as the ethnohistorical sources do not explicitly rule out the possibility. Moreover, the absence of women *patolli* players may be due to masculine bias in the ethnohistorical record.

The Aztec game of *patolli* offers an interesting conceptual paradox: it seems to be simultaneously sacred and prosaic. For this reason, we provide an overview of gambling and the religious significance of the game after a brief introductory discussion of Mesoamerican games of chance.

Games of Chance in Mesoamerica

Archaeological explorations throughout the twentieth century reveal that *patolli* was not an Aztec invention but had a deep history as well as a broad geographical spread at the time of European contact (Mountjoy and Smith 1990; A. L. Smith 1977; Swezey and Bittman 1983; Voorhies 2013). Moreover, Alfonso Caso (1925:203) discov-

ered that these dice games had not been eradicated during the Colonial period but were played in some remote Indian communities in the Sierra Norte region of Puebla. The games were analogous to *patolli*: the Nahuatl-speaking group from Huiztzilán, Puebla, even referred to the game as *petol*, whereas the Totonac speakers in neighboring Zapotitlán played a similar game called *lizla* (Kendall 1980:12). Other versions are thought to endure in the games of *bul* or *baac* of the lowland Mopan and K'ekchi' Maya of southern Belize, *patole* among the Cahita-Acaxee of northwest Mexico, *kolia atáarakua* among the Tarascans of Michoacán, *baq* among the K'iche' (Quiché) of the Maya highlands, and *romavó* or *quinze* by the Tarahumara of Chihuahua (Beals and Carrasco 1944; Caso 1925:203; Culin 1907; Edmonson 1967:203; Lumholtz 1902; McGee 1985; Miller and Taube 1993:132; Verbeeck 1998:82).

In tandem, these ethnographic studies and ethnohistoric accounts of *patolli* and games like it provide a rich and vivid picture of the dynamics and beliefs surrounding the Mesoamerican dice game. *Patolli* was especially complex. It was a ceremonial game, deeply entrenched in cosmological referents and associated with divination, but it was also accompanied by heavy betting and drinking (Verbeeck 1998). The manner in which religious devotion and gambling went hand in hand in the Aztec game is fascinating from a modern Western perspective, as it reminds us that these two practices are not mutually exclusive outside of the Judeo-Christian worldview.

Games of Chance, Gambling, and Ancient Mesoamerican Religion

In ancient Mesoamerica, *patolli* represents an intersection between gambling and religious practice. The Spaniards suppressed the game during the Colonial period due to its religious overtones (Kendall 1980:16). As with the rubber ball game, the excessive gambling that accompanied games of *patolli* drew the chroniclers' attention. Their descriptions of vast sums being wagered trump descriptions of the religious, astronomical, or divinatory aspects of play (Gallegos Gómora 1994:20; Hill and Clark 2001:339). *Patolli* players

could lose all their personal possessions or even wager themselves and risk becoming a slave (Durán 1971:301,312).

Yet, evaluating the reliability of these colonial reports is problematic. Colonial authors may have overrepresented the extent of *patolli* gambling because gambling was familiar to them or because they wished to characterize the indigenous peoples as prone to immoral practices. The accounts of excessive gambling and the inability of participants to practice self-restraint reflect the colonial perception of Indians as childlike and in need of paternal care from Church and State, thereby justifying colonial discipline. Conversely, indigenous informants may have exaggerated gambling and downplayed religious connotations, being aware that the latter could result in prohibition on the grounds of heresy (Duverger 1984:25). Regardless, it was not long before *patolli* and the ballgame invoked the ire of the Spanish authorities, and the games were forcefully suppressed (Arbena and LaFrance 2002:xi; Durán 1971:307). Nevertheless, it seems that *patolli* continued to be played clandestinely (Kendall 1980:5).

Despite this preoccupation with gambling, *patolli* was entrenched in Mesoamerican cosmology. Duverger (1984) insists that all Aztec games were infused with religious significance and that the Western conceptualization of games as mere recreation is a major misunderstanding of Mesoamerican culture (see also Gutiérrez, Chapter 14, this volume). Sahagún (1979b:460) echoes this view: "All these games seemed to us steeped in idolatrous superstitions." As we discuss below, *patolli* boards probably represent the cosmos, with arms indicating the world's four corners (Edmonson 1967:203; Gallegos Gómora 1994:20; Kendall 1980:16–18).

The ritualized nature of *patolli* does not rule out gambling. Gambling shares many similarities with religious behavior. This is abundantly apparent even in contemporary Western societies, where gamblers often engage in ritualistic behavior such as carrying charms and tokens in order to invoke Lady Luck. Such behavior seems to have been prevalent in Aztec times. Gamblers were known to pray at altars and offer food and

incense so that their luck would be improved during play. Durán (1971:301) describes how avid *patolli* gamblers attributed divine status to their gaming implements. Furthermore, gamers frequently conversed with their bean dice prior to a match and would place their playing instruments in sacred places and bless them with incense (Kendall 1980:15). These forms of behavior seem somewhat analogous to the ritualized behavior of avid gamblers in the contemporary world. Indeed, in the European tradition, the Romans and Greeks saw games of chance as being associated with both gods and luck, due to the notion that the winners of games of chance were considered to have received help from the deities. This view supposedly changed dramatically with the emergence of Christianity, as there could be no concept of luck in a world where God was omnipotent (Roberts et al. 1959:601–02). Despite this, these earlier beliefs are both pervasive and resilient and clearly persist in European society.

In contrast to the practice of modern gamblers blessing their implements through invocation to a vague religiosity, the Aztec game was closely associated with several spiritual forces often conceptualized as godly patrons of the game. Aztec deities are unlike those of the Greek pantheon, with their human forms and unique powers and roles (M. Smith 1996:211). Rather, the Aztec possessed a bewildering plethora of godly forces that were closely related and often transformed from one guise to another. The godly forces patronizing games include Xochiquetzal, Xochipilli, Ollin, Ometochtli, and the patron deity of dice, Macuixóchitl, who was routinely invoked as the dice were cast (Durán 1971:305–06; Kendall 1980:4). The codices allude to the role of these deities. The *Codex Borgia* (Folio 62), from the Eastern Nahua, depicts Xochiquetzal, the female patroness of pleasure, flowers, and games, beside a ball and a *patolli* board (Díaz and Rodgers 1993). And the *Tonalámatl Aubin*, an Aztec divinatory almanac, depicts Xochiquetzal with a decapitated individual near a ballcourt (Aguilera García 1981:19).

Games of chance are commonly connected cross-culturally to a belief in benevolent spirits (Roberts et al. 1959:602), but Manichean themes

of good and evil were not a part of the Mesoamerican worldview. Some of the aforementioned Aztec deities were associated with excess, lust, inebriation, and lack of control (Miller and Taube 1993:127–28, 190). It would appear that for the Aztecs, gambling and inebriation went hand in hand. Indeed, ethnohistoric sources describe excessive consumption of *pulque*, an alcoholic drink derived from maguey, during gameplay. In this context, both liquor consumption and gambling were inherently religious acts (Kendall 1980:4).

Aztec *patolli* bore some similarities to divination: the fundamental act of casting beans was inherently the same in both divination and *patolli* (Edmonson 1967:203). Other similarities exist between modern K'iche' Maya divination and *patolli*, as both involve the laying out of beans into "houses" onto a mat or cloth (Edmonson 1967:203). The Aztecs used *patol* beans in shamanistic divination, often to diagnose diseases (Duverger 1984:44; Verbeeck 1998:93). *Patol* beans are otherwise known as mescal beans (erroneously named, as they actually contain cytosine and not mescaline). Still, cytosine is a powerful hallucinogen much akin to mescaline, corroborating the possible importance of these beans in shamanic contexts. Despite this, as far as we know, there is no ethnohistoric or ethnographic evidence for the use of hallucinogens during games of *patolli*.

To fully comprehend how these games worked on a religious level, it is important to be aware of Aztec beliefs pertaining to chance and contingency. Edmonson (1967:201) notes that nowhere in Middle America do indigenous people bet on future uncertainties, as knowledge of these things requires divination. This leaves the interesting question as to exactly what the Aztecs were doing when gambling on *patolli*. Could it have been simply prosaic in nature or something more spiritual? In the Aztec worldview, the astrological sign under which a person was born determined the course of his or her life (Duverger 1984:38; Sahagún 1979a). This essentially set a predestined life course from which an individual could not deviate. Indeed, there was no Nahuatl word for "chance," and the con-

cept may not have existed for Nahuatl speakers (Duverger 1984:38–39). This sounds ironically similar to the supposed lack of a concept of chance or luck in Medieval Europe due to the divine omnipotence of the Christian god (Roberts et al. 1959:601–02).

So, what was the role of games of chance in Aztec society given a cosmology devoid of concepts of luck and chance? It seems that games of chance allowed the Aztecs to test the power of the astronomical signs under which they were born (and their subsequent destinies) against one another. Furthermore, it seems that success in these games would be conceived of as heralding future success and therefore would have represented a way for players to check their status with the deities, which accounts for the heavily ritualized pregame activities (Duverger 1984:39; Kendall 1980:25). Speculatively, engagement in *patolli* might have been a way of divining one's future and may subsequently have been played when someone was anticipating an upcoming major personal event.

For the peoples of ancient Mesoamerica, gambling can thus be seen as an essential part of religious behavior. Kendall (1980:25) consequently proposes that the wagering of vast quantities of personal possessions and the propensity to risk everything might have emically constituted extreme religious devotion and a potential necessity in certain contexts. This is an interesting concept, but doubt is cast on it by some of the negative perceptions of fervent gamblers attributed to Precontact Aztec society (Duverger 1984:46).

Archaeological Evidence of *Patolli* in Ancient Mesoamerica

Although *patolli* is primarily known as an Aztec game, the name has come to denote several similar dice games that have been identified archaeologically across Mesoamerica. William Swezey and Bente Bittman classified Mesoamerican *patolli* boards into five types, with one type a miscellaneous category (Type IV) that we will not discuss further (Swezey and Bittman 1983:373–88). The cruciform board described and illustrated by Spanish chroniclers is classed as Type V

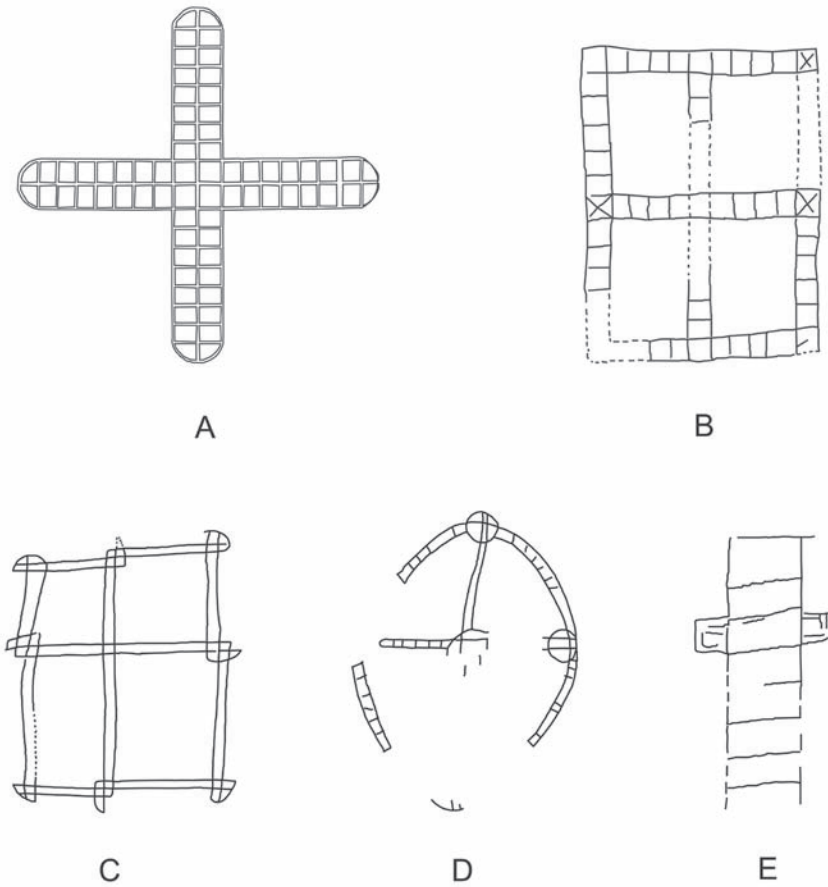


FIGURE 12.1. Typology of *patolli* game boards according to Swezey and Bittman (1983) and one graffito that is not a *patolli* board. *a*: schematic drawing of gameboard from Pedregal, Mexico (Type V); *b*: gameboard from Nakum (Type II); *c*: gameboard from Teotihuacán (Type I); *d*: gameboard from Chichén Itzá (Type III); *E*: graffito from Structure E, Nakum. (Drawn by Yesenia García; not to scale.) Sources: *a*: after Swezey and Bittman 1983:Figure 17; *b*: after Tozzer 1913:Figure 49e; *c*: after Swezey and Bittman 1983:Figure 4; *d*: after Swezey and Bittman 1983:Figure 7; *e*: after Hermes et al. 2001:Figure 13e.

(Figure 12.1a). As mentioned, it likely symbolizes the cosmos, with the ends of the cross representing the cardinal directions and an axis mundi at the center. This form is known principally from ethnohistoric documents, but one Type V board is incised on a stone in the Pedregal de San Ángel, near Coyoacán in central Mexico. This is the only playable gameboard of this type known archaeologically (Kendall 1980:11). It is oriented perfectly to the cardinal directions, which confirms its significance as a cosmogram.

The cross motif is also present in Types I and II of the Swezey and Bittman typology, but in

both cases a square frame encloses the cross. The *patolli* boards most commonly found in archaeological contexts in the Maya region, and across Mesoamerica more broadly, are known as cross-and-frame boards (Kendall 1980:37) and are classified by Swezey and Bittman as Type II (Figure 12.1b). Such boards consist of a square grid, generally with 11 squares on each side, and an interior cross marked with additional squares. These *patolli* boards are incised into plaster floors and sometimes bench tops (A. L. Smith 1977; Swezey and Bittman 1983:381), but one is illustrated in an Aztec postconquest almanac (*Codex Tonalámatl*

Aubin) together with a ballcourt, ball, and presiding deity (Gallegos Gómora 1994:17; Kendall 1980:34).

Type I is similar except the frame has spiraled or twisted corners and an inset cruciform twisted at its nexus (Figure 12.1c). This type is most evident in the codices, such as the *Borgia* (Eastern Nahuatl), *Vaticanus B* (Mixtec), and *Vindobonensis* (Mixtec), where the boards are depicted along with dice and other game equipment (Kendall 1980:33–36). But the form is rare in the archaeological record of the Maya region (Swezey and Bittman 1983:376).

Type III is a circular gameboard with an interior cross. An example from Chichén Itzá contains squares along the circle and cross (Figure 12.1d), but other examples cited by Swezey and Bittman lack squares and appear unplayable. This form is rare; most Maya examples are from the Usumacinta zone. Type III gameboards exhibit variation in size, shape, and number of squares, and there is some uncertainty over whether they are actual gameboards (Coggins 1983:36).

In this study of archaeological gameboards of the ancient lowland Maya, we take a conservative position in identifying what designs can be considered playable gameboards or their symbolic representations. Other scholars have interpreted a much wider range of designs as representing *patolli* boards. For example, Hermes et al. (2001:Figures 13b–c) propose that two parietal graffiti from Nakum with ladder-like motifs resemble *patolli* boards (Figure 12.1e), but we do not include these or other equally ambiguous designs in our dataset.

The gameboard typology of Swezey and Bittman proves useful for identifying patterns in their variation. Type II boards constitute the vast majority in the Maya archaeological record. Some Maya examples, however, are Type III, and there is one known instance each of Type I and Type V. The last two types are the most commonly recorded in the codices for the Colonial period. However, it is clear these designs existed much earlier and were either not as popular or did not survive archaeologically. It is also clear from the pictorial manuscripts that the Type II and Type III forms definitely were dice game scoreboards for a game closely similar to the

one described and illustrated by the chroniclers, since they appear accompanied by bean dice (*Codex Borgia*) and stick dice (*Codex Vindobonensis*) as well as other gaming implements.

Before turning to the Maya *patolli* game, we present an overview of the contexts in which *patolli* boards have been found outside the Maya area. Many possible gameboards have been reported for Teotihuacan. Gallegos Gómora (1994:19) mentions more than 130, whereas Swezey and Bittman (1983:381) mention over 70. These appear to date to the middle and late periods (400–700 CE), but there is little uniformity in terms of their size and number of squares (Swezey and Bittman 1983:381). These features come from a variety of contexts, including a temple patio floor near the Zacuala Palace, and in structures along the Avenue of the Dead between the Pyramid of the Moon and the Pyramid of the Sun (Séjourné 1959; Swezey and Bittman 1983:382). Elsewhere, *patolli* boards have been found at El Tajín in the south-central Gulf lowlands (atop the Pyramid of Niches incised into a stone plinth), at Pedregal de San Ángel in Mexico City (inscribed on a rock), and at Tomatlán, West Mexico (pecked into a rock; Mountjoy and Smith 1990:243; Swezey and Bittman 1983:374). At Tula, in the central highlands, Acosta (1961:43, 48–54, Plano 1) discovered six gameboards, two incised into bench tops and the rest into plaster floors. Muir (1926:237) identified two *patolli* boards inscribed on the plaster floors of Mound E, Colonia Las Flores, in the Gulf lowlands near Tampico.

These examples indicate that Maya engagement in *patolli* was part of a broad pan-Mesoamerican phenomenon. Thus, there might be similarities between these examples and the games played in the Maya area in terms of who was playing, where the games were played, and the beliefs attached to these games.

Ethnohistory and Ethnography of Maya Dice Games

Ethnohistoric and ethnographic data collectively offer insights into the games played in the Maya region in the period following European contact to the present day. When viewed critically, they also offer the potential of aiding our understanding of the circumstances under

which games were played in earlier times. Most of the archaeologically known gameboards were made and used during the Late/Terminal Classic (600–1000 CE) and Early Postclassic periods (1000–1200 CE).

Unfortunately, ethnohistoric sources for Maya *patolli* are scant. Diego de Landa states that these games were played by the sixteenth-century Yucatec Maya: “On which account they were accustomed to have in each town a large house whitened with lime, open on all sides, where the young men came together for their amusements. They played ball and a kind of game of beans, like dice, as well as many others” (Tozzer 1941:124). This quote provides an indication of where archaeologists might expect to find Maya *patolli* boards.

Additionally, several ethnographic studies of Maya games resembling *patolli* provide a window to explore the mechanics of Maya *patolli*. Especially noteworthy is *bul*, which is played by Mopan and K’ekchi’ Maya farmers of southern Belize (Ventur 1980a; Verbeeck 1998). Verbeeck argues that *bul* retains many traditional elements despite some potential syncretic alterations (Verbeeck 1998:82). Ventur’s account describes several different versions of *bul*. The *ch’iich’*, or “bird”, game involves the inscription of a chicken-shaped image into the earthen floor of a house. Different parts of the bird are piled with corn kernels, which are then taken by the players with successful dice rolls (Ventur 1980a: 249–50). This scorekeeping method differs from that of the traditional Aztec game in that circumscribed piles of corn kernels are removed as a result of the roll of the dice rather than moving counters along tracks. However, other *bul* games involve placing corn kernels in rows and moving the markers along the tracks, as determined by a throw of the dice in a manner more similar to *patolli* (Ventur 1980a:249–50). Alternatively, Verbeeck describes the game being played on tracks created with sticks, rather than seeds, on the ground. Either way, it seems that a few dice games fairly similar to *patolli* are still being played in the Maya region.

Additionally, it seems that despite the apparently prosaic nature of many games played today by Maya groups, *bul* has a distinctly ritual

character (Verbeeck 1998:85). *Bul* is an essential part of the “vigil of the maize,” a ceremony held the day before planting season to ensure that seed corn is surrounded by joyousness (Verbeeck 1998:87). Verbeeck reports that there is little concern over who wins or loses, only that the game takes place. In this context, *bul* is not following the religious logic of Aztec *patolli*: for the Mopan Maya, the game is not a way to test the player’s luck so much as a way to ritually buffer agricultural risk (Duverger 1984).

Archaeological Perspectives on Maya *Patolli*

We now consider the role of *patolli* in the ancient Maya world. In addition to basic questions surrounding the Maya *patolli* game, such as who played it and when and where it was played, we tackle some intriguing questions that arise from our review of Maya ethnohistory and ethnography. For example, was Maya *patolli* a religious game? If so, what sort of religious beliefs were associated with it?

In order to pursue these issues, we collected information on 69 *patolli* gameboards in the Maya region at 27 sites (Figure 12.2, Table 12.1). We have been conservative in terms of what we accept as a *patolli* gameboard, as discussed: grid graffiti designs that do not conform to a *patolli* design have been excluded (J. Bolles 1977:131–32). All the *patolli* boards discussed come from the Maya lowlands. Somewhat surprisingly, we have not learned of any gameboards in the Maya highlands.

When Was *Patolli* Played?

The first major question regards the antiquity of *patolli* boards. This has been a source of debate in the past, as several authors have proposed or considered the possibility that “outsiders” introduced the game to Maya after the collapse (Ruz Lhuillier 1952:44; A. L. Smith 1977). This debate is now resolved, as more Maya gameboards have been discovered, showing without a doubt that Maya *patolli* was a local tradition of considerable longevity. In our discussion of the antiquity of the *patolli* gameboards, we employ standard names for periods of Maya prehistory, which correspond to the dates shown in Table 12.2.

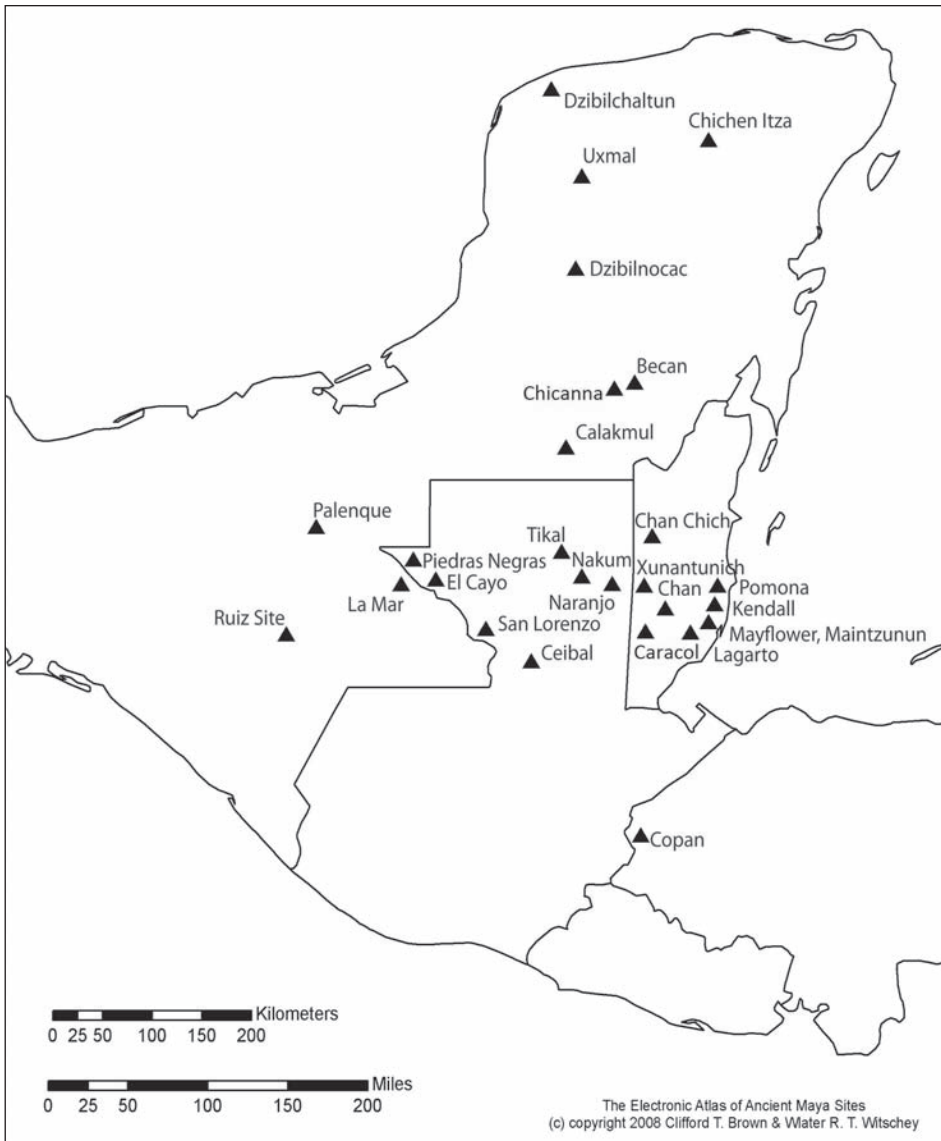


FIGURE 12.2. Map of the Maya area showing archaeological sites with *patolli* gameboards.
(Drawn by John Walden.)

Patolli, a Classic Maya Game

Most Maya *patolli* boards are incised into plastered surfaces and thus fall into the broader corpus of Maya graffiti: writing or drawings that have been scribbled or scratched into a wall or other surface. Early Mayanists did not consider graffiti important and often did not completely record them (e.g., Tozzer 1913:160). Today, it is clear that motifs of animals, human figures, and

buildings incised into walls and floors are ubiquitous across the Maya region. However, dating these graffiti images is difficult (Euan Canul et al. 2005:2; Patrois 2013:433). The informal style of the *patolli* boards has resulted in conjecture whether they were created during the Classic period occupation or whether they represent the doodlings of post-collapse squatters (Patrois 2013:433). Numerous studies now show that the

TABLE 12.1. *Patolli* gameboards at ancient Maya sites.

Site	Country	Date of feature	Public/ private	No.	Type	Location	Context	Details	References
Becán	Mexico	Late Classic	Private	1	II	Incised into bench top	Structure 4, a large palace structure	Located slightly off the centerline of the structure	Hohmann 1987:56–57, 1998:124.
Calakmul	Mexico	Late Classic–Early Postclassic	Private	1	II	Incised into floor	Structure VII, a temple structure repurposed as a palace	Located 2 m to the west of a Late Classic vaulted tomb	Folan et al. 1995:319.
Caracol	Belize	Late Classic	Private	4	II?	Incised into a bench and the floor in two different places	Structure A3, an elite temple structure. Structure B-6 (western wing of B-5) described as palace-like?	In both contexts (A-3 and B-6), one <i>patolli</i> was located on a bench; the other was adjacent on the floor	Chase and Chase 1987:13, 34.
Ceibal	Guatemala	Late Classic	Public	3	II, V	2 engraved into altars; 1 incised into a bowl	2 in Plaza A; 1 in a bowl in Burial 1, Structure A-14	Altars are associated with Stelae 10 and 22	A. L. Smith 1977: 349–63.
Chan	Belize	Late Classic	Private	2	II	Incised into floors	Structure 6, Rooms 2 and 5	In association with a pecked quincunx. High phosphorus levels around the board	Robin et al. 2012:142, 146.
Chan Chich	Belize	Late/Terminal Classic	Private	2	II	1 incised into a bench; 1 incised into an adjacent higher bench	Structure C-6, a residential/ceremonial structure	Bench contains a burial with possible playing pieces	E. Harrison 2000:80–89.
Chicanna	Mexico	?	Private	3	II, III	Incised into a floor	Structure II, Room 5	Motifs and 3 <i>patolli</i> boards, which are all odd	D. Bolles n.d.:57–58.
Chichén Itzá	Mexico	Late/Terminal Classic	Private/ Public	2	I, II	1 incised on floor; 1 incised into bench	Structure 5C35, a gateway structure; Structure 2D-6, (Mercado)	3 reported by Euan Canul are suspect (they are just grids). Martín Díaz and Schmidt 2009 illustrate all: we only accept 1 floor-incised board in 5C-35	Euan Canul et al. 2005:1–13; Martín Díaz and Schmidt 2009:Figure 18; Ruppert 1943:Figure 4c.
Copán	Honduras	Early Classic?	Private	2	II	3 incised on floors of 2 early structures	Structure 10L 26, a royal temple structure	Uncovered through tunneling	Williamson 1996:4.

TABLE 12.1. (cont'd.) *Patolli* gameboards at ancient Maya sites.

Site	Country	Date of feature	Public/ private	No.	Type	Location	Context	Details	References
Dzibilchaltun	Mexico	?	Private	1	III	Drawn in black pigment on floor	Structure 1-sub		E. W. Andrews 1974:144; Coggins 1983:36–41. http://www.aztecnoticias.com.mx/notas/cultura/97956/halla-inah-en-campeche-un-patolli-prehispanico Maler 1903:85.
Dzibilnocac	Mexico	Late Classic	Private	1	II	Incised into floor	Building A-1, elite temple structure	58 squares	
El Cayo	Mexico/ Guatemala	Late Classic site	Private	1	III	Incised into a door lintel	Temple V, an elite temple structure		
Kendal	Belize	Terminal Classic/Early Postclassic	Portable board	1	II	Incised slate board (portable)	Structure G-1, a long-range structure, possibly residential	Possible game piece found in association with the board	Graham 1994:289–90, 294; Wanyerka 1999.
La Mar	Mexico	?	Private	1	III	Incised into a temple lintel	A temple structure on the southern edge of the main plaza	Divided into the same number of divisions as other Type IIIs	Maler 1903:95.
Lagarto	Belize	Late/Terminal Classic	Public	3	II	3 engraved into slabs	In a little precinct with numerous granite boulders	In association with a pecked cross motif	Wanyerka 1999:108–11.
Maintzunuzun	Belize	Terminal Classic/Early Postclassic	Portable board	1	II	Incised slate board (portable)			Graham 1994:289–90, 294.
Mamey Hill	Belize	?	Portable board	1	II	Incised slate board (portable)	In a mound where it had been reused as a drain cover		A. L. Smith 1977:359; Swezey and Bittman 1983.
Mayflower	Belize	?	Portable board	1	II	Incised slate board (portable)	Structure A-9, a residential structure		Graham 1994:289–90.
Nakum	Guatemala	Late/Terminal Classic	Private	2	II	1 each incised into the floors of St. A and St. N	“Temple” A in what resembles an E-group, but reversed (sunset ?); Temple N, in upper floor of south annex	Temple A is spatially restricted	Hermes et al. 2001:60; Tozzer 1913:160–62.

Naranjo	Guatemala	Late Classic	Private	6	II	6 incised on floor	Structure B-18, a western structure of the main plaza/E-group	Boards are separated east/west by a partition wall	Morales and Fialko 2010:500-05.
Palenque	Mexico	Late Classic	Private	1	II	Incised into floor	Temple Inscriptions, incised in the floor near the tomb of Pacal	Board has a cranially modified head incised in each quadrant	Ruz Lhuillier 1952:25-46.
Piedras Negras	Guatemala	?		1	III	Incised into lintel	Lintel 6, provenience lost after woodcutters moved it		Houston et al. 1998; Mahler 1903:75.
Ruiz Site	Mexico	Early Postclassic	Public	1	I	Painted onto floor	Mound K		Lowe 1959:31, Figure 45b.
San Lorenzo (Planchón de Figuras)	Mexico	?	Public	5	II, III	Engraved into natural rock	On the banks of the Lacantun River	Associated with other rock art covered by the river at certain times	Mahler 1903:Figure 67; Palka 2014:98; Pincemin Deliberos 1999a, 1999b.
Tikal	Guatemala	Late/Terminal Classic	Public/Private	10	II, III	7 incised on floors and benches; 2 on walls; 1 unlocated	8 in civic structures; 2 in temple 4 (6F-27)	2 unplayable boards on walls. Lots of possible "mens houses." 1 Early Classic board in North Acropolis	Becker 1999:65; W. Coe 1990; P. Harrison 1970; Ministerio de Cultura y Deportes 2015; Trik and Kampen 1983.
Uxmal	Mexico	Late/Terminal Classic	Private	1	I	1 painted on floor	Temple II (Temple of the Magician)		Pollock pers. comm. to A. L. Smith 1977; Swezey and Bittman 1983.
Xunantunich	Belize	Late Classic	Private	11	II	10 on plaster floors (1 partial)	8 in A-11, the Ruler's Palace; lower rooms: 1 in A-20, a civic-ceremonial structure on the Castillo; 2 in C-3, a range structure	3 boards associated with wall graffiti. Board in A-20 on a red-painted floor in association with a large pecked symbol. 1 Board in C-3 etched into a red-painted floor also	Church 1996; Neff 1995; MacKie 1985; Yaeger 2005.

TABLE 12.2. Time units of Maya prehistory and their approximate dates.

Time period	Dates
Late Postclassic	1200–1500 CE
Early Postclassic	1000–1200 CE
Terminal Classic	850/900–1000 CE
Late Classic	600–850/900 CE
Early Classic	250–600 CE
Terminal Preclassic/Formative	100/150–250 CE
Late Preclassic/Formative	300 BCE–100/150 CE

graffiti found in many ancient Maya buildings is contemporaneous with Classic period occupation and not the result of Postclassic lower-class vandalism. The graffiti depicts scenes of deities and courtly life that indicate that the artists possessed esoteric knowledge and were probably Maya elites (G. Andrews 1995:237; Haviland and Haviland 1995; Hutson 2011:403; Webster 1963:37–38). Thus, it is reasonable to assume that the graffiti-style incision of the boards occurred during the Late Classic, and there is no *a priori* reason to presume “outsiders” created them after the collapse.

Another pertinent issue concerns general problems encountered when attempting to date graffiti (G. Andrews 1999:233). If known, the date of construction of a floor or bench upon which a *patolli* board is incised provides a *terminus post quem*, although it leaves ambiguity as to exactly when the incision occurred. An example comes from Palenque. The board etched into the floor of the Temple of Inscriptions that seals Pacal’s tomb could have been made at any point following Pacal’s 683 CE interment within the temple’s platform, although A. L. Smith (1977) argues for a Terminal Classic to Early Postclassic date (Kendall 1980:29). Moreover, Acosta (1940:57–58) thinks the board was incised even later by Totonac invaders or non-Maya squatters on the grounds that the cranial modifications on heads depicted in the four board quadrants seem distinctly non-Maya, an opinion opposed by A. L. Smith (1977:358). Similarly, at Structure 5D-38, Tikal, a *patolli* board is incised into the plastered surface of a bench containing Late Classic potsherds. Thus, the board must be younger than

the bench and its subsequent plastering and could date to the Late Classic period or to any time thereafter (W. Coe 1990:II:664–65).

Sometimes the destruction of a building or its encasement in a subsequent structure provides a *terminus ante quem* that can narrow the possible age range of buried gameboards. At Xunantunich, *patolli* boards in Structure A-11 were buried by roof collapse shortly after abandonment, as evidenced by the presence on the floor of what had been whole vessels (Church 1996:51). Initially, Mackie (1961:216) posited that an earthquake might have destroyed Structure A-11, but Yaeger (2005:26–27) emphasizes that the apparent gradual nature of destruction is more in keeping with dismantlement. Either way, the building was effectively out of use by 750–775 CE, which means that the buried gameboards must have been used prior to that date.

In other circumstances, artifact assemblages in direct association with *patolli* boards provide approximate dates. Several instances corroborate a Classic period age for the game, such as a *patolli* board incised into a bowl at Ceibal (Sabloff 1975:211; A. L. Smith 1977:350). This *patolli* design must have been incised at the time of manufacture, which definitely dates to the Terminal Classic period, based upon vessel style. Another example is the *patolli* board on the floor of the apical building in Structure VII at Calakmul, which could have been incised any time after the building’s Late Classic construction (Folan et al. 1995:319). However, floor assemblages include Terminal Classic cooking vessels and numerous Late Postclassic Chen-Mul Modeled Mayapan-style incense burner fragments showing the superstructure was used for a prolonged period during which the gameboard might have been created (Braswell et al. 2004:177). Likewise, the *patolli* board in the western structure of Tikal group (5G-4-1st) was covered with Terminal Classic ceramics and ceiling collapse. This likely indicates that the board was buried by Terminal Classic debris shortly after abandonment and can probably be attributed to that time period (Becker 1999:58).

As difficult as it may be, dating graffiti inscriptions is often easier than dating boards

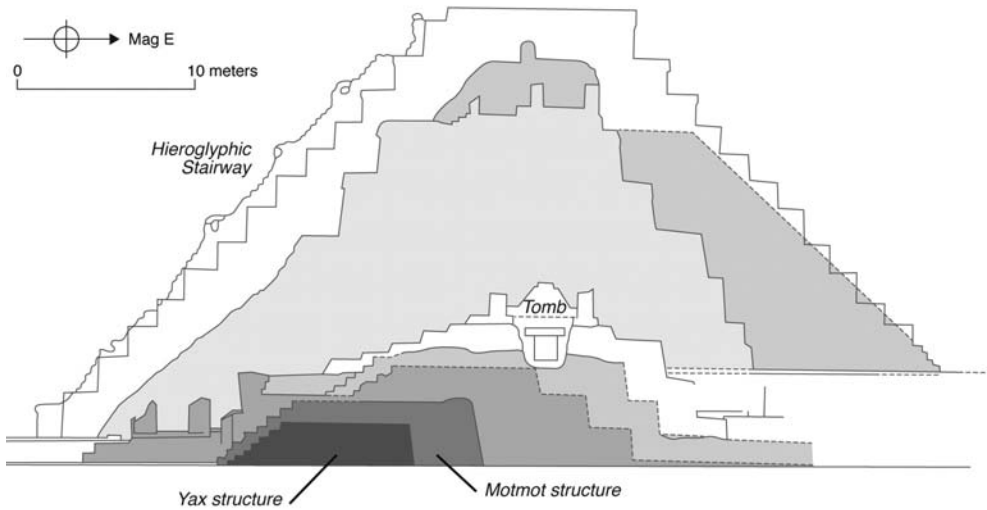


FIGURE 12.3. Schematic cross-section of Structure 10L-26, Copán, showing the location of Early Classic period structures. (Drawn by Dan Van Dorn after Fash et al. 2004:Figure 4.2.)

etched or pecked into stone slabs or altars, as these can only be dated through association with nearby stelae, such as those found at Ceibal (A. L. Smith 1977).

Finally, the best and least controversial evidence for early *patolli* boards are from Copán and Tikal, where gameboards have been dated to the Early Classic period. At Copán, boards were found within Structure 10L-26, a royal temple structure with the famous hieroglyphic staircase (Figure 12.3). Tunneling projects identified earlier phases of construction within the platform of the final building episode that dates to 756 CE. Two *patolli* boards are incised into the floor of the earliest construction platform (called Yax) situated outside the now-vanished building; another board is incised into a plaster floor in the building (Mot Mot) that encapsulates the earliest building (Williamson 1996:173). While these two construction episodes are only relatively dated, both were built and used at some point during the Early Classic period (Fash et al. 1992:108; Williamson 1996:173). This example irrefutably proves that the incision of *patolli* boards was not solely the work of post-collapse invaders or squatters and indeed the boards were present at least as early as the Early Classic period.

Recent work at Tikal has produced another gameboard attributed to the Early Classic period

(Ministerio de Cultura y Deportes 2015). This board is incised into a plastered floor within the northeast corner of the North Acropolis. It is the common Type II form consisting of tracks forming a square, within which two tracks form a cross. The feature is oriented to the cardinal directions.

In summary, a brief glance at Table 12.1 leaves little doubt that *patolli* was a Late Classic–Early Postclassic tradition in the Maya region and that the preponderance of surviving *patolli* boards date to the Late Classic period (Swezey and Bittman 1983:404). While there is a range of complicated issues involved in reliably dating the graffiti images, we have a fairly reliable *terminus post quem* for the majority of *patolli* boards provided by the respective surfaces upon which they were laid (Patrois 2013:433). However, caution needs to be exercised in assuming Maya *patolli* was principally a Late Classic phenomenon. We do not consider the apparent proliferation of gameboards to represent a sudden popularization of the game in the Late Classic; instead, we think these boards represent the final manifestation of a game with a deeper history in the last construction stages of many structures. The examples from encapsulated early structures at Copán and Tikal clearly indicate that *patolli* was played prior to the Late Classic period (Webster

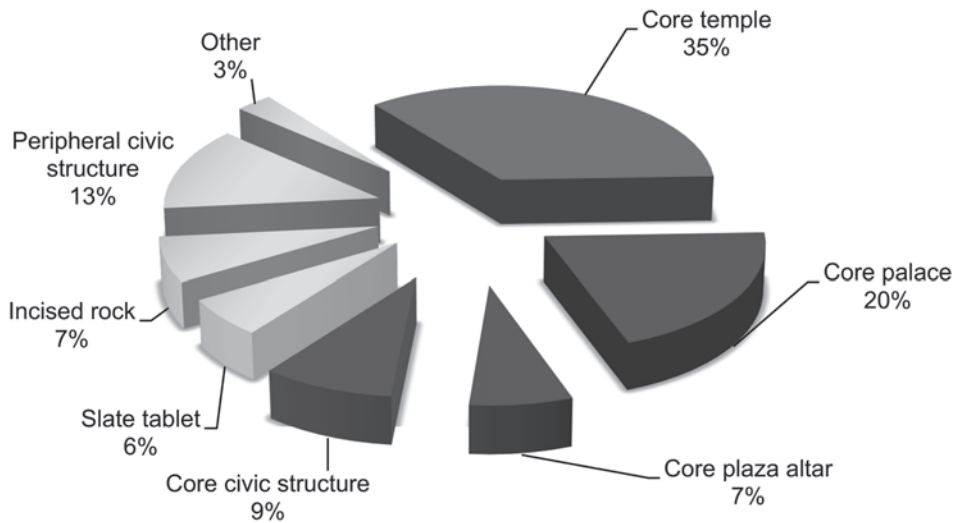


FIGURE 12.4. Pie chart of locations of *patolli* gameboards in our sample as percentages of the total sample ($n=69$).

1963:38; Williamson 1996). It is likely that other early boards existed but are either plastered over or buried by subsequent architecture and have yet to be revealed. This suggests that the known surviving gameboards represent only a minuscule fraction of the games once played. It is probable that all surviving boards we discuss represent the last games played by the Maya prior to site abandonment.

Where Was Patolli Played?

Most archaeologically known boards (71 percent) are in central core areas of Maya civic-ceremonial centers (Table 12.1; Figure 12.4). These areas functioned as the loci of the community's religious, political, and economic activities dominated by elites. The majority of our examples are in temples (35 percent) located within principal plaza groups. This is evident at Becan, Chichén Itzá, Copán, Dzibilnucac, Nakum, Naranjo, Palenque, Tikal, and Uxmal (Ruppert 1943:Figure 4c). Elsewhere, the boards found in site core areas are in palaces—that is, elite residences (20 percent)—such as at Calakmul, Kendal, Tikal, and Xunantunich. Still others (9 percent) are in buildings that do not appear to have been elite or royal residences or temples but

had some form of civil-administrative function. A good example of a core civic building is Structure 6 at Chan that contains two *patolli* boards (Robin et al. 2012). In addition, a few boards are engraved into altars that are displayed in major plazas (7 percent), such as those at Ceibal and Lagarto.

Another significant setting for the gameboards is within civic structures that are located in peripheral residential areas, away from the core zone (13 percent). Our examples are all from Tikal and are described in the following section.

Finally, there are *patolli* boards etched into a natural rock formation at Planchón de Figuras (7 percent) and on portable slate boards (6 percent) at Maintzunun, Kendal, Mayflower, and Mamey Hill.

Was Patolli Played in “Men’s Houses”?

One intriguing question is whether the ancient Maya played *patolli* in “men’s houses” in a manner similar to the sixteenth-century Maya as described by Landa. This specific function has been proposed for certain distinctive buildings at Tikal (P. Harrison 1970; Swezey and Bittman 1983:381). At Tikal, one recurrent architectural pattern found outside the core area is a cluster of

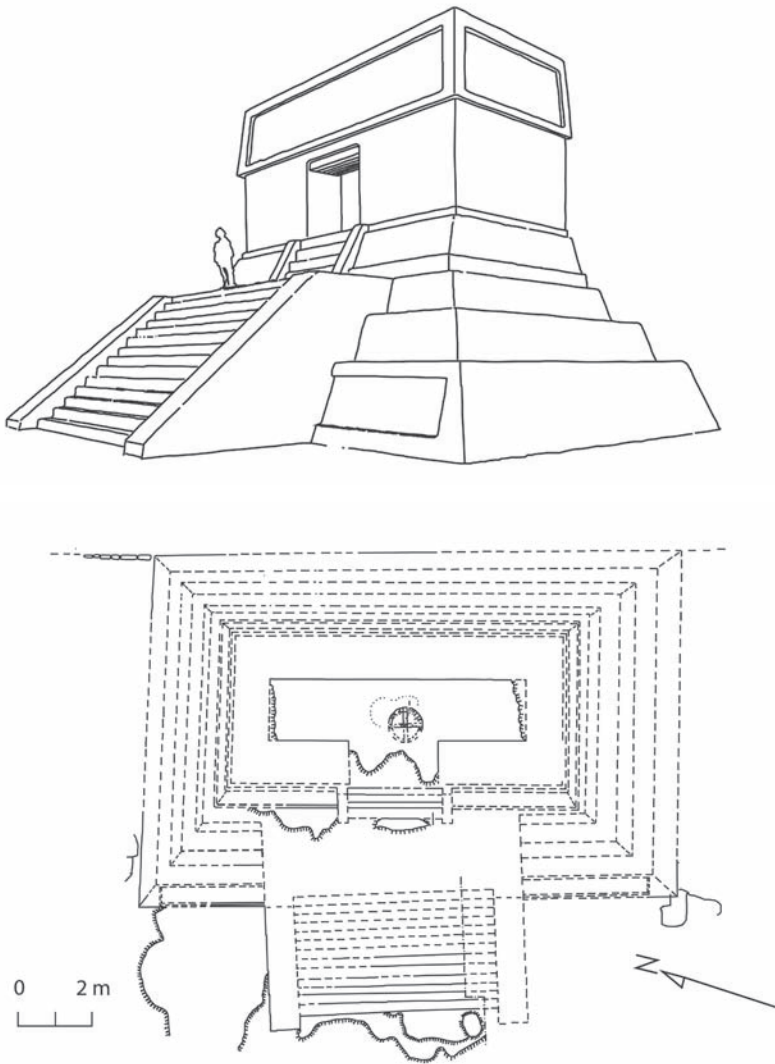


FIGURE 12.5. Structure 5G-8-1st at Tikal, a potential “men’s house.” Above: restoration drawing; below: plan drawing. (After Becker 1999:Figures 57 and 58; drawn by Yesenia García.)

residential buildings on low platforms grouped around a small plaza. The eastern structure in these arrangements is distinct from the other buildings because of its square footprint, relatively high platform, and crowning vaulted masonry building (Figure 12.5). The unique eastern structures, dubbed shrines, also have a distinctive mortuary pattern (Becker 1999:1). This particular pattern of clustered residences and associated shrine buildings, now dubbed

“Plaza Plan 2,” is likely the material manifestation of a corporate social group focused around the eastern structure, which served communal functions, including interment of group elders. These eastern structures are plausible candidates for “men’s houses.” For example, in one elite residential group (Peninsula Group 5G-1), the floor of the final building atop the high platform in the eastern structure (5G-8) has a centrally positioned circular *patolli* board graffito

(Becker and Jones 1999:Figure 57). Unusually, this pattern is replicated in the final building (5G-4)—directly across the plaza on its western side—by a centrally located floor graffito. However, this *patolli* board has a square frame with an interior cross (Becker and Jones 1999:Figure 49), and the floor is painted red. Both buildings with *patolli* graffiti were in use during the Eznab phase (850–950 CE).

Peter Harrison (1970:268) speculated that three tandem buildings in the Central Acropolis at Tikal (Structures 5D-62, 5D-52-1st, and 3D-50) possibly operated as “men’s houses,” but there is no robust supporting evidence such as the presence of *patolli* boards corroborating this argument. To our knowledge, these Tikal examples represent the limited evidence for *patolli* being played during the Classic period (250–1000 CE) in what might plausibly be “men’s houses.”

Cosmological Beliefs and the Maya Game of Patolli

Unlike many modern games, Mesoamerican *patolli* was deeply entrenched in cosmological beliefs. The majority of Maya *patolli* boards are located in religious contexts: buildings with a religious function, such as temples, as noted, and rooms where religious rites may have been conducted, as we will discuss.

There are other examples of *patolli* boards in buildings with sacred significance, in addition to the structures known as temples. At Naranjo, six *patolli* boards are incised into the floor of the uppermost platform of Structure B-18, a Late Classic (600–850/900 CE) temple structure in the central plaza group (Figure 12.6; Gámez 2004:226–32; Morales and Fialko 2010:500). Structure B-18 is the western structure of an “E-group,” an architectural complex widespread in the Maya area and known at Tikal as an “astro-nomical commemoration complex” (Laporte and Fialko 1995). The western building would have formed the viewing platform for watching the sun at critical times in the solar year when it rose over the opposite eastern range structure. The gameboards in Structure B-18 are aligned in an east-west direction in a corridor across the middle of the platform floor, but because

of multiple rebuilding episodes it is not clear if the sight line to the eastern building was unobstructed at the time the gameboards were in use. At some point, a partition wall was constructed that separates the boards into two clusters, and other renovations further blocked off the area of the game boards (Morales and Fialko 2010:500). Despite this uncertainty between the position of the gameboards and a view of the rising sun, the many *patolli* boards in this structure suggest that *patolli* might have been grounded in astronomy and the calendar.

A *patolli* board also is present in an E-group at Nakum, but in this case it is in the eastern range structure (Structure A) of the complex and is incised on the floor of the southeastern room rather than in the western structure (Structure C), as at Naranjo (Aimers and Rice 2006:81; Hansen 1998:70; Hermes et al. 2001; Tozzer 1913:162). The Nakum graffito is a fairly standard frame-and-cross motif, but its orientation is not reported (Tozzer 1913:Figure 49e).

Another correspondence of possible significance is the fact that *patolli* boards are often found (approximately 37 percent), in the same rooms as other graffiti attributed by Haviland and Haviland (1995) to informal art produced by people who were experiencing or had recently experienced altered states of consciousness. This argument is based upon neuropsychological research showing predictable visual hallucinations created by the human mind in trancelike states coupled with the observation that such predictable images are present in the Tikal parietal art (Lewis-Williams and Dowson [1988], cited in Haviland and Haviland [1995]). In fact, Haviland and Haviland (1995:306) state that, for the ancient Maya, “the production of the graffiti, and the trance behavior with which such activity was associated, were a part of the normal use of many buildings from at least the late Preclassic onward, based on the presence of entoptics in a graffito.”

An example of this comes from the ruler’s residence at Xunantunich (Structure A-11; Figure 12.7). Two gameboards in a lower room (Room 9) of the royal palace were found in association with a broken drum, several whole storage jars (likely used for food or liquid), and a “graffito”

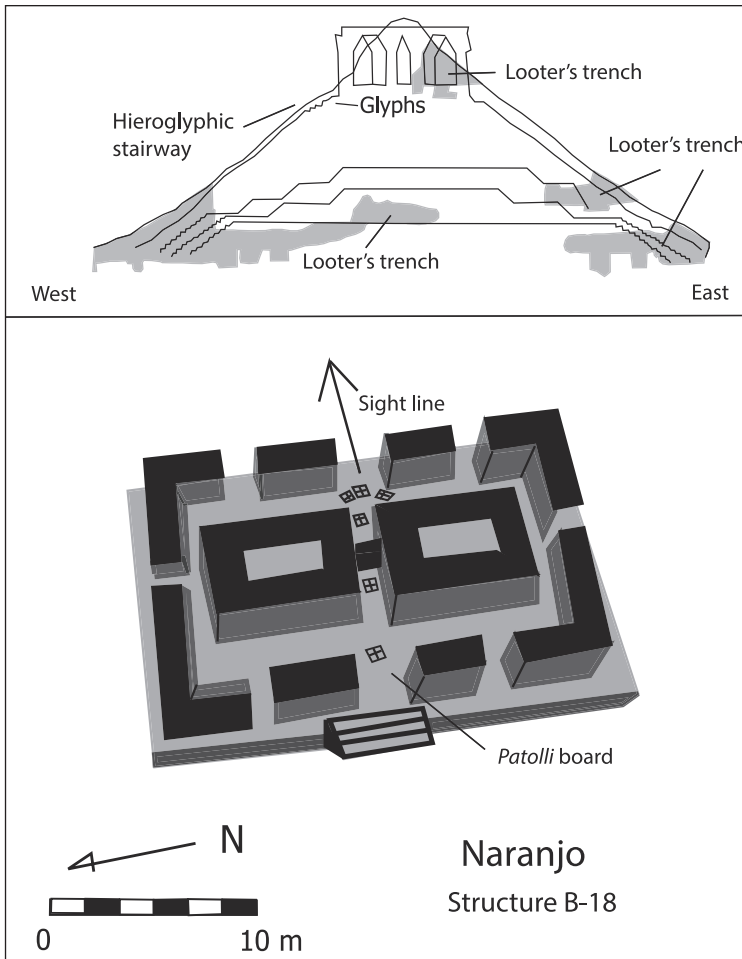


FIGURE 12.6. Structure B-18 at Naranjo. *Above*: cross-section of the platform mound and the building at its summit; *below*: isometric drawing of this building showing the position of the *patolli* gameboards. (After Morales and Fialko 2010:Figures 2 and 3; drawn by Barbara Voorhies.)

of a man engaged in what may be a bloodletting rite or masturbation (Yaeger 2005:18). Following Haviland and Haviland, Yaeger (2005:20) proposes that the lower rooms of the Xunantunich palace were private ritual spaces for royal courtiers.

Scholars have proposed a ritualistic function for the *patolli* game, based on the association of several *patolli* gameboards with other rock art incised into a rock outcrop at Planchón de Figuras on the bank of the Lacantún River, Chiapas, Mexico (Swezey and Bittman 1983:386). Here, a limestone shelf at water's edge is covered in carv-

ings of animals, buildings, monuments, people, and two Type II and three Type III *patolli* boards that are exposed only when the water level is low (Maler 1903:Figure 67; Palka 2014:Figure 4.28; Pincemin Deliberos 1999a:723, 1999b:144–48, 159). Moreover, Palka (2014:198) interprets this as a likely pilgrimage destination and speculates that the carvings may signify attempts to raise the river levels in times of drought. This unusual setting for gameboards is difficult to interpret, not the least because the rock art motifs were likely created at different times beginning in the Late Classic period.

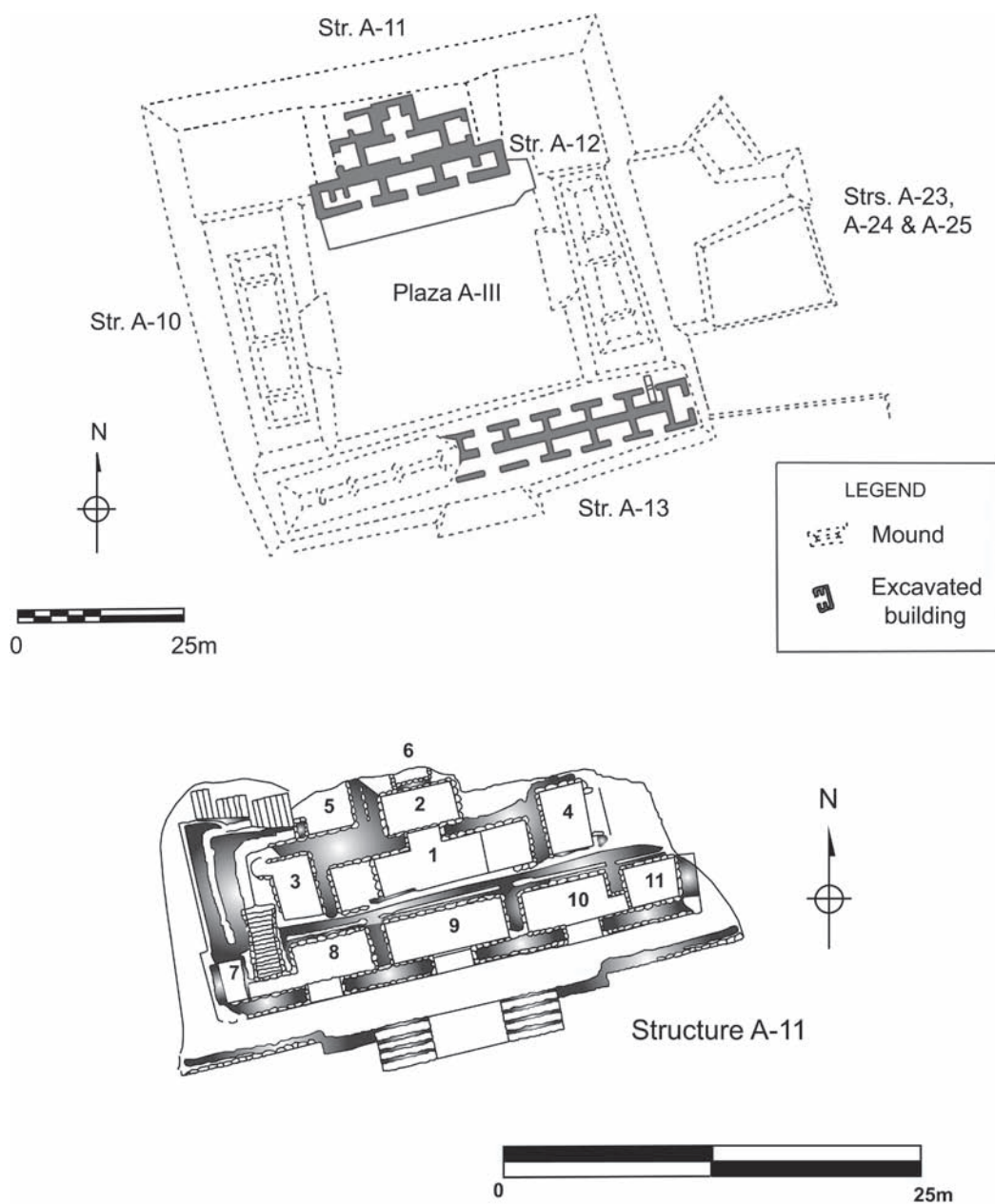


FIGURE 12.7. Structure A-11 and the Xunantunich palace compound. *Above*: plan drawing of the palace compound; *below*: isometric drawing of Structure A-11. (After Yaeger 2003:Figures 4 and 9, respectively; drawn by Yesenia García.)

These examples show that *patolli* boards occur in several contexts suggesting religious significance. The diverse range of contexts might result from the fact that different cosmological beliefs were attached to *patolli* at different places.

Patolli in Possible Mortuary Contexts

There is some tantalizing, albeit slender, evidence that the *patolli* dice game may have been involved in a Maya mortuary ritual. Games were part of mourning rituals among the Iroquoians (Williamson and Cooper, Chapter 4, this volume), and an explicit link between dice games and funerary rites has been demonstrated for some South American societies (Corr 2008). Such associations raise the possibility that this might be the case for the ancient Maya.

Four *patolli* boards in our sample are positioned above or in the vicinity of Maya burials. At Chan Chich in Room 2 of the ceremonial/residential structure C-6, part of an elite Late/Terminal Classic residential compound in Plaza C-2, gameboards are incised into the plastered upper surfaces of two adjacent benches (E. Harrison 2000; Valdez 1998:81). The lower bench contained the burial of a 30–40-year-old man, together with a Terminal Classic bowl and two small blank shell discs that are probable gaming pieces. One disc was probably placed in the deceased's hand and another in his mouth at the time of burial (E. Harrison 2000:83). This is reminiscent of Durán's (1971:301) account of the ritual potency of the game paraphernalia of professional Aztec *patolli* players. However, Ellie Harrison (2000:81–82), the excavator, argues that the benches and *patolli* graffiti probably are Late Classic in age, thus predating the intrusive Terminal Classic burial, but some uncertainty remains about the relative ages of these features.

Likewise, at Palenque and Calakmul, we note the proximity between a *patolli* board and a human burial. The *patolli* board at Palenque is incised into the floor of one entryway of the Temple of Inscriptions, a building positioned above the tomb of King Pacal (Kendall 1980:29; Ruz Lhuillier 1952:Figure 2; 1973:Figure 119). At Calakmul, a *patolli* board is incised into the floor of an outer room of a three-room Late Classic

palatial residence (Structure VII) and positioned close to an intrusive Late Classic tomb under the plaster floor (Dominguez Carrasco 1992; Folan et al. 1995:319–20; Gallegos Gómora 1994:9).

Finally we note the Type V *patolli* design (the only one in the Maya region) incised into a bowl (Poite Variety, Bayal Ceramic Complex) that accompanied a burial at Ceibal (Burial 1, Structure A-14; Sabloff 1975:211; A. L. Smith 1977:350; Swezey and Bittman 1983). The burial is that of a woman, which reminds us of Edmonson's (1967:203) account of *patolli* being played by Acaxe women on ceremonial occasions.

These four examples present tenuous evidence that there was some connection between mortuary interments and *patolli*, although at present we remain skeptical. The example from Chan Chich presents the most solid evidence of an association, but it, as well as the two examples from Calakmul and Palenque, could be coincidental. The Type V gameboard on the bowl at Ceibal would have been unplayable and its appearance symbolic, like several other examples that we discuss below.

Symbolic or "Unplayable" Patolli Boards

The cross-shaped (Type V) board incised into the bowl at Ceibal is one of several *patolli* boards in unplayable contexts. We suspect that these designs are symbolic representations of a dice game. At Tikal, two *patolli* designs are on vertical walls: one is located in Structure 5D-32-1st (on the southeast corner of the Acropolis [W. Coe 1990:II:554]), on the interior wall of Room 2, and another is located on the south wall of Room 5 of Structure 5D-65 (Triak and Kampen 1983:Figures 41Y and 68D). These designs, which otherwise appear playable, could not have been used as gameboards.

Patolli Boards in Public and Private Contexts

A sharp dichotomy exists between *patolli* boards in public and private contexts. We use these terms to refer to the degree of architectural spatial restriction surrounding the board (in terms of available space for onlookers) and the degree to which the location was accessible.

The majority of Maya *patolli* boards are situated in elite, spatially restricted locations that could accommodate only a small number of people. Many *patolli* boards occupy niches, and, in some cases, rooms appear to have been architecturally modified to increase privacy. This occurs at Tikal, Structure 5D-38 (a palace structure on the eastern plaza), where a *patolli* board was incised into the upper surface of a red-painted bench top set into a little niche (W. Coe 1990:II:664, 1990:V: Figure 244; Trik and Kampen 1983:Figure 45D). This niche and its bench appear to have been specifically constructed for the board. However, the casual style of the incision renders this interpretation problematic. The *patolli* board at Chan Chich is in a large room (6 × 4 m) that had been walled in by later construction, thus effectively creating a niche around the bench with the board (E. Harrison 2000:81). Harrison further suggests this may reflect a desire for more privacy on the part of the elite occupants. Many *patolli* boards exist in contexts where people could recline or relax during play, either leaning against adjacent walls or on benches.

Many *patolli* boards are in temples that are generally spatially restrictive due to their architecture layouts. Examples include Becán, Chan Chich, Calakmul, Xunantunich, and Tikal (Hohmann 1987:56–57, 1998:Figures 130 and 131). At Nakum, Temple A, a *patolli* board is located in the entrance of two very narrow internal corridors running parallel through the structure (Hermes et al. 2001:39; Tozzer 1913:168). Unlike descriptions of the public spectacle of Aztec *patolli*, most Maya boards are in spatially restrictive locations that could not accommodate many onlookers. Indeed, efforts may have been taken to increase the privacy of *patolli*, if the game included divinatory aspects through which people could consult or test the deities.

Only a small number of ancient Maya *patolli* boards occur in open, public settings. Two large boards (1.40 × 1.45 m and 13 cm thick) engraved into stone altars were found at Ceibal in front of Stelae 10 and 22 in Group A in the main plaza (A. L. Smith 1977:356). Another example comes from the much smaller Late/Terminal Classic site of Lagarto, where Wanyerka (1999:

108) identified three *patolli* boards and a pecked cross motif on stone monuments in the plaza.² The accessibility of the Lagarto and Ceibal *patolli* boards in plazas suggest they may have been public games, as sizable crowds could gather around them. Admittedly, the boards at Ceibal are in a central elite plaza that may itself have been spatially restricted. Still, the size and location of these boards indicates a social scenario, possibly involving wagering onlookers, as described for the Aztecs. This conclusion could be rendered problematic by uncertainty about whether these boards are in their original locations or were repositioned in front of stelae after the Classic Maya abandonment of Ceibal (A. L. Smith 1977:356).

Portable Game Boards

The description of Aztec players roaming the countryside in search of opponents with rolled mats under their arms is an evocative one. Obviously due to the nature of archaeological preservation, we can only speculate as to whether this behavior existed in the Maya world. The portable slate boards from Maintzunun, Mamey Hill, Mayflower, and Kendal in Stann Creek, Belize, may have fulfilled a function analogous to these Aztec boards (Graham 1994). These represent something of a regional tradition, as no portable boards have been found elsewhere (A. L. Smith 1977:359). The portable boards date to the Terminal Classic–Early Postclassic (850/900–1200 CE) and come from a range of archaeological contexts (Graham 1985:219–27, 1994:289). Ledyard Smith (1977:359) learned of a board from Mamey Hill, Pomona through personal communication with Ewan MacKie, who described it as originating from a mound in which it had been reused as part of a row of slates just beneath the ground surface, possibly to cover a drain. The board from Maintzunun was recovered from a surface deposit (Graham 1994:294). The *patolli* board from Mayflower came from surface accumulation near Structure A-9, a residential structure on the main plaza (Graham 1994:106, 289). Another slate *patolli* board was discovered at Kendal from the ground surface at the base of Structure G-1, a Terminal Classic–Early Postclas-

sic range structure peripherally located to this group (Graham 1994:290). In addition to this, an incised slate game “piece” measuring 3×3 cm was recovered from surface accumulation near Group F, Op. 10B (Graham 1994:290).

Who Played Patolli?

This brings us onto our third and last important question: which members of Maya society played *patolli*? Almost all *patolli* boards discovered archaeologically suggest elite or royal engagement in these games (Gallegos Gómora 1994:20; E. Harrison 2000:87). Archaeologically, we have found no examples of *patolli* boards from what are essentially commoner contexts. This could be indicative of two possible scenarios: *patolli* might have been purely an elite pursuit or the commoner versions are not archaeologically visible. The first possibility is certainly worth contemplating, for in a number of societies, the elite engaged in games that were socially exclusive.

Alternatively, the lack of *patolli* boards in commoner contexts might be a result of biased archaeological excavation or a lack of preservation. Admittedly, in the past, Mayanists missed things in the commoner record due to the fact that research gave priority to civic-ceremonial centers and their public and elite structures. However, following several decades of household archaeology, it is reasonable to assume that some evidence of *patolli* might have been found by now (Lohse and Valdez 2004).

This leaves one likely possibility: that most Maya participated in these games in a way similar to the Aztecs but that commoners simply utilized everyday items and played a materially ephemeral game using beans and sticks, much like *bul* and various other North American dice games (Beals and Carrasco 1944:519; Culin 1907). In fact, *patolli* may have originated with gameboards drawn on the ground (Voorhies 2013) and only later were etched into plaster surfaces.

Summary and Conclusions

Several conclusions emerge from our analysis of *patolli* gameboards in the Maya region. The broad spatial distribution of boards across the southern and northern Maya lowlands indicates

the ubiquity of these games throughout the two zones. The apparent absence of such gameboards in the Maya highlands is noteworthy: if they do exist, we are unaware of them.

Despite difficulties in determining the age of *patolli* boards, the vast majority are found in architectural settings dating to the Late/Terminal Classic period, between 600 and 1000 CE. Some caution is required when interpreting these data. While it is clear that *patolli* was popular across the lowland Maya region during this time period, the scarcity of boards dating to earlier times likely results from preferential preservation (of more recent building floors) and sampling bias (in terms of archaeological excavation). The Early Classic *patolli* boards identified through tunneling a temple platform at Copán (Williamson 1996), and a recently discovered Early Classic gameboard at Tikal (Ministerio de Cultura y Deportes 2015), are revelatory in this regard. These boards indicate that *patolli* was played prior to the Late Classic period. In short, we can say with a high degree of certainty that *patolli* was popular during the Late/Terminal Classic periods, but we also suspect that the game may have been equally prevalent earlier.

Exploration of the spatial contexts of the surviving gameboards reveals distinct patterns in terms of where *patolli* was played within Maya settlements across the lowlands, the vast majority being found in centrally located elite temple structures (35 percent) and noble and royal residences (20 percent). Accordingly, we can state with certainty that *patolli* was played in the religious buildings and palaces located within site core zones. However, similar issues to those discussed in relation to when *patolli* was being played arise when forming arguments about who played *patolli*, based on the spatial distribution of boards in the ancient Maya world. Both the nature of archaeological preservation and ethnographically and ethnohistorically documented Mesoamerican dice games need to be considered when thinking about who played *patolli*. Contemporary Maya dice games, such as Mopan *bul*, are popular among commoners and would be invisible archaeologically (Ventur 1980a; Verbeeck 1998). So overall, the evidence wholly

supports upper elite and royal participation in *patolli* but does not rule out the possibility that it was also played by nonelites. Cross-culturally, games can be socially divisive, such as the Mississippian game of *chunkey*, which was likely an exclusively elite pursuit (DeBoer 1993:83). In this instance, however, elite engagement in *patolli* does not necessarily preclude commoner participation in similar, more materially ephemeral games similar to *bul*.

To tackle the tougher question of why *patolli* was played, we believe a combination of the spatial analysis of patterning of *patolli* boards in relation to nearby architecture, and also a consideration of some pertinent emic beliefs relating to these games ethnohistorically and ethnographically, can illuminate the emic beliefs behind engagement in these games. The overwhelming frequency of boards found in religious spaces (temples) clearly suggests the game had an overtly ritual role. The specifics of this ritual role are more problematic to ascertain. However, it is certainly striking that 74 percent of examples are located in spatially restricted or private contexts, unlike the Aztec games that were played in public spaces. In our sample, only 19 percent of recorded dice gameboards are in public settings. The spatial restriction and its evident privacy lead us to consider that the game may have been an intimately personal affair for its participants and may have involved some form of divination in which Maya individuals could test their luck or the efficacy of their deities in a manner analogous to that posited by Duverger (1984) for the Aztec.

As astronomical observation complexes, the examples of *patolli* boards in E-groups at Nakum and Naranjo lend support to claims by various authors that the gameboard formed a cosmogram and carried calendrical associations and further supports the religious importance of the game in ancient Maya worldview.

Overall, the preponderance of *patolli* boards located in religious contexts suggests the game had ritual functions in contrast to many games of chance today. While this may seem strange, such a situation might be expected in ancient Mesoamerica, where religious beliefs were pervasive and no distinction was drawn between such concepts as religion, politics, economics, and society. The archaeological record does not permit any insight into gambling and its possible association with *patolli* in the ancient Maya world. However, it is worth noting that due to the sheer prevalence in the New World of gambling behavior in association with games of chance, such behavior was likely (see also Evans, Chapter 15, this volume). This does not invalidate the conclusion that Maya *patolli* was associated with religious behavior. In ancient Mesoamerica, there was no Manichean division between good and evil, and gambling and drinking were not regarded as sinful practices. Hence, these practices were not considered mutually exclusive with devotional activities, as is profusely evident for Aztec *patolli* (Duverger 1984). Possibly, this behavior could have existed in ancient Maya times.

Acknowledgments

We thank Yesenia García for her drawings and Laura Kosakowsky for Table 12.2. Bárbara Arroyo and Julia Guernsey alerted us to some Guatemalan gameboards, and Vilma Fialko shared information about boards at Naranjo. Thanks also to Jaime Awe, Ellie Harrison Buck, Minette Church, Clemency Coggins, Hasso Hohmann, Miriam Judith Gallegos Gómora, Laura Gámez, Elizabeth Graham, Miriam Makiha Gokita, Olivier de Montmollin, and Jason Yaeger for generously sharing knowledge about ancient gaming and *patolli* gameboards.

Notes

1. When the Aztec emperor Moctezuma was under house arrest, he played a game named *totoloque* with his captors, which Kendall (1980:14) suggests was *patolli* but Piña Chan (1969:39), following Clavijero and Bernal Díaz, describes as a game that involved throwing gold objects at a target.
2. Lagarto's plaza has 12 stone monuments, three of which (monuments 5, 10, and 12) contain comparatively large *patolli* boards (50 × 48 cm; 68 × 65 cm; 70 × 68 cm, respectively; Wanyerka 1999:108, 111).



Sport and Ritual as Social Bonding

The Communal Nature of Mesoamerican Ballgames

MARIJKE M. STOLL AND DAVID S. ANDERSON

One of the primary characteristics used by Paul Kirchhoff in defining Mesoamerica was the tradition of ballplaying. Ever since Kirchhoff's publication (1966 [1943]), the Mesoamerican ballgame has received copious attention in the academic literature, so much so that Eric Taladoire (2012) recently compiled a 100-page bibliography on the subject. Much of this attention, across time periods and regions, has focused on the control and promulgation of the game by elite actors or has represented the game as primarily a ritual act that recreates indigenous cosmogonies. This intense focus has turned into a dominant paradigm where the Mesoamerican ballgame is repeatedly assumed to be a ritual and political practice of the elite alone. As such, we have often lost sight of the communal role this game may have held as a contestive match. After all, at its core, the ballgame is a game of physical skill that embodies communal discourses of power and identity (after Sutton-Smith 1997; Voorhies, Chapter 1, this volume), much like many of the other games in the indigenous cultures of North America.

In this chapter, we argue that archaeological evidence from our own research in the Mexican states of Oaxaca and Yucatán (Figure 13.1), as well as a reexamination of other examples of ballcourt architecture throughout Mesoamerica, suggests that the primary role of ballgames was in community building rather than solely as an element of elite political theater, as the dominant

paradigm would have us believe. This interpretation is further supported through both ethnohistoric and ethnographic evidence research by Marijke Stoll, ultimately bringing us to a new understanding of Mesoamerican ballgames as not simply a spectacle of elite ritual, nor even a simple sport, but instead a competitive *and* integrative communal tradition.

Studying the Mesoamerican Ballgame

Over two decades ago, John G. Fox (1994) suggested that for archaeologists to understand the sociopolitical functions of ballcourts in wider society, it is important to examine how people actively used them within specific regions. Through regionally focused research on ballcourts, we aim to challenge the dominant paradigm previously proposed by scholars about ballgame traditions (Blomster 2012; Cohodas 1978; Day 2001; de la Garza 2000; Feinman and Nicholas 2011; J. W. Fox 1991; Gillespie 1991; Hill and Clark 2001; Koontz 2008; Miller and Houston 1987; H. Orr 1997; Scarborough and Wilcox 1991; Stern 1948; Uriarte 2006; Zeitlin 1993). The standard interpretations have been that the ballgame was a large-scale ritual event linked to agricultural fertility, sacred cosmology, and human sacrifice. Associated with death and renewal, as well as unification and opposition, the ballgame has been seen as an allegory for war and a venue for alleviating territorial conflicts (Kowalewski

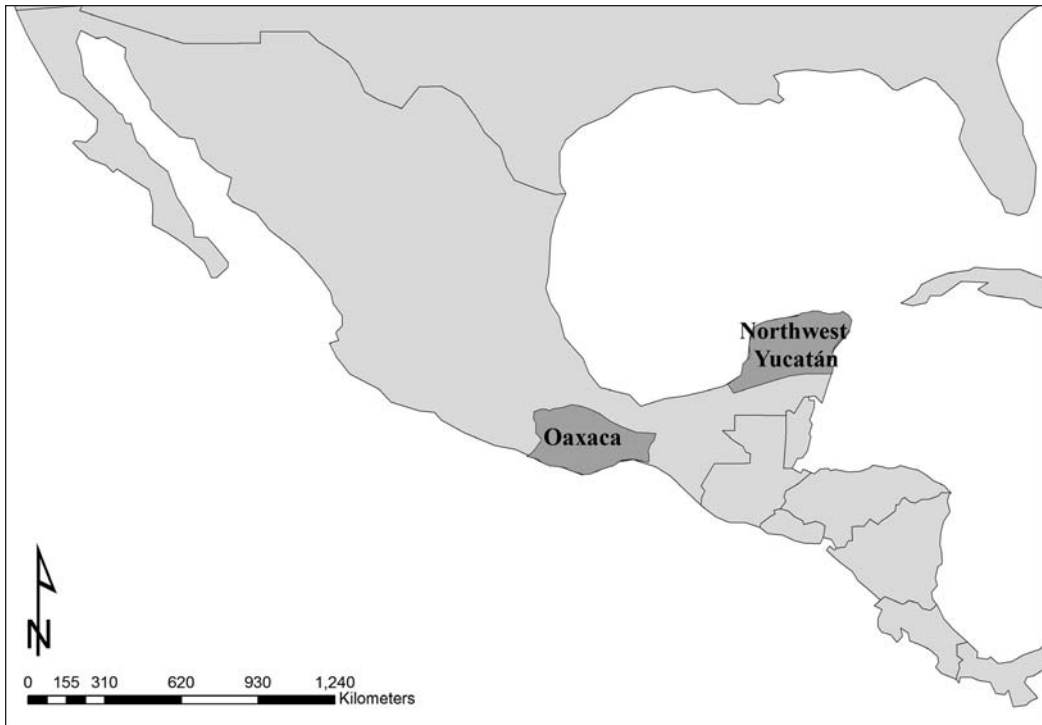


FIGURE 13.1. Map of case-study regions presented in this chapter. (Drawn by Marijke M. Stoll.)

et al. 1991; Gillespie 1991; Hill and Clark 2001). Venus, solar imagery, and animals such as the frogs and crocodiles that occupy liminal spaces supposedly dominated ballgame iconography (Day 2001; Uriarte 2000). The movement of the ball across the court has been argued to be a metaphor for the sun as it passed through the sky and the underworld, while the ballcourt—typically I-shaped with stone-tenoned rings and stone markers—is equated with the entrance to the underworld (Altuve 1997; Macazaga Ordoño 1982; Moya 2004).

By challenge, we do not mean to imply that we reject these interpretations, as they are generally well supported. Certainly there were many occasions when access to ballgame events and ceremonies was highly restricted, where participants and audience were primarily composed of elites, both low and high-status nobles, and possibly their retinue (including secondary actors such as musicians, dancers, priests, and attendants). It is also evident that the ballgame was, at times, highly ritualized, symbolizing a

contest between contrasting forces such as light and dark, or, alternatively, the cosmos against the underworld; in some cases, matches were held to ensure successful planting and harvest seasons (Uriarte 2001). The iconography of the Classic era ballgame tradition in the peripheral coastal lowlands zone, centered on the Gulf Coast region, clearly linked the ballgame to sacrifice, cosmology, and agricultural fertility (Zeitlin 1993). But in this chapter, we argue that such associations are not universal. Instead, such assumptions should be evaluated on a case-by-case basis for their appropriateness to the social reality of Mesoamerican communities and the socially defined contexts in which ballgames occur. In turn, we suggest that some ballgames, as examples of contestive play, held a greater role in community building than as mere backdrops for elite political theater.

The ballgame's popularity suggests that it appealed to a much broader audience than only the elite groups. In some cases, ballgames and related festivities would have drawn small communities

together with opportunities to network, trade, and have fun. In other cases, different social groups would have traveled to larger centers to attend ballgames and other celebratory activities. In still others, people would make pilgrimages to ballcourts located at the political boundaries between *cazicazgos*. Here, we are interested in exploring processes of political negotiation between and among communities made possible through participation in the ballgame as hosts and guests, rivals and supporters, and players and audience members and how those processes led to the construction of communal identity inherent to the region and the people involved (Sutton-Smith 1997).

One way to explore this communal role is to consider where monuments such as ballcourts are located (Turnbull 2002). The social and political implications surrounding the sponsorship and performance of the ballgame depend on its emplacement within both the built environment and the larger landscape. The material and iconographic evidence strongly indicates that ballgames were intimately connected to the external and internal sociopolitical relationships of elites and their ability to consolidate political power through ritual performance (M. Miller 2001; Scarborough and Wilcox 1991). For that reason, it is not surprising that ballcourts have been primarily found at head-towns, polity or regional capitals, and major settlements where games would have been controlled by powerful elites. Such courts are larger and more elaborate and sit at the heart of large elite communities that archaeologists historically have been drawn to investigate. But we can and should also examine instances of ballgames that may have been organized by smaller-scale communities or, as in the case of midsized settlements and larger centers, lower-status elites, as well as distributions of ballcourts in regions with heterarchical political structures (e.g., Hendon et al. 2009).

Theoretical Background

The relationship between sport and society is intricately complex (Blanchard 1981; Blanchard and Cheska 1985; Sutton-Smith 1997). This is because sport can engender both conflict and

social integration between individuals and societies. Incorporating theory from the anthropology of sport, some authors have argued that there is a clear relationship between competitive games, society, and the evolution of social and political inequality (W. Hill 1999; Hill and Clark 2001). Lévi-Strauss (1966:31–32) refers to the “disjunctive effect” of competitive games because of their ability to create inequality in the form of winners and losers where none had existed before. Some scholars have argued that the very social function of sport is to maintain inequality (e.g., Burley 1996; Donnelly 1996; Gruneau 1975), while others assert that sports are an outward expression of underlying social values and existing or emergent power relations (MacClancy 1996:4).

Conflict is deeply associated with the ballgame. In the famous K'iche' Maya legend of the Popol Vuh, the ballgame was the chosen method of combat between the Hero Twins and the Lords of the Underworld (Tedlock 1996). The ballgame is also often linked with rituals of accession and the legitimation of authority between elites. Examples of conflict, competition, and legitimation via the ballgame can be seen in the stories about the ascension of the Postclassic Mixtec cultural hero Lord 8 Deer (A. Joyce et al. 2004). The game is argued to be an outlet for social aggression, a form of interelite competition, a substitute for warfare, and a way to avoid or terminate interpolity conflict (Joyce and Winter 1996:38; Kowalewski et al. 1991; Stern 1948:96–97; Tala-doire and Colsenet 1991:174). Some have even linked the ballgame to incipient sociopolitical complexity among early Mesoamerican villages in the Early and Middle Formative (Hill and Clark 2001) periods. Convincing arguments have been made that ballcourt construction increased in times of intense political competition (Feinman and Nicholas 2011). Based on the distribution patterns in the Basin of Mexico, Santley et al. (1991:4) argue that the simultaneous use of multiple ballcourts signified political decentralization in a given region, with elites in constant competition (see B. Stark 2012 for a contrasting opinion). While the historical meaning of the ballgame varies, its objective, they argue, was

always the same—economic and personal gain by ruling elites who either participated themselves or sponsored teams (Santley et al. 1991:15).

However, sports such as the ballgame are *also* ideal forums for creating and maintaining *communitas* (*sensu* V. Turner 1969) among group members. Bell (1997) argues that routine activities such as sports resemble religious rituals in form and effect, particularly in their ability to integrate individuals. Sports lend themselves to ritualization because of the heightened emotions (joy, excitement, disappointment, anger, antagonism, etc.) that are produced by both playing and watching. The activities that accompanied ballgames would also have contributed to intracommunity and intercommunity social integration (Barber 2005:60; J. G. Fox 1994; W. Hill 1999). Iconographic evidence, for example, links the ballgame with the ritual practices of auto- and human sacrifice (de Borhegyi 1980; Wilkerson 1991). Sacrifice involved extreme physical and emotional states for the participants and audience members who witnessed it. The feasting events that occurred around games were equally important for communal bonding, as moments in which social distinctions were enforced and power and identity were negotiated (Ashmore 2002:312; Bray 2002; Dietler 1996). Through shared experiences involving heightened emotional states, physical activities, and cultural rites of reciprocal obligation (Hendon 2002), communal bonds were forged, turning individuals into community members (Day 2001; Inomata and Coben 2006; Swenson 2008; Tsukamoto and Inomata 2014; Williamson and Cooper, Chapter 4, this volume; Zych, Chapter 5, this volume). Thus, the sociopolitical significance of ballcourts and the ballgame, we argue, lay in the roles they played as community-building (and sometimes dividing) enterprises.

In this chapter, we adopt a practice-oriented perspective that emphasizes that communities are actively constructed (and contested) through human action and agency (Barber 2005; Yaeger and Canuto 2000). By examining how the daily and extraordinary practices that constitute community (Joyce and Hendon 2000:143) are expressed through both material culture (De-

Marrais et al. 1996) and spatial organization (de Certeau 1984; Foucault 1978), archaeologists can study how communities and communal identities are created, negotiated, maintained, and contested (e.g., Barrett 2000; Hodder 2000; Pauketat 2001).

While multiple communities on diverse spatial scales can co-occur, local community membership tied to physical location and shared histories has long been recognized as an important component of social identity for people living in modern Mesoamerica, particularly among indigenous groups (Barabas and Bartolomé 1999; Barber 2005; Chambers and Young 1979; Rothstein 1988; Schryer 1987). Typically, this community is comprised of the town in which people are born, the communal lands surrounding it, and any cultural or natural features contained therein (Monaghan 1995). Archaeologically, the Mesoamerican town generally corresponds to the site, allowing archaeologists to investigate the spatial and symbolic logics of communities in different historical contexts (de Montmollin 1995; Hendon 2010; Villamil 2005).

The construction of a ballcourt would have distinguished communities socially and politically from those without ballcourts (de Montmollin 1995; Joyce and Hendon 2000). In turn, this would have affected local and regional sociopolitical and economic networks, as well as how and when participating communities negotiated such relationships. As ballcourts are evidence for both periodic (routine) and sporadic (special or momentous) interactions with neighboring and nonlocal groups, the presence of these important facilities in particular sites would have further reinforced intracommunity and intercommunity social distinctions (Hendon 2010). Yet, at the same time, the games and their accompanying festivities would also have linked communities through cooperative competition and communal experiences.

Archaeological Case Studies

Research projects that focus on ballcourts within a regional historical and cultural context have been limited. But by situating the ballcourts within the particular contexts in which such

traditions were active, we believe we can understand the sociopolitical processes that made them so prominent for Mesoamerican communities. This regional community focus can further aid in answering broader questions about the salience of ballgame traditions in community social interactions.

In the following sections, we look at the ballgame and ballcourts in northwest Yucatán, Mexico during the Middle Formative period (1000/700–400 BC) and the Nejapa region of Oaxaca, Mexico during the Postclassic period (AD 1000–1521).

*Middle Formative Period,
Northwest Yucatán, Mexico*

Due to the famous Great Ballcourt of Chichén Itzá, the northern Maya lowlands have long played a role in the larger discussion of the Mesoamerican ballgame (Kurjack et al. 1991). Yet, the immense size and complexity of the Great Ballcourt, along with its association with the symbols of elite Maya ideology, has fostered the dominant paradigm that ballgames and ballcourts are the tools of elite political theater. This paradigm has been challenged by the discovery of a network of Middle Formative settlements with multiple examples of ballcourt architecture in northwest Yucatán during a regional survey carried out by the Proyecto Costa Maya (PCM), under the direction of Anthony P. Andrews and Fernando Robles (2004). Although the original goal of the project was to locate and document Late Classic period sites and coastal-inland interactions, after three field seasons, more Middle Formative settlements had been identified than from any other period (Anderson 2003). Out of 116 documented Middle Formative sites, 24 were found to have ballcourt architecture (Figure 13.2). Most interestingly, these ballcourts were found primarily at small villages demonstrating little if any sociopolitical stratification.

One of the most extreme examples of this phenomenon can be seen at the site of San Jeronimo I. Despite an extensive exploration of the settlement, the only structures visible on the surface amounted to a single ballcourt and two apsidal house foundations. While no other ball-

court sites were this small, most were encountered at settlements with a minimal corpus of architecture, notably lacking traditional forms of elite structures. During the course of the survey, this pattern caused a fair bit of debate regarding their cultural role (Lawton and Medina 2001; Medina 2003). Clearly these courts could not uphold the traditional paradigm of the ballgame as elite political theater. As the survey project continued, however, a notable counter-example was recorded at the site of Xtobo. Xtobo represents one of the largest Formative settlements in the region, covering just less than one square kilometer and built around a plaza flanked by monumental architecture (Anderson 2003, 2011). At first, the ballcourt at Xtobo seemed to present an answer to the dilemma by providing a capital for a local ballgame tradition. But as work continued in the region, the role of the ballgame in northwest Yucatán continued to present interpretive problems.

Edgar Rene Medina (2005) began a thorough review of all data associated with ballcourts within the region. He demonstrated that despite some variability in the architectural corpus, the ballcourts of northwest Yucatán exhibited all of the traditional attributes of ballcourt architecture, including benches, aprons, upper walls, and defined end fields (after Taladoire 2001). A well-preserved example of ballcourt architecture was recorded at the site of Pitaya, where the upper wall was still clearly visible even prior to excavation (Figure 13.3). Over the course of Medina's investigation, another example of Formative architecture was encountered within the original Proyecto Costa Maya survey region by the Proyecto Salvamento Arqueológico de Ciudad Cauce, directed by Fernando Robles and Josep Ligorred (2008), at the site of Xanila. The ballcourt at Xanila brought the total number of known ballcourts within the region to 25. Medina led the excavations of the eastern structure of the Xanila ballcourt, uncovering a preserved lower bench and apron. In addition, a trench dug through the center of the ballcourt's playing alley encountered a feature that was interpreted as a ballcourt marker. While later Classic period ballcourt markers

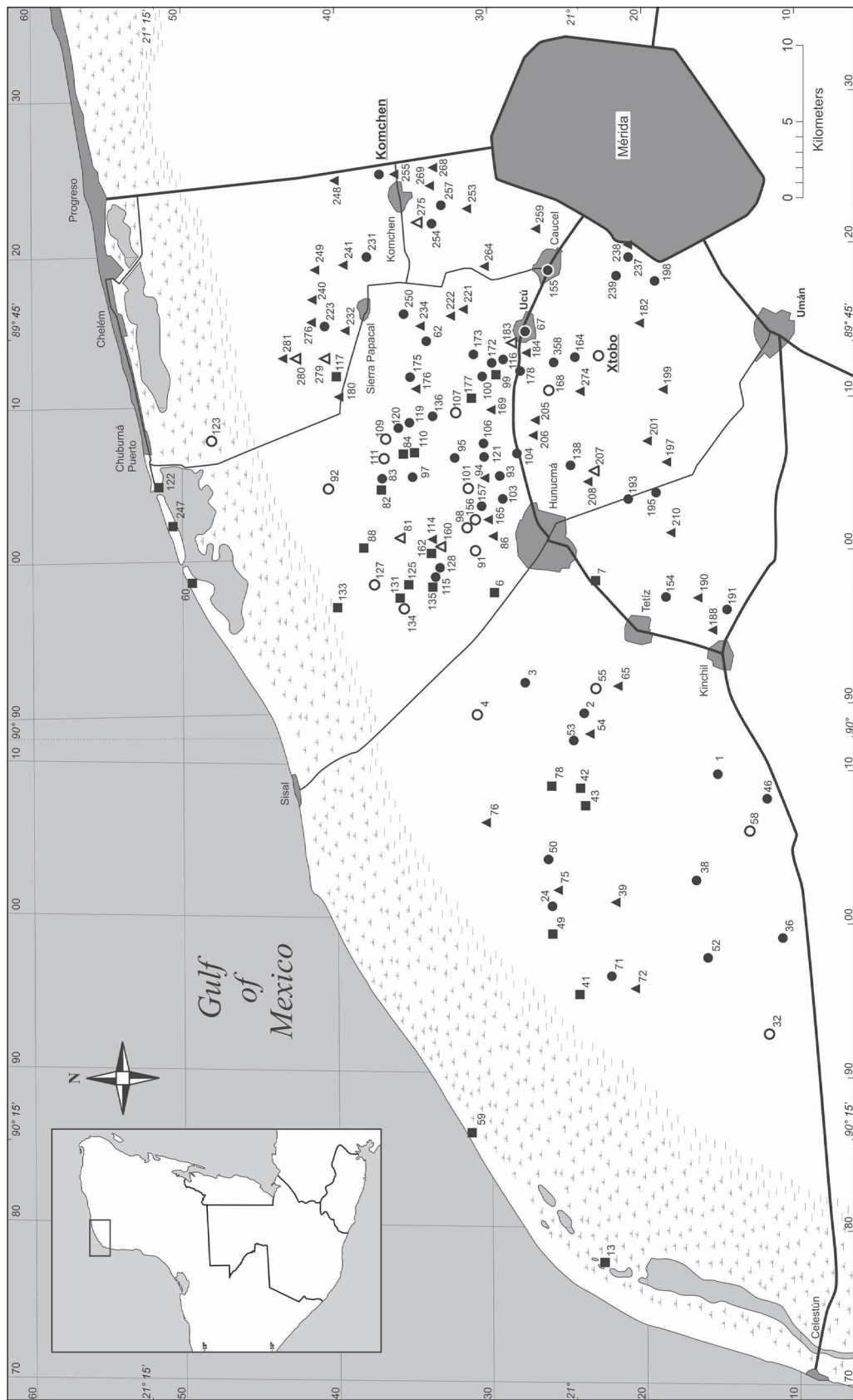


FIGURE 13.2. Map showing Formative period sites recorded by Proyecto Costa Maya (PCM). Triangles represent Middle Formative sites; squares represent Late Formative sites; circles represent Middle and Late Formative sites. Hollow symbols represent ballcourt sites. (Based on INEGI maps and project data; drawn by David S. Anderson.)

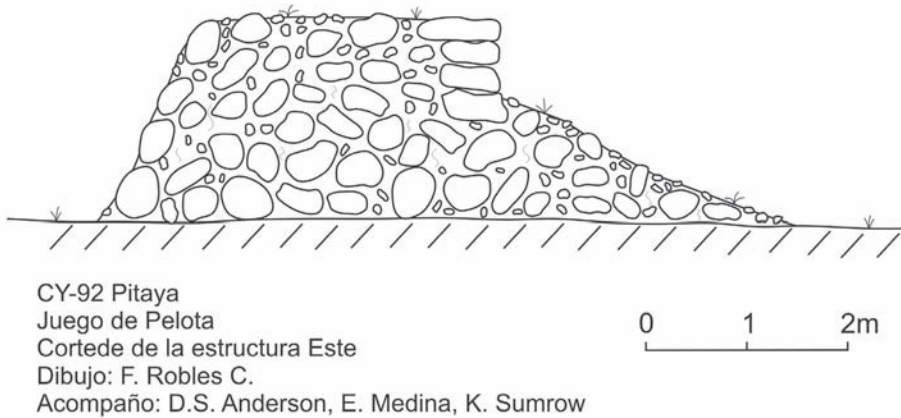


FIGURE 13.3. Cross-section of the eastern mound of the ballcourt structure at Pitaya, Yucatán. (Drawn by Fernando Robles.)

were carved from a single stone, this marker was made up of a series of small cut limestone blocks arranged in a circle. The presence of ballcourt markers had not been previously noted in this area, thereby providing additional evidence for material continuity with later versions of the ballgame in the Maya region.

During Medina's project to further examine the region's ballcourts, David S. Anderson (2011) began an intensive survey at the site of Xtobo. The investigations at Xtobo documented a densely inhabited settlement covering 67 ha with minimal resettlement after the Formative period. Xtobo included many traditional indicators of stratified sociopolitical organization, such as monumental architecture, elite residences, and the presence of *sachbes* (causeways) connecting particular structures to the center of the site. The site's ballcourt was located just to the south of the main plaza and exhibited many of the same characteristics as those observed by Medina. In particular, the presence of a bench, apron, and upper wall could be confirmed. The ballcourt at Xtobo, however, is an outlier in that it is the smallest example in the region.

The role of Xtobo as a regional center began to come under question as investigations in the region continued. While clearly one of the largest Middle Formative sites in northwest Yucatán, it was still a relatively small settlement. With an estimated population of only 1,500 inhabitants and pyramid architecture reaching just 8 m in height, Anderson began to question how

much control the site might have had over a network of 25 separate ballcourt sites, let alone the more than 100 additional Middle Formative sites found in the region. The limited nature of Xtobo's political control was made particularly clear as the Proyecto Salvamento Arqueológico de Ciudad Cuncel continued its work in the region. Excavations led by Nancy Peniche May (2012) at the site of Xaman Susula encountered evidence of elite architecture in what she argued to be a throne room reminiscent of later Classic Maya presentation throne rooms. This architecture embodies a statement of sociopolitical power that even the rulers of Xtobo apparently could not muster, although Xaman Susula was a physically smaller settlement. There is also the question of the relatively small size of Xtobo's ballcourt. At just under 12 m long, it is easily the smallest example recorded within northwest Yucatán. This is certainly opposed to the precedent set by the Great Ballcourt of Chichén Itzá, which is approximately twice as large as any other known Maya ballcourt (Kurjack et al. 1991).

These diverse data ultimately suggest a complex landscape of emergent and heterarchical sociopolitical power in Middle Formative northwest Yucatán, a landscape that only becomes more complicated as one looks farther afield to neighboring centers at the sites of Komchen (Andrews V n.d.; Ringle and Andrews V 1990), Xocnaceh (Gallareta 2005; Gallareta and May 2007), and Poxilá (Robles et al. 2006). Interestingly, however, the network of ballcourts seems

to stop as one travels farther away from the core zone surrounding Xtobo, suggesting that the ballcourts of the northwest represent a regionally distinct tradition. (The only other Middle Formative ballcourt recorded in Yucatán so far is at the site of Paso del Macho, located about 100 km to the south of Xtobo [Gallareta et al. 2007].)

Postclassic Nejapa de Madero, Oaxaca, Mexico

Both the ballgame and ballcourts have a long, enduring history in Oaxaca, at least since the Late Formative period (300 BC–AD 300; Feinman and Nicholas 2011:101). Recent evidence of the ballgame in Oaxaca has now been found in the Nejapa region, a large valley located roughly halfway between the highland central valleys and coastal Isthmus of Tehuantepec. Nejapa was (and still is) a boundary zone between the territories of three ethnic communities and was itself probably multiethnic and multilingual for many centuries before the Colonial era. Since 2009, Stacie King has been conducting systematic survey and excavations in this understudied region (King 2010, 2012; S. King et al. 2012). Archaeological data show that while settlement occupation remained low from the Middle Formative through the Classic periods (900 BC–AD 1000), it increased dramatically in the Postclassic period (S. King 2012). Part of this expansion may be due to Nejapa's crucial location along the exchange route between the central valleys and the isthmus (Fahmel Beyer 2005). Successive military invasions from expanding highland Zapotec and Aztec empires in the fourteenth and fifteenth centuries also likely impacted settlement patterns and organization (Oudijk 2000; Oudijk and Restall 2007; Zeitlin 2005). It is during this same period that people living in Nejapa constructed numerous ballcourts in different locations.

Out of over 150 sites registered over the past three field seasons by the Proyecto Arqueológico Nejapa/Tavela crew, 14 feature ballcourts (Figure 13.4). The majority are found at sites that have been dated to the Postclassic era, based on the recovered ceramic material and some radiocarbon dates (S. King 2010; S. King et al. 2012). As in

the previous case study, the ballcourts in Nejapa appear to exist in a dense network of settlements. Most are located within a distance of 2 km from each other. Calculating the average person's walking speed at 5 km per hour (Aspelin 2005), it would have been possible for an individual to travel to multiple ballcourts in a single day.

Marijke Stoll examined the distribution of ballcourts across the landscape in order to assess the sociopolitical role of the ballgame in Nejapa at the regional scale (de Montmollin 1995:158; Hendon 2010:201). Numerous social, political, economic, and geographic factors probably played a role in the presence or absence of ballcourts across time and space. For the purposes of this analysis, Stoll selected three variables that serve as an entrée into identifying the factors that influenced ballcourt distribution in Nejapa: (1) the total area of the site, or site size; (2) site accessibility; and (3) site complexity. For site accessibility, elevation was used as a proxy, assuming that lower-elevation sites are more accessible than higher-elevation sites. Site complexity was calculated based on the number of nonresidential and public structures recorded at each site, such as plazas, temples, and platforms. *Montículos*, or mounds in Mexican Spanish, were also included in the structure count. Although a mound could be a domestic structure, it would most likely have been a residence for a higher-status individual, indicating internal social complexity. Based on the traditional Mesoamerican ballgame paradigm, it was hypothesized that ballcourts would be located at large complex sites located close to or on the valley floor. A ballcourt index (a measure of highest values and how they cluster) and a binary logistic regression model were created using these variables.

Based on the results, Stoll found that, in fact, the Nejapa ballcourts were located at sites that vary in size, complexity, and elevation. Using the same variables from the cluster analysis, Stoll then ran a binary logistic regression analysis. Mapping the results of the analysis shows that many of the sites predicted to have a ballcourt, in fact, do not, while the model missed smaller sites that actually have ballcourts (Figure 13.5). The visual results are confirmed by the results of an

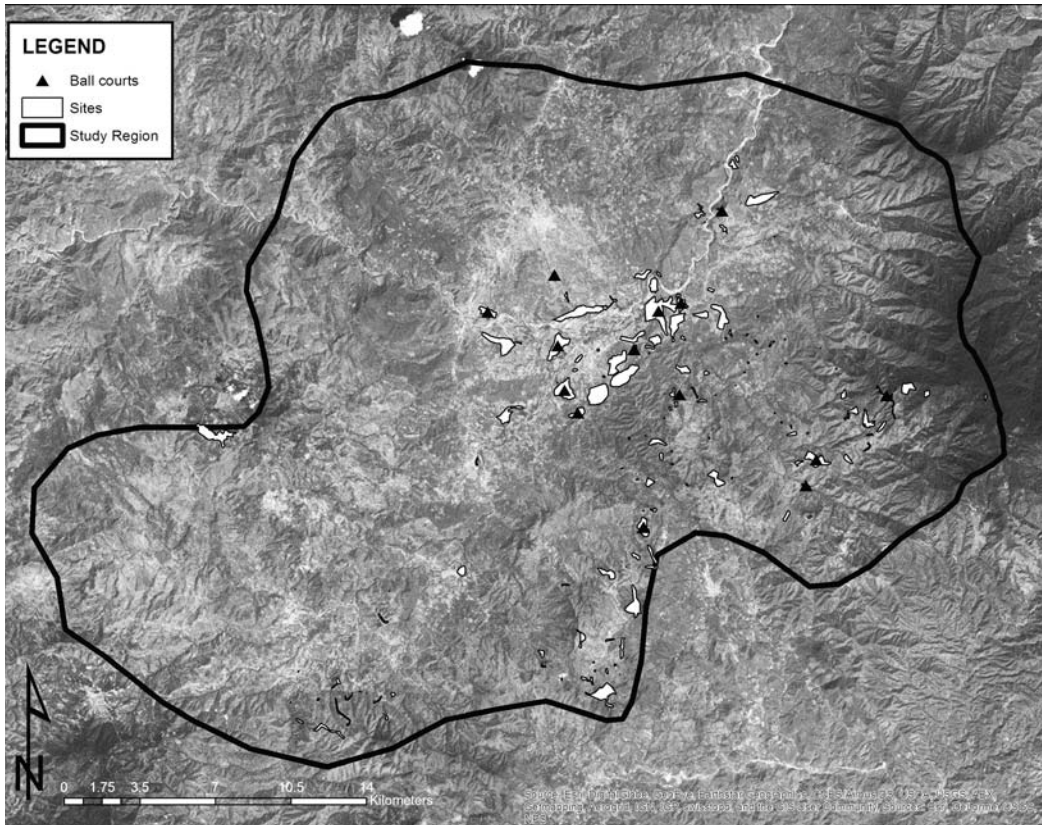


FIGURE 13.4. Map showing site boundaries documented by Proyecto Arqueológico Nejapa/Tavela survey crews; 14 of these sites feature ballcourts (black triangles). (Drawn by Marijke M. Stoll.)

efficiency equation ($n = 11$ percent). Clearly, the model is not very efficient at predicting where ballcourts should be located in Nejapa, based on the independent variables of site size, site complexity, and accessibility. Therefore, the earlier proposition, that ballcourts are only located at sites that are large, complex, and accessible, must be rejected. The spatial analysis demonstrates that ballcourts were built in large urban centers, minor towns, and even isolated locations.

These isolated sites are particularly striking given that there are no other structures nor any occupation near the ballcourt itself. For example, the site of Llano de las Casas (TAV-TAV-029), which measures a mere 2 ha in total area, features only a ballcourt with a small adjoining platform. No other evidence of occupation is found at this site. Llano de las Casas is located only 1.22 km from El Sital (TAV-TAV-010). This 36.5 ha site

features complex civic-ceremonial architecture and elite residences, including a palace. El Sital also has one of the best-preserved ballcourts in the region, located in the saddle between the two peaks forming the summit of the site. Other, non-ballcourt sites lie to the south of Las Casas, including Cerro La Virgen (SJL-SJL-005) and Peña del Rodeo (TAV-TAV-045).

If these sites—ballcourt and non-ballcourt—are contemporaneous, it would suggest that the isolated court at Las Casas may have served as a pilgrimage site for boundary-marking rituals between different communities to the north and south of the site. It is probable that individuals traveled from Peña del Rodeo to attend ballgame events at both Llano de las Casas and El Sital, but the circumstances and performances surrounding such events would have been markedly different.

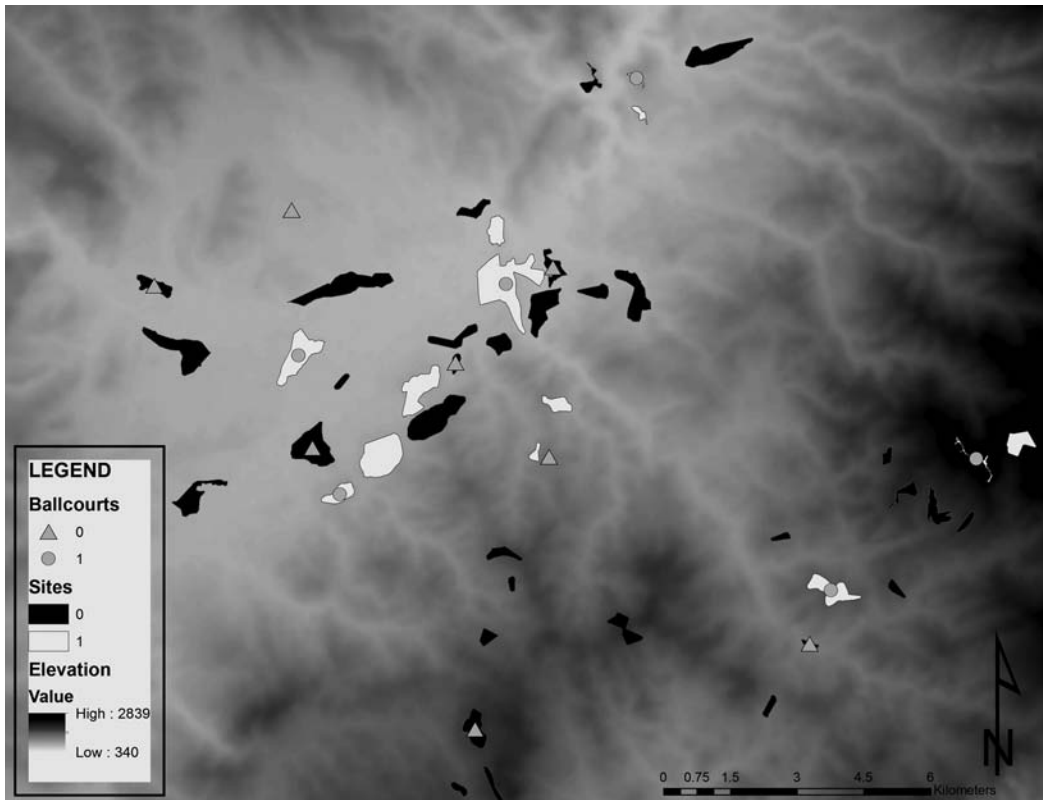


FIGURE 13.5. Map displaying the results of logistic regression model analysis. The results show that the model classified over half of the documented ballcourt sites as non-ballcourt sites (gray circles; $n=7$) based on the criteria of size, complexity, and access. This demonstrates the variation present between communities with ballcourts in the Nejapa region. (Drawn by Marijke M. Stoll.)

Importantly, Las Casas is a *palangana*-style court (Figure 13.6). These rectangular-shaped courts, often described as a washbasin form, are predominately found in Guatemala and north and central Oaxaca (Taladoire 2003). Another *palangana*-style ballcourt was discovered on the southern slopes of the same mountain as El Sital. This smaller court lies only about 1.06 km northwest of Las Casas but more than likely pertains to the El Sital settlement and may have even been located in a smaller, lower-status elite barrio. Meanwhile, the main ballcourt at El Sital most closely resembles a Zapotec-style court from the central valleys, with features not found at other courts in the Nejapa region.

While we cannot determine precisely what types of games were played at each court, it is interesting nonetheless that two different courts

reflecting distinct ballgame traditions are found within the same site. The presence of a *palangana* court both at a lower-status barrio of El Sital and an isolated location a kilometer and a half away—a style predominantly found in Guatemala—deserves further investigation. The ballcourts would likely have served some integrative purpose between the different neighborhoods and possibly even between these neighborhoods and different communities.

Modern Ballplaying Communities in Oaxaca: An Ethnographic Case Study

Modern versions of the ballgame are still played today in several states in Mexico and even California (Turok 2000). Today the Federación de Deportes Autóctonos y Tradicionales (FDAT) counts 13 state associations and a multiplicity



FIGURE 13.6. The *palangana*-style ballcourt at the site of Llano de las Casas (YAU-TAV-TAV-015), looking northwest. (Photograph by Marijke M. Stoll.)

of different groups among its members. These organizations play a diverse number of mostly traditional indigenous games divided into physical sports and games of mental skill (Turok 2000: 59). In all, 13 *modalidades* are currently played in Mexico. They vary in the rules of play, game equipment, and point systems. The hipball game *ulama de cadera* is considered to have conserved the most prehispanic elements (Leyenaar 1978). Like the version witnessed and described by sixteenth-century chroniclers, two to eight players strike a 3–4 kg ball with their hips (Turok 2000:62). Played in Jalisco and Sinaloa, *pelota purépecha encendida*, also known locally in Sinaloa as *quicha*, is perhaps one of the few games that can be described as having symbolic overtones. A cultural tradition “rescued” by the local FDAT of Sinaloa, the game represents the fight between the old and new suns. Using a ball made of maguey roots soaked with petroleum and lit on fire, players wield hockey-stick-like batons to strike the ball across the playing surface (Turok 2000:62–63).

The version most commonly played today in Oaxaca is *pelota Mixteca de hule*, or Mixtec rubber ball (Berger 2009; Taladoire 2003; Turok 2000). This game is the modern-day equivalent of a regional ballplaying tradition, much like what is seen in the archaeological record of northwest Yucatán and Nejapa, Oaxaca. Players use a vulcanized rubber ball weighing 1 k and a heavy glove made of stiff leather and metal studs that weighs at least three to five times more. Today, most courts used to play *pelota Mixteca* have been built in so-called *polideportivos* or sports fields, usually constructed alongside other fields designated for Western sports such as basketball and soccer (Berger 2009:9). However, an official court is not necessary to play. In her ethnographic study of *pelota Mixteca*, Stoll observed several informal spaces used for play, such as the court at San Antonio Arrazola, located on *terreno escolar* (school land) behind the school’s basketball court and the municipal building. Another, at Buena Vista, lies behind one player’s house next to his *milpa*. This player

is also the *coime* or custodian of the court. Neither of these courts is bordered by fences, and they are quite modest and informal. Boys start learning how to play *pelota Mixteca* between the ages of 8 and 14, taught by an older player who is a relative or friend of the family.

Today's *pelota Mixteca* matches are included in sponsored celebrations for important religious or political events, such as Catholic holidays. These holidays occur annually and create a cyclical rotation of teams traveling to different towns around the state. Tournament matches are especially popular for such events and include multiple teams participating in ranked rounds. The community that hosts a tournament invites teams from other towns to play. Those invited are expected to attend and, in turn, will be hosted and fed. Guest teams are then expected to reciprocate, inviting allies and rivals to play in their own community. Players who decline invitations to compete may find their own future invitations rejected; failing to show up can cause loss of social reputation among other players. The organization of games and the cycling between hosts and guests in *pelota Mixteca* is similar to the ways in which *crosse* (Williamson and Cooper, Chapter 4, this volume) and *chunkey* (Zych, Chapter 5, this volume) matches were probably organized and scheduled among different communities. Similarly, gambling—a common activity discussed extensively by several authors in this volume—is integral to *pelota Mixteca* games (Williamson and Cooper, Chapter 4; Zych, Chapter 5; Yanicki, Chapter 7; Seymour, Chapter 10; Evans, Chapter 15; Cameron and Johansson, Chapter 16). Players are required to place bets, and audience members also participate. Some of the money from the bets is used to maintain the playing field as well as provide food and drink for the games.

Many authors have commented on the similarity between *pelota Mixteca* and handball games from Spain, including *boce lucea* and *de largo y rebote* (Berger 2009:25; Turok 2000:65). Colonial era dictionaries, on the other hand, list a handball game in several indigenous languages, indicating that this type of game was probably fairly widespread and not entirely a foreign im-

port (Taladoire 2003). While European influence is possible, the players Stoll interviewed insisted strongly that the game is prehispanic. Many view it as part of their history and cited this as a motive for playing. Several players expressed to Stoll that *pelota Mixteca* was “*la tradición de la familia*.” Stoll concluded that playing *pelota Mixteca* is still greatly implicated in the process of community building in which commensality, game playing, and gift exchange (via gambling or cyclical payments and debts) all form important components of the overall tradition.

Discussion

How do we link the sociopolitical community to power politics, ideology, and social practice? Swenson (2003) argues that power is a politicized practice centered at the intersection of the material and the ideological. The ballgame, as a sociopolitical institution, appears to be such an intersection. As theatrical performance, it was in many respects a social spectacle playing out in a *ritualized* and *politicized* space. But how did the ballgame express power in politics beyond elite relationships? Even if the audience was restricted, how did the ballgame impress on other members of the community the power of the elite or their ideology? We would argue that the efficacy of the ballgame, and the power of the ballcourts as lived, social spaces, lay in the role it played in the politics and relationships among community members, both as an *integrative* and a *divisive* force.

Ethnographic data on *pelota Mixteca* is instructive. According to the players, *pelota Mixteca* is played to settle disputes, maintain relationships with other communities, and—most importantly—have fun. Traditions of reciprocal and sometimes asymmetrical obligation are still important in the formation of alliances and rivalries among Oaxacan communities, and, in fact, such commensal politics are common throughout small communities in the Americas (Dietler 1996:90; Lau 2002) and include obligatory community participation in construction projects, or labor parties, and the fiesta system. The players themselves link *pelota Mixteca* to community integration through cooperative

competition, claiming that the purpose of the game was to unite the pueblos in the past as it does in the present. Of particular interest, Stoll (2015) has found that the role of *pelota Mixteca* remains strong among Oaxacan immigrant communities in the United States, suggesting that the community-building power of the game can endure transnational migrations.

Regarding the prehispanic evidence, one could attempt to argue that Xtobo was the center of a local ballgame tradition and accept the traditional paradigm of the ballgame as an elite-dominated form of political theater, but we think the evidence does not warrant this conclusion. Rather, the data suggest that Xtobo's political power was limited, despite its relative advantages in scale. We should therefore examine the role of the game in Formative northwest Yucatán within its particular historical and social context. Ballcourts at small Formative sites with no apparent political significance suggest that during the Formative period the game itself was not strictly political, or at least not in the manner of elite-dominated politics. Instead, we posit that the game was a key component in local community building. The residents of Middle Formative northwest Yucatán were recent immigrants to the region, perhaps from Chiapas (Andrews V 1990; J. Ball 2001; Rissolo et al. 2005), where another regional tradition of Middle Formative ballcourts may have been identified (Agrinier 1991). As such, it is reasonable to presume that Middle Formative Yucatán was experiencing a phenomenon similar to the one occurring today among Oaxacan immigrants to the United States, as identified by Stoll (2015). The new inhabitants of northwest Yucatán may have been looking to maintain their identity as immigrants in a new region by using the ballgame to maintain social ties in a new home.

In this scenario, Xtobo's presence at the center of a ballcourt network is more likely an expression of shared identity than political control. The network is made physical through a series of alignments running from Xtobo to other ballcourt settlements (Figure 13.7). A series of straight lines connect Xtobo with other ballcourt settlements. In six cases, at least three settlements

are found on each line. In the most extreme case, a single line can be drawn from Xtobo through four additional ballcourt settlements. The accuracy of these alignments is so great that the path created by the alignment always passes within 200 m of the ballcourts found at each site. The presence of these alignments is unlikely to be related to astronomical phenomena, due to the lack of any significant points from which an individual could observe such alignments on the ground, and yet their accuracy requires some form of explanation. We posit that these alignments represent paths for pilgrimage between ballcourt settlements. If northwest Yucatán were united during the Middle Formative by a regular ritual of ballplaying and pilgrimage, it would make for a society closely united through the practice of a community-oriented game.

By the Late Formative period there is a dramatic shift in the settlement of the region. The data from Proyecto Costa Maya and Medina's (2005) research suggest that over half of the settlements with ballcourts were permanently abandoned. Xtobo also appears to decline and may have been abandoned early in the Late Formative period (D. Anderson 2011). Concurrently, the settlement at the neighboring site of Komchen appears to go through a strong period of growth, resulting in a site well over twice the size of Xtobo (Andrews V n.d.). Komchen, despite being located only 2 km away from one of the region's ballcourt sites, apparently never built a ballcourt for its own inhabitants. This abandonment of ballcourts and shift to a new political center suggests a notable cultural reorganization within the region. Perhaps the game's role in maintaining social ties within migrant communities was no longer necessary after hundreds of years living in Yucatán, or perhaps the game simply lost its appeal, as cultural drift moved the Maya people into a new period of florescence.

Meanwhile, the distribution of Postclassic ballcourts at large urban centers, small towns, and even isolated locations in Nejapa, Oaxaca, is especially intriguing given that communities here were probably occupied by people from distinct sociolinguistic, political, and ethnic groups. Ballcourts at major and minor settlements were

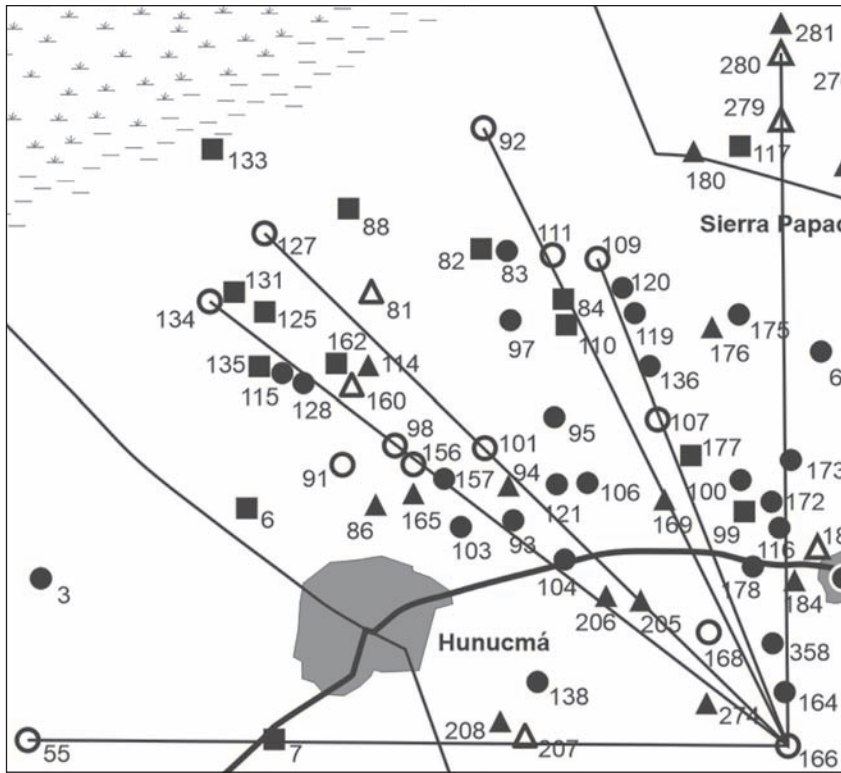


FIGURE 13.7. Map showing alignments between ballcourt sites and Xtobo (Site 166) in northwest Yucatán. (Drawn by David S. Anderson.)

probably used for different types of ritual performances, feasting events, and other ballgame activities than those at isolated sites, with different purposes and sociopolitical meanings for game sponsors, spectators, and players. Ballgames played at sites with residential occupations—elite and commoner alike—likely integrated social groups while also highlighting status distinctions between them. The location of the court within the settlement would have affected how divisive or integrative the game was. The urban center of Greater La Amontonada, consisting of a civic-ceremonial center and six dispersed neighborhoods, itself has three ballcourts (S. King 2010; S. King et al. 2012). Two are located in El Cucharital, with one in a higher-status elite residential zone. The third is in the ceremonial center of another mixed-status neighborhood.

Travel to the large urban centers by minor elites from the small towns would have carried different sociopolitical meaning than travel to

minor settlements by regional elites. The isolated ballcourt sites further suggest that the ballgame also served as a mechanism for performing periodic rituals possibly linked to boundary making and pilgrimage. The construction of a ballcourt at a site without other structures or evidence of habitation indicates that the motivation for building the court is tied to the importance of that location. Through hosting and attending ballgame ceremonies, Nejapa residents actively negotiated internal and external political tensions. Successful negotiation of community tensions would have been especially important during the Postclassic period, when population numbers and commercial trade were greatly expanding and foreign armies were repeatedly invading the region.

Western Mesoamerica, consisting of the Mexican states of Nayarit, Jalisco, Colima, and Michoacán, is another region with a strong but understudied ballgame tradition. Current evi-

dence suggests that games here were also more communal or socially integrative rather than strictly elite practices. While formalized ballcourts are not common, ballplayer figurines dressed in typical protective gear are abundant. Game equipment, which included both large and small rubber balls, long or short sticks, bats, and paddles indicates that a variety of different types of ballgames were played. Unique to the west Mexican tradition, there are also the modeled ballcourts that show games in progress (Figure 1.2, this volume). These ceramic models depict I-shaped ballcourts with more or less vertical walls and side benches, surrounded by two to four stepped structures. Incredibly, spectators (numbering anywhere from 12 to 30) are shown seated on these structures and include men and women, musicians, embracing lovers, and even umpires! Two opposing teams of two to three ballplayers are on the court, some wearing gloves, chin-strapped helmets, or “conical bills,” with anywhere from one to four balls in play (de Borhegyi 1980:6). The generally populous nature of these figurine models clearly shows games as celebratory communal traditions rather than an elite-dominated or controlled activity.

Additional evidence for a communal ballgame tradition can be observed in ballcourt distribution. In Jalisco, for example, courts are associated with the Teuchitlán tradition, which emerged in the core region of the highland lake-district during the Classic period. At the site of El Arnel (300 BC–AD 200), courts are typically found attached to circular platform complexes or clusters of architectural circles surrounded by platforms forming precincts of different social statuses. More formal ballcourts—described as open I-shaped courts—are located in the central precincts, while less formal ballcourts are found in lower-status precincts. Very few ballcourts have been found outside this core region (Weigand 2000:47–55). Weigand (2000:55) argues that, based on the distributional pattern, the game had an integrative role between different social segments of the core but did not figure much into the relationships between the core and the hinterlands.

The notion that the ballgame, and thus ball-

courts, are uniquely associated with the social elite and political propaganda is perhaps best known from Classic Maya iconography and archaeology. In fact, the idea that ballcourts are only found at Maya political centers is well enshrined in the summary literature (Ashmore 1981; Bullard 1960; Scarborough 1991), and yet many examples to the contrary have been documented. Several regional surveys have encountered networks of Classic Maya ballcourts, not unlike those discussed above in Formative northwest Yucatán and Postclassic Oaxaca. A survey conducted of the settlements surrounding the Classic period city of Quirigua, Guatemala documented over 20 peripheral sites that included ballcourt architecture, demonstrating a notable amount of interest in the game outside of the polity capital (Leventhal 1981). De Montmollin's (1997) study of Classic period ballcourts from the Upper Grijalva Basin in Chiapas recorded numerous examples of ballcourts at not only primary centers but also at a majority of secondary centers ($n = 60$), again suggesting a broad base of communities and social-status groups that had access to the ballgame. Recent survey work in the Three Rivers region of Belize has further documented the presence of ballcourts at sites of all sizes, suggesting to the surveyors that the ballgame “contributed to the to the integration of local communities” (Lohse et al. 2013:99). Finally, a small network of three ballcourts has been documented at sites in the hinterland surrounding the Early Classic settlement of Chunchucmil (Hixson and Mazeau 2017). Beyond these Classic Maya ballcourt networks, additional examples of ballcourts have been found at small isolated Classic period settlements such as Trinidad de los Nosotros, Guatemala (Moriarty and Foias 2007) and Santa Teresa, Yucatán (Hutson et al 2015). While the Classic Maya elite had an undeniable interest in the ballgame, they also clearly did not control all expressions of the game. Maya communities throughout the sociopolitical hierarchy played ballgames.

Although they focus on sites at the margins of Mesoamerica, two additional studies by Whalen and Minnis (1996) and Hendon et al.

(2009) further demonstrate the importance and usefulness of taking an expansive look at the ballgame on a regional scale. Working in northern Mexico in and around the regional center of Paquimé (AD 1130–1450), Whalen and Minnis noted a regional network of ballcourts, with three located at Paquimé itself, and more at many smaller sites in the region. While one might be tempted to see a regional capital controlling a network of ballcourts, analyses of the surrounding settlements suggest that Paquimé's control over the region was minimal at best (Whalen and Minnis 2001). In the Cuyumapa River drainage of Honduras during the Late Formative to the Terminal Classic, the differences in the orientations of the ballcourts were linked by Hendon and colleagues to seasonal ritual cycles and patterns of intraregional social interaction. Ballcourts aligned to the summer solstice were for the use of the local communities close to those with ballcourts, while ballcourts aligned to the winter solstice were larger and located in major centers where multiple communities would have gathered to participate in ballgame rituals (Hendon et al. 2009).

Conclusions

We find archaeological and ethnographic evidence to support our claim that the Mesoamerican ballgame held a community-building role. New data from regional surveys in both Yucatán

and Oaxaca provide us with a wealth of evidence, suggesting that all community members had a stake in ballgames and the rituals that accompanied them. Additional archaeological data from west Mexico, the Maya region, northern Mexico, and Honduras further suggest that the communal role of the ballgame often outweighed the concerns of elite actors and cosmological recreations. While we do not deny that state-level actors at times co-opted the game for their own political purposes, this does not negate the existence of communal traditions of playing. Instead, it underscores the existence of such traditions. If common Mesoamericans had no interest in the ballgame, then the use of the game in political propaganda would have had little effect. Even state-sponsored games would have occasionally included people from a variety of social statuses and communities. As our own modern sports games show, spectacular displays of athletic competition are incredibly appealing to human beings. The traditional paradigm of the Mesoamerican ballgame as an institution of elite political theater has unfortunately blinded us to the additional roles that contestive games of physical skill play in a community. Ultimately, we hold that Kirchoff was more right than even he knew: to be Mesoamerican was to play ball, whether you were an elite or a commoner.



Acrobatic Dances and Games of Mesoamerica as Ritual-Entertainment

GERARDO GUTIÉRREZ

It is well recorded how Precolumbian Mesoamerican groups celebrated key events in political and agricultural cycles and in the reckoning of ritual and solar calendars with an assortment of song, dance, comedy, and games (Acuña 1978; López Austin 1967; Piña Chan 1969). For the Postclassic period (1100–1500 CE), primary sources mention or depict the presence of specialists who staged and performed dances that counted on the participation of primary nobility and rulers (Sahagún 1989:468; see also *Codex Azcatitlan*; *Codex Dresden*; *Codex Fernández Leal*; *Codex Madrid*; *Codex Paris*; *Selden Roll*). Both Nahuas and Mayas describe the existence of community houses, *mixcoacalli* and *popol nah*, respectively, where dancers, musicians, and singers were trained.

The first comprehensive study of Mesoamerican acrobacy was by Román Piña Chan in 1969, which interpreted acrobatic iconography as representing games and sports. His approach is problematic, however, because it reduced the complexity and richness of Mesoamerican practices to restrictive European conceptions of athletics. In the Greco-Roman classical tradition, *gymnastikē* (gymnastics, or the training of professional athletes) was a true art (*technē*), as opposed to acrobacy (*akrobatēs*—literally, walking on tiptoe or tightrope walking), which was perceived as “bad” art, no different from lowly practices such as teaching boxing positions (Elsner 2009:4; König 2009:258, 260). This dichotomy

between true (e.g., gymnastics) and false (e.g., acrobacy) arts has predominated in Western culture since the treatises of Galen and Philostratus written circa AD 160–220 (Bowie and Elsner 2009). So, while the physical performance of the athlete is worthy of victory and honor, that of the acrobat is destined to an uneasy social liminality. In consonance with this classical worldview, the performance space of the professional athlete is the stadium, whereas that of the acrobat is the circus arena and market plaza.

The Western approach for interpreting Mesoamerican acrobatic games was challenged by Victoria Bricker’s (1973) seminal work that brought attention to ritual humor and the key political and religious roles of the irreverent clown in the context of ceremonial festivities in indigenous societies from the Yucatán Peninsula to the American Southwest. This ethnographic approach also has philological support based on the analyses of Alfredo López Austin (1967) and René Acuña (1978) around the concepts of magic, illusionism, and ritual farce among Nahuas and Mayas. In the 1980s, Clifford Geertz’s (1980:13) research on Bali provided the performance perspective of the “Theater State,” framing political systems governed by rituals and symbols rather than by force. Subsequent researches in Mesoamerica have relied on this approach to interpret the meaning of political and religious imagery (see essays in Inomata and Coben 2006; Looper 2009; Taube 1989).

In this chapter, I build upon these previous studies, since Mesoamerican acrobatics clearly provided wonder and entertainment through the performance of spectacular acts, assuming difficult, dangerous, playful, or illusionistic positions through the masterful control of the acrobat's body alone or with the assistance of equilibrium devices. Beyond the entertainment, however, the physical aspect of the acrobats' performance, defying verticality with the sheer strength and mastery of their bodies, placed them in the special dimension of supra-humans. The acrobats make the unnatural seem natural and dare to follow the impossible (Danta 2015:72). During a performance, the improbable acrobats are indeed like gods.

I argue here that iconographic representations in ceramics, epigraphy, painted codices, and ethnohistorical sources suggest that Mesoamerican acrobacy and games were performed not as mere entertainment but as "ritual merriment." By this, I mean that game, joy, and laughter were driving forces in the creation of the universe and rested at the core of Mesoamerican religious beliefs and practices. In their multifaceted nature, the creator gods were jokers and tricksters; hence, the universe is merely the crystallization of divine, loud, chaotic laughing. Life is a joke, and we need to endure it with merriment while performing our brief roles on the cosmic stage.

One of my goals of this chapter is to disassociate the uneasy dichotomy between religion and game seen in the current Judeo-Christian worldview from that of the Mesoamerican perspective. Early analyses of Mesoamerican games are permeated with evaluations of seriousness (or the lack thereof) according to our hieratic and restrained sense of correct ritual behavior, wherein comical emotions are removed and the focus is on policing and punishing foolishness. This point is clearly stated in Ecclesiastes 7:3–4: "Sorrow is better than laughter: for by the sadness of the countenance the heart is made better. The heart of the wise is in the house of mourning; but the heart of fools is in the house of mirth." These biblical verses have been immortalized in a variety of Western media, to name

a very few: the moralizing paintings of William Hogarth—*A Harlot's Progress* (1731) and *A Rake's Progress* (1732–1733)—and in such literature as Edith Wharton's *House of Mirth* (1905) and Federico Gamboa's *Santa* (1903). This pictorial art and literature intended to show how young people, if not judicious, are easily trapped in a vicious cycle of game, gambling, music, dance, drunkenness, drugs, infamy, and prostitution. Such biblical values are powerful, but is this the only way to understand game, gambling, dance, and mirth? Does ludic behavior always end in the loss of social status, infamy, poverty, and asylums? Are there alternative social scenarios in which the gambler and performer actually achieve prestige and social status? Is it possible that ritualized merriment has been an integral part of the political life of many human groups? Perhaps it takes a fool to unmask and punish political and religious chicanery hidden by the veneer of hypocrisy; and perhaps it takes a good laugh to pierce the vanity of the powerful and the pompousness of the "wise."

Mesoamerican Ritual Merriment

Contrary to Judeo-Christian beliefs in which the benevolent action of God creates the world and his wrath destroys and punishes it, in Mesoamerica, the laughter of the gods holds both the power of renewal and destruction. In admonitions to the newly appointed Aztec ruler of central Mexico, it is clear that the laughter of the deity Tezcatlipoca creates the *altepetl* (the political system), and his mockery destroys it (Sahagún 1979b:157, 175). Indeed, this particular deity destroyed the great and mythical city of Tula through the shapeshifting transformation of his person: first, by taking the figure of an old man to fool the priest/deity Quetzalcoatl, getting him drunk, and then having him commit incest with his sister. While Tezcatlipoca enjoyed his mockery, Quetzalcoatl fell into a depression and decided to end his tragedy by committing suicide. Nonetheless, this is not the end of story (as perhaps would be the case in Judeo-Christian tradition), because after this emotional experience of failure, Quetzalcoatl tricked death

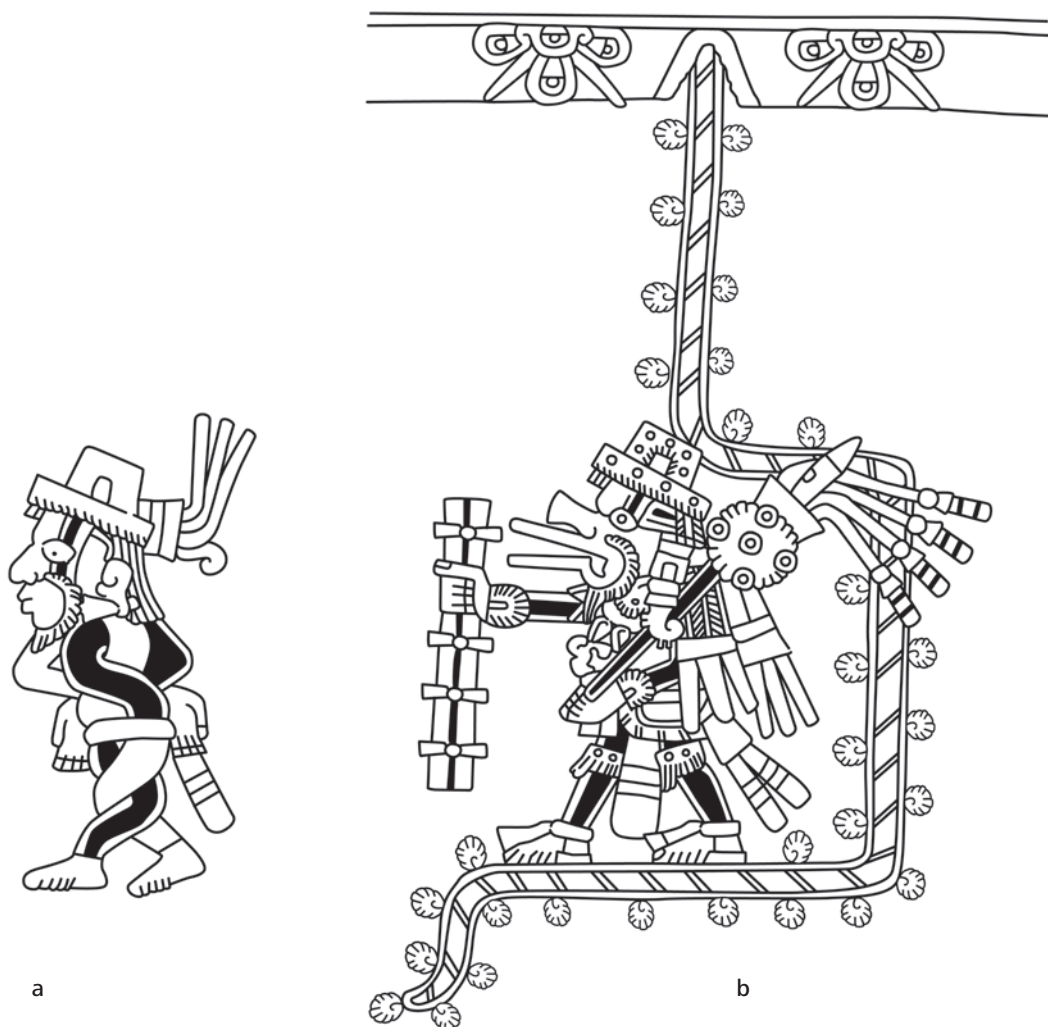


FIGURE 14.1. The Wind God as an acrobat: (a) Wind God (9 Wind, Quetzalcoatl) contorting his body as a whirlpool; (b) descending from the sky as a tightrope walker (after *Codex Vindobonensis*, Folio 48. (Drawn by Gerardo Gutiérrez.)

through his own powers as a shapeshifter and turned into the Morning Star, ascending into the sky. A fitting end, since Quetzalcoatl was born from the primordial sacrificial flint that cut open the sky (Boone 2007:181, 185, 189; Mendieta 1971:78).

Notably, among Quetzalcoatl's many attributes, he is represented as a contortionist in the *Codex Vindobonensis*, where he twists his body like a whirlpool to demonstrate his power over meteorological phenomena (Figure 14.1a). The creator couple sent Quetzalcoatl to the earth to

be a benefactor for mankind, and he descended using a rope and performing an acrobatic act of tightrope walking (Figure 14.1b). He attempted to lead the Toltec people by moral example, but his trickster twin (Tezcatlipoca) tripped him up and he fell, much like an acrobat could fall during a gravity-defying act. Nevertheless, the resurgence of Quetzalcoatl and his immanence as a heavenly body places him above the tricks and mockery of his twin brother by completing a cycle of birth-death-renewal along the vertical axis of the Mesoamerican cosmos. Like an

acrobat challenging gravity, Quetzalcoatl overcame verticality, and this is a key message embedded in the plot. Ultimately, the loss of Tula is not relevant because there had been (and will be) many Tulas in the continuing destructions and recreations of the universe. This Postclassic narrative is full of ludicrous moments that likely provoked the listeners to laughter more than sorrow for the disgrace of the Toltec people. I would argue that the purpose of the tale was precisely to entertain the public, especially if the story was recreated by performers, dancers, singers, and puppeteers in the large marketplaces of Postclassic cities in central Mexico. The moral embodied in the plot is that people and their political constructs, regardless of complexity, are eternally vulnerable to the caprices of the gods.

In a philological approach to indigenous acrobatic practices, I would highlight that no language of Mesoamerica reports a word equivalent to the concept of “acrobat” in European languages. Instead, there are plenty of specialized concepts for particular performers. Perhaps the closest word to the etymological root of the Greek *akrobates* is found in the Nahuatl—*mecatitech tlamatiliztli* (rope-walker/dancer)—while what Western societies refer to as “gymnastics,” “sports,” and “games” in Mesoamerican languages would be activities associated with “dance”: *itotia* (Classic Nahuatl); *acut* (Maya Choltil); *xajarik* (Maya K’iche’). Acrobatic dance in Mesoamerica would have embraced the dynamic movement of trained bodies and, apparently, even the ballgame (*tlachocholihui* in Nahuatl) was considered an acrobatic dance more than a sport. Here, the field of study opens broadly since acrobacy and dance are at the core of ideology, politics, warfare, and economic exchange among Native American groups (Heth 1992; Looper 2009).

Acrobacy, dance, and song come together in Mesoamerica and were practiced widely and regarded with great esteem. What we consider dance in our cultural perception may have been seen as the normal way in which gods moved and expressed their divinity, and singing was their way to express divine voice and emotions. If Mesoamerican deities “dance” and “sing” as part of their ontological divinity, therefore, they

would also expect their worshippers to dance and sing for them. The gods would manifest themselves to indigenous people through the bodies of particularly good dancers and the voices of gifted singers. Dance is movement, but through steps and pauses, the body can also create music. Bodily and instrumental music merged with songs to pay homage to the givers of life. Through the performance of dance and singing, the supernatural entities are called and invited to share food; drink chocolate, *pulque*, and beer; and enjoy the aroma of tobacco and incense (see Evans, Chapter 15, this volume).

Acrobacy in Archaeology, Iconography, and Ethnohistory

Within the known iconographic corpus of Mesoamerica, there are at least 20 representations of human figures assuming challenging contortionist positions (Coe and Diehl 1980; Cook de Leonard 1952; W. Fash 1988; García Moll 1979; Hirth and Hirth 1993; Medellín 1978; C. Navarrete et al. 1993; Pérez Suárez 2008; Piña Chan 1958; Romano 1967; Tate 1995; Taube 2005). Similarly, there are abundant references to equilibrists, funambulists, and jugglers, providing opportunities to explore the context, practice, and meaning of acrobatics in the Precolumbian period (Chenaut 1995; Clavijero 1987; Dahlgren 1954; Durán 1994; Fernández de Oviedo y Valdés 1855; Galinier 1989; García Escobar 1990; Ichon 1973; Krickeberg 1933; León Portilla 1972; Nájera Coronado 2008; Quezada 1977; Stresser-Péan 1948; Torquemada 1975–1983). I present here a basic typology of acrobatic dances to organize these representations by dividing the expressions between those that are performed only with the strength and flexibility of the body and those that make use of equipment, including poles, ropes, and rotary mechanisms (Table 14.1). Illusionism was widely practiced too and will be addressed as a special category.

Type 1. Body Strength, Balance, and Flexibility

As mentioned, acrobatic dances performed with only the body’s strength and flexibility constitute the first major category of performances. There are two major categories within this class: contortionism and acrobalance.

Acrobatic Dances and Games of Mesoamerica as Ritual-Entertainment

TABLE 14.1. Types of acrobatic dances practiced in ancient Mesoamerica.

Type 1. Body strength alone	Type 2. Body strength and equipment	Type 3. Illusionism
1.1. Contortionism	2.1. Balancing on posts	3.1. Shapeshifter.
1.2. Acrobalance	2.2. Dance on stilts	3.2. Puppeteer.
	2.3. Tightrope walking	3.3. The one who can “cut or dismember himself or other people.”
	2.4. Juggling	3.4. The “arsonist.”
	2.5. <i>Palo volador</i> (flyer)	
	2.6. <i>Huahua</i> (pinwheel)	

Contortionism

The contortionist assumes bodily positions that are difficult or impossible for most people to do. This inspires awe and wonder among spectators. Some contortionists are flexible by genetic inheritance, a condition called hypermobility in which the joints have a greater than normal range of motion. However, in some situations these individuals can develop a debilitating physical condition. Instead, the vast majority of professional acrobats become super-flexible through intensive training. Most contortionists begin training and performing difficult positions when they are children younger than 10 years old; as long as they continue regular hyper-stretching, there is no age limit for continuing the practice.

There are eight basic positions with variants seen in contortionism (Figure 14.2). The easiest one is the bridge where the body creates an upward bow with hands and feet on the floor (Figure 14.2a). Instead of placing the hands on the floor, one creates a backbend by placing the head behind the knees (Figure 14.2b). The backbend is the entry posture for more complex positions requiring still more flexibility that fewer people can perform. From the entry backbend, the acrobat can place the elbows and hands on the floor in an extreme wheel. With the elbows and hands used for support, the feet and toes can be raised up to produce an elbow stand (Figure 14.2c). If the palms are placed flat on the floor, and the head placed between the legs, one can then lift the two legs to achieve a headseat posture (Figure 14.2d). Another position, the chest stand, requires placing the head between the legs and then flexing downward until the chest reaches the floor; the feet are then lifted and may touch the head or the floor (Figure 14.2e). A more dif-

ficult position is the triple fold, which requires that from a chest stand the feet be placed behind the armpits; one then bends back still further until the knees rest on the floor (Figure 14.2f). All of the foregoing acrobatic positions start with a backbend, but there are also frontbend positions: a standing person bends over and passes both head and arms through the legs, resting the armpits on the back of the thighs (Figure 14.2g). The human knot position is like the frontbend but performed with the back and knees resting on the floor, while the back of the acrobat's head then rests on the ankles (Figure 14.2h).

Yoga practitioners in India apparently could adopt similar positions to those considered contortionist and have been doing so since at least 300 BC. Yoga occurs within the context of asceticism and the relationship between the self, body, senses, mind, and intellect to achieve higher states of consciousness (Eliade 2009:174). Female acrobats were represented on Greek pottery practicing contortionism around the same time (400–300 BC), but apparently they were performing for wealthy patrons (Hoek and Herrmann 2013). Ceramics from the Han dynasty present professional performers of contortionism at the Chinese court since 221 BC (Qiubai 1989). To date, however, the earliest representations of contortionists actually come from Mesoamerica circa 1100 BC, but it remains unclear how contortionism developed and was practiced.

From the archaeological site of Tlatilco (1300–1000 BC) in the Basin of Mexico, there are at least five contortionists represented on effigy vessels and two examples of modeled solid figurines. Presumably they were recovered from funerary contexts, but only one was excavated by professional archaeologists. The solid figurines



FIGURE 14.2. The basic positions of contortionism: (a) bridge or wheel; (b) backbend; (c) elbow stand; (d) headstand; (e) chest stand; (f) triple fold; (g) frontbend; (h) human knot. (Drawn by Gerardo Gutiérrez.)

appear to be wearing masks (Figure 14.3f–g), and the depiction of protruding upper lips may suggest that the effigy vessel figures were also represented wearing a kind of soft leather mask, like flayed faces (Figure 14.3a–e). The contortionists from Tlatilco are presented in the chest-stand position, their genitalia hidden under tight-fitting “shorts,” but they all seem to represent males given their lack of female breasts.

Only the effigy vessel found in Burial 154 was found within a well-preserved archaeological context (Figure 14.3a). The skeletal remains of the individual interred in Burial 154 belonged to a mature male 40–45 years old (Figure 14.4). The burial furniture contained the effigy vessel of the contortionist and many other objects: a *cajete* (flat-bottomed, outcurved wall bowl); a *botellón* (globular jar with tall vertical neck); a *cuenco* (simple, incurved wall bowl); two effigy vessels of phalluses; a bone bloodletter; an assortment of exotic stones, including hematite mirrors, a greenstone ear spool, and objects of quartz and flint; a small stone metate; a round grinder handstone; and a large chunk of tar (*chapopote*; García Moll et al. 1991:68–69), probably brought from the Gulf Coast of Mexico (Wendt and Cyphers Guillén 2008).

What can we infer about the early practice of contortionism from the Tlatilco examples? The team working during the fourth excavation season (Temporada IV) at Tlatilco excavated 214 burials from a cemetery and recovered circa 1,140 archaeological objects (García Moll et al. 1991:14). The most common offerings uncovered in the burials were *cajetes* (in 41 percent of the burials), followed by *botellones* (in 30 percent of the burials). Technically, the effigy vessels of Tlatilco are anthropomorphic “bottles,” but, interestingly, the acrobat of Burial 154 is the only archaeological object from Temporada IV that depicted as a contortionist. The occurrence of a single acrobat effigy vessel out of 1,140 mortuary objects in Temporada IV indicates that effigy vessels of acrobats were not frequent. Therefore, I argue that the effigy vessel of the acrobat was not placed in Burial 154 to be a companion to the deceased, such as dogs in other locales in Mesoamerica. I believe the effigy vessel of the acrobat

in Burial 154 marks a special individual who had accumulated prestige and achieved social status, perhaps by the practice of contortionism and other acrobatic feats.

In her study of the Temporada IV burials, Rosemary Joyce (1999) has inferred that some of the burial clusters at Tlatilco were associated with obsidian production and that these clusters tend to display elaborate treatments to beautify the interred individuals. Burial 154 belongs to a cluster of such burials related to the production of obsidian, and is indeed the only one out of the 214 burials from Temporada IV with a contortionist effigy vessel. It is also the only one that contained tar, phallic effigy vessels, and graphite. If the individual in Burial 154 was an acrobat, he could have used his physical ability to attract social prestige, wealth, and even to gain esoteric knowledge as a master of ritual performance, tapping exotic resources from all over Mesoamerica and west Mexico through active obsidian trade networks in Formative times (e.g., Clark and Lee 2007; Hirth et al. 2013). West Mexico also presents Formative period contortionist figurines, primarily assuming simple positions like the wheel (Figure 14.3i) and chest stands (Figure 14.3h), but their archaeological contexts or proveniences are unknown and even more problematic than those of Tlatilco.

Clear depictions of contortionists have not been found in central Mexico after 1000 BC, but four representations of such acrobats are found in the Gulf Coast region at the sites of Las Choapas (Figure 14.5a; Medellín 1978); Balancán (Figure 14.5b; Gómez Rueda 2003); Ejido Emiliano Zapata (Figure 14.5c; García Moll 1979); and Belén (Figure 14.5d; Pérez Suárez 2008). Monument SL-16 of San Lorenzo has also been inferred to represent a contortionist since it exhibits a pair of foot soles, as in the other examples, including a sixth Olmec-style monument from San Antonio Suchitepéquez, located in the Pacific coast of Guatemala (Figure 14.5e; Coe and Diehl 1980:323; Cyphers Guillén 2004:75). It is also a round altar depicting two acrobats performing at the same time (Figure 14.5f; Shook and Heizer 1976). This group of low relief circular monuments is posited to be of Middle



FIGURE 14.3. Contortionists of Tlatilco: (a) effigy vessel in Burial 154; (b–e) effigy vessels; (f–g) solid figurines; (h–i) effigy vessels, western Mexico. Sources: (a–b) after photo by author, MNA-INAH; (c) after Piña Chan 1958: 2:Lámina 31; (d) Art Museum 1995:Figure 38; (e) after Archivo Miguel Covarrubias, Tlatilco: Cerámica-dibujos, fotografías y notas, no.29522, http://catarina.udlap.mx/xmlib/projects/covarrubias/browse/item.jsp?path=/db/xmlibris/Sala%20de%20Archivos%20y%20Colecciones%20Especiales/Fondo%20Moderno/Archivo%20Miguel%20Covarrubias/Tlatilco:%20Cer%20mica%20-%20Dibujos,%20fotograf%20EDas%20y%20notas/&key=amc_tlatilco_ceramica_dibujos_fotografias_y_notas_25.xml; (f) after photo by author, MNA-INAH; (g) after Piña Chan 1958: 2: across from Lámina 29; (h–i) Museo Dolores Olmedo, after photo by author. (Drawn by Gerardo Gutiérrez.)



FIGURE 14.4. Burial 154 of Tlatilco. Note the effigy vessel of the acrobat placed near the right hand of the interred individual and aligned with other ceramic containers. A “medicinal” pouch with rock crystals is located on his left side. Tar, chert, a metate, and other stones are placed at his feet. On display in MNA-INAH. (Photograph by Gerardo Gutiérrez.)

Formative date given their style similarities with La Venta sculptures. Unfortunately, none were from excavated contexts.

If the Tlatilco acrobats were depicted in clay, in the Olmec region the preferred medium was stone—primarily altars from which the contortionists literally emerged out of the stones. Indeed, Monument SL-21, a hollow lid purportedly found near Laguna de los Cerros, represents a special type of tridimensionality, where the depicted character appears to be escaping from its presumably two-dimensional stone matrix (Figure 14.5g; Cyphers Guillén 2004:Figure 21). In museum exhibits, these altars are displayed vertically for the public to appreciate their carved

motifs, but the materiality of these stone altars indicates that they were flat-lying and probably used as platforms for contortionists to perform on and over them. The Olmec examples depict contortionists taking a position between the chest stand and the elbow stand. They all wear masks and three of them (Balancán, Belén, and Suchitepéquez) also wear elaborate hairdos or headdresses whose motifs are associated with either the early sprouting of the corn plant or its coming into ear. The feet represented above the head may also symbolize the cleft motif, more obvious examples of which are a small Olmec-style statuette from Guerrero (Figure 14.5h; Gutiérrez and Pye 2010:31–32) and a statuette of



FIGURE 14.5. Olmec style contortionists: (a) round altar from Las Choapas, Veracruz; (b) round altar from Balancán, Tabasco; (c) round altar from Ejido Emiliano Zapata, Tenosique, Tabasco; (d) round altar Belén, Tenosique, Tabasco; (e) round altar from San Lorenzo, Veracruz, Monument SL-16; (f) round altar Suchitepéquez, Guatemala; (g) a hollow lid, from Nuevo Órgano near Laguna de los Cerros, Veracruz; (h) serpentine figurine, San Pedro Aytec, Guerrero; (i) contortionist of unknown provenience. Sources: (a) after photo by the author, MNA-INAH; (b) after Pérez Suárez 2008:118, Figure 5; (c) after García Moll 1979:Figures 2 and 3; (d) after Pérez Suárez 2008:118, Figure 6; (e) after Cyphers Guillén 2004:75, Figure 34; (f) after Shook and Heizer 1976:3, Figure 1; (g) after Cyphers Guillén 2004:61, Figure 21; (h) after Gutiérrez and Pye 2010:31, Figure 2.4, back; (i) after Joralemon 1971:23, Figure 23. (Drawn by Gerardo Gutiérrez.)

unknown provenience presented by Joralemon (1971:Figure 23).

The altar of Suchitepéquez depicts one acrobat in profile, holding his ankles with a gigantic hand to form a closed circle, providing a “cave-like” frame for the central scene (Figure 14.5f). In the center, a second acrobat performs an elbow stand and literally sprouts from the chest cavity of the first acrobat. This action reinforces the idea that the central acrobat is emerging from the realm of stone into the space of the spectators. The representation of small foot soles over the head of the Olmec-style contortionists conveys dynamism and movement with their bodies through sheer strength in a gravity-defying act. It is noteworthy that the diameters of these altars range between 60 cm to 1 m (23.6–39.37 in), which indicates that if contortionists had to perform on top of them, they had to make use of all their force, flexibility, and balance within a limited space. An adult individual with a height of 1.60 m (62.99 in) would need a distance between 1.00–1.20 m (39.37–47.24 in) to perform a wheel position, but he or she would have only required 60 cm to perform a backbend and then take a chest- or elbow-stand position. This suggests that the location of the carved feet traced near the edge of the altars may have also served to mark the original position that the acrobats needed to begin their movements. The contortionist in stone would be mirrored by the live contortionist—simultaneous performances in the realms of the underworld and the human plane.

And if not simultaneous acrobacy, perhaps they were consecutive actions of contortionism, an entity unraveling out of the stone/underworld into the open air. The iconography adorning the headdresses of these early acrobats is associated with the germination of sacred plants such as corn and cacao. Therefore, their body positions and movements could be reenacting the development of these plants from embryo to maturity. The roundness of the altars, and the closed circle achieved by the contortionists in placing their feet on their heads during a chest-stand position, might have represented the latent state of seeds. And when acrobats raised their legs slowly upward, changing position to take an elbow stand

or a headseat, they may have been signifying the sprouting event of the plant. The carved contortionist depiction on the stone may have been providing a window into the soil to see this unfolding begin. This idea is reinforced by acrobatic representations in the Late Formative period (300 BCE–100/150 CE)—for example, Stela 25 of Izapa, and depictions of acrobats in the Early Classic period (250–600 CE)—in the Maya area, where the head and arms of contortionist-like characters are represented as roots with their legs turning into the upper foliage of sacred trees, adorned with leaves (Figure 14.6a; Taube 2005; Figure 3). It is important to note that most of the known acrobats of Tlatilco were bottle effigy vessels with openings where plants and flowers could have been placed.

The altar of Suchitepéquez in the Pacific coast of Guatemala is distinct from its Gulf Coast counterparts, with the presentation of a partial side view instead of a complete frontal view of the central figure, as well as an abstract sideways depiction of a second figure encircling the first. Although Izapa Stela 25 depicts a saurian creature and not a contortionist, it contains elements that associate acrobats with the centrality of the vertical axis mundi as its body turns into a sacred plant/tree (maize, cacao, ceiba, etc.; Looper 2009; Taube 2005). It also depicts this sacred tree in profile in the same fashion as most of the acrobats of the Classic (250–900 CE) and Postclassic periods would be represented.

In the Maya area, acrobats are depicted in two media in the Classic period: (1) painted polychrome vessels and (2) carved jade pendants. For Taube (2005), most of the representations of contortionists of the Classic period depict the Maize or Cacao deities (Figures 14.6b and 14.6c). I would argue, however, that they represent key events in the development of vegetation—from sprouting to full maturation. This is the moment in which the verticality of life defeats gravity, and the stem of the plant becomes a sacred axis. For instance, the contortionist in Structure 10L-26 at Copán was arranged to represent a tridimensional cosmogram, with the horizontal cardinal directions formed by jade ear spools and the central vertical axis by the

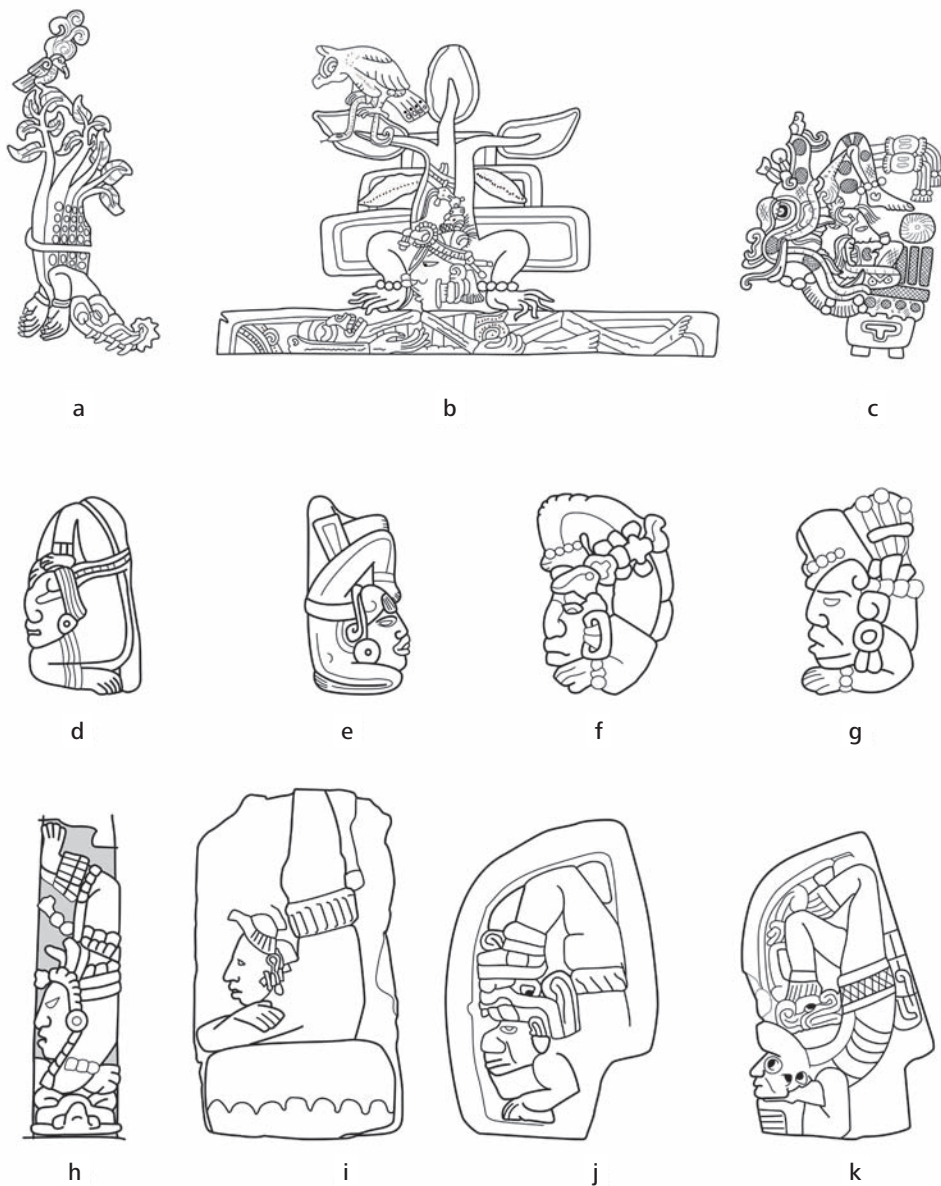


FIGURE 14.6. Maya contortionists: (a) Late Formative Izapa Stela 25; (b) Early Classic Maya vessel K6547; (c) Maize God, detail from Early Classic Maya vessel; (d) Early Classic jade Maya contortionist, Structure 10L-26, Copán; (e) Early Classic jade Maya contortionist, Museo Barbier-Mueller de Arte precolumbiano (after Taube 2005:26, Figure c; (f) Early Classic jade Maya pendant, Salitrón Viejo, Honduras; (g) jade acrobat; (h) Late Classic pectoral of Maya contortionist, Tikal, Burial 196; (i) Classic Period Maya stela, El Bellote Island, Mecoacan Lagoon, Tabasco; (j–k) contortionists, central Veracruz, Classic period. Sources: (a) after Clark and Moreno 2007:Figure 13.24; (b) after Looer 2009:Figure 3.25; (c) after Looer 2009:Figure 3.27; (d) after Taube 2005:Figure b; (e) Museo Barbier-Mueller de Arte Precolumbino, after Taube 2005:Figure c; (f) after Taube 2005:Figure d; (g) Dumbarton Oaks collection, after Taube 2005:Figure e; (h) after Taube 2005:Figure c; (i) after C. Navarrete et al. 1993:Figure 74; (j) Proskouriakoff 1971:Figure 7; (k) Krickeberg 1961: Lámina 101. (Drawn by Gerardo Gutiérrez.)

jade acrobat (Figure 14.6d). In the Classic period, the iconography of contortionists has been fully appropriated by the Mesoamerican ruling elite, since these jade Maya contortionists are positioned in the central place usually reserved for the Maya “king” (figures 14.6e–h). A monument from Isla El Bellote, Laguna Mecoacán, Tabasco, presents a change in media from carved jades to standing stela (Figure 14.6i). This contortionist is depicted in profile performing a chest stand on a drum/altar. Farther north, we have two Late Classic period (AD 600–900) contortionists carved on “hachas,” or axes, from central Veracruz. One wears the headdress of a jaguar (Figure 14.6j; Proskouriakoff 1971:564), while the second contortionist is a skeletonized individual wearing the mask of a monkey (Figure 14.6k; Krickeberg 1961: Lámina 101). The feet of the second representation are missing, and the “grass” motif appears to be growing from the stumps of the legs; a Wind glyph is attached to the right stump. Perhaps the first acrobat is associated with symbols of rulership, whereas the second represents a Wind deity.

During the Early Classic period in the Maya region, contortionists seem to have been metaphors and metonymies for rulership, with the ability to position themselves in the central axis of the universe simultaneously defying gravity (germination of plants; standing bodies versus inert bodies) and to regulate religious and political verticality (movement of substances between different levels of the universe; political balancing; Looper 2009; Taube 2005). For the Postclassic period, this interpretation is less certain, since most of the known representations of contortionists of this period were depicted on paper media (Figure 14.7) and only the Songs of Dzitbalche (Campeche) mentioned contortionism as part of the dances performed at the *popol nah* (Inomata 2006b:192). If, in the Classic period, the contortionists were human beings impersonating deities, in the Postclassic period, deities themselves performed this type of acrobacy without mediators. Therefore, the deities of death (God A, Figure 14.7a), rain (God B, Figure 14.7b), divinity itself (God C, Figure 14.7c), creation (God D, Figure 14.7d), maize (God E,

Figure 14.7e), and dynastic rulership (God K, Figure 14.7f) are all depicted performing chest stands and headseats. A further consideration is that the “diving” or “descending” position begins to dominate the iconography, replacing the acrobatic chest-stand depictions seen in the Formative and Classic periods.

Acrobalance

This acrobatic dance consists of human pyramids formed by three or more participants. Each successive participant climbs up to stand on the shoulders or head of the individual beneath him. The acrobat at the point, or head, of the formation then performs a series of aerial maneuvers from this human platform (Figure 14.8a). Acrobalance combines strength, balance, flexibility, and trust. This particular dance was performed in 1529 for the King of Spain, Charles I, and Pope Clement VII by indigenous acrobats brought to Europe (Clavijero 1987:247; Díaz del Castillo 1916: 151–52; Weiditz 1994:15, 22, 28, Plates xv–xvii).

Type 2. Acrobatic Dances with Equipment

The second major category of acrobatic performances consists of balancing feats performed with simple balancing equipment such as stilts, ropes, and wooden implements (Table 14.1).

2.1. Balancing on Posts

Based on the writings of Clavijero, we know that acrobats could do aerial tricks from atop wooden posts, increasing the heights and the danger of the movements (Figure 14.8b). With some variations, these acrobatics were also seen in Nayarit and Oaxaca. In Oaxaca, they were performed by ritual specialists in honor of the god Cocijo, the rain deity, asking for beneficial rains (Dahlgren de Jordan 1990:225).

2.2. Dance on Stilts

The primary prehispanic reference for this dance comes from the Maya area, where old women on stilts danced to ask for good rains (Landa 1982:66). It is also depicted in the *Codex Madrid* (Figure 14.8c), a Maya manuscript dating to the Postclassic period. Ethnographically, this dance



a



b



c



d



e



f

FIGURE 14.7. Postclassic period contortionists: (a) God A (Death God) as a contortionist; note how the left foot turns into a cacao plant; (b) God of Rain and Lightning (God B) as a contortionist; note how the left foot presents a germinating corn plant, and a cacao plant grows from the glyph Wind; (c) God C (divinity) as a contortionist; note how he is performing inside a royal house and holds a tripod censer; (d) God D (Creator God) as a contortionist; note how vegetation emerges from his body; (e) God E (Maize God) as a contortionist, Early Postclassic, Chichén Itzá; (f) God K (God Dynastic Rulership) as a contortionist; note how he is performing on a cosmogram with the glyph Six Death in the center. Sources: (a) after *Codex Dresden*, facsimile, p.15, top row, right; (b) after *Codex Dresden*, facsimile, p.15, middle row, left; (c) after *Codex Paris*, facsimile, p.15, center; (d) after *Codex Dresden*, facsimile, p.15, top row, middle; (e) after Taube 1992:Figure 18c; (f) after *Codex Dresden*, facsimile, p.41, bottom row, left. (Drawn by Gerardo Gutiérrez.)

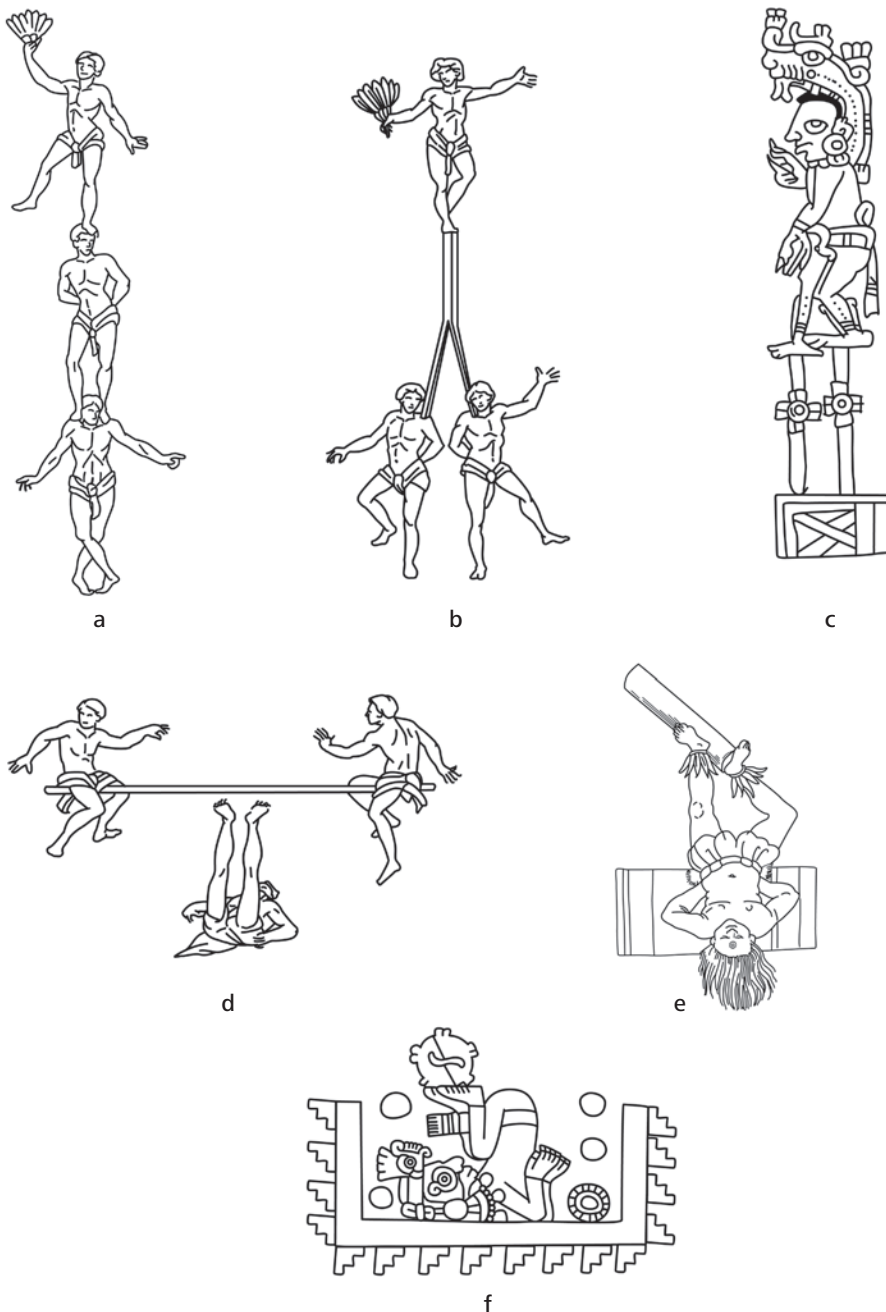


FIGURE 14.8. Acrobalance: (a) indigenous acrobats forming a human pyramid; (b) indigenous acrobats balancing with posts; (c) stilt dance in Yucatán; (d) indigenous juggler; (e) indigenous juggler performing in Spain in 1529; (f) Mixtec juggler balancing a stone ball. Sources: (a) after Clavijero 1780: Lámina between pp. 186 and 187; (b) after Clavijero 1780: Lámina between pp. 186 and 187; (c) after *Codex Madrid*, facsimile p.36, top row, left; (d) after Clavijero 1780: Lámina between pp. 186 and 187; (e) after Weiditz 1994:Plate xvii; (f) after *Codex Vindobonensis*: Folio 44. (Drawn by Gerardo Gutiérrez.)

survives among the Zapotecs of Zaachila in the central valleys of Oaxaca during their town feast days. In Oaxaca, it is primarily performed by young men impersonating women, which provokes surprise but also jokes. It is possible that Landa's description is actually making reference to these female impersonators, just as Bricker (1973) makes reference to males impersonating grandmothers in the carnivals of the Chiapas highlands.

There are many ways to "stand up" with stilts, but experienced stilt walkers do it through an acrobatic flip, first assuming a horizontal crawling position with their knees and hands, and then performing a handstand. Afterward, they take a bridge position with the feet and the extreme tips of the stilts and then, in a feat of strength and equilibrium, the acrobats catapult their bodies forward to pass from the bridge position to a standing position on the stilts. As with many acrobatics, it is necessary to see it to believe it.

2.3. Tightrope Walking

Currently, this activity is seen in the southern regions of Mexico, particularly Guerrero and Oaxaca. In the area of Caxonos, Oaxaca, it is practiced as part of town feast days and at the end of the year, typically by children and young adults, ages 8–20 years old, accompanied by band music. As seen in Figure 14.1b, the Wind God descended the skies walking on a sacrificial rope, therefore that deity is the original tightrope walker of Postclassic Mesoamerica.

2.4. Jugglers

A juggler executes skillful and dexterous movements principally through balancing objects with hands and feet, subjecting these objects to rapid spinning movements. The Nahuas reported a game called *cuauhilacatzoliztli*, or "playing with wood," where one juggler lies on his back rapidly spinning a wooden pole with his feet (Figure 14.8e; Weiditz 1994). The Cakchiquel Mayas called this game *vuch* (Acuña 1978; López Austin 1967). The level of difficulty was increased by balancing two other acrobats sitting on the opposite ends of the pole (Figure 14.8d; Clavijero 1780:Lámina between pp. 186 and 187). The

Codex Vindobonensis, from the Mixtec region, depicts this ability with an acrobat balancing a stone ball (Figure 14.8f). The Mixtec acrobat is shown performing in a place of great power, named the "enclosure of water," near the "mountain that bears the heavens" and the "temple of Venus."

2.5. Palo Volador

The *volador* or "flyer post" is to this day a spectacular practice of descending around a single pole. The pole was at least 17 m high, with the skyward end carved to create a peg (used as male connector) to hold the gyrator device, or *tecomate*, that functioned as a female connector. A rectangular wooden frame was tied to the *tecomate*, and two to four ropes were wound around the pole. Performers would tie the loose ends around their waists. When the performers gently threw themselves backwards into the air, their body weight pulled on the ropes, which began to unwind. The wooden frame and the *tecomate* would turn and the speed of the spiral descent of fliers would increase, with each turn freeing more rope length. Fernández de Oviedo provides a detailed description of *voladores* among the Nicaraguans in 1528 (Figure 14.9a).

and I found myself one day seeing a feast, that they called the *mitote*...upon finishing picking cacao fruit...sixty persons walked rhythmically [to the beat of drums]... And in the middle of the plaza there was a tall post buried in the ground at a height of more than 80 palms, on top of the pole was placed a very painted idol...(that was the god of cacao)...and had four posts in a square [frame] atop of the [tall] post, and winded around [the frame and post] was a rope made from vines as thick as two fingers, and at the ends of the ropes were two boys of 7 or 8 years...and at some point during the drumbeat, they threw themselves from the top of the frame, and the rope began unwinding, and they were flying turns in the air...it took as much time as praying five or six creeds for them to put their feet on the ground and that is the time it took for the

rope to unwind, the boys moving with such speed in the air, moving their arms and legs, that it seemed they were flying. (Fernández de Oviedo [1855:93–94])

It is interesting to note that during their flying time, the performers would have been descending upside down in a controlled fall and could have taken positions similar to those of the contortionists while in the air—for example, bridges—depending on how they manipulated their body weight on the rope. This dance is full of symbolic meanings, and the pole has been interpreted being a phallus or a tree that bears the universe, while the dancers have been reported performing like birds or monkeys (Bertels 1993; Nájera Coronado 2008; Stresser-Péan 1948, 2005). The ritual actually starts with the selection of a tree from the nearby forest. It is carefully cut, and the community invests significant effort bringing the multi-ton tree to the main plaza of the town and placing it vertically without benefit of modern machinery. Directly or indirectly, this feat requires the participation of the entire community. A rich offering that may include live birds, flowers, tobacco, incense, and liquor is placed in the deeply excavated hole for the pole. The festivity was primarily practiced once or twice in harvest periods during the solstices (June and December). Defying verticality and experiencing the world upside down places this ritual dance among the key acrobatics of Mesoamerica.

Associated with the *voladores*' activities in Nicaragua, Fernández de Oviedo (1855) further reports a “game” that involved the ruler of the political system throwing darts with wax tips at groups of young people who came to the town asking for cacao. Once they were hit by the darts, at least four times they were given cacao beans as a reward. Interestingly, in the Cuicatec cognate codices *Fernández Leal* and *Porfirio Díaz* (Figure 14.9c), this ritual dance was associated with the “sacrifice by throwing arrows,” where individuals were tied to a wooden frame and warriors took turns shooting projectiles at them (Figure 14.10c). This practice is similar to the Skidi Pawnee sacrifice to the Morning Star in the Great Plains of

North America. Depending on the Mesoamerican region, this activity probably addresses several Postclassic period ideas.

Independent of the interpretations of the pole as a “great phallus” (Stresser-Péan 1948), the pole more likely represented the central tree that bears the skies and unites the upper and lower levels of the Mesoamerican cosmogram. The act of descending from the sky is associated with many deities (i.e., solar), but especially the Wind God, the first acrobat, who is also patron of arts, song, and music. In the Maya area, a reference to the *palo volador* can be found in the Popol Vuh (Christenson 2007), in the passage where One Batz and One Chouen, the older brothers of the Hero Twins, were transformed into spider monkeys. One Batz and One Chouen were great musicians, singers, and sages, but they were mean to their younger brothers, Hunahpu and Xbalanque. Therefore, they were tricked by the Hero Twins into climbing a tree. But the tree kept growing, and One Batz and One Chouen were trapped in the canopy. The only way to descend was to use their loincloths like the ropes of the performers of the *palo volador*. Unfortunately for them, their loincloths, tied around their waists, transformed into monkey tails.

In an extraordinary case of survival and continuity, the early Spanish religious orders accepted the *palo volador* as part of indigenous festivities during the Colonial period on the condition that the performers impersonate angels instead of birds or monkeys (Figure 14.9d; see *Codex Azcatitlan*). Although there were attempts by secular priests to eradicate its use, the civil authorities usually ruled in favor of the native people, allowing the practice to continue (Nájera Coronado 2008).

2.6. Huahua (*Comelagatoazte*)

Strongly associated with the *volador*, the *huahua* is a vertical gyrating device that can rotate 360 degrees around the center of a support parallel to the ground (Figure 14.9b). The frame of the device consists of two to six vertical support posts and one transverse beam. The transverse beam passes through a hole carved in the gyrating post. There are two variants in terms of the

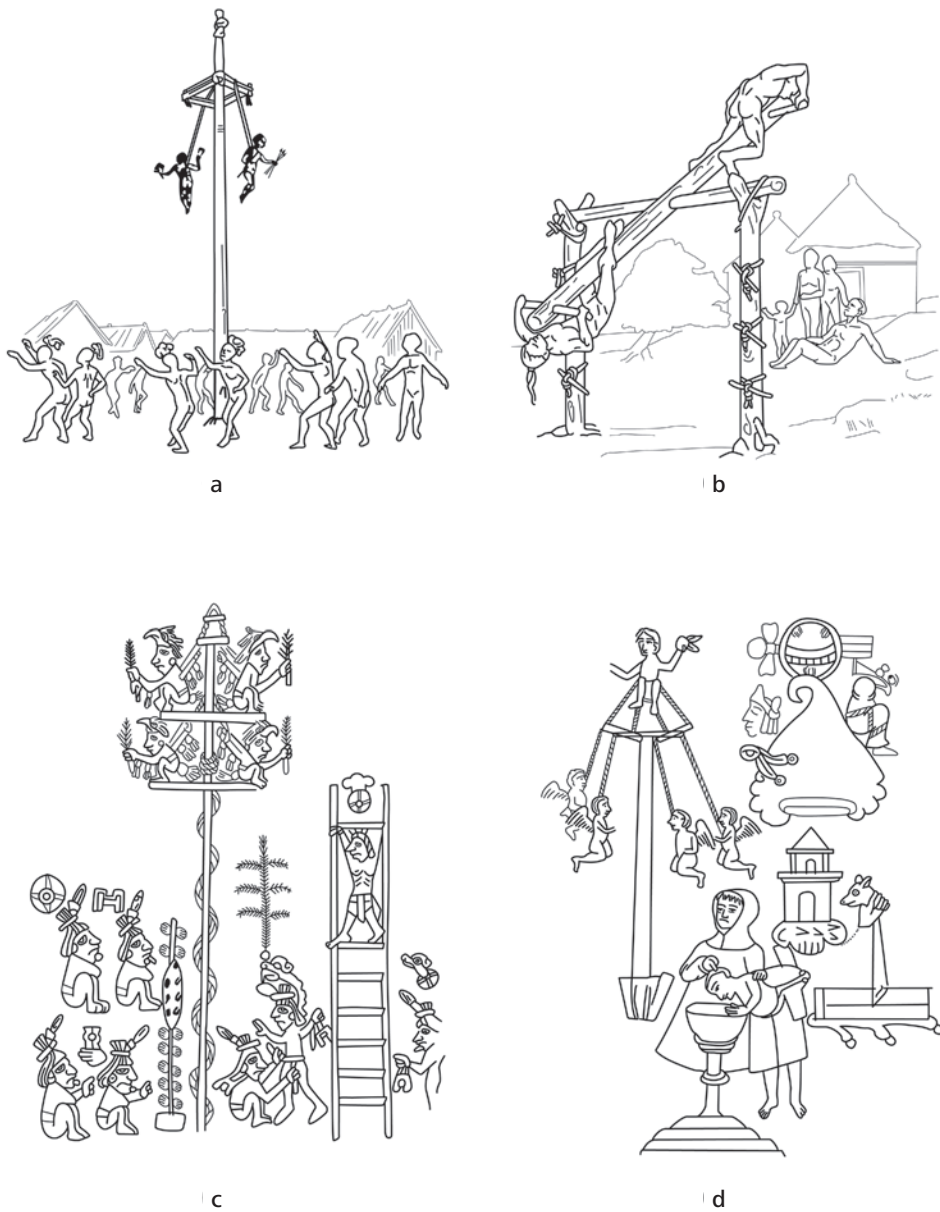


FIGURE 14.9. *Voladores* and *huahuas*: (a) game of *palo volador* in Nicaragua during festivities for the god of cacao, 1528; (b) game of *huahua* in Nicaragua during festivities for the god of cacao, 1528; (c) game of *palo volador* associated with sacrifice by arrows; (d) game of *palo volador* in central Mexico, adapting to the Catholic rituals of the colonial period in the sixteenth century. Sources: (a) after Fernández de Oviedo 1855:Lámina 5, 1a; (b) after Fernández de Oviedo 1855:Lámina 5, 2a; (c) after *Codex Fernández Leal*, facsimile, p.59; (d) after *Codex Azcatitlan*, facsimile, Lámina 27. (Drawn by Gerardo Gutiérrez.)

number of participants: two or four. At least two participants are required to make it spin. One climbs the frame of the machine, and once on the end of the pole with the gyrator, pushes it forward with the performer's weight, while the second participant is on the ground and jumps on the other end and moves to the vertical position using the first performer's momentum. At this point, the cycle begins again, and the acrobat on top projects himself forward and downward to aid in lifting his partner. Gravity and body movements are the energy that keeps the machine moving rotationally. This is a strenuous game and can achieve great speed and accelerating centrifugal forces, especially in a *huahua* with four participants. Fernadéz de Oviendo (1855) saw this game among the Nicaraos in 1528 and considered it spectacular (Figure 14.9b). Notably, he reported that this device was used for amusement and to train young people in agility, balance, and force.

In Veracruz, Mexico, the *huahua* is performed at important festivals in tandem with the *palo volador*. In the Mixtec-Chocho region, the Selden Roll depicts the *huahua* being performed by monkey impersonators in the ballcourt of the polity of Coixtlahuaca, right after a New Fire ceremony at the end of a 52-year calendrical cycle. In this particular case, the *huahua* machine was erected in the ballcourt. Above the *huahua* the Wind God is seen descending from the sky, performing a handstand. A serrated knife is shown near a sacrificial stone. Two warriors are touching the *huahua* frame while holding two captives dressed like the Earth Goddess, awaiting gladiatorial sacrifice (Figure 14.10e). A monkey impersonator is depicted mocking and mimicking a victim during his sacrifice. This particular performance and related sacrificial rituals took place right after the Wind God cut off the head of a large serpent, and the water flows freely through the towns of the earth. This indicates that acrobatics practiced with gyrating machines—in particular, the *palo volador* flier, and the *comelagatoazte* or *huahua* (a complete 360-degree “seesaw” or a pinwheel)—were associated with rain petitions and harvest ceremonies. They were widespread from the northern

Gulf Coast of Mexico to Nicaragua and survived the Colonial period up to the present in Mexico and Guatemala.

Type 3. Illusionism

Illusions distort the senses and deceive the eyes, ears, skin, or perception. The best descriptions of Mesoamerican illusionism are in the *Florentine Codex*, during the destruction of Tula by Tezcatlipoca, and in the *Popol Vuh*, when the Hero Twins defeated the lords of the underworld (Xibalba) by performing amazing feats of illusionism.

In the destruction of Tula, Tezcatlipoca transformed into a Huastec chile seller, whose nakedness and public exposure of his virile member infatuated the daughter of Tula's ruler. When the Toltec warriors went looking for him in the marketplace, he disappeared and reappeared at will. Eventually, Tezcatlipoca, in the disguise of the Huastec chile seller, married the Tula princess, causing great distress among the Toltec. The Toltec nobles demanded that the chile seller prove his valor by waging war in unconquered regions. Seeing that this demand was a conspiracy to get rid of his Huastec persona, Tezcatlipoca organized an army of dwarfs and hunchbacks to conquer the lands and overcome the Toltec nobility. After a successful conquest, Tezcatlipoca entered Tula in triumph, performing the “dance of the captives” (Sahagún 1978:19, 22). The song and dance of Tezcatlipoca was so powerful that many Toltec people died or turned into stones. As part of his many tricks of illusion to destroy Tula, Tezcatlipoca sat in the marketplace and had a puppet in the figure of the solar deity dance for the bystanders. The dance of this puppet attracted and mesmerized large crowds of Toltecs to the point that they began to push one another, crushing each other and dying. Over and over again, the Toltec people were tricked and mocked with illusions by Tezcatlipoca until the great city was finally abandoned.

Similar satirical and mocking narratives can be found elsewhere in Mesoamerica—one of the best known being in the *Popol Vuh*, when the Maya Hero Twins danced for the Lords of Xibalba (Christenson 2007;Looper 2009; Taube

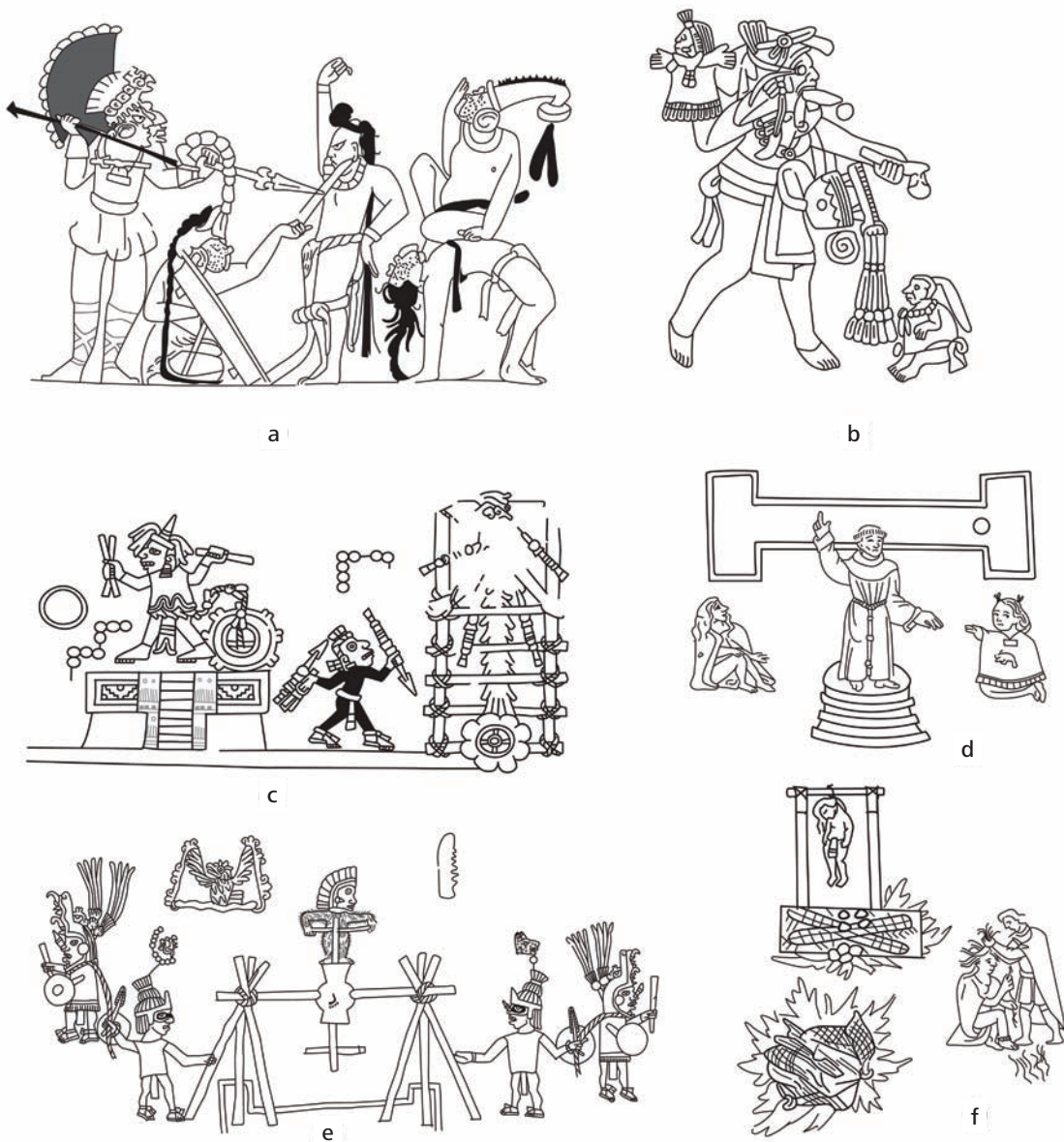


FIGURE 14.10. Sacrificial contexts of Mesoamerican acrobacy: (a) Maya clowns torturing and mocking a sacrificial victim; note that one clown is performing a bridge position; (b) puppeteer, detail from Monument 21 of Bilbao, Guatemala; (c) depiction of gladiatorial sacrifice and sacrifice by hurling spears in the Mixtec region; (d) Spanish friars preaching against the practice of the ballgame; (e) game of *huahua* with monkey impersonator, associated with gladiatorial sacrifice; (f) hanging and punishment of gamblers and practitioners of banned games. Sources: (a) after K2025, Maya Vase Database, http://research.mayavase.com/kerrmaya_hires.php?vase=2025; (b) modified from Chinchilla 2015:66, bottom; (c) after *Codex Becker I*, facsimile, p.10; (d) after Acuña 1984:Cuadro 4; (e) after *Selden Roll*; (f) after Acuña 1984:Cuadro 10. (Drawn by Gerardo Gutiérrez.)

1989). During these dances, they performed the illusions of killing a dog, people, and then themselves, seeming to cut their bodies into pieces and then putting themselves back together again. The Nahuas of central Mexico called these performers *motetequi*, illusionists who cut people into pieces and then put them back together—not very different from the modern magic trick of sawing a woman in half.

In these two origin myths, there are a variety of illusions that induced altered states of consciousness in spectators, leaving them vulnerable to the intent of the performer. The shapeshifter is ever present: individuals made use of collective suggestion, ritual time and spatial context, drugs, illusion, acrobatics, and the cloak of night to make others believe in their transformations into animals (Gutiérrez and Pye 2010). The puppeteer is a powerful performer with the capacity to make the “little gods jump” (*teuquiquixti xoloteutontli* in Nahuatl). A well-known iconographic representation of a puppeteer is found on Monument 21 of Bilbao, Cotzumalguapa, Guatemala (Figure 14.10b), associated with a dance of fruit harvesting and human decapitation (Chinchilla 2015:66). The puppeteer holds on his right hand a female puppet and on the left hand a bone bloodletter or a drumstick made from a human femur. He has a sharp pointy tongue, perhaps indicating the actual date—One Flint—and may be signifying that he is speaking “sacrifice” or that he is an ill-spoken person. Although the puppeteer is not the central figure of the scene, he receives all of the attention of a dwarf or another puppet seated before him.

The Practice and Meaning of Indigenous Acrobacy

Native peoples from all over Mesoamerica likely participated in performances, as previously detailed, which featured acrobats/dancers/tricksters staging spectacles designed to reproduce canonical passages of the myriad indigenous cosmogonies. Such events would have provided joyful moments of relaxation during foraging or agricultural ritual calendars, as well as an arena to resolve social tensions. This is a phenomenological research problem that requires explora-

tion of the daily life of indigenous acrobats and how members of their societies perceived them (Heidegger 1975; Husserl 1970; Zahavi 2003). Generations of scholars have debated whether the worldview captured in the ethnohistory of the Postclassic and early Colonial periods can actually be applied to other regions and times. Many argue against it, since a disjunction of meaning and representation could have occurred over time and space (Gillespie 1989; Knight 2013; Kubler 1962, 1967). Certainly, symbolic meanings were not the same for every culture and region over time and throughout Mesoamerica, but I believe we need to be careful with a straightforward methodological assumption of a disjunction in practices and beliefs in the Mesoamerican space. By this, I mean that both continuity and disjunction of practice should be investigated and tested, and neither should be assumed.

As the case studies presented above indicate, acrobatic dances have a long tradition in Mesoamerica and carry multiple meanings. But notably, all known representations of acrobatic dances and games seem to converge on a few interrelated themes: (1) ritual directionality; (2) the vegetative cycles of maize and cacao; (3) shamanic transfiguration; and (4) the humiliation of captives by gladiatorial sacrifice. While few in number, they are all-encompassing themes with many intersections. Still, their presence and repetitive contexts offer heuristic categories for approaching the topic of acrobatic practices in the context of ritual merriment. A core foundation myth states that when the Mesoamerican universe was created by the primordial gods (Grandfather and Grandmother; Boone 2007:26), a symmetric cosmogram of three axes was created. One axis was formed by the apparent solar movement in the firmament, with eastern and western cardinal directions marking the path of the sun from dawn to dusk. The northern direction lies to the right of the sun and the southern direction by its left hand. These four parts come together in a center that also projects a vertical axis connecting the above and below. The location of the center is variable, and each political system has at least one located where the founding ancestors happened to have

placed their first altar. In the corners and center of the cosmogram, god-trees support the skies (above) and the earth (below; López Austin 1997).

Furst (1968) associated some of the poses seen in Olmec figurines with ritual positions adopted by shamans from South America during the process of shifting from their human form into that of an animal companion. Gutiérrez and Pye (2010) review ethnographic and ethnohistorical evidence in Mesoamerica to support a similar interpretation. During key moments of such transformations, the shaman would take a contortionist position and perform acrobatic jumps while changing into the hide of the animal companion. Indeed, the human shapeshifter is only mimicking the transformational process of seeds turning into plants.

In this regard, I propose that the movement of the contortionist dancers were reproducing the vegetative development of sacred plants such as corn and cacao, from seed to erect plant and ultimately fruit. In addition, this mimicking of plant development may have also referenced the embryonic development of animals—especially those where this process is observable, as in amphibians (frogs and toads) and birds (when their eggs open after their three-week incubation). Therefore, seeds, frogs, toads, reptiles, and birds are the original shapeshifters.

Iconographic representations of acrobats may be invoking metaphorically the vegetative cycle of maize, cacao, and other sacred trees, like the ceiba and cactuses, through the narrative of the god-tree bearers that separate the above from the below, as well as functioning as vertical conduits for these realms (López Austin 1997; Taube 2005). In this sense, I would argue that acrobatic dances such as the *palo volador*, *huahua*, and stilts are also visual tropes associated with the upward/downward vertical movement through the sacred trees, practiced during rain petition ceremonies and harvest festivals.

Humor, farce, mockery, irreverence, political satire, and games were key expressions of sacredness in Mesoamerica. Laughter seems to have been as important as sacrificial blood in indigenous religiosity, and there is no better way to express happiness than dancing, laugh-

ing, and making others laugh. Indeed, for the Nahuas, one can cast a spell on someone with a joke (*texoxochti*) or administer cruel punishment to a social transgressor by mocking them. Not surprisingly, public shame by mockery is the most powerful punishment in the toolkit of political operators and sacred specialists of central Mexico (*nahual* or *naualaua*; Gutiérrez and Pye 2010). The full range of human emotions and passions were celebrated in religious festivals in Mesoamerica. In the same way that shedding tears in certain ceremonies was required in order to secure a good rainy season, happiness was demanded in other ritual situations.

For instance, during the festivities of Ochpaniztli, celebrated for the Mother of Gods (Teteo Innan), the young female impersonator of the goddess could not cry during the ceremony, an event that ultimately would result in her decapitation. The tears of this powerful female deity would forecast the death of the many warriors on the battlefield (Sahagún 1981:119). To prevent these tears and deaths, the impersonator had to be entertained by singers and dancers. Even after her sacrifice, the attending public seemed to have enjoyed a macabre dance where a priest would dress up in her flayed skin and dance in the company of the Huastec husbands of the goddess. I suppose that the Nahuas of central Mexico took for granted that the goddess's Huastec husbands needed enormous phalluses to please their powerful wife, exactly as depicted in the *Codex Borbonicus* (1988:Folio 30). Similar to the story of Tezcatlipoca impersonating a Huastec in Tula, it is likely that the festivities of Ochpaniztli were full of jokes with sexual connotations and puns on how a great city was lost to the prowess of a well-endowed seller of chile pepper.

Conclusion

The practice of Mesoamerican acrobacy had multiple meanings that transcend any interpretations reducing them to simple ludic games, dance, or shamanic transfiguration. Similarly, one cannot identify acrobats—especially contortionists—with the maize deity alone (Looper 2009:2; Taube 2005). Mesoamerican acrobacy contains all these elements, but their contex-

tual association makes the whole larger than the sum of its parts. Mesoamerican acrobacy needs to be understood within the framework of a system of beliefs that celebrate the physicality of the performer as he or she reproduces the moment of creation (of the political unit or the universe), while generating dynamic energy for its continued and constant movement. Through their bodies, Mesoamerican performers provoke happiness and well-being. It feels good to be merry, especially community-shared joy, where chiefs and rulers are the leading dancers, singers, actors, and hosts of drinking and feasting events. Laughter becomes a metaphor for motion, divine breath, and the act of political balancing. These seasonal rituals might have encapsulated a worldview around the old creator couple (the Grandfather and Grandmother of all the gods and peoples); the cultivation of corn; ritual directionality; community-choreographed dance, music, songs and farces; comedy; poetic declamation; heavy consumption of foods, drinks, drugs, tobacco, games and gambling; gift giving; and a vast display of regalia and special garments.

During the Colonial period, some games and dances were targeted for eradication, like the ballgame and board games, and their practice resulted in serious punishments, including death (Figures 14.10d–f), but many other farces were appropriated for use at Catholic carnivals during Christmas, Holy Week, All Saints Day, and a myriad of festivities for local patrons. The theatrical recreation of primordial myths and their use as moral lessons for members of Mesoamerican communities did not end with the Spanish Conquest. The colonial establishment maintained and reshaped it to fulfill similar functions at these European festivals.

Victoria Bricker (1973) observed in Zinacantan, Chiapas, how members of the community reenact ludicrous and satirical plays to reinforce their social structure and their roles as active agents within it. Social criticism is expressed through picaresque and spicy jokes, mocking aspects of political and daily life in the community during the five days of the indigenous carnival. All authorities are expected to participate in farces and be actors/performers. Acting

roles in the farces are not accidental but carefully allocated according to social hierarchies. It is an earned privilege and a great responsibility to participate in the plays and literally become a social “actor.” Mayordomos, or *ch'òkoj* (stewards of ceremonies and community festivities), are highly competitive yet onerous positions, charged with providing foods, drinks, music, entertainment, sacramental services, pronouncements, and discourses during public events (Bunzel 1952:40–46).

Through ritualized merriment, the gods descend from the skies or emerge from the crevices of the earth or bubble up from springs to make their presence known through states of ecstasy achieved by performers who then convey messages from the deities to the other participants. The *mitote*, or gathering of large crowds to dance and sing (*mitoa cuicoanoya* in Nahuatl), was the meeting location where disparate and opposing forces of the universe came together. This was the place of the *mitotereros*—the most foolish, scandalous, chaotic, and noisiest participants—who would lead a gathering over a period of days in dance, music, songs, and farces. If the gods created the universe through sacrifice and ritual, the actions of dancers and singers provided the energy to keep it moving, since a static universe represented the end of creation (López Austin 1997). Rulers and leaders, as embodiments of the gods, are obliged to dance and sing well; hence, the dance and song of the rulers was equally important as their political and military activities. If the rulers and the nobility danced to praise the gods for their political successes, then commoners, in turn, danced for their rulers as part of their duties and services to the polity. Dance and song were critical tribute payments and key components of the political economy of Mesoamerica. Even captives who had lost everything on the battlefield had the opportunity to dance before their immolation (Sahagún 1970:43–44). This was their moment to mock death through dance.

Indeed, Mesoamerican dance and singing was not the exclusive practice of living humans. The dead continued to dance in the afterlife, as we know from the Nahuas of central Mexico, where it was believed that the souls of the

warriors who died on the battlefield and women who perished during childbirth were destined to accompany the solar deity with dances and songs through his diurnal phase. Animals, trees, plants, and insects could dance as well. Objects and elements that Westerners consider inanimate—such as water, rocks, and the earth itself—seem to have been able to dance too. Dance was therefore the normal physical and spiritual state of things for Mesoamerican groups. It was

the appropriate way to communicate with the divine. Acrobatic dances and games may have been part of a larger complex of playful Mesoamerican performances that included theater, illusionism, and gambling. Acrobatic dances and games were indeed an essential form of political staging, socialization, and community building that provided needed spaces to restage foundational events of native political systems.



Aztec Gambling and Magical Thinking

SUSAN T. EVANS

We in modern societies share with the Aztecs of sixteenth-century Mexico a love of gambling, which must be one of the great human universals. Our pleasure in gambling has deep roots: we are all the result of countless episodes in which our ancestors played the evolutionary odds, choosing successful responses to uncertainty. Although today we are buffered against the life-threatening consequences of everyday choices, we bear all the necessary apparatus for dealing with the vagaries of fortune—the generalized, adaptable body and the brain with its capacities for rational thought and impulsive reactions. We play the odds constantly and reflexively in our daily lives and occasionally may place bets on games of chance, “gambling” in the more formal sense.

Depending on the stakes, we anticipate the outcome with responses ranging from mild curiosity to anxiety, which can be soothed by the rituals of magical thinking. Few among us have never sought the comfort of a prayer or amulet that possessed the power to calm, in spite of our rational acceptance of its lack of demonstrated efficacy.

Magical thinking is the belief that thoughts or actions, often ritualized, can control an uncertain outcome, even when such thoughts or actions have no proven value. It is practiced universally. And while the modern world puts precedence on scientific explanations, we can empathize with the use of magical thinking in

traditional cultures because of our own experiences in dealing with uncertainty.

Thus, magical thinking and gambling are gateways to understanding other cultures. This chapter explores magical thinking and its uses—especially its use by gamblers in Aztec society of sixteenth-century Mexico—finding that Aztec attitudes about gambling are similar to our own, while recognizing the stronger role played by magical thinking in their culture.

Magical Thinking and Hot Hands

Never go against your gut. (Moscow Rules [n.d.])

Evolutionary psychologists and behavioral ecologists reason that the suite of cognitive resources we deploy against uncertainty achieved its present form about 100,000 years ago, with the emergence of the first *Homo sapiens sapiens* and the modern human brain, the products of evolutionary pressures operating throughout our primate and mammalian ancestry. The modern brain’s convoluted neocortex gives us our strong capacity for reasoning and learning, while the underlying “animal brain” provides intuition-based drives that propel us toward impulsive responses in crises—for example, fight or flight.¹

These intuitive or reflexive responses to uncertainty are strongly adaptive. Developmentally, the limbic system–based responses that shape our psychological attitudes and behavior are directly expressed throughout childhood, but

with maturity, crisis reactions are tempered by the natural process of synaptic pruning, as well as by neocortical rewiring: habits based on knowledge and training are established. Mature responses draw upon a cognitive hybrid, fusing reason and impulse into learned intuition, also known as “recognition-primed decision-making” (Klein 1999:17). This capacity allows us to deploy quickly the best and most timely responses to threats and opportunities.

For example, a game of darts draws upon behavior deeply rooted in the primate line. Even though the accuracy once essential to immediate survival is now mostly unnecessary at the personal level, we retain the capacity to become skilled at throwing things at targets and the competitive drive to throw more accurately than others. When faced with a standard target and a reward for hitting it, the rational shooter will maximize accuracy. But with the unanticipated substitution of an image of a baby for the target, failure rates rise significantly (L. King et al. 2007: 910–12). This suggests that some sizable proportion of the population overrides reason with magical thinking because the target remains, after all, only a piece of paper. The irrational behavior may be explicable from the perspectives of evolutionary psychology and behavioral ecology as a protective impulse toward the representation of the baby, based on internalization of social lessons about avoiding harm to others.²

We can assume that other complex instinctive behavioral responses are found cross-culturally. Consider our belief in “hot hands”—runs of good luck. This draws on the assumption that resources will be found in clumps, or groups. The expectation is based on the propensity for food to occur in groups (flocks, stands), and our species’ survival depended on recognizing this. We descendants of ancestral foragers also expect that other resources are grouped, and hot hands are appreciated by gamblers, even though they would seem to defy the laws of probability based on large numbers (Blanchard et al. 2014).

However, randomly distributed phenomena are themselves loosely clumped in time and space, particularly where there are constraints from cultural and biophysical environments.

Even without such constraints, we commonly experience clumped outcomes that defy the odds based on probability.³ Using intuition inherited from our species’ distant past, we learn from our experiences, whether in finding ripe fruit or parking spots. We assess the odds based on previous occurrences and consider the unique circumstances of each situation.

We would better understand the overall odds if we could keep track, mentally, of thousands of outcomes, because probability values are best derived from large numbers. However, the modern human brain is better at keeping track of small numbers, a skill no doubt honed during our long millennia of hominid evolution as hunter-foragers, including our evolution into fully modern *Homo sapiens sapiens* (G. Navarrete et al. 2015). There is also the human propensity to remember better our unusual runs of good luck and to forget the long periods of indifferent results. As Durán described Aztec gamblers,

Someone might ask whether they always won with that magic incantation. The devil is subtle in permitting some to win occasionally, thus confirming their unholy beliefs. At other times, when they lost, they were persuaded to curse their own bad luck, which is what losers do. (Durán 1971 [1574–1579]:318)

Belief in luck predisposes us to believe that we can beat the laws of chance.

Intelligence and Reason

Normal humans have considerable intelligence, the ability to acquire skills and knowledge and make rational decisions, and modern neurological studies reveal learning as the process of developing a network of established paths in the brain’s neocortex—a significant rewiring of the brain. While any normal person is capable of learning, each individual possesses a unique set of potential strengths and weaknesses. In any society, from childhood, individuals will display a range of innate capabilities for reason and performance, with potential behavioral plasticity shaped by cultural norms and customs, including opportunities for training.

We recognize that far beyond the binary opposition of the Scholastic Aptitude Test's traditional categories of "verbal" and "math" are many expressions of intelligence. There are varied types, "multiple intelligences" in any population and indeed in any individual, and the variation clusters into several broad categories. Howard Gardner's original model (1983) recognized seven modalities: musical-rhythmic; visual-spatial; verbal-linguistic; logical-mathematical; bodily-kinesthetic; naturalistic; interpersonal; and intrapersonal.

The last two—the abilities to read other people and know oneself—are principal components of emotional intelligence (Goleman 1996). Most people can correctly interpret nonverbal expression, and some seem gifted with this interpersonal sensitivity. Societal training in emotional intelligence often emphasizes sympathy and duty to others, and when sympathetic individuals sense the pain of others they try to alleviate it. But correctly recognizing emotional vulnerability in another person does not necessarily prompt a sympathetic response. Bullies and con artists use emotional intelligence to discomfit others and take advantage.

Well-honed intrapersonal and interpersonal skills characterize social leaders and enhance their charisma. Recognizing the power of emotional intelligence, we can better understand the basic skills needed by those who would present themselves as capable intermediaries with the forces of the unknown. Anxious in the face of uncertainty, we may turn to those who seem capable of negotiating the future.

This may involve a willing suspension of disbelief: our complicated attitudes about the cognitive boundary between reason and magic are reflected in our language. "Magus" is not in common usage, yet we know that it means a wise person rather than one who has developed skills such as sleight of hand, a magician. In the modern world, we generally assume that any reason-defying phenomenon, like a magical illusion, can be explained rationally, even if that explanation has not yet been forthcoming. Thus, a magician is a kind of con artist.

Similarly, to call someone wise (unironically)

recognizes a rare combination of reasoned thinking and sympathetic emotional intelligence. But "wizard" and "wizardry" have less flattering implications, such as the willingness to confound with displays of privileged knowledge and skills, and also trying to do so with the support of the supernatural world.

Understanding emotional intelligence and other of Gardner's "frames of mind" has had an enduring value in interpreting the gifts, blind spots, and passions of modern people; but do these modalities of intelligence apply to traditional societies?⁴ All modern humans have highly similar general capacities for intelligence and physical movement, but recent research in ethnography has not sought cross-cultural similarities. Instead, it has been crippled by a combination of infatuation with the barren, "self-regarding...cul-de-sac" of postmodernism and a strong tradition of particularizing cultures (Beard 2013:6). Ethnographers are generally reluctant "to discuss—or commit to print—comparisons between the values of peoples in modern industrial societies and those of inhabitants of tribal societies" (Dutton 2009:65).

Meanwhile, psychologists have been unafraid to seek universals, such as the relation of facial expression to emotions (Ekman and Friesen 2003). The validity of cross-culturally shared human psychological characteristics is substantiated by the powerful and lucrative applications of these lines of research, such as facial response recognition software, making a television or gaming device into a monitor useful to corporate or government powers (Khatchadourian 2015).

Besides making us very afraid for the future of human privacy and free will, these breakthroughs in understanding the universals of human behavior corroborate the assumptions of many anthropological archaeologists that people in ancient societies were operating from the same basic parameters of psyche and soma as we are today. This would imply that the modes of intelligence valid today can be effectively applied to other societies, including traditional societies such as the Aztecs. We can assume that Aztec gamblers would develop rhythmic,

if not melodic incantations, sensitively use their surroundings, express themselves well, calculate the odds of particular outcomes, move elegantly through their rituals, be sensitive to others, and know themselves, including knowing when to trust reflexive, animal-brain responses.

Their rituals were based on rules derived from magical thinking and thought to minimize damage and maximize gain. Such ritualized responses may become highly formalized and particular to types of situations. But it is our perception of adaptive value that lets us distinguish between effective and magical. Such judgments depend on what the judge knows, and thus one's intelligence, in the sense of possession of a store of reliable knowledge, sets limits on our ability to distinguish between phenomena we attribute to the actions of the spirit world—true magic—and those we see as the effects of known causes, including enhanced adaptation.

Magical Thinking as Adaptive

Behavioral ecologists would argue that much cognition labeled “magical thinking” might have adaptive value. When we wear lucky clothing or orient our furniture to channel positive energy, we deploy another means of problem solving, increasing our life-enhancing mindfulness, desired by many today.

For example, is there a causal relationship between ritualized costume and success in horse racing? In 2014, the owner of the horse California Chrome wore the same outfit to all three Triple Crown races. California Chrome won the Kentucky Derby and the Preakness, but this ritualized costume was apparently only useful for two wins in a row: California Chrome lost the Belmont (Hoppert 2014).

In spite of having failed such empirical tests, magical thinking remains rife in racing and other venues and is more disparagingly called “superstition.” Baseball and other sports seem equally committed to magical thinking (Gmelch 2000).

Such beliefs are part of the lives of many normal adults, and while a rational purist would deem them superstitious or neurotic, their prevalence suggests that few societies or individu-

als are entirely and always free of them. South Korea, a strong participant in the global capitalist economy because of pragmatic development in engineering and other fields, is home to about 300,000 shamans—one for every 160 South Koreans—with their own union, working through the Internet as well as in person (Sang-Hun 2007). Regardless of their other religious affiliations, many South Koreans regularly consult shamans. Clearly, a successful shaman should be emotionally intelligent and have a well-developed, learned intuition in order to deliver to the client both psychological comfort and a sense of control over a seemingly mysterious situation. There may be adaptive value in this, such as the mental focus induced by an incantation or the sense of well-being offered by a kindly and experienced diviner.

If some features of magical thinking have adaptive value, then, logically, it has evolutionary significance and would probably be subsumed under limbic system–related cognitive processes. Its demonstrated effectiveness would undercut its status as magical thinking. Thus, when considering the role of magical thinking in any society, we must recognize that magical thinking is culture-contextual, derived from that culture's belief system and explanations for the phenomena around us.

In some societies, the use of hallucinations to interpret uncertainty is regarded as a valid alternative pathway to understanding, and we know that this is an ancient practice (Shafer 2013). The experience may stimulate different responses among individuals, but their perceptions develop from the constraints of their culture and particular individual neocortical and limbic system pathways. Moreover, the hallucination may result in new and useful ideas and perceptions.

The Animated Aztec World

The Aztecs commonly achieved altered states of consciousness, with the stronger and more expensive hallucinogens and stimulants reserved for the nobles and wealthy commoners.⁵ Hallucinogenic experiences accessed the power to navigate a spiritual world full of active forces.

The Aztecs, inheritors of millennia of Meso-

american cultural traditions, dominated central Mexico immediately before the sixteenth-century Spanish intrusion into the New World and subsequent conquest of the Aztec Empire. Like other Mesoamericans, they believed that the world around them was charged with animated energy. Every object, each natural feature—animal, vegetable, mineral, even time—possessed a force that required appropriate offerings and oblations. These were independent agents, and human responses to them created a conversation of agency.

Mesoamericans believed that humankind owed its existence to sacrifices by the creator gods, a debt that people repaid through generous and frequent offerings to the gods and all the powers of the living earth. If the offerings were well received, the gods might reciprocate with good fortune. The most costly offering of all was human sacrifice, of war captives (warriors and the vanquished) and slaves purchased in the market. Other, more common offerings included autosacrificial blood, animal sacrifices, incense, food, drink, and prayers, processions, and pilgrimages.

In a sense, the most sustained offering was an individual's dedication to live a moderate, thrifty, dutiful, hard-working life because risk-taking invited chaos and disaster. Ideally, Aztec lives followed a narrow path of duty and moderation, and sources such as the *Codex Mendoza* show children disciplined toward this goal (Berdan and Anawalt 1992b [ca. 1541–1542]:122–33, Folios 58–63). Sermons by elders drove these points home (see *Florentine Codex*, Book 6; *Rhetoric and Moral Philosophy* [Sahagún 1969 {1569}:67–126]). Aztecs' fear of the uncertainty of their world led them to see imminent disaster in any unusual phenomena, as shown by the unremittingly pessimistic prophecies in *The Omens* (Sahagún 1979b [1569]), and *Primeros Memoriales* (Sahagún 1997 [1559–1561]:174–77).

Time and Divination

It has been common among all kinds of peoples and nations since the beginning of the world to use divination. (Ruiz de Alarcón 1984 [1629]:141)

The fate of any event hinged upon its timing. For the Aztecs, each day brought a different set of influences, and scheduling any important event (a wedding, a housewarming, investiture of a king) required a calculation from the divinatory almanacs (see Boone 2007, especially pp. 28–32). Time was perhaps the strongest influence on any individual because the date of baptism, within a few days of birth, established that person's fate according to the 260-day *tonalpohualli* divination almanac (e.g., *The Soothsayers*, a Book of Days [Sahagún 1979a [1569]]).

Aztecs believed that, as individuals, their fates were determined by Oxomoco and Cipactonal, the primordial human couple, the primordial diviners (Figure 15.1). Their divination technique was shared by Aztec diviners (and gamblers): interpreting maize kernels cast onto a blanket or mat (*Leyenda de los Soles* 1992 [ca. 1558]:16).⁶ The resulting pattern was interpreted as signaling good or bad fortune. The kernels were called “Seven Snake” (Ruiz de Alarcón 1984 [1629]:154). In Nahuatl, the language of the Aztecs, Seven Snake is Chicomecoatl, goddess of maize and general agricultural fertility, a strong metaphor for prosperity.

The Catholic proselytizer Ruiz de Alarcón wrote a treatise in 1629 on native Mexican religious practices as a guidebook so that other Catholics would recognize the behaviors and materials associated with the native religions they were trying to eradicate. He marveled at the native propensity to favor “contingent,” luck-based explanations rather than those based on cause and effect.⁷ He observed that native diviners used

pebbles or maize kernels, which they throw upon a cloth.... And they judge the fortune according to whether the pebbles or kernels have fallen near or far from themselves, not noticing that by throwing them hard they will go far and they will remain near it if they are thrown gently, with the one or the other depending on the will of the one who does the throwing. (Ruiz de Alarcón 1984 [1629]:142)

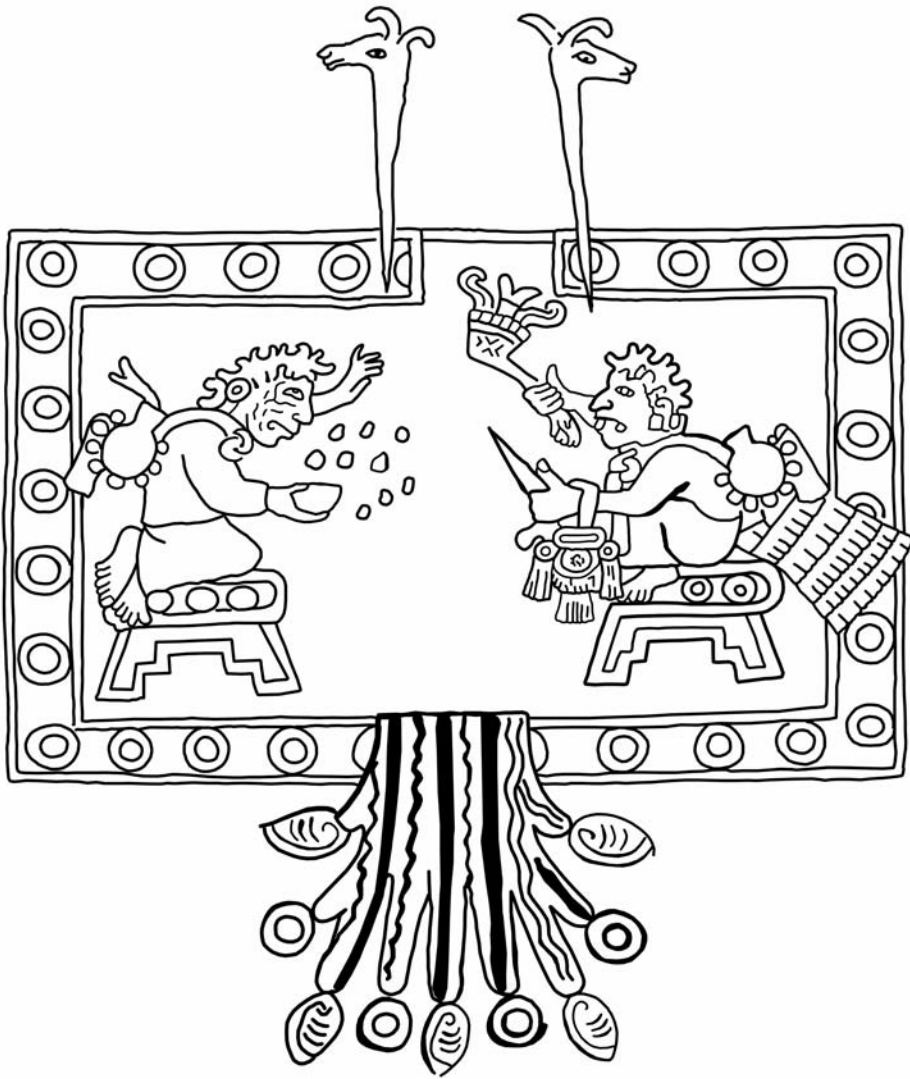


FIGURE 15.1. The primordial human couple, Oxomoco and Cipactonal, cast the newborn's fate with maize grains. (Drawn by Susan T. Evans from *Codex Borbonicus* [1899 {prob. sixteenth century}:21]).

It seems unlikely that anyone experienced in watching maize kernels (or beans or pebbles) being tossed onto a mat—for divination or in a game such as *patolli*—would remain unaware of the causal relation between the type of throw and the resulting position of the thrown object. Any gambler or supplicant would consider the skill of the *patolli* player and the sympathy of the diviner before placing a bet on a player or seeking counsel about an uncertain future.

The Aztecs recognized that the fates cast their birthdates and that the divination almanac dates preordained their lives toward good or bad fortune, but knew that it was possible to modify that fate through several strategies. They mediated their fates through ritualized behavior and thought, consulting and heeding the advice of a wide array of professional wise ones, diviners, doctors, and sorcerers (at least 40 types, according to López Austin [1967]) while actively

deploying a suite of incantations and actions, learned from childhood onward, in order to secure safe passage through life.⁸ If the birthday sign was evil and better fates were available in the next few days, the diviner could choose another, nearby date, resetting fate and gaming time itself (e.g., Sahagún 1979a [1969]:4:30).⁹

Time Gamed Back

If penances were not carefully observed, if the individual did not diligently build on the strengths conferred by the sign, then time would become angry, and the individual's good luck would disappear. Sahagún's informants offer numerous examples of the active agency of time in these circumstances. If someone born on One Flower, for example, neglected penances, "The day sign was angry with her" (Sahagún 1997 [1559–1561]:167). Furthermore, those fearing the debasement predicted by their unlucky sign in the Book of Days, like One Ocelot (*Florentine Codex*, Book 4 [Sahagún 1979a {1569}:5]), could show "prudence [and] might well be saved through forethought" but "almost all became slaves." On the other hand, those born on lucky One Deer merited "good fortune.... And if it were not realized, these lost it through laziness" (Sahagún 1979a [1569]:9).

The Aztecs' recognition of the potentially huge role of fate in their lives channeled their energy into narrow habits of moderation, thrift, and diligence so that they could weather bad luck: droughts, famines, illnesses, increases in tribute, or declarations of war. Gamblers, betting on chancy outcomes, sought out chaos, deliberately wasting time and risking the harm of chaotic forces for them and those around them.¹⁰

Aztec Games and Gamblers

Every country has and has had its games and its gamblers. (Durán [1971 {1574–1579}]:301)

In spite of the risks to individual, family, and social stability, gambling was a regular part of Aztec life. Everyone took part in the great festivals, and the chronicler Durán noted a festival's "many different dances, farces, and games," while grimly emphasizing, even in the title of the

chapter on feast-day games, the potentially fatal consequences of losing at gambling: "CHAPTER XXII which treats of the games which the Indians had for entertainment and amusement on feast days. [These were] also used to gamble one's life away and become a slave forever" (Durán 1971 [1574–1579]:301).

Durán knew about these things firsthand. Born in Spain in 1537, he grew up in the 1540s and 1550s in the old Aztec capitals: Tenochtitlan/Mexico City and Texcoco. He was a keen observer of native life at a time when it was still vibrant, before epidemics and the suppression of traditions culled the active practices and practitioners of the old ways. He observed festivals with many native traits, and he noted that in Mexico, "[I]n former times those given to this vice [of gambling] were both many and greedy" (Durán 1971 [1574–1579]:301).

Gambling behavior in Mesoamerica is, no doubt, many centuries old, but direct evidence for it is limited to accounts of Late Postclassic customs recorded in the sixteenth and early seventeenth centuries, which deal mostly with the world of the Aztecs. However, there is no doubt about the great antiquity of games in Mesoamerica, with strong evidence from the Soconusco region for game surfaces like those used in dice games played by the Aztecs and others, dating to 5,000 years ago (Voorhies 2013). The earliest known formal ballcourt also is found in the Soconusco region and dates to about 2,600 years ago (Hill and Clark 2001). Both board games and ballgames are known archaeologically throughout Mesoamerica for subsequent centuries; and while our evidence favors elite settings—where leisure activities have prestige value rather than suggesting sloth, as they would in the working class—games were probably enjoyed informally by people across socioeconomic classes.¹¹

Accounts of gambling among the Aztecs contain direct description and depiction, including passing references to gambling. Gambling is mentioned in sermons—for example, in the *huetlatoalli* speeches to the new ruler (e.g., Sahagún 1969 [1569]:64)—and illustrated in several major native-style screenfold manuscripts. Many of these references pertain to the board



FIGURE 15.2. Folio 60r from the *Codex Magliabechiano* depicts “*patolli*, which is like a game of dice on top of a mat.” (Drawn by Susan T. Evans from *Codex Magliabechiano* [mid-1500s]:Folio 59r, gloss [60v], translation by Boone [1983:205].)

game *patolli* and the ballgame *tlachtli*, which are among the best-known and most popular betting venues.

Gambling on the Patolli Game

Many of the Indians’ games were extremely subtle, clever, cunning, and highly refined. [It is a pity] that so much heathenism and idolatry was mixed up with them. (Durán 1971 [1574–1579]:312)

Among the oldest sources on Aztec gambling are illustrations such as Figure 15.2, which shows four people around a *patolli* mat. In Nahuatl, *patolli* was a general term for games involving dice and betting (Molina 1977 [1571]:80). But its particular association is with the Parcheesi-like dice game played upon a “mat [on which] was painted a large X, which reached from corner to corner. Within the arms of the X certain lines

were marked which formed squares. The X and its squares were marked or striped with liquid rubber” (Durán 1971 [1574–1579]:302–03). Ethnohistorical sources vary as to the precise number of squares and the number of dice (marked beans) and tokens (pebbles or possibly worked sherds).¹² Durán (1971 [1574–79]:306) specifies the number of dice as “five, in honor of the god” Macuilxochitl (Five Flower), patron of the game.¹³

Many people could play together in this... their most common game.... [Bets were made] on the one who best handled the dice.... When this game was played, such a crowd of onlookers and gamblers came that they were pressed against each other around the mat, some waiting to play, others to bet. It was a remarkable thing to see. (Durán 1971 [1574–1579]:303)

Durán conveys the excitement surrounding a betting game, probably taking place in a town plaza. We have all experienced or witnessed wins and losses at games and gambling and can readily relate to the mental focus and visceral eagerness among those present, the skill and nerve of successful gamblers, and their exciting runs of good luck. The Aztecs experienced many of the same feelings when gathered around a *patolli* board or at a ballgame to gamble or watch others win and lose.

Gambling and Palace Life

While festivals offered an opportunity for everyone to bet on games of chance, the palace people—particularly the lords—gambled regularly. It was a major feature of Aztec court life. In the *Florentine Codex*, half the text in a chapter on “how the rulers took their pleasure” deals with the ballgame and *patolli* game: how games were played and what was gambled on their outcomes (Sahagún 1979c [1569]:29–31).¹⁴

The Aztecs were fascinated by anything that exhibited life and therefore possessed animated agency, and the rubber ball and bean dice both danced in the air before connecting with fate. Perhaps the rubber lines delineating the *patolli* board added resilience to the play of the dice. The beans used as dice were “known in Mexico by the name of *colorín* (*Sophora secundiflora*) and in the United States as the *mescal bean*. This name is incorrect...the bean contains cytosine and not mescaline. But...it should be classified within the category of psychotropes.... Thus the *patolli* seems, genetically, to have had some connection with a questioning of destiny” (Duvverger 1984:44). It would be interesting to know if gamblers or diviners ever used as dice the seed pods of *Sebastiania pavoniana*, which harbors the larvae of *Cydia deshaisiana*, the Mexican jumping bean moth.

These matters pertaining to the animation of the playing pieces are notable, because in Aztec society, nobles—especially royals—claimed privileged access to many things that carried an energized force, and also claimed that such energy was too strong for most commoners and could harm them (see extended discussion in

López Austin 1988:1:388–400). For example, in the palaces, games and gambling were everyday activities, and so were feasts where the celebrants consumed hallucinogens such as peyote and stimulants such as chocolate and tobacco, which caused courtiers to perceive and access even more energy in a world they already regarded as charged with animate forces.

Members of upper-class society claimed that they preferred chocolate drinks to *pulque* (agave beer), and the course of Aztec empire expansion suggests that empire-building was motivated by the need to secure and control cacao plantations (see a justification in Sahagún 1997 [1559–1561]:224), but *pulque* was ubiquitous in Aztec society, although its open use was heavily controlled by severe penalties for public drunkenness.

On the occasional major feast days, the commoners could behave immoderately, publicly drinking *pulque* and gambling, activities that were openly pursued by the upper classes in their palaces and mansions. The connection between *pulque* drinking and *patolli* gambling was honored in Ometochtli, the *pulque* god, who was always remembered when gamblers made offerings during their games (Durán 1971 [1574–1579]:306).

Macuilxochitl, Patron of Gambling and Palace People

The patron deity of gamblers was Macuilxochitl, the object of most of their offerings. Macuilxochitl (Five Flower in Nahuatl) represents a complex of spiritual forces overseeing fertility (Nicholson 1971:Table 3, 417–18). His alter ego, Xochipilli (Flower Prince), is linked to hallucinogens. Macuilxochitl dominates the left side of the *Codex Magliabechiano* image (Figure 15.2), emphasizing the great importance of luck in any gambling setting.

The identification of the palace as a place of gambling is strengthened by Macuilxochitl's other important patronage: palace people. This is an inclusive term, covering those who were part of the palace household or who frequented the court—in other words, those who shared (or observed) the pleasures of the ruler. While palace servants were by no means granted the

privileges of nobles, they lived closely with them and observed gambling, ballgames, feasting, and indulgence in hallucinogens and stimulants. And servants included rural villagers who periodically worked in service at the palace. They too would have come under Macuixochitl's influence. Thus, palace ways and gods were familiar to people who served there, even if their own lives centered on their farmsteads.

Macuixochitl rewarded supplicants with good fortune but punished them by withholding it and also by sending venereal disease and hemorrhoids. To placate the god, gamblers included him in their games. A portion of every bet was an offering to the god. "[M]asters of these games invoked the demon...in order that he might give them victory" (*Codex Magliabechiano*: [mid-1500s], 59r op. cit.). "He was invoked by the gamblers when they cast the beans from their hands...rolled them a little in their hands, and, on throwing them on the mat...they noisily called to Macuixochitl and clapped loudly" (Durán 1971 [1574-1579]:306; see also translation of gloss [60v], Boone 1983:205).

The name Five Flower suggests the five fingers that toss dice (or divination pieces), and across his mouth is a design variously interpreted as a five-fingered hand or a flower. At the top of the *Magliabechiano* image, five precious *chalchuihuatl* disks would remind people across the Aztec world of his power. The number five also suggests such important Aztec phenomena as the axis mundi (the "fifth direction") and the finality of living in the Age of the Fifth Sun (Díaz Balsera 2005:46).

Gambling Stakes

Depending on the setting and the game, the stakes varied greatly. When rulers gambled, the majordomos brought out "all which the ruler was to wager in the game...capas...lip plugs, the golden ear plugs,...the golden necklaces" (Sahagún 1979c [1569]:58). The rulers also wagered "green stone, fine turquoise, slaves, precious capas, valuable breech clouts, cultivated fields, houses, leather leg bands, gold bracelets, arm bands of quetzal feathers, duck feather capas, bales of cacao" (Sahagún 1979c [1569]:29).¹⁵

Durán (1971 [1574-79]:305) mentions that professional gamblers "staked jewels, stones, slaves, fine cloths, breechcloths, their homes, their wives' jewelry. They gambled their lands, their fields, their granaries filled with grain, their maguey fields, their trees and orchards." The poor could wager their modest goods against the king's bet, and if they won would be given fine goods brought out by the king's majordomos. There was even a winner-take-all clause in the *patolli* rules, occasioned if one of the dice beans stood on its end (Sahagún 1979c [1569]:29-30).

The most serious gambling bet was one's own life: gamblers wagered their own lives if their losses became catastrophic, and they were forced to consign themselves as slaves to the winners. The Aztecs were businesslike about this: a gambler unable to pay his debts was like a thief and would become the property of his creditors. If no one could redeem the debt, then the debtor could be sold as a slave in the marketplace, where merchants and lords would shop for human offerings to be sacrificed (Durán 1971 [1574-1579]:281).

However, some gamblers must have won, and, in fact, Durán recalled learning from one man that he was a professional, full-time player at pins (bowling), who said "that he seldom lost" (Durán 1971 [1574-1579]:304). Gambling was also the life of choice for some commoners, and some sought to earn a living by it. The professional *patolli* gamblers "always went about with the mats under their armpits and with the dice tied up in small cloths" (Durán 1971 [1574-1579]:304). A winning gambler's earnings could provide for his family and neighborhood, as well as raising his own economic status. If one gambler could lose "quetzal feathers, slaves, houses, fields" then another was that much richer (Sahagún 1979c [1569]:30).

Attitudes toward Gambling

Palace lords included the wealthiest gamblers, like Motecuzóma, whose resources were vast and unlikely to be diminished by lost bets.¹⁶ Gambling was tolerated—not outlawed—but everyone knew its risks and that some individuals seem fated to be gamblers, perhaps destined to lose everything. The twenty *trecena*

(thirteen-day-count) signs of the divinatory almanac were variously glossed as good, neutral, and evil. An evil day sign generally presaged a life of sloth, adultery, thievery, and drunkenness. Such dissolute futures are repeatedly forecast.¹⁷ But only one, One House, “was said to be evil” in that a man born under that sign lived “in dangerous luxury, ... completely given to the rubber ballgame and to *patolli*.”¹⁸ “He lost; he lost the possessions of others. ... He wagered everything which was in his home. ... All the treasures and support of his beloved mother and father he spirited away, even if some little thing had been hidden” (Sahagún 1979a [1569]: 93, 94).¹⁹

However, the day signs could be ameliorated, even the evil One House, if “he practiced abstinence diligently, he drew blood from himself.” To this, Sahagún’s informants add the seemingly contradictory note that “[i]f he played the rubber ballgame, it was said that he thus nourished the day sign, that thus it improved.” (Sahagún 1997 [1559–1561]:161–62). Sahagún’s informants in general were nobles, and perhaps this “nourishment” of the day sign was possible because nobles could partake of activities and essences too powerful for commoners.

Attitudes about commoners undertaking gambling as a career are well expressed in the *Codex Mendoza* (1992 [ca. 1541–1542]). Folio 70r shows contrasting paths for young people: most are being educated into dutiful, moderate Aztec adulthood and following vocational training and betterment. But the right side of the page shows the slackers: the vagabond and thief, gossip and drunk, gamblers, a ballplayer, and a *patolli* player (Figure 15.3). The gloss states,

[T]he majordomo is giving them good advice, telling them to give up idleness and going about as vagabonds, which lead to becoming thieves and ballplayers, or a player of *patolli*, which is like dice. As a result of these games, they increase their stealing to satisfy and provide for such vices, so that it will only bring them to a bad end, as the drawings show.” (*Codex Mendoza* [ca. 1541–1542]: Folio 69v, translation by Berdan and Anawalt 1992c:144)



FIGURE 15.3. From the *Codex Mendoza*, a detail of a *patolli* gambler. The cape to the side of the bean dice is knotted rather than folded, “as though it had been impulsively pulled off [and bet as] ... a desperate wager by the near-naked player.” (Berdan and Anawalt 1992a:2:226; drawn by Susan T. Evans from *Codex Mendoza* [ca. 1541–1542]:Folio 70r.)

Like the Aztecs, we take the view that gambling is somewhat dangerous. While there is little harm in occasional low-stakes, feast-day indulgence, habitual gamblers live on society’s margin, no matter how wealthy they may become. Because of the long-term role of randomness in honest games, any gambler is bound to lose, and so, even if wealthy, they may court disaster. Gambling was thus seen as a gateway activity leading to crime and violent death. The losing gambler endangered his family and community through reckless use of hard-won resources (Durán 1971 [1574–1579]:307). Gamblers “always went about indigent, in need; finally, when there was nothing left to gamble, they staked themselves” (Durán 1971 [1574–1579]:305).

Like Sahagún’s informants, who described the cursed lives of those born under the sign of One House, Durán called professional gamblers

infamous and knavish people, idle, dishonest, vicious, enemies of honest toil. Persons proud of their honor fled from any contact with them, and thus parents advised their children to keep away, to shun them and their presence as bad company. They were afraid that [their children] might become addicted, learn to gamble, and gamblers came to no good end. (Durán 1971 [1574–1579]:305)

Gamblers, Aztec Gamblers, and Magical Thinking

Believing in a participatory cosmos spurs us on to action. (Aveni 2002:297)

The epistemological bases of the Aztec world and our own vary greatly. Yet, gambling provides an area of beliefs common to our modern responses to a presumably scientifically explicable environment, and also to Aztec responses to a cosmos throbbing with spiritual forces. We may wish luck to be a lady, while the Aztecs call upon on Macuilxochitl's kindness, but gamblers in both societies recognize the murky region of uncertainty in which magical thinking may provide comfort and even, gamblers might believe, some edge in the game.

Here is how the Aztecs prepared to play *patolli*.

Those dice, together with the pebbles used in the game...were revered as gods, as it was believed that they were mighty; and thus when they played, [the people] spoke to them...and begged them to be favorable, to come to their aid in that game,...uttering a thousand loving words, a thousand compliments, a thousand superstitions. After having spoken to them, they placed the painted mat and the small case containing the implements of the game in a place of worship. They brought fire, cast incense into the flames, and offered their sacrifice in the presence of the implements, placing food before them. When the ceremonial gift had been delivered, they went off to play in the most carefree manner. [Durán 1971 (1574–79):304]

Durán commented that Spaniards also spoke to the dice. Furthermore, Durán and the other Catholic proselytizers shared with the Aztecs a belief in the power of ritualized actions, words, and thoughts in their own culture—and in each other's. The Catholics firmly believed in the power of the devil, as beseeched through the devil-worshipping paganism they hoped to eradicate. They witnessed how the devil worked through the Aztecs, demonstrating the effectiveness of some Aztec practices as magical thinking,

because they could not explain how an impressive effect had been caused.

For example, some Catholics believed that Aztec acrobats who juggled logs with their feet did so “through diabolical arts.” But with greater knowledge of Aztec culture and society, Durán could dismiss their fears. He knew that sorcery was unnecessary because the tricks were achieved through training and physical skill. There was a juggling school in his childhood neighborhood, and his neighbor, an Aztec “most skillful in this art...[trained] young Indians from different provinces...how to juggle the log with their feet” (Durán 1971 [1574–1579]:297).²⁰ Durán jokingly calls the performance “sleight of foot” and compares it with “sleight of hand played in Spain.” He recognized that the success of the acrobats lay in training. The acrobats had strengthened their natural kinesthetic intelligence with long years of practice (as Gutiérrez, Chapter 14, this volume, points out), not through magical thinking, though they, no doubt, faithfully followed a regime of prayers and offerings.

Durán (1971 [1574–79]:307) reflected on changes in Mexico, noting with some regret that irreplaceable skills were lost with the suppression of games and the destruction of gaming pieces. In part, this was to save the gamblers from further economic losses in a Colonial era world even harsher than that of the Aztec period, and, of course, to save their souls from the devil worship that saturated every throw of the dice.

Aztec gambling practices combined skill and hope in a strategy to control fate.²¹ The Aztecs shared with gamblers everywhere and throughout time the use of magical thinking and of particular kinds of intelligence and intuition—the capacity of our species for reasoning and instinct. These shared human capabilities were shaped by their own cultural values and norms, which rewarded successful gamblers lavishly but always pressured toward conformity and duty. Aztec gambling behavior illuminates that culture's worldview, belief system, and societal norms, and offers a perspective on cross-cultural reliance on intelligence and luck, including a cross-cultural dependence on magical thinking as a means of influencing an uncertain outcome.

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Notes

1. The effect of the brain's structure on play has been explored from the perspective of the brain's right and left hemispheres by Dobkin de Rios and Schroeder (1979).
2. There are other explanations: the shooter may cynically assume that this psychological experiment could be made public, and those who would shoot a baby, even in representation, would be shamed. Or the shooter may realize that, although the action is harmless, it can serve as a behavioral gateway, the first step toward habituation into harmful actions, and thus should be avoided.
3. Even if there is only a 1-in-6 chance of rolling doubles at dice, and a 1-in-36 chance of doubles on the next roll, experienced gamers find these situations to be common—doubles don't just show up every sixth roll. See Wong (1998) for an interesting common-sense perspective.
4. Gardner's work has prompted much discussion among psychologists, and while emendations have been proposed, the original list functions adequately for this purpose.
5. The Aztecs had many controlled substances, and commoners were forbidden or at least discouraged from using them, with occasional exceptions. The Tenochca lords incorporated hallucinogens into their feasts and used peyote and morning glory seeds, plus stimulants such as a strong tobacco mixture and chocolate drinks. These were part of "a 'physical' presence of power, a visual, auditory, palpable, olfactory dimension—perceptible in incense and flowers—indeed, a hallucinatory aspect of power, which has been too often placed among the exotic accessories, to be minimized and conjured away.... The source of that power was a divine force infused into the nobles, into the ranks of the pipiltin—a vocation for leadership that came from the gods Quetzalcoatl and Xiuhtecuitli and sealed the nobles' authority" (Gruzinski 1989:19–20).
6. Divination by casting beans was a "common, mundane practice" in Renaissance Italy, though suppressed by church authorities (Monson 2010:46). At the same time in Britain, "games of chance...were totally forbidden since they involved recourse to divine providence for unworthy reasons" (Thomas 1971:121).
7. "[P]or suertes remitiendo a su contingencia la resolución de sus dudas" (Ruiz de Alarcón 2011 [1629]).
8. A divination was regarded as much less effective without the proper invocation, noted Ruiz de Alarcón (1984 [1629]:142).
9. "We can easily imagine the attraction which ancient Mexicans must have felt for all divination techniques; they never missed a chance to question destiny" (Duverger 1984:39).
10. Gamblers are among a group including "adulterers, prostitutes, licentious persons,...thieves,...and drunkards" thought to harm others (including "animals, plants, and things...[including] religious rites and offerings") through pollution, a native tradition by the Nahuas of today (López Austin 1988:1:266).
11. "Board" (as in board games and gameboards) is herein used in the broad sense, to indicate a marked playing surface around which tokens are moved. Mesoamerican board games were played on marked mats or open ground and architectural floors.
12. Strategies of play have not been documented, but a series of simulations devised by Gómez and Galindo (2007) have re-created plausible tactics. See also the discussion in Walden and Voorhies, Chapter 12, this volume.
13. Macuixochitl's association with games may date at least into the Classic period. A figure on the floor marker of Copán's Ballcourt IIb may represent one of Copán's kings dressed as a Maya version of "Macuixochitl, complete with the diagnostic hand over the jaw" (Fash and Fash 2007: 275).
14. The other pleasures cited in Chapter 10 of Book 8 are the rhythmic procession of the ruler exiting the palace; poetry; rhetoric; hunting; landscape design; entertainment by jesters (especially those juggling logs with the feet) and the ruler's servants; and animals kept in zoos. (For a full discussion, see Evans 2000.)
15. Lords were not always good-natured about their losses. Citing Alva Ixtlilxóchitl (1975–1977 [1600–1640]:II:144), Fash and Fash (2007:271) note, "In 1473 the Emperor Axayácatl tried to

- secure gardens in Xochimilco from its lord,... betting his own market and the lake around it... Upon losing the game, he had his Xochimilcan counterpart strangled to death rather than lose such a treasure to a lower-ranking lord.”
16. However, it was possible that a ruler could lose his *altépetl*, as recounted by William Sanders in a personal communication.
 17. Book 4 of the *Florentine Codex*, the Book of Days, repeatedly exhorts the people to avoid being indolent/lazy, drunk, loud, incorrigible, sowers of discord, insolent, lying, rumor-mongers, cowardly, adulterous, thieving, hot-tempered, big-talking, agitating, troublemakers (Sahagún 1979a [1569]).
 18. Women born under One House faced bad futures of their own, as described in the *Florentine Codex*, but gambling seems to have been a male pursuit (Sahagún 1979a [1569]:95–96).
 19. The *Codex Telleriano-Remensis* (1995 [1563]:182–83), does not associate One House with gambling.
 20. Piña Chan (1969:34) quotes Clavijero’s description of a log juggler who “threw himself on his back, lifted his feet high and held a thick round log about eight feet long with his feet. He threw the log in the air...twirled it rapidly...[while] two men sat astride the ends of the log.”
 21. Fittingly, the greatest Aztec god, Tezcatlipoca, bestowed good fortune and bad regardless of an individual’s ethics or offerings—the perfect embodiment of an indifferent universe.



The Biggest Losers

Gambling and Enslavement in Native North America

CATHERINE M. CAMERON AND LINDSAY D. JOHANSSON

They...sit up all night gambling with visitors or among them and in this way like all the tribes of this coast they will after parting with all their useful articles dispose of their wife & children & finally of themselves to years of Slavery.

Meany (1926:139)

Games were an almost universal aspect of North American Indian society, and many Native American games—perhaps most—could have bets riding on the outcome (Culin 1907; DeBoer 2001:226). Gambling added drama to the throw of the dice or the toss of an arrow and captured the audience in the heart-stopping moments that determined a player's fate. Gamblers wagered, won, or lost personal possessions, but the obsessed gambler might lose more than property (Yanicki, Chapter 7, this volume). Ethnographic accounts from across the continent describe gamblers who had lost every bit of property they owned, including the clothes they were wearing, and then staked the lives of their family members or their own lives. Failure at the next go meant enslavement for the loser or the loser's family.

Slavery was practiced widely throughout North America, both before and after European contact, with the vast majority of slaves captives of war (Brooks 2002; Cameron 2008; Snyder 2010). In most groups, not all captives became slaves. Women could be incorporated as wives or concubines; children and some adults might

be adopted. Slaves generally occupied the lowest rung on the social ladders and even captives who were incorporated into the social system of their captors might live marginal lives. Gambling was another avenue to enslavement and almost certainly a much less common one. Captives of war were members of a hated enemy group, but those enslaved through gambling might, minutes before, have been part of a happy crowd watching a festival-day contest. These different circumstances seem to have resulted in different outcomes for those enslaved through gambling.

In this chapter, we use ethnographic and ethnohistoric accounts to explore enslavement through gambling, the gender of the gambler, who became enslaved (the gambler, gambler's wife, children, etc.), the length of enslavement, and how the captive might be redeemed. We examine the parallel between gambling and warfare, which is evident in the social distance between gambling partners, as well as the language and attitude associated with gambling. As archaeologists our goal is to determine whether enslavement through gambling was a practice that occurred in North America's prehistoric

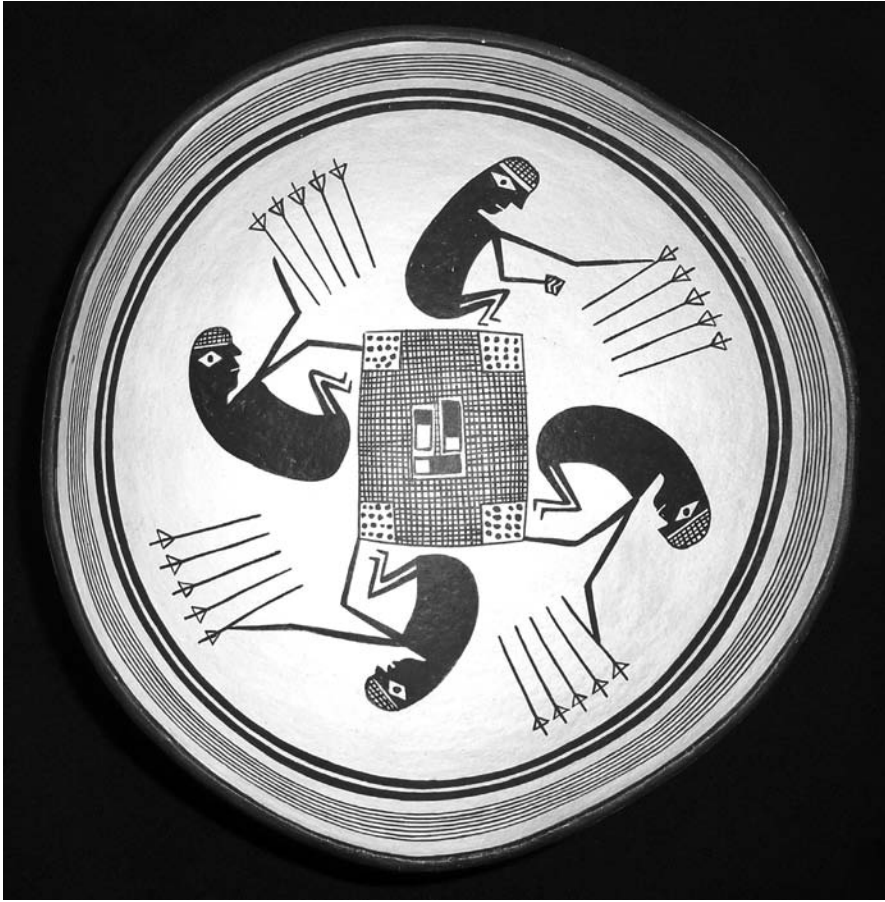


FIGURE 16.1. Evidence of the importance of gambling in prehistoric periods in this replica of a ceramic bowl recovered from the Cameron Creek Village site, southwest New Mexico. The vessel is associated with the Mimbres culture and dates to AD 1000–1130. In the image, players surround a gaming mat and may be gambling for arrows. (Photograph by Stephen H. Lekson, published with permission.)

past, and, if so, what its influence might have been. The common occurrence of enslavement through gambling in North American ethnographic accounts is one line of evidence that the practice was not solely a result of Euro-American intrusion. Archaeological evidence of gaming pieces, iconography (Figure 16.1), and even playing fields (DeBoer 2001; Yanicki 2014, Chapter 7, this volume) make it clear that games were common even early in the Precontact period. Whether wagering on the outcome of games is a universal human behavior is a question perhaps best left to psychologists, but its occurrence in North America can be evaluated by assessing its frequency in oral histories. In the last section

of the chapter, we point to a number of oral histories that describe enslavement through gambling. While it is likely that many more such accounts remain to be found, those we present suggest that enslavement through gambling was a common feature of indigenous North American societies deep into the Precontact period.

Enslavement through Gambling in North America

Here, we analyze the ethnographic and ethnohistoric accounts that we have compiled based on characteristics detailed in Table 16.1. Table 16.1 is organized by large geographic districts in which we found relevant data. For each account, we

record the group upon which the report focused (although a few accounts report generically on Native American activities for a broad region without specifying a particular group), the gender of the gambler, who was enslaved, the length of enslavement, how the slave was redeemed, and the types of games played. In only a few accounts is each type of data available, but nevertheless, patterns are apparent.

The Sample

In collecting data for this study, we scanned prominent ethnographies and secondary sources looking for accounts of gamblers staking and enslaving themselves or family members in games of various types. The Human Relations Area Files were consulted for additional sources. While we have found a significant number of accounts of enslavement through gambling, suggesting that the practice was not uncommon, we feel that considerable ethnographic and ethno-historic data remain to be uncovered. The data in hand, however, have allowed us to document a not-uncommon method of enslavement and to make some statements about the nature of indigenous gambling and the social position of people enslaved thereby.

The sources we use are not without difficulties. Ethnographic accounts of gaming practices were virtually all made well after contact, when the societies under study had been subject to decades of Euro-American meddling and attempts at directed culture change. Gambling was frowned upon by missionaries and government agents and actively suppressed in some cases (Tedlock 1992:24). Some of the earliest accounts express disgust with indigenous game players and contempt for their willingness to lose property in games of chance or skill. Given these attitudes, we must be cautious about the veracity of accounts of gamblers staking their lives or sending their family into slavery. Some may be exaggerated to make a point about the depravity of people whose land the disparagers were taking; others may have been created as object lessons by Euro-Americans who hoped to lure Native Americans away from such practices. Still, the bulk of the evidence suggests that gambling was a source of slaves across North America.

We found 24 reports of enslavement through gambling among groups in five regions: the Northwest Coast, Northern California, the Northwest Interior, the Southeast, and the Northeast/Great Lakes regions (Table 16.1). We made efforts to insure that the reports were independent and did not use the same early explorer's account or other source. In some cases, two different observers reported enslavement through gambling in the same group, strengthening our confidence that the reports are accurate. Most of the accounts are from the nineteenth century, although a few date from the eighteenth century or before or to the twentieth century. The reports were made by early travelers (such as Kurz 1970 [1937, referring to years 1846–1852]), missionaries or military observers (such as Lejune 1898 [1639]; Emmons and De Laguna 1991), and early ethnographers (for example, Swanton 1905). There is a notable lack of indigenous voices in these accounts, except those few filtered through Western observers.

The largest number of reports ($n = 7$) comes from the Northwest Coast. The dominance of Northwest Coast accounts may be partly because slavery was so much a part of the social system there and because sustained contact with Euro-Americans only began in the late eighteenth century. Furthermore, slavery in the Northwest Coast lasted well into the late nineteenth century, allowing the practice to be recorded by many early travelers and ethnographers. Captives became slaves for life and constituted a prominent social class. By contrast, in other parts of North America, many captives were eventually adopted or became the wives of their captors. Although their status often remained marginal, they may have been less obvious to an observer than Northwest Coast slaves. Five accounts come from the Northeast/Great Lakes region, but most other regions have far fewer.

The Games

The games played when gamblers became enslaved are only mentioned in half of the accounts we collected and include the stick game, the hoop-and-pole game, and the bowl game. The stick game (Figure 16.2) was played in six of our reports, including five Northwest Coast and

one group in the Northwest Interior (Culin 1907: 227–66 reports similar games played elsewhere in North America). There are a number of accounts of how the game was played (Table 16.1; Culin 1907; see Emmons and De Laguna 1991: 413–22 for Tlingit). Swan (1874) describes the game pieces and methods of play among the Haida.

The Haidahs, instead of disks, use sticks or pieces of wood 4 or 5 inches long and a quarter of an inch thick. These sticks are rounded and beautifully polished. They are made of yew, and each stick has some designating mark upon it. There is one stick entirely colored and one entirely plain. Each player will have a bunch of forty or fifty of these sticks, and each will select either of the plain sticks as his favorite.... The Indian about to play takes up a handful of these sticks and, putting them under a quantity of finely separated cedar bark, which is as fine as tow and kept constantly near him, he divides the pins into two parcels, which he wraps up in the bark, and passes them rapidly from hand to hand under the tow, and finally moves them round on the ground or mat on which the players are always seated, still wrapped in the fine bark, but not covered by the tow. His opponent watches every move that is made from the very first with the eagerness of a cat and finally, by a motion of his finger, indicates which of the parcels the winning stick is in. The player, upon such indication, shakes the sticks out of the bark and with much display and skill, throws them one by one into the space between the players till the piece wanted is reached; or else, if it is not there, to show that the game is his. The winner takes one or more sticks from his opponent's pile and the game is decided when one wins all the sticks of the other. (Swan 1874:8)

The hoop-and-pole game, found across North America (Culin 1907; Yanicki 2014:Appendix B, Chapter 7, this volume), was associated with enslavement through gambling in three of



FIGURE 16.2. Decorated gambling sticks and pouch used in the stick game by the Haida of British Columbia, Canada. The set contains 56 sticks, 41 of which were inlaid with abalone shell. These objects were collected by Lt. George T. Emmons of the U.S. Navy, who was stationed in Alaska during the 1880s and 1890s and worked closely with the indigenous people of the region. (Courtesy of the National Museum of the American Indian, Smithsonian Institution 13/4007]. Photo by NMAI Photo Services.)

our accounts, two in the Plains and one in the Southwest.

The game of hoop and pole...consists essentially in throwing a spear, or shooting or throwing an arrow at a hoop or ring, the counts being determined by the way in which the darts fall with reference to the target. The game is remarkable for the wide diversity in the form of the implements employed, as well as in the method of play. (Culin 1907:420)

In the Southeast, the game was called *chunkey*, and the hoop consisted of “a wheel-shaped disc made of carefully polished stone” (C. Hudson 1976:421–22). *Chunkey* has a long history in the Southeast and is argued to have begun about 1000 years ago at the site of Cahokia near modern St. Louis (Pauketat 2009b:39–50; Zych, Chapter 5, this volume). Proof that this game was played prehistorically lies in the thousands of *chunkey* stones that have been found by archaeologists at sites in the Southeast and elsewhere. *Chunkey* players are also depicted in southeastern iconography (Figure 16.3).

The bowl game was associated with en-

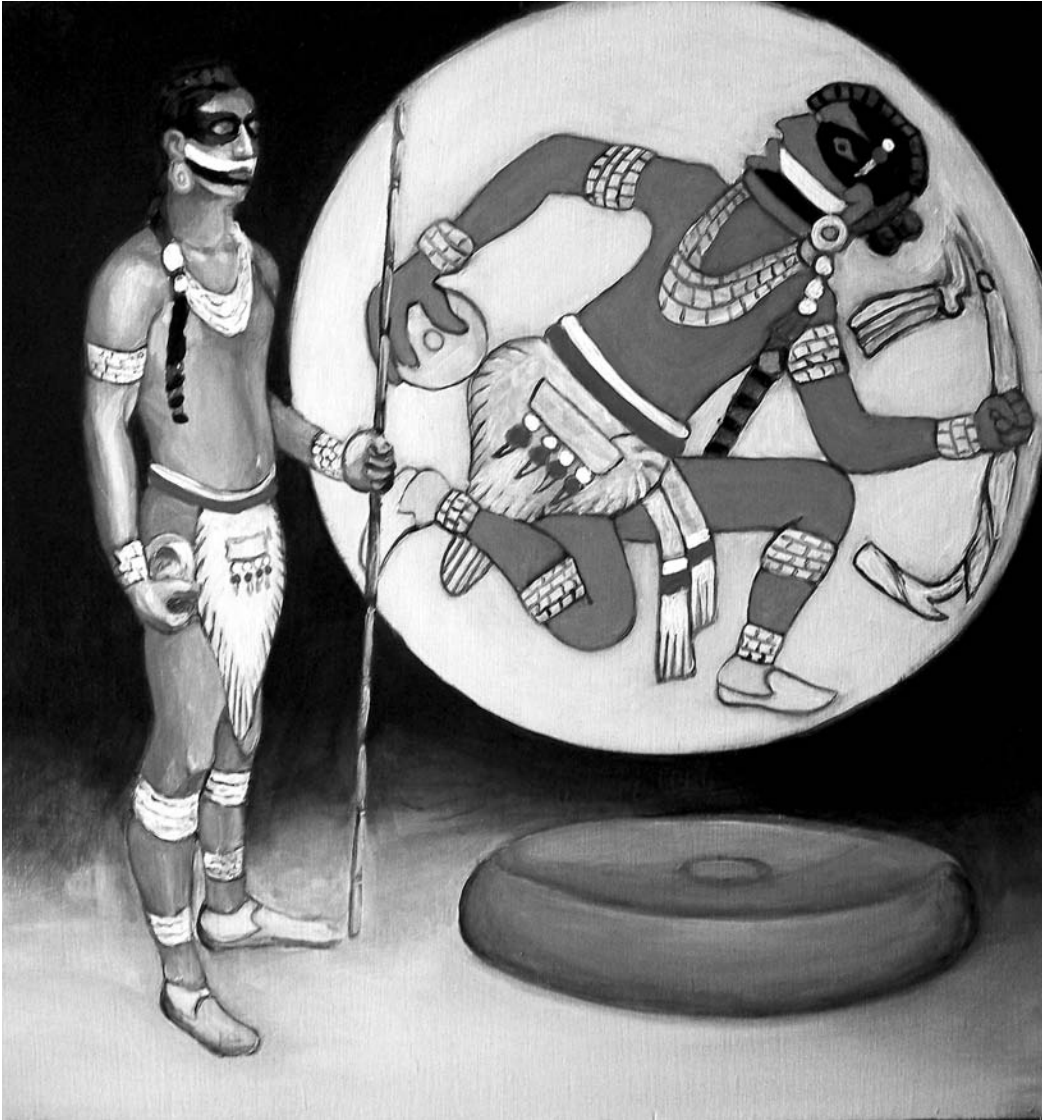


FIGURE 16.3. Illustration of a *chunkey* player by artist Herb Roe. The illustration is based on a Mississippian gorget design. On the gorget, the player appears to be in the act of throwing the *chunkey* stone. Below the gorget is a *chunkey* stone like many of those found across the Southeast and elsewhere. (Courtesy Herb Roe, with permission.)

slavement through gambling in three of our accounts, although two may be referring to the same group (the Assiniboin). Two are Plains groups and one is in the Northeast/Great Lakes region. The descriptions of the game place it within Culin's category of "dice games" (Table 16.1). In the mid-nineteenth century, Rudolph Friederich Kurz described the game played by

groups he observed, which may have been Crow or Assiniboin.

They take a shallow wooden plate, put in it some beans or seeds of corn that have been burned black on one side and add thereto a magpie's claw, one talon of which is distinguished from the others by a white line

TABLE 16.1. Gambling leading to enslavement in indigenous North American groups.

Group	Gender of gambler	Who was enslaved?	Length of enslavement	How slave was redeemed	Games played	Reference
Northwest Coast						
Yakutat Tlingit	M	gambler	not specified	not specified	"stick game"	De Laguna 1972:554; also Emmons and De Laguna 1991:422.
Tlingit	M	wives, children	not specified	not specified	"little sticks"	Emmons and De Laguna (1991:413, 422). They cite a number of late 18th- and early 19th-century observers, including Lütke 1835; see also L. Jones 1914. Dennis 1930: 186–87.
"Natives of Oregon" (Oregon City)	M?	wives, gambler	"slaves for life"	not specified	"pointed sticks"	
Haida	M	"whole families and towns"	unknown	unknown	"stick game"	Swanton 1905:58.
Lower Chinook	M	gambler	"specified number of years or certain quantity of goods"	if goods offered, if gambler got lucky, or friend put up goods	not specified	Ray 1938:52; Donald 1997: 117–18; Hajda 2005:575–76.
Bella Coola	language suggests men only (women also gambled, but at what cost?)	children, gambler	"unless re-purchased by some relative"	"repurchased by relative"	small sticks, <i>lehal</i>	McIlwraith 1948:159.
Northwest Coast Indians ("from the Columbia to Fuca's Strait," most likely Chinook.)	not specified	gambler	"term of years"	"or till another lucky chance enables them to pay up their debts"	not specified	Swan, 1857:156.
California						
Yokut	not specified (language assumes male)	family of the gambler	not specified	not specified	not specified	Latta 1949:132.

Yurok	M?																			Erikson, Erik H. (Erik Homburger) 1943:289.
Northwest Interior																				
Kaska	M, F	wives	2–3 days																	Honigmann 1954:71.
Flatheads (Upper Columbia River region)	Not specified (language suggests male)	gambler, along with his wives and children	life																	De Smet 1843:171.
Nez Perce	F	gambler	not specified																	Spinden 1908:245; Dennis 1930:187.
Southwest																				
White Mountain Apache	M	women, children	not specified																	Culin 1907:454, reporting on a memo from Reagan in 1901.
Plains																				
Herantsa (Hidatsa)	not specified (language assumes male)	"elder wives"	not specified																	Kurz 1970 [1937]:147–48 http://hdl.handle.net/2027/mdp.39015008961867 .
Crow or Assiniboin	not specified (language assumes male)	women, gambler	not specified																	Kurz 1970 [1937]:148).
Assiniboin (North Dakota, Montana; account at Ft. Union, Montana)	M (women play their own games)	wife	not specified																	Denig (n.d.) manuscript in library of BAE (cited in Culin 1992 [1907]:173–76.
Mandan	M	gambler	not specified																	Catlin 1926:150.
Southeast																				
Unspecified group in the Carolinas	not specified	gambler	until family can pay to redeem them																	not specified Lawson 1714:176.

TABLE 16.1. (cont'd.) Gambling leading to enslavement in indigenous North American groups.

Group	Gender of gambler	Who was enslaved?	Length of enslavement	How slave was redeemed	Games played	Reference
Choctaw	M	gambler and wife (wife first)	"limited time"	not specified	not specified (ball-game and racket game mentioned, but unknown which included gambling)	Swanton 1918 (see citation in MacLeod 1925:371; see also Pauketat 2009b:42).
Northeast & Great Lakes						
Unknown (Dakota Sioux [Naudowessiel, group Carver knew best?])	not specified	gambler	not specified	not specified	bowl or platter	Gelb 1993:182.
Ungava District, Hudson Bay Territory	M, F	wife	"until a tempting offer is made"	"tempting offer"	not specified	L. Turner 1894.
Indians of New France; Montagnais; Algonkian; Huron	M, F	gambler (M or F)	1–2 years	set free	not specified	Le Jeune 1898:199–201.
Mi'kmaq	not specified (language assumes male)	wives	not specified	not specified	not specified	Lescarbot 1914 [1609]:197.
Narragansett	not specified	gambler	not specified	not specified	not specified	R. Williams 1963:196–97.

drawn from the root to the tip; they put in also, if they have them, some brass nail heads. Then they turn the plate quickly upside down.... According as the black or bright side of the seeds lie upward, but especially as to the position taken by the white tip of the magpie's claw, they reckon the count. (Kurz 1970 [1937]:148)

DeBoer (2001) argues that dice games among the indigenous people of North America were most often played by women. However, of the two accounts that specified the gender of the bowl game gambler, both reported they were men.

Gender of Gambler

Of the 15 accounts in our corpus where the gender of the gambler was reported, the overwhelming number (11) were male, suggesting that the sort of high-stakes gambling that resulted in enslavement was most likely to be undertaken by men. In three groups, both men and women were involved; two of these groups were found in the Northeast/Great Lakes region, and one was in the Northwest Interior region. Only one account from the Northwest Interior listed women as the gamblers: Spinden (1908:245) noted that, among the Nez Perce, "only women gambled away their freedom."

Who Was Enslaved?

All accounts specified who was enslaved when a gambler lost heavily. In 10 cases, the enslaved was the gambler himself or herself, and sometimes the loss was piecemeal. For example, among the Chinook, "A desperate gambler sometimes wagered his own body, beginning with hands, then limbs, and finally head, and with its loss came slavery" (Ray 1938:51). The same limb-by-limb enslavement was found among the Flathead of the Upper Columbia River (de Smet 1843:171). In five cases, the gambler wagered his wife or his wife and children (see also Leonard, Chapter 2, this volume). In eight cases, family members and the gambler were all lost to slavery. Generally, it was only after he had gambled and lost his wives and children that the gambler wagered and lost

his own freedom. One observer reported "whole families and towns" lost to slavery (1905:58).

The accounts tend to confirm that, generally, only men were able to wager themselves or their family. In a study of gambling in North America based on ethnographic accounts DeBoer (2001: 227) suggests that high stakes (such as horses and weapons) were wagered only by men and includes the wagering of the gambler and spouse. There are no accounts of women wagering their husbands.

Length of Enslavement and the Nature of the Slave

Less than half our accounts of enslavement through gambling specify how long an enslaved gambler or gambler's family was held, but those that do report "1–2 years," "a specified number of years," and even "2–3 days" (Table 16.1). In two cases, the individual was set free after the term was up, and the suggestion is that the freed slave returned home. Other cases suggest that a gambler or his family had to be "redeemed by friends" or that they were held "until the family paid the debt." In these cases, the gambler, or his family members, seem to have been held in lieu of goods: should the gambler or his family produce those goods, the enslaved individual could return home. However, in at least two cases (the Flathead and natives of the Oregon City area), the gambler and his family were enslaved for life.

Gambling Slaves and Other Slaves

The accounts we collected suggest that an individual who became a slave through gambling losses was treated differently than an enslaved war captive. Warfare and raiding produced many captives across North America and elsewhere in the world, yet not all captives of war became slaves (Brooks 2002; Cameron 2008, 2011; Donald 1997; Rushforth 2012; Snyder 2010). Women and children were the most common captives (as they were worldwide), and many became wives or were adopted. In other words, a way was found to incorporate them into the kinship system of their captors. Other captives lived their lives as slaves because they existed outside the kinship system of their captors and thus

were almost nonhuman (Cameron 2011; Snyder 2010). Whether these enslaved captives could ever escape slavery by joining their captor's kin group depended on the beliefs and practices of the groups in which they were held. For most of the societies along the Northwest Coast, slavery was for life, and a slave's descendants were also slaves.

In contrast to war captives who were mostly women and children, a large number of people enslaved through gambling must have been men. High-stakes gamblers—those who wagered the most important things, such as themselves or their family—were primarily men. Almost half of the accounts list only the gambler lost to slavery; in many others, the gambler was lost along with his family. Certainly, wives and children were wagered and lost, but men must have made up a larger proportion of slaves created through gambling. Gambling slaves, in contrast to war slaves, often served for a short period of time and returned to their families at the end of his or her term of service. Captives of war were rarely returned to their natal family or able to escape their captors.

The definition of "slave" as a category of social person blurs into other categories such as pawn, debt slave, and indentured servant and has been the subject of considerable scholarly debate (Bonnassie 1991:16–25; Copley 1960:4–9; Patterson 1982:13). Discussing the Chinook, a Northwest Coast group, Leland Donald (1997: 117–18) suggests, "the self-enslaved gambler did not have quite the same status as the enslaved war captive and perhaps more closely resembled the debt pawn commonly found in West Africa." In a study of debt slavery worldwide, Testart (2002:180–81) argues that a pawn is collateral for a loan in the form of a person. That person retains her status in her home lineage and can be redeemed when the loan is paid. In contrast, a slave has been severed from natal ties (Testart 2002:176).¹ Testart likens the person enslaved through gambling to the debt slave or person who has been sold into slavery rather than a pawn. But our research suggests that individuals enslaved through gambling (unlike war captives) often could go home; in other words, like a pawn, they must have retained ties to

their natal group. We disagree with Testart on this point.

Gambling, Captive Taking, and Social Distance

Games, the inevitable gambling they involve, and warfare are linked. Among the Blackfoot, "Gambling is often spoken of as fighting, or war, and in turn war is spoken of as gambling" (Wissler 1911:59). Some scholars see warfare as an extension of gaming. For many indigenous Native Americans, success in war was a young man's primary avenue for the development of social status (Maschner and Reedy-Maschner 1998; Rushforth 2012; Snyder 2010), and the skills needed to succeed in war were often developed on playing fields (Loy and Hesketh 1995).² Warfare and gambling are similar also in the social distance of the actors involved. DeBoer (2008: 235) reviewed ethnographic accounts of raiding for wives and argued that, while frequency of marriage declines with distance, "sites of wife-abduction... are likely to occur at the borders of the area from which spouses are recruited." Focusing specifically on groups that targeted captive women for wives, his data show that captives "commonly came from 50 km away or more, sometimes much more," indicating that there was a particular social distance at which captive taking was permitted and particular social distances within which captive taking was not permitted (DeBoer 2008:238). Similar patterns in the social distance between participants in gambling contests involving significant stakes are also detailed by DeBoer (2001:233–34) for ethnographically documented groups across North America.

Gambling is a social behavior with both benefits and dangers. On the one hand, it brings people together in mutually enjoyable activities, and it can facilitate the movement of goods across a landscape (DeBoer 2001; Flannery and Cooper 1946; Janetski 2002). On the other hand, it can cause anger and bitterness when a contestant loses or accuses an opponent of cheating.³ In their ethnographic study of gambling among the Gros Ventre of Montana (A'aninin), Flannery and Cooper (1946:409–14) examine social relationships among gamblers. Like other economic

interactions, gambling for the Gros Ventre was dependent on the social distances between those involved. Family members could not gamble with one another, but with increasing social distance, gambling was permitted—up to a point. A Gros Ventre band would gamble with other Gros Ventre bands or with other tribes with which they had generally friendly relations. However, they would not gamble with distant enemies. The prohibition of gambling among family members or close associates makes sense on several levels. The hostility that gambling can produce could seriously disrupt group social dynamics, a potentially lethal problem for small groups where success in subsistence activities depends on group efforts. More importantly, relationships among family and close associates are intended to be friendly and altruistic (falling into Sahlin's [1972] generalized to balanced reciprocity). To take their property would be a severe breach of these principles (Flannery and Cooper 1946:413–14).

Flannery and Cooper recognize that, in contrast to gambling as a recreation, high-stakes gambling has a strong predatory aspect in which the gamblers were looking for gain at the expense of their opponents and that the loser came away not only without his goods but often without the prestige that he had built up over an entire career.

Certain kinds of gambling were indulged in predominantly for friendly recreation, to have a good time together. The minor wagering therein merely added a little spice and zest to play, while the losers suffered no appreciable loss or hurt. Other kinds, the common games for large stakes and the occasional ones for career prestige, were indulged in predominantly for gain and this at the expense of the losers, for acquisition in which the losers suffered losses that were grievously felt and that seriously hurt. As the bettor-wager pattern shows, gambling of the first kinds was recognized as consistent with the accepted canons of in-group altruism and benevolence; that of the second as inconsistent therewith. (Flannery and Cooper 1946:416)

Similar patterns in the social distance between participants in gambling contests involving significant stakes are also detailed by DeBoer (2001:233–34) for ethnographically documented groups across North America, including groups from most of the regions in Table 16.1. Gambling took place between different villages or between different tribes but not among people in the same village. As a Chiniki First Nation Elder explained to Gabriel Yanicki, when gambling,

[Y]ou'd never see two families going at each other, or bet or compete against each other. That was always prevented because they always wanted to prevent fighting amongst each other. But it, if it was another tribe, then the competition falls into place. (Yanicki 2014:58)

DeBoer also reviewed oral accounts of gambling and found the same pattern.

North American dice gambling can be seen as an in-between or liminal activity, one playing out the ambiguities inherent in alliance, exchange, warfare, marriage, and other relations with two-faced enemy-friends who are typically situated far, but not too far, away. (DeBoer 2001:235)

Thomas McIlwraith showed that not only did enslavement through gambling have negative social implications for the gambler, it could also have negative social implications for the winner.

It was not uncommon for a Bella Coola to lose his freedom by gambling. At *lehale* specially, a player who had exhausted his goods not infrequently wagered his children, or in extreme cases, himself. If he lost, his children, or himself, became the property of the winner. Unless speedily repurchased by some relative, such slaves were usually sold or given away at the first opportunity to a member of a foreign tribe, since it was considered improper for a man to hold a member of his own tribe in servitude. (McIlwraith 1948:159)⁴

McIlwraith's observations show that, although enslavement through gambling may have occurred within a tribe, it was likely more common at the supra-tribal level, where the most negative types of reciprocity would have occurred (Sahlins 1972). Where these two zones—captive-taking and high-stakes gambling—intersect is the zone within which gamblers, as well as their wives and children, could become slaves after an unlucky turn.

Enslavement through Gambling in Prehistory: Evidence from Oral Tradition

Archaeologists are engaged in finding ways to identify captives or slaves in the past, and human remains are the best line of evidence. Skewed sex ratios identify patterns of raiding for women, where captor settlements have more women than expected and settlements that are the target of raids have fewer (Keeley 1996:68; Kohler and Turner 2006). Subpopulations of women or others that show isotopic evidence of foreign birth (Helgason et al. 2000; Price et al. 2006), as well as evidence of abuse, overwork, and poor health or nutrition, suggest the presence of enslaved captives (Harrod 2012; D. Martin 2008; Martin et al. 2010, 2012). Captives can be identified in iconography, although these are often male war captives rather than the most common captives, women and children.

Finally, warfare, captive taking, and enslavement can be found in oral traditions that support the occurrence of these activities in the past. While we may eventually be able to identify captives and slaves in the archaeological record, it is doubtful that we will ever be able to confirm that a particular slave lost his or her freedom through gambling. Our best lines of evidence are oral accounts of enslavement through gambling.

We found six oral accounts of enslavement through gambling from five of the regions defined in Table 16.1. Although a more comprehensive search for such accounts is warranted, those we found illuminate several points. Our six accounts are distributed throughout North America, suggesting that enslavement through gambling was a widespread outcome. In each case, either the wife, the family, or the gambler

himself was lost. The gambler was always male, although in one case, he was gambling with a woman (Bella Bella). This observation fits the ethnographic data presented in Table 16.1: where gamblers participated in games with stakes high enough that human lives were wagered, they were almost always men.

DeBoer (2001:234) has suggested that the social distance (and resulting animosity) among gamblers was greater in mythic accounts than those from ethnohistory. Some of the accounts we found seem to follow this pattern; others did not. Two of the accounts (Bella Bella and Yana) seem to be simply two men (or male creatures) engaged in gambling, one of whom was unlucky. The winner doesn't seem any more malevolent than the loser, and the loser seems appropriately dejected when he has gambled himself or his family away. Two accounts, from the Tlingit and Navajo, talk about a Great Gambler. The Tlingit account is fragmentary, but the Great Gambler here seems benevolent. He blesses an unlucky gambler who is then able to win back a chief and the chief's family whom he then frees. In the Navajo tale, the Great Gambler is clearly evil, reducing Pueblo people to slavery and forcing them to work for him. He is eventually vanquished, however, through the clever actions of a young Navajo couple.

In two accounts, the Koasati and the Chilcotin, the theme seems to be revenge by a loser. In the Chilcotin account, the losing gambler has lost his wife, but by some unexplained miracle gains X-ray vision—the power to see through things. With this power, he is able to challenge his former gambling partner and win everything back, including his wife. In the Koasati account, man gambles with Thunder and loses his wife. As in the Chilcotin account, he gains supernatural power—in this case, from Iron-Woman—in order to win back his losses. Both Thunder and the human burn each other badly, and the human, after regaining his wife and other belongings, chases Thunder out of the world.

Europeans—especially missionaries—disapproved of gambling in Native American communities. Above, we discussed the possibility that this may have changed the nature of gambling and our concern that enslavement through gam-

bling recorded ethnohistorically or ethnographically may not be an accurate representation of prehistoric practices (Tedlock 1992). We use oral traditions as a line of evidence for enslavement through gambling on the assumption that these accounts refer to a time prior to European settlement. Of course, we recognize that oral traditions, like any aspect of culture, are subject to modification and change to suit the needs of the time (see Dye, Chapter 6, this volume). Still, because they are used among many groups as a way to recall origins and retain traditional practices and values, they should be less subject to change than other aspects of culture. One of the ethnographers reporting an oral account did bring up this concern. Swanton (1909:138) believed that the Tlingit account was a morality tale, the result of missionary teaching that stressed the theme of moderation and mercy toward the loser. Frederica De Laguna (1972), who worked for many years among the Tlingit and was using the oral accounts that Swanton recorded, disagreed with his assessment. She believed that indeed these are virtues that the Tlingit people also valued, so the account may not be a response to missionary coaching.

Conclusions

Ethnographic and ethnohistoric accounts from across North America report people enslaved through gambling losses. Such high-stakes gambling was usually a male undertaking, but the persons enslaved could be women and children, as well as the gambler himself. Gambling was likened to warfare, and high-stakes gambling especially was entered into by players who were

at some social distance from one another, such as different bands of the same ethnic group or different ethnic groups—never by family members or close associates. The accounts collected for this study suggest that, in most cases, gambling slaves were treated differently from people captured and enslaved during warfare. They were held for shorter periods and apparently did not carry the same stigma as other slaves. Captives taken and enslaved during warfare generally could not return home because the disgrace of having been a slave was too great. In some of the societies listed in Table 16.1, gambling slaves clearly could and did return home, although for most of the cases there was not enough information to demonstrate this.

Did ancient people in North America lose their freedom when their lives were gambled away? Archaeological data demonstrating such transformations in status would be difficult to recover. Instead, we took the position that if enslavement through gambling did occur prehistorically, it may have been chronicled in oral traditions that describe the activities of ancestors and mythical creatures. Indeed, we found this to be the case, recording six oral accounts in a range of societies extending across North America. Our data gathering for this section of the study was not as extensive as we would like, and we feel that many more such accounts remain to be uncovered. We are also well aware that oral traditions do not give an unaltered image of the past. Still, the data in hand suggest that the gambling slave may well have been a not-uncommon part of the ancient social landscape of North America.

Notes

1. Other scholars also see natal alienation as a key characteristic of the slave—for example, Patterson (1982).
2. Loy and Hesketh (1995:78–79) note that this is a much more widespread pattern with games as the primary military training for both Europe knights and Japanese samurai.
3. Although gambling can generate anger and re-
criminations, many of the accounts we collected noted that gamblers tended to be philosophical

- about their losses (for example, Lawson 1714:176). We did not track this as a separate variable, but it should be pursued in future research. Most observers were reporting on the immediate outcome of the match when, presumably, the audience was still watching. How the gambler and his family reacted later, when the enormity of the loss began to sink in, may have been quite different.
4. “Lehale” is a term used in the Northwest Coast for the stick game.



Post-Game Remarks

WARREN R. DEBOER

Much like well-conceived games, the papers in this volume are instructive and enjoyable. They should ignite new interest in the archaeology of those gaming activities that are so pervasive among big-brained and playful mammals. As 16 chapters are too many to consider individually, my comments are organized (sometimes loosely) around a few salient themes that run through the volume and direct us to questions that remain either unanswered or unasked.

If “It’s Only a Game,” Then What Is It?

It’s only a word, one derived from Gothic *gamen*, “game,” “amusement,” “play,” or “hunting for sport.” According to academic legend, it was the playful polysemy of this word that turned the twentieth-century philosopher Ludwig Wittgenstein away from logical atomism (in which reality was to be mapped onto an ideal language) and redirected his attention to radically different notions involving what he called “language games,” a shift in perspective that has come to find a congenial home in much of social science (Stroll 1999:618).

In his overview of 1980, Lancy observed that games typically elude cross-cultural definition, resist systematic description in terms of either content or context, and often fall into one of those residual categories consigned to the “afterthought” chapters of ethnographies, or at least those older ethnographies that aspired to full cultural coverage. The basic classification of

games promulgated in the Royal Anthropological Institute’s *Notes and Queries on Anthropology* (Freire-Marreco and Myers 1912) and enshrined in Culin’s 1907 *Games of the North American Indians* continues in use today: (1) chance (for example, dice); (2) strategy (chess is usually cited); (3a) strength and physical prowess (most ball-games); or (3b) manual dexterity (string figures). When adding other crosscutting considerations, such as team sports versus individual (or even solitary) players, the classification becomes unwieldy and any gamelike commonalities shared by all variants sink into obscurity. If we put aside the question, what is a game? and ask instead, what do games do?, the muddle deepens. Answers range from the quasi-biological to an arsenal of social science favorites.

As several volume contributors point out, games can be fun, and, as notable antidotes to boredom, fun activities readily recruit human accomplices. As discussed in Voorhies’s opening chapter, Sutton-Smith (1997:207–13), in his tellingly entitled *The Ambiguity of Play*, elaborates this seemingly simple point by contrasting it to a Calvinist sensibility in which “fun” and “frivolity” are the companions of dissolution and waste.

In Chapter 7, Yanicki adds that from an evolutionary standpoint, games can be viewed as a form of “costly signaling” in which show-offs attempt to impress would-be mates or discourage would-be enemies. The community houses in which Maya youths practiced gaming skills were

described by Bishop Landa as lacking walls and accordingly open to public view. As such, they would have been ideal stages for ostentatious displays (see Chapter 12). Other common views are that games, as part of play, have key roles in socialization by promoting the acquisition of cultural mores and their proper situational deployment while further developing critical motor skills needed for adult competency. It is also worth noting that childhood play ordinarily takes place under relatively protected conditions in which creativity and exploration can be pursued at low cost, free from the hazards of ordinary life (compare Chapters 10 and 11 for slightly different takes on this matter). Reigning above these competing claims, however, is the abstract, elusive, yet enduring construct of social integration, a term that Latour (2005) lampoons as the “ether” of the social sciences.

By adopting a community-based rather than an elite-orchestrated perspective, Stoll and Anderson (Chapter 13) argue that the ball-game played by some ancient Maya served an integrative role that “fed *communitas* through intervillage rivalry, rooting for the home team, and the emotional high of cooperative competition”—a charming picture except for those of us with nerdy high school backgrounds and mixed memories about the hoopla surrounding sports. Similarly, Harlan’s argument, presented in Chapter 11, that ceramic figurines served as educational toys that facilitated the learning of social personae in Chalcatzingo society, comes right out of a functionalist, integrative mold in which socialization is emphasized at the expense of critique and creativity.

Following Culin (1907), several authors note that American Indian games, albeit played with enthusiasm, often resembled ceremonies and were typically infused with allusions to religion and myth. In response to this blurring of categories, the ethnographer James Howard once apologized for subsuming sports and games within a chapter devoted to religion. Echoing Williamson and Cooper’s comments on lacrosse (Chapter 4), Howard (1965:126) explained that, from the Ponca perspective, games, in fact, “were ceremonies.” For the Zuni of New Mexico,

Matilda Coxe Stevenson (1904) also emphasized that games, religion, and ceremonial life were hopelessly entangled. Zuni games followed a ceremonial calendar: were owned or sponsored by ceremonial fraternities; or sought to bring rain, fight illness, or forecast the outcome of conflict while individual players or teams were identified with mythical figures renowned for their gaming exploits. Bemused by the inseparability of games, myth, religion, and ceremonial life, Stevenson apparently felt it necessary to distinguish Zuni society from the society that sent forth anthropologists. Expressing a view that continues to pervade the gaming literature (e.g., Rogers 1990:Figure 13; Roberts et al. 1959:597), she remarked, “[A]mong enlightened peoples games are usually associated with sport and recreation.” In this view, the pre-enlightened and overlapping categories of the Zuni that often addressed “recreation” rather than mere recreation awaited some straightening out.

In the otherwise detailed index to Emma H. Blair’s history on the Indian Tribes of the Upper Mississippi Valley and Great Lakes Region (1911–1912), there is no listing for games (except for “game” in the sense of “hunted animals”), but there are entries for gambling under the heading “vices.” Again, the implication is clear: games, and play in general, stand in opposition to wholesome work of the toilsome sort. As Gutiérrez (Chapter 14) aptly reminds us in his review of the various interpretations given to, or imposed upon, prehispanic acrobatics, a basic anthropological task is to be aware of such cross-cultural clashes of canons and categories.

Rules of the Game

Rules for a good game must be flexible enough to allow players to make choices and thus avoid predetermined and hence pointless outcomes (an exception was the guessing game played at Fox funerals that was always won by the moiety of the deceased [Michelson 1925:385]). For the archaeologist, however, rules of play are not given but must be inferred from the remains of gaming paraphernalia and the playing boards, fields, lanes, and courts on which games took place. As Zych emphasizes in Chapter 5, games

are expected to display a certain degree of standardization in rules, equipment, and playing fields. In contrast to the verdict cast by Spier (1933:341) and repeated by Erasmus (1950) that the relationship between odds and payoffs in Native American dice games tended to be arbitrary, I have tried to show elsewhere (DeBoer 2001) that, at least in the case of the plumstone game, there is an acceptable, if somewhat loose, correlation between payoffs and the probability of various dice throws. The very use of plumstones may guarantee some consistency in size and weight of the dice (see Leonard's Chapter 2 on the fascinating story of *Prunus nigra*). In this regard, it is interesting to find that as post-European peach pits came to serve as dice, they were filed down to resemble their plumstone prototypes (Tooker 1994:124), while the Chipewewa called their bone dice "plumstones," much as our cubical dice may be called "bones" (Densmore 1979 [1929]:16). Continuing with size variability in gaming pieces, Zych's Chapter 5 charts local and regional variability in *chunkey* stones recovered from archaeological contexts. Based on these data, I calculated ballpark estimates of *chunkey* stone volumes (loose proxy measures of weight?). These results indicate that mean volumes in different regions range from 65 to 140 cm³. This is not an inconsiderable spread. Imagine a serious bowler switching between 10- and 20-pound balls. As summarized in Janetski's Chapter 8 and elsewhere by Molly Hall (2009), Fremont bone dice also display substantial variability. In our age of machine-produced clones, such variability is unexpected.

Sizes and shapes of Mesoamerican or Hohokam ballcourts can typically be defined by standing walls, berm outlines, or other architectural traces. "Chunkyards" (as they were called by early European observers) and the playing fields of lacrosse and shinny (the female version of lacrosse) are more elusive. Pending the use of subsurface sensing technology, historical accounts will continue as the major source of information. Unfortunately, many of these descriptions were based on eyeballed impressions rather than actual measurements. Nonetheless, a compilation and assessment of the many ref-

erences to such playing fields remains to be done and should reveal illuminating patterns, or provocative nonpatterns. At the early historic Apalachee settlement of San Luis, discussed by Stauffer and Reilly in Chapter 3, the circular plaza ballcourt is identified as such in surviving mission records. This well-documented case raises interesting questions. Was the ballcourt, like its inscribing plaza, circular? If so, how was *juego de la pelota*—as Spanish missionaries called the game—played on a circular field? How is a game that is focused on a central pole topped by an eagle's nest (shades of the Plains sundance pole!) and fringed with raptor-talon decapitators related to the *hottí icósi*, or "little brothers of war," played by Muskogean speakers of later times? Note that the extra-large chief's house and council house flanking the Apalachee plaza are also circular. They stand apart from the rectangular church, friary, and other Spanish structures and, in this regard, conform to the "round" Indian versus "square" European settlements pictured on colonial maps (Waselkov 1989). Maps have much to tell, as do toponyms, as shown by Yanicki (Chapter 7) and Seymour (Chapter 10).

One common feature that impressed early nineteenth-century observers, as well as later anthropologists, is the amount of time that Native Americans devoted to practicing gaming skills. In the 1840s, Catlin (1989:55, 134, 397) commented with dismay that the Assiniboin, Choc-taw, and Mandan seemed to be "everlastingly practicing" their games. One wonders, along with Yanicki and Ives (Chapter 9), whether such practice, perhaps in the off-season, contributed to the thousands of cane dice casually tossed into the middens of Promontory Point. The diurnal and seasonal timing of games is a matter that deserves more study. As examples, the Navajo moccasin guessing game was played during winter nights, terminating at daybreak (Matthews 1897). Among the Ojibwa, winter was the season for light-hearted practice games that contrasted with the high-stakes, high-enmity intervillage games of summer that were typically beset with violent disputes ensuing from accusations of sorcery (Landes 1971:26–28).

In the above example of Ojibwa “practice games,” one might wonder how much practice need be devoted to pure “games of chance.” Charles Lummis, writing from Isleta Pueblo at the beginning of the last century, relays a clue in the following, perhaps exaggerated account.

[N]o really aboriginal game is a true game of chance.... An expert pa-tol player will throw the number he desires with almost unfailing certainty by the arrangement of the sticks in his hand and the manner and force in which he strikes them down. It is a dexterity which anyone may acquire with sufficient practice....” (Lummis, cited in Culin 1907:191)

In this contrary sense, dice are trustworthy, albeit at the expense of fair play, level playing fields, and the other defenses mounted against the common practice known as cheating.

Bending the Rules

My introduction to cheating as an anthropological problem occurred when I was a student in a 1965 class given by Dimitri Shimkin. In a lecture on gambling among the Wind River Shoshone, with whom he had done fieldwork, Shimkin noted that the numerical scores that the Shoshone assigned to various dice combinations defied probabilistic reasoning. Rather than relinquish the notion of human reasonableness, however, the professor, tilting his head downward and peering over his spectacles in a motion that presaged a significant point, concluded with something to the effect (if my fifty-year-old notes can be trusted), “You see, Einstein need not have been worried. God does play with loaded dice, and anthropologists should know not to believe everything their informants say.”

There is little reason to doubt the general applicability of Verne Ray’s (1963:128) verdict for Modoc gambling: “cheating was rampant.” In a manner recalling the *osinolos* of the Apalachee (Chapter 3), professional gamblers in the Plateau region acted as cultural brokers during their widespread travels from group to group. These gambler-ramblers were often wealthy, held in high esteem, and considered to be “excellent

marriage prospects” (Brunton 1998:579). Their admirable reputations, however, depended completely on gambling success and could quickly topple through a change in fortune or by public detection of cheating, both attributed to the loss of the gambler’s spirit power (Gunther 1927:274). That is, cheating, if undetected, was a normal ingredient of success. Among the Puyallup-Nisqually, another Plateau group, the bone billets used in the hand game could be skillfully loaded such that opponents found them difficult to handle (M. W. Smith 1940:217). Finally, one remarkable piece of gaming equipment is the 15½-inch-long, pointed wooden stave collected by Alfred Kroeber during his fieldwork among the Arapaho and subsequently illustrated by Culin (1907:Figure 26). Arapaho women claimed that this implement, when stuck in the ground so as to oversee their bowl-and-dice matches, afforded effective surveillance against cheating (presumably by opponents, but details are lacking).

As an aside, this mystery stave raises the issue of umpires. Where are they? “Four old medicine men” who oversaw the “ceremony of measuring out the grounds” and who served as “judges of play” were mentioned by Catlin (1844:124), but, certainly, refereeing is not much in evidence in the accompanying sketches of the rough-and-tumble Choctaw lacrosse game (Plates 225 and 226) nor in the equally raucous, knock-about double-ball game played by Dakota and Ojibwa women (Catlin 1844:Plate 252); also see Copway 2014 [1850]:40). In Cherokee lacrosse, the role of “drivers,” identified by their turbans and hand-held willow switches, was apparently “to keep the game from slowing down, not inflicting penalties” (Vennum 2007:54). Thus, it is a rare and welcome sight to find umpires among the players, spectators, lovers, and musicians modeled in the ceramic ballgame tableaus of west Mexico (cf. Figure 1.2).

But is counter-cheating just another manner of gaining unfair advantage? Mooney (1890) detailed the onerous preparations facing players in the weeks preceding the Cherokee ballgame. This preparatory regimen included fasting; sexual abstinence; special diets; antisorcery potions;

ointments to be rubbed onto limbs and rackets to promote strength, agility, and stamina; and above all, spiritual guidance administered by each team's shamanic sponsor. From the Cherokee perspective, the ballgame was essentially a dramatic struggle that, although enacted by competing teams, was actually waged by two competing shamans whose relative power determined the outcome (Mooney 1890:111). The Kiowa calendar for the winter of 1881–1882 records another shamanic contest in which the home-town prophet Pa-tepte, said to make the bone “buttons” of the hand game hover in the air, triumphed over his rival, the dreaded Apache “medicine man” named Dăvéko, whose invisible darts were widely feared. According to Mooney (1898a:348), this salient event was witnessed by “a large concourse (in the medicine tipi), all dressed and painted for the occasion.” The wizardry of Maricopa shamans was even more proactive and involved casting impediments in the way of opposing runners in the kick-ball race that was so popular in much of the Southwest (Spier 1933:336).

With respect to performance enhancers, the native sports pharmacopeia was large (Moerman 1998). Perhaps best known is the black drink, an emetic (hence the taxonomic label *Ilex vomitoria*) found in association with an Apalachee council house (Chapter 3) and used throughout the prehispanic Southeast as far north as Cahokia. Iroquois players of lacrosse and snow snake macerated the roots of evening primrose and applied the resultant salve to alleviate sore muscles, while women chewed a mix of ironwood and poplar barks to rub onto plum or peach-stone dice to spike their potency (Herrick and Snow 1995:142, 176). “Bewitched” dice were common motifs in myth and to be taken seriously in everyday life. For this reason, there was great reluctance to play with dice or other gaming pieces provided by opponents. Whether invited to a feast or a gambling match, visitors were advised to “bring their own bowl” (Champlain 2012:134). Given the wariness with which one approached the gaming pieces of others, it is not surprising that Mi'kmaw wooden bowls were owned by women (Chapter 2) yet, oddly, were

carved and decorated by men. A similar separation between ownership and manufacture is recorded for the Pawnee, where “women specialists” made the gambling baskets while “medicine men” decorated the dice (Weltfish 1965:401). In the Great Basin and Plateau, finger bones were dug up from the graves of great gamblers and fashioned into dice, an exceedingly dangerous but extremely potent form of magic (Brunton 1998:581; Gabriel 1996:43). Such retrieval of body parts might account for the bone die from the Lodaiska site in Colorado that was fabricated from what appears to be a section of human calvarium (Irwin and Irwin 1959). This macabre possibility leads to related matters.

Ahead of the Game

Whether it be the nimble fingers needed to weave a cat's cradle or pitch the cane dice of Isleta, the reproving cry of *uwagi* or “mano” in Cherokee lacrosse or in modern soccer (Vennum 2007:55), the desperation following yet another scoreless toss of the plumstones, the underhanded throw of the pole in *chunky*, the overhead power shot of lacrosse, the crushing collisions of American football, or the contortions of the Mesoamerican acrobats discussed in Chapter 14, games are embodied. This somatic fact is evident in kick-focused sports such as soccer, now globally distributed, as well as in arm-based throwing sports such as baseball, largely limited to North America and assorted post–World War II enclaves and its British cousin cricket, strewn across the vestiges of empire and, like baseball, incomprehensible to most outsiders. Frank H. Cushing (1892), America's counterpart to Marcel Mauss (1990 [1950]; J. Green 1979), was a pioneer in detecting similarities between the habitual motions employed in games and other quotidian activities. In the Cushing tradition, Jolie (2002) has argued that motions employed in the Plains basket-and-dice game match precisely those used in the parching and winnowing of seeds. One might also cite the elaborate hand signals used in the hand game. Like Plains Indian sign language, this somatic code not only crosscut linguistic boundaries, it was designed to do so (Grinnell 1962:327–28).

Dismembered bodies and games (and one could add war) go together. The basic model for this association, as applied to ballgames, was put forward by Gillespie (1991:326–27) who stated, “[D]isembodied heads are related to ballgames. They also deal with the changing seasons, the movements of the sun and the moon, and agricultural fertility.” True enough. The general theme of “losing one’s head” in gambling has a Pan-American distribution and can be traced in a consortium of myths reaching from Amazonia (Tello 1923); over the isthmus to the Popol Vuh of the K’iche’ Maya (Tedlock 1996); northward to Zuni country, where Eagle Star God loses at dice and forfeits his head to the Hero Twins (Culin 1907:215); onto the Plains, where “Basket Woman” of the Pawnee is both moon and mother to all stars (G. Dorsey (1997 [1906]: 45, 186); to the Lower Mississippi Valley, with its “headpots” (given mythological context by Dye in Chapter 6); and onward to Iroquoia, where another pair of revenge-seeking twins are victorious in a dice game played against a powerful but evil gambler whose consequent beheading is widely celebrated (Curtin and Hewitt 1911: 372–74, Vennum 2007:56–57). The repetitive motifs in these far-flung myths, as pointed out by Dye and as noted by Stauffer and Reilly, led Paul Radin (1948) to posit an ancient underlying master narrative at work. Thus, gambling baskets and bowls, in addition to being likened to human skulls, have female, lunar associations, while plumstone dice are equated with stars that rise from deoculate heads, just as dice rebound upward from the downward smack of the plumstone bowl or seeds bounce in the toss of the winnowing basket. Cases of astronomical connections are numerous: Culin (1907:82, 120) for the Passamaquoddy and Acoma; J. O. Dorsey (1884:334–35) and Fletcher and LaFlesche (1972 [1911]:366–67) for the Omaha; and Dye (Chapter 6) on the Menominee and Winnebago “star dice.”

Now back to earth to deal with human rather than heavenly bodies. In their richly documented Chapter 16, Cameron and Johansson remind us that the taking of captives was endemic in Native North America and cannot be dismissed as a mere byproduct of European

invasion. “Wife capture” was also an occasional reality, not merely a European sex fantasy. Captives replaced lost family members and thus bolstered native populations decimated by disease or warfare. They could serve as drudge labor and, in some areas, are aptly named slaves. And, as Evans presents the Aztec case in Chapter 15, the pool of war captives and slaves provided a regular source of sacrificial victims. These human offerings included those hapless losers who, having tested the limits of “magical thinking,” had wagered their own bodies, sometimes piece by piece, in gambling.

Several years ago, an unnamed anthropology department was seeking to hire a primatologist. As is customary, finalists for the position gave presentations on their research to students and faculty. In this particular hiring, three of four presentations included PowerPoint slides of colorful monkey butts. One speaker even identified her animals by name on the basis of these idiosyncratic markings. Later, in the inevitable wrangling of the search committee, a cultural anthropologist, disgruntled by the fact that the department was hiring in the wrong subfield, shouted, “I identify my people by their heads, not their tails!” Coarse or amusing, this anecdote came to mind when reading Mark Harlan’s engaging and heads-up chapter (11) on the anthropomorphic figurines from Chalcatzingo, Mexico. As alluded to earlier, Harlan interprets these ceramic figurines to be toys, whose modeled features introduced children to the complex sartorial codes that marked the numerous social roles found in an increasingly complex Chacatzingo society. In developing this argument, Harlan recruits Wobst’s stylistic signaling hypothesis to draw a parallel between the ornate headdresses typifying the Chalcatzingo figures and Wobst’s own example taken from the Balkans, where conspicuous headgear allowed folks to distinguish foe and friend at a distance.

But perhaps there are more general factors at work. It is not unusual for the head region to be the focus of human attention (La Barre 1984). With respect to figurines, recall the elaborated coiffures of the unfortunately misnamed “Venuses” of the European Paleolithic (and

Neolithic) or of the Valdivia figurines of coastal Ecuador (both the authentic ones and the modern fakes). These fancy hairdos are likely counterparts to the attention-getting Chalcatzingo headdresses, and both are examples of the salience given to the head region of human anatomy (Marcus 1998:31–38). This salience may well be an extension of the facially focused visual communication forged in the mother-infant dyad and later extended to the substantial face-recognition capacities of neurologically unimpaired adults (Barrett et al. 2002:279–81). In this sense, Wobst's stylistic signaling hypothesis can be seen as a cultural cooptation of innate human tendencies. The body is a biological as well as a cultural construct.

Meme Games

The recent conceptual and technology-aided advances in the study of ancient DNA (a review is found in Culotta et al. 2015), new and controversial techniques for unraveling the history of languages (Bouchard-Côté et al. 2013; Holman et al. 2011; Pagel 2009, Wichmann et al. 2010), and a renewed interest in cultural evolution derived from Darwinian premises (Shennan 2011; Stark et al. 2008) promise a reinvigorated four-field anthropology, one equipped to offer a deeper understanding of the human past. Of course, in order for this to happen, two-way bridges will need to replace the palisades surrounding disciplines and their deeply engrained sentiments (McMahon and McMahon 2005). The payoffs of such a rapprochement are actualized in several recent studies (e.g., Seymour 2012; Shaul 2014; Ortman 2012 for the Southwest) and in Chapter 9, where Yanicki and Ives enlist cognates, calques, haplogroups, and just plain old artifacts in their account of gaming in the Plains, Plateau, and Great Basin.

On the one hand, the internal linkage of rules and formats that characterize games can be expected to impede innovation and variability over time. On the other, the relative laxity of external constraints that impinge on the exploratory world of game play ought to permit, if not actively encourage, such variability. These claims, however, remain suppositional

and untested (for a start in this direction, see de Voogt et al. 2013). Nonetheless, new insights on the history of games will surely ensue from the adoption of the Darwinian program of descent with modification, particularly when coupled with the cultural processes of borrowing and imitation that, of course, are also subject to modification (Currie et al. 2010; Lyons et al. 2011; Shea 2009). In short, like other cultural domains, games should be amenable, perhaps even well suited, to phylogenetic analysis.

In an earlier era, Kroeber (1948:417–18) noted that gambling games often covered large and compact areas that coincided with the gambling proscriptions of major religions. With a view more fitting for the Great Basin Shoshone, Kroeber's student Julian Steward, always one to reach for general significance, suggested,

The diffusion of generalized types of games was neither favored nor hindered as much as other kinds of culture elements by the peculiarities of local cultures or environments. Such games as hoop-and-pole, shinny, ring-and-pin, and the hand game are distributed across culture areas . . . in such a manner as to indicate little functional dependence upon the total culture of each area. The wide distribution of some games could be interpreted as rapid diffusion facilitated by their general acceptability. (Steward 1941:246)

According to John Price (1972:164), however, games that are “woven into the pattern of culture” (presumably “specialized” games in contradistinction to Steward's “generalized types”) do not diffuse so easily. Moreover, Edmonson (1967:202) wonders why the eminently diffusible hand, straw, stick, and moccasin guessing games seem to have stopped at the Rio Grande (which can be doubted) while among Haddon's “Eskimos,” each local group boasted a large repertoire of string patterns, but the patterns themselves had limited distributions (Haddon 1906:xix). Clearly, the diffusion of games is a highly variable process.

Applying the social distance and interaction models made famous by Sahlins (1972) and prefigured in the less famous article by Flannery

and Cooper (1946), several contributors stress that gambling in Native North America was typically an intergroup event between—to use an insightful oxymoron—“enemy friends.” Such interaction, whether reciprocated between hosting and visiting parties or taking place on neutral ground, can lead to an expansive regional network of game play, a process that Yanicki and Ives gloss as “fluency,” presumably in the sense of “flow” rather than linguistic facility. Although a common language (including sign languages, pidgins, and the like) facilitates the spread of information, it is hardly necessary for such transmission to occur. As Crump (1990:115) states, “The linguistic demands of almost any game are restricted and undemanding, so that, in actual play, an extremely involved game such as contract bridge can get by with a basic vocabulary of less than thirty words, of which a half will be numerical.”

Speaking of numbers, one might ask if languages limited to three number terms (one, two, and many) impede the development of high-scoring games. I doubt it. Similar and equally faulty reasoning might suggest that folks with two basic color terms (“light” and “dark”) are unable to appreciate the full spectrum of visible color and are doomed to spend their lives as if in a black-and-white movie. This is Whorf on steroids. Any individual with a full complement of fingers and toes can reach twenty through simple matching. More complicated somatic counting systems go much higher (e.g., Saxe and Posner 1983). Along with all the counting sticks, tally marks, and other mnemonic paraphernalia regularly employed in Native American games, there are also cases of special counting systems activated only in gambling. Among the Luisiño, for example, there are five basic number words, while special terms for six, seven, and eight are reserved for gambling (Closs 1986:33). Furthermore, as noted by many chapter authors, games—particularly gambling games—were often intergroup and multilingual affairs and, as such, hot spots for exchanges of all kinds, including the spread of number terms.

Switching from the deep time of archaeology to the short duration of human life or, in biolog-

ical phraseology, switching from phylogenetic to ontogenetic time scales, we can thank Mark Harlan for this volume’s singular contribution dealing with children. His argument that Chalcatzingo figurines were children’s toys is carefully reasoned, eminently plausible, and contrary to most prior interpretations. Not being a Mesoamericanist, my queries are of a general nature. Questioning the alleged predominance of female figurines at Chalcatzingo, Harlan makes the case that, *at most*, two-thirds of figurine fragments that can be sexed or gendered (the two are merged in the analysis) pertain to females. As Harlan is careful to point out, it does not follow, however, that the remaining one third is, by default, male! Lacking any “toy soldiers” that boys might find more appealing, it could be that the Chalcatzingo figurines were indeed dolls made by female adults for female children. This conclusion would be in accord with the list of Native North American dolls and other gendered toys tabulated by Pettitt (1946:41–43). In addition, as most convincing archaeological inferences rely on sound provenience, it’s unfortunate that Harlan is forced to rely on lumped and otherwise unspecified “residential refuse.” More tightly defined provenience units yielding fewer figurine fragments might permit some refitting of even crumbly, comminuted figurines and thus shed light on a host of taphonomic questions. Harlan’s analysis of thousands of figurine fragments is truly heroic but may generate sympathy for the view expressed by Marcus (1998:313): “Ten figurines found intact in ritual scenes, or lying near a hearth in an undisturbed Formative household, are worth 100 figurines found in fill.” Adding another order of magnitude, one might say “or 1,000 figurine fragments.” But my grumpiness should not detract from Harlan’s accomplishment.

Over 80 years ago, the usually perspicacious Edward Sapir (1951 [1934]:595) expressed wonder at “how little ethnology had concerned itself with the intimate genetic problem of the acquirement of culture by the child.” Matters have improved, and relevant studies are now legion under the banner of “cultural transmission.” But the understanding of how children acquire

(or, in a more agentic mode, “discover”) gaming knowledge remains meager. Terse, summary statements such as “all the young people imitate adult games” (Lowie 1956:97) or “children have few games worth mentioning” (Pond 1986 [1908]:116) are suspect. The latter remark suggests that Pond was effectively excluded from the often secret, adult-free world of child play, while there is much evidence to counter the general applicability of Lowie’s verdict. For instance, the Puyallup-Nisqually drew a sharp distinction between games played by adults and children, the latter rigidly excluded from bone and disk gambling “because of the connection of these with demonstrations of power” (M. W. Smith 1940: 208). In his monumental survey, Culin (1907: 715–16) apologized for his “scanty” coverage of children’s games but noted the spinning of tops, sledding, hide-and-seek, tag, whirling “buzzes,” swings, and other “amusements,” his term for the games of childhood. Finally, when what used to be called the “sexual division of labor” is applied to North American games, the distinction between games played predominantly by men, such as *chunkey* and lacrosse, and those generally associated with women, such as plumstone and shinny, is anticipated in childhood, with young boys and girls rarely playing together at the same games (e.g., J. Dorsey 1892:329). When contests between men and women do occur, it is often as opposing teams at ceremonial events, a classic case of ritual inversion (for the Shawnee, see Howard 1981).

What’s to Be Done?

Imagine a campaign slogan: “Let us move backward!” Accustomed to the futuristic and progress-promising cant of political discourse, we might sense a joke offered by the unelectable. For speakers of the Aymara languages of the Andes, however, one faces what has happened in the past, while the unknowable future lies behind (Lakoff and Johnson 1999:141). As an archaeologist, I find the Aymara perspective congenial.

As pointed out by Voorhies in her opening chapter, most authors in this volume find it necessary to cite Stewart Culin’s *Games of the*

North American Indians. This compendium, as the passionate lifework of a museum man largely unencumbered by the anthropological conceits of his time, continues to be the foundational document in the study of indigenous North American games. The present volume attempts to shed new light on the prehistory of gaming. In this endeavor, Culin’s careful description of gaming paraphernalia is of obvious use. Of course, archaeologists have been warned to death of the hazards of “ethnographic analogy.” However, in the case of plumstone dice of the Eastern Woodlands, the stick dice preserved in the arid West, the *chunkey* game witnessed by Europeans in the Southeast and Plains, and the lacrosse and stick games that continue to be avidly played (Chapter 8), it is clear that we are dealing with related “homologues” extending across what used to be called the “Protohistoric Rubicon.” In the case of other games, ancient iconography comes to our aid. Examples include portrayals of *chunkey* players on southeastern shell gorgets and ballgames in Mayan and Totonac friezes or in west Mexico’s famous miniature sculptures (Figure 1.2; also see Whittington 2001). In contrast to North and Middle America, South American games are understudied. In 1949, Cooper (1949:503–24) lamented that field data were “very imperfect and spotty,” and the largest block of “missing data” entries in a more recent worldwide survey of games pertains to South America (Chick 1998:203). There are useful accounts of particular South American games (e.g., Stern 1948 on the rubber ball game), but the continent lacks its Stewart Culin.

Let’s rotate the Aymara metaphor around and face the unknown and adopt the English pep talk of “moving forward.” As an Indo-European language, English gravitates toward threesomes rather than the quaternary partitions and repetitions so pervasive in Native American languages. I have three suggestions, all of them prefigured in this volume.

Games should no longer be a residual category, one in which are lumped the “toys,” “ceremonial objects,” and any other mysteries that form the brunt of archaeological jokes. A basis for identification now exists for various sorts of

dice; the *chunkey* game has been elevated from a casual pastime to a central institution of the Cahokia statelet (Pauketat 2009a, 2009b). New attempts had been made at clarifying the actual use of “possible gaming pieces” that have been variously interpreted as “spindle whorls,” “fly wheels,” “whistles,” or “buttons.” For example, Kamp and Whittaker (1999) have cast doubt on the gaming function of edge-ground ceramic discs, while in a second study, Kamp et al. (1999) succeed in establishing that Sinagua children modeled their own animal figurines. The simultaneous rediscovery of children in the archaeological record, along with a renewed interest in “cultural transmission” from an evolutionary standpoint, and now games, whether of children or adults, are inevitably entangled. Advances will require wide reading across many disciplines.

This leads to a second suggestion. There are unlikely to be new Stewart Culins, and we don’t need “game archaeologists” or a subspecialty dubbed “gameology.” As we have seen, games constitute a fuzzy and notoriously permeable entity that, depending on the case, merges with ceremony and ritual, bridges the sacred and the secular, mimics exchange or theft, elates winners and depresses losers, makes allies and enemies, defines fair play and cheating, creates universes ruled by destiny or chance, and calls upon the in-

tervention of gods and spirits. Games should be approached as networks with many and varying links to other cultural domains. Such an open-ended approach may begin locally but ramifies outward. It might use the Human Relations Area File as a source of clues, but be wary of cultural data shunted into what are never culture-free categories. Vennum (2007:54) recounts the case of the Mohawk-Hobart lacrosse game in which a Mohawk ball carrier “disappeared into the woods at one side of the field and reemerged near the end of the field to score the winning goal!” In games, we never can be sure when we are out-of-bounds.

Lastly, the lateral expansion of connections emphasized above needs to be accompanied by what will always be archaeology’s greatest strength—namely, the documenting of cultural change over the deep time of prehistory. For this past to be known, we must rely on vestiges surviving into the present, whether bones, artifacts, nucleic acids, foot-trampled playing fields, or those living fossils called languages. As pointed out earlier, research in all of these fields, aided by rapidly developing technologies, is opening new vistas on the human past. The archaeologists in this volume, all of whom have enlisted multiple sources of evidence in their chapters, should be set to play an active role in this endeavor.

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