Pre-Columbian Mesoamerican and Caribbean Ballgames: An Example of Cultural Diffusion

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Abstract
Upon examining the archaeological record and the historical accounts of pre-Columbian cultures in Mesoamerica and in the islands of the Caribbean Sea, one sees evidence of similar ballgames played in both regions. The question then arises, when the geographical and chronological proximity of these cultures is considered, whether these games developed separately, or whether their existence was a product of cultural diffusion. Drawing on insights from archaeology and geography, I argue that there is a connection between Mesoamerican ballgames and those played in the Caribbean. I prove this connection between the two cultures by establishing where and when the ballgame originated, showing when the ballgame arrived in the Caribbean, examining the similarities between the ballgames played in the two regions, and considering whether there is incontrovertible evidence of contact between them. I conclude by addressing what such an intercultural exchange signifies for our understanding of pre-Columbian cultures.

Introduction
Archaeologists and historians have uncovered evidence, dating from the pre-Columbian era, of a particular style of ballgame played both in Mesoamerica and in the islands of the Caribbean Sea.¹ ² The evidence consists of special playing courts, ballgame paraphernalia, depictions of the game on ceramics (fig. 1), on sculptures and in codices, and of accounts of the game in the historical records of the Europeans that colonized the New World.³
In this paper I argue that the presence of the game in the islands of the Caribbean is the result of cultural diffusion between the Mayans of Mesoamerica and the Taino in the Caribbean. Before we examine the specifics of the Mayan and Taino cultures regarding their ballgame traditions, let us first consider the argument I am making with regard to the science of geography.

Geography, like all sciences, consists of compiling a body of data and trying to make sense of it in order to discover patterns whereby larger truths can be established. One of the concepts that geographers use in understanding geographic data is diffusion. Diffusion, as described by geographers, is “the process by which a characteristic spreads across space from one place to another over time.”

Geographer Derek H. Alderman described the significance of cultural diffusion in our understanding the world, saying:

Cultures develop and change both through spontaneous, local invention and the adoption of ideas, customs, and objects from other cultural groups. As early as the 1930s, scholars suggested that “no more than 10% of all of the cultural items found in any culture—including our own—originated in that culture” (Ferraro, 2006, p. 395). The diffusion or spread of culture from a point of origin to other places and people can occur through personal contact, migration, trade, war, or mass communications. Diffusion is important to studying history, but it is also part of the trajectory of the future.

Cultural diffusion occurs within cultures and between cultures. Geographers divide diffusion between cultures into two basic types: relocation diffusion and expansion diffusion. Relocation diffusion occurs when groups of people move from one area to another. The colonization of the New World is an example of relocation diffusion. Europeans moved to the Americas and brought much of their culture with them. Expansion diffusion is the movement of cultural ideas from one region to another. Consider the case of computers and the Internet: digital technology has spread around the world. The obvious usefulness of digital technology has led to its global use. The diffusion of the ballgame from Mesoamerica to the Caribbean islands is also an example of expansion diffusion. The Mayans did not move, en masse, to the Greater Antilles, but their ideas spread to that region. I argue for this cultural connection by comparing the chronological record of the game’s existence in both
regions, by illustrating similarities between the games, and by indicating the influence
that Mesoamerican cultures had upon their neighbors. To lay the foundation for my
argument, I am going to begin by providing some background concerning the two
cultures in question.

The Mayans and the Taino

The Mayans were one of the great pre-Columbian civilizations that arose in
Mesoamerica and in the western part of South America. The Mayan culture began
to develop in approximately 600 BCE in the center of Mexico’s Yucatan peninsula,
gradually expanding until it covered the entire Yucatan, and expanding west and south
to the Gulf of Tehuantepec and east to cover most of modern-day Honduras. Their
culture was quite advanced for the time in architecture, mathematics, and astronomy,
leaving behind the impressive ruins of their cities, which are a popular tourist attraction
today. Despite their vigorous civilization, the Mayans were no match for the Spanish
who finally subdued the last Mayan kingdom in 1697. During their heyday, however,
the Mayans thrived in the rainforests of the Yucatan peninsula and in bordering regions,
extending trading networks throughout Mesoamerica and among cultural groups such
as the Taino, who inhabited the islands of the Caribbean.

The Taino were an indigenous people living in the Bahamas, the Greater Antilles,
and, to some extent, the Lesser Antilles, and were the dominant group of people in
those regions when Columbus arrived. Linguistic evidence indicates that the Taino
originally arrived in the islands of the Caribbean by traveling up the chain of the
Lesser Antilles after leaving their homeland in the Orinoco region of South America.
Archaeological evidence of Taino culture consists mainly of the ballcourts that they
had constructed. There is archaeological evidence of Taino ballcourts in the Antilles in
Eastern Cuba, Hispaniola, the Turks and Caicos Islands, Puerto Rico, and St. Croix.
The time frame for Taino ballcourt use extends from 600 CE to the early sixteenth
century, when European contact caused the demise of Taino culture.

Determining Where the Ballgame Originated

The first question that needs to be addressed is: Where did the game originate? 
Historical origins of ideas can be difficult to determine. Nevertheless, a chronological
comparison of the presence of the game in the two regions suggests that Mesoamerica
was the game’s birthplace. The earliest ballcourt discovered in Mesoamerica is in Paso
de la Amada in Chiapas, Mexico, and dates to 1,400 BCE. The game in Mesoamerica
likely dates, however, to much earlier than that; 12 rubber balls, which have been dated
to 1,600–1,700 BCE, were uncovered at the Olmec culture El Manati site in Veracruz.
As the earliest ballcourts in the Greater Antilles date to 600 CE, ballcourts appeared
in the Greater Antilles at least 2,000 years after their appearance in Mesoamerica
(1,400 BCE). In the Mayan civilization, 600 CE was the Classic Period, when Mayan
culture was at its zenith and was expanding its influence into areas beyond its borders.
We can only conclude, from this chronological comparison, that the ballgame most
likely diffused from the Mayans to the Taino.

Similarities between the Ballgames

The first clue, in examining the similarities between the games, is their overall
cultural significance in both places. In both regions, the ballgames were more than just
sports played for recreational purposes. The Mesoamerican Ballgame, a compilation
of the papers that were presented at a conference on the subject in 1985 in Tucson,
Arizona, describes the cultural significance of the game in Mesoamerica:
The game endured for 2000 years and extended over a million square miles. . . . The importance and popularity of the game to the Aztecs is indicated by the approximately 16,000 rubber balls that were imported annually into the Nahuatl capital of Tenochtitlán from the rubber tree-rich lowlands (Codex Mendoza 1938). . . . Some groups in Sinaloa still play versions of the game (Leyenaar 1978).19

As I indicated earlier, the games were more than an athletic competition: In addition to its role as sport, the ballgame was used as a vehicle to increase the power, prestige, and wealth of the elite who often bet vast sums on the outcome of contests. . . . While the historical meaning assigned to these contests often varies from scholar to scholar, the objective of the game was always the same: personal political and/or economic gain. . . . According to Theodore Stern, the game served as a substitute for direct military confrontation.21

Further evidence attesting to the political significance of the game is that parts of Mesoamerica with several different polities vying for power had many ballcourts, and areas with fewer competing powers had fewer ballcourts.22 A similar pattern of ballcourt distribution appears in Puerto Rico where, according to scholar Gary S. Vescelius, “the most elaborate courts . . . were on the putative boundaries of chiefdoms” and were perhaps used for “games between polities.”23

An interesting parallel can be drawn when one considers the significant part that sports also play in today’s societies. Sports are more than recreation; they are defining cultural characteristics that help to delineate the boundaries between nations, states, cities, schools, and individuals. Consider the clamor that arises every time there is a Soccer World Cup. To many, soccer is more important than life and death. Perhaps the world would have even more wars if it were not for the “safety valve” of sports. A similar example of substituting a competition as a proxy for total war can be seen in a sixteenth-century account of military conflict between France and England:

During the fourteenth century, war between English and French armies was raging on most French territory. Troops and Mercenaries from both countries were rampaging everywhere, bringing havoc and
destruction. In 1531, a French nobleman, Jean, Lord of Beaumanoir, offered to his English foes an opportunity to settle the quarrel. Thirty warriors from each side were to fight to the death in a closed field, the loser’s friends being banished or ruled over. On March 27, 1531, the English leader, Bembro, Lord of Ploermel, was killed, and the English army withdrew in defeat. *This part of France then knew peace for some time.*\(^{24}\) (emphasis mine)

An examination of the courts upon which the games were played, and of the paraphernalia used in the games within the two regions, offers further clues to their cultural connection. The ballcourts constructed in the two regions are different in that the Mesoamerican courts are more refined and complex (fig. 3), while the courts discovered in Puerto Rico and other islands in the Caribbean are more modest (fig. 4).

\[\text{Figure 3. Ballcourt at Chichén Itzá.}\]\(^{25}\)

\[\text{Figure 4. Ballcourt at Caguana, Puerto Rico.}\]\(^{26}\)

One of the foremost experts on Mayan civilization, Michael D. Coe, describes the ballcourt at Chichén Itzá as “the largest and finest in all Mesoamerica.”\(^{27}\) In his book *The Maya*, Coe describes the physical layout of this ballcourt:

- Its two parallel, upright walls measure 272 ft long and 27 ft high (82.6 by 8.2 m), and are 99 ft (30 m) apart. At either end of the I-shaped playing field is a small temple, the one at the north contain-
ing extensive bas-reliefs of Toltec life. That the game was played Mexican-style is shown by the two stone rings set high on the sides of the walls."28

In contrast to Coe’s description of Chichén Itzá’s ballcourt, Dr. Ricardo Alegria provides a description of the central ballcourt in the Barrio Caguanas at Utuado, Puerto Rico: “This court is a rectangle 160 feet long and 120 feet wide. The longer sides, which run from north to south are marked by lines of great stone blocks or monoliths, some of which are more than six feet high and must weigh more than a ton.”29 The basic difference then, between the ballcourts in Mesoamerica and those in the Caribbean, is that those in Mesoamerica were architecturally sophisticated, having masonry floors, walls, and often temples, while those in the Caribbean were simple dirt fields lined with monoliths.

The fact that the ballcourts in Mesoamerica were more complex than those in the Caribbean does not force us to conclude that there is no connection between them. It only indicates that those in the Caribbean were simpler, something that we should expect when examining the product of cultural diffusion between a cultural characteristic’s point of origin and outside regions. The differences between the ballcourts found in the two regions can be attributed to what geographers call place and to a similar concept, distance decay. Place is “that which makes a particular point on the Earth’s surface unique.”30 Even though the ballgames were similar, their differences are due to the particular characteristics of the places in which they are found. The factors that make one place different from others can be attributed to the different resources that are available and to the particular cultural characteristics inherent in each area. John Bale, in his groundbreaking work *Sports Geography*, articulates the process of sports diffusion, saying:

Folk games seem to have originated in certain ‘culture hearths’, diffusing away from these culture cores, and thereby modifying their form. Smith (1972), for example, basing his conclusions on anthropological evidence, suggests that the ball-play concept among indigenous North Americans spread from meso-America and in doing so assumed a variety of different forms.31 Hence, the islands in the Caribbean received the ballgame from Mesoamerica, but they adapted it to their own cultural heritage and to their own local resources. The other geographic characteristic that I mentioned earlier, distance decay, describes how, as one moves farther from a cultural phenomenon’s point of origin, the evidence of the phenomenon dilutes to the point at which the phenomenon no longer is evident.32 As one moves away from the ballgame’s point of origin, gradual differences can be detected, as the previous paragraphs indicate. Nevertheless, enough similarities can be detected to indicate a common point of origin.

Parallels between the games played in the two regions can also be seen when examining the artifacts associated with the ballgame. A common artifact associated with the ballgame in Mesoamerica is the yoke, a piece of equipment that the players often wore around their waist or on an arm or leg.33 There have been numerous yokes recovered from archaeological sites (fig. 5), as well as numerous depictions of players wearing yokes in figurines, carved on monuments, painted on ceramics, and recorded in the various Mayan codices that have survived the centuries.
Archaeological investigations of Taino villages in the Greater Antilles have yielded stone yokes of similar design to those found in Mesoamerica (fig. 6). This fact also supports the idea of cultural diffusion between the two regions. Irving Rouse, in The Tainos, tells of these artifacts and their possible use:

It is not uncommon to find fragments of “stone collars” and “elbow stones” in and around the Puerto Rican courts. The collars are complete rings shaped to fit around the human waist... Analogies in Mesoamerican archeology suggest that the wooden and the lighter-stone collars and elbow stones were worn by ball players as belts with which to protect their bodies and to deflect the ball.

A comparison of how the games were played in the two regions also yields clues to their having a cultural connection. In Rouse’s book, the game played among the Tainos is described thus:

The teams, each with ten to thirty players, occupied opposite ends of the court, as in tennis, and alternated in serving the ball. Players attempted to keep it in motion by bouncing it back and forth from their bodies to the ground inside the limits of the court. They were not allowed to touch it with their hands or feet.

Accounts of the game in Mesoamerica describe similar parameters of play: “One interesting property of the game was that the ball was struck mainly with the hip, buttocks, or knee: hence the name ‘hip-ball game.’” Lastly, in establishing the
cultural connection between the games played in the two regions, is the fact that the Taino word *batay*, referring to the ballgame, is also found in Classic Mayan inscriptions in the same context. 39

**Proof of Contact between the Two Regions**

Having established that there are similarities between the ballgames played in the two regions, I will now examine whether there is incontrovertible evidence of contact between them. Among the evidence that archaeologists look for when trying to determine if there was contact between one culture and another is the discovery of artifacts in one area that could only have originated in another. Evidence for contact between Mesoamerica and the islands of the Caribbean is proven by the fact that pre-classic Mayan jadeite axes have been discovered on the island of Antigua. 40 A mineralogical analysis of these artifacts indicates that they could only have originated in Guatemala. 41 Jadeite stone axes do not float, so they could only have made the journey via canoe.

Columbus, during his voyages through the Caribbean, was aware of the strong seafaring tradition among the Mayan and the Tainos: “Columbus was the first European to reveal that the Indians of the New World were seafaring trading peoples who roamed throughout the islands in large trading canoes. Columbus’s reports concerned primarily the trading voyages of the Taino in the Caribbean islands he had discovered in his four voyages.” 42 An examination of the geography of Mesoamerica and the Caribbean shows that the Mayans only needed to cross the Yucatan strait between the mainland and Cuba to interact with the Taino (fig. 7). Such a journey could easily be made in one of the large trading canoes that Columbus mentioned.

![Map of Mesoamerican civilizations](image)

**Figure 7.** Map of Mesoamerican civilizations. 43

A subset of the Mayans, called the Chontal Mayans, who lived on the Gulf Coast of Mexico, had a particularly vigorous seafaring tradition and have been called the Phoenicians of the New World. 44 My conclusion, therefore, when taking into account the similarities in ballgame paraphernalia, the similarities in the game’s social significance, and the jadeite artifacts discovered in Antigua, is that there was indeed contact between the two regions and that the people in these regions must have been aware of each other’s ballgame traditions.

Despite my assertion that the ballgame diffused from Mesoamerica to the Antilles, it could be argued that the games developed independently. Given the complexity of the games, this is not likely, as John Bale explains:
Tylor (1880), regarded by many as the ‘father of modern anthropology’, noted that while some simple games such as wrestling or throwing a ball had grown up independently in a number of geographic locations, others seemed so distinct and artificial that it was unlikely that their distinctiveness could be hit upon more than once.45

What the Diffusion of the Ballgame Signifies

What can we learn from this cultural connection between the two regions? When investigating matters of a historical nature, it is sometimes helpful to draw parallels between cultures. Doing this comparison helps us to see the commonality of humankind, and it helps us to see the differences between cultures across chronological and geographic space. The cultural connection between the Mayan civilization and the Tainos, when the Mayans were at their zenith, indicates the cultural hegemony that the more-advanced Mesoamerican cultures imposed upon their neighbors. A cultural parallel to this is the Roman civilization. The cultural influence of the Roman empire on its neighbors, when it was at its greatest extent, is described in Western Civilizations:

Although for convenience’s sake historians speak of the empire’s borders, in fact these borders were highly fluid and permeable. We ought, more properly, to speak not of “borders” but of “frontiers,” and to see these frontiers as zones of particularly intensive cultural interaction between provincial Romans and the non-Roman peoples who lived beyond them.46

The advanced Mesoamerican civilizations asserted a similar cultural influence over their neighbors. Certainly one of the most important aspects of Mesoamerican culture, the ballgame, would have been shared with cultures beyond its borders.

Notes

3. Codices are ancient manuscripts.
9. Ibid.
12. Ibid., 704.
14. Ibid., 60.
22. Ibid., 17.
28. Ibid.
37. Ibid., 15.
38. Ibid., 3.
40. Ibid.
42. Ibid., 2.
Bibliography


