RECONSTRUCTING ANIMAL EXPLOITATION BY PUEBLOAN PEOPLES OF THE SOUTHWESTERN UNITED STATES USING MIMBRES POTTERY, AD 1000-1150

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Summary

Much of prehistoric animal use can only be inferred from archaeological deposits, except when portrayed in prehistoric art. The Mimbres-Mogollon of the southwestern USA are known for their elaborately painted ceramic bowls, many of which depict naturalistic motifs. Examination of the more than 6300 Mimbres pottery archive files at the Maxwell Museum, University of New Mexico, and other published information, revealed less than 120 bowls that depict humans/human artifacts and animals together. On these vessels, detailed scenes of hunting, fishing, trapping, and snake ceremonies are depicted.

Résumé

Reconstitution de l'exploitation des animaux par les Amérindiens Pueblo des États-Unis du sud-ouest en utilisant les poteries des Mimbres (1000-1150 ap. J.-C.).

L'utilisation préhistorique des animaux ne peut se déduire que des gisements archéologiques, à moins qu'ils soient dépeints sur les objets d'art. Les Mimbres-Mogollon des États-Unis du sud-ouest sont connus pour les bols céramiques décorés dont beaucoup représentent des motifs naturalistes. En examinant plus de 6300 fichiers sur la poterie des Mimbres au musée Maxwell, à l'Université de Nouveau-Mexique, et d'autres renseignements publiés, on découvre que moins de 120 bols décrivent des êtres humains ou des artefacts avec des animaux. Ces vases figurent des scènes de chasse, de pêche, et de piégeage, et des cérémonies du serpent.

Zusammenfassung

Die Rekonstruktion der Nutzung tierischer Ressourcen mit Hilfe von Töpfereiprodukten der Mimbres (1000-1150 n. Chr.).

Viele Informationen über prähistorische Tiere können heute nur noch aus archäologischen Quellen erschlossen werden; es sei denn, die Tiere wurden in vorgeschichtlichen Kunstwerken dargestellt.

Die Mimbres-Mogollon im Südwesten der USA sind für ihre kunstvoll bemalte Keramik bekannt. Viele Gefäße tragen naturalistisch ausgeführte Motive. Die Untersuchung von mehr als 6300 Keramikproben aus den Beständen des Maxwell Museums, Universität des Staates New Mexico, brachte 120 Gefäße zutage, auf denen Menschen, bzw. Gegenstände und Tiere zusammen abgebildet sind. Auf ihnen sind detailgenaue Szenen aus Jagd, Fischerei und Fallenstellerei zu erkennen. Außerdem ist ein Schlangenkult nachzuweisen.

Key Words

Southwest USA, Pottery, Hunting, Fishing, Trapping, Ceremony.

Mots clés

États-Unis du sud-ouest, Chasse, Pêche, Piégeage, Cérémonie.

Schlüsselworte

Südwesten der USA, Keramik, Jagd, Fischerei, Fallenstellerei, Kult.

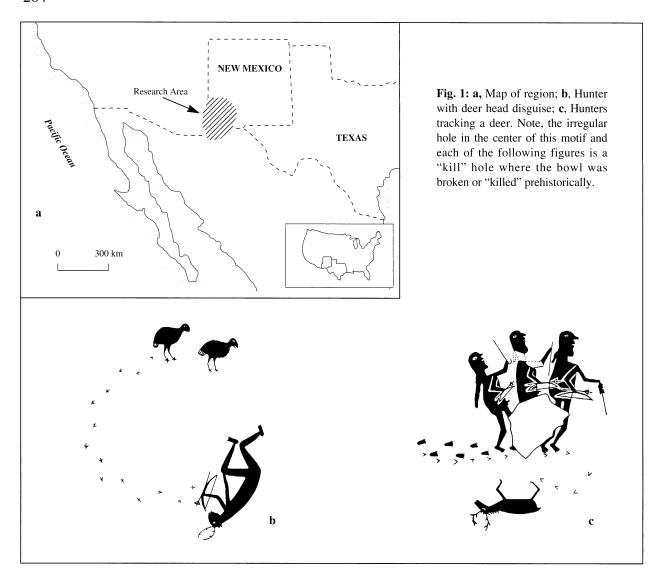
Introduction

Archaeologists of Prehistory often lack the perspectives of the people they are studying because the only record left by many of these peoples is their rubbish. However, the prehistoric Mimbres people of the southwest USA (fig. 1a) have provided detailed depictions of nature and their life-

ways in their ceramic art (Kidder, 1924; Brody, 1977; Kabotie, 1982; Scott, 1983; Fewkes, 1989: 23-24 [1914, 1923, 1924]; Shaffer *et al.*, 1995). The significance of these motifs lies in that they are the Mimbres' own documentation of these activities, and often are the only definitive evidence of Mimbres specific behaviors and technology.

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The Mimbres people

The Mimbres people were a sedentary people that lived primarily in what is now southwestern New Mexico (fig. 1a). The name Mimbres is derived from the Mimbres Valley where the major concentration of Mimbres puebloan sites occur. These people were horticulturalists, but also procured a variety of wild game. From 200-1000 AD, Mimbres life was concentrated in pit house villages. By around 1000 AD, the Mimbres changed architecture and built above ground Pueblos. At this time, they also began manufacturing their Classic Mimbres pottery (Anyon and LeBlanc, 1980; Anyon *et al.*, 1981; LeBlanc, 1983; Shafer and Taylor, 1986; Shafer and Brewington, 1995), most of which entailed geometric designs, although many were of naturalistic motifs. By 1150 AD, the Mimbres Valley was abandoned and the pottery was no longer

produced. What makes Mimbres pottery so useful is the detailed naturalistic motifs that portray Mimbres lifeways. Many of the portrayals include facets of life involving animals, including their roles in hunting, fishing, trapping, and ceremony.

Hunting methods and tools

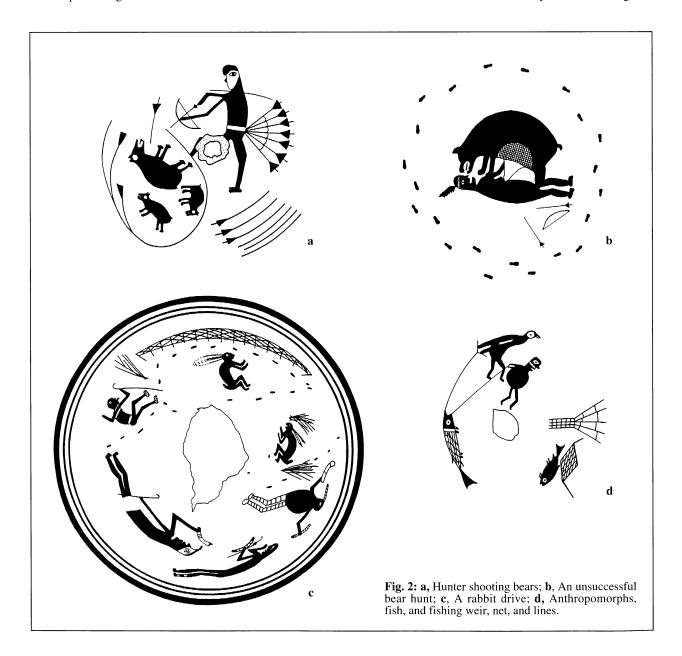
Mimbres pottery shows a variety of hunting motifs that include various methods and tools for the procurement of game. Figure 1b shows a human with a deer mask, carrying a bow and arrow and following the tracks to two birds. The use of such disguises by Native American hunters has been documented ethnographically (e.g. Steward, 1938: 36), and as is shown with this bowl, also occurred prehistorically. Figure 1c shows three humans carrying bows, arrows, crooks, and an unidentified object.

These individuals are tracking a male deer. Notice that the foot prints of the humans follow the foot prints of the deer. While it is not surprising to find that the Mimbres practiced animal tracking, it is surprising to find it so clearly documented prehistorically.

One set of equipment that shows up frequently in Mimbres hunting motifs is the use of the bow and arrow. Figures 1b-2b, 3b all portray people with bows and arrows while engaging in hunting activities. There are numerous other bowls that simply show animals portrayed with arrows protruding out of their bodies. As can be seen from

these motifs, humans are shown in the process of hunting and being successful in procuring game. Figure 2a shows a human shooting arrows at an adult bear and two cubs. This motif has been interpreted by LeBlanc (1983: 135) as a hunter shooting at a mother and two cubs in their den, two of the arrows having missed, and one about to strike the mother bear. As can be seen in figure 2b, however, the hunt was not always successful.

One other hunting tool, the net, appears to have been used for smaller game. One of the ways in which historic hunters of the American southwest procured small game



that was abundant in large number was by the use of the "rabbit drive." In such a drive, people would set up a net in one location. They would then form a line of humans in another location and drive the game towards the net. The game would become entangled in the net or would try to escape. As can be seen in Figure 2c, the four humans are trying to catch two jackrabbits. One of the jackrabbits (by the net) has run in a circle (see foot prints) in attempting to escape. While it has been known that rabbit drives occurred historically (e.g. Spier, 1928: 112-113; Beals, 1933: 348-349; Hill, 1982: 52), this vessel offers solid evidence that the rabbit drive was in practice prehistorically, nearly 1000 years ago.

Fishing

One of the truly unique aspects of Mimbres pottery is the repeated presence of fish motifs. In fact, Brody (1977: tab. 2) indicated that fish represent 11% of the animal motifs that appear on Mimbres pottery. Contrary to the amount of fish noted on the pottery, Anyon and LeBlanc (1984: 218) and Nelson and LeBlanc (1986: 235) stated that fish were of no food value to the Mimbres based on a lack of fish bones from archaeological sites and the ephemeral Mimbres River. However, Shaffer (1991) found fish remains (mostly of minnow-sized fish) throughout the deposits recovered with flotation at the NAN Ruin, located in the Mimbres Valley.



The discrepancy of fish between the archaeological deposits and the pottery may be explained, in part, by the types of fish represented. Gladwin (1957: 224-231) and Jett and Moyle (1986: 688-720) noted that many of the fish represented in Mimbres pottery are actually marine fish, probably from the Gulf of California and the Pacific Ocean, some 500 km to the west. Given the unlikely circumstances that the Mimbres were avid fishermen in the Mimbres Valley, the portrayal of the variety of fish and tools used in their exploitation was unexpected. These tools include fishing line, fish weirs, and fish net.

Shown in figures 2d and 3a are examples of fishing and fishing technology. Two anthropomorphs are shown holding lines going to a fish's mouth (fig. 2d). The use of a fishing line implies that there is a hook on the end of the line that is caught in the fish's mouth. The possibility of fish hook technology makes this bowl especially unique because no fish hooks have been identified from any Mimbres site. Figure 2d also shows a probable fish net and fish weir (Jett and Moyle, 1986: 710). Another fish weir may also be displayed on figure 3a. In this figure, a bird-headed anthropomorph holds a fish in one hand, fish on a pole in the other, and the bundle in the upper left appears to be a fish trap (Moulard, 1984: 113; Jett and Moyle, 1986: 711).

One additional piece of fishing technology, the fishcarrying pole, is displayed in figure 3a and has not been found archaeologically. Hudson and Blackburn (1979: 307-308) noted that such a device was described ethnographically for the Chumash of California, but no archaeological specimens were known. The tool was described simply as a stick with a hook on one end, the length being two feet long or longer (Hudson and Blackburn, 1979: 307-308). A similar Mimbres motif with a fish-carrying pole was described by Shaffer (1991: fig. 6.2). The purpose of the pole is for transporting fish after they have been caught. The lack of recognition of this form of technology in the archaeological record may be due to the pole being created from a perishable material that has not survived, or not being recognized by archaeologists. Such a construction would not require significant alteration to a stick or branch. As such, this would be an expedient technology that might be overlooked archaeologically, even if preserved.

Trapping

Two bowls show a unique trapping sequence. The first bowl, figure 3b, shows people setting traps. Note that the trappers have placed their other tools, bows, arrows, and shields (?), to one side. It would have been difficult to positively identify the individuals as setting snares if it were not for figure 3c. Figure 3c shows a male trapper holding

three snares. Additionally, three of the four snares have caught birds. Two birds have managed to evade the traps and walked away.

The Pueblo Indian snake ceremony

Ceremonies using live snakes are highly publicized events of many southwestern Pueblos, due in part to the handling of rattlesnakes. Two major Pueblo ceremonies involve the use of live snakes, the summer snake dance ceremony and the Snake Society initiation ceremony. Both of these ceremonies require the participants to handle and dance with snakes (White, 1962; Fewkes, 1986: 302-303 [1897]).

Shaffer et al. (1995) documented that the Mimbres possibly portrayed snake ceremonies in their bowls (fig. 3d). If so, the Mimbres bowls represent the earliest documentation of the Pueblo snake ceremony (Shaffer et al., 1995). Figure 3d shows a human carrying two snakes, with a third snake present in a nearby jar. The human has face striping, similar to that worn by the snake clan dancers during the snake dance ceremony (Stephen, 1936: 580-581). The jar painted on this bowl is similar to ones described for the holding the snakes before and during summer snake dance ceremony (e.g. Stephen, 1936: 614, 730-731; Bourke, 1984: 109 [1884]; Fewkes, 1986: 970 [1897]). It is based on the graphic similarities between this motif combined with two other motifs (not shown here), and the ethnographic record documenting Pueblo snake ceremonies that Shaffer et al. (1995) hypothesized that the earliest recovered depictions of the snake ceremony were documented by the Mimbres.

Discussion

We have shown that Mimbres pottery provides very detailed information about the interactions of humans and animals. As such, we can infer much about hunting tactics, trapping, fishing, game drives, and snake ceremonies. Mimbres pottery is truly one of the few media that can provide us with such specific information about prehistoric human behaviors from the American southwest. Specific attributes in these hunting motifs that have not been identified prehistorically without the Mimbres self portraits include hunting disguises (deer headed hunter), tracking, trapping, and rabbit drives.

The bowls with fish motifs are important because of the renderings of fishing tools. Here we have the use of fish lines and possible fish hooks, weirs, nets, and fish-carrying poles used in the procurement of fish. Since these tools have not been recovered archaeologically, it is doubtful that their use would have been recognized without these motifs.

The renderings of Pueblo snake ceremonies in Mimbres pottery are quite surprising. These ceremonies would have left little or no archaeological evidence to indicate their performance in prehistory (Shaffer *et al.*, 1995). As such, no other archaeological finds have dated the ceremony prior to the entrance of Europeans into the southwestern

USA. Clearly, the hunting strategies, tools, and many of the other activities documented on the vessels would have been difficult to recognize archaeologically had it not been for their portrayal by Mimbres potters.

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