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Dogs in the Southwest

Tobi Taylor, Center for Desert Archaeology

Alan Ferg, Arizona State Museum

Dody Fugate, Museum of Indian Arts and Culture

DOGS AND HUMANS have lived together for a very long time. In fact, some scholars say that over the millennia, reciprocal behavior between the two species has produced more of a symbiosis than domestication. When and how this association began is still being debated, but there is no question that it has gone on far longer than for other domesticated species; when humans arrived in the Western Hemisphere, they already had dogs with them. Thus, when people first came to live in the Southwest, they undoubtedly arrived with their dogs.

Dogs followed Archaic people on their seasonal rounds and did tricks for their Mogollon masters. They drank from, and played in, Hohokam irrigation canals, and their hair was used by Ancestral Pueblo weavers. Dogs traveled with, and sometimes did the dark bidding of, the conquistadors, lived through the Pueblo Revolt, and have long herded Navajo sheep. More than mere witnesses to human history, however, dogs have served many purposes—as guards, hunting guides, draft animals, babysitters, bed warmers, cleanup crew, and food and fiber resources, to name a few.

Dogs have also played a part in Southwestern traditional stories, ritual, and art. In oral histories, they have been depicted in positive and negative ways, as both helpers of mankind and the embodiment of witchcraft and evil spirits. Dog impersonators have also taken part in Pueblo dances, even as kachinas. And there is a panoply of art, both ancient and modern, that depicts dogs and their kin, many examples of which are illustrated in this issue.

Today, dogs in the Southwest fill a variety of roles besides that of cherished pet. They herd cattle, guard sheep, participate in hunting, and are exhibited in dog shows. They work as service animals for the handicapped, as therapy dogs, as members of the police K-9 corps, and in the Border Patrol. As anthropologist Marion Schwartz has noted, “What

This photograph, titled Benjamin and His Brood of Little Dogs, was taken in Rancho San Pedro, Sonora, Mexico, on a cold morning in 1995. It illustrates many of this issue's themes. The dogs (and one cat) are clearly social animals, and they are part of a human household. Their relationship with their human companion structures their interaction among themselves, as well as with human society.



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Issue Editors: Alan Ferg and Tobi Taylor

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is most remarkable about dogs is their ability to adapt to the needs of the people with whom they live. Dogs have proved themselves amazingly flexible beings.”

Continuing the tradition begun with our theme issues on horses and birds (issues 18:3 and 21:1), this issue of *Archaeology Southwest* explores some of the roles that dogs have played in this area, from prehistory to the present.

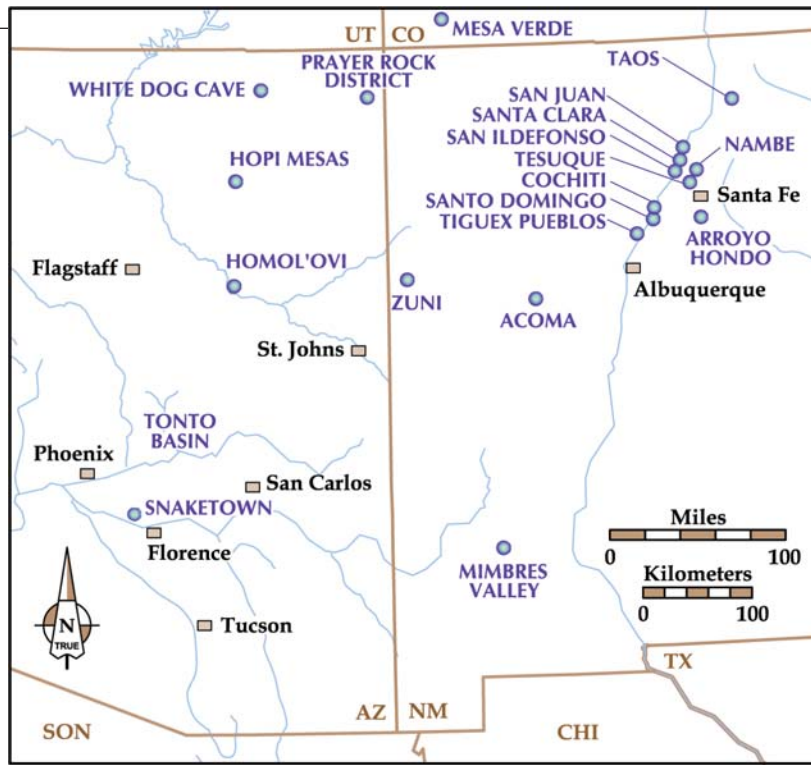
First, Jennifer A.

Waters reviews the archaeological evidence of dogs in the Early Agricultural period in the southern Southwest. She finds that dogs were used in a variety of ways in both daily life and ritual, including as food, as resources from which to make tools and jewelry, and as burial offerings.

Dody Fugate discusses the changing role of dogs among Pueblo groups from prehistoric to modern times. David H. Snow looks at how dogs are depicted in traditional stories from Pueblo groups. Rachel Freer and Mike Jacobs write about two Ancestral Pueblo sashes that are believed to be made of dog hair. Alan Ferg examines some unusual Ancestral Pueblo dog-effigy vessels. And Vincent M. LaMotta examines two dog or coyote sacrificial burials at the ancestral Hopi site of Homol’ovi I in northern Arizona.

Marc Thompson writes about the Mexican hairless dog, which, for centuries, was a major food source throughout Mesoamerica. Interestingly, this breed was brought back from the brink of extinction by Mexican artists Diego Rivera and Frida Kahlo.

J. J. Brody provides insight into the depiction of dogs and doglike quadrupeds on Mimbres bowls, and concludes that the most realistic depictions of dogs in Mimbres art are those that show them interacting with humans. Then, Tobi



Archaeological sites and geographical locations mentioned in this issue.

Taylor considers dogs in Mimbres-themed contemporary art.

Steven R. James and Michael S. Foster discuss several dog burials and a cache of figurines found at the Hohokam site of Pueblo Grande, in Phoenix. Alan Ferg writes about contemporary treatment of prehistoric dog burials and figurines by tribes in southern Arizona. And T. Michael Fink looks at the incidence of a fungal disease known as valley fever among the Hoho-

kam, and suggests a research avenue that involves dogs.

William H. Doelle and Richard Flint discuss the Spanish practice of using dogs to attack Native Americans. And Tom Kolaz recounts the invention of dog masks by Yoeme (Yaqui) carvers.

Alan Ferg presents a portfolio of Southwestern artwork depicting dogs from prehistoric to contemporary times. Finally, William H. Doelle discusses how dogs contribute to our sense of place.



This photograph, taken by Daniel A. Markey in 1887, shows Apache women, accompanied by their dogs, delivering hay to the quartermaster at San Carlos, Arizona. In the same year, historian Will C. Barnes wrote about Apache canines: “Big dogs, little dogs, lean dogs, fat dogs, dogs of every color, size, shape, and breed; dogs with only three legs, with only one eye, with ears cut off, and ears split . . . in fact, a congregation of dogs” (courtesy Sharlot Hall Museum, Cat. No. IN-A-100P).

Early Dog Burials in the Southern Southwest

Jennifer A. Waters, *Desert Archaeology, Inc.*

DOG REMAINS in early Southwestern sites suggest that dogs played many roles in both life and death. Dogs—either whole or in part—were buried, occasionally with humans. This treatment may mean they were pets, hunting companions, or ritual offerings. Isolated bones, discarded in trash areas, some burned or with cutmarks, suggest that some dogs were eaten by prehistoric peoples. Dog bones were sometimes made into awls and other tools, and perforated dog teeth were used as pendants.

The earliest dog (or possibly coyote) burials in southern Arizona were recovered from sites along the Santa Cruz River in Tucson. A partial burial, two skulls in a pit, and two partial skulls were found at the site of Las Capas. These dated to the San Pedro phase of the Early Agricultural period (1200–800 B.C.).

Adjacent to Las Capas, another San Pedro phase settlement, the Costello-King site, yielded a severed domestic dog skull buried in a pit. The back of the skull showed damage related to its removal. This skull, like those at Las Capas, was from a medium-sized to large dog—i.e., an animal that was between a Springer Spaniel and a German Shepherd in size.

More recent in age are three domestic dog burials (two adults and a puppy) from Los Pozos, a settlement occupied during the Late Cienega phase of the Early Agricultural period (400 B.C.–A.D. 50). The adults were small (Cocker Spaniel-sized) to medium-sized dogs. It appears that one adult dog was placed on a pithouse roof before it burned. The roof fall from this pithouse also contained a dog-tooth pendant. The other adult dog appears to have been placed on a pithouse floor at abandonment. The puppy was buried in a pit; two awl tips were recovered from the same feature, perhaps intended as grave goods.

Another Cienega phase burial of a small to medium-sized domestic dog was excavated at the site of Santa Cruz Bend located on the northern side of Tucson.

The largest number of early dog burials in the region was recovered from the La Playa site in Sonora, Mexico. The excavations produced thirty dog burials from Early Agricultural contexts. Those burials are currently being analyzed by Patricia Martinez Lira of the University of York.

There appears to be a pattern of decreasing dog size through time: the earliest dogs from the San Pedro phase (Las Capas and Costello-King sites) were medium-sized to large animals; subsequent Cienega phase dogs (Los Pozos and Santa Cruz Bend) were small to medium sized, as were three dogs from the Early Ceramic period Houghton Road site. However, this may simply be a matter of the small sample size available at this time, because Hohokam-era dogs of all sizes have been recovered, as well as one individual that was even larger, from the Classic period (A.D. 1150–1450) component of the San Xavier Bridge site.

The analysis of the La Playa dogs and the recovery of new specimens from sites in the Tucson Basin should reveal a clearer picture of the relationship between humans and dogs during the Early Agricultural period.



This is one of thirty dog burials found at the La Playa site in Sonora (courtesy Proyecto La Playa, INAH, Sonora; photograph by Gorge Morales).

See the Center for Desert Archaeology website for more information: <<http://www.cdarc.org>>

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Pueblo Dogs

Dody Fugate, Museum of Indian Arts and Culture

THE LIST OF FUNCTIONS that dogs served in Pueblo villages presents an interesting dichotomy. They tended to be viewed simultaneously as superior animals and inferior humans. Dogs acted as guardians, hunting companions, bed warmers, field protectors, and probably, on occasion, ritual guardians for shamans. They also ate leftover food in cooking areas and cleaned up the latrines. Clearly, dogs played an important role in controlling disease.

Unlike in Plains cultures, Southwestern dogs were only rarely used as beasts of burden. Nor is there much evidence of widespread use of dog meat as a part of the regular diet, as it was in Mexico (see page 9). An exception to this is known from Arroyo Hondo Pueblo (A.D. 1300–

Dogs, who may have been used as shamanic spirit guides, had less of a role as individual spiritual protectors but still retained some of their older religious guardian functions. There are examples among the Hohokam and Pueblo peoples of dogs as sacrificial objects (see pages 8 and 12–13).

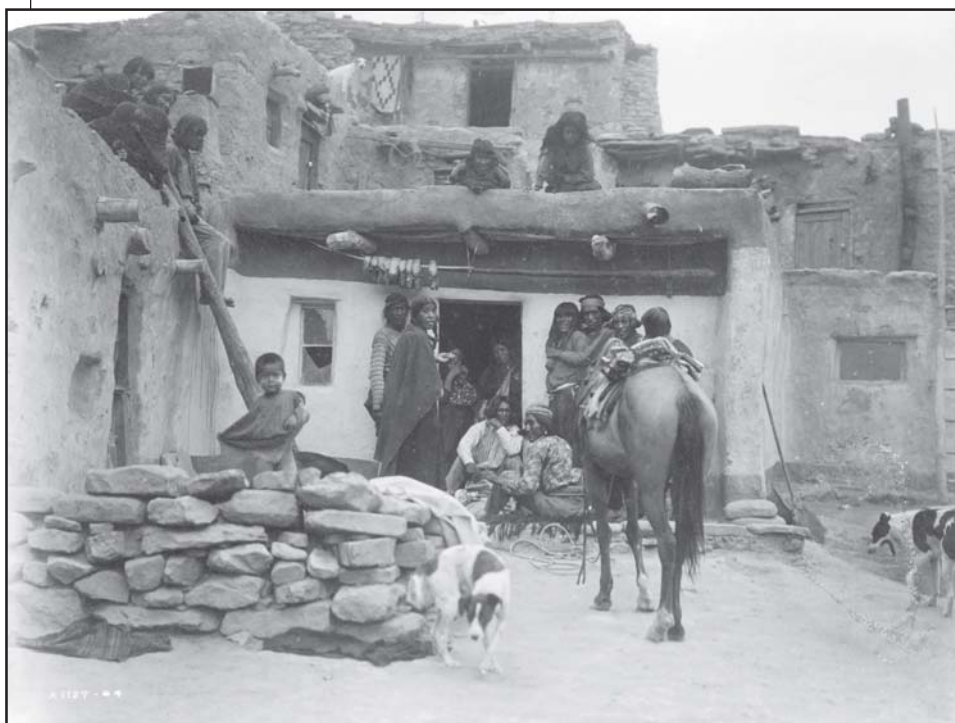
All over the world, dogs have been depicted escorting the dead to the next life. As such, dogs are often buried with humans. Throughout the Southwest, entire dogs or dog skulls are included in human burials (see page 3). This practice, however, became less common over time. Although dog burials were common among some Southwestern groups, other groups show no evidence for this treatment of dogs. Interestingly, the region with the most dog burials is the San Juan Basin, where dogs were buried in graves and in important structures.

Dogs are also related to guarding entrances, both literally and in the afterlife. In the prehistoric Pueblo world, dogs are found buried in structures, often as a part of the closing rituals when a place was deconsecrated (see page 8).

Another aspect of dogs that appears to have been important is their color. Among some native groups, such as the Pawnee and Iroquois, dogs with white coats seem to have been desirable for religious functions. What the color of a dog had to do with religious practices is hard to determine when so few examples of coat color remain. In some Southwestern sites, like Long House at Mesa Verde in southwestern Colorado, dogs were buried in the four corners or on four sides of a structure. No evidence remains about the color of these dogs, but it is intriguing to speculate that each may have been a different

color. Dog hair, mostly white, was also used in sashes, belts, and kilts (see page 6).

After the arrival of Europeans, who brought their the Christian concept of “man holding dominion over the animals,” the Pueblos’ perception of dogs appears to have changed, as seen in dogs’ present roles as bothersome hangers-on and individual pets. After the arrival of Spanish priests, dogs ceased to be buried. “We bury humans, not animals,” Pueblo people now say. Still, there are dog



At Pueblo villages, dogs were known to climb ladders, and sometimes had to be chased off of roofs. This photograph, taken in 1905 at a Hopi pueblo in Arizona, shows three dogs, including one (at top) that could have climbed a ladder to this vantage point (courtesy Library of Congress; photograph by Edward S. Curtis).

1400), where there was a great reliance on dog meat. At other Pueblo sites, dog meat was eaten only rarely, perhaps as part of a medicinal diet. Ethnographic evidence indicates that dogs were eaten at Hopi during the 1800s, but few dog bones show evidence of dogs used as a food source prior to the 1700s.

From about 1250 into the 1300s, religious practices appear to have shifted from shamanism to a more structured religious organization involving the whole pueblo.

dances at some Pueblos, and dogs have been found on religious paraphernalia as representations for all domestic animals (see David H. Snow's article below).

Today, although time and change may have taken dogs out of Pueblo religious life, dogs still live in Pueblo villages, performing their age-old duties.



Dog Mummies at White Dog Cave

IN 1916, two rare, well-preserved mummified dogs were found at White Dog Cave, in northeastern Arizona, by archaeologists Samuel Guernsey and Alfred V. Kidder. White Dog Cave was occupied by humans and canines during the Basketmaker II period (about 400 B.C.).

When the archaeologists excavated the larger dog, which was light colored, they assumed that, in life, it was white—hence the name of the cave. However, when zoologist Glover M. Allen later examined the dog, he wrote that “The hair is still in good condition and though now a light golden color with cloudings of dark brown, it may in life have been darker.”

Today, both dogs are in the care of the Peabody Museum of Archaeology and Ethnology, Harvard University.

Top: This dog was about two years old when it died. Zoologist Glover Allen wrote that it was “a long-haired animal the size of a small collie, with erect ears and long bushy tail.” Bottom: This dog was about eight months old when it died. It was described by Allen as “a much smaller black-and-white individual, about the size of a terrier, with short, but not close, shaggy coat, erect ears, and long full-haired tail” (photographs by Dody Fugate).

Pueblo Dog Tales

David H. Snow, Cross-Cultural Research Systems

FOR MORE THAN A CENTURY, anthropologists and others have recorded stories from Pueblo societies. Some of the diverse tales including dogs are briefly recounted here.

There is a Dog Katsina at Hopi, representing domesticated animals. It is depicted on the kiva altar cloth during the Nima'n ceremony. Prayer feathers might be tied to a dog's neck or tail, as on other domestic animals, to promote their increase. And, according to anthropologist Elsie Clews Parsons, dogs are assigned houses in Hopi belief: “There is a bluff northeast of Oraibi called Butterfly house, and, in Hopi tradition, the dogs once had a distinctive dwelling, an opening on the side of the mesa, Pohki, Dog house.” Parsons noted further that Rabbit or Dog Katsinas might carry on a “mock hunt,” or tease a real dog during clown performances at Hopi.

The Dog Dance, *Tse'share*, was performed at Taos, San Juan, Santa Clara, and Nambe. Each male dancer had one end of a cord or a long woven sash attached to his belt; a female dancer held the other end. Throughout the dance, the men (“dogs”) led, and the women followed.

Pueblo dogs guard against strangers, as in the San Juan tale, “The Envious Corn Girls.” In this story, dogs bark at

and chase Sweet Corn Girl, who has been transformed into a fox through envy, patiently trotting after her unsuspecting husband.

A widespread Native American story of “dog-husband” is reversed in the San Juan tale, “Little Dog Turns Girl.” Little Girl Dog outwits her sisters and her suitor by assuming the guise of a desirable woman and is chosen by Rising Star over Little Girl Dog's industrious sisters. Little Girl Dog then bears his two children—puppies—to the ultimate shame of Rising Star and his family.

Kwe'lele, a patron kachina of Zuni's Big Firebrand society, provides his patient with bread-cakes during a cure, of which three are eaten by the patient, and a fourth thrown to a dog who thereby absorbs the sickness.

Dogs have been said to be constantly on guard against night-prowling witches. Conversely, two Pueblo stories associate dogs with witchcraft. A Taos tale collected by Parsons notes that at Santo Domingo and Tesuque, a witch could take the form of a black dog. And in a Cochiti tale, Bloodclot Boy is turned into a helpless dog by his witch-wife. He is then left to fend for himself before he obtains the magic formula necessary for transforming her into a snake.

Basketmaker Dog-hair Sashes from Obelisk Cave

Rachel Freer and Mike Jacobs, Arizona State Museum

IN 1931, archaeologist Earl Halstead Morris directed an expedition in the Prayer Rock district of northeastern Arizona. The caves in the area yielded some of the best documented Basketmaker material culture ever collected. At Obelisk Cave, Morris found a cache of what he called six “phenomenally fine” flat-braided sashes, tied in a bundle and wrapped with cord. Morris later arranged for the transfer of two of the sashes to the Mesa Verde Museum, two to the University of Colorado Museum, and two to the Arizona State Museum (ASM).

The sashes are suspected to be of dog-hair yarn, though this has never been positively confirmed. Human hair and dog hair were the primary animal fibers used by the Prayer Rock Basketmakers, and would have been both easily available and a pragmatic fiber choice for this time and location. Color symbolism has always been important to the Southwest’s native people, so it is likely, though unproven, that dog hair was available in many colors, which were manipulated to convey meaning. In addition, dogs were special creatures to the early inhabitants of the Southwest (pages 4–5), and items made of dog hair may have had added significance. During examination, the wider, white sash shown here was found to contain both animal fiber and cotton. This is significant because cotton fiber was relatively uncommon on the Colorado Plateau at the time that these sashes were woven.

Any animal hair of adequate length can be spun into a usable thread, and fibers from long-haired dogs are still used in textiles today. The structure of the hair fiber itself includes scalelike cells that cover the outer surface, which

can also help to identify the animal of origin and other characteristics. It is plausible that the brown hairs in the narrower sash shown below may be human. Using polarized light microscopy (PLM), we have attempted to further characterize the hair without destroying the samples. The white hairs have retained a scale pattern visible under PLM. Because no morphological characteristics stand out, and because of extensive crossbreeding within the canine family, animal identification of these white fibers is difficult using this technique. Under PLM, the brown fibers appeared to be degraded, as a result of light damage while on exhibit. Although further analysis is needed, it is highly likely this brown fiber is human hair.

Other analytical techniques are being considered to further characterize these sashes. Scanning electron microscopy will aid in identification of the more degraded fibers, but it is more costly to perform. Other nonmicroscopy analyses being considered include DNA, protein analysis, and radiocarbon dating. All of these analyses involve require minimal sample sizes, and the samples will be destroyed.

For the time being, however, the sashes have been dated indirectly. The perishable materials from Obelisk Cave fit well with the Late Basketmaker assemblages from the other Prayer Rock caves. A date for the sashes of A.D. 450 to 500 conforms with the ten tree-ring cutting dates, while a date of A.D. 575 to 600 better accords with the ceramic evidence. It is hoped that directly radiocarbon dating the fibers will provide an answer.



Two “phenomenally fine” braided sashes were found with four others at Obelisk Cave in northeastern Arizona. Their high quality suggests that they were of great value to their makers and wearers. At top: White dog-hair and natural cotton yarns (ASM, Cat. No. A-21413). At bottom: White dog hair and brown dog(?) hair (ASM, Cat. No. A-21414) (courtesy ASM; photograph by Jannelle Weakly).

A Rare Breed

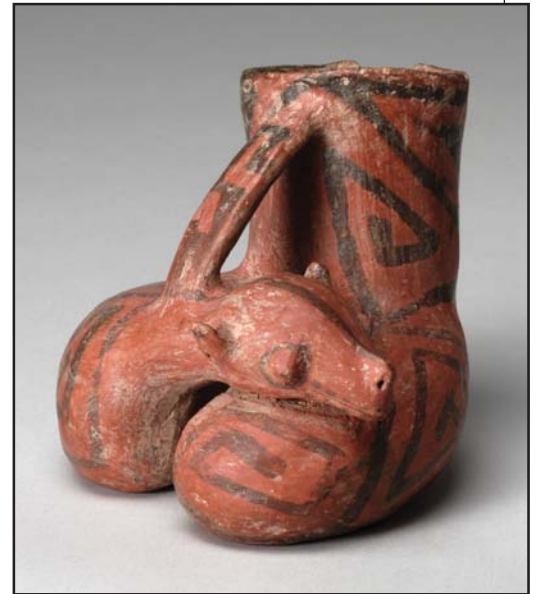
Alan Ferg, Arizona State Museum

THESE THREE PREHISTORIC ceramic effigies appear to be animals modeled in the form of a ring or doughnut, as if curled up or sleeping. This posture, as well as the upright ears, teeth, and general shape of the heads, suggests that these are depictions of dogs. At the left is a Puerco Black-on-white effigy. On the right is a Puerco Black-on-red effigy, which has pierced ears as if it once wore earrings. Both of these are hollow vessels with strap handles (broken off on one) and date to around A.D. 1030 to 1150. At the bottom is an effigy whose ceramic type is unknown, but it is roughly contemporaneous with the other two. It differs from the other two in having suspension lugs and a solid head that was appliquéd to a hollow body.

Most prehistoric dog effigies tend to be more lifelike, with four legs. The “doughnut dogs” shown here are reminiscent of even rarer, slightly later, Tularosa Black-on-white curled snake effigies. More importantly, both the snake and dog forms have similar counterparts in the incredibly rich ceramic bestiary made by potters in Colima, West Mexico, from 300 B.C. to A.D. 300. These effigies are so similar, in fact, that it is hard to imagine that the Southwestern dog effigies were not somehow inspired by those from West Mexico. Marc Thompson shows a more lifelike dog effigy on page 9.

More common in the Southwest, though relatively rare, are ring or doughnut pots that may be plain

or painted but that have no modeled or appliquéd appendages. These vessels have a much greater temporal and geographic distribution than the ceramic dogs. For this vessel form, we have one account of ethnographic use. While working in the Chama Valley in New Mexico, ar-

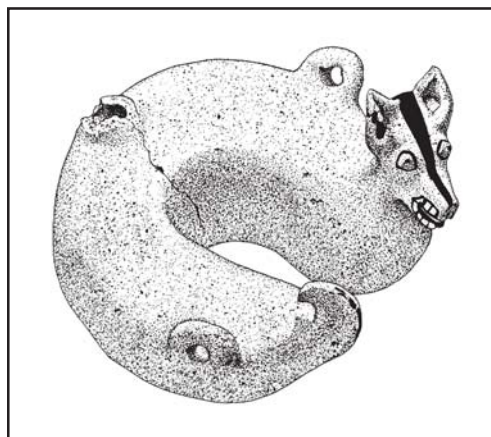


Left: Puerco Black-on-white vessel, found in 1958 on Everett Hinkson's Cedro Ranch, near St. Johns, Arizona (from the Norton Allen Collection; Arizona State Museum, Cat. No. 97-194-1). Right: Puerco Black-on-red vessel from Nutria Canyon, near Zuni, New Mexico (ASM, Cat. No. GP-5973) (photographs by Jannelle Weakly).

chaeologist J. A. Jeancon was told by Aniceto Swaso, of Santa Clara Pueblo, that during times of drought, men who knew rain medicine prayed for rain at a shrine near

some rock tanks. At sunup on the fifth day, it rained gently directly into the tanks, filling them. The people from the village brought this type of doughnut-shaped “cup” to dip into the sacred water and carry back to the village. Jeancon wrote, “In case none of the doughnut-shaped cups were at hand, an abalone(?) shell was used to dip out the water to the people. Then in a very short time it rained all over the country and the drought was broken. This never failed.”

Like the cups mentioned above, the exotic shape of these dog effigies could indicate an esoteric function—but that function is now unknown.



Black-on-white vessel from site 5MT9943, in southern Colorado, excavated by Soil Systems, Inc. The effigy's paint is carbon, with paste and temper indicating a local, or at least Mesa Verdean, origin; the ceramic type is uncertain (courtesy Soil Systems, Inc.; drawing by Alison Dean).

Canid Sacrifices from Homol'ovi I

Vincent M. LaMotta, University of Illinois at Chicago

THE RITUALIZED TREATMENT OF DOGS and their close relatives has been documented in Pueblo societies of the northern Southwest from the ancient past to recent times. Ethnographic accounts demonstrate that canids were sometimes targets for ritual acts of violence. For example, Alexander M. Stephen, who lived among the Hopi during the late nineteenth century, recorded the stoning and decapitation of a village dog as a sacrifice involving M̄asaw, a Hopi deity associated with death and other metamorphoses. Coyotes and dogs in Hopi society are sometimes imbued with witch power, and as such their sacrifice constitutes a potent ritual act. Furthermore, because they are associated with M̄asaw, such canids might play an important role in rituals of transformation or metamorphosis—such as those involving a death or the termination of ceremonial structures.

The Arizona State Museum's Homol'ovi Research Project (HRP) documented two striking examples of coyote or dog sacrifice in its 1994–1999 excavations at the ancestral Hopi site of Homol'ovi I in north-central Arizona. This 1,100-room pueblo, occupied from approximately A.D. 1290 to 1400, is one of seven major Pueblo IV period sites in the Homol'ovi cluster. The mid- to late 1300s at Homol'ovi were marked by ritual intensification and increasing interaction with the Hopi Mesas. HRP fully excavated two large kivas in Homol'ovi I's south plaza whose use and abandonment falls within this period. In both cases, structure termination rituals involved the sacrifice by decapitation of a juvenile coyote or dog. (Based on the size and shape of the bones, they most likely belong to either a dog or a coyote, but differentiating the bones of immature individuals is seldom possible.)

In Kiva 215, located in the northeast corner of the plaza, excavators encountered a two- to three-month-old coyote/dog buried in a small pit cut into deposits above the

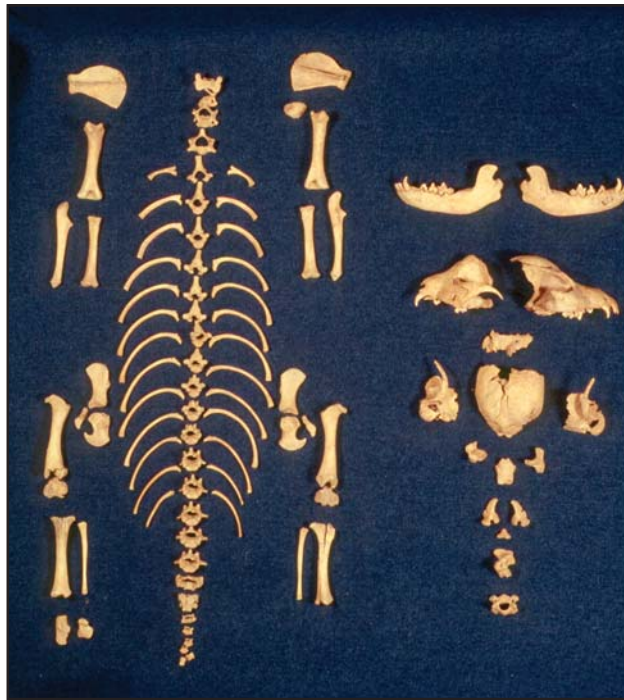
structure's slumped roof. The headless but otherwise articulated skeleton had been placed in a large Jeddito Yellow Ware sherd. A piece of ground stone had been placed on the body, and atop that lay the skull and first three vertebrae. Although this burial had been cut into a stratum some eight feet above the kiva's floor, the sacrifice may well have been associated with structure-termination rituals.

The kiva's floor and floor features had been buried in deposits of ash and trash, dumped in through the roof hatch, ostensibly to end the use of those features and to seal off the space. Ceramic evidence indicates the burial dates to about the same time as these closure deposits.

Excavators encountered a second decapitated, juvenile coyote or dog skeleton in a clear termination-ritual context in Kiva 901, in the northwestern corner of the plaza. In this case, the skull and first three cervical vertebrae of a one- to two-month-old individual were found in the upper fill of the kiva's hearth. A headless skeleton, presumably from the same individual, was found on the floor about two feet east of the hearth. This sacrifice can be

associated not only with the termination of the structure, but also with the closing of one of its key floor features.

Although coyote/dog remains have been found as isolates and in various states of articulation elsewhere at Homol'ovi, the pattern of juvenile coyote/dog sacrifice discussed here is thus far unique to Homol'ovi I kivas. Similarities in age, treatment, and context of these individuals strongly suggest that these deposits represent a specific ritual practice. Perhaps the release of power inherent in these animals, through sacrifice, was one component of termination rituals that transformed these power-laden kivas from active use to a power-neutral state of disuse. These procedures may have taken on greater importance in times of ritual intensification, such as the period discussed here.



This well-preserved skeleton of a two- or three-month-old coyote or dog shows that the animal was decapitated and then interred. This probably represents a ritual closure of a power-laden kiva (courtesy Homol'ovi Research Program, Arizona State Museum; photograph by Richard W. Lord).

Itzcuintle: Ancient Mexican Dog Food

Marc Thompson, El Paso Museum of Archaeology

DOGS PROBABLY ARRIVED with humans in the New World during the Late Pleistocene. An apparent dog's head carved from an extinct camelid sacrum was discovered in 1870 at Tequixquiac, Hidalgo, about forty-five miles north of Mexico City. By 3000 B.C., skeletal changes are evident in small dogs, and canid bones account for seventy percent of mammal remains in central Mexico. Dogs were raised and regularly eaten by Mesoamerican farming and urban populations, including the Olmec, Teotihuacan, Zapotec, Maya, Toltec, and Mexica (Aztec) from the Preclassic through the Late Postclassic periods (2000 B.C.–A.D. 1519).

In Mesoamerican belief, dogs guided their deceased masters to the Underworld and were essential for crossing streams and other bodies of water. This may account for the sacrifice and burial of dogs with human interments. An incised peccary bone from the tomb of a Late Classic (A.D. 700) Maya ruler located underneath Temple I at Tikal, Guatemala, depicts animals, including a dog, in a dugout canoe on the surface of the watery Underworld. The canoe, with the deceased lord in the guise of the Corn God, represents a metaphor for the journey to the Underworld led by a dog.

In West Mexico (the modern states of Colima, Jalisco, and Nayarit), seventy-five to ninety percent of Preclassic shaft tombs (circa 300 B.C.–A.D. 300) contained ceramic dog effigies; many vessels presumably held liquids. Some vessels depict grossly overweight, seemingly hairless dogs with short legs and barrel chests. Other dogs appear emaciated or are shown with patterns that appear to be wrinkles.

These are thought to represent the hairless breed known by the Nahuatl term *xoloitzcuintli*. Among the Zapotec it was known as *peco xolo*, and the Yucatec Maya called it *ah bil*. Visible wrinkling of the bare skin on ceramic pieces identifies the objects as hairless dogs. The mutant gene for hairlessness also causes abnormal dentition, and mandibles with missing teeth serve as indicators of the remains of this breed.

The ancient name *xoloitzcuintli* for the hairless Mexican dog refers to Xolotl, a canine god, the double of Quetzalcoatl, and the name of an early-thirteenth-century ruler of Texcoco in the Basin of Mexico. Xolotl accompanied Quetzalcoatl to the Underworld to retrieve the bones of ancestral humans. *Xolochtli* is a Nahuatl noun for wrinkle; *itcuinconetl* is a puppy, and the term *itzcuintli* refers to a native Mexican dog.

Hairless dogs were a major food source throughout Mesoamerica, and Spanish chroniclers, including Hernán Cortés, described their barter in markets and found them praiseworthy features of native cuisine. By the end of the 1500s, the breed was nearly extinct due to the intensity of the Colonial practice of pickling the meat for consumption. In the twentieth century, the Mexican artists Diego

Rivera and Frida Kahlo brought the breed back from the brink of extinction.

Today, the Hispanicized term for the dog is *escuintle*. This term is also used as an affectionate term for children along the border between Mexico and the United States. This is similar to the use of the English word “kid” (i.e., a young goat) when referring to a child.



Top: Ceramic dog effigy. Nayarit, Mexico, circa A.D. 100 to 250. (El Paso Museum of Archaeology, Cat. No. W 83-1-46; photograph by Jason Jurgena). Bottom: Modern escuintle (native Mexican hairless dog); note the unusual dentition.

When Is a Dog in Mimbres Art?

J. J. Brody, *University of New Mexico*

THE PAINTED POTTERY TRADITION of the Mimbres people of southwestern New Mexico, dating from about A.D. 1000 to 1130, is famous for its depictions of animals. As a rule, many of these are so stylized that the identification of species below the level of “family” is difficult or impossible without pictorial clues about behavior and context.

As a case in point, during the early 1970s, I tried to identify as many Mimbres painted animals as I could. However, I found that many were so highly stylized or had so many anomalous characteristics that I lost confidence in my ability to name them. I asked several biologists to help sort things out, but soon realized that disagreements among splitters and lumpers made consensus unlikely. In the end, I made my own arbitrary decisions and published, in my book *Mimbres Painted Pottery*, a list of 1,161 animals culled from 733 different painted vessels. I divided these vessels into seven broad subject classes: nonhuman mammals, humans, mythic creatures, amphibians/reptiles, insects, fish, and birds, and then I further subdivided them into two dozen groups.

Among these classes was the canine group, which contained twenty-six animals, including four that I could have called dogs because of their interactions with humans and another dozen possible dogs. Today, I still identify most Mimbres paintings of canines shown interacting with humans as dogs (the two examples shown on this page) and identify others as probable dogs if they closely resemble or seem to behave like those that I call dogs (the two examples shown on page 11). Thus, when someone asks, When is a dog in

Mimbres art?, I have a simple answer: When it behaves like one with humans present—or looks as though it would if a human were there.

In a recent *Natural History* article, paleontologists Xiaoming Wang and Richard Tedford, who study canid lineages, described the domestic dog as “a highly specialized adaptation for cohabiting with humans.” Archaeologist Dody Fugate tells me that other specialists use the term symbiosis to describe another aspect of the same phenomenon, each of which can be thought of as a variation of the old saw that if it looks like a dog and acts like a dog, it is a dog. That just happens to describe the way that artists think when creating pictorial representations of perceived reality.

This should come as no surprise to us. Mimbres artists made art by projecting illusions of reality, and they characterized dogs most convincingly by showing them interacting with humans. They skimped on morphological and taxonomic details to concentrate instead on projecting images of posture, attitude, and behavior. Their most doglike dogs are perky creatures with upright, curved tails, upright ears, visible toes, and an alert look. Most are medium sized with white patches around the neck, tail, lower legs, trunk, and elsewhere. Their color patterns resemble that of a mummified dog shown on page 5. Other breeds may have been present among the Mimbres as well, including large, shaggy wolflike animals.

Interestingly, canine variants that are depicted without humans or without behavioral contexts may best be described as doglike.



Top: This Mimbres Classic Black-on-white bowl, from the Cienega Ruin, New Mexico, depicts a woman carrying firewood in a burden basket, a man in the background with a log on his head, and their dog (courtesy Maxwell Museum of Anthropology, Cat. No. 40.4.276). Bottom: This Mimbres Classic Black-on-white bowl shows two men training a dog with a hoop (private collection; drawing by Ron Beckwith).

humans or without behavioral contexts may best be described as doglike.



All of this is consistent with everything we know or can surmise about Mimbres artistic procedures. Their most realistic animal subjects gain vitality by behavior and context rather than through morphology or physiology. Their most fishlike fish and froglike frogs seem to swim across or dive into the bowls on which they are painted, and their actions transform pots into imaginary bodies of water. Likewise, Mimbres dogs transform pots into environmental spaces.

Left: Mimbres Classic Black-on-white bowl showing a hunter with a bow and arrows, and two large dogs (private collection; drawing by Ron Beckwith). Right: Without any context, this animal can only be inferred to be a dog, though its white neckband and tail tip support that identification; Mimbres Classic Black-on-white bowl from the Pruitt site, New Mexico (courtesy Maxwell Museum of Anthropology, Cat. No. 40.4.133).

Mimbres Dog Descendants

Tobi Taylor, Center for Desert Archaeology

“WHETHER MIMBRES PAINTERS were directly, indirectly, or not at all ancestral to any modern Pueblo people, they were indisputably ancient and Southwestern, and Mimbres motifs have current symbolic value for all of the Pueblo Indians,” wrote art historian J. J. Brody in *Mimbres Painted Pottery*. Artists such as Maria and Julian Martinez, of San Ildefonso Pueblo, used Mimbres motifs in their pottery, as did their grandson Tony Da, as well as Acoma potters like Marie Z. Chino and Anita Lowden. More recently, Diego Romero, of Cochiti Pueblo, has created a series of bowls that meld Mimbres motifs with comic-book imagery to produce a commentary on what he calls “urban Indian life.”



This black-on-white bowl, made by Laurel and Paul Thornburg of Sonoita, Arizona, in 2007, is a replica of the Mimbres Black-on-white bowl shown on page 10 (courtesy of the artists; photograph by Jannelle Weakly).



The bowl by Romero that is shown here is one of several featuring the fictional Chongo brothers and includes Coyote, who is making sure that he does not have an open alcoholic beverage inside the car.

Mimbres pottery has influenced non-Indians as well. For example, Paul and Laurel Thornburg, who live near Sonoita, Arizona, have made thousands of replicas of Mimbres pottery using traditional techniques, such as painting with yucca-fiber brushes. They also sign their work so that no one can attempt to pass them off as genuine Mimbres pots.

This bowl, by Diego Romero (Cochiti), is titled *I'm Trying to Help You Chungos, Indian Bingo Is the Way to Go*. The coyote in the car bears a strong resemblance to the dogs in the Mimbres bowl at top left (courtesy Museum of Indian Arts and Culture/Laboratory of Anthropology, Cat. No. 54131/12).

Hohokam Dogs and Iconography at Pueblo Grande

Steven R. James, California State University at Fullerton

Michael S. Foster, Logan Simpson Design

IN THE HOHOKAM REGION of central and southern Arizona, dogs have been recovered from a number of prehistoric sites, including Las Colinas and Pueblo Grande, in Phoenix; Bumblebee Village, Honey Bee Village, the San Xavier Bridge site, and the Yuma Wash site, near Tucson; the Junkyard site and Escalante Ruin, near Florence; and Meddler Point, in the Tonto Basin. Furthermore, ceramic dog figurines were manufactured at some villages, attesting to the importance of dogs in Hohokam society.

In 1989 and 1990, Soil Systems, Inc., personnel conducted an extensive data recovery program at Pueblo Grande, a large Hohokam village along the Salt River Valley within the city of Phoenix. More than 2,500 features in fourteen habitation areas and associated human burial groups were excavated. Most features date to the Classic period (A.D. 1150–1450), whereas only four of the fourteen habitation areas are from the pre-Classic Sacaton phase (950–1150).

With regard to the evidence for dogs at Pueblo Grande, the excavations recovered fifteen dog burials, which probably date to the Classic period, near or within the human burial groups; none of the animals were found in habitation areas. Although the dog burials represent the largest such assemblage recovered to date from a single Hohokam site, they were poorly preserved, making species and sex determinations difficult. However, the dog remains did not exhibit any evidence of butchering marks or burning. With a few exceptions, there is very little evidence from Hohokam sites that dogs were eaten.

The large number of canid burials encountered within and around the human burial groups at Pueblo Grande indicates that domestic dogs were an important animal in Hohokam society. Dogs may even have been killed upon the death of their owners and buried nearby. Some support for this inference was provided by an obsidian projectile point recovered adjacent to the lowermost rib of one dog skeleton, suggesting the animal may have been shot with an arrow.

Aside from the dog burials, the Pueblo Grande excavations resulted in the recovery of an unusual cache of six intact ceramic dog figurines and fragments of a seventh. They had been placed on the floor of a Sacaton pithouse and were partially covered with sherds from four vessels that had been deliberately smashed next to them. All of the solidly constructed dog figurines were modeled from a plain paste and showed evidence of body painting. Anatomical features are crude, and include punched or incised eyes, mouths, nostrils, and anuses. All six complete specimens exhibit erect ears and upright, slightly hooked tails. Two figurines may represent pregnant females.

Although rare, the Pueblo Grande cache is not unique. In 1887, the Hemenway Archaeological Expedition under the direction of

Frank Hamilton Cushing recovered the first cache of these zoomorphic figures. As farfetched as this seems today, Cushing and others on the expedition believed that these figures resembled guanacos, South American camelids re-

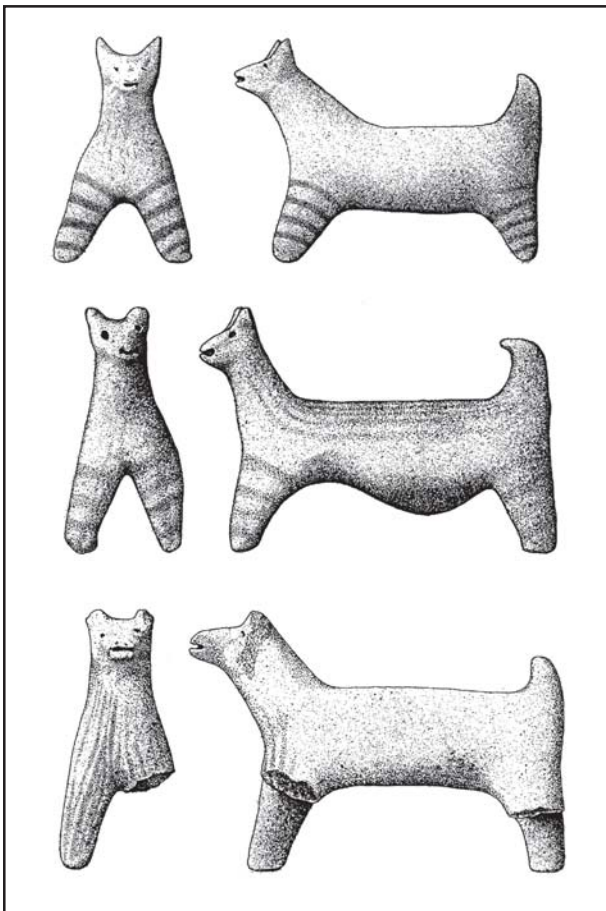
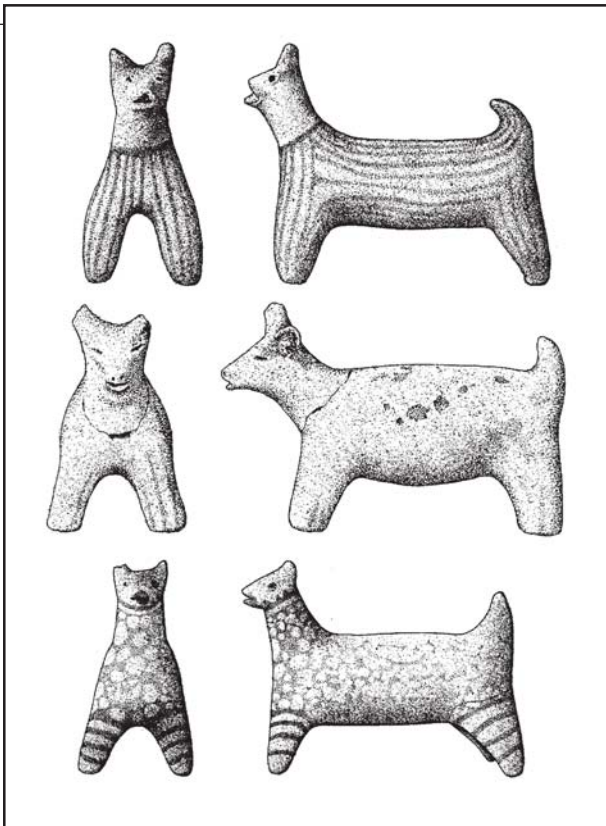


Six intact dog figurines, and two pieces of a seventh, were found on the floor of a pithouse (Feature 2099) at Pueblo Grande. Next to them were sherds from four smashed plain ware vessels and a small stone censer. A “plummet” stone (oblong with a groove around one end) found in the fill may have been part of this deposit (courtesy Soil Systems, Inc.).

lated to llamas, arguing that they showed diffusion between the American Southwest and Peru. Thus, Cushing named the site “Los Guanacos” to commemorate the find, and the site is still known by this name.

Other discoveries of similar ceramic figurines were made during the twentieth century. At the well-known pre-Classic site of Snaketown along the Gila River, excavations in the mid-1930s under Harold Gladwin, of Gila Pueblo, recovered nearly twenty animal figurine fragments, apparently from trash contexts. The mid-1960s excavations at Snaketown by Emil Haury, of the Arizona State Museum, resulted in the recovery of an additional nineteen animal figures from a Sacton phase cache. These were found with other broken artifacts, which he attributed to a sacrificial act wherein the pottery vessels and figurines were deliberately broken. Haury further suggested that the animal figurines represented deer, and that their high number and similar appearance were associated with either hunting or fertility. The cache appears to represent a ceremonial or ritualistic act, and thus shares some traits with the one at Pueblo Grande.

Recent excavations at Los Guanacos by SWCA, Inc., have resulted in the recovery of twenty-one whole animal figurines and fragments of several others. Fragments of similar animal figurines have also been found at a few other sites, including the Hodges Ruin in Tucson (see page 14) and Las Colinas in Phoenix.



The six dog figurines from Pueblo Grande, with short ears and upraised tails, are solid clay, and have smoothed and sometimes polished surfaces. They range from about six and a half to eight inches in length (courtesy Soil Systems, Inc.; drawings by Jon Joha).

We recently argued in an issue of the *Journal of Field Archaeology* that the animal figurines from these caches are dogs. They most likely are representations of small Southwestern dogs with short ears and upraised tails. In contrast, deer and other ungulates do not hold their tails upright, except when startled or running away.

Recently, archaeologist David Wilcox suggested that kin groups, participating in funerals, produced such caches and that the figures were buried in the household of the deceased in order to accompany the dead to the afterlife.

This argument is of particular merit, especially given the distribution of dog burials around the edges of cemeteries at Pueblo Grande. The breaking of items in these caches suggests an act that represents an end to something, rather than a plea for successful hunting or fertility. The vessels may have been broken to signify the end of life, or releasing grief, and the destruction of personal or household property. The ceramic dog figures would have been placed in the cache as companions or guardians in the afterlife.

In Mesoamerica, such practices were commonplace. When considered as a group, the figurines may represent a pack of dogs that would have provided even greater protection in the afterlife. The one thing that we do know for certain is that the ceramic animal figures are not guanacos or llamas—they are indeed dogs.

Dogs in the Desert: Repatriation

Alan Ferg, Arizona State Museum

IN 1986, at the request of the Tohono O'odham Nation, the twelve Classic period dog inhumations recovered at the San Xavier Bridge site south of Tucson were returned, along with the human burials from the site, and reburied. The tribe's belief was that the dogs had originally been purposely buried with care, most near each other in what amounted to a dog cemetery, and that that treatment should be respected and repeated. Since then, dog burials (as well as eagle and macaw burials) from a number of other Hohokam sites have also been repatriated.

In 2002, the governor of the Gila River Indian Community sent a letter to the Arizona State Museum (ASM) requesting the return of twenty-one "guanaco" figurines that had been recently excavated at their namesake site of Los Guanacos. This request was made on behalf of the Four Southern Tribes (the Ak-Chin, Gila River, and Salt River Pima-Maricopa Indian Communities, and the Tohono O'odham Nation), the Hopi Tribe, and Zuni Pueblo. What galvanized the tribes was a Phoenix newspaper article printed nine months earlier. Its author, ostensibly reporting the discovery of the "guanaco" cache, noted that a project archaeologist had indicated the figurines were "symbolic." The reporter then went off on what one person characterized as a failed attempt at humor about

how the figurines might have been toys or "collectibles" that spawned a prehistoric marketing frenzy. The reporter meant no harm, but his ill-conceived fluff showed a complete lack of understanding of or appreciation for what the figurines might have been. This insensitivity did not go unnoticed by the tribes, and the Gila River Indian Community prepared a report summarizing current archaeological knowledge about the figurines, and stating their belief that "Quadruped figurines are sacred in terms of their ceremonial deposition, which is recognized as a traditional religious practice by the O'odham, the acknowledged descendants of the Hohokam."

Although Gila River did not record what animal they thought the "guanacos" represent, they agreed that archaeologists' identification of them as dogs was the most strongly supported by the archaeological evidence, including the proximity of dog inhumations to the figurine cache at Pueblo Grande (see pages 12–13). They also pointed out that the figurines are sometimes modeled with an anus, and are sometimes found in burned contexts, both of which play a role in a traditional Pima story about dogs "when the animals still talked," in which they met in a community smoke house (*jeñ kii*) that burned down.

The requests for the return of actual dogs are closely connected with traditional O'odham beliefs. The role of dogs in the O'odham creation epic, the fact that dogs have their own spirituality and power that can manifest as *kaachim mum-kidag* (staying sickness in O'odham), their being buried in their own cemeteries in historic times, and the great time depth of dog burials in southern Arizona prehistory were cited as evidence of the importance of dogs in O'odham culture.

But the existence of Hohokam ceremonies using "guanaco" figurines was inferred—by both the tribes and by archaeologists. Such ceremonies had not survived into historic times, and the figurines would not meet the federal Native American Graves Protection and Repatriation Act (NAGPRA) re-

The Hodges Site Figurine

ONE FRAGMENTARY "guanaco" figurine was found during excavations in the 1930s at the Hodges site in Tucson, but it was not illustrated in the final report. The figurine (ASM Cat. No. A-22675) consists of a torso, right rear leg, and tail. Its size, orangish clay body, buff-colored wash, size, and modeled anus make it visually indistinguishable from many such items found in the Salt-Gila Basin, where it is presumed to have originated. It came from a large pit (Burial 16) that was identified as a trench cremation, though bones are not mentioned in the field notes, and none can be found in the ASM collections. Aside from the figurine fragment, this pit contained a large and varied artifact assemblage, including shell, stone jewelry, concretions, turquoise, chipped stone, a stone ball, and a "lava tube"; fragments of a palette, a rubbing stone, stone "doughnuts," "medicine stones," stone bowls, manos, and metates; and more than 450 sherds, primarily Rincon Red-on-brown and Sacaton Red-on-buff. One has to suspect that this was not a cremation but a cache of burned, intentionally broken offerings, much like those recovered at Snaketown, one of which contained nineteen "guanacos."



quirement that a sacred object is necessary for the continued practice of a traditional religion. However, Arizona Revised Statutes §41-844 defines a “sacred, ceremonial object” only as “an object traditionally utilized in religious observances.” The ASM Repatriation Committee solicited input on the request and then considered a list of fifteen questions designed to clarify the legal standards expressed in Arizona law, and whether the preponderance of evidence supported a determination that the figurines from Los Guanacos fit the Arizona standards. It concluded that

...the Museum does not find in the Arizona law any requirement that the ceremony in question still be practiced, that the ceremony should have been prac-

ticed in historical times, or even that the claimant group be able to precisely identify the ceremony in which the object was used. The language of the Arizona law supports a less restrictive interpretation. It is only necessary that there was an original use in traditional religious ceremony or ritual. The Arizona State Museum has assessed the available evidence and concluded that the guanaco figurines meet the statutory standard and definition to be regarded as Sacred Objects under Arizona law.

The figurines were returned to the Gila River Indian Community, and are currently being cared for at the Hugam Heritage Center.

Going to the Dogs: Studying Valley Fever in the Southwest

T. Michael Fink

VALLEY FEVER, also known as Coccidioidomycosis, is an infectious fungal disease found only in arid and semiarid regions of the New World. In the United States, it occurs in Arizona, California, Nevada, New Mexico, Utah, and Texas.

Valley fever is caused by the inhalation of airborne *Coccidioides* spp. fungal spores that are present in the uppermost layers of the soil and become airborne in dust. While many animals can develop valley fever, humans and dogs account for the vast majority of reported cases. Although valley fever is primarily a lung disease, some infections lead to more serious systemic illnesses, which can often be fatal, and, in rare cases, cause skeletal lesions.

Although many aspects of valley fever have been extensively researched, little is still known of its history. Very little prehistoric evidence of valley fever in humans has been reported in the Southwest. The cases include two individuals at Los Muertos and one person at Pueblo Grande, both in the Phoenix area; one individual at Nuvakwewtaqa, in northern Arizona; and one person at LA 53680, near Taos, New Mexico.

It is puzzling that so few cases of valley fever have been found among the Hohokam, as they inhabited a large portion of central and southern Arizona, an area where mod-

ern infection rates are high. In contrast, eighteen archaeological cases have been reported from the equally endemic San Joaquin Valley, in California.

In addition, there is a source of evidence for valley fever that is often overlooked: dog burials, which are frequently found at Hohokam and other prehistoric sites in the Southwest. Dogs (and coyotes) are very susceptible to valley fever; in extreme cases, they can exhibit skeletal evidence for it in the form of lesions that primarily produce bone growth (known as hypertrophic osteopathy). In contrast, in humans, valley fever lesions destroy bone. This bone growth, as well as the fact that dogs were rarely cremated, means that there is a better chance that evidence for valley fever would be preserved in dogs.

To date, no skeletal lesions related to valley fever have been reported from prehistoric dog burials. However, “going to the dogs” for evidence of hypertrophic osteopathy is a worthwhile strategy. Along with continued examination of human remains, looking

at archaeological cases in dogs could provide greater insight into the antiquity of valley fever and its long-term impact on humans and animals in the Southwest.



Dogs with valley fever experience hypertrophic osteopathy, which is bone growth that starts in the lower limbs and can eventually affect much of the rest of the skeleton. The lesions vary in appearance from smooth to cauliflower- or coral-like. In this modern dog pelvis, the left side shows abnormal bone growth, while the right side is not yet affected (photograph by T. Michael Fink).

An Unsettling Image

William H. Doelle, *Center for Desert Archaeology*

THE ACCOMPANYING ARTICLE by Richard Flint resonates on several levels. Although it is a native representation of a dog in a cultural context—like many of the illustrations in this issue—it is immediately unsettling. Note that the dog has a collar. I initially perceived the “rope” in the Spaniard’s hands as a leash. But, the “leash” is attached to the bound hands of the captive native. The image depicts a dog being set on an Indian leader from an Indian community in the Basin of Mexico, probably in 1521, or shortly after the conquest of Mexico under Hernán Cortés.

The image connects to the Southwest in at least two ways. First, there is the dramatic contrast with the ways in which current evidence suggests that dogs were integrated

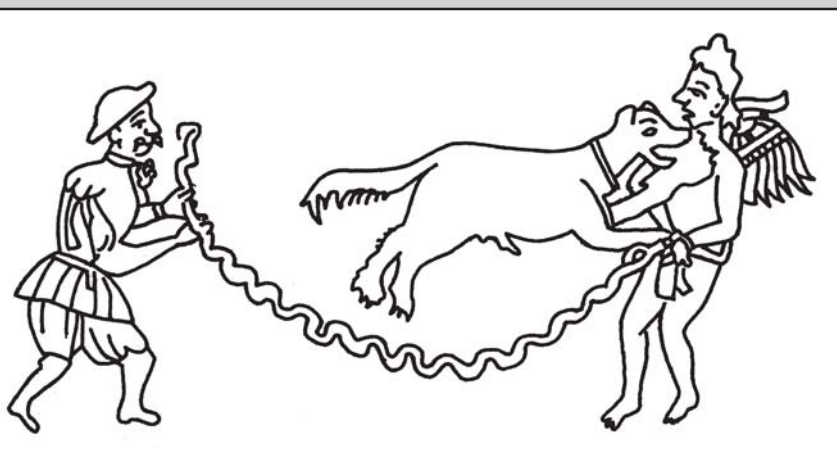
into the native cultures of the Southwest in pre-Hispanic times. Second, Richard Flint’s article notes similar events in the 1540s, when the Coronado expedition encountered the native populations of the Southwest.

Although the evolution of dogs has been based on flexibility, this flexibility can be influenced by humans in ways that are negative as well as positive. Whether we ponder the initial ways in which Spaniards used dogs to intimidate native populations, or if we consider how a famous professional football player, Michael Vick, was recently indicted for running a dog-fighting and gambling ring, we are reminded that humans can misuse this flexibility exhibited by dogs. It is sobering, but this fact should not be ignored.

The Setting on of Dogs

Richard Flint, *Center for Desert Archaeology*

IN MARCH 1545, after the witnesses’ testimony had been taken, the *fiscal* (prosecuting attorney) of the *Audiencia* (high court) of Mexico, Cristóbal de Benavente, lodged six formal charges against Francisco Vázquez de Coronado stemming from his leadership of the expedition to Tierra Nueva. The fourth of those charges was that he had “precipitated an uprising of the people of Tiguex (the southern Tiwa pueblos of New Mexico) by illegally setting dogs on Bigotes and the cacique” [two leaders of the



An excerpt from a codex, or native pictorial text, from central Mexico in the early 1500s, is redrawn here from Richard Flint’s recent book, titled *Great Cruelties Have Been Reported: The 1544 Investigation of the Coronado Expedition*. It depicts a Spanish dog being set upon a bound native leader from near Tenochtitlan, the former Aztec capital, where Mexico City is now located.

Contreras, testified that after a Tiguex pueblo had been besieged during the winter of 1540–1541, “in the camp where Francisco Vázquez was, [the Spaniards] captured three Indians and put them in the tent where [the general] was. [The Spaniards] told him that those Indians had fled from the besieged pueblo the night before and that he should decide what he would order done with them. And he ordered [the Spaniards] to set dogs on [the Indians]. The witness saw them unleash the dogs and kill the Indians.”

Pueblo of Cicuique/Pecos]. Although all of the eyewitnesses who gave sworn testimony reported that the setting on of dogs had occurred, and most believed that it could not have happened without Coronado’s authorization or consent, the captain general himself insisted on his innocence, saying that “[Long] afterwards, when they had come to this province [Nueva Galicia], he learned that since [Bigotes] denied what don Pedro de Tovar asked him and because he was not willing to confess, don Pedro told him to tell the truth or else ‘that dog that was wandering loose would bite him.’ Seeing that he chose not to confess, don Pedro called the dog and it bit [Bigotes].”

Coronado was eventually exonerated of this charge. There is no doubt, however, that the setting on of dogs did occur on more than this one occasion during the course of the expedition. For instance, the captain general’s groom, Juan de

Yoeme Dog Pascola Masks

Tom Kolaz, Southwest Center

THE YOEMEM (Yaquis) live in several villages and ranchos on and around the Rio Yaqui, in Sonora, Mexico, and in central and southern Arizona. Each of the Yoeme ceremonies that occur throughout the year on various saint's days, anniversaries, and during the week leading up to Easter is opened with a speech by the elder *pascola*, and then each *pascola* dancer, who wears a mask usually carved of cottonwood, dances in turn.

The earliest collected Yoeme *pascola* masks, which depict human faces, date to the 1880s. In the 1930s, goat masks began to be carved and collected, and in the early 1960s, monkey or ape masks appeared.

Masks that depict dogs, sometimes referred to by collectors and dealers as coyote faces, have been carved since at least the 1970s. (If a buyer asks if the mask is of a coyote, a carver will generally say yes. But if simply asked what the mask represents, a carver will answer, "a dog.")

The two best-known carvers of canine masks were both from Sonora: Antonio Bacasewa, from Vicam Pueblo, and Cheto Alvarez, from Potam. It is likely that one or both of them invented this type of mask, and they certainly became the most prolific dog mask carvers.

In the 1980s, Francisco Martinez, from Old Pascua, in Tucson, increased the popularity of masks, including those portraying dogs, by decorating his masks with cut abalone pieces, hair, rhinestones, and a broader paint palette than the typical black base with white and red painted designs seen on most *pascola* masks made before 1970.

Criscencio Molina Maldonado, who lives in Potam, has carved dog masks since at least the 1990s. Although many carvers make dog masks today, Maldonado's are more lifelike and sculpted, and have great depth. Unlike masks

by other carvers, the muzzles on his masks are several inches long, and the details on the masks—such as the teeth—are much more accurate. Maldonado travels great distances to find the large-diameter cottonwood roots needed to carve his realistic dog masks.

Dog masks do not appear to have any special significance to the Yoemem. Some might argue that the *pascolas* are hunters and that, at the *maso me'ewame* ceremony, they do



Left: Dog mask carved by Criscencio Molina Maldonado, purchased 2006 (Arizona State Museum, Cat. No. 2006-1073-3). Right: Dog mask carved by Criscencio Molina Maldonado, circa 1990, from a private collection. It was used to teach young boys how to dance pascola (courtesy ASM; photographs by Jannelle Weakly).



hunt and "kill" a deer, as enacted by a deer dancer. During this ceremony, they howl and track the deer dancer as a dog or coyote would—on all fours—but they most often do this with human-face masks. In addition, this particular ceremony was being practiced long before the dog mask was invented.

Today, the masks made by Yoeme carvers on both sides of the border depict humans, goats, dogs, pigs, horses, monkeys or apes, birds, reptiles, and other animals, particularly those found in the Sonoran Desert.

Old Dogs and Some New Tricks

Alan Ferg, Arizona State Museum

AS WE HAVE SEEN throughout this issue of *Archaeology Southwest*, depictions of dogs by Native American artists are as varied as the dogs themselves. In prehistoric times, much of the dog imagery apparently related to serious matters in ceremonies, the spirit world, and the afterlife, though some items appear to have been decorative and perhaps narrative in nature.

Two nineteenth-century Hopi bowls show what may be dogs, but the claws, heart lines, and wings suggest a far more exotic creature and perhaps a specific purpose for the bowls. On the other hand, this potter may simply have been decorating these bowls with fanciful beasts she thought would be of interest to tourists. The same may be true of the Western Apache tray basket, with its virtuoso display of what look like 108 little dogs.

The contemporary items shown here were made to be sold. Some pieces grew out of longstanding ceramic and basketry traditions. For example, Calisto Andrew's telephone-wire dogs appear to be his own innovative fusion of a foreign material with an O'odham knotless-netting weave long used on traditional *giho* burden baskets. The ironwood dog is an early masterpiece of Seri ironwood carving, an art form that did not exist before the 1960s.

Some of these dogs reinterpret ancient imagery, some are actual portraiture, some look like dogs we've all met, and one—Margia Simplicio's Dalmatian, with its candy-sprinkle spots, is like a dog out of a dream.



Two Lagunillas-style ("Chinesco") dog effigies (300 B.C.–A.D. 200) from the Ixtlan del Rio area, Nayarit, Mexico; gift of Alan and Sylvia Houle. Left: Seated dog is Style E; its left side is emaciated, with spine and ribs protruding (ASM, Cat. No. 2003-1266-12). Right: Standing dog is Style C; it is orange ware, with resist-painted dots and spirals (ASM, Cat. No. 2003-1266-19).



This Santa Cruz Red-on-buff jar (A.D. 850–1000), from the Nichols Ranch, Arizona, has repeated elements that are most often identified as dogs (Norton Allen Collection; ASM, Cat. No. 97-194-718).



A Tonto Polychrome vase (A.D. 1350–1450), from the site of Gila Pueblo, Globe, Arizona, with a modeled handle that is probably a dog (ASM, Cat. No. GP-50570).



Pottery puppy, black and white paint on buff clay body, collected from the Maricopa Reservation, Arizona, between 1885 and 1907 (Caroline Smurthwaite Collection; ASM, Cat. No. 22913).

All photographs on pages 18 and 19 by Jannelle Weakly and courtesy of Arizona State Museum (ASM) unless otherwise noted.



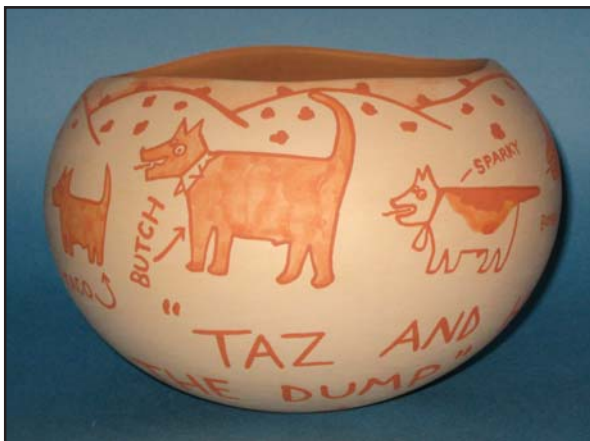
Left to right: pottery dog made by Teresita Romero (Cochiti), about 1958 (ASM, Cat. No. E-3696-x-22); telephone wire dog made by Calisto Andrew (Tohono O'odham) of North Komelik, Arizona, about 1963 (ASM, Cat. No. E-5862); basketry dog with removable head made by Lucy Andrew (Tohono O'odham) of Santa Rosa in 1961 (ASM, Cat. No. E-4645); ironwood dog carved by Aurora Astorga (Seri) at Desemboque, Sonora, in 1967 (ASM, Cat. No. E-7209); another wire dog by Calisto Andrew, about 1987 (ASM, Cat. No. 92-31-3).



Two Polacca Polychrome, Style C, bowls, both almost certainly made by the same Hopi potter, showing doglike animals with claws, heart lines, and wings; collected by Nelle A. Dermot before 1919, and probably made in the 1880s (Top: ASM, Cat. No. 8338; bottom: ASM, Cat. No. 8339).



Western Apache coiled tray basket, circa 1900, with 108 repeated figures that are thought to be dogs; private collection (courtesy American Indian Art Magazine).



Taz and His Gang on the Way to the Dump, featuring Butch, Sparky, Bones, Cody, Taz, Spot, and Taco. Orangish paint on buff clay, made by Shawn Tafoya (Santa Clara) in 1992; private collection (courtesy of American Indian Art Magazine).



Three beaded dogs, all made by Margia G. Simplicio (Zuni) between 2003 and 2007; private collection (courtesy of American Indian Art Magazine).

Back Sight

PLACING ARCHAEOLOGY in a broad context is always a goal of this publication. This issue is focused on a theme—dogs in the Southwest—that tends to receive scant attention. For example, in 1941, anthropologist Alfred Kroeber, who was famous for cataloging the diverse traits of Native American cultures, published an extremely thin volume titled *Salt, Dogs, Tobacco*. Even though dogs were flanked by two addictive substances, the entire book was only twenty pages long—an indication of how little thought anthropologists devoted to dogs.

A thematic issue like this can provide our readers—including me—with a new perspective on a topic. First, I wanted to understand the antiquity of dogs. In a wonderful article titled “How Dogs Came to Run the World,” published in *Natural History*, paleontologists

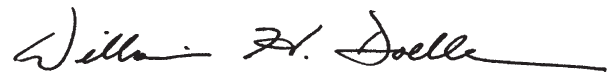
Xiaoming Wang and Richard Tedford provide a brief evolutionary history of dogs. They state that the first recognizable members of the dog family developed some forty million years ago in what is now southwestern Texas. So, with this lengthy family tree, dogs have a much deeper history in the Southwest than we humans do.

Then I began to think about how dogs contribute to our sense of place in the present, and imagined how they must have made similar contributions in the past. Would they have recognized a human companion returning home from a distant trading journey and run to greet him, long before anyone else had noticed? Perhaps. Would they have caught the scent and been alerted to strangers in the vicinity of the community, and given warning with their barking? Most likely. Throughout time, the behavior of dogs has been focused on place. Their mere presence among us, as well as their behavior, also contributes to our human sense of place.

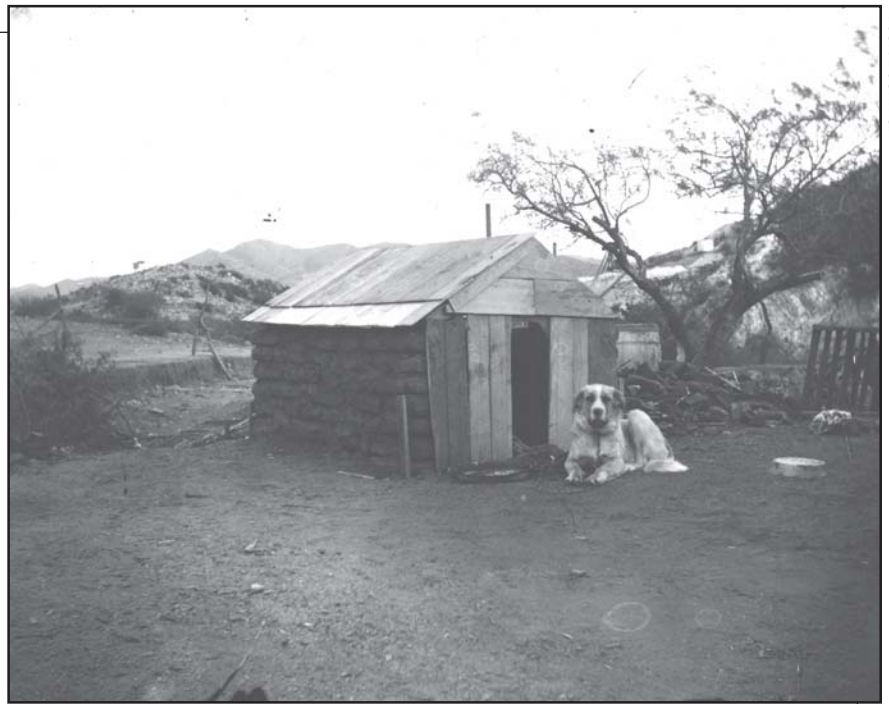
The black-and-white photographs that open and close this issue were chosen for what they reveal about dogs and place. In the first image, a large family of dogs is responding to the human domestic environment via their own social context. In the image displayed on this page, the local domestic architecture has been adapted to the needs of a large and friendly-looking dog. These photographs provide unique views of how dogs share our lives and play a role in our construction of a sense of place. I hope you enjoy this focus on dogs in the Southwest. It has

back sight (băk sīt) n. 1. a reading used by surveyors to check the accuracy of their work. 2. an opportunity to reflect on and evaluate the Center for Desert Archaeology's mission.

been both educational and fun for me to work with the issue editors to recognize this important companion species.



*William H. Doelle, President & CEO
Center for Desert Archaeology*



Albert Buehman

In about 1935, while Tucson struggled through the Depression, this dog—clearly a cherished member of his household—had his own custom-built adobe home (courtesy Arizona Historical Society, Tucson, Buehman Collection No. B109441).

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