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PLEISTOCENE ART OF THE WORLD

Short articles



## PALEOINDIAN PORTABLE ART FROM WYOMING (USA)

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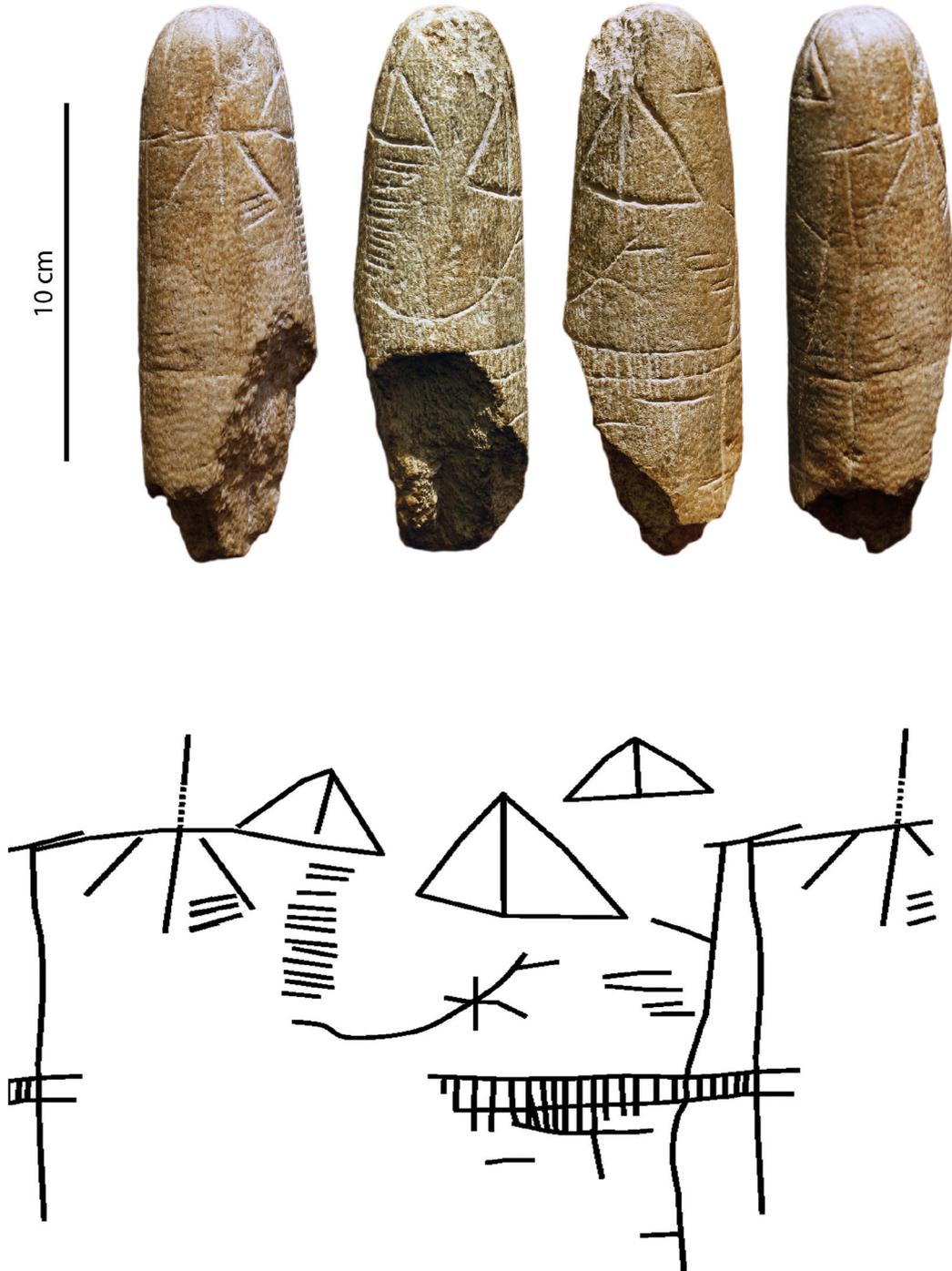
The first researchers studying rock art in Wyoming did not realize how long the region had been occupied. David Gebhard created the first rock art chronology for Wyoming, a relative sequence of four styles based on superpositions. More recently, Ron Dorn, Julie Francis and Larry Loendorf published a chronology derived from radiometric dates, cation-ratio, and varnish micro-lamination which suggests considerable antiquity for a number of rock art panels in Wyoming. In the Bighorn Basin, the Legend Rock site, has petroglyphs that have minimum limiting age estimates between 11000 and 10000 years ago. A varnish micro-lamination sample from an outline pecked animal shows a black layer indicating deposition during the Younger Dryas. Other glyphs on the panel with similar stylistic characteristics may be the same age. None of the oldest animal images are from species that are now extinct.

Portable art in the form of worked and carved bone, antler and ivory objects has been excavated at Paleoindian campsites dating before 8000 years. The most intriguing Paleoindian portable art piece from Wyoming is an incised segment of mammoth ivory, the Barnes Tusk, recovered not far from the Legend Rock site. We now have some reason to doubt the Pleistocene antiquity of the site where it was found, but we still believe the artifact is of at least Clovis age.

We believe the tusk to be mammoth ivory. The artifact was broken after it was incised, as all incisions meeting the break surface are clean breaks (figure). The tusk fragment has a mass of 434 g, or close to one pound, and it is 14.9 cm in length. Just above the break, it is 4.8 cm in width and 14.6 cm in circumference. Secondary pedogenic carbonates have precipitated into the incisions and the break surface on one side of the tusk, eliminating the possibility that this is a modern forgery. Traces of red ochre can also be seen under magnification.

The incised design is comprised of a series of abstract geometric designs but the complete design is not present (figure). The most prominent features are a series of bisected triangles and a webbing design, or a “ladder motif.” The bisected triangles and the ladder motif are known from Upper Paleolithic art. Carved and incised bone, antler, and ivory tools are known from Clovis contexts and may include both utilitarian and artistic markings. The artifacts most artistically similar to the Barnes tusk, recovered from Clovis contexts, are the incised limestone cobbles from the Gault site. They typically show abstract geometric designs. This supports the idea that the Barnes tusk is from early Paleoindian times.

The tusk was found on the ground surface at the base of an abandoned road cut into an alluvial terrace. A scatter of surface artifacts was observed on this same surface, and a single tool, a small biface fragment, was recovered. A distal fragment of a Clovis point was found on a higher terrace surface 300 m east of the site. At the site itself, we located a hearth feature in the terrace profile



Incised mammoth musk, photograph and drawing of engravings.

just above where the tusk was found. The feature is a broad and shallow pit cut into underlying fluvial sands. We collected a small sample of the hearth fill for dating. Approximately 2 m west of the feature we dug a single auger hole. We augured through four meters of deposits to be sure we had dug through the layer from which the tusk was derived. In the auger test, we recovered a single sample of dateable charcoal from 205 to 219 cm in depth, a little more than one meter beneath the hearth sample.

With funding from the Wyoming Archaeological Foundation and the Office of Research at the University of Wyoming, we submitted the two charcoal samples for AMS radiocarbon dating to Beta Analytic. The charcoal sample from the hearth dates to  $2400 \pm 40$  BP (Beta-247797). The sample from the auger hole dates to  $4190 \pm 40$  BP (Beta-247797). The tusk appears to have been found on a late Holocene alluvial terrace containing what is a Late Archaic archaeological component.

We have several theories for the artifact, but we believe it was originally manufactured in early Paleoindian times. It was probably picked up by a Late Archaic person and discarded in the Barnes site. The tusk was recovered from fine-grained alluvial deposits, and the only large clasts present are artifacts. It seems almost certain that the agent of deposition for the Barnes tusk was a prehistoric human. A second argument can be made on stylistic grounds. While incised bone artifacts are known from the Plains later in prehistory, they are not common, and typically they show very simple designs. This artifact fits comfortably within an early Paleoindian or Upper Paleolithic assemblage, but it would be highly unusual in a late Plains Archaic site.





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