

The Good, the Bad, and the Ugly: Claims for Proboscidean Depictions in North American Parietal and Mobiliary Art

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INTRODUCTION

If 40,000 years is presently seen as the “maximum limiting age” (Goebel et al. 2008: 1500) for human entry in the New World, we can safely assume that all arriving Paleoamericans were anatomically and cognitively modern *Homo sapiens*. Other matters are controversial and still hotly debated by paleoarchaeologists: what the actual homeland of the first settlers was; how they made their way—by foot or by watercraft; what route they took; how many migratory waves there were, and how the newcomers adapted to the varied environments they encountered as they journeyed across the land.

On the other hand, it is known that they entered a continent teeming with animals but empty of humans. Moving about in small bands, hunting and foraging, they would have transformed a natural landscape into a cultural one, turning undefined, open spaces into specific, meaningful places. Mark-making or artification, one of a suite of innate modern behaviors, would have been instrumental in this enculturation process. One would expect that, in addition to artifying their bodies, weapons and other paraphernalia, Paleoamericans would also have left behind in their surviving corpus of paleoart a representative pictorial collection of large Ice Age herbivores and their predators with whom they shared the Pleistocene landscape, as did the Franco-Cantabrian cave artists of the Upper Paleolithic. For example, there is ample archaeological evidence in the form of kill sites that mammoth and mastodon on occasion were hunted and eaten by them (Surovell and Waguespack 2008). Yet to date, with the rare exception of three authentic portrayals of *Mammuthus columbi*—two in the form of petroglyphs near the town of Bluff in southeastern Utah (Malotki and Wallace 2011; Malotki and McIntosh 2015) (Fig. 1) and one an incised image on fossil bone at Vero Beach, Florida (see Section 1.8 below)—not a single depiction of ancient bison, muskox, horse, camel, tapir, saber-toothed cat, giant short-faced bear, and other now-extinct species has been unequivocally identified. They simply appear to be absent from the Paleoamerican “meme pool.”

Instead, all earliest North American paleoart, both parietal and mobiliary, is dominated by purely abstract-geometric designs of either curvilinear or rectilinear configuration—circles, spirals, dots, grids, lines, meanders, rakes, stars, cross-hatchings, and so forth (Malotki 2013). Generally termed non-figurative, non-representational, or non-iconic, these archetypal markings apparently were foremost on the minds of paleoartists and can be regarded as constituting the foundational iconography of the Americas.

Quaternary ecologist Paul Martin (1973: 972) was among the few who attempted an explanation. Proponent of the highly contested “Blitzkrieg” or Overkill Hypothesis, he

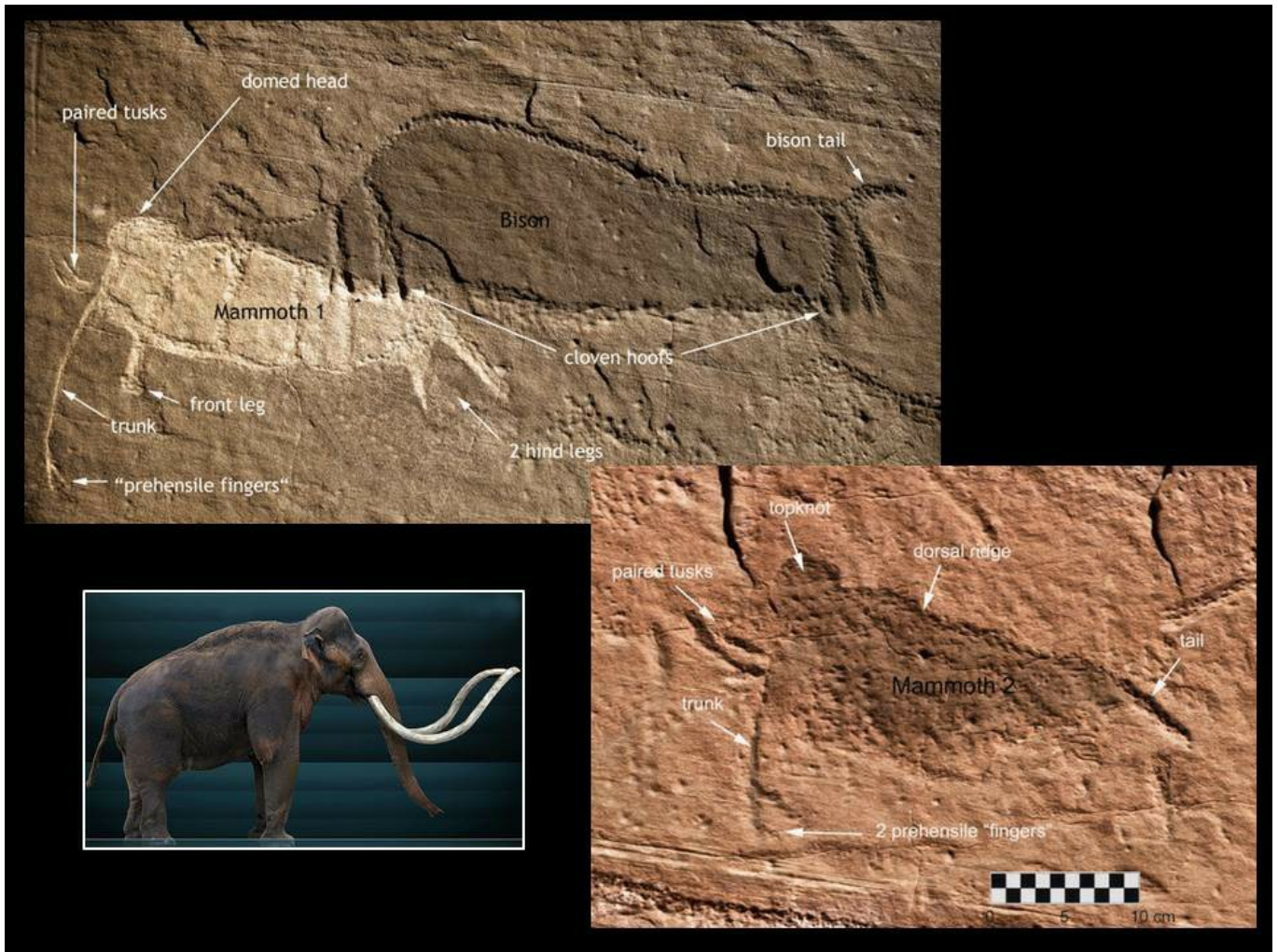


Figure 1. *Mammuthus columbi* digital model by Sergio de la Rosa, Wikimedia Commons. Mammoth 1 with overlain bison (top) and Mammoth 2 (bottom) near Bluff, Utah. Digital enhancements © Julia Andratschke.

regarded overhunting as the reason for the complete absence of iconic Ice Age art in the Western Hemisphere. In his opinion, the newly arriving immigrants, as they swept explosively across the land, decimated their megafaunal prey within the span of a mere 1000 years. In his view, so thorough and rapid was the extermination that most of the big game population, never before having encountered human predators, “was wiped out before there was an opportunity to portray the extinct species.”

Among the counter-arguments that paleoarchaeologist David Meltzer (2009: 255 259) lists is the point that Martin’s overkill scenario requires there to have been no Paleoamerican presence prior to Clovis times. Otherwise “the megafauna surely would have become accustomed to and developed defensive behaviors to respond to human hunters.” Martin’s reasoning for the assumed non-existence of figurative Ice Age art is based on the Clovis-first scenario, which at the time of his writing placed the arrival of humans at around 13,500 years ago. However, we now have compelling evidence that pre-Clovis populations were present in the Western Hemisphere thousands of years before that (Bourgeon et al. 2017; Stenger 2014: 5; Collins et al. 2013: 531).

More recently, anthropologist Gary Haynes (pers. comm. 2014) has attributed the “mystery” that not more Ice Age images have been found to “the very low density of humans” at the time. He speculates that most of them “were probably rather young and extremely mobile, [which] could have reduced the urge to create more complex visual communication. Artwork became more abundant when settlements were longer-term and more generations of people were present.”

Today, single-cause explanations for the demise of mammoths are no longer seriously entertained. Recent research on the extinction of woolly mammoths in Beringia seems to prove that these pachyderms succumbed to a combination of “multiple environmental challenges related to changes in climate, habitat and human predation” (MacDonald et al. 2012).

Whatever the causes of their extinction, it has been assumed by various investigators—both professional and avocational—that in spite of Paleoamericans’ notable bias for non-figurative artification, it would be only a matter of time until more naturalistic depictions of this keystone Ice Age species would be found in the American West. As artist and art historian Barbara Alpert (2012) poignantly remarks, the quest for an image of a mammoth has served as a “Holy Grail” for North American archaeologists and fossil hunters alike. Not surprisingly, for over a century, an assortment of claims has arisen for images purportedly showing proboscidean zoomorphs. The rationales underlying these claims, ranging from the absurd to the potentially plausible and the powerfully persuasive, are investigated below.

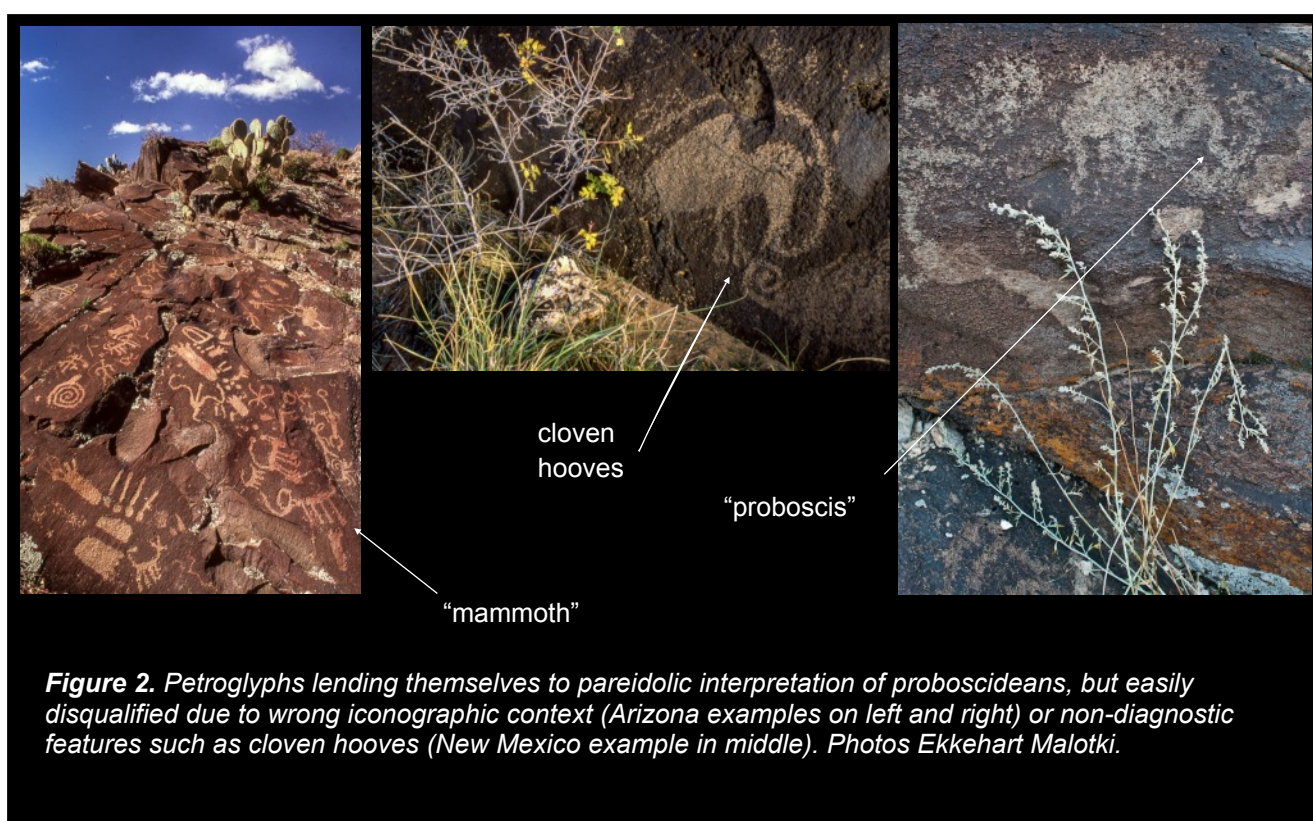
Paradoxically, perhaps because of the apparent lack of figurative Pleistocene art, no other region in the world seems to have a longer “tradition” of unfounded claims than North America, especially with regard to mammoth images. By contrast, more than 500 parietal portrayals of mammoth are known from the Upper Paleolithic of Eurasia, distributed in 46 caves—at least 160 in Rouffignac and 70 in Chauvet-Pont d’Arc alone—and about 130 such images on mobiliary art are known, yet the number of proven forgeries in Eurasia is very small. With the exception of one mammoth drawn in the fake Basque cave of Zubialde, and possibly one or two modern renditions posited for Rouffignac, no faux proboscideans have been identified (Bahn 2016: 238).

Why there is such a disproportion in the number of bogus claims between the Old and the New World is a bit of a mystery, but perhaps it is explainable by the apparent absence of megafaunal paleoart and a perceived need on the part of some American proponents for Ice Age art to “compete” with Europe. Aware that European discoveries of cave paintings and engravings, stone tools, and decorated bone and ivory confirmed the co-existence of early humans with extinct animals, in particular the mammoth, “some archaeologists eagerly sought the same kind of evidence to establish man’s antiquity in America ... and boast[ed] of inhabitants as old as any in Europe” (Sayles 1968: 99).

It is also likely, however, that the hoaxes, fakes and false claims in North America simply proceed from understandable human failings and desires such as greed and monetary gain, publicity and self-promotion, revenge for past slights and insults by colleagues, institutional pride, envy, or the desire to play a practical joke on people in authority (Jackson and Rose 2009). Some of those responsible for archaeological fabrications and spurious assertions may have been caught up in the romantic naiveté of their times regarding ancient man. Others may have been motivated by a more serious

intent, such as supporting their personal pet theories about the human past. A few, finally, may have been hoping to equal European claims for the deep-time existence of art. Mobiliary items, which can be easily fabricated, transported, and sold to collectors, encourage greed, whereas non-portable items, such as rock art, not being so easily sold or otherwise converted to financial gain, might tend to be more associated with self-promotion and revenge for not being taken seriously.

It would be inaccurate to characterize all occurrences of proboscidean depictions in the United States as being deliberate fakes or frauds. These depictions can actually be classified in three categories which I call the “good”, the “bad”, and the “ugly.” The “good” consist of a couple of instances where a strong case can be made for being bona fide renditions of mammoth or mastodon. The “bad” are those which may simply be the result of pareidolic illusion and autosuggestive mindsight, mistaken identity, or the belief that what should be there, actually is there, i.e. “wishful thinking” (Fig.2).



Finally, the “ugly” consist of those which are clearly intentional fakes or frauds. Sections 1 and 2 below discuss the most prominent candidates for these three somewhat subjective categories.

1. PROBOSCIDEAN DEPICTIONS IN MOBILIARY ART

1.1. Holly Oak Shell Pendant, Delaware

In the category of mobiliary paleoart, one of the most egregious confirmed specimens of fraudulent manipulation is the Holly Oak pendant.¹ Its counterfeit depiction of a woolly mammoth on a piece of genuine prehistoric seashell was found to have been inspired by the well-known Paleolithic mammoth engraving on a fragment of ivory tusk² from the Magdalenian site of La Madeleine in southwestern France—the first proboscidean representation ever to reach the European public (Griffin et al. 1988) (Fig. 3). The pendant, a marine whelk shell allegedly “discovered” in 1864 in the state of Del-



Figure 3. Photo of a cast of the La Madeleine mammoth engraving, courtesy of Burt Alpert. Drawing of the Holly Oak Pendant, David Meltzer and William Sturtevant 1983: Fig. 1, with permission from David Meltzer.

aware, was first announced to a skeptical archaeological community in 1889 by archaeologist Hilborne Cresson as evidence of equally ancient human occupation in America. It was not until the advent of accelerator mass spectrometry (AMS) in the early 1980s that this myth was debunked when it turned out that the radiocarbon-dated shell was just over 1000 years old (Griffin et al. 1988: 579-581). From all indications, Cresson incised the image on the shell in the late 1880s, based on a published reproduction of the La Madeleine engraving.

¹ For a photograph of the pendant, see Meltzer and Sturtevant 1983: Fig. 5.

² For a photograph of the original La Madeleine carving, see Bahn and Vertut 1997: Fig. 1.3.

It is interesting to note in this context that anthropologist Lawrence Straus and colleagues (2005: 515), in arguing against the hypothesis advanced by archaeologists Bruce Bradley and Dennis Stanford (2004) that the origin of Clovis may be traceable to the Solutrean culture of Franco-Cantabrian Europe of circa 24,000 to 17,500 years ago, cite the scarcity of early art and/or artifacts from Clovis or pre-Clovis America as a counter-argument. Specifically, alluding to the Holly Oak pendant, they point out that the dearth of early art known in the nineteenth century was so pronounced that “one unbalanced American archaeologist went so far as to fabricate a specimen of counterfeit ‘Paleolithic art,’ using the La Madeleine plaque as a model to engrave the outline of a mammoth,” which he then claimed to have discovered in Pleistocene deposits at a site in Delaware. Indeed, the differences between Solutrean and American art assemblages are so enormous that “in effect, it appears as though cultural amnesia was instant and total, the moment the [Solutrean] groups made landfall” (Straus et al. 2005: 522).

1.2. Lenape Stone, Pennsylvania

Another well-known outright forgery is the Lenape Stone (Fig. 4), with its purported depiction of a woolly mammoth (Kraft 1996; Le Quellec 2009: 120). The artifact is com-



Figure 4. Obverse side of the Lenape Stone, Henry C. Mercer 1885: Fig. 1.

prised of two fragments which were supposedly unearthed at different times, in 1872 and 1881, by the same person—a young farmer—in the same field in Bucks County, Pennsylvania. Resembling a type of gorget or ornamental breast plate that does not appear in the archaeological record until thousands of years after the demise of the mammoth, the small slate, just over 11 cm long, is perforated with two holes typical of gorgets and covered with iconic designs on both sides. One side is decorated with various animal figures and stylized objects (turtle, fish, bird, snake, tomahawk and peace pipe), and the other shows a huge elephantine creature being confronted by a group of stick-figure humans, one of whom is equipped with bow and arrow and long spear. In the forest nearby a couple of tepees are erected under a radiant sun, a crescent moon, two stars, and what look like lightning bolts.

Henry C. Mercer, founding member of the Bucks County Historical Society, was so intrigued by the “find” that he named it and wrote a small book about it in 1885 entitled *The Lenape Stone: or, The Indian and the Mammoth*. Apparently a strong believer in

the contemporaneity of mammoths and Native Americans, he interpreted the side of the artifact showing stick figures and an elephant-like creature as “a combat between savages and the hairy mammoth” and went so far as to describe three of the human forms as, respectively, one wearing a feather headdress, one sitting on the ground smoking a pipe, and one being trampled under the forefeet of the beast (Mercer 1885: 5-6).³

Among the strongest arguments against the authenticity of the piece are not only the totally anachronistic iconography—bow and arrow, for example, are not attested as Ice Age weapons in North America—but also the fact that the etchings on the two fragments at no point cross the break in the stone. This suggests that they were inscribed after the stone was broken or even that the two fragments were not related at all. The gorget created a sensation because it seemed to offer concrete proof for either the co-existence of Paleoamericans and extinct Pleistocene animal species, or for a much more recent extinction date of the megafaunal pachyderms. Today, the artifact, which is on display at the Mercer Museum in Doylestown, Pennsylvania, is considered one of the great hoaxes in American archaeology.

Still, regardless of the fact that the corpus delicti has been routinely debunked by professional archaeologists, there are still holdouts defending its “authenticity.” Frank Joseph, editor-in-chief of *Ancient American* magazine, for instance (n.d.: 35), while dismissing it as an artifact of Ice Age antiquity, sees it as “a much-later commemorative gorget depicting tribal memories of mega fauna confrontations many thousands of years before it was made.” In his opinion, “a simple farm boy would not have been capable of perpetuating a hoax by portraying such an obscure account.”

1.3. Hammond Tablet, Massachusetts



Figure 5. Segment of the Hammond Tablet, showing three of the four proboscidean motifs on its obverse face. Original drawing Frank C. Delabarre 1925: Plate XXX.

³ For additional reactions to the Lenape Stone in the latter part of the nineteenth and the early twentieth centuries, see Kraft 1996: 1-4.

In 1917, some thirty years after the publication of Mercer's book, a slate tablet bearing motifs similar to those etched into the Lenape Stone reportedly came to light near Taunton, Massachusetts. Known as the Hammond Tablet (Fig. 5) after the local resident who allegedly "discovered" it, it features symbols on both sides so uncannily like those on the Lenape Stone that there can be no doubt it was plagiarized from that fraudulent piece (Kraft 1996: 6). Once again, a large pachyderm, this time complemented by three additional, disembodied mammoth heads, is facing several stick-figure hunters with bows and spears in a forest setting adjacent to a teepee encampment under the sun, moon, and stars.⁴ Unlike the Lenape Stone, however, which still can be viewed and examined, the whereabouts of the Hammond Tablet are no longer known.

1.4. Davenport Effigy Pipes, Iowa

The case of the Davenport Elephant Pipes (Fig. 6) is an interesting one, involving a number of artifacts, including two sculpted effigy pipe heads resembling elephants. One of them, rather awkward-looking, is distinguished by a long snout reminiscent of an anteater, while the other is equipped with a pronounced trunk that curls down toward the animal's forelegs. Retrieved in the course of an excavation of an ancient Indian burial mound in Louisa County, Iowa, in the early 1880s, the elephants were probably intended to "prove" that one of the mysterious mound-builder cultures of the upper Mid-



Figure 6. *Davenport Elephant Pipes, Charles E. Putnam 1885: Figs. 1 and 2.*

west, dated approx. 550-1200 CE, had been a contemporary of those beasts.

The case was so embroiled in controversy, professional jealousy, and accusations that in time the whole affair became known as the Davenport Conspiracy (McKusick 1991). There appears to be sufficient documentation now to ascertain that the clay

⁴ For an actual photograph of the complete tablet, see Delabarre 1925: Plate XXIX.

smoking pipes were fashioned in the basement of the Davenport Academy of Natural Sciences to play a hoax on and/or discredit the foreign-born amateur archaeologist Jacob Gass, who had been newly appointed to the Academy. The pseudo-artifacts were then “salted” in a mound, where they were readily “discovered” by Gass, a Lutheran minister, who himself was believed to have been guilty of trading in fake relics, many of which ended up in the Davenport Academy museum. In the eyes of Haynes (2002: 158), the animals sculpted on the Iowa pipes “remain a mystery, unless an imperfect folk-memory of a vanished long-nosed animal survived in midcontinental Native Americans thousands of years after mastodont extinction.”

1.5. Flora Vista Slabs, New Mexico, and Montezuma Valley Jar, Colorado

Two small sandstone plaques, part of the Arizona State Museum collections and commonly referred to as the Elephant Slabs,⁵ are another example that most archaeologists have now condemned as the bizarre work of “some hoaxer with a knowledge of ancient alphabets, cattle brands, Indian designs and gold miners’ signs” (Harris 1971: 77). Unearthed in 1910 by a small boy in an Indian ruin on the Animas River near Flora Vista, New Mexico, the tablets primarily contain the symbols of a supposedly ancient yet apocryphal writing system (Fig. 7). Southwestern archaeologist Edwin Booth Sayles

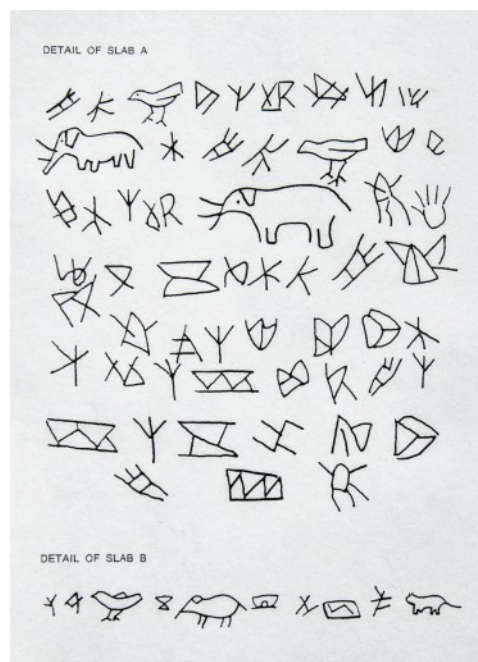


Figure 7. *Flora Vista Elephant Slabs, Fantasies of Gold* by Edwin B. Sayles. © 1968 The Arizona Board of Regents. Reprinted by permission of the University of Arizona Press.

(1968: 93-94), in a lengthy discussion of the slabs, actually cites an interpretation of their inscribed “message,” that he considered “worthy of consideration.” However, it is not clear whether the decipherment by a Park Service archaeologist is to be taken seriously or was offered by him tongue-in-cheek. In the words of American author Jason Colavito (2012), “the symbols are nonsense and do not conform to any known written

⁵ For photos of the two slabs, see Sayles 1968: 88.

language. ... If they truly represented a European or African language,” as some commentators have stated, “surely the same characters should be in use in the Old World.”

Interspersed among the horizontally arranged “text” lines are several bird and animal shapes, including, unmistakably, two contoured elephantine zoomorphs with clearly drawn tusks, trunks, and flapping ears. Earl Morris, a prominent archaeologist of the time who inspected the ruin site, dated it to 1200 CE on the basis of associated potsherds and saw no reason to doubt the authenticity of the incised specimens despite the low likelihood that a Puebloan resident of the ruins—if indeed a resident had made them—could ever have seen an elephant.

In addition to the suggestion that these slabs might contain clues to some hidden treasure, several other wildly hypothetical scenarios have been proposed to explain them: that mammoths and Puebloans coexisted until 800 years ago; that they were mementos of Phoenician trade ships between 900 - 200 BCE.; that they portrayed war elephants from Kublai Kahn’s shipwrecked invasion fleet against Japan in 1275 CE, which a Native American depicted for posterity (Anonymous 2008). Somewhat more plausible may be the idea that Mormons buried them in the ruins to stage a “religious revelation” (Sayles 1968: 87). The proboscidean images, especially, may have been designed to offer “evidence” in support of the statement in the Book of Mormon that a small group of Israelite immigrants arrived on the North American continent and became the founder population for its ancient civilizations. In particular, passage 9:19 in the Book of Ether (Colavito 2012) states that the early settlers were aided by the presence of not only domesticated animals, including horses and asses, but especially “elephants, and *cureloms* and *cumoms*.” It’s been speculated (Miller and Roper 2014) that viable candidates for *cureloms* and *cumoms*, enigmatic names that prophet Joseph Smith left untranslated, are extinct animals related to the elephant, in particular mastodon and the quadruple-tusked (two pairs) gomphothere.

In addition to the enigmatic Elephant Slabs, Sayles, in his *Fantasies of Gold* (1968: 91-92) also comments on the drawing of a pottery vessel decorated with a tuskless elephant (Fig. 8). According to him, the prehistoric jar, attributable to the Pueblo I Period (about 1000 CE) within the classificatory system of Southwestern archaeology, was found in the 1880s at a ruin site in Montezuma Valley in the southwesternmost county



Figure 8. Montezuma Valley jar, from a 1903 newspaper article of unknown title.

of Colorado (home to the Ute Mountain Indian Reservation) “within sight of the spot from which the Elephant Slabs came.” A newspaper clipping (Anonymous 1903) titled “Were Cliff Dwellers Aware of the Mastodon?” actually pinpoints the location in Montezuma Valley at “about seven miles from Mesa Verde,” today a national park world-renowned for its Ancestral Puebloan cliff dwellings. In describing the pitcher’s dimensions—three and one-fourth inches in diameter and four and three-fourths in height—it also explains that it came to the fore during excavation work for an irrigation ditch. Sayles (1968: 91-92) questions whether the elephant was part of the original decoration. In particular he is skeptical of the floral design to the left of the animal, which in his view does not conform to pottery designs from the Pueblo I Period and therefore may have been added just like the elephant.

As of now, all my efforts to obtain reliable information on the whereabouts of the jar or get confirmation of its very existence have been in vain. Clearly, there is a need not only to have the vessel’s archaeological provenience verified but also to have its painted décor analysed by a ceramic specialist.

1.6. Jacob’s Cavern Humerus, Missouri

Two other examples of mobiliary art would probably profit from modern forensic examination to establish possible authenticity. The first is an engraved deer humerus from Jacob’s Cavern in Missouri (Fig. 9). Found in 1921 in a humanly disturbed layer amidst several other artified and perforated objects, all of which completely disintegrated within weeks of their removal, this so-called “mastodon” bone was the sole intact survivor (Allison 1926: 328). Bilaterally engraved, it is decorated on one side with an apparent



Fig. 20. “Mastodon” Side of the Carved Bone.

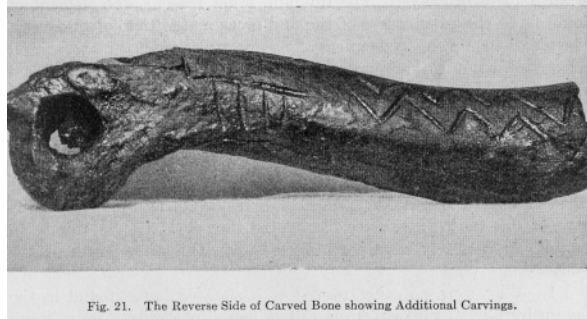


Fig. 21. The Reverse Side of Carved Bone showing Additional Carvings.

Figure 9. Jacob’s Cavern incised bone, Vernon C. Allison 1926: Figs. 20 and 21.

paired-line zigzag and a rake-like element. Heavily grooved, as can be perceived from archaeologist Allison's photographs in Figure 9, these geometric elements differ markedly from the much finer curvilinear incisions that make up the "mastodon" on the other side. This side's design, while admittedly reminiscent of a quadruped, is so heavily stylized that it is difficult to discern unequivocally the diagnostic traits of a proboscidean. This may be the reason that the figure, at one point, was also believed to depict a rhinoceros (Bahn and Vertut 1988: 26). However, woolly rhinos never extended their range into North America. Ordinarily one would assume that both sides of an artifact were artified by the same person. If this assumption makes sense, one wonders why the graven lines vary so much in depth and why the designs exhibit two such radically different styles.

On the basis of physical evidence, the bone, which is perforated at the lower end by means of a stone drill, was initially declared genuine and was believed to have originated at a date somewhere around 16,000 to 12,000 BP (Allison 1926: 335). In 1928, however, Nels C. Nelson of the American Museum of Natural History, where the artifact was held, in a scathing review of the earlier report, pronounced it "a plain fraud," listing eleven well-thought-out reasons in support of his position (Nelson 1928: 330-332). For instance, he found it strange that the carved specimen was the only one that appeared well preserved while all the others completely disintegrated soon after their collection. In addition, he pointed out that the color of the "mastodon" engraving differed markedly from the color of the bone itself, indicating to him that the two surfaces had not undergone the same degree of weathering.

Allison (1928), in rejecting the criticism, insisted that various scientific tests, including X-ray photography, had shown that the humerus was mineralized and the "mineralization occurred after the carving."

Whatever the case, according to Anibal Rodriguez, senior museum technician in the Division of Anthropology (pers. comm. 2012), the artifact has now been declared irretrievably lost, so determining its authenticity and that of the two types of incisions is no longer feasible. Even if the artifact were available, direct radiocarbon dating would not be an option today because, shortly after its acquisition by the museum, the bone was saturated with paraffin to stabilize its fragile condition (Allison 1926: 328).

1.7. Rocky Mountains Stone Pendant, Colorado

The Rocky Mountains Stone Pendant (Fig. 10), as I have named it, is another object whose status is still unresolved. I first learned of this item, which was discovered some sixty years ago near South Park, Colorado, when I came across the abstract of a paper titled "A Stone Pendant from the Rocky Mountains: An Example of Pleistocene Art?" Paleoarchaeologist Steven Holen presented this paper at the Colorado Archaeological Society Annual Meeting in Pueblo, Colorado, in 2009. As he states in his abstract, it was in 1956 that the person who found the pendant had archaeologist Marie Wormington examine it. She was one of the leading authorities on Paleoindians at the time and curator at the Colorado Museum of Natural History (now the Denver Museum of Nature and Science). No information is available, however, concerning what verdict she reached regarding the artifact.

According to Holen (2008: 5), the pendant is made of dark metamorphic rock. Bearing an elephant-like image on one face and abstract-geometric marks on its obverse side, it measures just over 7 cm in length and nearly 4 cm at its widest point. A biconical hole at its end, most likely made with a stone drill, appears to attest well to it being a genuine artifact. What remains controversial, however, is the actual representational



Figure 10. Rocky Mountains Stone Pendant. Photo courtesy of Steve Holen.

incising. There is a marked difference in the degree of patination between the stone object and the elephantine figure engraved upon it. Considering that the exact circumstances of the artifact's discovery and provenience are still not established and the outlined animal shows considerably less varnish than the stone itself, attributing its creation to a paleoartist from the Late Pleistocene or Early Holocene is presently not warranted. To verify or falsify authenticity, it would be crucial to conduct a microscopic study and internal analysis of the engraved lines. Such an analysis should clarify whether the lines were made with a stone chisel or a metal instrument. Holen himself (2008: 5) has advanced a possible explanation that cannot be ruled out, that the figurative engraving was made in historic times "after elephants again were introduced into North American zoos and circuses."

No longer in the possession of the Denver Museum of Nature and Science, the pendant is presently curated by the United States Forest Service at the headquarters of the Pike and San Isabel National Forests in Pueblo, Colorado. Forest Service Heritage Program manager Amanda Sanchez (pers. comm. 2016) has indicated that, due to my interest in the item and its possible significance, the Forest Service may undertake a new effort to shed light on how the pendant came to be.

1.8. Vero Beach Bone, Florida

Unlike the above array of suspect, unverified, or downright fraudulent claims for proboscidean imagery on mobiliary art, amateur fossil hunter James Kennedy's 2009 discovery of a realistic mammoth portrayal at the Old Vero site in east-central coastal Florida (Fig. 11) is so persuasive that it has made international headlines. Etched on a fragment of extinct megafauna bone, the proboscidean rendering—believed to convinc-

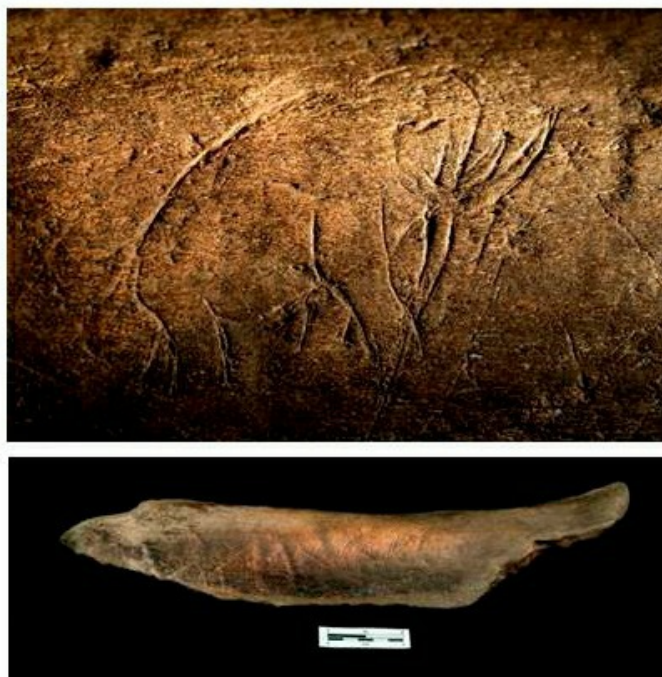


Figure 11. Vero Beach incised fossil bone. Photos by Jeff Gage, courtesy of Barbara Purdy.

ingly depict a *Mammuthus columbi*—displays the same grade of coloration as the outer bone layer. It shows such perfect use of perspective that, in the eyes of Alpert (2012), “no other [Franco-Cantabrian] Pleistocene example achieved the same degree of photographic realism.”

Compellingly verified by a barrage of scientific tests, including scanning electron microscopy and rare earth element analysis that revealed no sign of falsification (such as the use of metal tools in the production of the engraved animal), the bone can be seen as a truly credible piece of pictorial evidence for the contemporaneity of Paleoamericans and Ice Age megafauna (Purdy et al. 2011; Purdy 2012). Although its mineralized condition as well as lack of collagen have precluded absolute chronometry by means of radiocarbon dating, the bone is assumed to be at least 13,000 years old, which is the currently known extinction date for mammoths in eastern North America.

In spite of all the scientific evidence amassed to date in support of the artifact's authenticity, archaeologist Barbara Purdy and her team (2011: 2912) nonetheless raise “the possibility that the incised bone is a forgery since it was found by an avocational

fossil hunter.” Additionally, archaeologist Brad Lepper (2012: 5) points out that the lack of a verifiable archaeological context represents “the greatest obstacle to authenticating the Vero Beach mammoth engraving.” Still, in light of the extensive scrutiny that the artifact has passed, together with the existence of reliable proxy evidence in the form of human and mammal skeletal remains in Florida from 13,000 years ago (MacFadden et al. 2012), the likelihood that the piece is a fake is rather minimal. From all indications, the Vero Beach specimen can be accepted as the currently best-supported North American instance of *figurative* mobiliary paleoart from the end of the Ice Age.⁶

2. PROBOSCIDEAN CLAIMS IN PARIETAL ART

2.1. Birch Creek, Utah

In the realm of parietal art, the number of known proboscidean forgeries is relatively small compared to the many paintings and engravings that have been mistakenly inter-



Figure 12. Woolly rhino pictograph at Birch Creek, Utah. Photo © Ekkehart Malotki; DStretch version (below) by Richard Jenkinson.

preted as portraying the Ice Age megabeast. Art fraud is clearly established for several megafaunal images in Birch Creek, Utah. Severely faded, one of them depicts a woolly rhinoceros, as is revealed after enhancing the image through digital DStretch technology (Fig. 12). As is well established, however, there is no paleontological evidence that

⁶ For the presently oldest known specimens of *non-figurative* mobiliary paleoart in the New World, see Lemke et al. 2015.

woolly rhinos ever existed in North America. Two other figures have been interpreted as mammoths by their pronounced cranial bumps and attached tusks (Fig. 13).



According to rock art aficionado Lee Swasey (pers. comm. 2010), the monochrome paintings in Birch Creek were produced in the 1950s by an individual, now deceased, from the nearby town of Ferron. He created four pictograph panels at different locations, one of which displays a mixture of motifs reflecting iconography from both the Four Corners region of the American Southwest and the European Upper Paleolithic



(Fig. 14). As local lore has it, the individual disliked the scientific community and was bent on misleading archaeologists with his counterfeit images. He may also have intended to organize tours to his sites for paying customers.

As it is, the faux images have been repeatedly published as being authentic Ice Age art on the Colorado Plateau (Agenbroad 2000; Agenbroad and Hesse 2004; Lepper 2010), even though it is hard to imagine how they could have survived for 12,000 years or more on the relatively open-air rock face where they are placed. Dennis Stanford and Bruce Bradley appear to be alluding to these two painted fakes when they state that “with the exception of a couple of possible Clovis pictographs of mammoths in the

west” (2012: 175), “evidence of Clovis ornamentation is minimal and rare, and the representation of animals and humans in cave art is totally absent” (2012: 65). For some reason, they neither specify what locality “in the west” nor do they provide references on which they base their conclusions.

2.2. Mojave National Preserve, California

Brief mention is also warranted of a blatantly fraudulent mammoth petroglyph that my friend Larry Midling discovered in a remote location of the Mojave National Preserve of California (Fig. 15) in January 2013 in the course of a joint rock art research trip into the area. Bearing no signs of revarnishing, the engraving cannot be older than 2001. Metic-



Figure 15. *Proboscidean graffito at the Mojave National Preserve, California. Photo © Ekkehart Malotki.*

ulous survey work in the region conducted in that year by archaeologist Don Christensen shows no record of this poorly executed graffito (pers. comm. 2013). As is demonstrated by this recent fake, the urge to create pseudo-Pleistocene imagery in the shape of proboscideans is not a thing of the past but appears to be an ongoing deplorable phenomenon.

2.3. Yellow Rock Canyon, Nevada

Regarding Paleoindian authenticity, a more challenging case than the Birch Creek fakes discussed in Section 2.1. is an elephantine petroglyph found in Yellow Rock Canyon, a small drainage off the western side of High Rock Canyon in the extreme northwest corner of Nevada. Its attribution to the Pleistocene era has been the subject of controversy and speculation. Discovered by members of a gem and mineral society in 1968 (Layton 1976: 250), the image is one of four petroglyphs cut into the surface of a large flat-topped rhyolite boulder (Fig. 16). While three of the glyphs are non-iconic curvilinear elements, which in the view of two researchers (Clewlow and Uchitel 2005: 35) “recall modern cattle brands,” the fourth element, measuring some 25 cm from tusk to tail, plainly shows a proboscidean facing left. Overgrown with random lichen patches that render some of its anatomic details obscure and/or ambiguous, it is realistically



Figure 16. Elephantine petroglyph in Yellow Rock Canyon, Nevada. Photo © Ekkehart Malotki.

portrayed with two tusks of differing lengths, a slightly upcurved trunk, a possible floppy ear, an eye-like feature and an obvious tail. Most noteworthy perhaps, a spear appears to protrude from the animal's side.

Archaeologist Donald Tuohy (1969: 10), who was the first to discuss this image, accepts the three abstract marks as "aboriginal petrography" but calls the quadrupedal creature "the artistic achievement of a Twentieth Century wag, and not a magico-religious doodle of a prehistoric hunter," citing as the main reason the beast's strong resemblance to an Indian elephant. Almost twenty years later, however, in musing anew about the maker of the zoomorph—whether prehistoric hunter, gold rush forty-niner, Basque shepherd, or camping hoaxer—he suggests that the artist was a prehistoric hunter "who had seen the real thing" (Tuohy 1986: 13).

In the judgment of William Clewlow and Sandra Uchitel (2005: 41), the elephant-like



Figure 17. Mouth of Yellow Rock Canyon, Nevada. Photos Ekkehart Malotki.

engraving "could readily be interpreted as a crude portrayal of a mammoth." In support of their hypothesis they mention the fact that a hoaxer would not have chosen such an isolated locality as Yellow Rock Canyon; that he would have incised it on a rock surface more easily seen by others; and that he would have rendered the depiction in more

elaborate detail and much larger size. However, several factors speak against their argumentation. Merely a mile from the rock art boulder is High Rock Canyon, which was part of one segment of the Applegate Trail that served thousands of immigrants as an alternate route to Oregon between 1846 and 1860. It was again heavily used by Oregon settlers on their way back south to the newly discovered gold fields in California. Aware that the mouth of Yellow Rock Canyon borders the Applegate wagon road and served its passers-by as a camping spot (Fig. 17), anthropologist Thomas Layton (1976: 256-257) envisages a scenario in which a gold-seeking forty-niner might have discovered the three abstract petroglyphs which, meaning nothing to him, inspired him to add the depictive image of an elephant. He thus regards the proboscidean glyph as an outgrowth of the cultural mythology of the mid-19th century of going to “see the elephant,” an idiomatic expression that, initially synonymous with the pursuit of a major personal goal, “finally came to describe the complete experience of seeking gold” (Layton 1976: 253).

My personal inspection of the rock art site revealed that all four of the Yellow Rock Canyon incisions exhibit the same production technique with a sharp-pointed tool, the same degree of weathering and lichen growth, and such a stylistic similarity that they must have been created by the same hand. In a detailed study, Clewlow and Uchitel (2005: 39) also concluded that all four motifs are equivalent in age, of the same style, and likely “were made at the same time, by the same artist.” Further, they propose a Late Pleistocene age for the engraving.

Several observations seem to speak against this age assessment. Not only is the elephant style totally modern, but the design stands out as too “fresh” and too unpatinated to have originated at the end of the Ice Age. Nor are the lichens that in places overlap the engravings suggestive of deep antiquity: depending on the microenvironment, some lichens tend to grow rather rapidly. In addition, the glyph-bearing boulder is an isolate. A careful survey of its general vicinity yielded not a single other rupestrian art site, which is quite unusual for patterns of rock art distribution in the Great Basin. Finally, attempts to replicate an incision with a piece of hard rock on a nearby boulder featuring the same kind of rhyolitic weathering rind as the engraved boulder failed completely. The rock simply shattered and barely left a mark. A visible result was finally achieved with the help of two geologic rock hammers, one of which was used as a chisel.

Both early pioneers and prospectors would have had metal tools at their disposal to create the glyphs. Close inspection of the evenly made engravings suggests that a star drill bit may actually have been employed to produce them.⁷ The possibility that the image-maker was the member of a 1919 U.S. Geological Survey party cannot be ruled out. Such people would have possessed sharp metal instruments. A mere 60 m from the rock art boulder is a section marker displaying this 1919 date, in addition to township and range information, proof that such a survey party worked in the area. On the basis of this additional piece of evidence, it is my tentative conclusion that the imagery at Yellow Rock Canyon is a hoax. To be sure, the animal’s outline is strongly reminiscent of an Indian elephant, not of a mammoth, which at first might prompt one to conclude that no hoax was intended. The fact, however, that a spear is protruding from its

⁷ I owe this insight to environmental geologist Cathy West. She also pointed out that micro-opalite inclusions in the rhyolite boulder were the reason for its near-impenetrable surface.

back strikes me as a strong indication that the engraver purposefully created a hunting scene with an Ice Age pachyderm.

2.4. Van, Pennsylvania, and Dinetah, New Mexico

The elephant figure at the Rainbow Rocks Petroglyphs site southeast of Van, Pennsylvania (Fig. 18), was readily recognized as a non-indigenous fraud by rock art specialist James Swauger (1972) when he first visited the site. As pointed out in his brief report, there are numerous authentic glyphs on the face of the rock shelter behind the boulder. In contrast, the boulder with the elephant figure is otherwise bare except for a conspicuously smoothed, rather precisely outlined 50x50 cm square within which the elephant



Figure 18. Elephant engraving at Rainbow Rocks, Pennsylvania.
Photo courtesy of Thomas Anderton.



Figure 19. Elephantine depiction in the Dinetah, New Mexico.
Photo courtesy of Carol Patterson.

is centered (Thomas Anderton, pers. comm. 2013). Totally atypical of Native American rock art, the surround feature, obviously Western-derived, gives the impression of a framed piece of art. The bas-relief image, with a large ear flap and upturned trunk, was evidently manufactured with metal tools, thereby betraying its modern origin.

A metal instrument also appears to have been involved in the fashioning of the rather awkward-looking elephant engraving (Fig. 19) at an undisclosed canyon site in the Dineh area of New Mexico, regarded the traditional homeland of the Navajo people following their arrival in the American Southwest. As rock art researcher Carol Patterson intimates (pers. comm. 2016), the image was most likely the work of a Navajo man. Although impossible to prove, he may have been inspired by an elephant from a circus or menagerie on tour through New Mexico and had no intent to draw a mammoth or mastodon. Rather than a forgery, the petroglyph is perhaps best understood as a pictorial memento of an actual encounter of a Native American with an unfamiliar non-native megabeast.

2.5. Barnesville, Ohio

In the state of Ohio, a major petroglyph site near the town of Barnesville includes two proboscidean zoomorphs that members of the Midwestern Epigraphic Society (MES) commonly interpret as mastodons (Leslie 2008). Unlike the Rainbow Rocks and Dinehah elephants in Section 2.4., these do not instantly convey the impression of non-indigenous imagery. Popularly known as Track Rocks, the site contains an abundance of engraved mammal spoor, bird tracks, and human footprints. Published diagrams of the markings also show several faces, geometric figures, snakes, and multiple cupules, all carved on two large-sized rock outcroppings situated amidst dozens of other sandstone boulders (Swauger 1974a: Fig. 2). First discovered in 1856 (Howe 1896: 325), the area served the local community for decades as a picnic and recreation spot, as shown by miscellaneous graffiti, primarily names and dates. Swauger's (1974b) description of the site in his comprehensive monograph on rupestrian art in the Upper Ohio Valley may have provided the impetus to list the imagery on the National Register of Historic

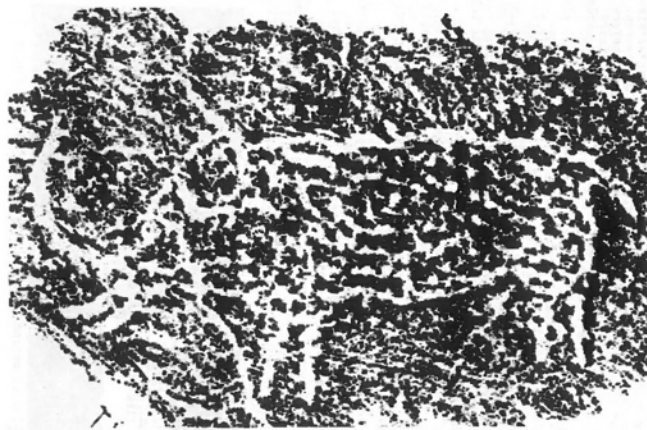


Figure 20. Rubbing of proboscidean engraving at the Track Rocks site, Ohio, with permission of James Leslie.

Places.⁸ Over the years the property changed hands several times, until the R&F Coal Company donated it to the Archaeological Conservancy in 1999.

In 1984, when MES members first visited the location, they determined that “it had been abandoned for some time, grown up in brush and forgotten by the locals” (James Leslie, pers. comm. 2012). In the process of clearing the heavy brambles that had enveloped some of the boulders, the group discovered a fully pecked but only faintly visible animal which, equipped with “an extra-long snout, beautiful tusks, and a short tail, clearly resembled an elephant” (Moseley 1984: 44). Because unfavorable lighting conditions at the time did not permit photography of the shallow engraving, a rubbing was made on stiff cloth with a black crayon (Fig. 20). This rubbing unmistakably shows an elephantine creature, 42 cm long, with a trunk, two tusks, and an eye (Moseley



Figure 21. *Mammuth americanus* digital model by Sergio de la Rosa, Wikimedia Commons, and the two proboscidean images at the Track Rocks site, Ohio. Photos © Ilona Anderson.

1984: 45). During a subsequent visit later that same year, a second elephant, also facing left and 33 cm in length, was recognized. Quite similar in anatomical conception to the first, it is easily distinguished from it by a longer tail.

Two newspaper articles that appeared in the local press following this “rediscovery,” one offering the fanciful suggestion that the hilltop locale might have been “used for sun worship by ancient Celts from Europe” (Anonymous 1984), the other mentioning the

⁸ See http://en.wikipedia.org/wiki/Barnesville_Petroglyph.

elephantine image (Baker 1985), once again generated local interest in the site. As a result, one of the townspeople (presumably the site's owner at the time) coated all the glyphs, including the two proboscideans, with black latex paint to make them more visible (Murphy 2009). Almost thirty years later, much of the paint has flaked off, giving the engravings a somewhat blotched appearance, as seen in recent photographs (Fig. 21).

Victor Moseley, founder of the Midwestern Epigraphic Society, was a follower of epigrapher Barry Fell (1989), who strongly believed that there was evidence in North America for Pre-Columbian contact by Celts from Spain, and Semitic seafarers from Carthage, Libya, and Egypt. Moseley (1984), while not ruling out the possibility that an Ice Age artist could have chiseled the elephants, nevertheless felt that they were “more reasonably” the product of ancient Mediterranean colonists, especially in light of an “Iberian-Punic script found on [a] tablet removed from the [Grave Creek Mound] less than 25 miles from the Track Rocks.” Petroglyph connoisseur Swauger (1974b: 112), who didn't notice the proboscideans during his investigation of the site, attributed the production of the track images to Ojibwe-influenced people of the Monongahela culture, whose earliest presence in the Upper Ohio Valley has been established as being around 1200 CE.

Based on their morphological traits, it seems likely that the two elephantine zoomorphs at the Track Rocks site represent mastodons rather than mammoths. Unlike Columbian mammoths, whose heads are generally domed or pointed, the dorsal ridges of American mastodons are relatively straight and flat. These engravings clearly lack the cranial bumps as is typical for mastodons. Both animals feature tusks and trunks,



Figure 22. Historic graffiti at the Track Rocks site near Barnesville, Ohio. Photo © Ilona Anderson.

highly diagnostic details for pachyderms. Their apparent antiquity is borne out not only by their time-worn, heavily eroded appearance, but also by the fact that there is no evidence they were made with metal tools. In contrast, the numerous historic graffiti at the site clearly show the use of such modern tools (Fig. 22). Although names and dates from the 19th and 20th centuries now exhibit a good deal of weathering, they are much more deeply cut than the two pachyderms and show V-shaped channeling typical of the use of metal implements (James Leslie, pers. comm. 2012).

Perhaps the strongest argument against the megafaunal images being recent forgeries is the fact that there are two of them. Modern hoaxers or counterfeiters of figurative

parietal art typically do not engage in “twinning” or doubling the same motif. Placed on separate sandstone blocks less than 10 m apart, the two quadrupeds display such striking consistency in both stylistic rendering and mechanical execution that it is tempting to attribute them to the same artist.⁹

Additionally, several archaeological and paleontological factors speak for a possible Pleistocene origin of the elephantine engravings. The deep antiquity of the Track Rocks site itself could perhaps be substantiated by a fluted Clovis spear point discovered nearby (MES Site Report 2008). Three additional projectile points of Clovis culture affiliation are attested in Belmont County within a radius of 40 to 50 km of Barnesville (Stansbery 2013; Brad Lepper, pers. comm. 2013). Finally, there is the famous Meadowcroft Rockshelter, just 80 km due west of Barnesville, believed to be one of the earliest pre-Clovis era sites in North America (Adovasio and Page 2003). A great deal of paleontological evidence for proboscideans in Ohio is offered in a report by geologist Michael Hansen. According to that report, remains of some 250 pachyderms have been recorded from 70 of the state’s 88 counties, with mastodon remains outnumbering those of mammoths by a ratio of about 3 to 1 (Hansen 1992: 5-6).

Haynes singles out five mastodon sites as “proven or likely from the Clovis era” (Haynes 2009: 42). Perhaps best known is the one at the Burning Tree Golf Course in Licking County, only 100 km west of Barnesville. Three separate piles of remains were found at this site, which has been established as being approximately 13,300 years old. These remains apparently were stowed by Ice Age hunters in a nearby shallow lake whose frigid waters at the time “would have served as a prehistoric meat freezer” (Lepper 2006). There is thus sufficient circumstantial evidence, beyond their appearance, that the two elephantine images at the Track Rocks may indeed represent Pleistocene megafauna, specifically *Mammuthus americanus*. The case for their authenticity certainly appears far superior to that of any other parietal Ice Age claim discussed in Section 2. It should be noted, nevertheless, that a determination made merely on the basis of photographs and published reports cannot be considered conclusive. Credible substantiation of my proposed interpretation of the Track Rocks proboscideans may not be feasible until a reliable method for gauging the age of petroglyphs becomes available.¹⁰

2.6. Havasu Canyon, Arizona

As mentioned earlier, the great majority of wayward claims for rupestrian proboscideans can be attributed to the psychological phenomena of wishful thinking, auto-suggestion, and mindsight or pareidolic assertion. A conspicuous example in this category of misinterpretations pertains to an entire panel of petroglyphs in Havasu Canyon, a side

⁹ The “twinning” of a proboscidean image also occurs at the Upper Sand Island site near Bluff, Utah, (Malotki and Wallace 2011) and in the opinion of eminent rock art specialist Jean Clottes (2013: 9) constitutes unambiguous proof that they are not modern fakes but bona fide Ice Age depictions.

¹⁰ Rock art expert Robert Bednarik (2013: 4; 2015: 8-9), relying on his very own microerosion (ME) dating technique, concluded that the two elephant-like figures could not be much older than the first half of the twentieth century. According to archaeologists Field and McIntosh (2009: 18), however, both the theory and practical application of the technique are “unproven” and should not be promoted as a valid dating instrument until it “has been placed on firmer scientific basis, tested in the field and validated by a range of independent dating specialists.”

drainage of the Grand Canyon in northern Arizona and home to the Havasupai Indian tribe. A “scientific expedition” into the area in 1924 under the direction of Samuel Hubbard, honorary curator of archaeology at the Oakland Museum and self-proclaimed religious fundamentalist, was funded by oil tycoon Edward Doheny. It resulted in two published articles that are so replete with extraneous detail and unsupported pronouncements that they are difficult to summarize.

Among the petroglyphs (mistakenly termed “pictographs”) that the publications describe is one called “a picture of the most terrible carnivorous dinosaur that ever existed on earth, the gruesome Tyrannosaurus of the late Cretaceous Period” that was

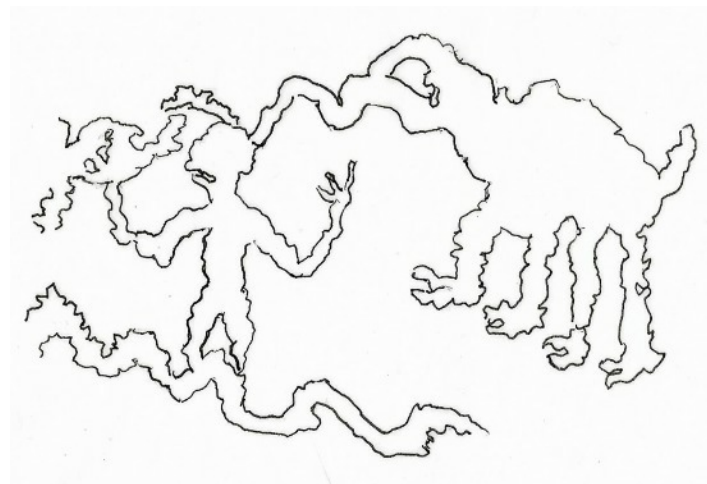


Figure 23. Partial drawing by Barbara Alpert of “elephant” in Havasu Canyon, Arizona, based on a photo by Samuel Hubbard 1927: 12.

“probably drawn more than 12,000 years ago” (Hubbard 1927: 37). In close proximity was “an elephant, attacking a large man” (Fig. 23). The tuskless animal is interpreted as female and assigned to the species of “imperial elephant” (Hubbard 1929: 36). The man being attacked stands on an undulating line that, in Hubbard’s eyes, symbolizes water. A second wavy line, merging with the head of the quadruped, is seen as the attacking trunk. Observing that the elephant is not as tall as the man, Hubbard (1927: 15) concludes that the latter must have been of giant stature, “more than 14 feet high.”

Hubbard’s failure to note that the “elephant” has cloven feet, which plainly mark the animal as an ungulate, places his entire interpretation in the realm of fantasy.

2.7. Moab, Utah

A somewhat more serious contender for pictorial proof of the coexistence of human-sand megamammals during the Terminal Pleistocene can be found in an account by Gould (1935) of an image along the Colorado River, downstream from the town of Moab, Utah, that is locally known as the “mastodon” and has been heralded in a number of publications as a bona fide portrayal of that extinct beast. Sadly, the depiction, which nowadays shows several gunshot impacts (Fig. 24), was rendered unfit for useful analysis years ago by perhaps well-meaning individuals who “enhanced” it by re-engrav-



Figure 24. Vandalized engraving of so-called “Moab mastodon,” Utah. Photo Ekkehart Malotki.

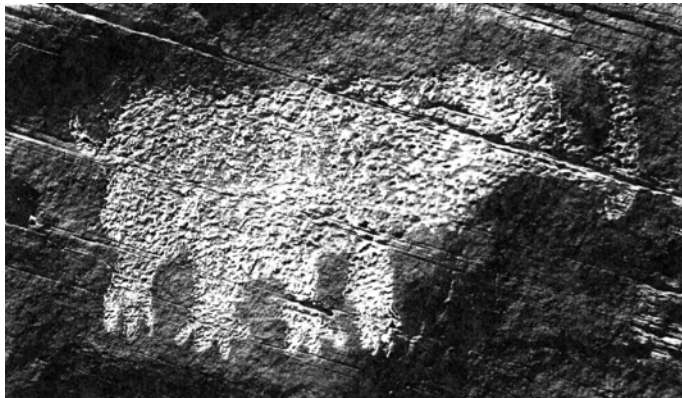


Figure 25. Chalked engraving of so-called “Moab mastodon,” Utah. Photo San Juan County Historical Society, courtesy of LaVerne Tate.

ing its accreted patina for better visibility. Interestingly, an earlier mention of this Colorado River glyph is found in the 1927 report of the same Samuel Hubbard who led the Doheny expedition into Havasu Canyon. In it he relates that he had received a picture of the animal from a man in Colorado who apologized that “he was obliged to chalk it to secure a satisfactory photograph” (Hubbard 1927: 27). In Hubbard’s eyes it clearly represented a rhinoceros about to charge, with menacing horn, prehensile upper lip, short tail, heavy body and short legs. The fact that the woolly rhinoceros never existed in North America probably accounts for the glyph’s later reclassification as a “mastodon.”

Although somewhat mastodon-like at first glance, with what could be construed as an upraised trunk, it quickly becomes clear that the tuskless creature is equipped with pointed toes or claws. They are easily discernible on an earlier photograph (Fig. 25) that shows the quadruped chalked but otherwise not vandalized. The stump-like feet of proboscideans do not possess external toes, a fact also remarked upon by Haynes (2002: 157) when he pointed out that the toes of the so-called Moab mastodon are “depicted as separated.” In addition, he observes that “nothing suggesting tusks can be discerned.” It is highly unlikely that an archaic artist-hunter, equipped with keen observational ability and intimate knowledge of the animals in his environment, would have erred so egregiously in his rendition of a pachyderm. For this reason, by the late 1960s, rock art devotee and researcher Campbell Grant (1967: 11) had declared the “three-toed trunked animal” a “hoax.”

Figure 26. Likely bear portrayal from a site along the Colorado River near Moab, Utah. Photo Ekkehart Malotki.



Based on the apparent divergent claws, and because the site is situated in close proximity to the Colorado River, some have seen in the image the depiction of a bear with a fish in its mouth (Malotki and Weaver 2002: 192). While the catching-fish interpretation is pure pareidolic speculation, identification of the vandalized quadruped as a bear may be justified. A bear petroglyph (Fig. 26) near the well-known Barrier Canyon Style pictograph panel at the junction of Courthouse Wash and the Colorado River, appears to substantiate such an identification. The site, a mere four miles north of the “mastodon,” shows the bear with the same type of separated toes as the “mastodon.” Indeed, so striking is the similarity that it is tempting to see both as the handiwork of the same artist.

2.8. Argus Mountain Range, California

Like the “Moab Mastodon,” a petroglyph allegedly representing a mammoth at a remote location in the Argus Mountain Range of California’s China Lake Naval Air Weapons Station north of Ridgecrest can be eliminated as a candidate for genuine Ice Age status. Engraved on a table-like basalt boulder, the “mammoth” figure, described in a 2005

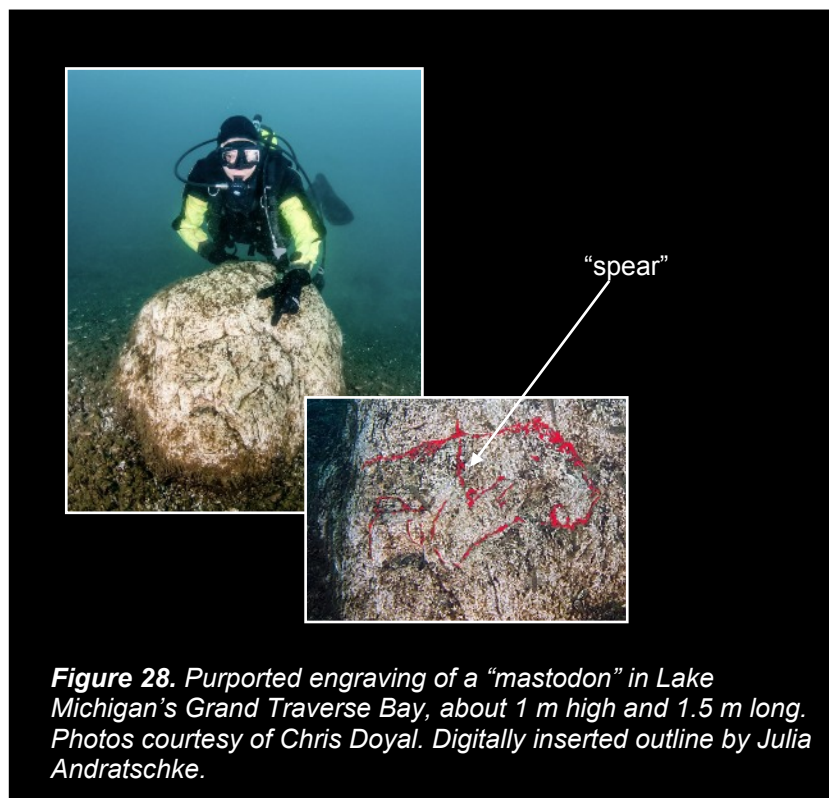


Figure 27. Alleged “mammoth” engraving in the Argus Mountain Range of California’s China Lake Naval Air Weapons Station. Photo Ekkehart Malotki.

article as having upturned tusks, a hairy bib between its front legs and a crested head (Kaldenberg 2005: 18). It is located in close proximity to a rake-like element that the same investigator has interpreted as “equine-like,” that is, reminiscent of an extinct Pleistocene horse (Fig. 27). My suspicion that the elements in question were much too lightly patinated to reflect Ice Age antiquity was confirmed during a personal visit to the site. A nearby boulder with a completely revarnished curvilinear glyph made this age difference abundantly clear. Additionally, the amorphous blob perceived as the torso of the “mammoth” is readily recognized as the result of utilitarian seed or plant food grinding activity. This conclusion is reinforced not only by the presence of two unmistakable grinding slicks on the platform of the “mammoth” boulder, but also by the fact that the entire surrounding area once constituted a large food processing complex with over a dozen additional grinding slicks on scattered rock slabs. Additionally, the lines identified as “tusks” resemble the parallel lines of the rake-like motif and are probably just the start of a glyph. Similar unidentifiable incised elements of apparently more recent vintage decorate several of the adjacent volcanic blocks. To my mind, the element characterized as rake-like is just that, a geometric motif. It would take quite a leap of imagination to turn such a simple set of parallel lines into a “horse” that “appears to be browsing, with its tail hanging loose” (Kaldenberg 2005: 18).

2.9. Grand Traverse Bay, Michigan

Claims have been made for a “mastodon” engraving on a granite boulder some 12 meters underwater in Lake Michigan’s Grand Traverse Bay (Fig. 28). According to



Mark Holley, who teaches underwater archaeology at Northwestern Michigan College but is no rock art expert, photos of the boulder show its surface covered with numerous fissures which, viewed together, suggest the outlines of a mastodon-like animal with a spear in its mid-section (Sharma 2007).

From all indications, however, the fissures appear to be completely natural, with no clear evidence of being human-made. Paleontologist Daniel Fisher of the University of Michigan, whose research expertise is the paleobiology and extinction of mammoths and mastodons, remains sceptical after seeing pictures and is withholding judgment. To his knowledge, “mastodons are not known to have ranged into northern Michigan, although fossil remains have been found in the southern part of the state” (Flesher 2007). My tentative verdict at this point would be that the perceived mastodon-like configuration is most likely the result of our innate propensity for pareidolia. We all easily fall victim to autosuggestion, such as seeing faces and animals in the clouds. That seems to be the case here. Pareidolic images are part of our biopsychological make-up.

Due to limited funding for scientific fieldwork, little research progress has been made regarding the “mastodon” boulder. Since few rock art specialists dive to examine petroglyphs, the ultimate verdict on the image will therefore have to wait until the boulder can be raised and investigated scientifically on land.

More recently, the underwater site has been in the news again because of a rock alignment that might have marked the shoreline 6,000 to 10,000 years ago (Sharma 2007). This alignment, consisting of a row of upright stones, has been reported sensationally as constituting a stone formation similar to the European megalithic site of Stonehenge. As Mark Holley (pers. info. 2016) informs me, however, much of the information published in the media is incorrect.

2.10. Willow Gulch, Utah

An instructive case of how easily certain quadrupedal rock art depictions can be misidentified as mammoths are two graven images in Utah’s Willow Gulch between the Escalante River and Fifty Mile Mountain. They were published as outline drawings in a 1979 survey report (Hauck 1979: 321-322), whose investigators refer to them as “pictographs.” Their characterization as “possible mammoths” most likely comes from misinterpreting a couple of the numerous bighorn sheep glyphs that populate the canyon walls at several locations in the Gulch as pachyderms. My personal attempts, on two separate occasions, to locate the alleged proboscidean depictions and confirm their existence have proven unsuccessful.

Thann Baker, archaeologist at the Glen Canyon National Recreation Area (pers. comm. 2010), certain that one of the two sites mentioned in the Hauck report 42Ka1843—had been successfully identified by the National Park Service as the correct location for the “donor” image of the mammoth interpretation, provided me with a simple illustration of the panel. Equipped with additional landscape pointers from the original site card shared by Matthew Zweifel, archaeologist at the Grand Staircase-Escalante National Monument (pers. comm. 2010 and 2015), I eventually was able to pin down the sheep engraving that had inspired Hauck and his survey team to “see” a proboscidean (Fig. 29).

The tiny head with recurved horn was mistaken for the tail end of the beast, and the curly bilinear appendage was misinterpreted as paired tusks. Close inspection of the curvilinear element reveals, however, that it is not as deeply engraved as the rest of the sheep and may actually have been added at a later time. Both of Hauck's drawings

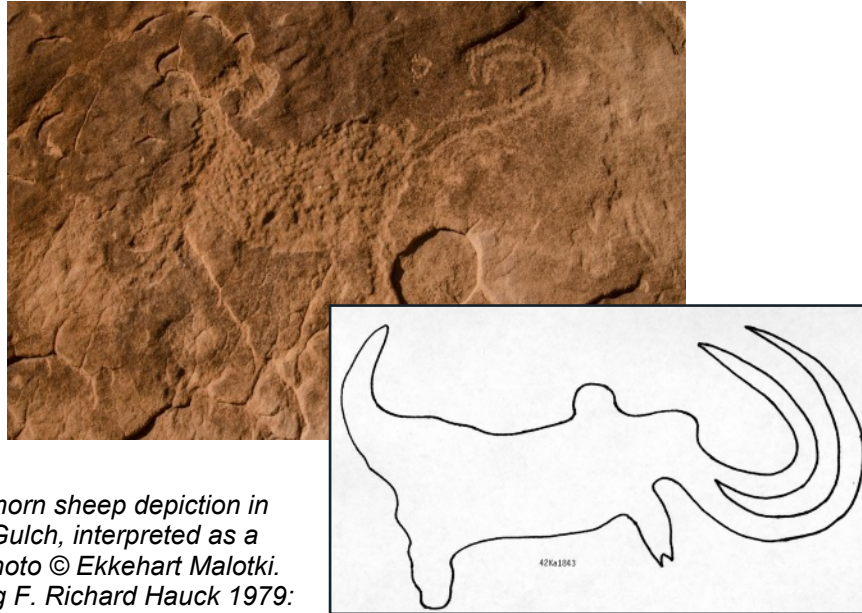


Figure 29. Bighorn sheep depiction in Utah's Willow Gulch, interpreted as a "mammoth." Photo © Ekkehart Malotki. Outline drawing F. Richard Hauck 1979: 322.

continue to be reproduced and cited as evidence of Ice Age art on the Colorado Plateau (Agenbrood and Hesse 2004; Lepper 2010). The exact location of the bighorn that prompted the second of Hauck's mammoth readings is currently unresolved.

2.11. Manila, Utah

An image from a Fremont culture site (approx. 400 to 1300 CE) near Manila, Utah, removed from its immediate iconographic context, has twice been identified in publications as representing a "mammoth" (Thompson 1993b: 15; Bicknell 2001) (Fig. 30). While pronouncing the glyph to be a proboscidean, rock art explorer Robin Bicknell nevertheless wonders how this depiction could show up embedded in relatively recent rock art imagery thousands of years after the extinction of these megamammals. To justify his interpretation he suggests (2001: 88) that perhaps the "people [at Manila] saw a mammoth carcass or skeleton exposed in a wash from heavy rain." It is inconceivable, however, that a carcass would have survived in that part of the ice-free Southwest for millennia. Nor would a complete skeleton reveal the one-time existence of a fleshy trunk. When seen together with adjacent glyphs, it quickly becomes apparent that the animal in question is a bighorn sheep with misplaced horns.



2.12. Shay Canyon, Utah

The somewhat poorly proportioned portrayal of a quadruped, reminiscent of a hippopotamus, in Shay Canyon, a side drainage of Indian Creek Canyon, Utah (Fig. 31), has been reported in the literature as that of a “mastodon” (Barnes 1982: 127), even though



it lacks such confirming details as tusks and trunk. In addition, the immediate iconographic context, both on the boulder and on the adjacent sandstone wall, consisting of simple Ancestral Puebloan anthropomorphic and zoomorphic motifs, speaks against a Paleoindian origin (Fig. 32). Much more likely is the hypothesis that the figure in question was an attempt on the part of the Native American image-maker to portray a bear.



Figure 32: Shay Canyon “mammoth” in the context of adjacent petroglyphs. Photo Ekkehart Malotki.

It is of interest to note in passing that, in 1958, National Park Service personnel, apparently convinced that this petroglyph represented a “mastodon,” a sensational find if true, removed the boulder bearing the image from its original location. Initially destined for display in the newly opened museum in Moab, Utah, it was later returned to its original site (Travis Schenk, pers. comm. 2013). The excised stone block, now propped up with rocks, can be easily viewed in Shay Canyon alongside dozens of rock art panels from the Late Archaic and Ancestral Puebloan periods. Access is feasible only a couple of miles down-canyon from the impressive petroglyph assemblage at Newspaper Rock State Historic Monument.

2.13. Paradise Flats, Utah

The contention for a “good elephant figure” from a site near Thousand Lake Mountain in central Utah, published in the form of an isolated drawing (Stokes and Stokes 1980: 29), is easily dismissed as erroneous when seen in an actual photograph with its iconographic context. Better known as Paradise Flats, the site features numerous ensembles of densely pecked quadrupeds, most of which represent ungulates such as bighorn sheep and deer (Castleton 1978: 155-159). Stylistically indeterminate, the imagery, which has not been scientifically dated, is definitely not Paleoindian, as is also confirmed by the simple stick figure anthropomorph in the upper left-hand corner of Figure 33. To the best of my knowledge, no such motif is on record for Pleistocene art in North America.

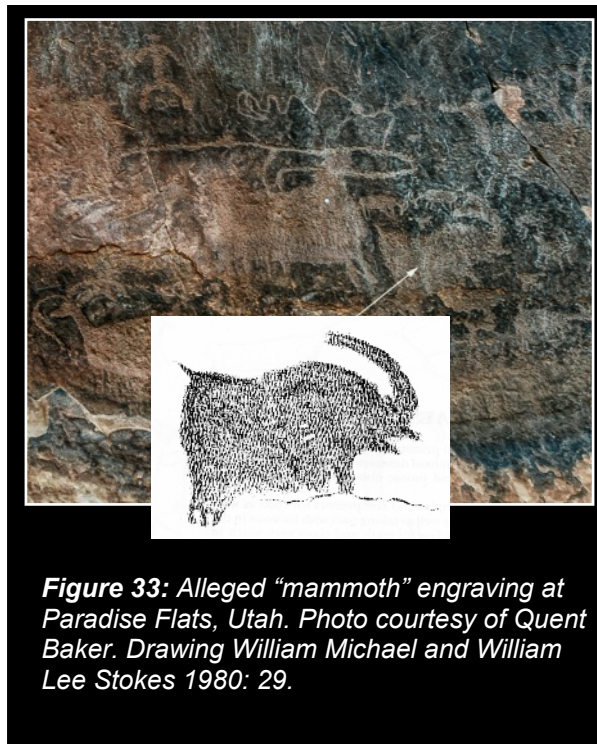


Figure 33: Alleged “mammoth” engraving at Paradise Flats, Utah. Photo courtesy of Quent Baker. Drawing William Michael and William Lee Stokes 1980: 29.

2.14. Quitchupah, Utah, and Lower Butler Panel, Utah

The alleged portrayal of a “tusked mammoth” at Quitchupah, Utah (Thompson 1293a: Fig. 5), can easily be rejected. Stylistically, the panel’s imagery appears to have been executed by an artist of the Fremont culture, which is thought to have “crystallized by the sixth or seventh century” and “peaked in the tenth to twelfth centuries” CE (Simms

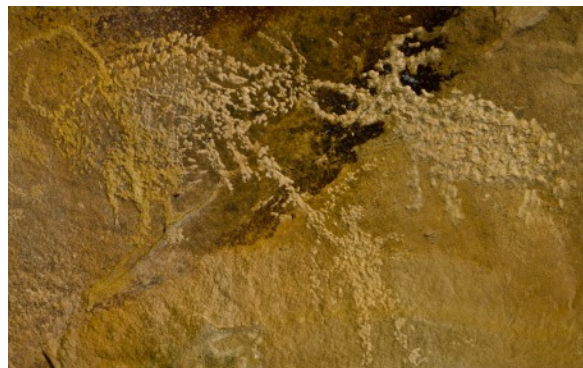


Figure 34. Purported “mammoth” glyph at the Quitchupah site, Utah. Photo Ekkehart Malotki.

2010: 23). Clearly discernible next to the quadruped that Bill Thompson interprets as a “mammoth” stands a hunter equipped with bow and arrow (Fig. 34), a pictorial juxtaposition which could only be described as anachronistic. There is unambiguous archaeological evidence that in the Four Corners region of the American Southwest bow-and-arrow technology was not introduced until about 500-600 CE (Blitz 1988).

Nor can a small outline quadruped with recurved horns decorating the upper chest area of a large anthropomorph at the spectacular “Lower Butler Panel” locality,¹¹

¹¹ The site is also known as the “Big Kachina Panel,” even though the anthropomorphic figures depicted on it are many hundreds of years older than the introduction of the kachina religion in the Southwest.

slightly downstream from the mouth of Butler Wash along the San Juan River, possibly represent a “mastodon,” as has been suggested (Jacobs n.d.). Executed in classic San Juan Anthropomorphic Style of Basketmaker culture affiliation (approx. 1000 BCE to 500 CE), the animal in question, which stylistically betrays no variation from its surrounding iconography, more likely depicts a pronghorn or bighorn sheep (Fig. 35).

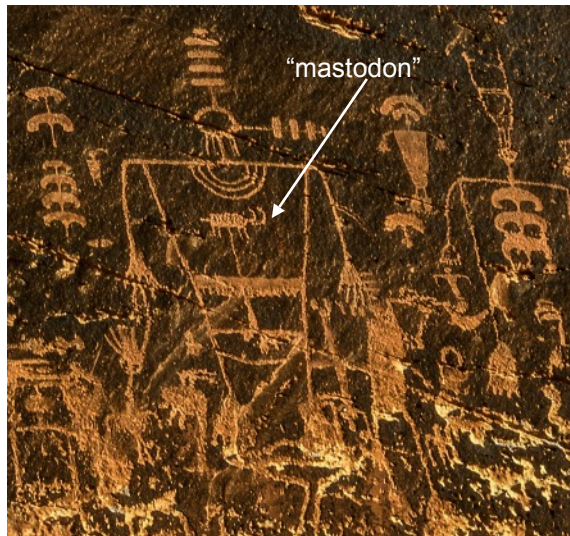


Figure 35. *Horned quadruped on Basketmaker torso at Lower Butler Wash along the San Juan River, Utah, interpreted as possible “mastodon.” Photo Ekkehart Malotki.*

2.15. Northwest of St. George, Utah

Rock art investigator Ray Urbaniak has twice published (2015a and 2015b) the photograph of a petroglyph panel (Fig. 36) from an undisclosed locality northwest of St.



Figure 36. *Suggested “mammoth hunting scene” northwest of St. George, Utah. Photo Ray Urbaniak 2015b: 13.*

George, Utah, which, in his eyes, “appears to depict a mammoth or similar animal being hunted with an atlatl” (2015a: 9). Specifically characterizing the imagery as a “mammoth hunting scene” (2015b: 13), he bases his interpretation on “the size and robustness of the legs and what appears to be an upward reaching trunk (in front of the tusks) which tapers off in diameter” (2015a: Fig. 7, caption text). While conceding that it would be controversial to identify an undated zoomorph as hailing from the Ice Age, he nevertheless suggests that “descriptions of certain Ice Age animals may have been passed down in oral tradition over time, perhaps over many generations” (2015b: 13).

Unlike the bow and arrow, which is not attested in the American Southwest until well into the first millennium CE, there is empirical evidence that as early as 13,000 years ago Paleoindian Clovis hunters employed the atlatl or spearthrower to kill mammoth and other big game with stone-tipped darts (Hutchings 2015). Also, the offensive weapon was not immediately discarded with the arrival of the bow but persisted in use alongside the bow long after its introduction, in some regions even into Historic times (Vanpool 2006). The hunting scene in question, featuring a highly unusual ground line, shows a human directing one missile at the horned animal on the left and possibly, although much fainter engraved, a second one at the quadruped on the right. Both weapons are drawn in standard schematized atlatl configuration, essentially as renditions combining a straight line, the shaft, and a circle bisecting it that is generally thought to symbolize the throwing board’s finger loops; alternately, the straight lines in the engraving could be interpreted simply as depicting the darts with exaggerated fletching.

Despite the established longevity of the atlatl, proposing a proboscidean reading as Urbaniak does, is completely unwarranted. The speared animal on the left shows no diagnostic anatomical features of a pachyderm. There is no “upward reaching trunk” in front of what he calls “tusks;” rather, what we see is the head of the animal. Morphologically, the quadruped conforms perfectly with images of bighorn sheep (or possibly pronghorn) that populate Southwestern rock art sites by the thousands. Stylistically, the entire hunting scene is somewhat reminiscent of Basketmaker imagery, although considering its provenience in western Utah, a later Ancestral Puebloan II-III affiliation, specifically of Virgin Anasazi cultural manifestation, is more likely.

My conclusion that the graven scene is of a bighorn sheep and not a mammoth also renders untenable Urbaniak’s idea that lengthy oral transmission is responsible for the

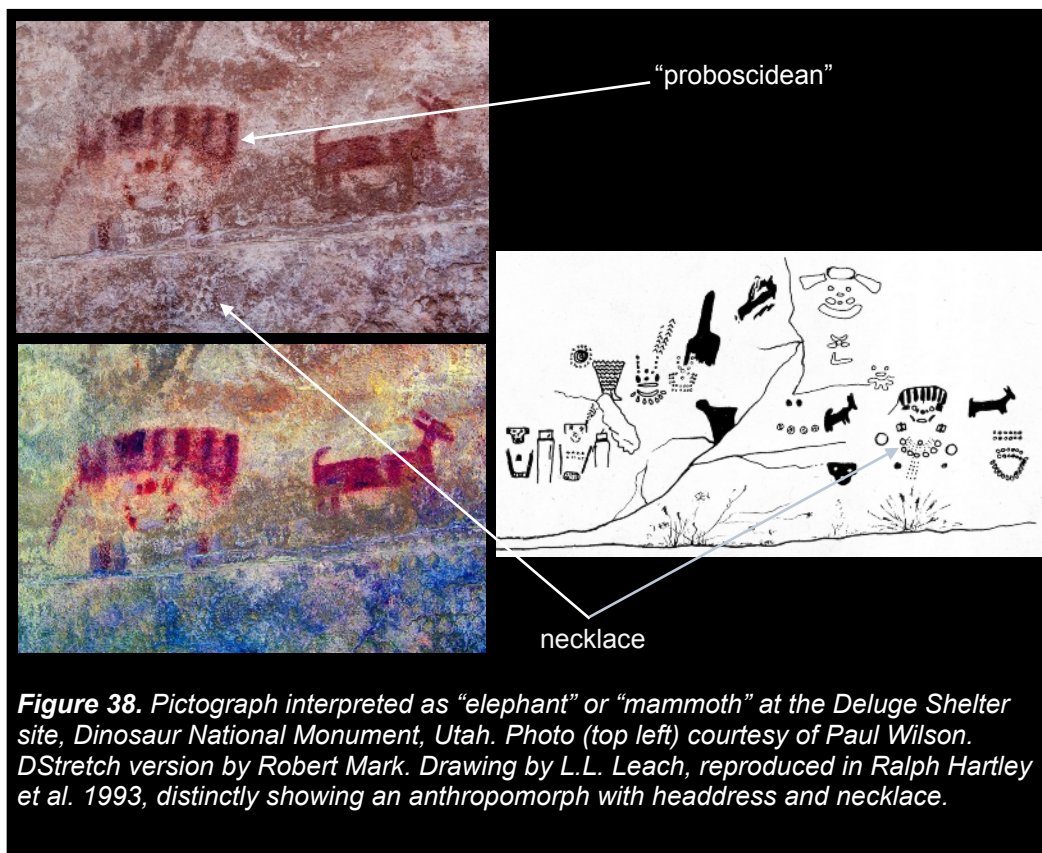


Figure 37. *Painting of a medieval elephant by Jacob van Maerlant, ca. 1350. Wikimedia Commons.*

suggested shift of frontal “tusks” to dorsal horns. It is hard to accept that the concept of a mammoth could have been passed along by word of mouth over hundreds of generations without gross error or distortion. The unreliability and poor fidelity of oral transmission over even a short period of time is well documented in medieval elephant paintings that were clearly drawn on hearsay. An outstanding illustration of this phenomenon is the painting by Flemish author and poet Jacob van Maerlant in his *Der Naturen Bloeme*, published posthumously ca. 1350 (Fig. 37). The animal’s corkscrew trunk and feet shaped like horse hooves are obviously the result of hearsay information, not personal observation by the artist. It is simply not reasonable to assume that specific anatomical features of an animal could have been reproduced thousands of years later by someone who had never seen it.

2.16. Deluge Shelter, Utah.

Several individuals have posited the existence of a proboscidean depiction at the Deluge Shelter site (42Un178) along the Jones Hole Creek trail on the Utah side of Dinosaur National Monument. Paul Rimmasch (2015), for instance, in an *Ancient American*



magazine article speaks of an “elephant-like creature,” and, according to a post on Facebook, a visitor to the site described the entire scene as showing a “Goat and a Circus Elephant” (Fig. 38) .

Divorced from the panel's overall context, there is really no telling what the striped configuration, executed in mineral-based hues of red, may have originally portrayed. Urbaniak (2016), upon learning of the Facebook interpretation, carried out a computer enhancement of the pictograph with the result that, in his eyes, "larger tusks" became visible, "encouraging [him to see] a 'mammoth' rather than an 'elephant.'"

To test Urbaniak's claim, an unenhanced photograph of the rock art panel was processed using DStretch digital imaging technology. Designed to reveal details that regular photographic techniques cannot provide, DStretch will bring out even faint pigments not visible to the naked eye. As is apparent from the vividly false coloration of the Dstretched result in Figure 38 (bottom left), there is no graphic evidence of tusks, one of the key diagnostic traits that would be helpful in identifying a proboscidean. An elephantine interpretation of the shapeless pigment remnant can therefore be refuted on basic depictional grounds. That is, it just doesn't look "elephant" enough to be called one.

Nor is the "elephant" reading a viable archaeological proposition within the temporal framework of Southwestern rock art. It is well established that culturally much of the art in the monument was created by the Fremont, a splinter group of Ancestral Puebloan people who called this part of the Colorado Plateau home from approximately 400 to 1300 CE, with Deluge Shelter's paintings specifically dated to around 735 and 920 CE (Cole 1990: 174). Described as Classic Vernal Style (Cole 1990: 173), Fremont parietal imagery in the region of the monument includes, in addition to mono- and polychrome pictographs, rather idiosyncratic combination forms consisting of pecked and painted elements. A great many of them show impressive broad-shouldered anthropomorphs in ceremonial regalia, generally regarded as the hallmark of Fremont imagery. Characterized as "heroic and supernatural-appearing" (Cole 1990: 175), they often feature highly variable headdresses and elaborate torso embellishments distinguished by prominent necklaces.

An apparent chest ornament is suggested by a multi-strand arrangement of dot pecks that may signify the strung beads of a necklace. Still partially preserved, it is plainly visible in Figure 38 (painting on top left). My hunch that the imagined "elephant" could constitute the headgear of a human figure was confirmed by a black-and-white sketch of the panel (Leach 1970) reproduced in anthropologist Ralph Hartley et al.'s 1993 report on the rock art of Dinosaur National Monument. The drawing clearly shows a jewelry-wearing, headdress-topped anthropomorph among numerous similarly depicted figures populating the Deluge Shelter wall.

Finally, a brief comment on the quadruped in the panel. Painted in the same red as the headgear, it most likely represents a canine. A recurring motif in the Fremont zoomorphic repertoire, dogs are readily recognized by their erect ears and curled-up tails. François Gohier (pers. comm. 2016), who has devoted much of his photographic work to documenting Fremont rock art and material culture, knows of other dog portrayals along the Jones Hole Trail. In addition, he offers two Fremont petroglyph panels from Nine Mile Canyon depicting hunting scenes with dogs in pursuit of bighorn sheep (Simms 2010: 46).

The occurrence of canines in Fremont art comes as no surprise considering that they are occasionally depicted in Barrier Canyon Style rock art. Shared iconography due to geographic overlap between the two cultures has been noted by Cole (2009: 244) and

appears to have been corroborated on the basis of new dating results at the Great Gallery—created between around 1 to 1100 CE (Pedersen et al. 2014). There is absolutely no evidence that the scene in question is the work of a latter-day Native Americans who could have witnessed an elephant in a traveling circus; nor is it conceivable that Fremont artists of a thousand years ago would have retained knowledge of mammoths through oral tradition, considering that the extinction threshold for the Ice Age megamammal in the American Southwest lies around 12,500 calendar years ago.

CONCLUSION

It is safe to assume that Paleoamericans, upon arriving in the New World at the end of the Pleistocene, entered a continent that was essentially an animal landscape, teeming with life, both apex predators and megaherbivores, similar to Africa's current Serengeti plain. One can equally assume that for thousands of years after their entry these mobile hunter-forager groups, living in "mammalian, other-than-human-dominated environments" (Hussain and Floss 2015: 46) would have engaged with these animals on a daily basis and crucially depended on them for their livelihood.

Among those encountered would have been proboscideans, mammoth and mastodon, keystone species of the Ice Age. Because of their impressive size and highly idiosyncratic features, such as tusks and trunks, they would probably have captured the imagination of people more vividly than most of the other approximately thirty-five species that met their demise, in part due to human encroachment, in the final stages of the Pleistocene. This hold on human attention is clearly evident in Western Europe's Upper Paleolithic parietal and mobiliary art, which contains some 630 depictions of woolly mammoth (*Mammuthus primigenius*). In terms of frequency, these rank fourth after horse, bison, and ibex portrayals (Sauvet and Włodarczyk 2000-2001: 221).

Yet, as can be gathered from my overview, only three cases can confidently be listed for proboscidean images in the paleoart of the United States. All three are believed to portray Columbian mammoths (*Mammuthus columbi*). As briefly mentioned in the Introduction, two of these occur as petroglyphs near Bluff, Utah, and the third, discussed in greater detail in Section 1.8, is an incision on fossil bone discovered at Vero Beach, Florida. In addition, two plausible mastodon (*Mammut americanum*) engravings are found on boulders near Barnesville, Ohio (Section 2.5). These few cases represent the "good" category in my informal classification, an extremely small number in comparison with the hundreds of mammoth portrayals in the European Upper Paleolithic.

There are also a few claims for depictions of non-proboscidean fauna that have been attributed to the terminal Pleistocene—a camelid species (*Camelops*) at Surprise Tank in the Rodman Mountains of California (Whitley 1999); two bighorn sheep petroglyphs in the Coso Range (Whitley et al. 1999: 23); unspecified animal depictions in Wyoming's Black Hills (Tratebas 2012); and Ancient bison (*Bison antiquus*) at the Upper Sand Island site (Malotki and Wallace 2011: 147; see also Figure 1 in this paper). Whether pre-Holocene age for them can reliably be established will not be answerable until absolute scientific dating techniques for petroglyphs become available.

In the case of proboscidean depictions, on the other hand, the well-known extinction threshold for mammoth and mastodon on mainland North America, broadly dated to between 13,000 and 12,500 years ago (Faith and Surovell 2009; Haynes 2013), can serve as a *terminus ante quem*. The accurately rendered images from Utah, Florida, and possibly Ohio, can thus be regarded as their own singular chronological markers. They serve as primary evidence for “self-dating,” a concept offered by German archaeologist Christian Züchner (2001). According to him, “rock art is self-dated when it shows a certain object, a certain symbol, or an extinct animal species whose age is known.”

Apart from the Upper Sand Island (Fig. 1), Vero Beach (Fig. 11), and Barnesville (Fig. 21) proboscidean depictions, none of the others discussed in this paper qualify as bona fide paleoiconography. Nine cases are clearly fakes and deserve the “ugly” label. Of the remaining cases, twelve are the result of misidentification, pareidolic assertions, or wishful thinking and belong to the “bad” category. The two engravings at Rainbow Rocks and in the Dinetah (Section 2.4) may actually have been intended to be portraits of modern elephants. I’m still undecided in my assessment of the elephantine incision on the Rocky Mountains pendant (Section 1.7) and designs on the Jacob’s Cavern humerus (Section 1.6). While the former artifact can still be examined, the latter has been lost.

Figures 1, 11, and possibly 21 that are part of my “good” classification are a visual testament to Paleoamericans’ coexistence with now-extinct Pleistocene megamammals. In light of the amazing domination of early North American paleoart by abstract-geometrics, both in the realms of parietal and mobiliary artification, one has to conclude that, at the moment, they constitute distinct regional innovations or anomalies.

One can only speculate why there is such a quantitative imbalance in figurative images produced by Upper Paleolithic people from France and Spain (3981 animal figures at 154 sites as counted by Sauvet and Włodarczyk in 2000-2001: 217)¹² and American Paleoindians. Perhaps the near-total absence of figurative Ice Age art in America is simply due to preservation issues, in particular the taphonomic law that the archaeological signal fades over time. Unlike Upper Paleolithic Europe, where most of the visual artworks were preserved in deep limestone caves, rock art in North America exists predominantly in open-air sites or shallow rock shelters that are vulnerable to the elements and hence more liable to deterioration. It is also tempting to attribute this near total lack of faunal Ice Age depictions to some sort of “iconophobia” or taboo prevalent among early Paleoamericans. They may have feared that the potency exerted by a naturalistically drawn animal could be harmful and that, as a consequence, non-iconic designs were considered less dangerous. Obviously, there is no hard evidence to support such a tenuous idea. In the end, both rock art and portable art from America’s Pleistocene-Holocene transition will continue to represent, to borrow a phrase from Winston Churchill, “a riddle wrapped in mystery inside an enigma” without a code or a key to unlock its ultimate existence.

¹² According to Paul Bahn (pers. comm. 2016), this total is now substantially higher, considering that there are currently over 400 decorated caves known and also numerous open-air sites.

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