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While the Pleistocene art of Europe has been described, discussed, analyzed and "explained" in thousands of publications, that of Asia has attracted almost no interest at all. This paper is a brief summary of all known Ice Age art of Asia, both rock art and portable art. The current evidence is critically reviewed, region by region, and hundreds of specimens purported to be art are rejected by the author. Those considered to be authentic are often extremely isolated, in both time and space. It is argued that this record can only be explained effectively as having been greatly distorted by several factors. The geographical distribution, for instance, is clearly conditioned by such factors as intensity of research activities and local preservation conditions. Thus the pronounced paucity of available evidence is, at least in part, imposed by taphonomic biases of various types.

KEY WORDS: prehistoric art; Pleistocene; symbolism; Asia.

INTRODUCTION

The Pleistocene art of Asia has attracted very limited interest by comparison to that of Europe, although Asia is well over four times the size of Europe. Until 1990, no comparative study of the Paleolithic art of Asia had been attempted (Bednarik, 1990a). The severely distorted record resulting from this significant, worldwide imbalance has been a major contributor to the slanted model of early global art development that has been promoted, which in turn has discouraged serious attempts to examine the available data outside Europe. Numerous claims for Pleistocene art have been made by indigenous Asian researchers, but most

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of them remained essentially ignored outside Asia until 1988. For instance, the first scientific report about Chinese rock art in English was published only in 1984 (in Australia), and world maps of the global distribution of rock art still showed a complete blank in China in 1985, when in fact about 10,000 rock art sites are known in that country (Chen Zhao Fu, 1991). Not a single instance of Pleistocene art had been authenticated in China until 1991 (Bednarik and You Yuzhu, 1991). The situation is not very different in India: that country's rock art, arguably one of the largest rock art bodies in the world, remained largely ignored in the outside world until a few years ago. In fact, the only widely known Pleistocene art from Asia are the figurines from Mal'ta, Siberia, and the reason why they attracted the interest of researchers was merely that they seemed to fit into the popular series of European female figurines of the Upper Paleolithic period. A dated "figurine" from India, on the other hand, first reported in 1977, has remained ignored so far.

This paper is an attempt to provide a comprehensive overview of the presently known Asian art of the Pleistocene, the geological period that ended about 10,000 years ago. The greater part of the Asian finds I have examined firsthand is not considered here, as I could not accept their authenticity. This was either because no human modification was evident (for criteria, see Bednarik, 1992a, 1994a), or because the Pleistocene age of the evidence in question could not be demonstrated, or was unlikely. Where I have not been able to examine the material firsthand, I have tried to obtain reliable evidence concerning its authenticity from the researchers responsible for the finds, but most of the evidence to be considered here has been studied by myself. I have also examined many of the find sites, and I have introduced a number of the key finds from Asia myself. Nevertheless, despite my endeavors to provide as complete as possible an account, it is quite conceivable that I have overlooked some evidence; after all, Asia is a large continent.

I shall list the known Pleistocene art region by region, beginning in the Near East and moving around the continent anticlockwise.

SOUTHWESTERN ASIA

The known record of Pleistocene art and artlike objects from Israel seems to mirror the general Asian situation: despite some extremely early clues of nonutilitarian behavior, there is a frustrating paucity of intervening evidence, and the general impression one gains from the evidence is that it is extremely fragmentary, patchy and taphonomically distorted (Bednarik, 1994b). There are several indications of very early technological and perhaps cognitive sophistication, including the fragment of a polished plank of willow wood, between 240,000 and 730,000 years old, the oldest known artifact of its kind (Belitzky et al., 1991). It comes from the Acheulian deposit of Gesher Benot Ya'aqov,

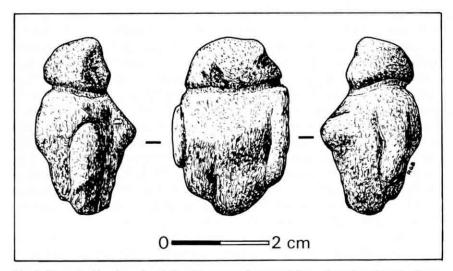


Fig. 1. Naturally shaped scoria pebble with presumed engraved lines. Acheulian, Berekhat Ram, Golan Heights, Israel.

as do two beadlike crinoid fossils with natural central perforations, and a number of very small, angular, unworn quartz crystals (Goren-Inbar *et al.*, 1991). A scoria pebble with the natural shape of a female torso, head and arms has been found in the Acheulian layer of Berekhat Ram, which is sealed between two dated lava flows and is between 233,000 and 800,000 years old (Goren-Inbar, 1986). Its shape has been emphasized by several deep grooves which the excavator judges to be artificial (Fig. 1). The object's markings have been examined by Marshack who will shortly present his findings (A. Marshack, pers. comm. September 1994).

The use of ocher or hematite can be traced back to the Mousterian in the Levant. For instance, such pigments are present throughout the Mousterian deposits of Qafzeh, Israel, and they include two pieces with Burial 8 at that site (Vandermeersch, 1981). At Nahr Ibrahim, Lebanon, the remains of a fallow deer, apparently buried with ocher, have been reported from a Mousterian context (Solecki, 1975). The incised bones recovered from Kebara Cave, Israel, are also Mousterian (Davis, 1974), and Goren-Inbar (1990) has reported a chert artifact from the Mousterian of Quneitra, Israel, in which natural bedding markings have been deepened, apparently artificially. A range of other Middle Paleolithic evidence from the Levant which is sometimes described as indicative of some symbolic function is not reiterated here, but is well covered in the archaeological literature (e.g., Leroi-Gourhan, 1975, 1989; Bar-Yosef, 1989; Belfer-Cohen and Hovers, 1992).

Some linear rock engravings in caves of Mount Carmel have been suggested to be possibly of Paleolithic age (Ronen and Barton, 1981), but the several portable decorated objects from the Upper Paleolithic provide more reliable evidence, particularly in terms of their approximate age. Several items of interest come from the Aurignacian levels of Hayonim Cave, Israel, including a fragment of a bone object with five or six deeply carved parallel grooves across its width; some perforated animal teeth that may have served as pendants or beads; and a limestone slab which bears arrangements of engraved lines on both sides (Belfer-Cohen and Bar-Yosef, 1981), in which Bahn (1991) perceives a possible animal figure. More convincing is the limestone cobble from Urkan e-Rub (Fig. 2), which is somewhat younger at *ca.* 19,000–14,500 B.P., and is attributed to the Epi-Paleolithic (Hovers, 1990). It is also engraved on both sides, bearing complex geometric compositions of arcuate and parallel lines which resemble the marking strategies of other early noniconic art traditions.

It is only with the Natufian, the Levantine final Pleistocene tradition (ca. 12,800-10,300 B.P.), that decorated objects appear in large enough numbers to discern a distinctive "tradition." El-Wad Cave at Mt. Carmel features prominently, with art finds first reported back in the 1920s, including figurines, beads, pendants and decorated sickle hafts. A bone sickle haft was carved in the shape of an animal head (Garrod and Bate, 1937), there was a human head carved

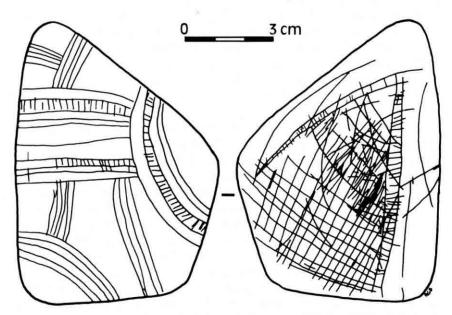


Fig. 2. Epi-Paleolithic engravings on both faces of a limestone cobble from Urkan e-Rub, Israel.

from calcite, and a few "phallic" objects made of flint nodules (Garrod and Bate, 1937, Pls 12, 13). Other Natufian sites have yielded pestles of "phallic" shape (Belfer-Cohen, 1991; Edwards, 1991), including Kebara Cave (Turville-Petre, 1932, p. 276), where in addition to several "phallic" objects, an engraved limestone slab was also recovered. A calcite sculpture, apparently of a couple, has been claimed to come from the Early Natufian of Ain Sakhri cave (Neuville, 1951), while a zoomorphic limestone figurine is from the Early Natufian of Wadi Hammeh 27 (Edwards, 1991). Finally, a long bone decorated on both ends was recovered at Nahal Oren (Noy, 1991, Fig. 5-1). One end of it has been shaped to resemble an animal head, the other bears a human face in profile.

The recent continuation of the excavations in the el-Wad Cave has provided several new Pleistocene art finds. This series includes five more objects made of chert nodules and a chert tool (Fig. 3) that seems to have been shaped into a zoomorphic form (Weinstein-Evron and Belfer-Cohen, 1993). They all bear

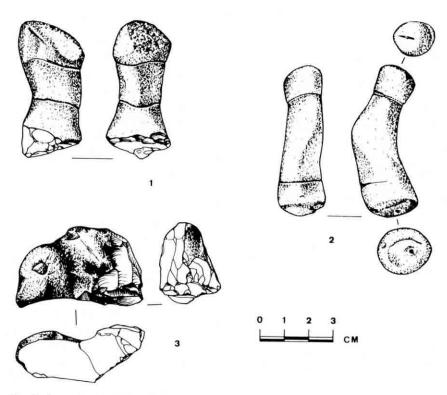


Fig. 3. Three of the modified chert nodules from el-Wad Cave, Israel. Two of these Natufian objects are thought to be phallic, the third possibly represents an animal. Drawing after Weinstein-Evron and Belfer-Cohen, 1993, with permission.

evidence of rubbing, pitting and incising, and some appear to be again phallic objects. These finds bear no more signs of modification than the Acheulian pebble from Berekhat Ram, but while their authenticity is readily accepted by archaeologists, that of the much older find remains controversial. Artistic evidence of the Pleistocene is accepted primarily on the basis of age and on how well a find fits into the consensus model; I have discussed this trend elsewhere (e.g., Bednarik, 1992b).

Although it has been claimed that certain rock art in Arabia dates from the final Pleistocene (Anati, 1968), this is not considered here as it is derived from the presumed identification of Pleistocene fauna. Such claims have been made in respect of several Asian countries (Siberia, China, South Korea, India) but controversial iconographic identifications are not acceptable dating evidence (Bednarik, 1993a). In Afghanistan, two pre-Neolithic stone objects have been excavated at Aq Kupruk, but their dating appears uncertain. Marshack, who has examined and reported them (1972), suggests that they may be about 10,000 years old, but there is no certainty of this. One object is an elongate pebble, ca. 75 mm long, which bears an anthropomorphous face, the other is a rectangular stone tablet, 70 mm long, clearly scored where it has been broken, which bears four series of regularly spaced notches on some of its edges. While the headlike sculpture seems to be without stylistic parallels, the type of decoration on the tablet can sometimes be found on late Paleolithic objects, e.g., in Siberia and European Russia. Another interesting find from Afghanistan is considerably older, consisting of a fossil shark's tooth at Darra-i-kur which has been reported to have been modified, and which belongs to a Levallois Mousterian (Dupree, 1972, 79). It provides further evidence that hominids took an interest in fossils they found (Bednarik, 1992b).

INDIA

The apparently relevant evidence begins with quartz crystals and hematite of the Lower Paleolithic, notably the Acheulian. At Singi Talav, from the base of the Lower Acheulian deposit, six small quartz crystals have been recovered (d'Errico et al., 1989). They measure from 7 to 25 mm in length, too small to have been used as tools, and are almost entirely unmodified, but were carried into the site, perhaps for their visual qualities. Refitting them was impossible, and they differ so much in mineralogical purity that they are not assumed to have come from the same crystal flower (Fig. 4). Hematite pebbles occur frequently in Acheulian deposits of India, and there is one specimen from Hunsgi which bears a wear facet with distinctive striation marks, suggesting that it has been used as a crayon to color or mark a rock surface (Bednarik, 1990b).

Two petroglyphs excavated in Auditorium Cave (Bhimbetka III F-24) were covered by the uppermost part of a substantial Acheulian layer (Bednarik, 1992c),

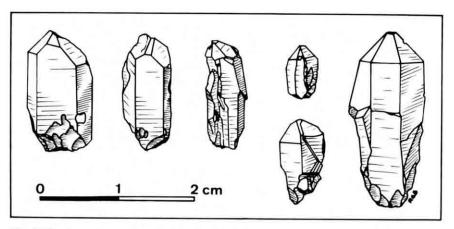


Fig. 4. The six small quartz crystal prisms from the Lower Acheulian of Singi Talav, near Didwana, Rajasthan, India.

which means that they are the oldest known rock art in the world (Bednarik, 1993b, 1994c). They consist of a large circular cupule and a pecked meandering line running parallel to part of its periphery. A further nine cupules are nearby and, although they are not datable by stratigraphy, they are also thought to be Acheulian (Fig. 5). The only other roughly dated rock art predating the Upper Paleolithic is at La Ferrassie, France (late Mousterian) and in Australia (>43,000 years B.P.), although Middle Paleolithic (or, in Africa, Middle Stone Age) rock art is likely to be found elsewhere. The Acheulian of India has provided further possibly relevant evidence, including two circular, discoid stone objects that seem to be non-utilitarian, one from Bhimbetka III F-24, the other from Maihar (Bednarik, 1992c).

The Upper Paleolithic, too, has provided important remains in India, but it should be emphasized that at this stage, no rock art can be safely attributed to that period in India. However, it is quite likely that such art has survived. The only known portable art from the Indian Upper Paleolithic is an ostrich eggshell fragment from Patne which bears a geometric engraved design (Fig. 6). It has been radiocarbon-dated to about 25,000 B.P. and the eggshell was not fossil at the time it was engraved. The Upper Paleolithic bone object from Lohanda Nala, described as a "mother goddess" or female figurine, is bracketed by radiocarbon dates to between 20,000 and 25,000 years (Misra, 1977). However, I have shown that it is not a figurine, but a well-made bone harpoon that has suffered extensive damage in its very coarse sediment matrix (Bednarik, 1992c, 1993b). Of relevance also are several perforated discs made from ostrich eggshell (from the Upper Paleolithic of Bhimbetka and Patne), similar to Upper



Fig. 5. One of the cupules in Auditorium Cave, Bhimbetka complex, central India, on hard quartzite; presumably Acheulian.

Paleolithic and later beads in three other parts of the world: northern China/ Mongolia, the Sahara and southern Africa (Bednarik, 1994c). Finally, the occurrence of animal teeth with grooves to facilitate their attachment to a string has been reported from one of the Kurnool Caves, Billa Surgam III (Bednarik, 1993b).

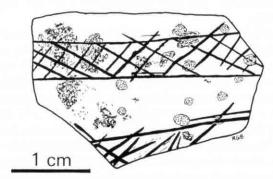


Fig. 6. Engravings on ostrich eggshell fragment from Patne, western India. Upper Paleolithic, about 25,000 years old.

Numerous other claims for Upper Paleolithic art in India have been found to have inadequate support. For instance, the grooved patterns on 45 ostrich eggshell fragments from six central Indian sites have been shown to be the result of a specific taphonomic process that affects also other mineralized calcareous substances of animal origin, and which has been described in detail (Bednarik, 1992a, 1993c). Rock paintings once attributed to the Upper Paleolithic are now generally considered to be Mesolithic. It is interesting to note that, despite the enormous wealth of apparently Mesolithic rock art in India, there are almost no portable art objects from that period. This tends to corroborate the model involving a massive taphonomic bias. I have been able to locate only six Mesolithic mobiliary art finds in India: the engraved chalcedony core from Chandravati (Sonawane, 1991), an engraved human tooth, and four engraved bone fragments. A similarly distorted record also seems to apply to petroglyphs, especially in comparison to the considerable effort in India to record the much more spectacular rock paintings (Bednarik *et al.*, 1991).

CHINA AND JAPAN

The earliest possibly nonutilitarian evidence comes from Zhoukoudian Site 1, southwest of Beijing, which has yielded some twenty clear quartz crystals, including a prism with all crystal facets intact (Pei, 1931). This site has provided the largest sample of *Homo erectus* remains, and is part of a complex of 26 sites. One of these is the Upper Cave, a natural bridge containing two Upper Paleolithic occupation deposits. These have yielded numerous hematite lumps and over 120 perforated objects (Bednarik and You Yuzhu, 1991). They include beads made of deer and fox teeth, shells, fish vertebrae, perforated pebbles and five polished tubular sections of bird bones on which parallel lines are engraved. Ocher has also been found around interred human skeletal remains in the Upper Cave, but wear facets or striations have not been noted on the pigment pebbles.

Numerous Paleolithic engravings on bone have been reported, especially from the Shiyu site, Shanxi Province. This large site dates from the Middle/Upper Paleolithic interface, comprising two major occupation horizons, which seem typologically identical, and which date to about 28,000 and 32,000 B.P., respectively. One of about 600 marked bone objects from both horizons has been published as depicting an engraved hunting scene (You Yuzhu, 1984), but none of the many specimens I have examined has actually been engraved by human hand. The entire assemblage bears taphonomic (and thus natural) markings, which are basically of four types: tooth marks, clastic gouge marks, root marks and abrasion marks. However, one item from the upper level at Shiyu is relevant here. It is one half of a broken stone disc that has been drilled through the center (Fig. 7), and was presumably used as an item of jewelry (Bednarik

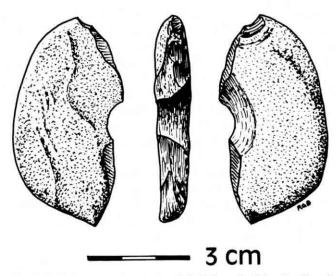


Fig. 7. Drilled stone pendant, broken in half, from the Shiyu site, Shanxi Province, central China.

and You Yuzhu, 1991). Very similar objects have been found at Siberian, Russian and Japanese sites of the Upper Paleolithic.

The only item of Pleistocene art so far found in China is an engraved antler fragment from Longgu Cave, Hebei Province (Bednarik and You Yuzhu, 1991; Bednarik, 1992d). It is extremely well made, bearing three highly distinctive geometric patterns which were infilled with red pigment. The object (Figs. 8, 9) is a little over 13,000 years old. Several claims to have identified extinct fauna in Chinese rock art, which would date the art to the Pleistocene, in one case even to the Tertiary, have been refuted (for detailed discussions, see Bednarik and Li Fushun, 1991; Bednarik, 1993a; Tang Huisheng, 1993). Nevertheless, as in India it seems likely that Pleistocene petroglyph traditions will be found.

A similar claim for Pleistocene petroglyphs based on the perceived identification of depicted fauna has been made in South Korea (Sohn Pow-Key, 1981). The same author had previously reported portable art from the Korean Middle Paleolithic (Sohn Pow-Key, 1974, q.v. Bahn and Vertut, 1988, p. 28) but these reports have not been independently checked.

Although Japan is claimed to have been occupied by humans at least since the Penultimate Glaciation, Pleistocene art evidence remains extremely scarce in that country. This is at least in part due to the small number of caves and the predominantly acidic soil characteristics of the country, which would provide poor preservation conditions for most of the materials that have elsewhere been

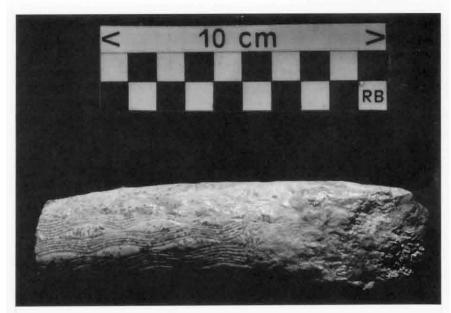


Fig. 8. Intricately engraved deer antler fragment from Longgu Cave, eastern China. Upper Paleolithic, about 13,000 years old.



Fig. 9. Another of the three engraved patterns on the Longgu Cave antler tragment.

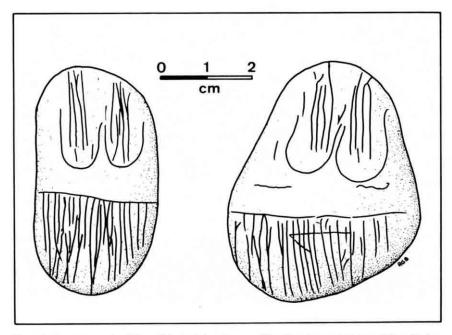


Fig. 10. Two engraved pebbles of the Incipient Jomon of Kamikuroiwa rockshelter, Ehime Prefecture, Japan.

used for the production of Pleistocene art objects, such as bone, antler, ivory or shell. The few available art objects are therefore of stone. They consist of a perforated stone disc from the Debari site in Mie Prefecture, reminiscent of that from Shiyu, China; a polished triangular stone object from the Deguchi Kanezuka site in Chiba Prefecture (Okamura, 1992); and the engraved pebbles from Layer IX in the Kamikuroiwa rockshelter, Ehime Prefecture, which is of the Incipient Jomon period and has been dated to over 12,000 years B.P. (Aikens and Higuchi, 1982). These *kokeshi* (Fig. 10) are natural pebbles with engravings which seem to represent breasts and skirts. The Jomon tradition produced the earliest ceramic vessels in the world and is Mesolithic rather than Paleolithic, but its early phase is of the Pleistocene.

SIBERIA

Apart from Israel, Siberia is the only region of Asia whose Pleistocene art has traditionally attracted any attention outside Asia, however limited. Paleolithic research in central Siberia commenced in 1871, soon after it had begun

in Europe, and has produced portable art at about 20 sites so far. Where this material can be plausibly attributed to the Pleistocene, it seems to belong mostly to the second half of the Upper Paleolithic. The best-known site is Mal'ta, excavated both before and after World War II. Located on a left tributary of the Angara, the Belaya River, the site has a Paleolithic layer which is often dated to between 24,000 and 23,000 years B.P., but a radiocarbon date of 14,750 \pm 120 B.P. (Boriskovski, 1984, p. 358) may be more relevant.

Pleistocene art or artlike finds have also been reported from the Irkutsk Hospital site, and from a series of further sites on the Angara (Buret', Krasnyi Yar, Ust'-Kova and Verkholenskaya Gora); from a number of sites on the upper Yenisey River, of which the Angara is the major tributary (Afontova Gora II, Afontova Gora III, Maininskaya, Dvouglazka Cave, Tachtik, Kokorevo, Novosselovo and Atchinskaya); from two sites on the upper Ob River (Ust'-Kanskaya and Denisova Cave); from two sites on the upper Lena (Shishkino and Tal'ma); two more south of Lake Baikal (Oshurkovo and Tolbaga); from one site on the Irtysh River (Cherno-Ozer'e); and from another lone site on the Arctic Ocean, on the mouth of the Indigirka River (Berelekh, the northermmost known Paleolithic site in the world). The evidence from these sites is quite varied, as is the reliability of its dating or interpretation. It is not possible to present a detailed analysis here, but some salient points are briefly mentioned.

A few rock paintings at Shishkino and Tal'ma have often been described as being of the Upper Paleolithic, including the presumed figure of a rhinoceros. Neither the published recording of this figure (Okladnikov, 1977, Figs. 56, 57) nor the actual painting on the rock at the Tal'ma main site resembles such an animal (Bednarik, 1992c), and the three animal paintings at Shishkino (Okladnikov, 1959; Okladnikov and Saporoshskaya, 1959) are almost certainly much younger than the end of the Upper Paleolithic (Bednarik and Devlet, 1992). Thus, there is no known Pleistocene rock art at all in Siberia at the present time. Even the Pleistocene age of the paintings in Kapova Cave, on the European side of the Ural watershed, may need to be confirmed now that dating by faunal depiction has been questioned in Siberia, and in Asia generally (Bednarik, 1993a).

Nevertheless, the Siberian corpus of portable art comprises very important specimens and a great diversity of material. One of the most significant finds is the sculpted animal head from Tolbaga (Fig. 11). It is carved on a natural projection of a second vertebra of a woolly rhinoceros. Microscopic examination of tool marks has shown how the head, thought to resemble that of a bear, has been carved with stone implements. Though produced with an economy of effort, the sculpture is sophisticated and animated, and of strikingly naturalistic appearance. Tolbaga, located on the right bank of the Khilok River, was excavated by Okladnikov in the 1970s, and two dates were secured from bones:

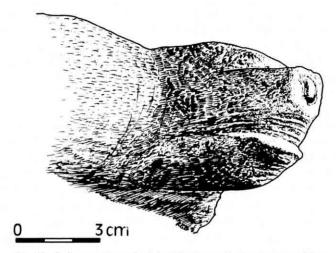


Fig. 11. Sculpture of an animal head (perhaps of a bear) on a vertebra of the woolly rhinoceros from Tolbaga, southern Siberia. Probably about 35,000 years old.

 $34,860 \pm 2100$ B.P. and $27,210 \pm 300$ B.P. Abramova (1990) argues that the older of the two dates is the more likely to refer to the carved vertebra. That would make it the oldest known naturalistic sculpture in the world.

Possibly the best-known corpus of Pleistocene art from Asia is that of the sculptures from Mal'ta and Buret', particularly those traditionally described as female figurines. Eurocentric commentators often consider them as part of a perceived Upper Paleolithic tradition extending from the Pyrenees to Siberia. However, there is considerable diversity among the 33 known Paleolithic anthropomorphs from Siberia, and as a group (Figs. 12 and 13) they are sufficiently different from the supposedly female figurines of western Europe, central Europe and European Russia/Ukraine to prompt separate consideration (Bednarik, 1990c). For instance, none of the Siberian specimens indicates abdominal enlargement and few offer clear enough evidence of gender to define them as female. Breasts are often lacking, and a vulvar cleft is suggested only on one, Mal'ta No. 5. About 40% of them show some facial details, which are frequently lacking on the so-called Venus figurines of Europe. Of the latter, only one is perforated, while many of the generally smaller Siberian specimens (Fig. 14) still bear perforations on the lower end, or the same is broken off. Indeed, a large part of the Paleolithic art of Siberia is perforated. For instance, this applies to 76.6% of the largest assemblage, that of Mal'ta, not counting those items that bear no perforation now, but may have been perforated in the past, or that have been attached to a string by other means (Bednarik, 1990c), such as the distinctive notched beads from Buret' and Mal'ta. Most Siberian anthropomor-

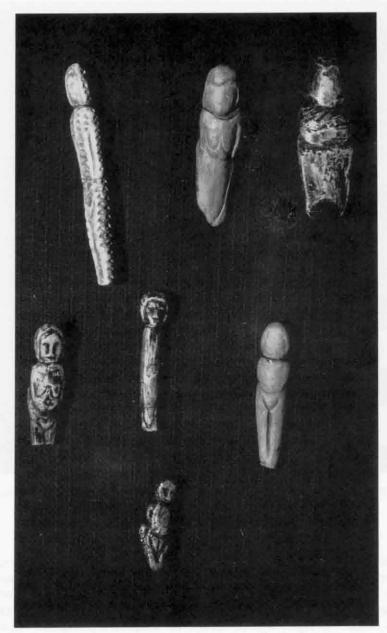


Fig. 12. Some of the anthropomorphous figurines from Mal'ta, Belaya River, central Siberia. Probably about 15,000 years old.



Fig. 13. Two of the ivory figurines from Buret', Angara River, central Siberia: No. 3 (left) and No. 4 (right).

phous sculptures of the Pleistocene are made from mammoth ivory, except Buret' No. 5, which is from pale-green steatite (Fig. 14c), and a clay figurine from Maininskaya. Most of the Siberian specimens have no "stylistic" counterparts in Europe, and they are distinctly different from many of those in European Russia. The highly stylized Krasnyi Yar sculpture is perhaps the one most likely to deserve a comparison with European finds. It seems to resemble the Magdalenian figurines and engravings of central Europe which have been col-

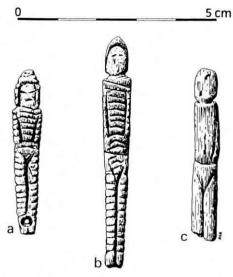


Fig. 14. Three small Paleolithic figurines from Siberia: (a) Mal'ta No. 13; (b) Mal'ta No. 27 (both ivory); (c) Buret' No. 5 (steatite).

lectively defined as stylized female figures, including those from Ölknitz, Petersfels, Nebra, Gönnersdorf, Pekarna and other sites (see Bednarik, 1990c for references and discussion).

Precisely the same applies to the other forms of portable art from these sites. The distinctive "flying bird" pendants (13 from Mal'ta, one from Buret'; see Fig. 15) have no counterparts in Europe, nor have the other three bird pendants, the five nail-like pins, and several other, apparently decorative items, particularly from Mal'ta. Objects of apparent jewelry clearly dominate the Siberian assemblages, even the human figurines were probably mostly pendants. They differ significantly from those of European Russia and central/western Europe. Afontova Gora II, Krasnyi Yar, Buret' and Mal'ta have yielded perforated disc beads, while perforated animal teeth occur at Verkholenskaya Gora and especially at Afontova Gora II, where they are numerous. Intricate surface patterns of various types occur on many artifacts, including evenly spaced notches on edges. Incised engravings are comparatively uncommon, and where they do occur, they are usually restricted to geometric arrangements, such as that on the large, centrally perforated Mal'ta ivory plaque (Fig. 15), on the Oshurkovo pendant (Fig. 16), an incised bone from the same site, two of the circular discs from Afontova Gora II, another circular disc from Afontova Gora III (engraved on both faces with radial patterns and circles; see Fig. 17), and four intricately decorated objects from Irkutsk Hospital site. A distinctive feature are notches



Fig. 15. Centrally perforated ivory plaque, engraved on both sides and 139 mm long; and one of the "flying bird" pendants from Mal'ta, central Siberia.

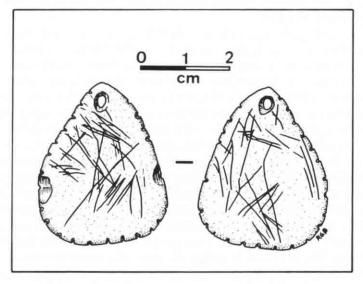


Fig. 16. The two sides of an engraved and notched pendant from Oshurkovo, near Ulan-Ude, southern-central Siberia.

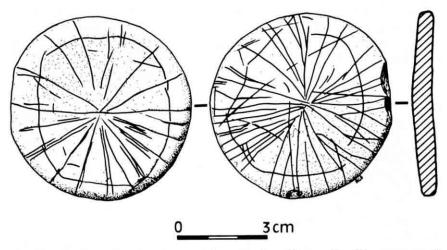


Fig. 17. Both sides and section of engraved ivory disc from Afontova Gora III, western-central Siberia.

along edges, reminiscent of those on the object described above from Afghanistan. Such markings are less common at the European Russian sites.

The only two-dimensional figurative art known from Pleistocene Asia are two Siberian depictions of mammoths: one of a perforated ivory plaque from Mal'ta (Fig. 18), the other on a juvenile mammoth tusk from Berelekh (Fig.

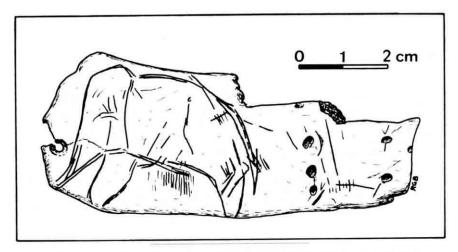


Fig. 18. Perforated ivory plaque with engraved mammoth figure, Mal'ta, central Siberia.

19). Although there is human occupation evidence of the final Pleistocene at the latter site, it should be noted that the mammoth survived to at least 4000 B.P. in the region (at Wrangel Island, on the same latitude but 1100 km to the east; Vartanyan *et al.*, 1993). Therefore mere depiction of the mammoth is not

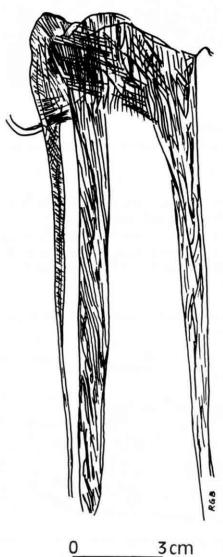


Fig. 19. Engraving of a mammoth, on a mammoth tusk from Berelekh, northern Siberia.

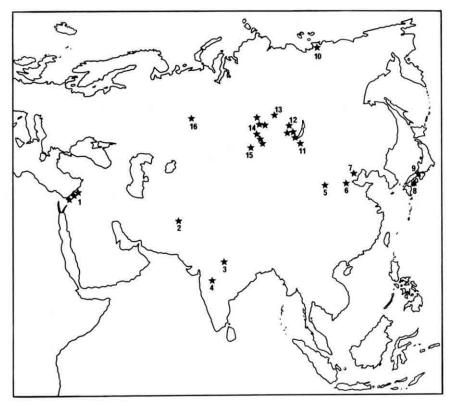


Fig. 20. Map of Asia, indicating the locations of sites with Pleistocene art finds: 1-Levantine sites; 2-Aq Kupruk; 3-Bhimbetka site complex; 4-Patne; 5-Shiyu; 6-Zhoukoudian site complex; 7-Longgu Cave; 8-Kamikuroiwa; 9-Debari; 10-Berelekh; 11-Tolbaga, Oshurkovo; 12-Upper Angara sites; 13-Ust'-Kova; 14-Upper Yenisey sites; 15-Ust'-Kanskaya, Denisova Cave; 16-Cherno-Ozer'e.

proof of Pleistocene age, nor is the use of mammoth ivory (consider also the mammoth-like sculpture from Ust'-Kova). This material can be found in various Holocene contexts of Siberia, at least until the Bronze Age, and it may have been salvaged from frozen carcasses or fossil remains (Bednarik, 1993a).

DISCUSSION

A comprehensive review of the known (and probably authentic) pan-Asian Pleistocene art suggests very strongly that we are dealing with a severely distorted sample. Not only has the surviving corpus experienced significant reduction through differential preservation, but the bias against finding such remains, recognizing them and having them reported "effectively" are at least as signif-

icant. The known sample reviewed here should therefore not be considered without an appreciation of the factors that have contributed to the distortion of this record. For instance, there is evidence from several Asian countries that local researchers, in trying to locate Pleistocene art, have been guided by western European models of what such material should be. It was perceived that western European Paleolithic art is generally "naturalistic" (because of the way it had been reported), and predominantly of large animals and of female humans. Specific "stylistic" elements of the Franco-Cantabrian iconic art that had been subjectively identified by western European researchers have guided Asian researchers in their quest to find Pleistocene art. By the same token, art that did not fit the European mold was ignored, or regarded as somehow "inferior." These severe research biases have distorted the record at least as much as aspects of preservation.

Another major factor has been the significant disparity in research intensity across the continent (Fig. 20). It is obvious that the only two concentrations of Paleolithic art known in Asia are from the two geographical regions that have seen the most sustained research efforts: the Levant and the region near Irkutsk. This can hardly be a coincidence when it is considered that, in various parts of Asia, almost no Pleistocene research has ever been conducted. In countries such as China and India, Paleolithic art clearly does exist, but the number of confirmed instances is incredibly minute, yet it includes the oldest currently known rock art in the world. These isolated, tantalizing clues confirm that what we know of Asian Pleistocene art is extremely tenuous. It is therefore inappropriate to attempt any form of synthesis on the basis of the available sample, which does not provide adequate data for any distributional or compositional interpretation. Despite these significant reservations, I shall attempt here some very tentative deductions, which seem possible especially if the sparse evidence is placed into a global context of archaic art systems (Bednarik, 1994c).

The most obvious characteristic of the very limited Pleistocene art we have from Asia is the almost complete absence of two-dimensional (graphic) figurative depiction. This is not at all surprising, because the same situation pertains to eastern Europe: nearly all of the world's known Pleistocene figurative graphic depictions are from western Europe, whereas the graphic Ice Age art of the rest of the world is almost entirely nonfigurative, as far as we can tell (Bednarik, 1993d). Even in western Europe, perhaps three-quarters of the graphic art is nonfigurative, but there the figurative component has been overemphasized.

Three-dimensional figurative art may have a much longer history, however. The animated Tolbaga animal head has its counterparts in the similarly sophisticated sculpted art of central Europe (southern Germany and Austria, ca. 32,000 years old; see Bednarik, 1989 for summary). The Berekhat Ram find may remain controversial, but there are a number of indications that the iconicity of natural shapes was recognized quite early, and that sculpture began by emphasizing the

iconic features of natural forms. These practices continued right to the end of the Pleistocene, as shown by the Natufian of the Levant. The extremely early petroglyphs of Bhimbetka have their counterparts in the cupules of one French Mousterian site. Another notable consistency is suggested by the earliest forms of apparent nonutilitarian behavior, especially the use of hematite and quartz crystals. Certainly the type of evidence found is the result of taphonomic biases, but these are also universal, and such finds occur in the Acheulian of Africa and Europe as well (Bednarik, 1992b, 1994c). Similarly, in China, Japan and Russia, the earliest known artlike evidence includes artificially perforated flat pebbles, probably used as pendants, i.e., a taphonomically highly resistant class of object. Perhaps these observations do indicate some underlying patterns, even if they do not suffice to form a Eurasian synthesis of Pleistocene art. Such patterns seem to indicate much more uniformity than more regional comparisons, or a superficial comparison between Asian and European Pleistocene art, might suggest.

The impression one gains from the present review is that the general progression of art development in the Old World was rather more uniform than is implied by regional studies. In such a broadly based model, it is also essential to consider the roles of the Americas and Australia (Bednarik, 1994c), because it is assumed that all three continents were initially settled from Asia. It is now almost certain that they were first peopled by hominids who possessed the capability of symbolic expression. There is a particularly well-preserved corpus of Pleistocene art in Australia, many times the size of that of Europe, which has also attracted comparatively little attention. Asia, therefore, not only occupies the geographical key position in hominid expansion, but also the key position in Pleistocene art development. The gross neglect of Asian paleoart until now has had a serious effect on all models of this development. Without exception, these models can be regarded as irrelevant to a universal paradigm, as they are based on inadequate data for such a purpose.

REFERENCES

- Abramova, Z. A. (1990). L'art mobilier paléolithique en Siberie. Bollettino del Centro Camuno di Studi Preistorici 25/26: 80–98.
- Aikens, C. M., and Higuchi, T. (1982). Prehistory of Japan. Academic Press, London/New York.
 Anati, E. (1968). Rock art in central Arabia, 2 vols. Bibliothèque du Muséon, Vol. 50. Institut
 Orientaliste Bibliothèque de l'Université Louvain.
- Bahn, P. G. (1991). Pleistocene images outside Europe. Proceedings of the Prehistoric Society 57(1): 91-102.
- Bahn, P. G., and Vertut, J. (1988). Images of the Ice Age. Windward/New York: Facts on File, Leicester.
- Bar-Yosef, O. (1989). Upper Pleistocene cultural stratigraphy in southwest Asia. In Trinkaus, E. (ed.), The Emergence of Modern Humans, Cambridge University Press, Cambridge, pp. 154–180.

Bednarik, R. G. (1989). The Galgenberg figurine from Krems, Austria. Rock Art Research 6: 118–125.

- Bednarik, R. G. (1990a). The Palaeolithic art of Asia. Paper presented to 23rd Annual Chacmool Conference, Calgary.
- Bednarik, R. G. (1990b). An Acheulian haematite pebble with striations. Rock Art Research 7: 75.
- Bednarik, R. G. (1990c). More to Palaeolithic females than meets the eye. Rock Art Research 7: 133-137.
- Bednarik, R. G. (1992a). Natural line markings on Palaeolithic objects. Anthropologie 29: 233–240.
- Bednarik, R. G. (1992b). Palaeoart and archaeological myths. Cambridge Archaeological Journal 2: 27-43.
- Bednarik, R. G. (1992c). The Paleolithic art of Asia. In Goldsmith, S., Garvie, S., Selin, D., and Smith, J. (eds.), Ancient Images, Ancient Thought: The Archaeology of Ideology, University of Calgary, Calgary, pp. 383-390.
- Bednarik, R. G. (1992d). Palaeolithic art found in China. Nature 356: 116.
- Bednarik, R. G. (1993a). Pleistocene animal depiction in Asia. International Newsletter on Rock Art 6: 2-6.
- Bednarik, R. G. (1993b). Palaeolithic art in India. Man and Environment 18(2): 33-40.
- Bednarik, R. G. (1993c). About Palaeolithic ostrich eggshell in India. Indo-Pacific Prehistory Association Bulletin 13: 34-43.
- Bednarik, R. G. (1993d). European Palaeolithic art—typical or exceptional? Oxford Journal of Archaeology 12(1): 1–8.
- Bednarik, R. G. (1994a). The discrimination of rock markings. Rock Art Research 11: 23-44.
- Bednarik, R. G. (1994b). A taphonomy of palaeoart. Antiquity 68: 68-74.
- Bednarik, R. G. (1994c). Art origins. Anthropos 89: 169-180.
- Bednarik, R. G., and Devlet, K. (1992). Rock art conservation in Siberia. Purakala 3(1-2): 3-11.
- Bednarik, R. G., Kumar, G., and Tyagi, G. S. (1991). Petroglyphs from central India. Rock Art Research 8: 33-35.
- Bednarik, R. G., and Li Fushun (1991). Rock art dating in China: past and future. The Artefact 14: 25-33.
- Bednarik, R. G., and You Yuzhu (1991). Palaeolithic art from China. Rock Art Research 8: 119– 123.
- Belfer-Cohen, A. (1991). The Natufian in the Levant. Annual Review of Anthropology 20: 167– 186.
- Belfer-Cohen, A., and Bar-Yosef, O. (1981). The Aurignacian at Hayonim Cave. Paléorient 7(2): 19–42.
- Belfer-Cohen, A., and Hovers, E. (1992). In the eye of the beholder: Mousterian and Natufian burials in the Levant. *Current Anthropology* 33: 463-471.
- Belitzky, S., Goren-Inbar, N., and Werker, E. (1991). A Middle Pleistocene wooden plank with man-made polish. *Journal of Human Evolution* 20: 349-353.
- Boriskovski, P. I. (1984). Paleolit SSSR. Izdatel'stvo Nauka, Moscow.
- Chen Zhao Fu (1991). History of the Discovery of Chinese Rock Art. Shanghai People's Publishing House, Shanghai.
- Davis, S. J. M. (1974). Incised bones from the Mousterian of Kebara Cave (Mount Carmel) and the Aurignacian of Ha-yonim (Western Galilee), Israel. *Paléorient* 2: 181–182.
- d'Errico, F., Gaillard, C., and Misra, V. N. (1989). Collection of non-utilitarian objects by Homo erectus in India. Hominidae. Proceedings of the 2nd International Congress of Human Paleontology, Editoriale Jaca Book. Milan, pp. 237-239.
- Dupree, L. (1972). Tentative conclusions and tentative chronological charts. In Dupree, L. (ed.), "Prehistoric research in Afghanistan (1959–66)." Transactions of the American Philosophical Society 62: 74–82.
- Edwards, P. (1991). Wadi Hammeh 27: an Early Natufian site at Pella, Jordan. In Bar-Yosef, O., and Valla, F. (eds.), The Natufian Culture in the Levant, International Monographs in Prehistory, Ann Arbor, Michigan, pp. 123-148.
- Garrod, D. A. E., and Bate, D. M. A. (1937). The Stone Age of Mount Carmel, Vol. I, Clarendon Press, Oxford.

Goren-Inbar, N. (1986). A figurine from the Acheulian site of Berekhat Ram. Mi Tekufat Ha Even 19: 7-12.

- Goren-Inbar, N. (ed.) (1990). Quneitra: A Mousterian Site on the Golan Heights, Monograph 31, Institute of Archaeology, Jerusalem.
- Goren-Inbar, N., Lewy, Z., and Kislev, M. E. (1991). The taphonomy of a bead-like fossil from the Acheulian of Gesher Benot Ya'aqov, Israel. Rock Art Research 8: 83-87.
- Hovers, E. (1990). Art in the Levantine Epi-Palaeolithic: an engraved pebble from a Kebaran site in the lower Jordan valley. Current Anthropology 31: 317–322.
- Leroi-Gourhan, A. (1975). The flowers found with Shanidar IV, a Neanderthal burial in Iraq. Science 190: 562-565.
- Leroi-Gourhan, A. (1989). Comment. Current Anthropology 30: 183.
- Marshack, A. (1972). Aq Kupruk: art and symbol. Transactions of the American Philosophical Society 62(4): 66-72, 83-84.
- Misra, V. D. (1977). Some Aspects of Indian Archaeology, Prabhat Prakashan, Allahabad.
- Neuville, R. (1951). Le Paléolithique et le Mésolithique du Désert de Judée. Archives de l'Institut de Paléontologie Humaine. Masson, Paris.
- Noy, T. (1991). Art and decoration of the Natufian at Nahal Oren. In Bar-Yosef, O., and Valla, F. R. (eds.), The Natufian Culture in the Levant, International Monographs in Prehistory, Ann Arbor, Michigan, pp. 557–568.
- Okamura, M. (1992). The achievements of research into the Japanese Palaeolithic. Acta Asiatica 63: 21-39.
- Okladnikov, A. P. (1959). Shishkinsie pisanitsi. Irkutsk.
- Okladnikov, A. P. (1977). Petroglify verkhnei Leny. Izdatel'stvo "Nauka," Leningrad.
- Okladnikov, A. P., and Saporoshskaya, W. D. (1959). Lenskije pissanizy. Izdatel'stvo Academii Nauk SSSR, Moscow/Leningrad.
- Pei, W. C. (1931). Notice of the discovery of quartz and other stone artifacts in the Lower Pleistocene hominid-bearing sediments of the Choukoutien Cave deposits. *Bulletin of the Geological Society of China* 11(2): 109–146.
- Ronen, A., and Barton, G. M. (1981). Rock engravings on western Mount Carmel, Israel. *Quartăr* 31/32: 121-137.
- Sohn Pow-Key (1974). Palaeolithic culture of Korea. Korea Journal 4-11 April.
- Sohn Pow-Key (1981). Inception of an mobilier in the Middle Palaeolithic period at Chommal Cave, Korea. In Resumenes de Comunicaciones, Paleolítico Medio, Xth UISPP Congress, Mexico City, pp. 31-32.
- Solecki, R. (1975). The Middle Palaeolithic site of Nahr Ibrahim (Asfurieh Cave) in Lebanon. In Wendorf, F., and Marks, A. E. (eds.), Problems in Prehistory: North Africa and the Levant, Southern Methodist University Press, Dallas, pp. 283-295.
- Sonawane, V. H. (1991). An engraved Mesolithic core from Chandravati, Rajasthan. In Pande, P. M., and Chattopadhaya, B. D. (eds.), Archaeology and History: Essays in Memory of Shri A. Ghosh, Vol. I, Agam Kala Prakashan, Delhi, pp. 53-56.
- Tang Huisheng (1993). Theory and methods in Chinese rock art studies. Rock Art Research 10: 83-90.
- Turville-Petre, F. (1932). Excavations in the Mugharet el-Kebarah. Journal of the Royal Anthropological Institute 62: 271-276.
- Vandermeersch, B. (1981). Les hommes fossiles de Qafzeh (Israël). C.N.R.S., Paris.
- Vartanyan, S. L., Garutt, V. E., and Sher, A. V. (1993). Holocene dwarf mammoths from Wrangel Island in the Siberian Arctic. *Nature* 362: 337-340.
- Weinstein-Evron, M., and Belfer-Cohen, A. (1993). Natufian figurines from the new excavations of the el-Wad Cave, Mt Carmel, Israel. Rock Art Research 10: 99-103.
- You Yuzhu (1984). Preliminary study of a Palaeolithic bone engraving. Kexue Tongbao 29: 80-82.