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EUROPEAN PALAEOLITHIC ART — TYPICAL OR EXCEPTIONAL?

Summary. *The recent discovery of the first Palaeolithic art object from China is discussed in the context of relevant Chinese and other Asian evidence, and considered within the framework of current models of very early art evolution as they pertain to Eurasia. It appears that these are biased in favour of selective evidence from western Europe, by ignoring that in most regions where Pleistocene art exists it is largely, if not entirely, non-figurative. It is also argued that any present distributional, statistical and compositional characteristics of the surviving evidence must not be considered to have cultural significance, unless there is clear evidence to that effect.*

For much of this century, China has been one of the principal sources of Lower Palaeolithic occupation evidence and hominid skeletal remains. Chinese evidence from the Upper Palaeolithic has received considerably less attention abroad, which may be partly due to the complete lack of any art finds. However, it has recently been argued that the apparent paucity of Palaeolithic art evident throughout Asia may reflect neglect rather than historical reality (Bednarik 1992a).

This has been cited as one of several possible biases which have contributed to a distorted picture of Palaeolithic art generally, according to which that art consists largely of 'naturalistic' images of objects, notably of large animals. This is not even true of the Franco-Cantabrian region itself, where figurative representations are outnumbered at least three times by non-figurative art (for instance, there are only 2188 identifiable biomorphs listed by Leroi-Gourhan 1971, from the Palaeolithic art sites in France, Spain and Italy!). Outside of southwestern Europe, two-dimensional figurative depiction is almost non-existent in Pleistocene art. If one excludes the few examples that are more appropriately considered as bas reliefs (such as the anthropomorphs from Molodova V and Kostenki I) or that are doubtful (such as the rabbit-like engraving from the latter site, or the iconic elements Marshack (1989) discerns in the markings on the mammoth tusk tip from Kirillovskaya, which are better regarded as non-iconic), the confirmed iconic figures in the Palaeolithic graphic art of Russia and all of Asia are limited to the paintings in Kapova Cave and two mammoth engravings, from Mal'ta and Bereliokh. Okladnikov's (e.g. 1977) claims of a Palaeolithic age for certain Siberian rock paintings at Shishkino and Tal'ma were found to be without supporting evidence (Bednarik 1992b; Bednarik and Devlet 1992), and the engraved pebbles from

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the cave of Kamikuroiwa, Japan (Aikens and Higuchi 1982), exemplify a form of proto-sculpture rather than true two-dimensional depiction.

It follows that in about 97% of the area of Eurasia, graphic Palaeolithic art — where it occurs — seems almost entirely restricted to geometric or non-iconic marks. This is as true of the only cave art known from central Europe — in Hohler Fels, Geissenklösterle (Hahn 1991), and possibly Mladec Cave — as it is of the numerous 'geometric signs' on portable objects from Russia (Marshack 1979), Siberia and India (Bednarik 1991a) (best exemplified at Eliseevichi, Mezin, Kirillovskaya and Mezherich, but also occurring, less pronounced or in smaller numbers, at Patne, Mal'ta, Afontova, Kavkaz, Balinkosh, Klinets, Timonovka, Suponevo, Novgorod-Severskaya, Avdeevo and Gagarino), and now of the first Palaeolithic art discovered in China (Bednarik and You 1991; Bednarik 1992c).

FIRST PALAEOLITHIC ART FOUND IN CHINA

Previous evidence of non-utilitarian activities from the Chinese Palaeolithic was restricted to some 120 perforated objects from the Upper Cave of Zhoukoudian (Bednarik and You 1991), evidence of ochre use, disc beads made from ostrich eggshell in the Gobi region, a 28,135-year-old perforated stone bead from Shiyu, Shanxi Province (Bednarik and You 1991), and a series of about 600 marked bone fragments from two layers at the same site (You 1984).

A sample of the last-mentioned corpus has been examined and it is now considered to be the result of several taphonomic processes (Bednarik in prep.). These findings have considerable impact on some western European claims of Palaeolithic markings on portable objects. For instance, the markings on some of the Cueva Morín bone fragments (Freeman and Gonzalez Echegaray 1971), which Marshack (1991, 54, Fig. 15) considers to be of natural origin, occur also on many of the Shiyu specimens. I have described very similar marks from ostrich eggshell objects in India and ivory objects in Siberia, identifying them as the result of mycorrhizal processes (Bednarik 1991a). Moreover, the hook-like incisions on the 'tally-marked' bone from Cueva Morín (Freeman and Gonzalez Echegaray 1983) closely resemble markings on some of the Shiyu bones, which I regard as natural, taphonomic marks (Fig. 1).

A 14-cm-long antler fragment recovered from a 13,000-year-old occupation layer in Longgu Cave near Xinglong, Hebei Province, is decorated with three carefully crafted, very complex non-iconic patterns. It bears traces of a thick ochre coating, partly preserved under calcium carbonate encrustation. A small amount of the antler's spongy inner material has been subjected to AMS dating. Its radio-

Figure 1
Bone fragment from the Palaeolithic occupation at Shiyu site, near Huairen, Shanxi Province, China, with incised, regular marks that were not produced intentionally. Scale ⅔. (Photo R.G. Bednarik)

Figure 2
Palaeolithic antler fragment from Longgu Cave, Northwest Mountain, near Xinglong, Hebei Province, China, with engraved pattern. Scale ⅔. (Photo R.G. Bednarik)

carbon age, 13,065 ± 270 years b.p. (Bednarik and You 1991), confirms that of the occupation layer.

The three engraved patterns form distinctive designs contained in surrounds. One consists of four sets of six or seven parallel wave lines, the other of an elaborate figure eight motif (Fig. 2), while the third pattern is an arrangement of parallel and zigzag lines enclosing two elongate panels of oblique cross hatching. The last-mentioned, especially, is reminiscent of the decoration on the only known graphic art object from the Indian Upper Palaeolithic, the 25,000-year-old Patne ostrich eggshell fragment (Bednarik 1991a).

DISCUSSION

It has been suggested that the Americas and Australia were colonized from east Asia during the Late Pleistocene. The early rock art of the former three continents is non-iconic and surprisingly uniform (Bednarik 1987, 1988, 1989a), as that of Asia (e.g. China, India) also appears to be. Equitable dialectic about early art origins cannot therefore be limited to evidence from western Europe, as has been the case almost exclusively so far, but must focus on Asian evidence.

Pleistocene art has survived in only a few novel environments, for example in a series of 320 caves in western Europe (Bahn and Vertut 1988) and southern Australia (Bednarik 1990) which have not been subjected to extensive frost spalling during the final Pleistocene. Most central European caves, for instance, suffered much parietal *gélifraction* (Tricart 1956; Schmid 1958) during the late Würm stadials, which had little effect in the decorated caves of southwestern Europe (Bednarik 1986), and none on the decorated limestone caves of southern Australia.

Similarly, the Pleistocene petroglyphs at numerous Australian open sites survived in most cases only because their surface was stabilized by rock varnish. Another example of how biases develop in palaeoart studies is provided by the female figurines of the Upper Palaeolithic, most of which are of calcium carbonate (either ivory or limestone) and were found in carbonate-rich, high-pH soils (loess or cave sediments). These preservation conditions, and not — as is sometimes assumed — the distribution of a tradition determine the

present-day distribution of the figurines (Bednarik 1991a).

It is thus inappropriate to draw any far-reaching inferences from the distribution, composition or statistics of the surviving remnant sample of Pleistocene art, without considering all the factors that led to the present distributional or statistical characteristics of that sample. Most of these factors are related to geomorphology and are of no archaeological or cultural import at all. Their misinterpretation has led to a series of futile speculations about the meaning and significance of Europe's Ice Age rock art. For instance, its restriction to caves is seen by some researchers as culturally significant, as proof that art production was endemic in caves. Yet the art evidently does not occur in caves because it was produced only there, but because it generally survived only there (Bednarik 1986) — apart from some notable exceptions (Bahn 1985).

One remedy for Eurocentric concepts of palaeoart would be to give as much attention proportionally to Asian Palaeolithic art as that continent would deserve in accordance with its comparative size. Not only would this lead to a more balanced understanding of the subject, it would also expose the peripheral significance of the Franco-Cantabrian art body within the global corpus of Pleistocene art evidence, of which it accounts for only a minute portion.

Ice Age art occurs in all continents except Antarctica, although in the Americas evidence remains limited to the very final phase of that period (Bahn and Vertut 1988, 26; Bednarik 1989a; Bahn 1991). However, I am confident that Pleistocene direct dates will be obtained from South American rock art. At the present time Pleistocene art appears to be most prolific in Australia, where thousands of rock art sites are prospective examples. Minimum ages of up to 32,000 years have been published for Australian petroglyphs several years ago (Nobbs and Dorn 1988), although the reliability of the cation-ratio dating method used remains the subject of some discussion (see extensive debate of Nobbs and Dorn 1988; Watchman 1991; Bednarik 1992b). However, the conservative minimum date of 36,400 ± 1700 years BP for a petroglyph at Wharton Hill, South Australia, was obtained directly from the radiocarbon content of organic matter under the rock varnish covering the rock art, and is therefore much more reliable (Dorn et al. 1992). The earliest dates now available for Australian petroglyphs of the non-iconic 'archaic linear tradition' are close to the upper limit of the radiocarbon method, and they are all minimum dates. Consequently it would be realistic to allow for the possibility that this tradition (which has early parallels in Asia) could be significantly older. The new data confirm other evidence and reasoning, according to which rock art was produced in Australia long before 40,000 years ago, and art in some form was probably introduced by the first settlers (cf. Bednarik and You 1991), who on present indications arrived some time between 50,000 and 140,000 years ago.

Pleistocene art may also be common in southern Africa, where paintings on portable objects have been dated to 26–28,000 years BP (Wendt 1974). In Europe, too, art older than the celebrated Franco-Cantabrian parietal and portable art of southwestern Europe is known to exist. The first Pleistocene rock art ever found in Germany (Hahn 1991) is of at least Aurignacian and Gravettian age respectively, and the sophisticated tradition of sculptured art in central Europe (Bednarik 1989b; Marshack 1985) is of greater age than the French or Spanish finds can be demonstrated to be.

IMPLICATIONS FOR EUROPEAN PALAEOLITHIC ART STUDIES

The southern German parietal art especially

is of great significance. Restricted so far to just two sites (Hohler Fels near Schelklingen, and Geissenklösterle near Blaubeuren, Swabian Alb), it is limited to exfoliated wall fragments, particularly of *Bärenschliffe*, found in stratified floor deposits. The 'stream patterns' documented by Marshack (1977), found even in the Mousterian (e.g. Leonardi 1988, Fig. 4) and widespread in the archaic cave art of southern Australia (see Bednarik 1990, and bibliography therein), are prominent in the engravings from Hohler Fels. The hypothesis that geomorphological selection is the determining factor in the composition of the surviving sample of cave art (Bednarik 1986) is clearly supported by these recent finds. The natural recording bias of European researchers in favour of figurative designs may well be amplified by these preservation biases which are attributable to climatic (severity of freeze–thaw cycles or regelation) and geological (different limestone facies) factors: it is rather unlikely that traces of non-figurative art on cryoclasts would have been recognized in the past. Yet without an understanding of the susceptibility of support surfaces to exfoliation it seems pointless to speculate about distributional evidence, both in the spatial and chronological sense. For instance, in much of central Europe, Würmian stadial peaks are inevitably marked by largely cryoclastic sedimentation; corresponding deposits do not exist in the two major concentrations of surviving Pleistocene 'cave art', Franco-Cantabria and southern Australia.

Many writers on the Palaeolithic art of France and Spain continue to ignore all evidence of Pleistocene art outside the regional traditions they study, and there continue to appear books with such promising titles as *L'image des animaux dans l'art préhistorique* which deal exclusively with the Upper Palaeolithic art of Europe — as if the Upper Palaeolithic were the only period of prehistory and western Europe were the only world region with a prehistory.

These extremely biased treatments are only one aspect of the Eurocentric approach of many (and not only European!) researchers when addressing Pleistocene art. The subjective 'identification' of styles and of individual iconographic elements are widespread in the literature, and the countless interpretation attempts remain of limited scientific value: they may tell us much about the cognition of the scholars doing the interpreting, but nothing about that of the artists or the consumers of the art. These subjectively conceived styles and taxonomies are the basis of the chronology of European Pleistocene parietal art (Bednarik 1992b). There is no agreement as to how many of the 280 or so sites include fakes, or may even consist entirely of fakes. The same, of course, applies to the portable art, which is known to include numerous frauds (e.g. Azilian pebbles, even objects recently carved from mammoth ivory). This raises an uncomfortable question: assuming that there are some undetected fakes in the corpus currently considered to be authentic, are they not likely to add to the inherent biases? Surely an astute trickster is likely to conform with the dominant model of what Palaeolithic art should look like, however right or wrong that model may be.

Finally, it is worth remembering that almost no European Upper Palaeolithic rock art is plausibly dated: there is only one example of a direct date (Lorblanchet *et al.* 1990), and a possible dating by association (Combier 1984). The archaeological minimum dating at ten other sites (Bednarik 1992b) does not meet the stringent criteria required for scientific acceptance. It should serve as a warning that two similarly subjectively conceived rock art chronologies (in eastern Spain and in the Sahara) have recently been rejected, and that the archaeological dating attempt of Karelian petroglyphs was rejected even though the age

estimate turned out to be fairly accurate (Bednarik 1992d).

SUMMARY

The parietal art of the Upper Palaeolithic of Europe is a corpus of rock art attributed to an arbitrarily defined period, although it remains itself largely undated. In general terms, it has been defined by what has come to be accepted as belonging to that corpus, largely by perceived style, location and association. It may include some questionable examples: the recent controversies of Cosquer (near Marseilles, now authenticated) and Zubialde Caves (northern Spain, now known to be a fake) provide again a timely warning (cf. Bahn 1992; Bednarik 1991b). European Upper Palaeolithic art differs from most other Pleistocene or probable Pleistocene arts in the world in that the latter are largely free of two-dimensional figurative depictions of objects, except perhaps some arts of the very final Pleistocene.

The emphasis on iconicity has even led to recent rejection of any pre-Upper Palaeolithic evidence of symbolism (Chase and Dibble 1987; Davidson and Noble 1989). However, in response it has been pointed out that art origins are not related to iconicity, that these models ignore a large body of evidence suggesting the existence of symbolic behaviour prior to the Upper Palaeolithic, and that the models are heavily biased in favour of preconceived ideas of what the evidence should confirm (Bednarik 1992e). When one considers that such paradigms are themselves based on partial and inevitably skewed evidence which upon close examination often offers considerable scope for scepticism, at various levels, one cannot help experiencing a certain apprehension towards interpretive hypotheses about European Pleistocene art.

A review of Palaeolithic art studies in the light of recent evidence from several continents suggests that one of the most serious limitations of Eurocentric interpreters of European Pleistocene art is that they seem to be unaware that most known Pleistocene art is non-European, and that one needs to place the European corpus of art within that of global Ice Age art to study it effectively. Secondly, it is essential to consider all the selective factors that contributed to the present distributional, statistical and compositional characteristics of the evidence before attempting any form of interpretation. These variables are the basis of our interpretations, and most of them are in no way related to cultural aspects (Bednarik 1992f).

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