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Сборник научных трудов кафедры археологии Кемеровского государственного университета посвящен 80-летию со дня рождения профессора кафедры Якова Абрамовича Шера – маститого ученого, труды которого известны как в России, так и за рубежом. Обширная тематика сборника, не укладывающаяся в географические рамки Южной Сибири, обусловлена широтой научных интересов юбиляра. В сборник вошли статьи исследователей из России, Казахстана, Узбекистана, Австралии, Франции, США, посвященные теоретической археологии и статистическому анализу археологического материала, проблемам изучения изобразительных памятников (палеолитического искусства, петроглифов, металлоопластики, каменных изваяний), историографии и музеификации археологических памятников, а также политическим аспектам археологического наследия. Книга рассчитана на широкий круг специалистов – археологов, культурологов, искусствоведов, музейеведов, а также студентов.

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PALAEOART OF THE LOWER PALAEOLITHIC*

Abstract. The traditional view in archaeology that Lower Palaeolithic hominins lacked essentially modern human cognitive capacities is refuted by the presentation of a series of finds from that period, indicating that it gave rise to discernible traditions of palaeoart production. While the number of such specimens remains small, distinctive patterning in their mode of occurrence and in the forms of this evidence facilitates the formulation of a hypothesis of “art” and symboling origins.

1. Beads and pendants
Palaeoart of the Lower Palaeolithic period seems to have been found for well over 150 years but it has remained largely ignored, misinterpreted or at least controversial. Jacques Boucher de Crèvecœur de Perthes [1846] found numerous fossilised sponge fragments with central perforations at St Acheul, as did Prestwich [1859]. They were forgotten by the time Smith [1894] excavated about 200 identical items from an Acheulian site at Bedford, England, with artificial enlargement of the natural orifice. Keeley [1980] examined some of the English sample and confirmed that perforations were modified, and Bednarik [2005] examined 325 specimens microscopically, demonstrating extensive wear and modification traces on many. Goren-Inbar et al. [1991] recovered similar disc-like and perforated fossil casts from an Acheulian site at Bedford, England, with artificial enlargement of the natural orifice. Keeley [1980] examined some of the English sample and confirmed that perforations were modified, and Bednarik [2005] examined 325 specimens microscopically, demonstrating extensive wear and modification traces on many. Goren-Inbar et al. [1991] recovered similar disc-like and perforated fossil casts from an Acheulian site, Gesher Ya’aqov in Israel, although these are crinoid segments and no evidence of modification was noted.

The more than forty disc beads at El Greifa, a Late Acheulian site in Libya [Ziegert, 1995, 2010; Bednarik, 1997], were certainly made with great care from ostrich eggshell. Similarly, there can be no doubt about the authenticity of two pendants from the Lower Palaeolithic of Repolust Cave, Austria [Mottl, 1951; Bednarik, 1992; 1997] (Fig. I).

2. Petroglyphs
Petroglyphs relating to Middle Palaeolithic or Mode 3 traditions are more common than Upper Palaeolithic rock art, at least in Australia [Bednarik, 1995; 2010] and southern Africa. The number of petroglyphs credibly attributed to the Lower Palaeolithic period remains small by comparison. The first rock art ascribed to the Acheulian are the eleven petroglyphs in Auditorium Cave, Bhimbetka complex, Madhya Pradesh, India [Bednarik, 1993a; 1994a]. Two of them were found covered by the uppermost part of substantial Acheulian occupation deposits. A second Indian quartzite cave, Daraki-Chattan, contains two vertical panels densely covered by over 498 cupules [Kumar, 1996; Bednarik, 2000]. Numerous exfoliated wall fragments bearing a total of 26 cupules, as well as one in situ cupule and two engraved grooves on a boulder were excavated within the Lower Palaeolithic occupation deposits [Bednarik et al., 2005] (Fig. II).

While two Indian sites thus present the currently oldest known rock art in the world, southern African finds also need to be considered here. A grindstone of the Fauresmith industry features a grid pattern, from Blind River Mouth in East London, South Africa [Laidler, 1933]. The Lower Sangoan cupules on a sandstone slab from Sai Island, Sudan, are believed to be in the order of 200,000 years old [Van Peer et al., 2003]. In addition to a series of Middle Stone Age cupule sites in the Korannaberg region of the southern Kalahari, at two of these sites, Nchwaneng and Potholes Hoek, the petroglyphs are suspected to extend also into the Fauresmith tradition [Beaumont, Bednarik, 2010].

3. Pigment use
Evidence of the use of iron oxides and hydroxides, presumably as colouring matter, has long been demonstrated from several Lower Palaeolithic sites in the Old World [Bednarik, 1992; 1994b]. Wonderwork Cave in South Africa [Beaumont, 1990; 1999; Binneman, Beaumont, 1992; Bednarik, 1994b] provides numerous ochre fragments down to the early Middle Pleistocene. A haematite piece from Kabwe Cave near Broken Hill, Zambia, is probably in the order of 300 ka old [Clark et al., 1947]. Clark [1974] also reports evidence of pigment use from the Acheulian site at Kalambo Falls, Zambia. A ground piece of haematite from Nootigedacht, South Africa [Beaumont, Morris, 1990] is somewhat older. The more than 70 red ochre pieces, over 5 kg in weight, from site GnJh-15 in the Kaphurin Formation, Kenya, are >285,000 years old [McBrearty, 2001]. More than 306 pieces of specularite, haematite, limonite, ochrous sandstone and manganese dioxide have been excavated at Twin Rivers, Zambia, dated to between 270 and 170 ka BP [Barham, 2002]. About 3% of this material shows signs of modification by grinding or rubbing. This confirms the actual use of ferruginous pigment during

* Все статьи на иностранных языках печатаются в авторской редакции.
the Lower Palaeolithic period, first demonstrated by Marshack [1981] in Europe and by myself in Asia [Bednarik, 1990]. A few European Acheulian sites had earlier yielded tentative evidence of ochre use, including Terra Amata [de Lumley, 1966] and Achenheim [Thévenin, 1976] in France and Ambrona in Spain [Howell, 1966]. The red pigment traces on the Tan-Tan figurine from Morocco also need to be considered, even though they are only microscopic, but they do represent the earliest evidence of applied pigment that we currently have [Bednarik, 2001a; 2003].

4. **Proto-figurines**

Currently we have only two specimens of the Lower Palaeolithic that appear to deserve the designation proto-figurine. A basaltic tuff pebble containing scoria clasts was excavated from a large occupation deposit of the Late Acheulian at Berekhat Ram, Israel, and is older than 230 ka [Goren-Inbar, 1985]. Its natural form, suggestive of the head, torso and arms of a female human (Fig. III), has been emphasized by man-made grooves implying that the iconic properties of the object were appreciated [Goren-Inbar, 1986; Goren-Inbar, Peltz, 1995]. Most commenting authors rejected the find in the subsequent years without examining it [e.g. Chase, Dibble, 1987; Davidson, 1990; Pelcin, 1994; Nowell, 1995; Noble, Davidson, 1996: 75; Davidson, Noble, 1998]. Marshack [1996; 1997] conducted a microscopic study of the object’s various markings, concluding that they were made with stone tools. His main findings were corroborated by d’Errico and Nowell [2000].

The object from Tan-Tan, Morocco, is of quartzite and comes from a Middle Acheulian occupation layer thought to be about 400 ka old on the basis of the lithic typology [Bednarik, 2001a; 2003]. Its anthropomorphous form is much more pronounced than that of the Israeli specimen and is emphasized by eight symmetrically arranged grooves (Fig. IV). Five of these lines were found to have been modified and microscopic traces of a brilliant red pigment seem to indicate that the figurine had once been coated by red paint.

5. **Engravings**

The largest site assemblage of engraved objects reported from the Lower Palaeolithic is from Bilzingsleben, Germany [Mania, 1991]. Five engraved bone fragments, mostly of the forest elephant, one presumed engraving on the fragment of a large ivory point, and one on a quartzite slab have been found [Mania, Mania, 1988; Bednarik, 1988; 1993b; 1995]. The grooves on these specimens were made with the points of stone tools, but some commentators have considered them to be incidental results of utilitarian activities. Lasermicroscopic analysis has shown that they were made intentionally [Steguweit, 1999; cf. Bednarik, 1988]. Moreover, one of the several engraved bone fragments from gravel pit Ol-
disleben 1, Thuringia (Germany), found with a Micoquian industry and Middle Pleistocene fauna [Günther, 1994], displays markings almost identical to those on the № 1 object from Bilzingsleben (Fig. V). These and other consistent features in the earliest known palaeoart suggest that even in these remote times, conventions that are definable as “traditions” already existed [Bednarik, 1995; Hodgson, 2000].

The status of a similarly marked elephant bone from another central European hominin site, Stránská skála in the Czech Republic [Valoch, 1987], remains to be clarified. The anthropic authenticity of an engraved bone fragment from the Acheulian of Sainte Anne I, France, which bears ten short cuts along an edge, seems assured [Raynal, Séguy, 1986; Crémades, 1996]. Similarly, the markings on a fragment of a Russian mammoth tusk from Whylen near Lörrach, Germany (Fig. VI), seem intentional, if not notational [Moog, 1939]. The pattern of seven long lines on a microcrystalline ironstone slab from Wonderwerk Cave, South Africa (Fig. VII), was engraved deliberately about 280,000 years ago [Bednarik, Beaumont, 2010].

6. Manuports

The earliest reported manuport dates from the very beginnings of hominin phylogeny, being almost 3 Ma old. Until recently it was attributed to Australopithecus but the discovery of Kenyanthropus platyops (3.5 Ma) offers another possibility. The Makapansgat jasperite cobble was excavated in 1925 from the fossiliferous, australopithecine-bearing breccia 3 of the dolomite cave Limeworks, Makapan valley, South Africa [Eitzman, 1958; Dart, 1974]. Its history has been reconstructed by microscopic study of its surface markings and accretions [Bednarik, 1998] (Fig. VIII).

This find remains entirely unique, but clear prismatic rock crystals are a more common form of manuport at early occupation sites. They occur in all Acheulian layers of Wonderwork Cave, the lowest of which are of the Early Pleistocene. The Lower Acheulian site Singi Talav in India has yielded six complete and unmodified quartz prisms ranging from only 7–25 mm [d’Errico et al., 1989]. Even smaller quartz crystals were excavated from the Acheulian layer of Gesher Benot Ya’agov, Israel [Goren-Inbar et al., 1991]. Zhoukoudian in China provided about 20 more quartz crystals, and here they occurred with Homo erectus remains [Pei, 1931]. The fragment of a large clear rock crystal was excavated in the Acheulian layer of the Gudenußhöhle, Austria [Bednarik, 1992].

The most-cited specimen of a Lower Palaeolithic evidence of “symbolic cognition” is a handaxe from West Tofts, Norfolk, bearing a fossil cast [Oakley, 1981], although its significance is doubtful. Similarly, the anthropomorphous dolomite piece from Mumbwa Caves, Zambia [Barham, 2000], might be a manuport, but its status remains to be clarified. The Erfoud manuport from Morocco, found within the outline of a Late Acheulian windbreak or dwelling structure, is probably authentic [Bednarik, 2002].

7. Discussion

We now have ample evidence of ochre use in the Middle Pleistocene, which may include the application of pigment to rock surfaces. The portable engravings of this period imply the existence of distinctive if rudimentary traditions, especially a marking behaviour one might call “spatially determined doodling”, which is still present in the subconscious of humans today. The even more distinctive behaviour that created the cupules of the Lower Palaeolithic in India and Africa, and later
of the Middle Palaeolithic from France (La Ferrassie) to Australia, also survived to historic times. In the face of this evidence it is no longer reasonable to continue denying that palaeoart traditions already existed in the Lower Palaeolithic. The use of beads and pendants, which seems to be demonstrated at least for the late part of that period, certainly implies the existence of complex social systems, because without such a context these purely symbolic products could not possibly have been used.

These observations indicate that we have severely misjudged the cognitive and cultural competence of early humans. It was simply absurd to expect that almost no cognitive evolution should have occurred in hominids for 7 Ma, followed by an immense “explosion” in their cognitive faculties during the last third of the Late Pleistocene, i.e. the last 0.5% of the duration of hominid evolution. Yet this is what palaeoanthropology and archaeology have favoured over the last few decades, especially in the Anglo-American school of archaeology. The record indicates otherwise, and it tells us also that hominins have been seafarers since the late Early Pleistocene, i.e. for about 1 Ma [Bednarik, 1999; 2001b; Bednarik, Kuckenburg, 1999]. Consequently the discontinuist or short-range model of human evolution that has dominated recent discussions is almost certainly false (for a more realistic and much better documented model, see [Bednarik, 2011]). It is much more probable that the increase in cognitive competence occurred gradually, over a long period of time. This applies also to language or speech, most certainly available to the first mariners, and to other fundamentally human capacities such as the creation of concepts of reality, concepts of self, and the acquisition of non-utilitarian systems facilitating advanced cultural and social constructs.

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