ELSEVIER

Archaeology Ethnology & Anthropology of Eurasia 41/3 (2013) 22–32
E-mail: Eurasia@archaeology.nsc.ru

ARCHAEOLOGY, ETHNOLOGY & ANTHROPOLOGY OF EURASIA

PALEOENVIRONMENT. THE STONE AGE

L.V. Lbova[1,2], P.V. Volkov[1,2], D.V. Kozhevnikova[2], and L.V. Kulakovskaya[3]

[1]Institute of Archaeology and Ethnography, Siberian Branch, Russian Academy of Sciences,
Pr. Akademika Lavrentieva 17, Novosibirsk, 630090, Russia
E-mail: lbovapnr5@gmail.com; volkov100@yandex.ru
[2]Novosibirsk State University,
Pirogova 2, Novosibirsk, 630090, Russia
E-mail: kozhevnikovadarya@yandex.ru
[3]Institute of Archaeology, National Academy of Sciences of Ukraine,
Geroyev Stalingrada 12, Kiev, 04210, Ukraine
E-mail: larissa.kulakovska@gmail.com

UPPER PALEOLITHIC "SOUNDING ARTIFACTS" FROM MESIN, UKRAINE: MODIFICATION MARKS*

Upper Paleolithic musical instruments and the criteria whereby they may be distinguished have not received enough attention in Russian archaeology. A considerable number of presumed musical instruments have been found in Eurasia. The examination of such artifacts from Mesin has revealed modifications by humans that clearly indicate musical function. In terms of modern classification, they might be untuned percussion instruments of both resonator and nonresonator types.

Keywords: *Mesin, Upper Paleolithic, Epigravettian, percussion instruments, traceological analysis, technological analysis.*

Introduction

Musical instruments, both simple and more complex, are unanimously regarded to be an indicator of modern behavior, and are part of a wide spectrum of innovations marking the early Upper Paleolithic (Mellars, 2005; Vishnyatsky, 2005). Their origin, evolution, and dispersal are related to the broader issue of the early culture of anatomically modern humans (D'Errico et al., 1998; Mithen, 2005; Otte, 2000; and others). Musical instruments are difficult to identify if there are no iconographic or ethnographic parallels available. Series of bone flutes and whistles in the early Aurignacian assemblages of Eurasia attest to the existence of stable musical traditions 40–30 ka BP (Bolus, Conard, 2009; D'Errico et al., 2003; Lbova, Kozhevnikova, Volkov, 2010–2011; and others).

Sounding toys, hunting implements (e.g., calls), ritual objects, and primitive musical instruments can be united under the term "phono-instruments" (Sheikin, 2002). We define a musical instrument as an object that produces various sounds when operated by humans. These sounds are rhythmic and vary in quality and pitch.

The Mezin collection, interpreted as the earliest set of musical instruments made of mammoth bones was described in detail by S.N. Bibikov (1981, 2008). The researcher published these materials 25 years after

*This study was carried out under the Federal Program "Scientific and Pedagogical Human Resources of Innovative Russia" (State Contract 14.B37.21.0995), projects of the International Association of Humanities Scholars (МАГ-2012-2013) and the Russian Foundation for the Humanities (Projects Nos. 13-04-00070 and 13-21-08002).

doi:10.1016/j.aeae.2014.03.004

their discovery (excavations of 1956). His approach to interpretation of the finds seemed unconvincing to many scholars. However, modern evidence relating to Paleolithic musical instruments provides a context that Bibikov's ideas were lacking. Scanty materials from Lespugue, Gourdan, Dolní Věstonice, etc. that were known at that time as well as whistles, aerophones, and flutes from Molodovo V, Ataki I, Avdeyevo, Kostenki, and Gagarino were not adequately interpreted in the 1960s (Hausler, 1960). The originality of S.N. Bibikov's bold hypotheses and the innovative techniques of the study of this unique artifact set are impressive; a reconsideration of existing dogmas makes it possible to assess the value of his remarkable discovery (Otte, 2008).

A detailed description of the "Mezin ochestra" was initially published in *The UNESCO Courier* (Bibikov, 1975). Bibikov's excellent knowledge of ethnology, the use of data from multidisciplinary studies (with the participation of archaeologists, experts in use-wear analyses, paleontologists, and medical forensic specialists) resulted in the identification of use-wear traces on these artifacts, allowing him to interpret the bones from the Paleolithic site as a set of percussion instruments. Later, this article was published in *Readings in Physical Anthropology and Archaeology* (Bibikov, 1978); all Western specialists refer only to that study.

In Western publications addressing the issue of the origin and development of music and musical instruments, the Mezin set is mentioned primarily in the context of other finds evidencing the creation of music in the Paleolithic period (Dams, 1985; Lawergren, 1985; Dauvois, 1994; D'Errico et al., 2003; Fitch, 2006; Oerter, 2007; and others). A detailed analysis of the Mezin artifacts made of decorated mammoth ivory can be found in I. Morley's dissertation (2003). He describes them as the earliest percussion instruments. Morley mentions the skepticism voiced by certain archaeologists and musicologists with regard to Bibikov's conclusions; skepticism voiced despite documented traces of percussion and manual contact (Ibid.: 67–68). Such traces were not necessarily caused by the use of these objects as musical instruments, since the every day activities of early humans often required blowing (Lawson et al., 1988; Scothern, 1992). However, the context of the discovery of the mammoth bones in association with a hammer, beater, and a "sounding" bracelet, lends support to the interpretation of the artifacts as musical instruments. According to Morley, the anthropogenic origin of use-wear signs on the bones is beyond any doubt (2003: 67–68).

The Mezin complex was also described by researchers from the Ukraine (Arkheologiya…, 1987). In their description of a flute from stratum IV at Molodovo V the authors also mention the Mezin musical instruments. It should be noted that even nowadays some Ukrainian archaeologists are rather skeptical about the interpretation of the mammoth bones, decorated with red paint, as being musical instruments (see, e.g., (Yakovleva, 2013: 62)). In Russian archaeology, the Mezin collection is mentioned in reviews on Paleolithic art and symbolic behavior (Proiskhozhdenie…, 2004; Kultura…, 2009; and others). To conclude, we see no reason to challenge the inferences reached by S.N. Bibikov and his group.

Archaeological context

The Mezin Paleolithic site is located on a high terrace of the right bank of the Desna River, in Mezin village, Chernigov Province (Ukraine). The site was discovered in 1908 and studied in 1909, 1912–1914, and 1916 by F. Vovk. S.I. Rudenko, P.P. Efimenko, L. Chikalenka and others also participated in the excavations. In 1930 and 1932, M.Y. Rudinsky resumed excavations. In 1954–1957 and 1959–1961, I.G. Shovkoplas conducted large-scale examinations of the site. An area measuring 1200 sq. m was excavated. The site was dated to 20 ka BP (Shovkoplas, 1965; Bibikov, 1981).

The Mezin site yielded numerous lithic artifacts, bone implements, art objects, and fauna remains. The lithic assemblage comprises 113 thousand artifacts made of local flint. The primary reduction is characterized by small prismatic cores (up to 60–80 mm), and blades removed from these cores. These blades represent the main type of blanks for tools. The tool kit (about 4 %) is dominated by burins (about 60 %) including truncation, angle, and dihedral forms. Scrapers (end, double, and others) amount to approximately 15 %. Truncated blades, asymmetrical points, and borers are also available. Various microtools form a representative series. Almost no lithics were found in Dwelling 1, where ornamented bones were discovered. The Mezin industry can be correlated with the Epigravettian, although it differs from other synchronous technocomplexes of the region. A similar industry has been recently reported from the Barmaki site located near Rovno (Western Ukraine) (Pyasetsky, 1997; Nuzhnyi, 2008). A fragment of a bracelet with ornamentation analogous to the Mezin was found there.

A series of radiocarbon dates has been recently obtained for Mezin (Table 1). We are inclined to estimate the age of the site as being within the range of 15–14 ka BP. This estimate is supported by the similarities between the Mezin assemblage and Barmaki artifacts that are dated to 14,300 ± 220 BP (Ki-11087) (Nuzhnyi, 2008: 98). Paleontological and palynological data pointing to a rather cold climate of the periglacial zone also corroborate the dates.

The artifacts under study were concentrated in the southwestern part of Dwelling 1, within grid squares