ASPECTS OF THE KÖRÖS CULTURE LITHIC INDUSTRY: THE ASSEMBLAGE FROM ENDRŐD 119 (HUNGARY): A PRELIMINARY REPORT

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INTRODUCTION

The site of Endröd 119 was discovered in 1976 in connection with a low elevation in the floodplains of the Körös River valley (fig. 1). It was excavated between 1986 and 1989 by. Dr. János Makkay (MAKKAY, 1987; 1992) within the framework of the Microregion Research Project of the Archaeological Institute of the Hungarian Academy of Sciences. The excavations of the remains of five houses, several pits and graves vielded a very rich Early Neolithic Körös Culture pottery assemblage, among which were caracteristic vessels and several bone (MAKKAY, 1990) and stone tools. Also a considerable quantity of faunal. remains, one of the largest animal bone samples ever collected from a Körös Culture site, comes from the excavation. Their study revealed the typical picture for the Early Neolithic of Southeast Europe, with a majority of domestic species, among caprovines dominate (Bökönyi, 1992). The study of the fish remains revealed the exploitation of different species such as carp, pike, pikeperch and the dominance of catfish (TAKÁCS, 1992). According to MAKKAY (1992), the life of this settlement ceased shortly before the latest phase of the Körös-Starčevo Culture, but continued in the nearby sites of Endrőd 39 and Endrőd 6. From the latter, two radiocarbon dates are available, namely 6580±180 BP (Deb-408) and 6240±190 BP (Deb-450) (BOGNÁR-KUTZIÁN and CSONGOR. 1987: 134).

For Endrőd 39 there are four radiocarbon dates: 6950 ± 140 BP (BM-1863R), 6970 ± 110 BP (BM-1868R), 6950 ± 120 BP (BM-1870R) and 6830 ± 120 BP (BM-1971R) (BOWMAN et al., 1990: 73; BURGLEIGH et al., 1983; HORVÁTH and HERTELENDI, 1994).

THE STONE ASSEMBLAGE

The chipped stone artefacts are very few pieces, among which are borers, end scrapers, retouched blades and sickle blades, splintered pieces and a few cores (fig. 2/1-9). The raw materials employed are obsidian and flint, in some cases the so-called ,,Banat" type, characterized by a yellowish-brown colour with small, light spots (KACZANOWSKA et al., 1981); no pieces of the other known variety of ,,Banat" flint, i.e., the black striped one (COMŞA, 1971) have been found. Obsidian, even thoung never analyzed, is most probably from the outcrops of the Tokay-Prešov Mountains (THORPE, 1987; WILLIAMS THORPE et al., 1984; 1987).

Far more rich is the polished stone assemblage, comprised of several ground, poliched and cutting-edged tools and by-products of their manufacture

process (figs. 3-4). Considering that the site lies in an area rather far from any stone outcrops and sources, it appears interesting in that offers us the possibility to understand the raw material movements, shedding light on possible cultural contacts. For this purpose, some artefacts which represent the various rock types, were selected for petrographical analyses (SZAKMÁNY and STARNINI, 1996), carried out by Gy. Szakmány of the Department of Petrography and Geochemistry of the Eötvös Loránd University of Budapest. The results will be published in a more detailed study, however some data are already available. The raw materials used for polished stone-adged tools are fine-grained, hard, rocks and include mainly hornfels and silicified limestone and diorite/gabbro, probabily from the Apuseni Mountains (Transylvania) formations (Gy. SZAKMÁNY, pres. comm. 1995). In some cases more tender rock such as claystone were also employed. As observed from other neolitic stone tool assemblages from southeastern Europe (VOYTEK, 1990), some of the pestles/ hammerstones look like re-cycled cutting-edged tools. The grinding tools (fig. 5) are usually obtained from sedimentary rocks such as sandstones. Also in this case, the raw material source is to be localized far from the site, but since these rocks are widespread in the Carparthian Basin, it is more difficult to establish their precise provenance. One spherical, pierced mace is obtained from a white crystalline rock, probably marble (fig. 4/6). To avoid damage, it was not sectioned to be analyzed. However one of the closest outcrops of white marble, exploited for its good quality during the Roman period, is known in Romania, in the Poiana Ruscă Mountains (Gh. A. SONOC, pers. comm. 1996).

As regards the typology of the tools and their manufacture, the cuttingedged tools include large and small trapezoidal axes and adzes (fig. 3/1-4, 6), chisels (fig. 3/5) and many pierced or , , shaft hole" hammer-axes (fig. 4/5, 7-9). Their surfaces were totally polished, including the hafted, butt part. Some discards such as one cylindrical core (fig. 4/4) (the by-product of drilling the shaft hole) and several waste flakes demonstrate that the manufacture of the tools took place at the site.

The re-working of the tools is shown by some flakes with clear traces of having been cut-off from previous polished implements (fig. 4/1-3), sawing partially from both sides the segment to be removed and then snapping it. The grinding tools are very fragmented and worn (fig. 5); in the case of the implements made from sandstones with soft cement, their surfaces are in a very bad state of preservation and it is difficult to argue their function. One large slab fragment was found covered with a thick level of fish bones and scales (fig. 6); in this case we cannot exclude an use connected with fish processing. This find confirms once more the often understimated importance of this riverine food resource in the subsistence economy of the early Neolithic communities of the central Balkans and the Carpathian Basin (KOSSE, 1979; 125-127, SHERRATT, 1982; 303). Some fragments of hard-cement, coarse-grained sandstone grinding implements can probably be related to grain processing. Finally there is one fragment of a grooved abrader, probably of the type used in the bone tools manufacture (SPEARS, 1990).

CONSIDERATIONS

The peculiar location of the site, in an area of very fine alluvial, clayey sediments (RÓNAI, 1985; CREMASCHI, 1992), might have conditioned the inhabitants to count on exotic materials for the supply of stone tools. On the basis of this assumption, this stone assembage is of particular interest for the information that we can achieve from the study of the provenance of the raw materials and of the typology of the tools, for understanding cultural connections, exchange systems and patterns of raw material procurement.

The wide variety of materials exploited by the inhabitants of Endrőd 119 is striking and indicates an extensive knowldge of non-local resources. Many of these materials needed a long-distance procurement, as in the case of obsidian, which comes from the Slovakian side of the Tokaj-Prešov Mountain Chain and the ,,Banat" flint (fig. 1), probably from the western Banat or the pre-Balkan plateau (KACZANOWSKA et al., 1981). The raw materials used for the scarce chipped stone tools are almost the same observed from other Körös Culture sites of Hungary (BÁCSKAY and SIMÁN, 1987, STARININI, 1993), namely obsidian and yellowish brown ,,Banat" flint, suggesting a north-south exchange network. For most of the other rock types, the closest sources are to be found in the Mountains of Transylvania, probably reached following the high course of the Körös River and its tributaries (fig. 1).

Interesting to note is the presence of perforated implements, in particular the axes and the spherical mace. Perforated axes and maces are in fact known in the Starčevo-Criş cultural sphere in Romania (PĂUNESCU, 1979: fig. 13/1; URSULESCU and DERGACEV, 1991: figs. 6-7) and according to URSULESCU and DERGACEV (1991: 164-167) they appear only in the late phases of the abovementioned Culture, and are considered to be one of the evidences of the influence of the Vinča Culture in the early Neolithic of Moldavia.

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REFERENCES

BÁCSKAY E. and SIMÁN K., 1987 – Some remarks on the chipped stone industries of the earliest Neolithic populations in present Hungary. In KOZŁOWSKI J.K. and KOZŁOWSKI S.K. (eds.) Chipped stone industries of the early farming cultures in Europe: Archaelogia Interregionalis: 107-130. Warsaw-Kraków.

BOGNÁR-KUTZIÁN I. and CSONGOR É., 1987 – New results of radiocarbon dating of archeological finds in Hungary. In PÉCSIM. and KORDOS L. (eds.) Holocene environment in Hungary: 131-140. Geographical Research Institute, Hungarian Academy of Sciences, 41. Budapest.

BÖKÖNYI S., 1992 – The Early Neolithic vertebrate fauna of Endröd 119. BÖKÖNYI S. (ed.) Cultural and landscape changes in Southeast Hungary. I. Reports on the Gyomaendrőd Project. Archeolingua, 1: 195-299. Budapest.

BOWMAN S.G.E., AMBERS J.C. and LEESE M.N., 1990 – Re-Evaluation of British Museum Radiocarbon Dates Issued Between 1980 and 1984, Radiocarbon, 32 (1): 59-79.

BURLEIGH R., AMBERS J. and MATTHEWS K., 1983 – British Museum Natural Radiocarbon Measurements XVI. Radiocarbon, 25 (1); 39-58.

COMŞA E., 1971 - Silexul de tip ,,Bănățean". Apulum, IX: 15-19.

CREMASCHI M., 1992 – Geomorphological survey and the distribution of archaeological sites. In BÖKÖNYI S. (ed.) Cultural and landscape changes in South-east Hungary. I. Reports on the Gyomaendrőd Project. Archeolingua, 1: 358-360. Budapest.

HORVÁTH F. and HERTELENDI E., 1994 – Contribution to the 14C based absolute chronology of the Early and Middle Neolithic Tizsa region. A Jósa András Múzeum Évkönyve, XXXVI: 111-133.

KACZANOWSKA M., KOZŁOWSKI J.K. and MAKKAY J., 1981 – Flint hoard from Endrőd, site 39, Hungary (Körös Culture). Acta Archaeologica Carphatica, XXI: 105-117.

KOSSE K., 1979 – Settlement Ecology of the Körös and Linear Pottery Cultures in Hungary. BAR, International Series, 64.

MAKKAY J., 1987 – Zwei neuere Opfergruben der Körös-Starčevo-Kultur. Bylany Seminar Collected Papers: 243-248.

MAKKAY J., 1990 – Knochen –, Geweih – und eberzahngegenstände der Frühneolithischen Körös-Kultur. Communicationes Archaeologicae Hungariae: 23-58.

MAKKAY J., 1992 – Excavations at the Körös culture settlement of Endrőd-Öregszölök 119 in 1986-1989. A preliminary report. In BÖKÖNYI S. (ed.) Cultural and landscape changes in South-east Hungary. I. Reports on the Gyomaenbdrőd Project. Archeolingua, 1: 121-193. Budapest.

PĂUNESCU A., 1979 – Les fuilles archéologiques de Cuina Turcului Dubova (Dép. de Mehedinți). Tibiscus, V: 11-56. RÓNAI A., 1985 – The Quaternary of the Great Hungarian Plain. Geologica Hungarica, Series Geologica, 21. Budapest.

SHERRATT A., 1982 – The Development of Neolitichal and Copper Age Settlement in the Great Hungarian Plain. Part. I: The Regional setting. Oxford Journal of Archaeology, 1 (3): 287-316.

SPERS C.S., 1990 – Macrocrystalline Stone Artifacts. In TRINGHAM R. and KRSTIC D. (eds.) Selevac: a neolithic villagein Yugoslavia. Monumenta Archaeologica, 15: 495-520. Los Angeles.

STARNINI E., 1993 – Typological and technological analyses of the Körös Culture chipped, polished and ground stone assemblages of Méhtelek-Nádas (North-eastern Hungary). Atti della Società per la Preistoria e Protostorica della Regione Friuli-Venezia Giulia, VIII: 29-96.

SZAKMÁNY Gy. and STARNINI E., 1996 – Petrographical Studies of Neolithic Stone Tools from Hungary. In POSFAIM., PAPP G. and WEISZBURG T.G. (eds.) Mineralogy and Museum 3 International Conference. Acta Mineralogica-Petrographica, XXXVII, supplementum: 119. Szeged.

TAKÁCS I., 1992 – Fish remains from the Early Neolithic site of Endrőd 119. In BÖKÖNYI S. (ed.) Cultural and landscape changes in South-east Hungary. I. Reports on the Gyomaendrőd Project. Archeolingua, 1: 301-311. Budapest.

THORPE O. W., 1978 – A study of obisidan in prehistoric central and eastern Europe and its trace element characterization. University of Bradford. Unpublished PhD thesis.

URSULESCU N. and DERGACEV V., 1991 – Influences de type Vinča dans le Neolithique Ancien de Moldavie. Banatica, 11: 157-172.

WILLIAMS THORPE O., WARREN S.E. and NANDRIS J.G., 1984 – The Distribution and Provenance of Archaeological Obisidan in Central and Eastern Europe. Journal of Archaeological Science, 11 (3): 182-212.

WILLIAMS THORPE O., WARREN S.E. and NANDRIS J.G., 1987 – Characterization of obisidan sources and artefacts from central ans eastern Europe using instrumental neutron activitation analysis. In BÍRÓ K. (ed.), Proceedings of the 1st International Conference on Prehistoric flint mining and lithic raw material identification in the Carpathian Basin: 271-279. Rota Press, Budapest.



Fig. 1 – Endrőd 119: location of the site. 1) obsidian sources; 2) limnic quartzite sources; 3) radiolarite sources; 4) land above 200 m; 5) possible source of white marble (drawing by E. Starnini).



Fig. 2 – Endröd 119, chipped stone industry: 1) end scraper; 2, 7-8) unretouched blades with sickle gloss; 3) splintered piece; 4) borer; 5-6) retouched blades; 9) flake core (n. 3 obsidian, nn. 2, 4-5, 7, ,Banat" flint, n. 9 limnic quartzite) (drawings by E. Starnini).





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Fig. 4 – Endrőd 119, polished stone tools: 1-3) wastes from reworking attempts; 4) cylindrical core; 5, 7-9) perforated hammer-axes; 6) perforated marble mace-head (drawings by E. Starnini).



Fig. 5 - Endrőd 119: 1-7) grinding tools (drawings by E. Starnini).



Fig. 6 - Endrőd 119: grinding stone covered by fish scales and bones (photo by E. Starnini).

ASPECTE ALE INDUSTRIEI LITICE DIN CULTURA KÖRÖS: ANSAMBLUL DE LA ENDRŐD 119 (UNGARIA) – UN RAPORT PRELIMINAR

Rezumat

Situl din Endröd a fost descoperit în anul 1976, iar între anii 1986 și 1989 a fost săpat de Dr. János Makkay. Campaniile arheologice au scos la iveală cinci locuințe, câteva gropi menajere și funerare, oase (frecvența cea mai mare având-o ovicaprinele și speciile de pește precum: peștelepisică, crap și știucă), uneltele de piatră și ceramică caracteristică culturii Körös.

Viața așezării încetează la scurt timp înainte de cea mai târzie fază a culturii Körös-Starčevo, dar continuă aproape de siturile Endrőd 39 și Endrőd 6.