Annales d'Université „Valahia" Târgovişte,
Section d'Archéologie et d'Histoire,
Tome VIII-IX, 2006-2007, ISSN 1584-1855

The Palaeolithic site from Cremenea – Poieniță, Covasna Department. An attempt towards a techno-typological and cultural reassessment

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Key words: cultural framing, Aurignacian, lithic collection, techno-typological analysis

Abstract: The researches previously carried out in the Paleolithic site from Cremenea – Poieniță offered a large lithic assemblage qualified as Aurignacian and a much smaller one, thought as belonging to the Gravettian. The paper here presents a techno-typological analysis performed on the lithic collection found in the History Museum from Braşov. Unfortunately, the collection lacks an important part of the initial Aurignacian inventory. Consequently, the outcome of the techno-typological analysis neither confirms nor rejects the cultural framing already proposed; it only succeeds in raising some doubts regarding the Aurignacian designation.

The site is located in the southern limit of the Cremenea village, on the right bank of Cremenea River, at an absolute altitude of 730 m (**Fig. 1**). In 1911, J. Teutsch carried out the first archaeological campaign, continued later, in 1924 and 1957, by M. Roska, C. S. Nicolăescu-Plopşor and F. Mogoşanu.

The 1957 campaign described the following stratigraphical sequence (**Fig. 2**): 1 – black-yellow soil; 2 – yellow, dusty soil; 3 – red soil, with ferrous and manganese oxides. The sequence included two cultural layers: the Gravettian one, located between 0, 33 and 0, 55 m depth, in the yellow, dusty soil, and the Aurignacian one, located between 1, 30 and 1, 65 m depth, in the red soil (A. Păunescu, 2001).

The techno-typological analysis of the lithic material

Most of the lithic material descriptions in Romanian archaeological literature followed a mainly typological approach, leaving aside the technological variability inherent to any given lithic assemblage. This is why our contribution attempts to a more fine-grained lithic analysis (J.-M. Geneste, 1991; C. Karlin *et al,* 1991), even though the old collections do not always facilitate such a detailed study.

Our revision took into account the lithic collection discovered at Cremenea by J. Teutsch during the 1911 campaign, located in the History Museum from Braşov. Since the collection appeared incomplete, given the published number of lithic items (Păunescu 1991: 352), we believed the appreciations regarding the exact number of items in each techno-typological category to be irrelevant. Also, the items lacked a marked indication of their depth, so we presumed that the cultural identity initially assigned to the assemblage was Aurignacian, following its published description (A. Păunescu, 1991, p. 350-356).

The raw material (**Fig. 3**)

The local flint makes up for most of the exploitable raw material, comprising two macroscopically differentiated types: blocks and thin slabs of dark-grey/light- brown, less homogenous flint with numerous natural fractures; pebbles and, to a lesser extent, thin slabs of black/dark-blue/light-brown, homogenous flint, intensively exploited and abandoned as small, exhausted cores. Other types of raw material consist of siliceous sandstone, menilith, radiolarite, yellow marle, apparently local as well as the flint but considerably less represented. The following considerations regarding the operational sequence and its products will mostly take into account the flint, since all other types of raw material appear only as isolated flakes or blades.

Technology

The operational sequence cannot be traced through all its stages. The cortical or semi-cortical flakes or blades are rare, which might indicate the development outside the site of the first knapping stages. For several blades and bladelets the quite marked bulb of percussion exhibits traces of scarring and chipping, indicating the use of hard-hammer percussion (**Fig. 4**). The collection includes one large sandstone pebble, with traces of use as a hammer (**Fig. 5**). Still, one cannot rule out the possibility that some of the bladelets may have been detached with the help of a soft (antler or bone) hammer.

The exhausted flint cores **(Fig. 6, 7)** appear as rolled pebbles or thin slabs bearing small cortical surfaces and also naturally fractured blocks showing few traces of intentional removals. The large cores with frequent natural breaks exhibit 63-75 mm long and less than 40 mm wide flaking surfaces usually located forward and two opposite striking platforms. Judging by the noticeable scars, the last removals are flakes and blades. The small, exhausted cores show forward and also sideways located, 50-55 mm wide and 45-55 mm long flaking surfaces, as well as one (rarely two) striking platforms. Their abandonment, if not caused by exhaustion, is due to knapping accidents like feathering affecting the last detached small blades or bladelets. In both cases, the flaking surfaces meet the striking platforms at an angle of 80-90º. The back appears sometimes cortical (flat or rounded) but it can also take the form of a crested surface. The rejuvenation of the striking platforms and flaking surfaces leaves behind crested blades, core tablets and also blades with multiple scars on the dorsal surface (**Fig. 8**). Their dimensions vary considerably, so the need for rejuvenation must have occurred in different moments of the operational sequence.

Among the blanks, the rare flakes belonging to different stages of the operational sequence do not seem to represent intentionally obtained items, but rather by-products resulted from applying different knapping strategies.

The numerous 30-55 mm long and 18-24 mm wide blades **(Fig. 9)** belong to the middle stages of the operational sequence (*plein débitage*), having parallel, straight long edges with macrochipping; they are largely proximal fragments with flat or faceted butt and also distal fragments, usually obtained during an "overshot" flaking accident. Most of the fractures affecting the blades are snap terminating bending fractures.

The 18-25 mm long and 5-10 mm wide proximal, median and distal bladelets (**Fig. 10**) can also be assigned to the middle and probably final stages of the operational sequence; some of them bear multiple scars on the dorsal surface, initiating from the same striking platform. Most of the fractures are impossible to identify, only some of them could be defined as bending snap and also feather terminating bending fractures. The proximal items show small, flat butt and the distal items have feathered longitudinal edge.

Typology (Fig. 11)

The retouched blanks (blades, bladelets, and to a lesser extent, flakes) largely exhibit two types of retouch modifying the long edges: direct, flat, extended *écailleuse* retouch, modifying entirely or partially one/both long edges of the 41-83 mm long and 18-27 mm wide blanks; direct, steep marginal retouch, affecting mostly median and distal, 14-25 mm wide blades and 8-10 mm wide bladelets. Among the retouched blanks, one can find truncated blades and flakes bearing a line of direct, steep retouch located on the surface of a former fracture occurred in the distal third of the blank. Also, some of the blades exhibit notches – direct, fine steep retouch small surfaces in the median or proximal third.

The end scrapers have as blanks retouched blades, flakes or core tablets. Their working edge meets the blank at an angle of 70º-85º. Few of the medium sized blades bear burin spalls on their distal end, which qualifies them as dihedral or canted burins. We also identified three borers on distally fragmented blades, modified through direct, steep retouch. One proximal blade shows flat, inverse retouch which entirely removed the bulb of percussion, maybe in the attempt of thinning the base for hafting a point or some other type of tool.

Discussion

The difficult matter regarding the accuracy of applying an Aurignacian label to a lithic assemblage becomes even more difficult when confronted with the actual meaning of the "Aurignacian" term. On one hand, the term can be used for describing assemblages from the beginning of the Upper Palaeolithic, sometimes exhibiting few of the features pertaining to the Final Middle Palaeolithic, sometimes appearing as completely autonomous (P. Mellars, 2006). On the other hand, the same term can describe a sole cultural entity with specific characteristics: carinated end scrapers/bladelet cores, production of twisted- or straight-profile bladelets, *Dufour* bladelets, strangled blades, the generalized use of the *écailleuse* retouch (Y. E. Demidenko, *et al* 1998; G. Lucas, 2006).

In fact, the cultural content of any given assemblage cannot establish a secure cultural framing, since the methodology or the criteria for such a framing remain unclear: „We are, in effect, consumers of one another's research conclusions, but we select among alternative sets of research conclusions in accordance with our biases and preconceptions. […] As long as there is no explicit concern with the logic of inference – how we know what we think we know about the past – there can be no consensus." (G. A. Clark, 1999, p. 2031-2032).

Back to the assemblage described here, the quality or the properties of the main raw material (local varieties of flint) appear to have been the decisive factor in the "massive" aspect of the assemblage and also in the apparent duality reigning on the technological options. The employment of two knapping strategies follows the presence or absence of natural breaks in the flint blocks/slabs. Also, the two types of retouch (the flat, extended *écailleuse,* Aurignacian-like retouch and the direct, steep, Gravettian-like retouch) could represent a consequence of adapting the retouch to the blanks, according to their dimensions. The fact that the assemblage comprises far more cores with bladelet scars on the flaking surfaces than actual bladelets could be interpreted more as a sign of an incomplete collection than an indication for a definite bladelet production. In fact, any given consideration that the study of the assemblage might provoke can be easily rejected by the fact that the collection lacks a great deal of items, especially the small ones, given the inappropriate excavation methods. Consequently, our techno-typological study does not confirm, nor rejects the

cultural framing previously stated and, no matter how unsatisfactory this might be, it only succeeds in raising some issues for future reflection.

REFERENCES

Clark G. A., 1999, Highly visible, curiously intangible, *Science*, 283, 5410, p. 2029-2032.

Demidenko Y. E., Chabai V. P., Otte M., Yevtushenko A. I., Tatartsev S. V., 1998, Siuren I, an Aurignacian site in the Crimeea (the investigations of the 1994-1996 field seasons), *Préhistoire d'Anatolie, Genèse de deux mondes,* Colloque international de Liege, 28 avril-3mai 1997, *ERAUL* 85 (vol. I), Liège, p. 367-413.

Geneste J.-M., 1991, L'approvisionnement en matiéres premières dans les systèmes de production lithique: la dimension spatiale de la technologie, R. Mora, X. Terradas, A. Parpal, C. Plana (eds.), *Tecnologia y Cadenas Operativas Liticas,* U.A.B., 15-18 Enero 1991, Treballs d'Arqueologia, I, 1991, p. 1-36.

Karlin C., Bodu P., Pelegrin J., 1991, Processus techniques et chaînes opératoires, comment les préhistoriens s'approprient un concept élaboré par les ethnologues?, *Observer l'action technique: des chaînes opératoires, pour quoi faire?*, Éd. CNRS, p. 101-117.

Lucas G., 2006, Re-evaluation of the principal diagnostic criteria of the Aurignacian: the example from Grotte XVI (Cénac-et-Saint-Julien, Dordogne), O., Bar-Yosef, J., Zilhao (eds), *Towards a Definition of the Aurignacian*, Trebalhos de Arqueologia, 45, Lisboa, p. 173-186.

Mellars P., 2006, Archeology and the dispersal of modern humans in Europe: deconstructing the Aurignacian, *Evolutionary Anthropology*, 15, p. 167-182.

Nicolăescu-Plopşor C.S., Pop I., 1959, Cercetările paleolitice din 1956. Cremenea, *Materiale şi Cercetări Arheologice*, V, p. 29-34.

Păunescu A., 2001, *Paleoliticul şi mezoliticul din spațiul transilvan*, Ed. Agir, Bucureşti.

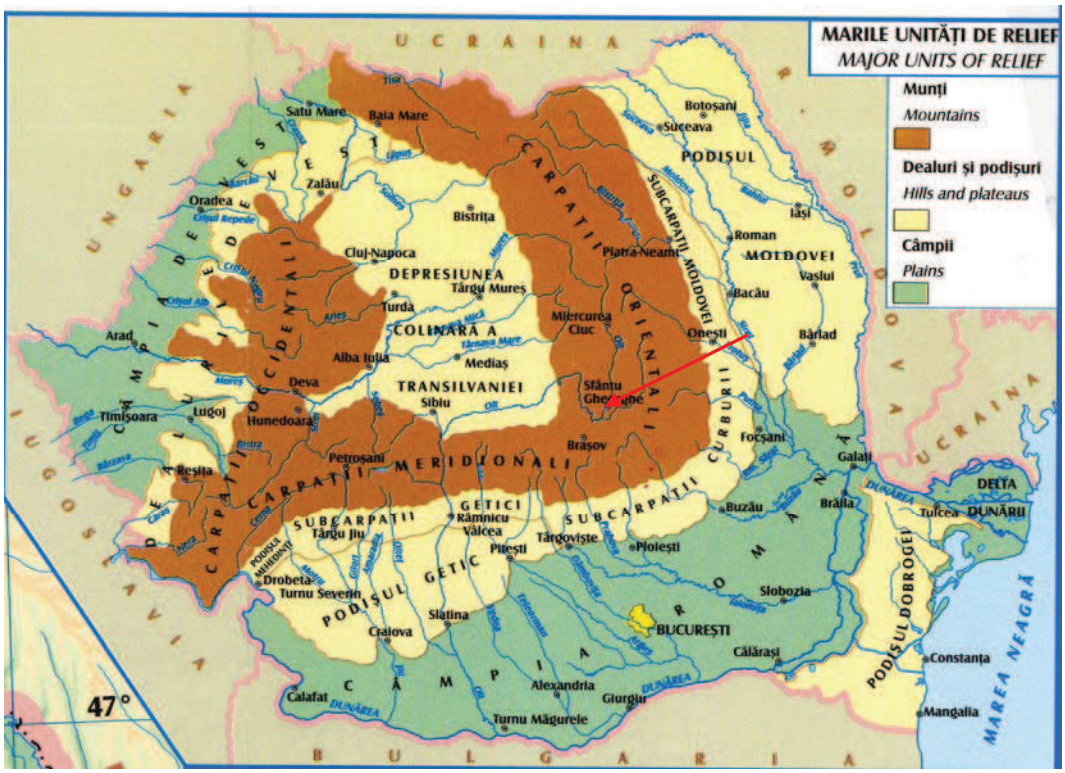


Fig. 1. - Approximate location of Cremenea-Poieniță site on Romania's map

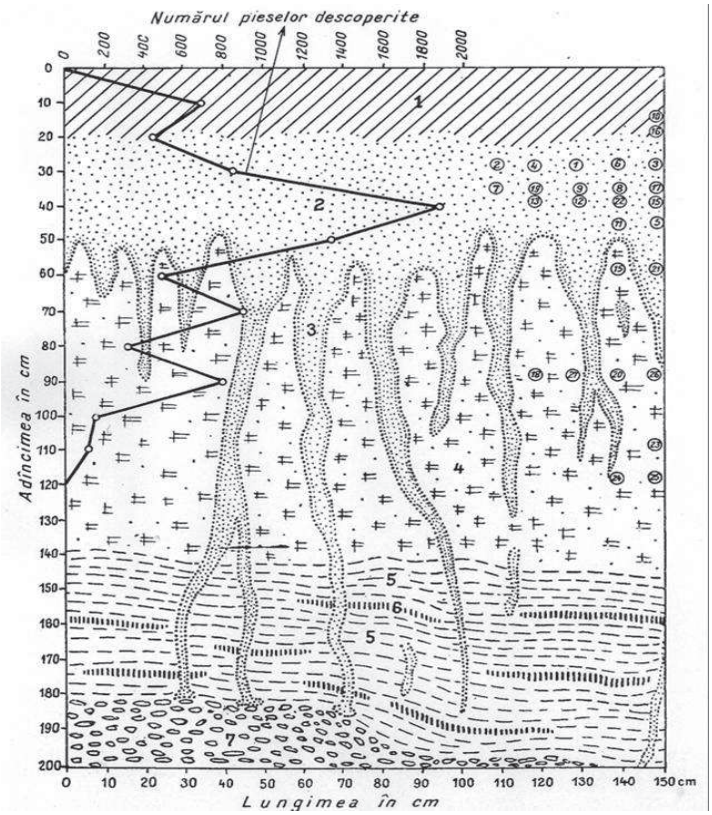
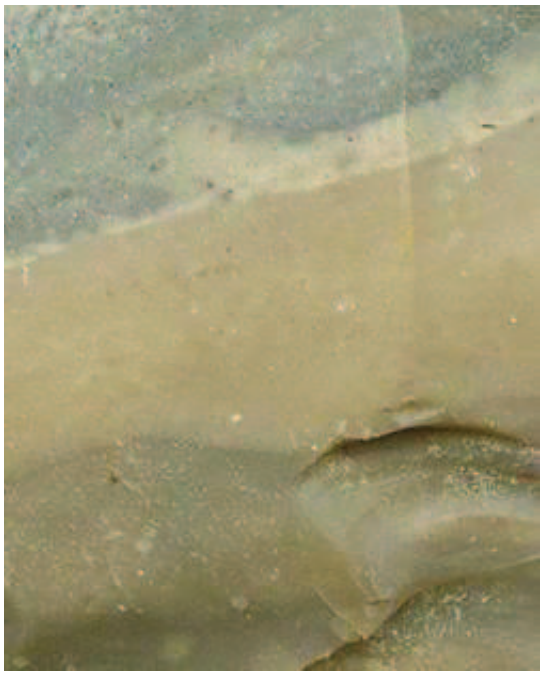


Fig. 2 - Stratigraphical sequence from Cremenea-Poieniță (after C.S. Nicolăescu-Plopșor, I. Pop, 1959, p. 30)



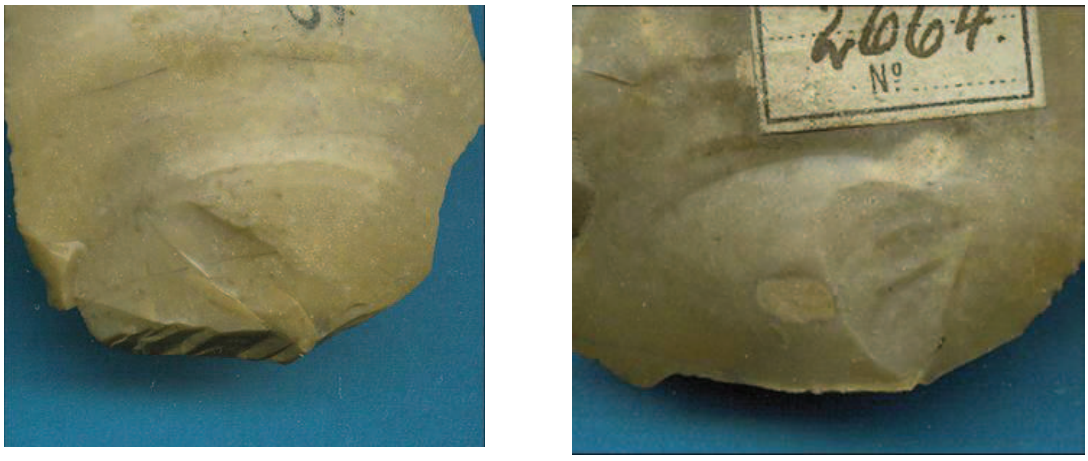
a.

b.

c.

d.

Fig. 3 - Different varieties of flint



a. **b.**

Fig. 4 - Bulb of percussion with scarring/chipping

Fig. 5 - Sandstone hammer

Fig. 6 - Flint cores

Fig. 7 - Flint cores

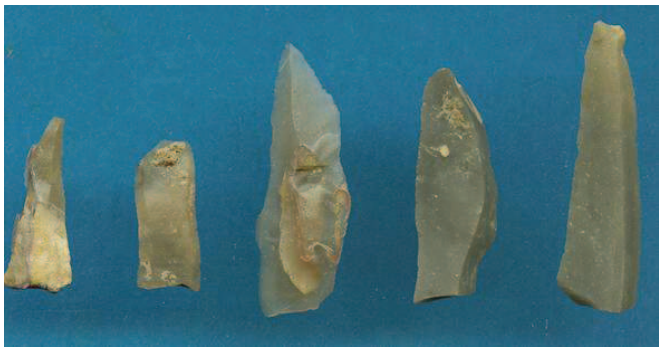

a


b


c

Fig. 8 - Rejuvenation by-products

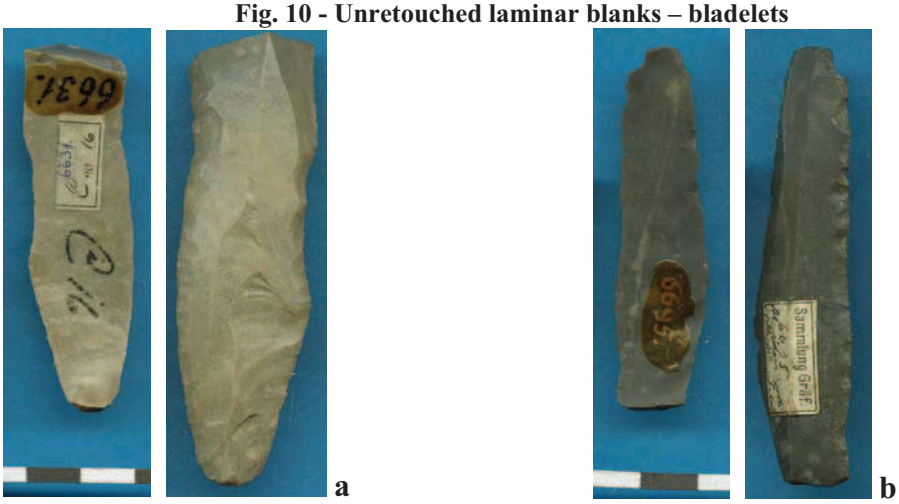
Fig. 9 - Unretouched laminar blanks – blades



a

b

Fig. 10 - Unretouched laminar blanks – bladelets



a b

c

Fig. 11 - Retouched laminar blanks: a-b-c. retouched blades; d. end scrapers; e. burins; f. borers

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