## AN EARLY MESOLITHIC SITE AT ZONHOVEN-KAPELBERG (BELGIAN LIMBURG)

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The site of Zonhoven-Kapelberg is located about 6 km north of the town of Hasselt, in the eastern part of the municipality of Zonhoven (see fig. 1). It is situated about 300 m due south of the locality "De Holsteen", well-known for the occurence of a large tertiary sandstone "polissoir" of late neolithic and/or bronze age date. From a geomorphological point of view the site is situated on a low elevation bordering the alluvial plain of the Slang- and the Roosterbeek, both small tributaries of the Demer River. It is also situated very close to the foot of the Kempen Plateau, a depositional surface formed from middle pleistocene terraces of the Meuse River.

The occurence of prehistoric settlement at this locality was brought to our attention by Mr. M. Welkenhuysen, a local amateur-archaeologist, who surveyed the area about 25 years ago. Systematic excavations were undertaken in September-October 1984 in very close collaboration with the <u>Labora-</u> torium voor Prehistorie of the <u>Katholieke Universiteit te</u> Leuven.

In all 56 square meter were excavated and a total of 1253 prehistoric lithic artifacts was recovered. Unfortunately the greater part of these (about 90 per cent) occur within the disturbed upper portion of the soil (ploughed layer). The remainder was recovered from the upper part of the the underlying loamy sands, which are most likely pleniglacial in age (coversands). On these sands a typical humo-ferric podsolic profile has developed, of which only the lower part humo-ferric accumulation zone is preserved. of the Underlying the loamy sands and separated from it by a fine gravelly layer are loamy sands, most probably of tertiary The overall distribution of (bolderian) origin. the artifacts recovered from the undisturbed coversands is represented in fig. 2. As may be judged from this plan, the concentration of the "in situ" finds is fairly well defined and limited to a circular or semi-circular area of 3 to 4 m in diameter. The fact that the "in situ" concentration very precisely coincides with the concentration of finds from the disturbed surface layer clearly proves that labouring or ploughing of the site has not been of a very intense "sitebusting" The fact also that the vast majority of nature. "in situ" finds are of very small nature (mainly chips and small flake fragments) accounts for their position in the pleniglacial coversands. Indeed, if one accepts that the lithic industry is early holocene in age (see further), some processus of vertical artifact migration has to be taken into consideration.

As stated above a total of 1253 chipped stone artifacts were recovered, having a total weight of 2.163 kg. Raw materials utilized at the site consist uniquely of flint, the exact provenance of which is unknown. Most likely, however, it was extracted from fluviatile gravel terraces of the Meuse River either close or distant to the site.

Amongst the debitage products cores, mostly with two opposed striking platforms, are rare (N=6) and all in an almost exhausted condition. Unmodified flakes and blades (including chips and flake and blade fragments) account for about 92 per cent of the total assemblage. Tools, i.e. retouched or otherwise modified artifacts, make up about 6 per cent of the industry and have for the most part been obtained on blades and bladelets. Amongst the tools endscrapers and burins are substantially present and account respectively for 7 and 8 per cent of the toolkit. Simple retouched flakes, blades and bladelets are numerous (circa 35 per cent). Typical backed elements, however, are scarce and limited to a single fragment of a backed blade. By far the most characteristic feature of the toolkit is the series of truncated elements (N=33; i.e. about 46 per cent of the toolkit) (see fig. 3). Only few of these are flakes; most are bladelets. The truncations are mostly oblique and straight, sometimes pronouncedly concave. The greater part of these truncated elements clearly correspond to the outof-use typological definition of the so-called Zonhoven points.

In addition to the lithic material a small quantity of charcoal has been recovered. In view of the nature of the site, its correlation with the artifactual assemblage is of course uncertain.

From a techno-typological point of view the industry of Zonhoven-Kapelberg is certainly to be classified with the late pleistocene-early holocene hunter-gatherers' assemblages of the local Epipalaeolithic or Mesolithic. The fairly pronounced microlithic character of the industry, in particular the presence of a whole series of truncated bladelets of true microlithic nature (Zonhoven points), and the conspicuous lack of any typical late palaeolithic pointed backed tanged implements, such as points or elements, seem to support strongly the attribution of the Zonhoven-Kapelberg industry to a mesolithic facies. The early character of this facies is moreover indicated by the irregular features of the debitage products and the rather archaic flaking technology that goes with it, by the substantial presence of burins in the toolkit, and most convincingly by the complete absence of microlithic armatures typical of the later fazes of the mesolithic

period. In this particular context, also the exclusive use of flint as a raw material most clearly pleads for an early mesolithic dating of the industry.

On the basis of the artifactual evidence, the industry of Zonhoven-Kapelberg may probably be compared to similar assemblages excavated in the Zonhoven area earlier this are very insufficentury. These assemblages, however, ciently reported and only of small comparative value. Some Dutch sites, excavated in the early seventies, seem to display a high degree of similarity with the Zonhoven-Kapelberg site and are fortunately much better documented (STAPERT, 1979). These sites, Swalmen in the province of Limburg and Gramsbergen in the province of Overijssel, are also essentially characterized by the dominant presence of a whole series of truncated bladelets of true microlithic nature. The numerous' points of resemblance between these sites and the site of Zonhoven-Kapelberg will be discussed detail in a forthcoming publication. in greater For the site of Gramsbergen (concentration I) a radiocarbon date of 9.320 ± 60 B.P. (GrN-7793) could be obtained. In our opinion a similar early holocene date, eventually also in the second half of the Preboreal climatic faze, may be envisaged for the Zonhoven-Kapelberg site.

With regard to its cultural affiliation, it is clear that the typological characteristics of the Zonhoven-Kapelberg industry, in particular the presence of numerous microlithic truncated bladelets (Zonhoven points), seem to indicate a certain degree of affinity with the Ahrensburgian sites of Belgium and the southern Netherlands. Because of the quasiabsence of backed elements in the assemblage, an affiliationship with the Tjongerian culture seems very unlikely. In view of the evidence presently availabele, we would favor the attribution of the Zonhoven-Kapelberg industry to some local "epiahrensburgian" tradition. If existent, such a tradition will certainly have played a very prominent and fundamental role in the development of the local microlithic cultures.

## References

STAPERT, D., 1979: Zwei Fundplätze vom Übergang zwischen Paläolithikum und Mesolithikum in Holland. <u>Archäologisches</u> <u>Korrespondenzblatt</u>, 9: 159-166.

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Fig. 1. Location of the site.



Fig. 2. Distribution plan of "in situ" finds. 1: flint artifact; 2: drainage trench-disturbance; 3: testpit.



Fig. 3. Selected lithic artifacts. Note especially the series of microlithic truncated bladelets (10-23).