

A MOUSTERIAN SITE AT VOLLEZELE-CONGOBERG
(Galmaarden, Belgium)

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With its height of 105 m the Congoberg (fig.1) dominates an undulating landscape descending towards the Dender and Mark valleys with valley floors at about 25 m a.s.l. It is a residual hill of Pliocene sands and sandstone resting upon Eocene clays. The sand outcrop is limited in surface and restricted to the top of the Congoberg. All around, the landscape witnesses the presence of a clay underground as it is nearly exclusively utilised as pasture land.

The discovery of a Mousterian site on top and on the northern slope of the Congoberg in 1983 is due to one of us (L.B.), who has been surveying the area for several years as part of the activities of the "Verbond voor Oudheidkundig Bodemonderzoek in Oost-Vlaanderen" (VOBOV). A first excavation campaign (June 17 - December 16, 1985) has been conducted by the "Laboratorium voor Prehistorie" (Katholieke Universiteit Leuven) in collaboration with the municipality of Galmaarden (B.T.K.-project). The excavation revealed an abundant archaeological material, whereas the profiles are very instructive with regard to the palaeogeographical and chronostratigraphical interpretation of the site.

As apparently no archaeological material has been preserved in original position, the excavation has been oriented towards the understanding of the complex stratigraphy. For that purpose different trenches and profiles, parallel with the contour lines, have been excavated. The profile of trenches N22E38-40 and N21E6-20 (fig. 2) teaches us that we were cutting through a fossil gully, which has been filled by different deposits.

The substratum was reached at a maximal depth of 3.8 m. It consists of green homogeneous clayey sands of Paniselian (Eocene) age. This substratum is dissected by a gully with a very irregular base due to a lateral interfingering of the gully fill with the substratum. The gully fill base consists of fine green laminated sands. Upon these sands, with a clear cut contact, is resting a bed of angular ferruginous sandstones of different size up to 1 m in diameter, and frost-broken flint pebbles in a matrix of clayey sands. The sandstone blocks seem to have random orientations. In between the sandstones some unconsolidated angular lumps of substratum material could be observed. Above these blocks some finer deposits occur. They consist merely of laminated silty sands, and sandy silts, deposited around some protruding large blocks. They are interfingering with the substratum, but also with the upper block bed. Overlying these laminated deposits is a second bed of angular ferruginous sandstones in a matrix of clayey sands, similar to the lower bed. Inside this bed many lenses of laminated finer sediments can be found. The top of this bed is convex in the centre of the gully which, at this stage, was completely filled.

A bed of finely laminated sandy silts with local sand lenses and scattered sandstone blocs covers the substratum and the gully filling. On other places a more homogeneous compact loess covers the stratified silts. A gray brown podsollic soil developed in the upper silt deposits. This soil was severely eroded so that on most places only the base of the B2 was preserved.

The gully, uncovered by the excavations but completely masked by the silt deposits, is probably the upper reach of a small dry valley, which now has its origin some 100 m lower on the slope of the Congoberg. The filling of the gully is apparently due to gelifluction. Cold conditions are suggested by the horizontal wedging of the substratum due to ice segregation and by the presence of lumps of substratum material in the gelifluction deposits. The lack of gloss and the fresh character of the artifacts point out that they have been on the surface only for a limited period of time.

No traces of interglacial soil material could be detected in the gully filling, suggesting that before the sedimentation started important erosion has taken place. The unpatinated artifacts, almost exclusively recovered in the gelifluction deposits, are thus posterior to the last interglacial but anterior to the gelifluction activity. The upper laminated sandy silts and the homogeneous loess are probably of Middle and Late Weichselian age. The position of the artifacts within this stratigraphic sequence suggests an early Weichselian age for the occupation period of the site.

From a palaeogeographical point of view the original position of the site can be located just below the top of the Congoberg on sandy deposits near a spring and a small gully in a clay landscape. Not long after the human occupation the early Weichselian cold initiated the gelifluction of the gully surroundings dragging off the archaeological remains of the site into the gully.

The excavated cultural remains include some badly preserved enamel fragments of large bovid (Bos or Bison) and of equid (Equus sp.) (determination, W. Van Neer). The lithic material (fig. 3-5) (artifacts from the surface and those collected during the excavation) is technologically and typologically homogeneous and therefore studied as a whole. Artifacts collected from the surface and in the upper part of the gully fill are frequently patinated and slightly rolled. Quite a number of artifacts are broken, probably due to their transport in the gelifluction deposits, others are damaged by frost activity.

The major part of the raw material consists of imported flint : a black fine grained flint of a very good quality, and to a smaller extent, a coarser grey-stained flint. Local flint pebbles of a moderate quality and not measuring over 10 cm were sporadically used. More than half of the cores found on the site are discoidal cores, totally exhausted and normally not exceeding 6 cm in length. A great number of them are probably transformed levallois cores. Levallois cores are small and intended for flake production. Core preparation is careful. Levallois flakes and blades represent almost 1/3 of the total amount of tools. Levallois flakes occur in different sizes and shapes, levallois blades occur to a much smaller extent (10 %). Striking platforms are mainly faceted.

Within the essential toolkit count the different scraper types prevail (55 %). A great number of them have been made of rather large levallois flakes. Almost half of these tools are simple side-scrapers with convex, and to a smaller extent, straight or concave retouched edges. Double side-scrapers, offset scrapers and convergent scrapers occur with almost equal frequencies. Other types of scrapers are present too; they are less numerous or are only represented by a few specimen.

Some mousterian points, mostly made on triangular levallois blades, occur. Limaces are rather numerous. They are small (5 cm) and mostly not completely symmetrical. Notches and denticulates stand for some 20 % of the essential count of the toolkit. Naturally backed knives are made of imported flint and, to a smaller extent, of local flint pebbles. Among the Upper Palaeolithic group of tools some endscrapers, burins and borers are present. A single bifacial leaf-shaped point has been found. Handaxes are scarce : one fragment of a small broken cordiform specimen and one point fragment.

The stratigraphical position of the cultural remains, correlated with gelifluction deposits, can probably date the Congoberg site into the Early Weichselian. Other Belgian sites such as those of Franquénies and Harmignies (Haesaerts, 1984) are from the same chronostratigraphical period. On technological and typological grounds the lithic industry belongs to the Mousterian complex. It shows affinities with Middle Paleolithic materials of the Rond-Point de Busigny site in northern France (Tuffreau, Vaillant, 1984), which has been classified as a Mousterian of Ferrassie type.

REFERENCES

- HAESAERTS, P., 1984, Aspects de l'évolution du paysage et de l'environnement en Belgique au Quaternaire. In D. CAHEN, P. HAESAERTS, Peuples chasseurs de la Belgique préhistorique dans leur cadre naturel. Bruxelles: 27-40.
- TUFFREAU, A., VAILLANT, J., 1984, Le gisement moustérien du Rond-Point de Busigny (Nord). Gallia Préhistoire, 27, 229-243.

Typological counts (preliminary)

	N	% real	% essent.
1. typical levallois flake	118	24.38	-
2. atypical levallois flake	42	8.68	-
4. retouched levallois point	1	0.21	0.40
5. pseudo-levallois point	4	0.83	1.59
6. mousterian point	11	2.27	4.37
7. elongated mousterian point	1	0.21	0.40
8. limace	5	1.03	1.98
9. single straight side-scraper	14	2.89	5.56
10. single convex side-scraper	46	9.50	18.25
11. single concave side-scraper	7	1.45	2.78
13. double straight convex side-scraper	5	1.03	1.98
14. double straight concave side-scraper	1	0.21	0.40
15. double convex side-scraper	10	2.07	3.97
17. double concave convex side-scraper	4	0.83	1.59
18. convergent straight side-scraper	4	0.83	1.59
19. convergent convex side-scraper	16	3.31	6.35
21. offset scraper	19	3.93	7.54
23. convex transverse scraper	3	0.62	1.19
25. side-scraper on ventral face	1	0.21	0.40
27. side-scraper with thinned back	3	0.62	1.19
28. side-scraper with bifacial retouch	2	0.41	0.79
29. alternate retouched side-scraper	6	1.24	2.38
30. typical end-scraper	1	0.21	0.40
31. atypical end-scraper	1	0.21	0.40
32. typical burin	4	0.83	1.59
34. typical borer	2	0.41	0.79
35. atypical borer	1	0.21	0.40
38. naturally backed knife	21	4.34	8.33
39. raclette	2	0.41	0.79
40. truncated blade/flake	2	0.41	0.79
42. notch	14	2.89	5.56
43. denticulate	33	6.82	13.10
45. retouch on ventral face	7	1.45	-
46-47.abrupt and altern. retouch(thick)	10	2.07	-
48-49.abrupt and altern. retouch(thin)	55	11.36	-
54. end-notched piece	2	0.41	0.79
61. chopping tool	3	0.62	1.19
62. miscellaneous	2	0.41	0.79
63. bifacial leaf-shaped point	1	0.21	0.40
	484	100.03	100.02

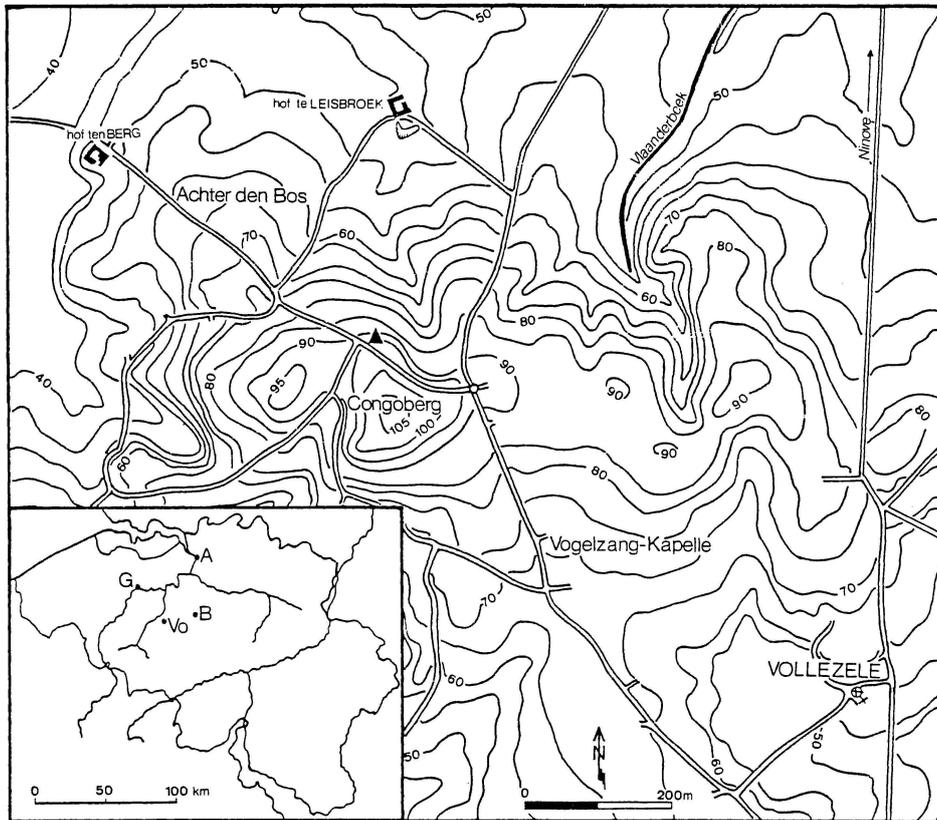


Fig. 1 : Vollezele, location of the site.

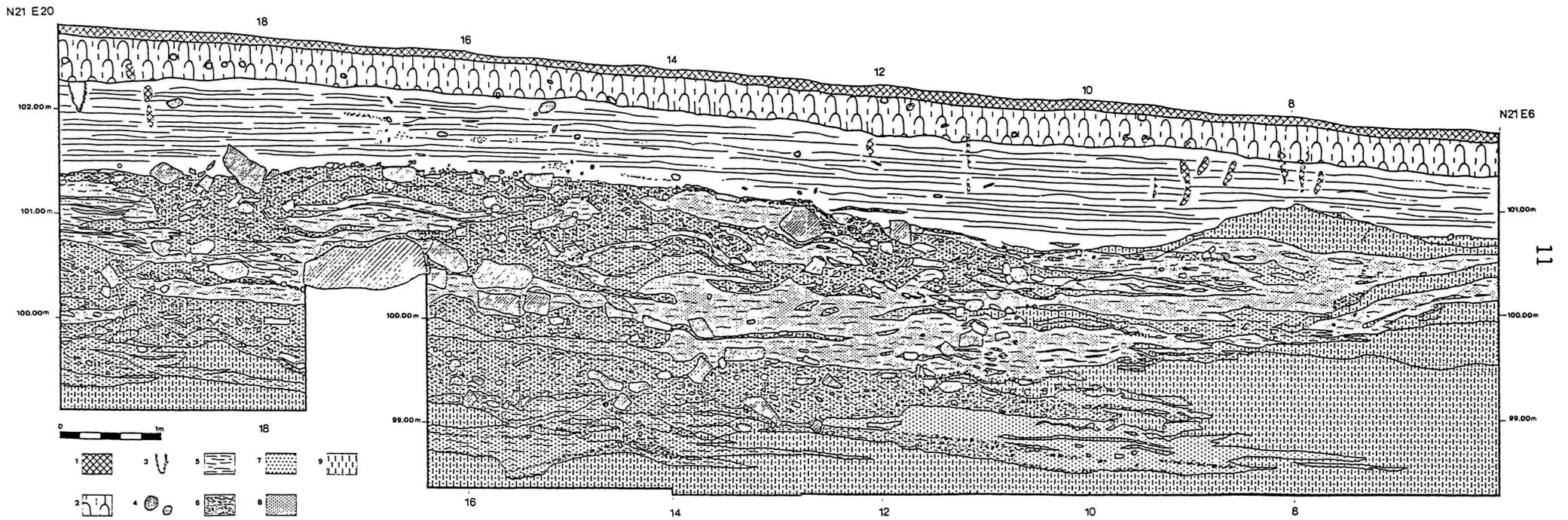


Fig. 2 : Vollezele, profile N21 E20 - N21 E6 : 1 : disturbed horizon; 2 : Bt horizon; 3 : soil degradation phenomenon;
 4 : ferruginous sandstone blocs; 5 : sandy silts; 6 : gravel; 7 : fine green sands; 8 : silty sands; 9 : clay.

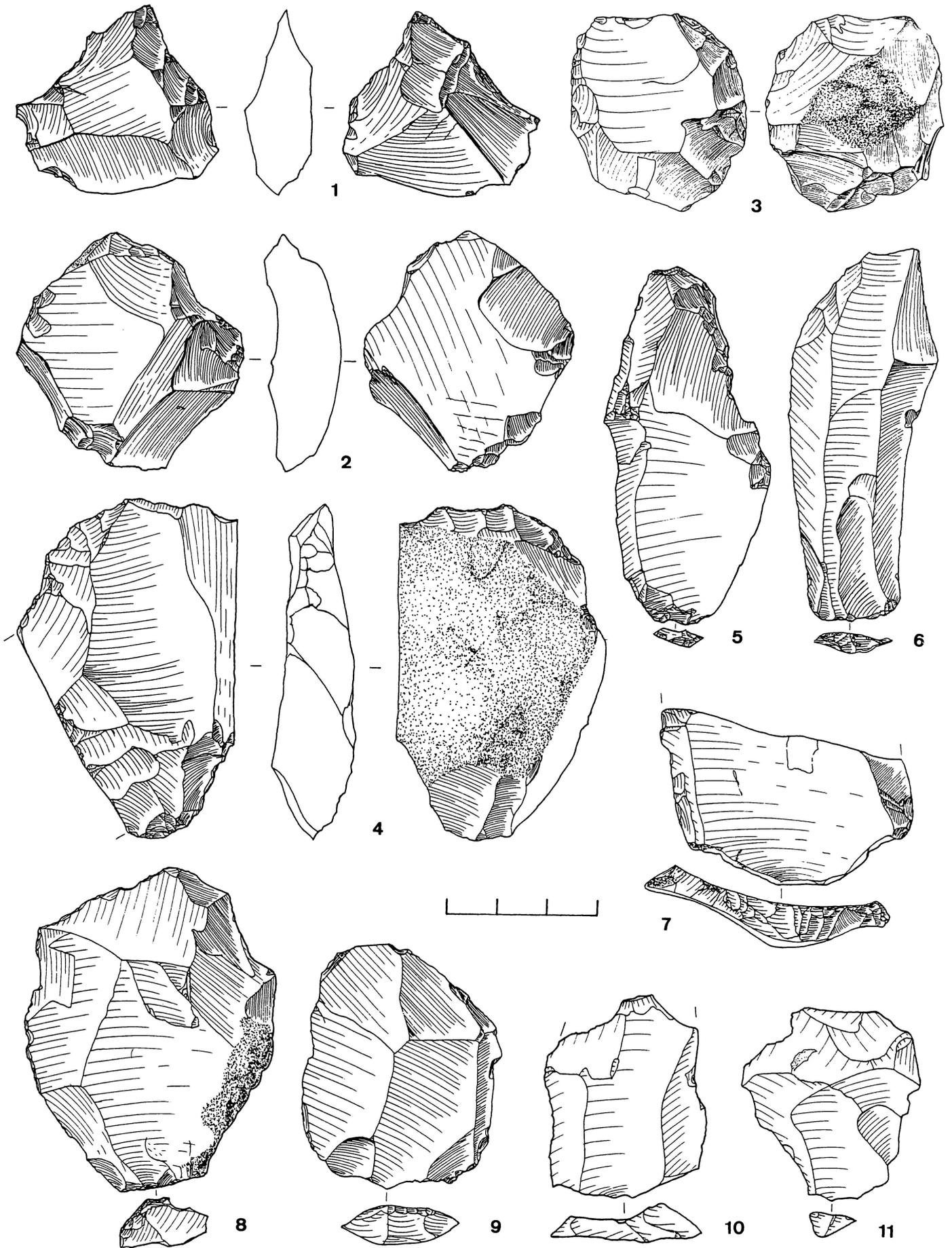


Fig. 3 : Vollezele, lithic industry: 1,2 : discoidal cores; 3,4 : levallois cores; 5,6 : levallois blades; 7-11 : levallois flakes.

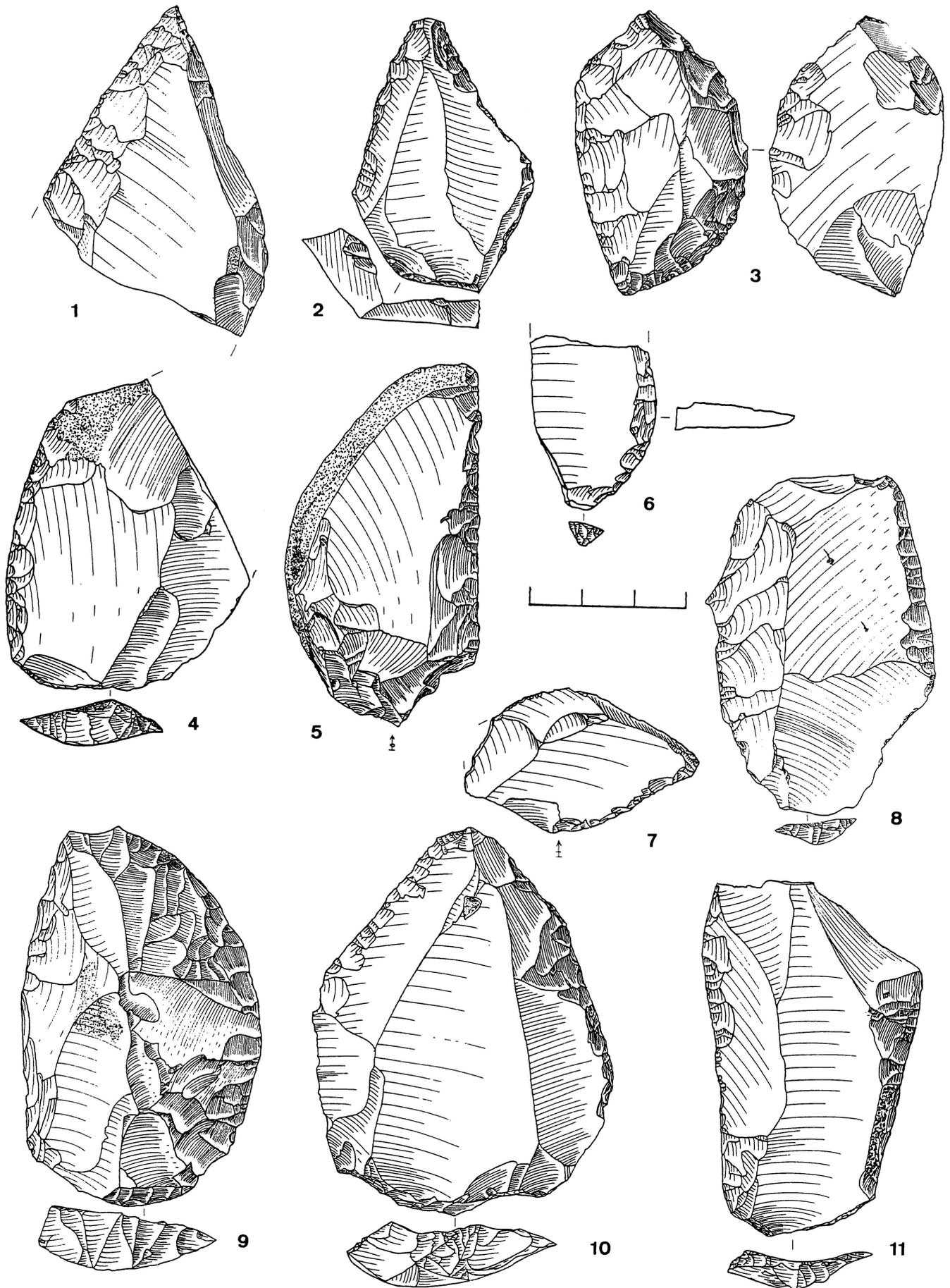


Fig. 4 : Vollezele, lithic industry : 1,2 : mousterian points; 3 : limace; 4-8 : single side-scrapers; 9,10 : convergent scraper; 11 : double side-scraper.

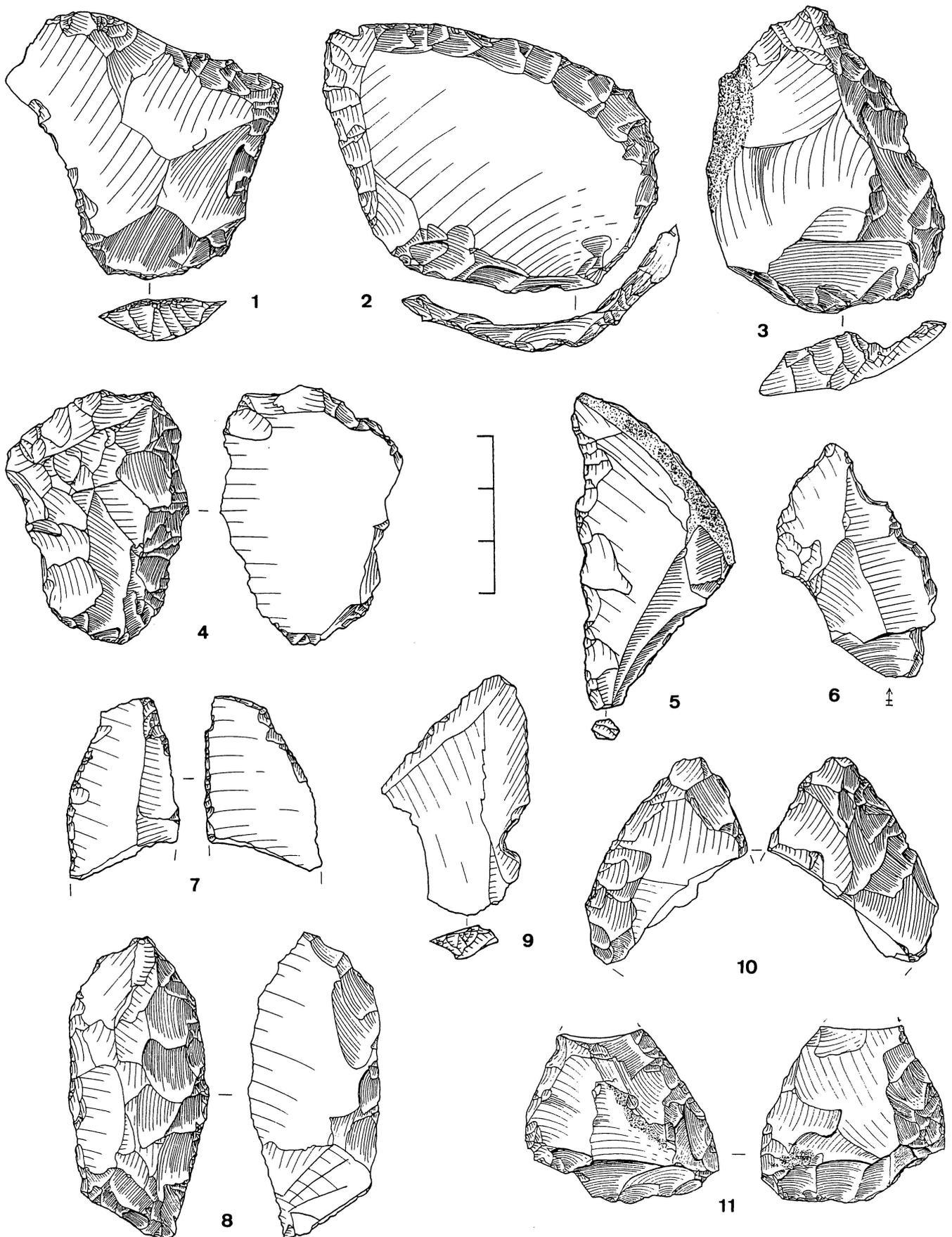


Fig. 5 : Vollezele, lithic industry : 1,2 : offset scrapers; 3-6 : denticulates; 7 : alternate retouched side scraper; 8 : side scraper with bifacial retouch; 9 : notch; 10 : cordiform handaxe; 11 : bifacial leaf shaped point.