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CONSIDERATIONS ON THE „SZELETIAN UNITY"

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The first excavations of the eponymous site of Szeleta cave were led by O. Kadić between 1906 and 1913, with the assistance of J. Hillebrand and M. Mottl. The results were yearly published by O. Kadić and finally a monographical summary was edited in 1915 (Kadić 1915). The next excavations were started in 1928 under J. Hillebrand's leadership and with the participation of A. Saád and guests from Cambridge (Saád 1929). The last excavations before the 2nd World War were directed by M. Mottl in 1934 (Mottl 1941). After the war J. Nemeskéri and A. Saád excavated in the cave in 1947 (Saád-Nemskéri 1955). The last specialist to work in the cave was L. Vértes, who prepared a stratigraphical section for the Szeleta symposion in 1967 and collected samples for dating (Vértes 1967).

Reading the papers and the monography by O. Kadić and his colleagues the mistakes soon become evident (e.g. errors in stratigraphy, depth data, false groupping of finds etc.). This in itself would make us cautious even if we neglect the effects of the one-time excavational method of cubic meters. The section and surface drawings, however, which were made by M. Mottl, seem to be correct, and they were also justified by later excavations. When the preserved material of Kadić's excavations was inventorized the finds were groupped in lower and upper layers. In some cases the major parts of the cave and the depth data in the old registers can be rendered to the pieces, but there is hardly any information on stratigraphical position and horizontal distribution. It is consequently no wonder that some more mistakes appear in this groupping, too.

M. Mottl's drawings, the yearly published preliminary reports, the results of later excavations and the revision of the material and of the data tell that originally there must have been 5 cultural levels in the cave (Fig. 1).

The lowermost cultural level is situated in the lime concretion stripes of the dark brown layer (Kadic: layer 2), and contained some scattered finds. This was followed by two charcoal levels in the middle part of the light brown layer in the main hall and entrance of the cave (Kadić: layer 3, hearths a and b), containing the lower Szeletian material. About 1 m higher there was another hearth level at the western side of the main hall and the entrance of the side corridor, still in the same layer (Kadić: layer 3, hearth c). This is the spot where the bone implements and Aurignacian type lithic material were found[1]. The next cultural level could be observed in the upper light brown or reddish brown layer (Vértes: yellowish red; Kadić: layer 6) in connection with hearths S, S1 in the main corridor and S2 in the side corridor. These upper hearth levels are separated from the lower layer complex by a dark grey layer (Vértes: greyish brown; Kadić: layer 4) all over the cave. According to Kadić the 30 to 70 cm thick layer contained mi-

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xed material of both the lower and the upper type of material. It was also noted by Kadic that the finds, though denser around the hearths, were dispersed all over the layer series from layer 3 till layer 6.

After the comparison of the data we have arrived to the following conclusion. The dark brown layer (layer 2) contained a few uncharacteristic lithic artifacts, and later Vértes reported an artificially formed bone object (?) from the same layer (Vértes 1967). The light brown layer contained three cultural levels, two of which (a and b) contained exclusively early Szeletian material. The third level (c) yielded Aurignacian finds. In the hardly disturbed upper complex there is only one cultural level, which can be fixed in the light yellow layer, on top of the reddish one. Here the leaf-shaped tools came from the same depth as the Gravettian type backed blades and Gravette-points even in the farthest back of the cave where probably all the layers had been preserved.

In the light of the above enumerated data the following questions can be put:

1. Is there a genetical connection between the earlier and later leptolithic industries (i.e. the lower and the upper Szeletian)?
2. Does the Aurignacian form a separate unit or is it a part of the earlier leptolithic industry?
3. Does the upper soil complex contain two different industries (upper Szeletian and Gravettian) in a mixed state or is it one specific unity?

These are the main questions of the Szeletian unity, which for a long time supposed two, genetically connected industries: a lower Szeletian (the Aurignacian bone points were supposed to have got there by chance) and an upper Szeletian. The Gravettian implements were mentioned as existing but not characteristic.[2]

It is difficult to answer these questions due to the above mentioned problemns of documentation and excavational methods. The so-called lower Szeletian contains the Aurignacian implements and some of the upper palaeolithic ones found in the grey (4) layer. The upper Szeletian contains, in turn, the rest of the material from the dividing dark layer, and some of the neolithic material from the neolithic pits and the lower part of the humus. If we would consider only those tools the exact stratigraphical position of which can be proved, the material would be reduced to a few dozens of artifacts (Siman, in press). Consequently we have to work with the whole bulk of the material never forgetting about the error possibilities.

The technological-typological distribution is disturbed in the lower layer by the mixing of the Aurignacian elements. Probably this is the reason why the blades make 13 % of the material (Table 1.), and many upper palaeolithic tools may also be due to it. The bifacial implements make 18 % of the whole material. The non-bifacial side-scrapers make about 30 % of the complex. The rest is constituted of mostly upper palaeolithic types (the majority belonging to the Aurignacian), some Levallois flakes, encoches etc.

In the upper complex the bifacial tools make only 9 % of the whole assemblage . The rest are retouched blades in majority, end-scrapers, burins, borers etc., and the Gravettian elements: backed blades, Gravette-points.

In the lower complex two technical processes can be reconstructed on bifacial implements. One is surface retouching all around the nodule till it resembles more-or-less a handaxe or an oval-shaped biconvex form (Fig. 2 : 1, 3). The second step, i. e. the edge retouching was mostly removed by cryoturbation, the few seemingly intact pieces are not sufficient for stating regularity. The other method, more common on bifacial implements made of glassy quartz-porphyry, means the reducing of the dorsal surface by unidirectional flat surface retouching, then making the overall form of the frontal surface by flake removal from both sides creating a ridge approximately along the longitudinal axis (Fig. 2 : 2,4). Some items show, that the next step would have been the removal of the ridge, but due to the laminated texture of the raw material it could rarely be done. Sometimes instead of flattening the dorsal surface the

Table 1.

Lower complex

	Cores Lumps	Blades	Flakes Waste	Tools	(Bif.)	Total
Hidroquartzite	6	18	33	38	(8)	95
Quartzporphyry	–	11	40	83	(39)	134
Obsidian	–	1	1	1		3
Volcanic rock	–	–	3	3		6
Silex	2	8	3	19	(1)	32
Radiolarite	–	2	5	12	(6)	19
Chert	1	–	6	3	(1)	10
Quartzite	1	–	2	3		5
Jasper	–	–	1	1		2
Wooden opalite	–	1	–	–		1
Total	10	41	94	162	(55)	307

Table 2.

Upper complex

Hidroquartzite	2	22	47	43	(5)	114
Quartzporphyry	2	12	44	57	(22)	115
Obsidian	2	4	6	2		14
Volcanic rock	–	–	6	2		8
Silex	2	6	13	22	(1)	43
Radiolarite	–	1	–	2		3
Chert	–	–	–	1		1
Quartzite	–	–	2	–		2
Jasper	1	1	–	1		3
Wooden opalite	–	–	–	–		0
Total	9	46	118	130	(28)	303

originally flat cortex was preserved (Fig. 2 : 5). The non-bifacial tools of this complex were usually made on flakes and blade-shaped flakes, sometimes on large blades with core-ridge, which had been removed from the core by hard percussion. In case of artifacts from glassy quartzporphyry it can also be supposed that the blanks came from bifacially prepared nodules. If retouching can be observed, it is mostly on the frontal surface.

As far as the separation of the Aurignacian tools is possible, they seem to be removed by hard and soft percussion, and the tool-kit consists of blades, steeply retouched blades, notches, heavy burins and bone tools.

In the upper complex there are two basic types of the leaf-shaped points: elongated ones with more or less pointed tips on both ends (Fig. 3 : 1,3) and less elongated ones with rounded base (Fig. 3 : 2,4). In the first case the greatest width is in the middle section of the implement, in the latter one in the lower third (the same ratio in the lower complex is 1 : 1,5). The points are biconvex, evenly retouched on both surfaces from both sides. Sometimes a secondary use of spoilt pieces may be supposed. The size varies between 6 and 12 cm. The non-bifacial implements show the traces of soft percussion or pressure technique. The bifacial retouching is totally missing. Blade is the most common blank form.

Concerning the raw material (Fig. 4.) the resemblance between the complexes is mirrored in the dominating use of the two main local raw material varieties: the glassy quartzporphyry and the hidroquartzite. The discrepancy appears in the use of alien raw materials. The Slovakian radiolarite is characteristic of the lower Szeletian material and scarcely appears in the upper complex. The silex material occurs mostly in the supposed Aurignacian in the lower complex and also in the upper complex; the role of the obsidian is also more significant in the later periods. The discrepancy is especially striking in the case of the bifacial tools (Fig. 4 : 3, Table 1). Here in the lower levels 29 % of the quartzporphyry is used for bifacial implements (i. e. 71 % of the bifacials is made of this raw material). In the upper complex the same ratio is 19 % (79 % of the bifacials). In the lower complex the remaining 29 % of the bifacials is made on hidroquartzite (15 %), radiolarite (11 %), silex and chert. In the upper one the remaining 21 % is made on hidroquartzite – except for one piece. A similar discrepancy can be observed in the raw material distribution of other implements: the ratio of the silex and hidroquartzite grows, while that of the quartzporphyry and radiolarite decreases considerably (Fig. 4 : 2).

These data reveal that there are significant differences between the two complexes, and the Aurignacian seems to be closer to the lower one from technical point of view, while regarding the typology and the raw material preference it displays more resemblance to the upper complex. Consequently my answer to the three questions is:

1. There is no direct genetical contact between the lower and the upper bifacial–leptolithic industries in the Szeleta cave. The leaf-shaped implements indicate formal and functional similarities and not cultural ones.[3]
2. The Aurignacian component can be separated both horizontally and vertically,[4] just like from respect of technology, typology and raw material distribution.
3. We have no reason to differentiate between industrial groups in the upper complex. Spatially there is no significant difference between the occurrence of the various elements. The hearths all belong to the same stratigraphical level. On the contrary, the material regarded as a closed unity, gives a fairly complete tool assemblage of a hunters' site near a kill-site. A major group is constituted of weapons: Gravette-points and projectile points, another major group contains cutting implements: blades, retouched blades, backed blades, truncated blades. The raw material is also uniform: glassy quartzporphyry is overwhelmingly used for all kinds of points and backed blades.

If these answers can be accepted we find ourselves once more at the very initial question: What is Szeletian ? – and more restrected to the eponymous site: Which Szeletian is the real Szeletian ?

I would not like to spare time and space for the analysis of the small cave sites since they help neither stratigraphically, nor typologically or from any other asoects. The comoarison of the Szeleta material with the open-air sites in the near surroundings, however, would deserve a special study. It seems, namely, that the so called Babonyian (Ringer 1983) is constituted of a series of workshops specialized on raw material, which may (at least partially) belong to the lower levels of the Szeleta cave (the Szeletian). The same may be true for the also raw-material specialized workshop on the Avas-hill in Miskolc. These sites are situated within a radius of 20 km, where both the Szeleta cave and the raw material sources are near the centre.

Let us now shortly examine what role the leptolithic implements play in the late Middle and Upper Palaeolithic of East and Middle Europe. Along the eastern Mediterranan, in Greece, bifacial tools are mostly found as scattered finds on the surface. They mostly come together with middle palaeolithic implements of Levallois technique, or as unique finds (Runnels 1988). The same is the situation in Bulgaria, where, however, the majority of the finds comes from caves (Kozlowski ed. 1979). In Greece, in the same time, there are leptolithic finds, which occur together with upper palaeolithic–Gravettian–implements, though the connection between the two cannot be proved (Argissa Magoula A site, Eleoussa etc.: Kourtessi-Philippakis 1986). In Roumania the sites with bifacial implements can be divided into two major groups: the Micoquian (Ripiceni), and the so-called Aurignacian with bifacial tols (Mitoc) (Chirica 1988). In the European part of the USRR the Micoquian type and denticulated microindustries have bifacial elements in the late middle Palaeolithic, while the Levallois elements appear only in the northern Carpathian area (Korolevo) (Gladilin et al 1985). During the Upper Palaeolithic there seems to be a flourishing period of the leptolithic implement types varying from the little, triangular arrow-heads to the large, elongated spear-points. They are to be found with Aurignacian type and early till middle Gravattian type industries between 28 – 29.000 and 15.000 years. In South Poland and Czechoslovakia there are abundant finds with leaf-shaped implements. In Moravia they belong to the middle palaeolithic Micoquian, to the Bohunician of transitional features and Levallois technique , and also to the Szeletian. This latter group of finds, however, can be further separated: some of the sites have dates no younger than 37.000, while others are no older than 34.000. Between the two groups there is a gap of 3–5.000 years. Theoretically it is not a long period still there are two phenomena which lend importance to it. One of them is the fact that in the Carpathian Basin there is actually no C–14 date from this period. The second is the fact, that this period coincides with the cold peak of the stadial. The two together would suggest that the Carpathian Basin was void of human population in this period, what, in turn, means that the Szeletian in Czechoslovakia is not a genetical unity – similarly to the case in the Szeleta cave. Regrettably enough most of the finds come from surface collections without any possibility of dating. In the same time we are confronted with sites which have yielded both projectile points and other bifacial implements together with (or in the vicinity of) Gravettian-type tools (like e. g. Predmosti). The relation of the two types of finds, however, is not clear, partly due to the deficiency of old excavations, partly because of being surface finds.[5] The coexistence of leptolithic elements with upper palaeolithic tool-kits can be observed further to the west, in Austria and in Germany as well (see Allsworth-Jones 1986).

The above short sketch tells that the bifacial elements were present on the whole territory of East and Middle Europe with varying role and importance. Their appearance cannot be restricted to a specific technological or cultural circle. The great variety of bifacial tools, especially in the Upper Palaeolithic, and the striking difference between the middle and upper palaeolithic type ones suggest, on one hand, that a good deal of group-specific feature is involved, and , on the other, that they had rather functional than traditional significance. The justification of this latter point, however, would demand a thorough analysis of the surroundings of the sites and also that of the economy of the different groups.

Notes

1. The above discussed bone implement of split base came from level IV of the Szeleta cave, where it was lying together with late Aurignacian blades, blade-scrapers and further smaller bone implements. (Saád 1929)
2. It should be noted, however, that V. Gábori-Csánk called attention to the fact that if the dating of the upper complex was right, this Gravettian had been the first appearance of the culture on the territory (Gábori-Csánk 1970, p. 9.)
3. There were very few species defined from the cave. Disregarding the cave bear dominating all over the cave, Capra and horse are mentioned from the lower complex, and red deer, mammoth, reindeer and Megaloceros from the upper one, what may perhaps suggest a shift towards hunting of steppe fauna.
4. For the sake of further research I mention that the laurel-leaf-shaped tools were found, this time, nearby exclusively in the middle and farthest section of the cave, the Aurignacian tools, on the other hand, came from the entrance of the corridor opening on the left of the cave. (Saád 1929, p. 10.)
5. One has to be careful with unique pieces standing out as alien ones inside a closed unit. I am convinced that the bifacial glassy quartzporphyry pieces in the East Slovakian upper palaeolithic sites do not typologically belong there: they are raw material lumps collected most probably from the nearby middle palaeolithic sites to the south, exposed on the surface.

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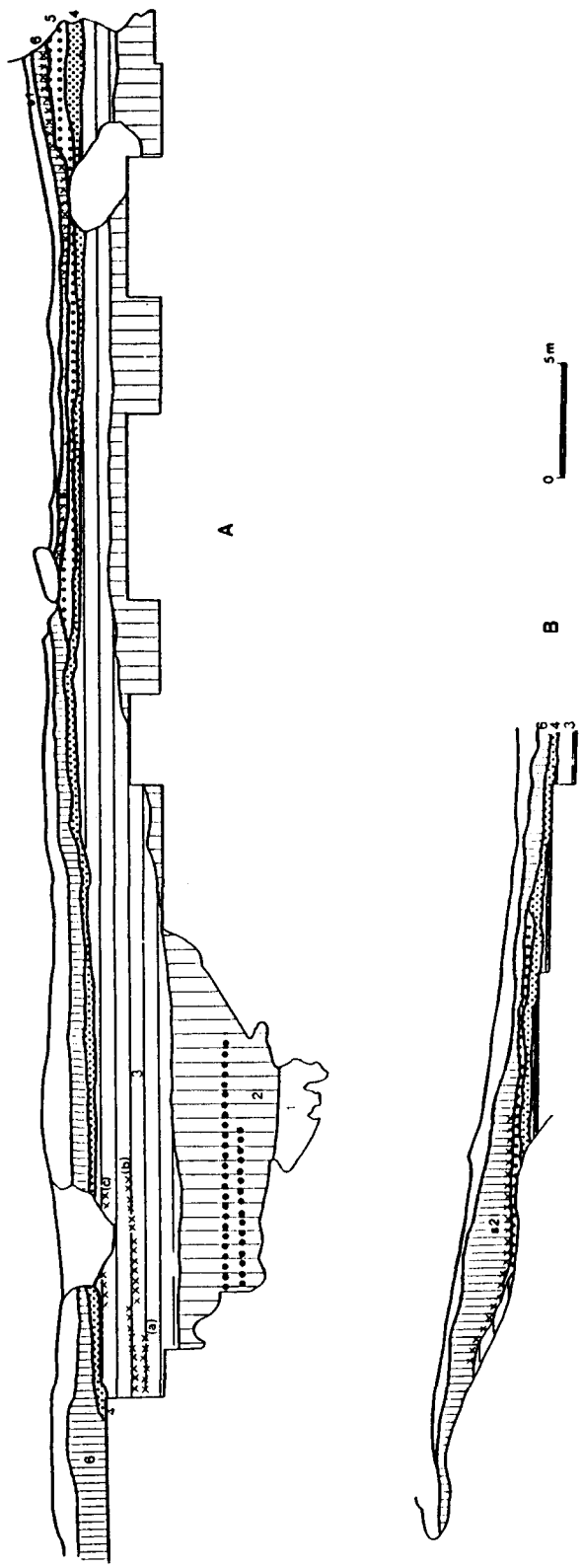

Fig. 1. Layer series of the Szeleta cave (after Kadic 1915) A = Main hall; 1. Fluviatile deposit; 2. Dark brown layer with lime concretion stripes (Mousterian indet.?); 3. Light brown, upwards reddish layer with hearths a, b (Szeletian) and c (Aurignacian); 4. Dark grey layer; 5. Reddish layer; 6. Light yellow layer with hearths S, S1 and S2 ('Upper Szeletian', Gravettian).

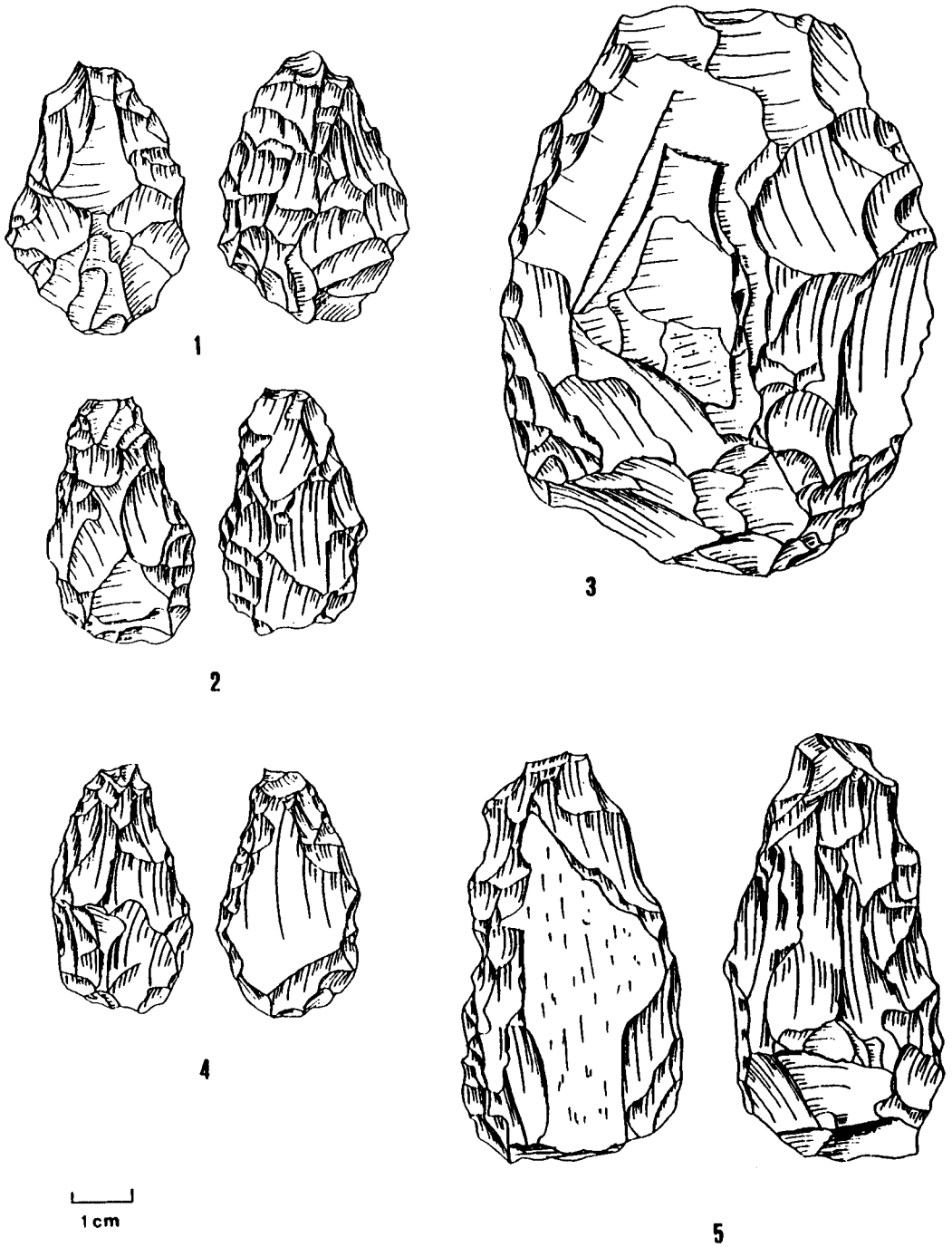

Fig. 2. Artifacts from the Szeleta cave, layer 3.

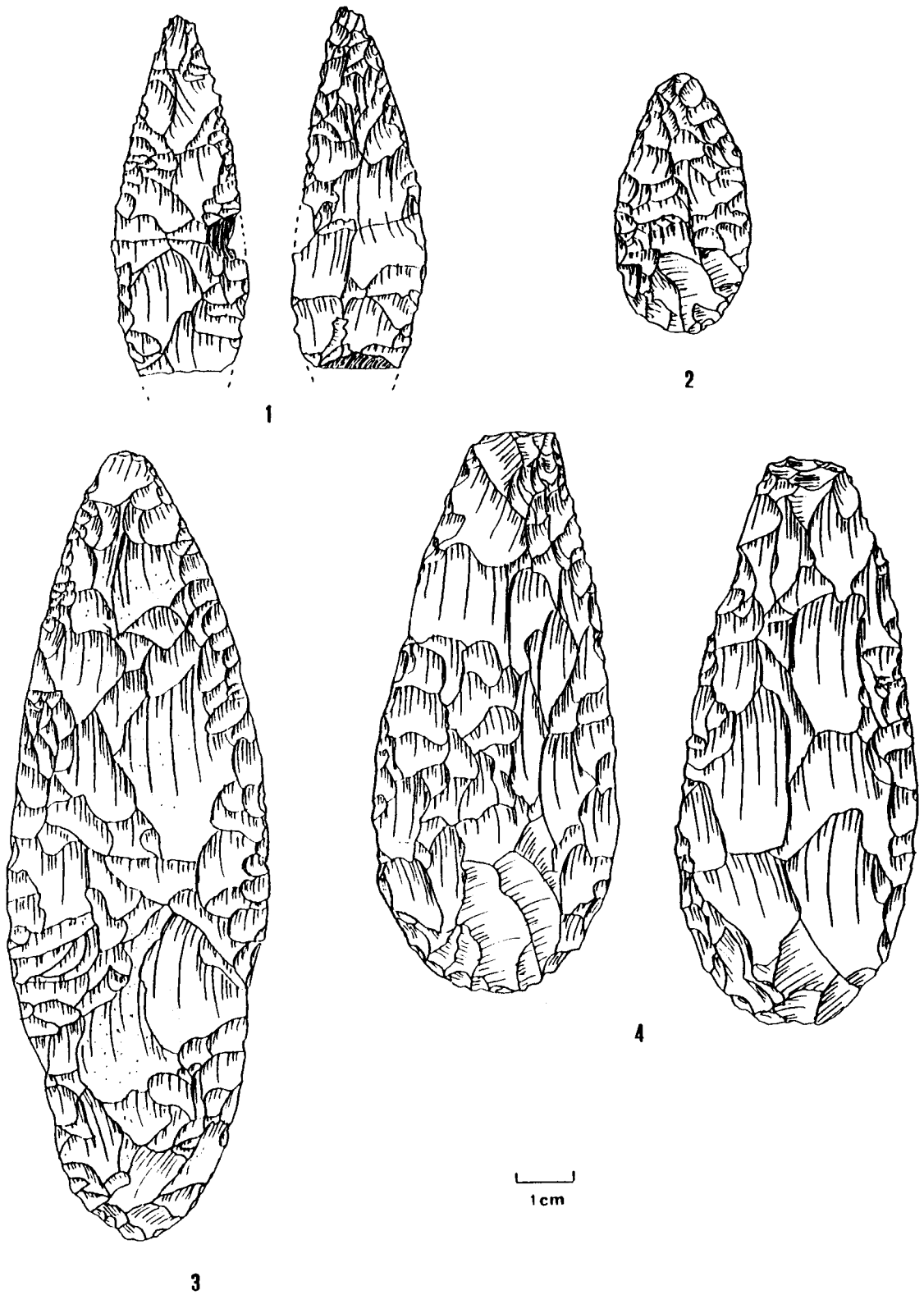

Fig. 3. Artifacts from the Szeleta cave, layers 5 and 6.

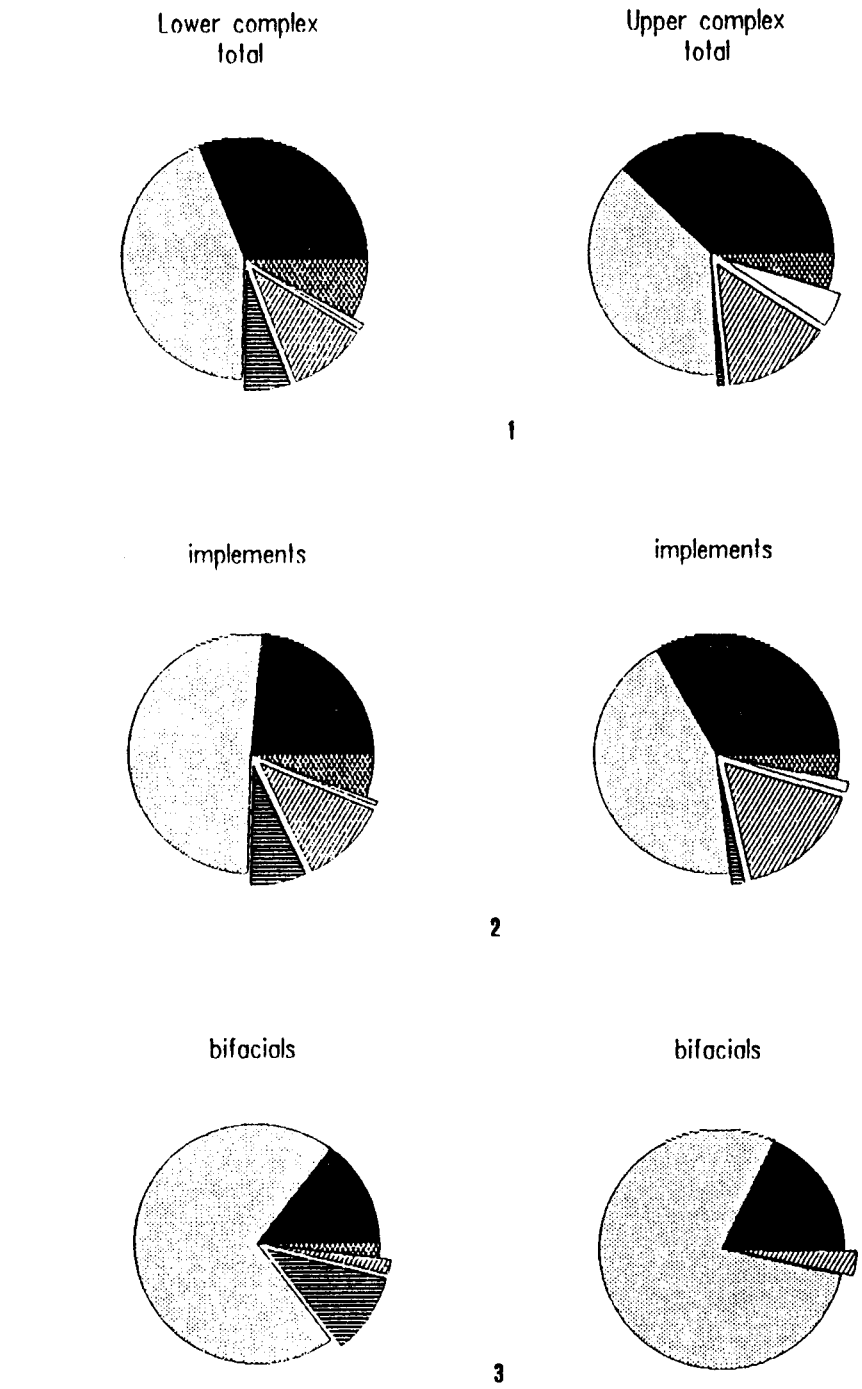

Fig. 4. Raw material distribution of the two leptolithic complexes in the Szeleta cave (see Table 1)