from: Hans Georg Gebel and Stefan K. Kozlowski (eds.), Neolithic Chipped Stone Industries of the Fertile Crescent. *Studies in Early Near Eastern Production, Subsistence, and Environment* 1 (1994). Berlin, *ex oriente*.

The Typological Characteristics of Aşıklı Höyük Chipped Stone Industry

Nur Balkan-Atlı

ABSTRACT. *Aşıklı Höyük is situated in central Anatolia, not far from obsidian sources, and its chipped stone industry is entirely of obsidian. Obsidian was brought to the site in the form of blocks or tablets and all the knapping took place on the site. The obsidian tools of Aşıklı Höyük are dominated largely by scrapers of all types and diversely retouched blades. Microliths as backed and truncated bladelets, and geometrics as triangles and lunates, are also present. Arrowheads, borers and burins are quite rare.*

RÉSUMÉ. *Aşıklı Höyük se trouve en Anatolie centrale, près des sources obsidienne, et son industrie lithique est entièrement en obsidienne. L'obsidienne a été apportéeau site sous forme de blocs et de tablettes, et tout le débitage était pratiqué sur le site. L'outillage de Aşıklı Höyük est dominé par les grattoirs de types varieés et par les lames diversement retouchées. Les microlithes, comme des lamelles à dos et des lamelles tronquées, et les géométriques, tels que des segments et triangles, sont aussi présents. Les pointes de flèches, les perçoirs et les burins sont plutôt rares.*

Aşıklı Höyük is an aceramic Neolithic settlement in central Anatolia, near Aksaray in the Cappodoce region. Excavations have been going on since 1989[1]. The site is dated to 8700-8500 BP. and it presents well preserved rectangular architecture of mud brick, closely knitted with narrow spaces and garbage areas in between. The economy was based on hunting, and no evidence of agriculture has been found yet (see ESIN 1993; ESIN *et al.* 1991).

Technological Remarks

The chipped stone industry of Aşıklı Höyük is entirely of obsidian amounting 72,000 pieces in four campaigns of excavation. The site, situated in the region of obsidian sources of central Anatolia, acquired its raw material from two sources as far as the analyses show: the Kayırlı source and the Nenezi Dağ source (BALKAN-ATLI 1993). The obsidian seems to have been brought to the site in the form of blocks and tablets, and the knapping took place on the site.

The debitage amounts to 83.5% of the industry (Table 1). The cores, 2.3% of the industry, are mostly opposed platform blade cores (Fig. 1); single platform blade cores and flake cores are less frequent. The cores were usually found in exhausted or small broken states. In the debitage blades are far more numerous than flakes. No pressure technique nor indirect percussion were observed in the knapping. Hard percussion seems to be the technique used.[2]

---

[1] The excavations at Aşıklı Höyük are by the Prehistory Section of the Istanbul University directed by Prof. Dr. U. Esin.

[2] A workshop was organized for the analysis of the technology during the 1993 campaign with the participation of M.C. Cauvin, D. Binder, F. Abbès and the author. The methodology was established and the results will be reached in the forecoming years.

Table 1. Debitage in general (core trimming and preparation pieces counted in blades and flakes).

blades	23.041	38.1%
bladelets	4.192	6.9%
flakes	16.540	27.4%
burin spalls	47	0.1%
chips	8.200	13.5%
chunks	8.409	13.9%
Total	60.429	99.9%

Typology

The retouched obsidian artefacts constitute 13.6% of the industry. These tools have blanks as flakes (52.2%), blade and bladelets (46.3%) and fragments of cores or tablets (1.5%).

Table 2. Tool Types

Type	*Number*	*Frequency*
Microliths	434	4.23%
truncated	20	
pointed	63	
backed	177	
notched	14	
various	135	
lunates	16	
triangles	9	
Arrowheads	88	0.86%
Pointed Blades	176	1.72%
Perforators	61	0.59%
Scrapers	6.444	62.83%
endscraper/flake	2.564	
double scraper/flake	185	
semi-circular	511	
circular	327	
endscraper/blade	1201	
double scraper/blade	81	
fan scraper	18	
scraper/core	103	
various	154	
fragments	866	
Sidescrapers	17	0.17%
Truncated blades	82	0.80%
Backed blades	698	6.81%
Various retouched blades	1.650	16.08%
Notched pieces	166	1.62%
Retouched flakes	361	3.52%
Burins	72	0.70%
Pièce esquillée	7	0.07%
Total	*10.256*	*100.00%*

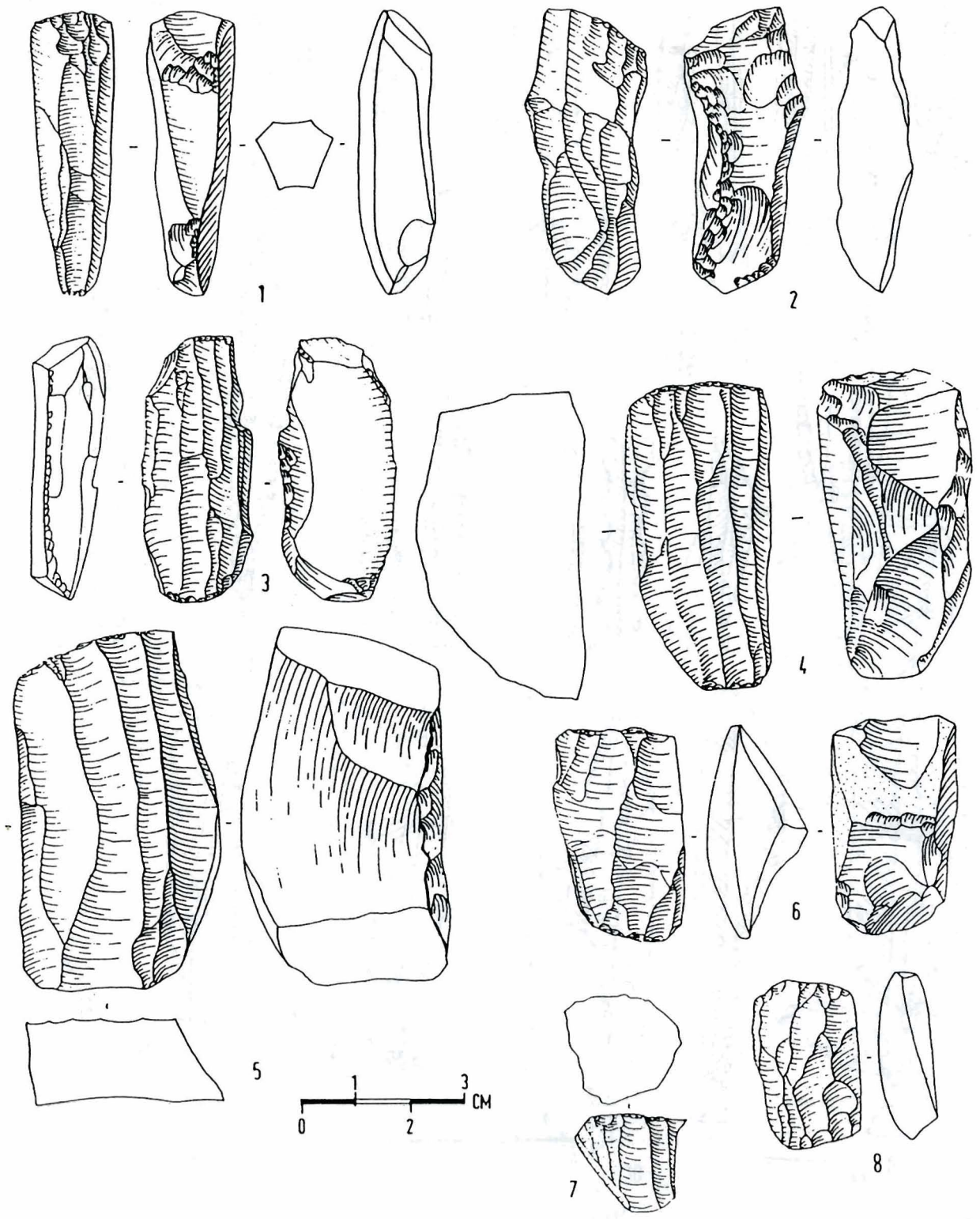

Fig. 1. Aşıklı Höyük cores: 1-6,8 opposed platform cores, 7 pyramidal core.

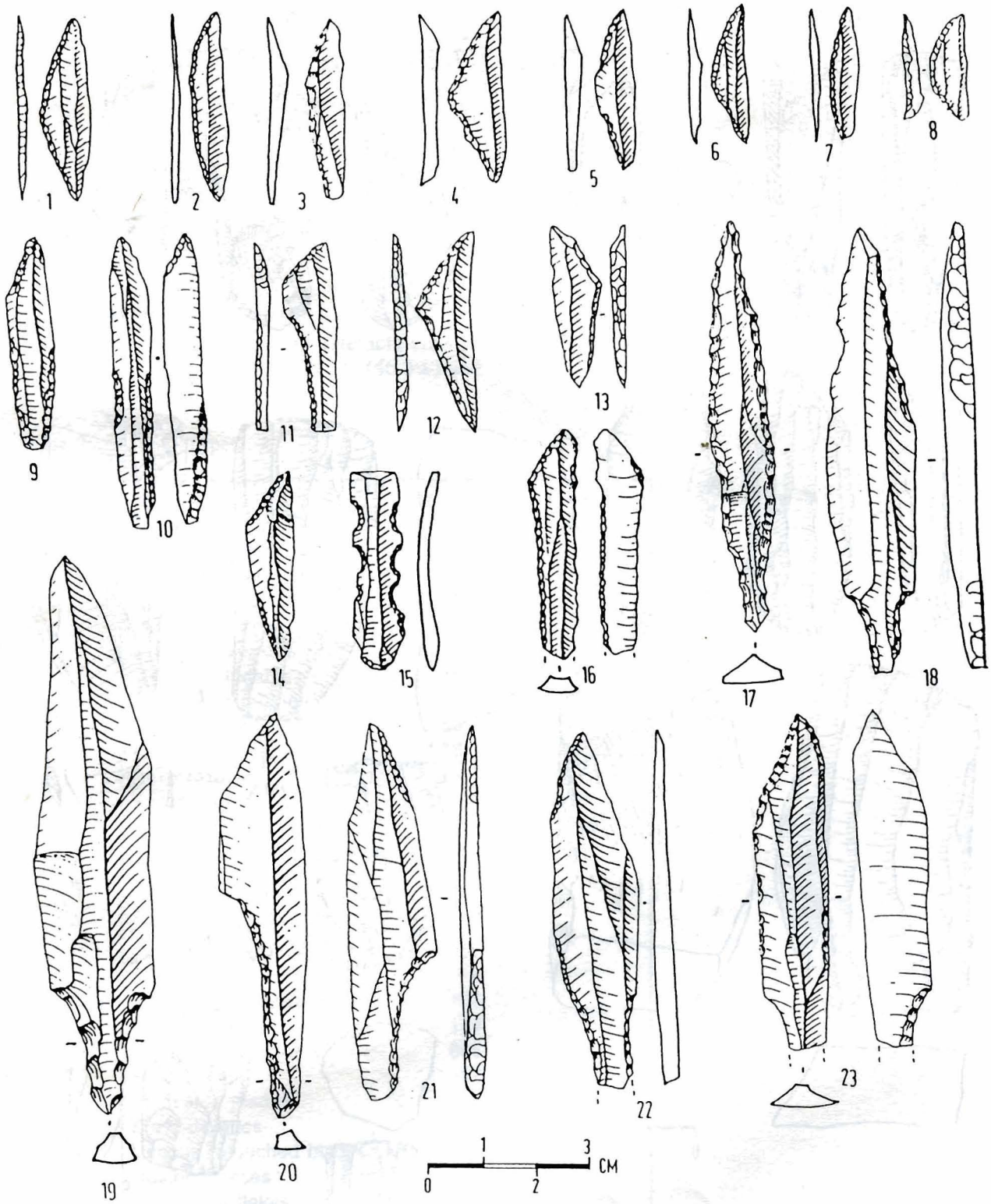

Fig. 2. 1-6 microliths, 17-23 arrowheads.

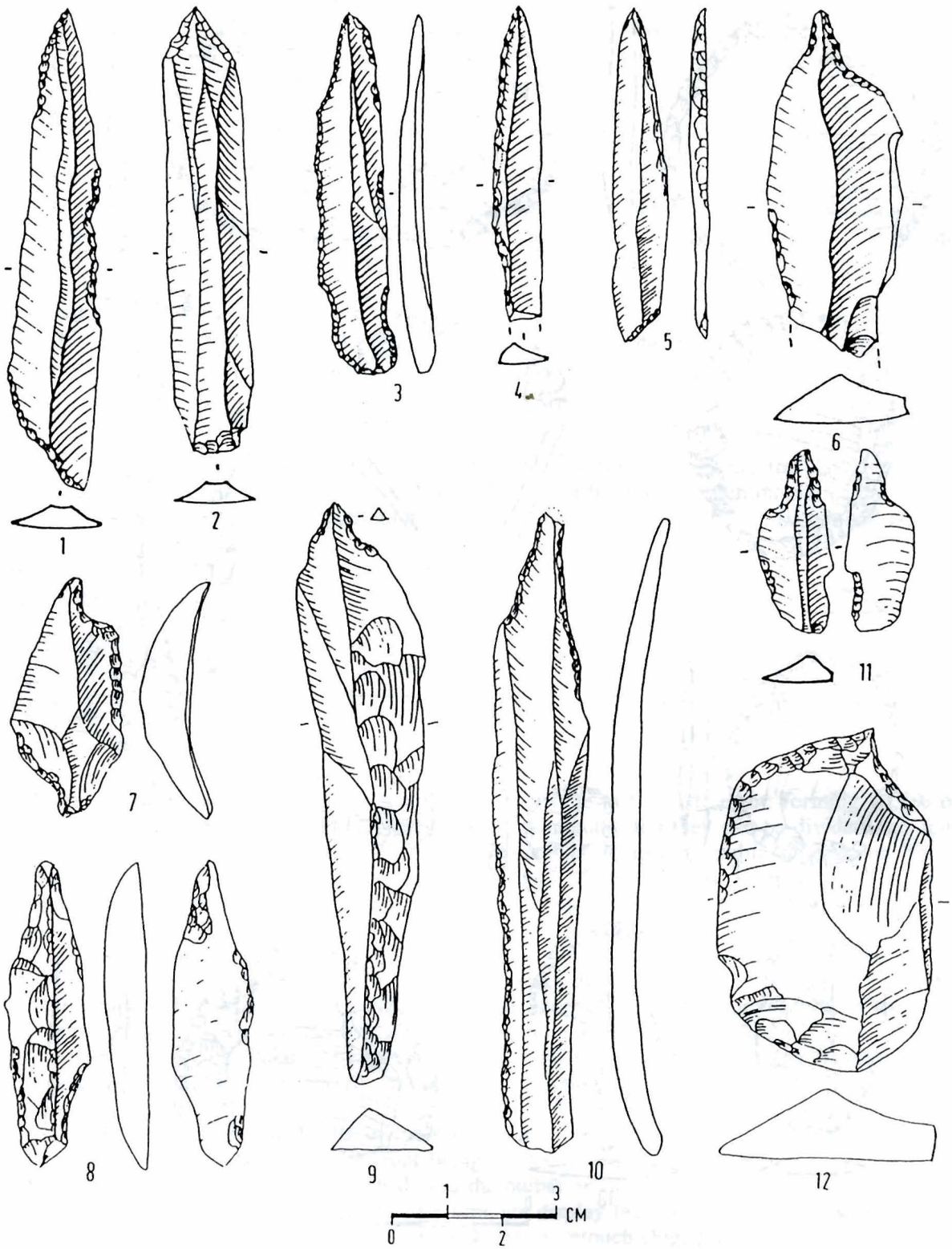

Fig. 3. 1-5 pointed blades, 6-12 perforators.

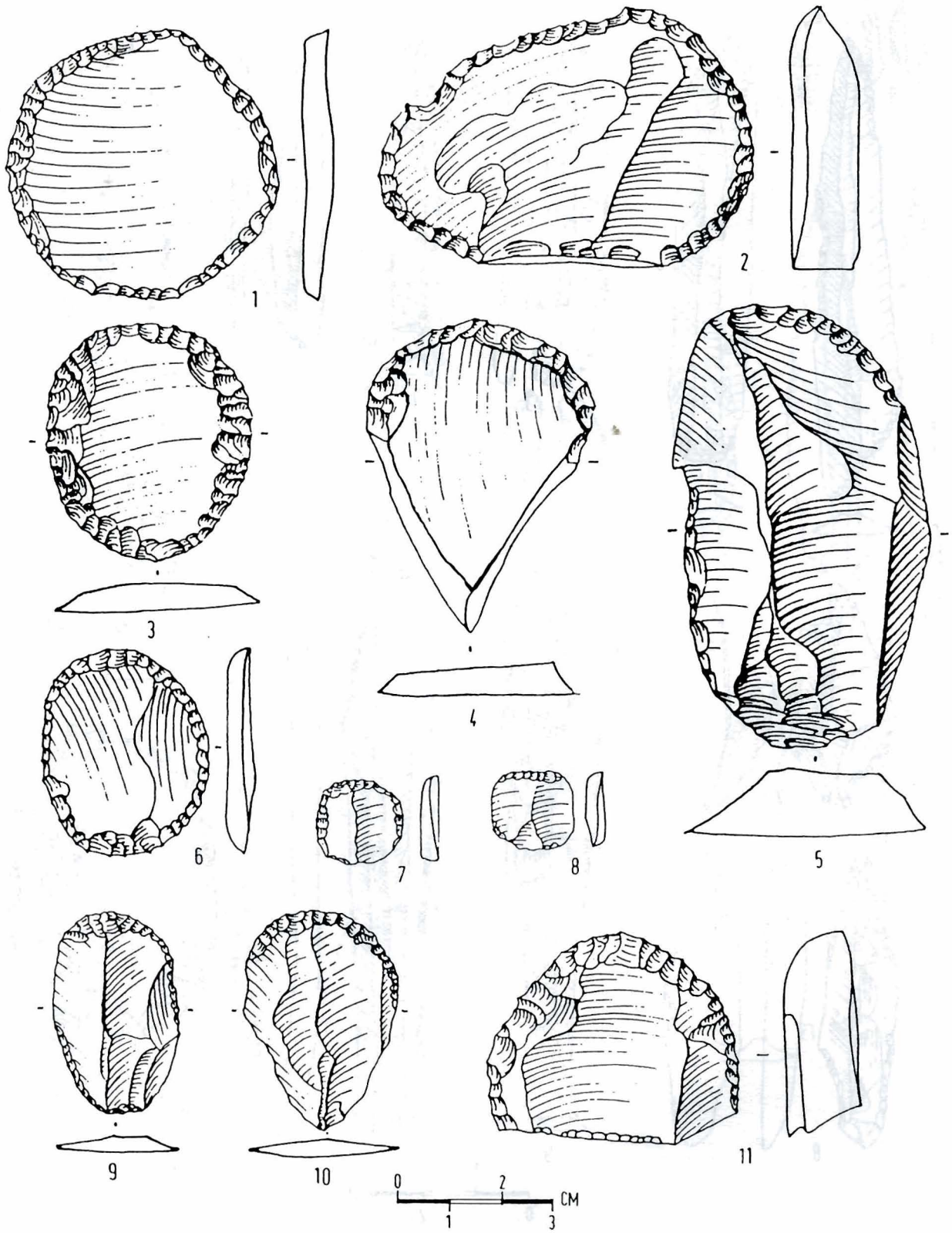

Fig. 4 . 1,3,6 circular scrapers, 2,7,11 semi-circular scrapers, 5,8-10 endscrapers on flake, 4 fan scraper.

Microliths

The microliths form 4.1% of the tools. They display a variety of forms: obliquely truncated bladelets (Fig. 2: 9,11,14,16), pointed bladelets (Fig. 2:10), rarely notched or denticulated bladelets (Fig. 2: 15), backed bladelets and finely retouched bladelets. The microliths comprend also geometrics in form of small triangles and lunates (Fig. 2: 1-8,12,13).

Points

Arrowheads are found in scarce numbers (0.9% of the tools). They are made on long , regular blades. The tangs are formed by direct steep retouch either on both sides forming two-shouldered Byblos kinds of points (Fig. 2:18,19,22), or on one side forming one-shouldered points (Fig.2:20,21,23). The point may be left unretouched (Fig. 2:19), retouched on both sides (Fig. 2:23) or most commonly retouched on one side (Fig.2: 18, 20, 21, 22). In most of the one shouldered points the tip is not axial, it is more or less oblique (Fig. 2:20). Another kind of arrowhead is formed by steep retouch all along the sides (Fig.2:17). This type is not clearly defined and may be bi-pointed blade or a kind of piercing tool.

Pointed Blades

This group of tools is composed of pointed blades which in some cases enter the class of toois as projectiles and in some cases as piercing tools. The tip is formed by steep retouch on one or both sides, either limited to the tip (Fig. 3:1,2) or continuing along the side (Fig. 3:3-5). The proximal end is often truncated obliquely (Fig. 3:1,5).

Piercing Tools

Clearly defined perforators are quiet rare (0.6%). They may be fabricated on blades, regular or crested (Fig. 3: 6,8-9,10-11) or more rarely on flakes (Fig. 3:7,12). The tip is usually made by steep retouch on both sides forming more or less long tips. Double perforators are rare (Fig. 3:7).

Scrapers

Scrapers compose the most abundant and popular tool type in the settlement, forming 62.8% of the retouched pieces. Scrapers on flakes (77.4%) are most numerous, and they can be divided into four categories: simple end scrapers on flakes (39.8% of the total of scrapers), double scrapers on flakes (2.9%), semi-circular scrapers (7.9%) and circular scrapers (5.1%). Simple scrapers are the most common type. They can be on large flake blanks (Fig. 4:5) or small flake blanks (Fig. 4:8-10). The abrupt retouch is mostly limited to the distal part forming a rounded front. The sides rarely bear retouch, the distal end is seldomly transformed and the bulb is usually present. Double scrapers on flakes are rare (Fig. 5:3,9). The fronts are usually on the sides and sometimes alternating (Fig. 5:6,8). Semi-circular scrapers (Fig. 4:2,7,11) are usually formed by steep retouch continuing all along the sides except the proximal end, which is often left untouched. Circular scrapers are usually finely executed on medium to small sized regular flakes. The bulb is usually removed and the abrupt retouch continues all around the piece (Fig. 4:1,3,6). Fan scrapers are very few (Fig. 4:4).

Scrapers on blades constitute 19.9% of the scrapers and 1.3% of them are double scrapers. They are executed mostly on regular blades, the front being limited to the distal end which is again mostly rounded (Fig. 6). The sides are rarely retouched and the bulbar end is either left untouched (Fig. 6:2,5-9) or retouched (Fig. 6:1,3-4,10). The double blade scrapers display the same characteristics, except the bulb is taken out and the proximal end is transformed by steep retouch (Fig. 5:1,2,4-5,7,10).

Scrapers on core fragments, thick primary flakes and rejunavating tablets are quite common (Fig. 7). Some of the cores broken by plunging accidents were transformed to scrapers (Fig. 7:4,7). A big number of broken scrapers was found. As they are mostly in form of small fragments, it was impossible to classify them. Sidescrapers are very few (0.17% of the tools) being executed on large flakes.

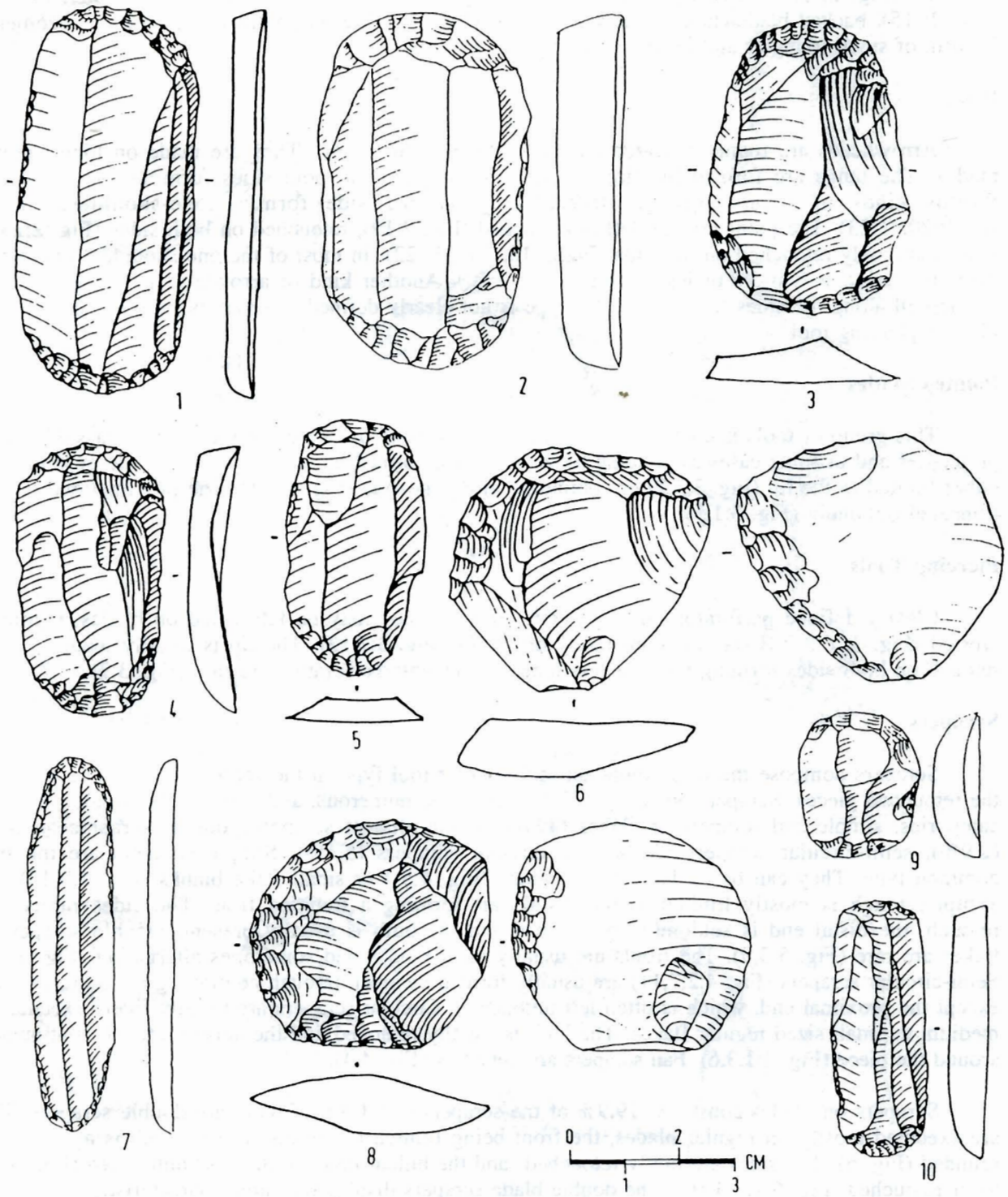

Fig. 5. Double scrapers on flakes and blades.

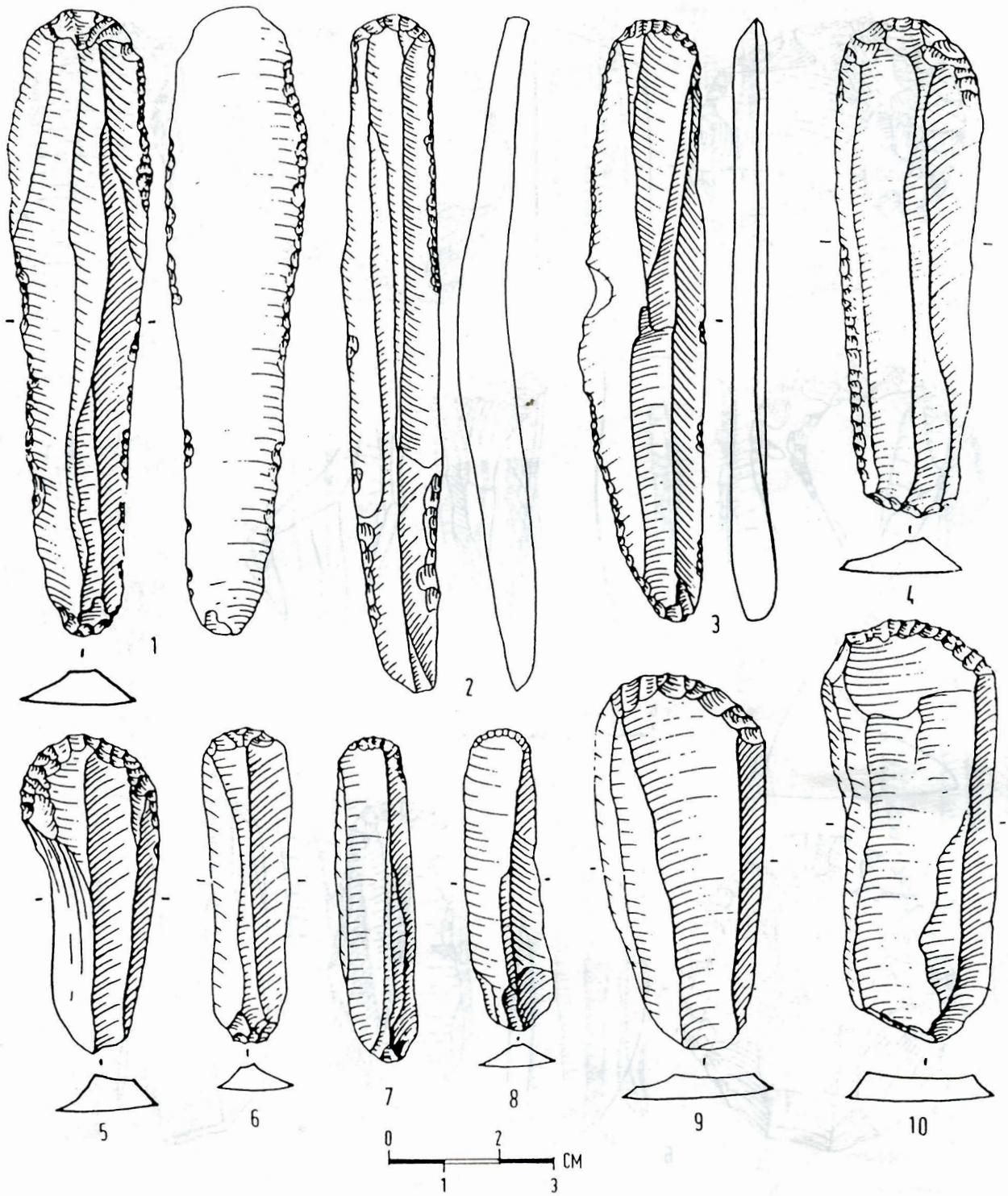

Fig. 6. Endscrapers on blades.

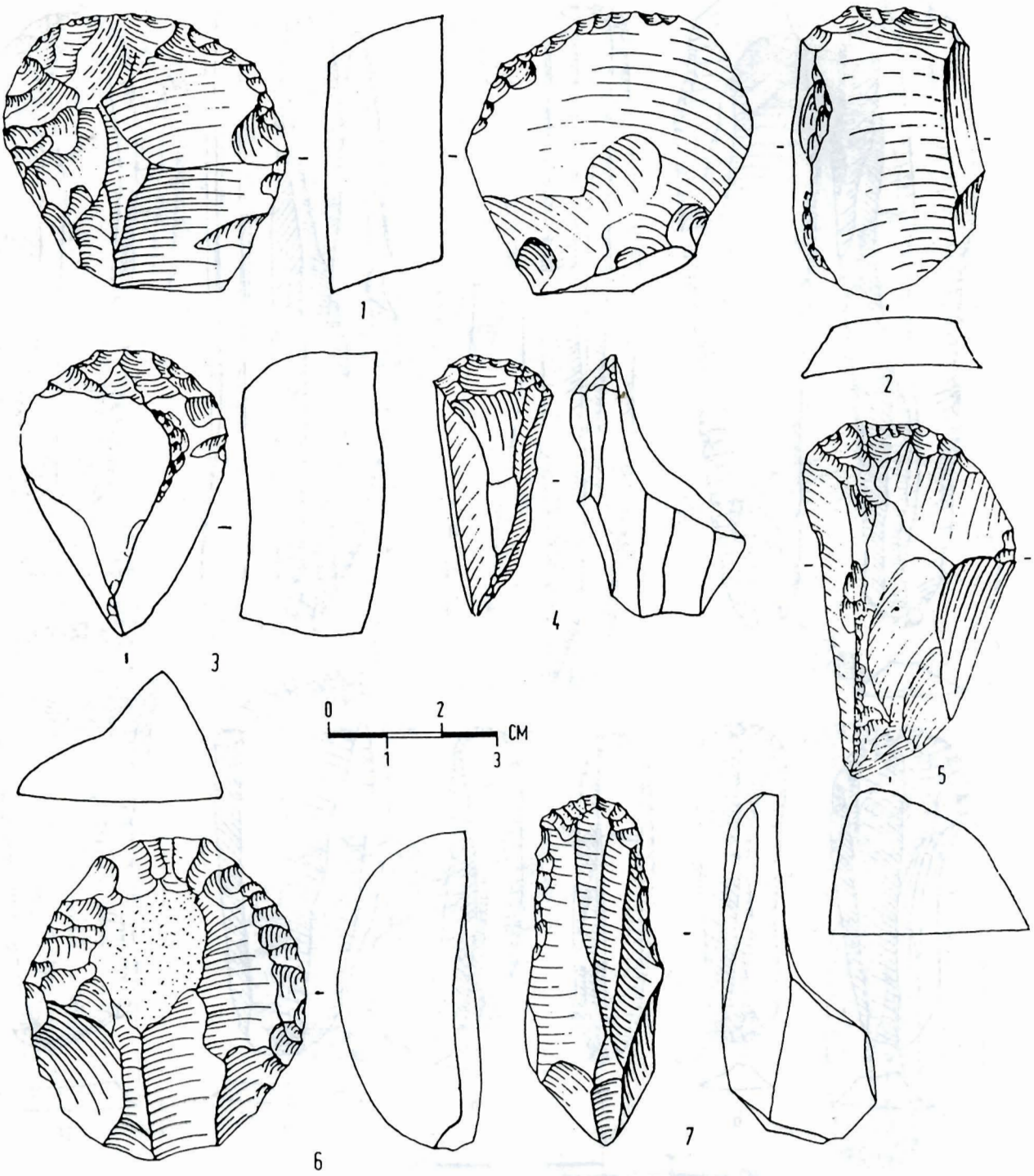

Fig. 7. Scrapers on revival tablets (2,3), on cores (4-5,7), and carinated scrapers (1,6).

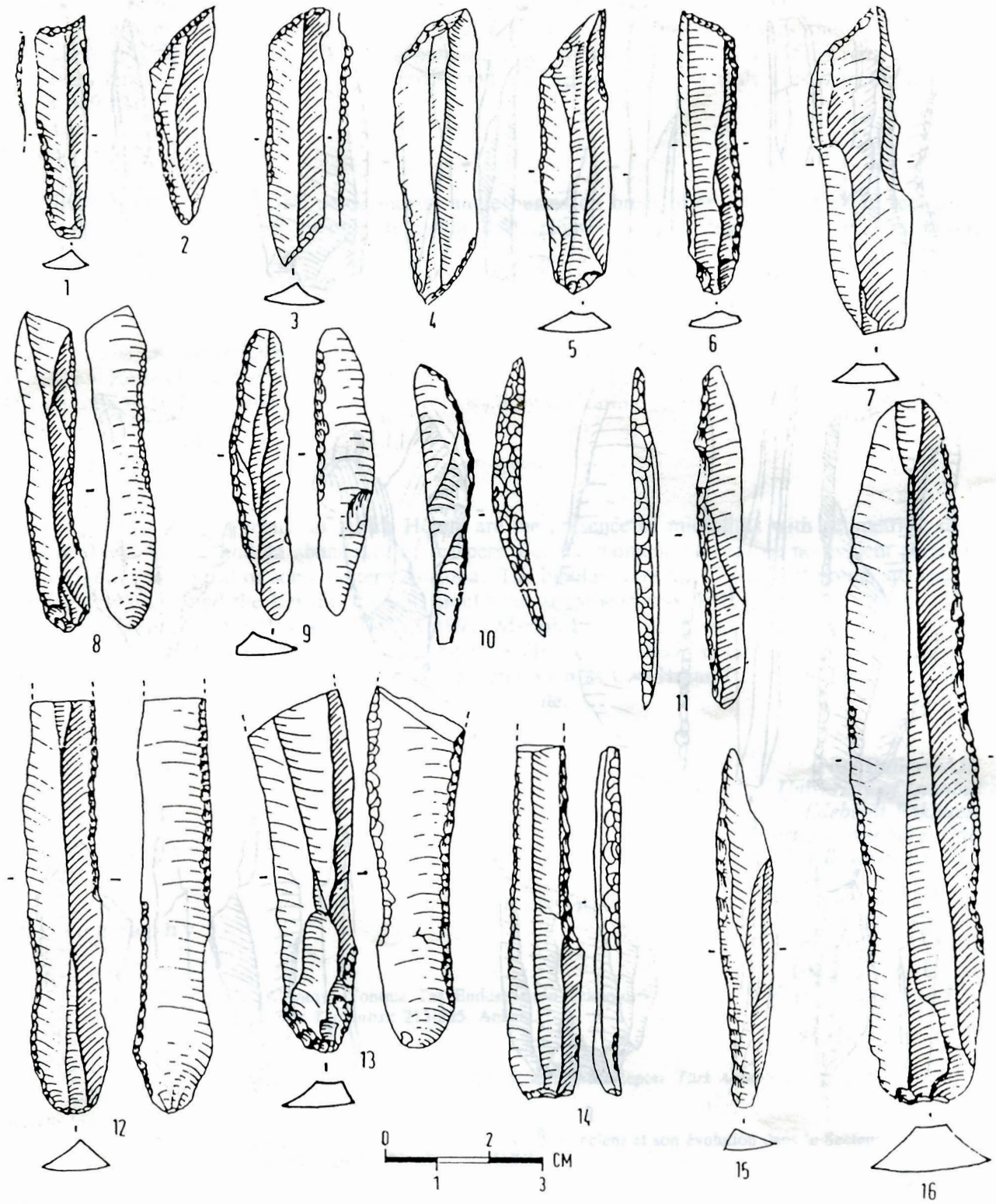

Fig. 8. 1-7 truncated blades, 8-9,12 alternately retouched blades, 10 crossed retouched blade, 11,14-15 steep retouched blades, 16 retouched blade.

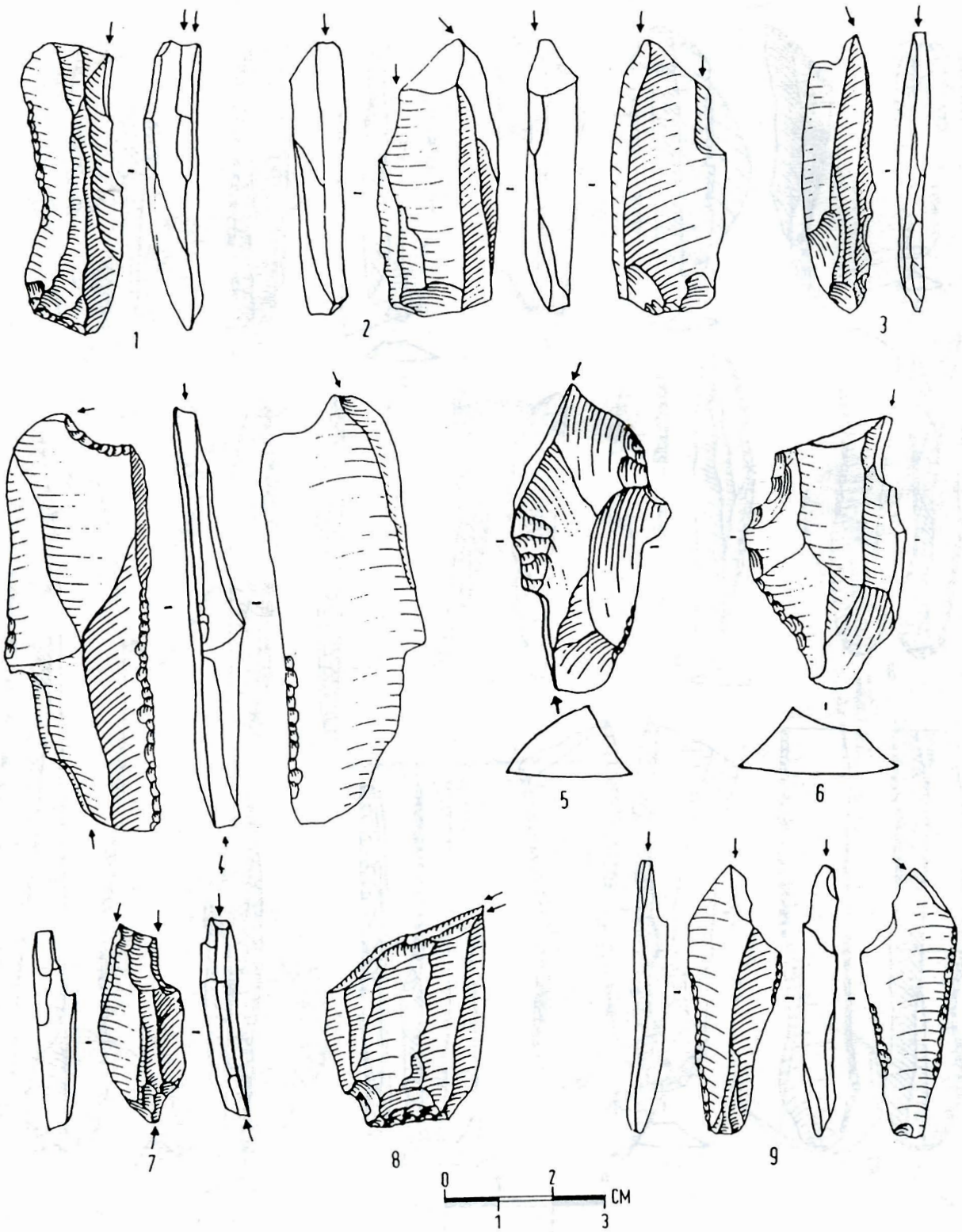

Fig. 9. Various burins.

Retouched Blades

Diversely retouched blades constitute 25.7% of the retouched artifacts. Truncated blades are rare (%). They are mostly obliquely truncated (Fig. 8:1,2,5-7), although sometimes they have double truncations (Fig. 8:3,4).Steep retouched blades are quiet common (Fig. 8:11,14,15). Crossed retouch also exists but very rarely (Fig.8:10). Alternate and alternating retouch is widely used in the industry (Fig. 8: 8,9,12).

Burins

Burins are quiet few ,and being mostly angle burins on break,often it is difficult to recognize them (Fig. 9:1-3,6,7,9). Burins on truncation (Fig. 9:4), transverse burins (Fig. 9:8) and dihedral burins (Fig. 9:5) are rare.

Various

The rest of the industry is composed of retouched flakes, notched pieces, and a few *pièces esquillées*. Retouch on flakes is not very common, and it is usually in form of partial fine retouch. Notches appear on flakes and on blades, often formed by utilization.

Conclusion

The outstanding elements of Aşıklı Höyük are the presence of microliths with geometrics, one-shouldered arrowheads and an abundance of scrapers. For the moment we can see no evident parallels with other sites in central or south eastern Anatolia.. The bipolar cores and the Byblos points are known from the south-east and the Levant; the one-shouldered arrowhead was defined by M.C. Cauvin from the earliest levels of Cafer Höyük (CAUVIN 1991) Microliths and geometrics were also reported from Suberde, situated in the western part of cenral Anatolia (BORDAZ 1969). As far as we know, it bears no resemblance with the other central Anatolian industries such as Can Hasan III or Çatal Höyük. Future research may bring new elements for comparison to this site.

Nur Balkan-Atlı
Univeristy of Istanbul
Edebiyat Fakültesi
Prehistorya Anabilim Dalı
Turkiye- 34459 Beyazıt, Istanbul

Bibliography

BALKAN-ATLI N.
1993 Aşıklı Höyük (Aksaray) Yontma Taş Endüstrisinin Teknolojik ve Tipolojik Açıdan Incelenmesi. *VIII. Arkeometri sonuçları Toplantısı*: 213-225. Ankara.

BORDAZ J.
1969 The Suberde excavations in southwestern Turkey, an interim Report. *Türk Arkeoloji Dergisi* 17.2: 43-71.

CAUVIN M.C.
1991 Cafer Höyük (Turquie): l'outillage lithique des niveaux anciens et son évolution dans le Secteur Est. *Cahiers de l'Euphrate 5-6*: 115-126.

ESIN U.
1993 1991 Aşıklı Höyük (Aksaray Ili-Kızılkaya Köyü) Kurtarma Kazısı. *XIV. Kazı Sonuçları Toplantısı I*: 131-146. Ankara.

ESIN U. *et al.*
1991 Salvage excavations at the Pre-Pottery site of Aşıklı Höyük in Central Anatolia. *Anatolica* 17: 123-174.