



ABOUT THE EARLY PALAEOLITHIC OF THE CRIMEA

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According to natural-geographical conditions, Crimea peninsula was one of the most favourable part of Ukraine for prehistoric man. This fact can explain higher concentration of Middle Palaeolithic sites in comparison with rest of Ukraine. For a long time has been considered that Crimea was populated only in Middle Palaeolithic (Bibikov, 1961; Gladilin, 1969). However in nowadays there are data which permit us to distinguish several Early Palaeolithic groups of sites.

1. *Classical Acheulian* is represented by single stratigraphical site in Zaskalnaya IX near Belogorsk. Big hand axe come from the lower layer (Riss-Würm according to Kolosov, 1983). Acheulian tools were found on the surface of more than 10 open-air sites between Main and Internal range of mountains (Valleys of Bodrak, Alma, Bouroulcha... rivers; Shchepinski, 1979). It is possible that these hand axes were tool's preforms of later periods (Gladilin, 1985). Several hand axes are coming from the main range of mountains near the Village Izobilnoe, Aluchta (Shchepinski, 1972).

2. *The Kiik-Koba lower layer industry* have been discovered in the cave Kiik-Koba and probably in Kabazi II, IV cultural layer near Simferopol. First industry have been determined by Bonch-Osmolovsky (1940) as amorphous stage (pre-mousterian age). Later both layers of Kiik-Koba were attributed to different phases of Mousterian (Kolosov, 1977). Lower layer was also attributed to micro-mousterian of Denticulated facia (Gladilin 1975). However we must take into consideration supposition of early age of lower layer (end of the Riss glacial). Similar inventories has been discovered in IV cultural layer in Kabazi II site (Riss-Würm?) collected from the surface (open-air site Krashy Mak I) (Kolosov *et.al.*, 1993). Probably all sites of this group are of Riss-Würm age and simultaneous with Early Mousterian in

Crimea. However as to the technical-typological characteristics they can be identified as Early Palaeolithic.

3. *Pebble industries* have been discovered not long ago and come only from the surface. Some of them were found in NE part of southern seashore on the slopes of Echki-Dag mountain (Klugin *et al.*, 1990). Unfortunately they are not numerous and only preliminary results have been published. The area investigated in this sites covered 150-1500 m². Sites are located at an altitude of 10-250 m above Black Sea. Stone artefacts were collected on the eroded surface in ravines (Klugin *et a.*, 1990). We think that material was redeposited. In the same time it is possible that the highest altitude of same sites was correlated with early and middle Quaternary sea terraces, more over that it was indicated the availability of natural pebbles. Among artefacts they are fragments of pebbles, flakes 5-8 tools (from each site) : choppers, choppings, proto-hand axes, points... Local volcanic pebbles is the most common raw material (an desite, porfirit...). For authors similar industries appeared in South Tadzhikistan (Karatau I, Lakchuti I), Siberia (Ulalinka), Transcaraphthia (Korolevo), Yaschtuch (Caucasus) and can be identified as Acheulian. However as for us such analogy is not correct because of preliminary technotypological analyses, various or not precise age of the sites. Three new sites with pebble inventories have been discovered near Yalta, S-W of Southern Seashore (fig. 1,1). The main material comes from area around 8000 m² (150-170 m) above the level of Black Sea. Artefacts have been redeposited from the top to the slope and coming from the recent delluvium deposits.

Complex comprises 300 finds Sea oval, round flatish pebbles of quartzite (72,8%) were the most common raw material; their length in average 10 cm and 3-4 cm is their thickness. Artefacts have patina and often

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keep calcium cortex. The industry has big parameters. The parameters of the biggest tool is : 16,1 x 13,6 x 6,3 cm; weight 2,3 kg. Generally tools were crudly worked, retouch on flakes occurs seldom.

Cores : 0

Polyhedron : 2/0,7%* (angular shape, unsystematic; their diameter 7,8 cm; striking platforms are not expressed. It seems that they were more on successful tools than cores).

Spheroid : 1/0,3 % (5,9 cm diameter;)

Core-like artefacts : 5/1,7 (one of them could be a chopping. The rest are fragments of pebbles. Striking platforms are not expressed - probably broken choppers).

Flakes : 89/29, 8% (their average diameter 3-5 cm; thickness 1-2 cm; usually they are transversal). The flakes are divided into :

Definable - 66 :

a) "Citrus", including flakes from the choppers 24-36, 3/** :

- segmentoid - 11/16,6%,
- semi-segmentoid -13/19,7%.

b) flakes with natural flat dorsal face (uncluding cortical) -30/45,5%.

- with cortical striking platform -25/37,9%,
- with flat striking platform -5/7,6%.

c) flakes from choppers -12/18,2% :

- with cortical striking platform : 10/15,2% (parallel dorsal pattern -/4,3%; indefinable -7/1,9%).
- with flat striking platform -2/3% (sub-parallel dorsal pattern -2/3%).

Indefinable : 23

Fragments.....of.....raw.....material -163/54,4%. Among them are pebbles with 1-2 negatives or pebbles splitted into 2-4 parts and flat fragments without traditional features of flaking. They have patinated surface like real artefacts and calcium cortex what can prove their old age. It seems that they were result of simple smashing technology. Some of them were anvils with characteristic traces, others were on successful tools (raw material was not always of a good quality) or were used like a tool without supplementary working. In general primary flaking was not developed. Flakes were obtained after simple smashing of pebbles and after production of choppers. Traditional cores and flakes from them have not been found. High level of fragments probably shows prevailing of smashing technology (Chabay, Sitlivy, 1993).

Hammerstones -7/2,4%. The tools are massive; their length is up to 13,7 cm. Characteristic traces are on the narrow edges of the pebble.

Tools -32/10,7% (including 2 indefinable). According to the type of blanks the tools are divided into :

1) on complete pebbles,

2) on flakes with natural dorsal face or flat cortical fragments. First more numerous group is represented by choppers (fig. 2; 3; 4,4-6; 5,1). All of them have; cortical base (some examples show traces of counter-flawes - using on an anvil (fig. 3,1; 4,5).

Choppers -19/63,3%¹

1) unifacial -13/43,3%

-lateral -4/13,3% (convex- concave -2/6,7%; convex -2/6,7%,

-terminal -9/30% (convex -7/23,4%; straight -1/3,3%; angular -1/3,3%.

* % with regards to all artefacts

** % with regards to all definable flakes.

¹ : % here and lower with regards to all definable tools.

2) partly-bifacial -4/13,3%

-lateral -2/6,7% (convex-concave -1/3,3%; angular -1/3,3%),

-terminal -2/6,7% (convex -1/3,3%; angular -1/3,3%.

3) bifacial -1/3,3%

-terminal -1/3,3% (straight)

4) bifacial-1/3,3%

-fragment -1/3,3%.

All tools on flakes have retouch only on ventral side. Quartzite was the main raw material for their fabrication. Selection of raw material is obvious.

Unifaces : 2/6,7% (are made on massive blanks with flat natural dorsal surface; the shape remains the shape of choppers) (fig. 4, 2-3).

-convex-concave with natural base or angular truncated base.

Flakes with irregular retouch (?) and irregular shape -3/10% (their parameters : 5,7-8,7 cm).

Side-scraper (?) -1/3,3% (simple with flat platform ?; fig. 5,2).

Flakes of irregular shape with denticulated edges -3/10% (7,4-8 cm). They are exception made on quartzite.

Proto-hand axe : 1/3,3% (sub-triangular on massive fragment of "citrus" flake partly bifacial with oblique base (fig. 4,1). The base and one edge have rests of cortex.

Longitudinally broken massive pebble with dorsal negatives and traces of chopping (fig. 5,3) -1/3,3%. This is the biggest tool in collection.

In general Gaspra industry is characterized by Oldowan types of tools, first of all by choppers. Bifacial and partly

bifacial tools are rare. As to the technical-typological characteristics, complex of Gaspra can be identified as developed Oldowan with some early Acheulian elements (one proto-hand axe).

Artefacts were accompanied by numerous natural pebbles of the same origin but of smaller size. New investigations of the higher part of the site show that artefacts come from one depth together with sea pebbles (a test pit was dug at the altitude of over 200 m above sea level). It seems that primary position of artefacts can be correlated with alluvium or with the base of continental cover deposits of ancient terrace. According to an altitude this terrace can be correlated with early Quaternary transgression of Black Sea (Archaeology, 1978; Lubin, 1984; Praslov, 1984). Probably the age of artefacts is close to the geological age of terrace (not older than Dunau-Günz but not younger than Günz-Mindel).

A part of Gaspra site pebble artefacts has been collected near Ai-Petri mountain complex : sites Ai-Petri (southern macro-slope) (fig. 1,2) and Arte site near mountain Aiu-Dag (fig. 1,3). Altitude of the first site is 450 m above Black sea. Natural pebbles has been found. Assemblage is still not numerous but similar features with Gaspra are possible to see (lateral chopper, partly bifacial "Citrus" flakes, the same raw material...).

Artek site has an altitude 120 m above Black Sea (part of a terrace). artefacts were accompanied by numerous pebbles what probably express processes of terrace dormation. According to altitude this terrace clearly correlates with Chaudinsk transgression (Günz-Mindel) (Archaeology, 1978; Lubin, 1984).

About 2000 m² were investigated and 31 patinated artefacts has been collected (in some cases with calcium cortex). Among raw material are : quartzite (9,5%), all the rest is diadaz (?) (volcanic material from Aiu-Dag montain). An average parameters of artefacts are slightly bigger than in Gaspra .

Probably this fact determined by a size of sea pebbles.

Cores : 0

Flakes : 10/32,3% (including indefinable -3)

1) "Citrus" (from choppers) -2/28,6% (fig. 6, 4); semi-segmentoid - 2/28,6%

2) Flakes with flat natural dorsal face -4/57,1% (with natural striking platform -4).

3) Flakes from choppers -1/14,3% (with natural striking platform).

Fragments of raw material -10.

Hammerstone -1/3,1%.

Modify tools -10/32,3% (including 5 indefinable);

1) Unifacial -5/100% :

Choppers unbroken pebbles -2/40%:
-terminal (convex) -1/20%,
-terminal (straight) -1/20%;

Tools on flakes with natural dorsal face and striking platform - 3/60%;

Unifaces : 3/60% fig. 6, 2-3),
-with natural base -20/40%,
-with dorsal truncation.

It is interesting to note that in Artek flakes were more common for tool manufacturing than pebbles (like it was in Gaspra). According to altitude differences between these two sites a more younger age for Artek can be proposed (Günz-Mindel ?). Any way techno-typological data indicate clear Lower Palaeolithic features for these Crimean sites.

New discovery arrises again a question about primary population of the Crimea and southern Ukraine. Probably it was in the same time as in Central Europe. Direction of migrations is a question for futur research. It is interesting to note that all known pebble industries of Crimea coming from the seashore. Analogies to these industries can be seen in Mediteranean Region

and Caucasus (Dzaparidze, Bosinski *et al.*, 1989).

Three groups of Lower Palaeolithic in Crimea. [1) pebble industry, 2) acheulian-Zaskalnaya IX, Bodrak/complex and 3) Kiik Koba, lower level/Kabazi II, IV, layer-microindustries] probably express stages of primary population.

Genesis between industries of the first group and the second/third can't be seen.

REFERENCES

Archaeology and paleogeography of the Early Paleolithic of the Crimea and Caucasus, Moscow, 1978, 104p (in Russian).

BIBIKOV S., 1961,

Primary population of Eastern Europe. *KSIA AN*, 11 : 3-6 (in Russian).

BONCH-OSMOLOBSKI G., 1940,

Grot Kiik-Koba. In Palaeolithic of the Crimea, vol. 1, Moscow-Leningrad, 226p. (in Russian).

BOSINSKI G., 1989,

Geological and paleogeographical frames of the Paleolithic. In *The Paleolithic of the USSR*, Moscow, p. 18-22 (in Russian).

CHABAY V. and SITLIVY V., 1993,

The periodization of core reduction strategies of the Ancient, Lower and Middle Palaeolithic, *Prehistoire Européenne*, vol. 5, p. 9-89.

GLADILIN V., 1969,

Levallois technique in the Mousterian of the Russian plain and Crimea. *Archaeology*, 22, p. 3-11 (in Ukranian).

GLADILIN V., 1985,

The Early Paleolithic. In *Archaeology of the Ukrainian SSR*, vol. 1, Kiev, p. 12-52 (in Russian).

KLUKIN A., KORRENEVSKI V., SHCHEPINSKI A., 1990,

Echki-Dag. Simferopol, 128p. (in Russian).

KOLOSOV Y., 1977,
Belaia Skala. Simferopol, 96p. (in Russian).

KOLOSOV Y., 1983,
The Mousterian Sites of the Belogorsk District, Kiev, 223p. (in Russian).

KOLOSOV Y, STEPANCHUK V., CHABAY V., 1993,
The Early Paleolithic of the Crimea, Kiev, 221p. (in Russian).

LUBIN V., 1984,
The Early Paleolithic of Caucasus. In *The Paleolithic of the USSR*, Moscou, p. 45-93 (in Russian).

MOROZOVA A., VRONSKI A. (eds.), 1989,
The nature of Kara-Dag, Kiev, 288p. (in Russian).

PRASLOV N., BOSINSKI G. *et al.* 1984,
Der altpaläolithische Fundplatz Dmanisi in Georgien (Kaukasus), *Jahrbuch des Römisch- Germanischen Zentralmuseums Mainz*, 36, t. 1, p. 67-117.

SHCHEPINSKI A., 1972,
A new Mousterian Sites on the Southern Seashore in Creimea. *Archaeology*, 7, p. 76-84 (in Ukranian).

SHCHEPINSKI A. 1979,
About the Acheulian in Crimea. In *The Investigations of the Palaeolithic in the Crimea*. Kiev, p. 85-106 (In Ukranian).

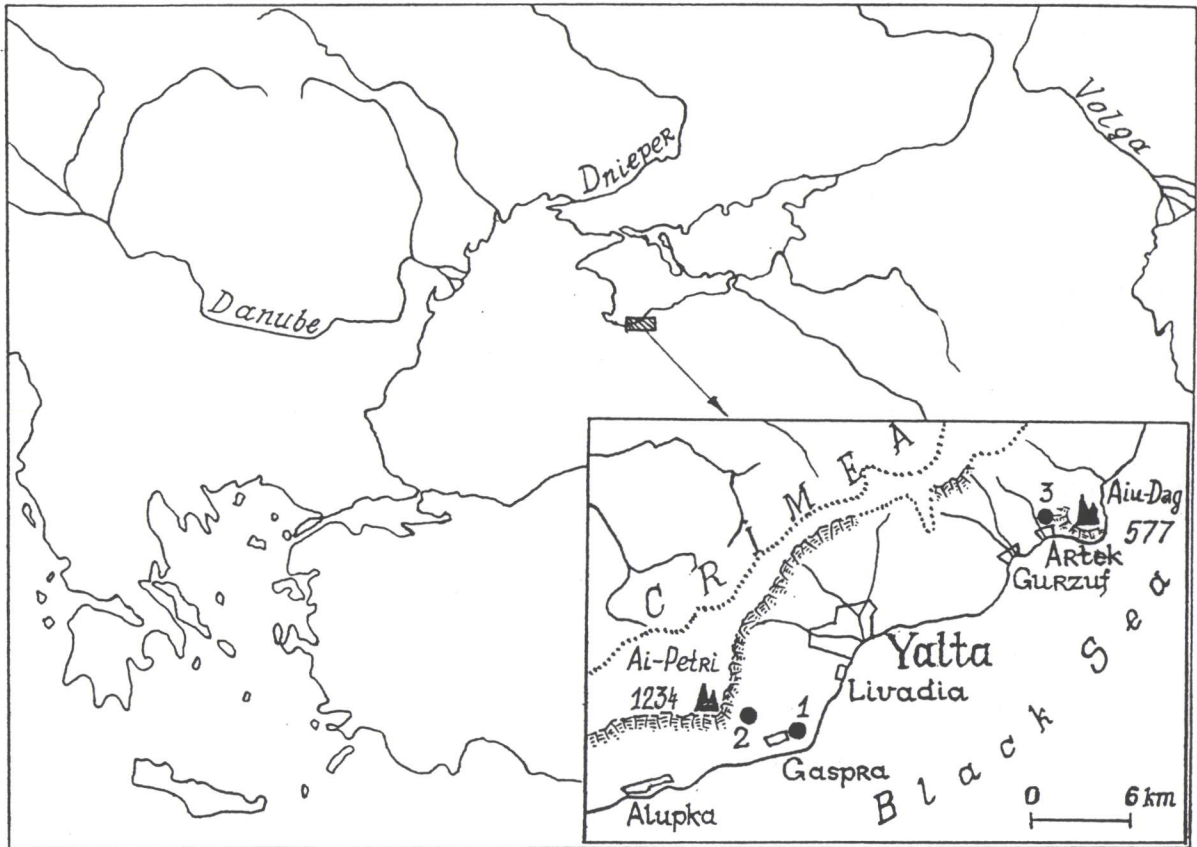


Figure 1 : Distribution of sites with pebble industry in Crimea :

- 1: Gaspra.
- 2: Ai-Petri.
- 3: Artek.

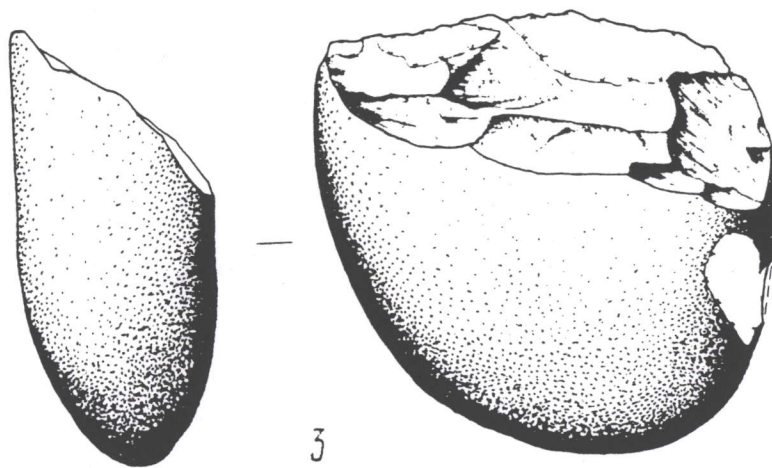
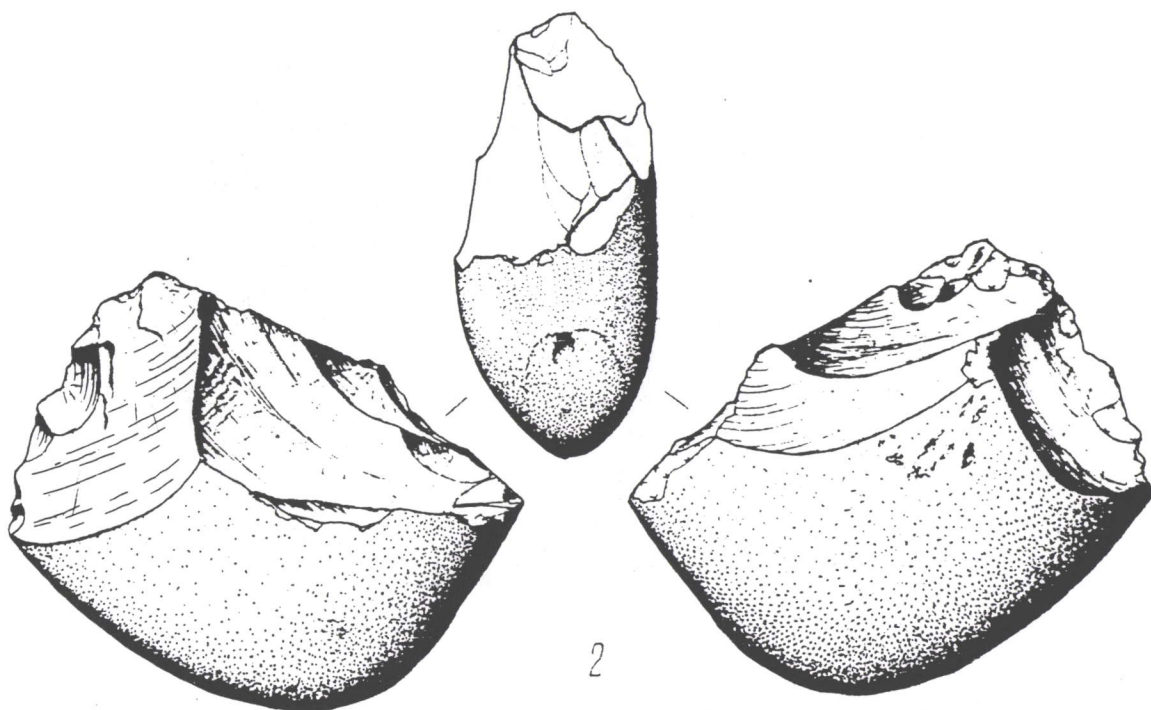
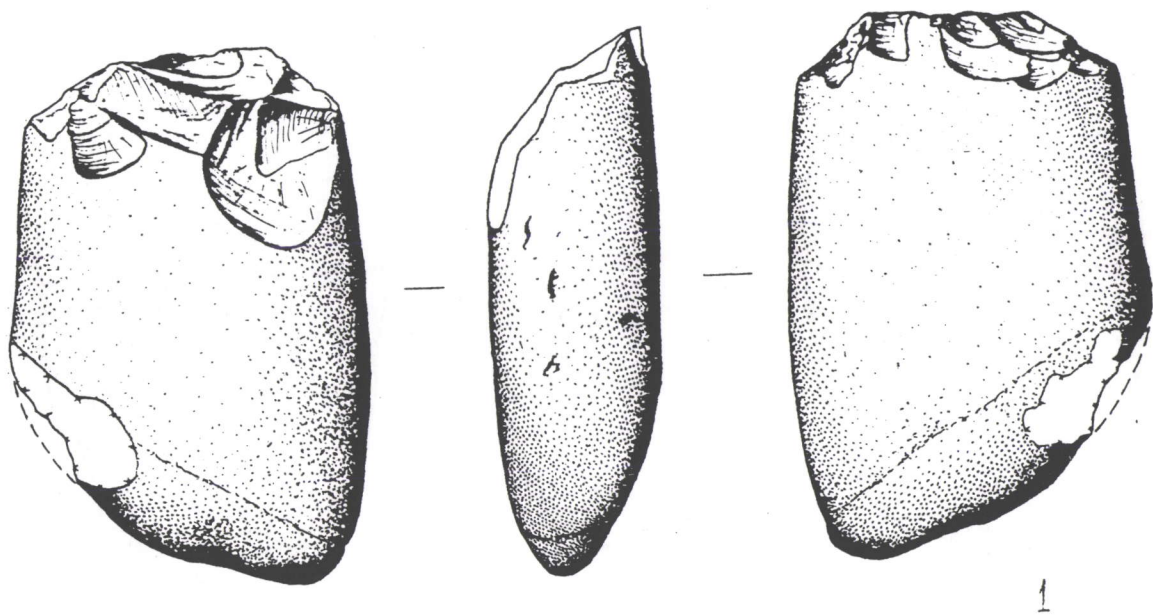
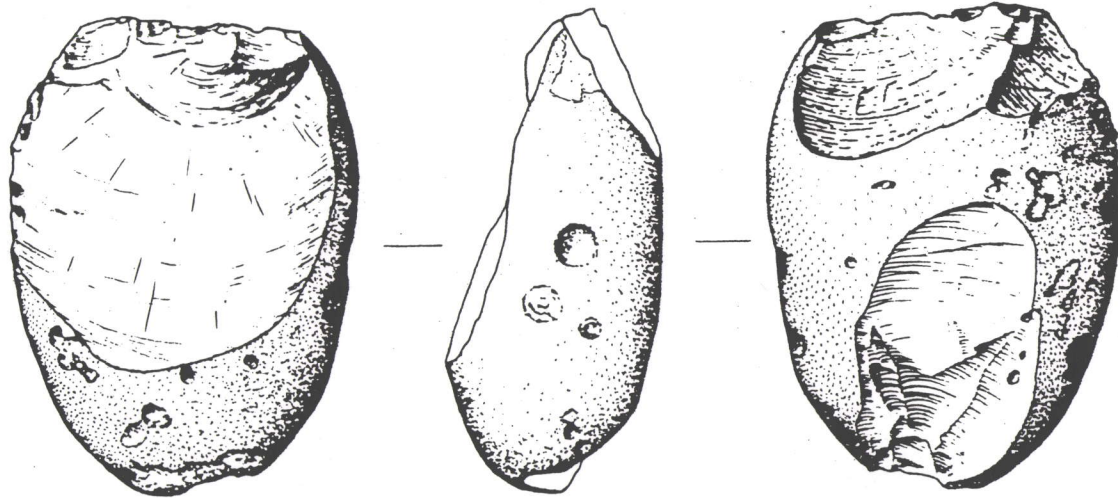
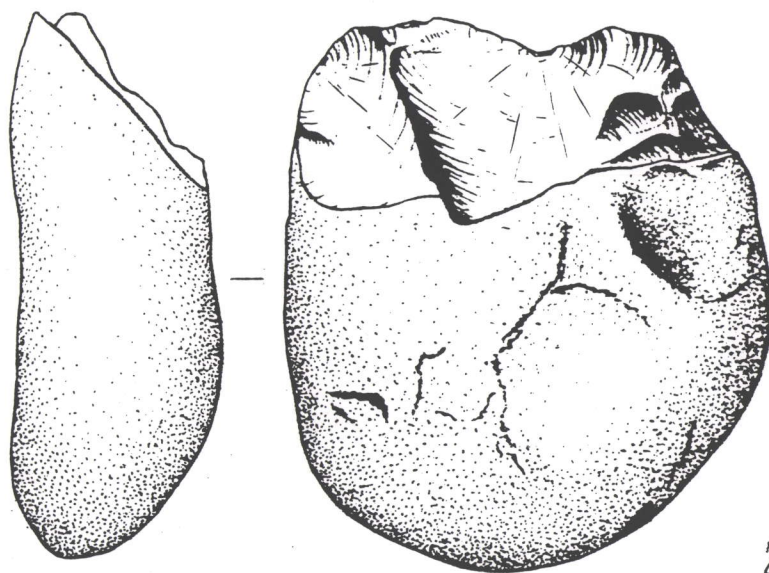


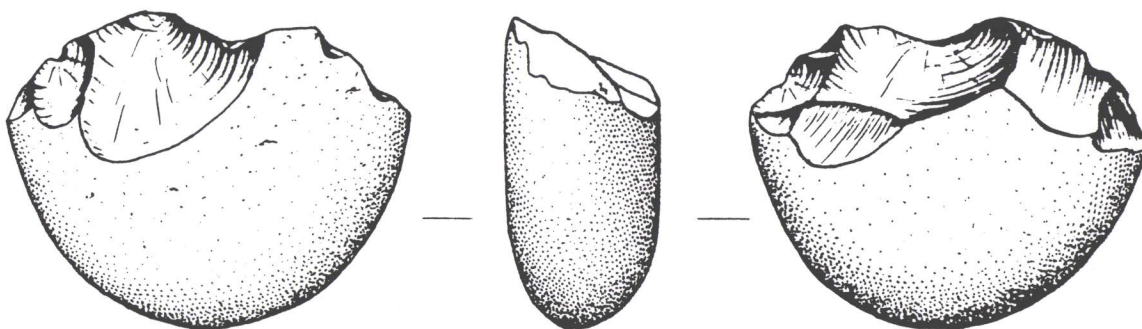
Figure 2 : Gaspra : Choppers.
(1-3 : hornfels).



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Figure 3 : Gaspra : Choppers.
(1 : hornfels; 2-3 : quartzite).

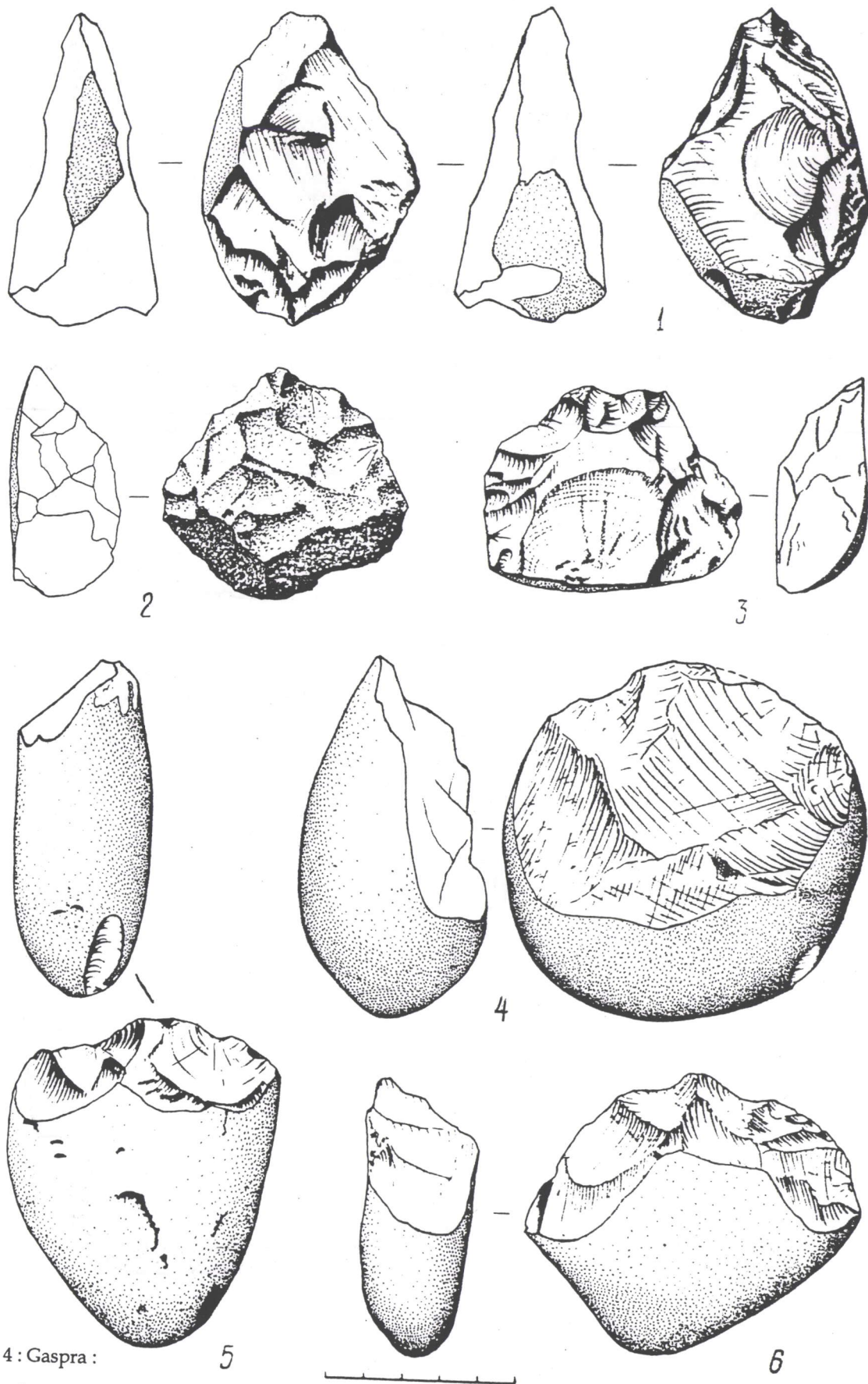


Figure 4 : Gaspra :

- 1 : proto-hand axe.
- 2, 3 : uniface.
- 4-6 : choppers.
- 1-4, 6 : quartzite; 5 : hornfels.

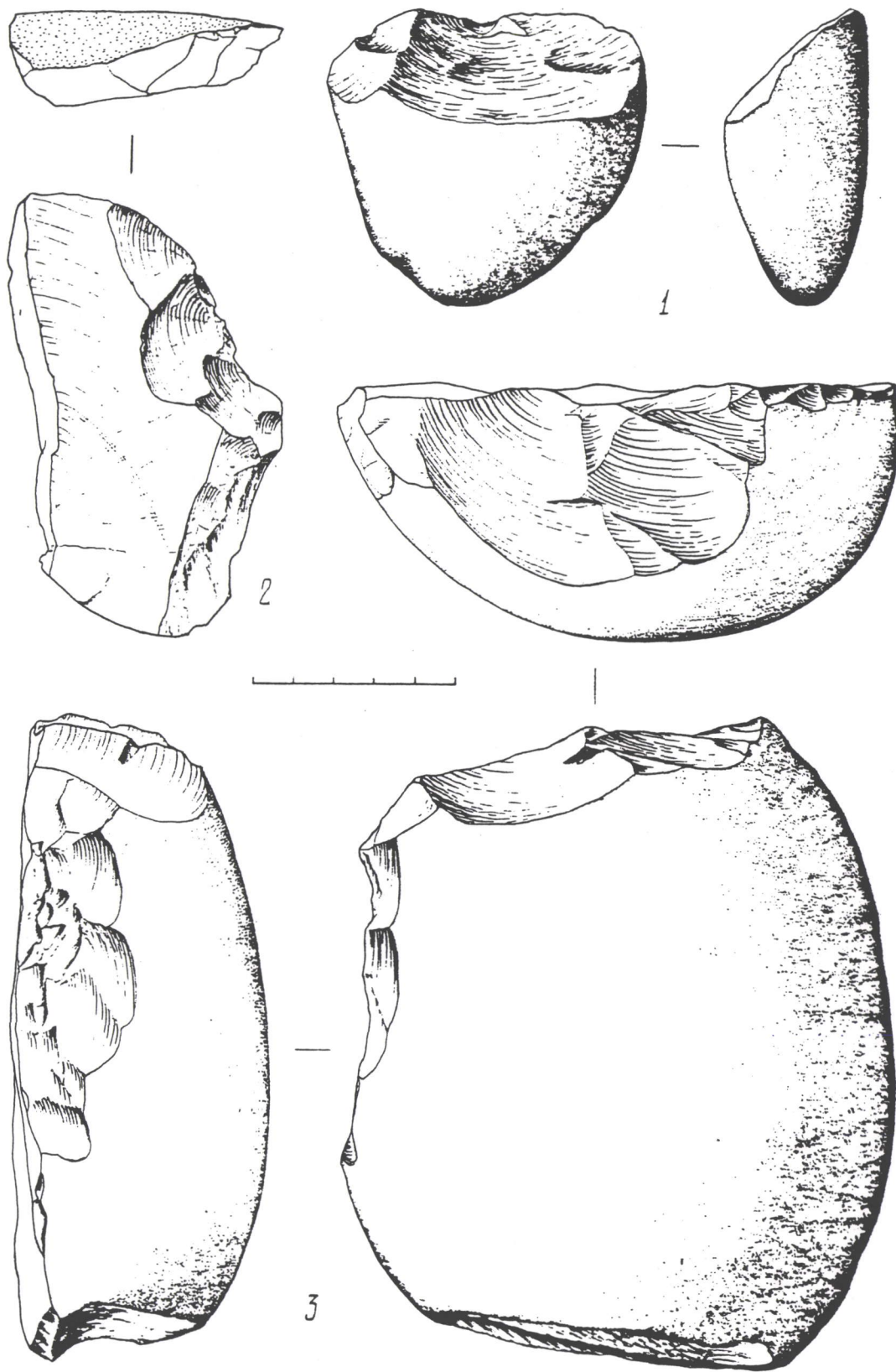


Figure 5 : Gaspra :

- 1 : Chopper.
- 2 : Side-scraper.
- 3 : Pebble with traces of chopping.
(quartzite).

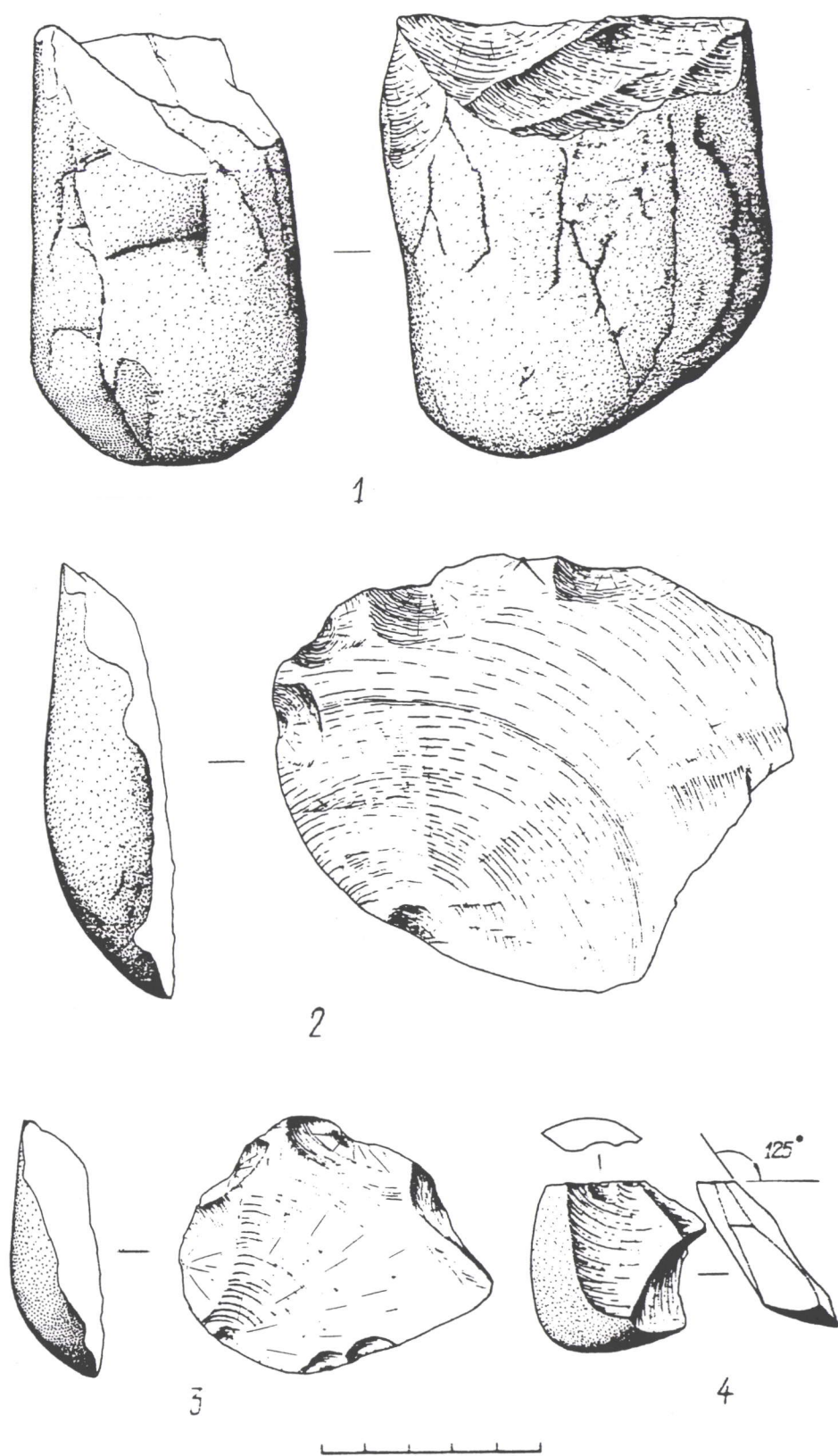


Figure 6 : Artek :

- 1 : Chopper.
- 2-3 : Unifaces.
- 4 : "Citrus" flake from the chopper.
(1-quartzite; 2-4 : diabase)

