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KABAZI V: INTERSTRATIFICATION OF
MICOQUIAN & LEVALLOIS-MOUSTERIAN
CAMP SITES

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Chapter 13

Kabazi V, Sub-Unit III/7: Artefacts

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This sub-unit was first discovered and investigated in 2003. Sub-unit III/7 comprises a total of three different levels: III/7-1, III/7-2 and III/7-3. However, it should be remarked that these levels are not uninterrupted scatters of surface finds, but depressions caused by erosion to the surface of lithological layer 14A, which – in turn – became filled with sediment from lithological layer 12A (Chapter 1, this volume). These depressions take the form of amorphous shallow pits. The investigated areas of archaeological levels III/7-1 and III/7-2 measure ca. 3.5 m², and level III/7-3 was excavated in an area of around 1 m².

The flint material from sub-unit III/7 has been analysed following a classification system developed by Gladilin (1976), and subsequently adopted for Crimean Middle Palaeolithic studies (Chabai and Demidenko 1998). Typological and technological characteristics of artefact assemblages from levels III/7-1 and III/7-2 suggest that these can be attributed to mixed complexes with both Levallois-Mousterian and Crimean Micoquian characteristics. On the other hand, the assemblage from level III/7-3 can be assigned to the Crimean Micoquian.

STRUCTURE OF THE ARTEFACT ASSEMBLAGE

The 8,291 artefacts recovered from sub-unit III/7 (Table 13-1) can be subdivided into three main groups. The first group (8,278 items) comprises products from flint processing which can be subdivided into six artefact categories (chunks, chips, flakes, blades, preforms, and tools; Table 13-1). The most numerous category in this group are chips, which make up 96.76% of all flint processing products. Among blanks larger than 3 cm, flakes are dominant, i.e. in the essential count (without chips and chunks) they constitute 68.05% of blanks, with blades numbering nigh on 6 times fewer pieces. The same relation is observed for all other archaeological levels, except for level III/7-3 (Table 13-1). Tools in the essential counts vary from 14% in level III/7-3, and up to 24% in level III/7-1 (Table 13-1). In

level III/7-1 tools are represented by unifacial forms. A single complete bifacial leaf-shaped tool was discovered in level III/7-3, and one unidentifiable fragment of a bifacial tool was recovered from level III/7-2.

The second group of archaeological artefacts comprises bone retouchers (Table 13-1). These tools, which would have been essential for flint treatment, are found in all archaeological levels. Finally, the third group is natural river pebbles. These were found only in archaeological level III/7-1, whereby none show traces of use.

The characteristic features of sub-unit III/7 artefact structure are 1) a low to middle range tool ratio, 2) the absence of cores and bifacial preforms, and 3) the dominance of unifacial tools.

Chunks

Chunks were found in two archaeological levels: III/7-1 and III/7-2 (Table 13-1), whereby in excess of 74 % stem from level III/7-2. Chunks can be described as the naturally split fragments of flint from either nodules or plaquettes. A chunk from level III/7-1 was burnt. Due to their limited sizes, chunks from sub-unit III/7 are too small to be considered a raw material reserve; in fact, they might be considered as waste of resources, originating as they do from the utilization of poor-quality nodules. Practically all chunks have dimensions not exceeding 5 cm. The largest observed chunk was encountered in level III/7-1 (length: 52.87 mm, width: 36.21 mm, and thickness: 13.68 mm). On the other hand, average dimensions of chunks are as follows: length – 31.12 mm, width – 20.25 mm, and thickness – 11.42 mm.

Preforms

Only a single item from this category was recorded in sub-unit III/7; a preform fragment was found in level III/7-3 (Table 13-1). Due to its small size (length: 20.26 mm; width: 36.41 mm; thickness: 18.81 mm), it is unclear whether this artefact is the preform of a core or of a bifacial tool.

Blank variability

Blanks from sub-unit III/7 include chips, flakes, and blades. Among blanks, chips are the most frequently observed (97.15 %; Table 13-2). Further, regular chips and chips with broken butts prevail. Chips (1.0 – 2.9 cm) from bifacial thinning make up 27.24 % (Table 13-3) of chips with identifiable striking platforms. The percentages of bifacial thinning chips in chip assemblages from each of the respective levels is as follows: level III/7-1 – 24.68 %; level III/7-2 – 27.7 %; and level III/7-3 – 35.38 %. Similar ratios of bifacial thinning chips have previously been encountered in levels III/1 (22.29 %) and III/2 (35.85 %), both of which have been shown to have yielded Micoquian assemblages. Among flakes and blades, items from bifacial thinning are represented by relatively small amounts, from 1.53 % to 5.76 % in levels III/7-1 and III/7-2, respectively. The blade index of sub-unit III/7 lies at 15.74. The variation in blade indexes ranges from 13.85 in level III/7-1 to 15.38 in level III/7-2. On the whole, blade indexes in archaeological levels belonging to sub-unit III/7 fall within the parameters considered characteristic for the Crimean Micoquian.

In sum, the presence of bifacial thinning items among all types of removals, the complete absence of cores, as well as the low blade index, are all suggestive of the fact that the majority of blanks resulted from the production of bifacial tools.

<i>Flint artefacts</i>	III/7-1	III/7-2	III/7-3	Total:	%	ess %
Chunks	7	20	.	27	0.33	.
Preforms	.	.	1	1	0.01	0.41
Chips	3,745	4,034	231	8,010	96.76	.
Flakes	42	113	9	164	1.98	68.05
Blades	8	18	3	29	0.35	12.03
Tools	16	29	2	47	0.57	19.51
Total:	3,818	4,214	246	8,278	100.00	100.00

<i>Pebble & bone artefacts</i>	III/7-1	III/7-2	III/7-3	Total:
Pebble fragments	3	.	.	3
Bone retouchers	4	4	2	10
Total:	7	4	2	13

Table 13-1 Kabazi V, sub-unit III/7: artefact totals.

Chips

Chips are the most numerous artefacts in the sub-unit III/7 assemblage (Table 13-3), as such have been subdivided into five different groups: “regular” chips, bifacial thinning chips, rejuvenating chips, broken chips, and small chips (measuring from 0.1 to 0.9 cm in length). Due to the small size of those pieces attributed to the latter group, it proved difficult to differentiate between those stemming from “regular” and those from “bifacial” thinning processes. Bifacial thinning chips are characteristic for all levels of sub-unit III/7, and they make up about a quarter of all identifiable chips from each of the levels. As a rule, such a high percentage of bifacial thinning chips is characteristic for Micoquian complexes and attests to the on-site production of

bifacial tools. Usually, the percentages of “bifacial thinning chips” in Levallois-Mousterian assemblages are three times lower, and as such reflect the preparation of supplementary platforms on cores, e.g. the percentage of “bifacial thinning chips” in Kabazi V, IV/1 (WCM industry) is 7.63 % of all identifiable chips.

Additionally, in archaeological levels III/7-1 and III/7-2, a series of diagnostic removals from the renewal of distal tips of bifacial convergent tools was observed – bifacial thinning removal of type “3B” after Yu. Demidenko (Demidenko 2004a, 2004b). In archaeological levels III/7-1 and III/7-2 rejuvenating tips make up 9.21 % and 10.79 %, respectively, of all bifacial thinning and rejuvenating chips.

	III/7-1	III/7-2	III/7-3	Total:	%
Chips *	3,670	3,881	208	7,759	94.08
Bifacial thinning & rejuvenating chips *	76	154	23	253	3.07
Flakes *	55	125	9	189	2.29
Bifacial thinning flakes *	1	7	1	9	0.11
Blades *	9	22	3	34	0.41
Bifacial thinning blades *	.	2	1	3	0.04
Total:	3,811	4,191	245	8,247	100.00

* including tools

Table 13-2 Kabazi V, sub-unit III/7: blank variability as numbers and percentages of each type.

	cm	III/7-1	III/7-2	III/7-3	Total:	ess %
Regular	1.0 - 1.9	174	306	31	511	55.00
	2.0 - 2.9	58	96	11	165	17.76
Bifacial	1.0 - 1.9	55	109	16	180	19.38
	2.0 - 2.9	14	30	7	51	5.49
Rejuvenating	0.1 - 0.9	4	2	.	6	0.65
	1.0 - 1.9	2	12	.	14	1.51
	2.0 - 2.9	1	1	.	2	0.21
Broken	1.0 - 1.9	536	932	87	1,555	.
	2.0 - 2.9	100	158	24	282	.
Other chips	0.1 - 0.9	2,801	2,388	55	5,244	.
Total:		3,745	4,034	231	8,010	100.00

Table 13-3 Kabazi V, sub-unit III/7: dimensions of chips.

Flakes and blades

Flakes make up 84.26 % of all removals larger than 3 cm. The rest is represented by blades (Table 13-2). The percentages of bifacial thinning flakes and blades are rather small (1.53 – 5.76 %) for Micoquian standards, but too high to be accepted as characteristic for WCM complexes. There are no rejuvenating blades and flakes. At the same time, five *débordante* flakes and blades, and one Levallois flake were found in level III/7-2.

Blank dimensions

In all archaeological levels of sub-unit III/7 there is observed an insignificant prevalence of blank length over blank width for all complete flakes (Table 13-4). Thus, generally speaking, it cannot be stated that elongated blanks among flakes are typical for sub-unit III/7. Furthermore, between 35 % (level III/7-1) and up to 43 % (level III/7-2) of flakes are characterised by transverse proportions, i.e. whereby the width prevails over the length (Fig. 13-1; 13-2). Most flakes range from between 3 and 4 cm in length / width (Fig. 13-1; 13-2), although there are a few flakes longer than 5 cm. The sub-unit III/7 blade assemblage is statistically incomplete to be of significance for parameter studies.

Whereas in level III/7-1 unifacial tools are smaller than unretouched flakes and blades (Fig. 13-1), in

level III/7-2 unifacial tools are longer than the latter (Fig. 13-2). At the same time, they do not form a clearly separate cluster of artefacts. Also, in both levels the majority of unifacial tools was made on elongated blanks.

Platform dimensions

The most prominent feature with regard to platform dimensions is the observation that in level III/7-2 blanks with the widest and thickest striking platforms were used for tool production (Table 13-4). This fact once again substantiates that only the largest blanks in this level were used for tool production (Fig. 13-1; 13-2). Further, it may be assumed that some of the unifacial tools found in this same level were actually imported to the site, and were therefore not connected with on-site flint reduction.

Surface cortex

66.67 % of blanks in sub-unit III/7 display cortex on their dorsal surfaces (Table 13-5). With the exception of bifacial thinning flakes, the different blank groups comprise between 66.49 % and 73.53 % of pieces with dorsal cortex coverage. The highest percentage (73.53 %) of corticated blanks is found among “regular” blades, while the lowest percentage (44.44 %) is observed among bifacial thinning flakes.

In each of the blank groups the majority of pieces demonstrate the minimal percentage of

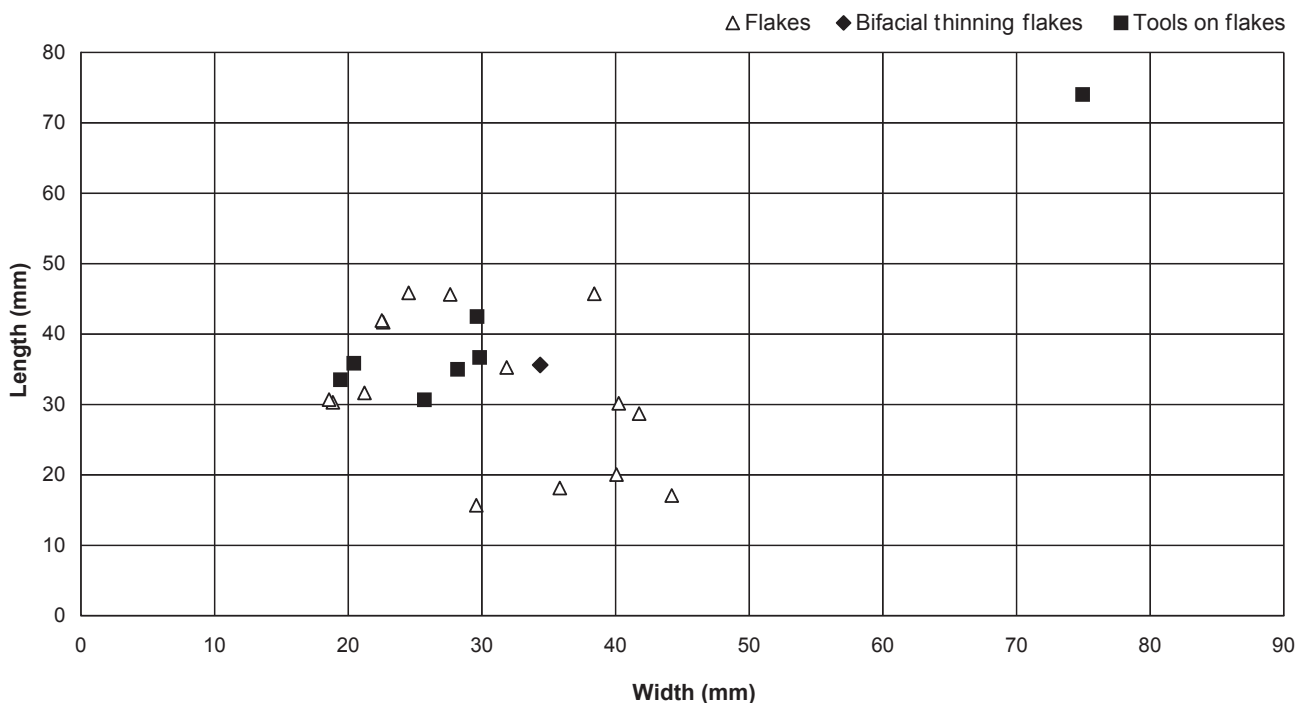


Fig. 13-1 Kabazi V, level III/7-1: distribution of flake types, by length/width parameters.

	Blank types	III/7-1	III/7-2	III/7-3
Length	flakes including tools	34.27	33.24	31.24
	blades including tools	51.40*	48.42	34.26*
	blanks (flakes & blades)	35.99	35.19	24.46
	tools	44.04	46.77	.
Width	flakes including tools	32.66	31.55	28.77
	blades including tools	24.43*	18.59	14.94*
	blanks (flakes & blades)	29.86	29.04	24.16
	tools	30.95	28.74	.
Thickness	flakes including tools	7.11	5.84	5.99
	blades including tools	5.73	5.19	5.23*
	blanks (flakes & blades)	6.83	5.72	5.74
	tools	8.68	7.64	.
Platform width	flakes including tools	13.63	16.49	16.53
	blades including tools	13.51	7.46	7.22
	blanks (flakes & blades)	13.62	15.32	13.43
	tools	11.61	15.77	.
Platform thickness	flakes including tools	3.73	4.46	4.61
	blades including tools	6.82	3.20	4.31
	blanks (flakes & blades)	4.08	4.29	4.51
	tools	4.85	5.50	.

*the number of artefacts is < 3 pieces

Table 13-4 Kabazi V, sub-unit III/7: average dimensions of blanks and blank platforms (mm).

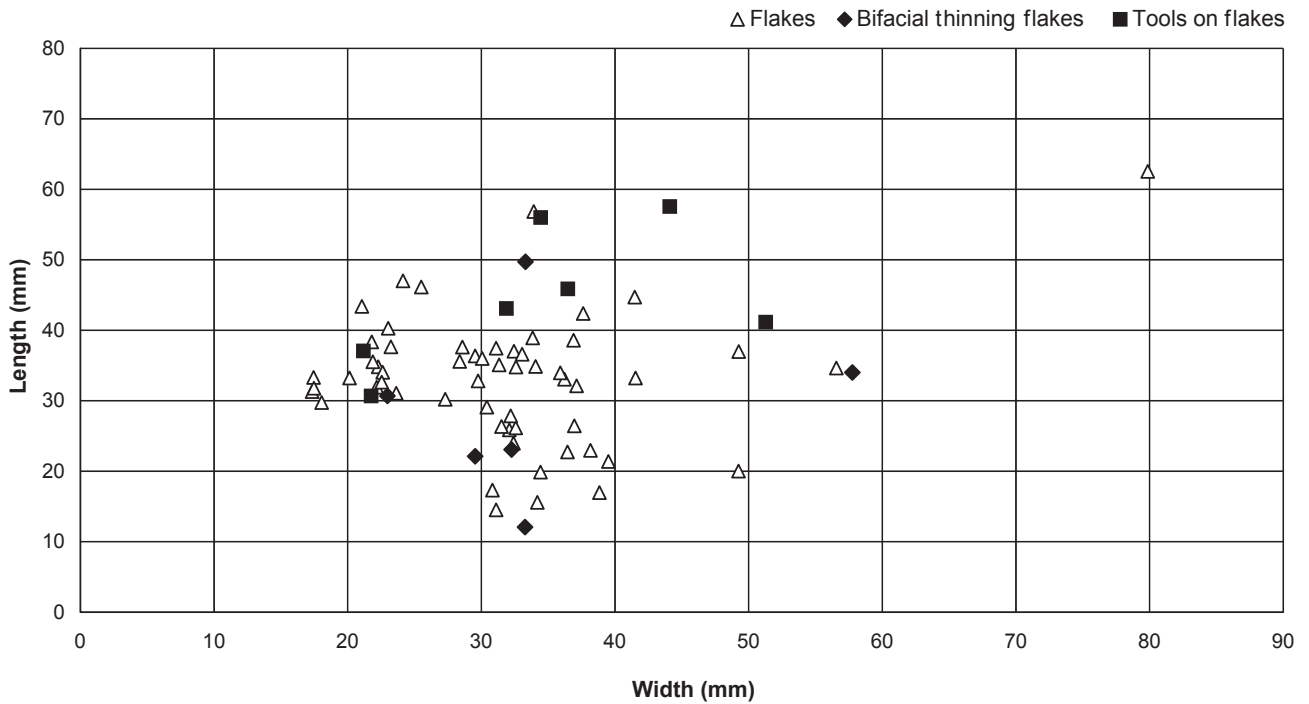


Fig. 13-2 Kabazi V, level III/7-2: distribution of flake types, by length/width parameters.

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
0 %	18	43	3	64	27.00
1-25 %	16	43	2	61	25.74
26-50 %	6	17	2	25	10.55
51-75 %	3	8	.	11	4.64
76-100 %	12	15	3	30	12.66
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
0 %	.	4	1	5	2.11
1-25 %	1	3	.	4	1.69
26-50 %	.	.	.	.	.
51-75 %	.	.	.	.	.
76-100 %	.	.	.	.	.
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
0 %	1	7	1	9	3.80
1-25 %	4	9	1	14	5.91
26-50 %	2	2	1	5	2.11
51-75 %	.	1	.	1	0.42
76-100 %	2	3	.	5	2.11
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
0 %	.	1	.	1	0.42
1-25 %	.	1	1	2	0.84
26-50 %	.	.	.	.	.
51-75 %	.	.	.	.	.
Total:	.	2	1	3	1.27

Table 13-5 Kabazi V, sub-unit III/7: flakes & blades – dorsal cortex.

cortex (<25 %) on their dorsal surfaces. Blanks with >50 % of cortex on their dorsal surfaces are found exclusively among “regular” flakes and blades; they are not numerous and make up 14.77 % of the total amount of blanks.

Dorsal scar patterns

A total of 12 different types of dorsal scar patterns have been identified on blanks from sub-unit III/7. The maximum variability of dorsal scar patterns is found on flakes (Table 13-6). Whereas the most frequently observed dorsal scar patterns on flakes are the cortex, converging and unidirectional variants, among blades the most widespread are unidirectional types. The presence of such scar patterns as unidirectional, unidirectional-crossed, bidirectional-crossed, and especially crested flakes, are all attributes considered characteristic of Western Crimean Mousterian (WCM) complexes. In the flake assemblage from level III/7-2 these types of dorsal scar patterns compose 55 %

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Cortex	10	15	3	28	11.81
Lateral	.	2	.	2	0.84
Bilateral	.	1	.	1	0.42
Radial	.	1	.	1	0.42
Converging	10	16	3	29	12.24
Unidirectional	7	33	1	41	17.30
Unidirect.-crossed	2	14	.	16	6.75
Bidirectional	4	15	.	19	8.02
Bidirect.-crossed	1	2	1	4	1.69
Crested	3	5	.	8	3.38
Janus	.	1	.	1	0.42
Unidentifiable	18	21	2	41	17.3
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Lateral	.	1	.	1	0.42
Converging	.	2	1	3	1.27
Unidirectional	1	2	.	3	1.27
Bidirectional	.	2	.	2	0.84
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Cortex	2	3	.	5	2.11
Unidirectional	5	4	2	11	4.64
Unidirect.-crossed	.	6	.	6	2.53
Bidirectional	1	1	.	2	0.84
Bidirect.-crossed	.	5	.	5	2.11
Crested	.	2	1	3	1.27
Unidentifiable	1	1	.	2	0.84
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Converging	.	1	.	1	0.42
Unidirectional	.	.	1	1	0.42
Crested	.	1	.	1	0.42
Total:	.	2	1	3	1.27

Table 13-6 Kabazi V, sub-unit III/7: flakes & blades – dorsal scar patterns.

of all identified types, whereby unidirectional scar patterns are the most frequent (Table 13-6). A prevalence of unidirectional scar patterns, together with numerous flakes displaying unidirectional-crossed, bidirectional-crossed and crested dorsal scar patterns, are indirect evidence that at least 55 % of flakes were obtained from cores using a parallel system of reduction. A similar system of core reduction is also typical for WCM industries. Further, the practically equal ratios of dorsal scar pattern types found in the blade assemblage from level III/7-2 (Table 13-6) serve to confirm the previous assumption regarding the characteristic system of core reduction in this level.

Axis

On-axis blanks prevail, with 72.67 % of all flakes and blades being recognised as such (Table 13-7). Among regular flakes 66.14 % are on-axis. The highest percentage of off-axis blanks was found among bifacial thinning flakes (50 %).

Shapes

Flakes are usually either trapezoidal, rectangular or crescent-shaped (Table 13-8). More than 70 % of all identifiable blanks are either trapezoidal or are trapezoidal elongated “regular” flakes. “Bifacial thinning flakes” are represented by trapezoidal shapes only (Table 13-8). Among blades rectangular shaped artefacts are dominant, this shape being observed for 64.28 % of all identifiable blades (Table 13-8).

Lateral profiles

Among “regular” flakes a large part of blanks (30.36 %) displays an incurvate medial profile (Table 13-9), followed by pieces with twisted (24.08 %), incurvate distal (14.14 %), convex (4.71 %) and flat (4.19 %) profiles. Only a small number of flakes with a convex profile were recorded in levels III/7-1 and III/7-2.

Among “bifacial” thinning flakes the incurvate medial profile is also characteristic. Flat and incurvate distal profiles are insignificant among these artefacts (Table 13-9).

The twisted profile is the most frequent among “regular” blades (Table 13-9). Blades with a twisted profile make up 59.46 % all identifiable blades, followed by “regular” blades with incurvate medial profile (35.14 %). Less than 3 % of blades have a flat profile. Bifacial thinning blades are represented in practically equal proportions by blanks with incurvate medial and twisted profiles (Table 13-9).

Distal profiles

Hinged and feathering types of distal termination are the most frequently observed among flakes from sub-unit III/7, with 52.08 % and 41.67 %, respectively (Table 13-10). Among “regular” and “bifacial thinning” flakes the hinged type of distal end is predominant. The blunt and overpassed variations are not numerous and are considered characteristic for “regular” flakes only. Flakes with overpassed distal profiles were discovered solely in archaeological level III/7-2 (Table 13-10). The majority of blades is characterised by a feathering distal profile. Hinged profiles are not numerous, but do occur among “regular” blades. Other variations of end termination include one blade with an overpassed distal profile (level III/7-2) and one with a blunt (level III/7-1) distal profile. The distal ends of roughly half (45.83 %) of all blanks in sub-unit III/7 are missing.

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
On-axis	22	59	3	84	35.44
Off-axis	10	30	3	43	18.14
Unidentifiable	23	37	4	64	27.00
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
On-axis	1	3	.	4	1.69
Off-axis	.	4	.	4	1.69
Unidentifiable	.	.	1	1	0.42
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
On-axis	9	22	3	34	14.35
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
On-axis	.	2	1	3	1.27
Total:	.	2	1	3	1.27

Table 13-7 Kabazi V, sub-unit III/7: flakes & blades – axes.

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Rectangular	4	13	1	18	7.59
Triangular	1	5	.	6	2.53
Trapezoidal	23	57	5	85	35.86
Trapezoidal elongated	1	2	.	3	1.27
Leaf-shaped	.	1	.	1	0.42
Ovoid	1	.	.	1	0.42
Crescent	2	7	1	10	4.22
Irregular	1	.	.	1	0.42
Unidentifiable	22	41	3	66	27.85
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Trapezoidal	1	7	1	9	3.80
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Rectangular	5	11	2	18	7.59
Trapezoidal elongated	2	4	.	6	2.53
Crescent	.	2	.	2	0.84
Unidentifiable	2	5	1	8	3.38
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Trapezoidal elongated	.	1	.	1	0.42
Crescent	.	1	.	1	0.42
Unidentifiable	.	.	1	1	0.42
Total:	.	2	1	3	1.27

Table 13-8 Kabazi V, sub-unit III/7: flakes & blades – shapes.

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Flat	2	6	·	8	3.38
Incurvate medial	14	41	3	58	24.47
Incurvate distal	6	21	·	27	11.39
Twisted	13	29	4	46	19.41
Convex	3	6	·	9	3.80
Unidentifiable	17	23	3	43	18.14
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Flat	1	·	·	1	0.42
Incurvate medial	·	6	·	6	2.53
Incurvate distal	·	1	1	2	0.84
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Flat	·	1	·	1	0.42
Incurvate medial	5	6	·	11	4.64
Twisted	4	15	3	22	9.28
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Incurvate medial	·	2	·	2	0.84
Twisted	·	·	1	1	0.42
Total:	·	2	1	3	1.27

Table 13-9 Kabazi V, sub-unit III/7: flakes & blades – lateral profiles

Cross-sections at midpoint

Among flakes and blades triangular and trapezoidal cross-sections are the most common. Whereas triangular cross-sections are dominant among “regular” blanks, trapezoidal cross-sections are most numerous among “bifacial thinning” blanks (Table 13-11). Also, trapezoidal cross-sections are characteristic for all types of blades. Less representative types of midpoint cross-sections for all groups of blanks are convex, lateral steep, polyhedral and flat varieties, whereby the latter was found exclusively among “regular” flakes (Table 13-11). Lateral steep blanks are typical for “regular” removals, and constitute in level III/7-2 14.18 % of all identifiable items. Usually, the lateral steep blanks correspond to *débordante* removals, a supposedly characteristic feature of

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Feathering	15	39	4	58	24.47
Hinged	21	44	4	69	29.11
Overpassed	·	2	·	2	0.84
Blunt	2	5	·	7	2.95
Retouched	5	6	·	11	4.64
Missing	12	30	2	44	18.57
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Feathering	·	2	·	2	0.84
Hinged	1	5	·	6	2.53
Missing	·	·	1	1	0.42
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Feathering	4	11	1	16	6.75
Hinged	2	5	1	8	3.38
Overpassed	·	1	·	1	0.42
Blunt	1	·	·	1	0.42
Retouched	·	2	·	2	0.84
Missing	2	3	1	6	2.53
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Feathering	·	1	·	1	0.42
Missing	·	1	1	2	0.84
Total:	·	2	1	3	1.27

Table 13-10 Kabazi V, sub-unit III/7: flakes & blades – distal profiles.

WCM industries. The polyhedral cross-sections are not numerous. This type of cross-section is inherent to “regular” and “bifacial” flakes.

Platform preparation

Platforms covered by cortex are least numerous among “regular” blanks (Table 13-12). Also, this type of striking platform is not characteristic for “bifacial” blanks. Generally, in all archaeological levels of sub-unit III/7 prepared platforms are the most typical. These constitute 68.03 % of all identifiable butts. Polyhedral platforms are most important among flakes. In levels III/7-1 and III/7-2 dihedral and polyhedral butts of “regular” and “bifacial thinning” blades are found in almost equal proportions. Facetted butts do not exceed the sum of

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Flat	1	.	.	1	0.42
Triangular	15	22	.	37	15.61
Lateral steep	4	16	.	20	8.44
Trapezoidal	12	48	3	63	26.58
Polyhedral	1	4	1	6	2.53
Convex	5	14	3	22	9.28
Unidentifiable	17	22	3	42	17.72
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Triangular	1	1	.	2	0.84
Trapezoidal	.	5	1	6	2.53
Polyhedral	.	1	.	1	0.42
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Triangular	3	6	.	9	3.80
Lateral steep	1	3	.	4	1.69
Trapezoidal	4	10	3	17	7.17
Convex	1	3	.	4	1.69
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Triangular	.	1	.	1	0.42
Trapezoidal	.	1	1	2	0.84
Total:	.	2	1	3	1.27

Table 13-11 Kabazi V, sub-unit III/7: flakes & blades – mid-point cross-sections

dihedral and polyhedral butts in all archaeological levels of sub-unit III/7 (Table 3-12). Faceting indexes are as follows: level III/7-1, Ifs – 14.81, Ifl – 74.07; level III/7-2, Ifs – 19.76, Ifl – 67.44; level III/7-3, Ifs – 22.22, Ifl – 55.55. A low amount of faceted striking platforms is a characteristic feature of the Crimean Micoquian. At the same time, in level III/7-2 a quarter of unifacial tool butts are faceted. In other levels striking platforms on unifacial tools are plain or polyhedral, i.e. this is further indirect evidence that the unifacial tool assemblage in level III/7-2 was imported to the site.

Platform lipping

84.06 % of platforms are unlipped (Table 13-13). Blanks with unlipped platforms prevail among

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Cortex	1	6	.	7	2.95
Plain	6	16	1	23	9.70
Dihedral	4	7	.	11	4.64
Polyhedral	9	28	2	39	16.46
Facetted	3	11	2	16	6.75
Crushed	6	17	1	24	10.13
Missing by retouch	1	.	.	1	0.42
Missing	25	41	4	70	29.54
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Plain	.	1	1	2	0.84
Dihedral	1	.	.	1	0.42
Polyhedral	.	3	.	3	1.27
Facetted	.	3	.	3	1.27
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Cortex	.	1	1	2	0.84
Plain	.	3	1	4	1.69
Dihedral	1	1	.	2	0.84
Polyhedral	1	1	.	2	0.84
Facetted	1	3	.	4	1.69
Crushed	2	2	1	5	2.11
Missing	4	11	.	15	6.33
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Plain	.	1	.	1	0.42
Polyhedral	.	1	1	2	0.84
Total:	.	2	1	3	1.27

Table 13-12 Kabazi V, sub-unit III/7: flakes & blades – platform types.

“regular” flakes and blades. Semi-lipped and lipped platforms are less representative. Together, semi-lipped and lipped platforms make up 16.94 % of all identifiable platforms. Among the lipped pieces, blanks with semi-lipped platforms are twice as frequent as the lipped items. There are no lipped platforms among “regular” flakes and blades.

Platform angles

A total of 70.97 % of identifiable flakes display obtuse platforms (Table 13-14). Half of all identifiable blade platforms are either right angled or close to it. Among “bifacial thinning” flakes and blades obtuse platforms are the most dominant; at the same time these are one of the most important attributes when defining bifacial thinning debitage.

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Unlipped	17	68	3	88	37.13
Semi-lipped	4	4	2	10	4.22
Lipped	.	.	.	.	.
Unknown	34	54	5	93	39.24
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Unlipped	.	2	.	2	0.84
Semi-lipped	1	.	1	2	0.84
Lipped	.	5	.	5	2.11
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Unlipped	3	8	2	13	5.49
Semi-lipped	.	1	.	1	0.42
Unknown	6	13	1	20	8.44
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Semi-lipped	.	1	.	1	0.42
Lipped	.	1	1	2	0.84
Total:	.	1	1	2	1.27

Table 13-13 Kabazi V, sub-unit III/7: flakes & blades – platform lipping.

Tools

Tools were found in all archaeological levels of sub-unit III/7 (Table 13-1). In 62.22% of cases, tools were made on flakes (Table 13-15). Blades served as blanks for 17.78% of tools. A few tools were made either on chips, natural flakes or bifacial thinning debitage. In the assemblage from level III/7-2 the sizes of unifacial tools correspond to the largest unretouched blanks (Fig. 13-2). On the other hand, in level III/7-1 this trend is not observed (Fig. 13-1). The general feature for all unifacial tools in sub-unit III/7 is the prevalence of elongated proportions, especially in archaeological level III/7-1. Unifacial tools with faceted striking platforms constitute three of the twelve complete examples. All of these tools were found in level III/7-2; two were made on blades and one on a flake.

The artefacts constituting the tool-kit from sub-unit III/7 can be subdivided into five different tool classes: points, scrapers, bifacial points, retouched pieces, and unidentifiable retouched fragments. In the essential count, scrapers are the most numerous (66.66 %) (Table 13-16). Points make up 28.58 % of tools in the essential count. Bifacial tools are represented by just two pieces, one of which is a complete bifacial point, the other an unidentifiable fragment.

	III/7-1	III/7-2	III/7-3	Total:	%
<i>Flakes & tools on flake</i>					
Right, 90°	3	25	1	29	12.24
Obtuse, > 110°	18	47	4	69	29.11
Unknown	34	54	5	93	39.24
Total:	55	126	10	191	80.59
<i>Bifacial thinning and rejuvenating flakes & tools on bifacial thinning and rejuvenating flake</i>					
Obtuse, > 110°	1	7	1	9	3.80
Total:	1	7	1	9	3.80
<i>Blades & tools on blade</i>					
Right, 90°	.	5	2	7	2.95
Obtuse, > 110°	3	4	.	7	2.95
Unknown	6	13	1	20	8.44
Total:	9	22	3	34	14.35
<i>Bifacial thinning blades & tools on bifacial thinning blade</i>					
Obtuse, > 110°	.	2	1	3	1.27
Total:	.	2	1	3	1.27

Table 13-14 Kabazi V, sub-unit III/7: flakes & blades – platform angles.

All of these tools are found typically in the Crimean Micoquian tool-kit. The percentage of bifacial tools is 4.76 % of all identifiable tools, without retouched and thinned pieces.

Points

A total of six points were found in two of the three levels (Table 13-16). Four of these stem from level III/7-2. In 4 cases, flakes served as blanks in point productions, two were made on blades. The lengths of blanks used for points range from 33.51 to 59.94 mm, and have mainly elongated proportions. Off-axis blanks with transverse proportions were used for only one point from level III/7-2. Four points were made on on-axis blanks, and in one case this attribute cannot be distinguished. From a typological perspective, each of the points can be assigned to one of the following morphological groups: semi-leaf (Fig. 13-3, 1, 3, 7), semi-trapezoidal (Fig. 13-3, 2) and unidentifiable. One semi-leaf point has a thinned back and an alternative retouch (Fig. 13-3, 3). Other points have dorsal secondary treatment. Points were produced mainly using combinations of non-invasive scalar flat (Fig. 13-3, 1, 2) and invasive scalar semi-steep

	III/7-1	III/7-2	III/7-3	Total:	%
Tool on natural flakes	.	2	.	2	4.44
Tool on chips	1	1	.	2	4.44
Tool on flakes	11	16	.	27	60.00
Tool on blades	1	6	.	7	15.56
Tool on bifacial thinning flakes	.	1	.	1	2.22
Tool on bifacial thinning blades	.	.	1	1	2.22
Unidentifiable	3	1	1	5	11.12
Total:	16	27	2	45	100.00

Table 13-15 Kabazi V, sub-unit III/7: blank types used for tool production.

	III/7-1	III/7-2	III/7-3	Total	%	ess %
Points						
Semi-leaf, dorsal	.	2	.	2	4.25	10.00
Semi-leaf, alternative, thinned back	1	.	.	1	2.13	5.00
Semi-trapezoidal, dorsal	.	1	.	1	2.13	5.00
Unidentifiable	.	1	.	1	2.13	5.00
Scrapers						
Straight, dorsal	.	2	.	2	4.25	10.00
Convex, dorsal, terminally thinned	.	1	.	1	2.13	5.00
Concave, dorsal, thinned base	1	.	.	1	2.13	5.00
Double straight, dorsal	.	1	.	1	2.13	5.00
Straight-concave, dorsal	.	2	.	2	4.25	10.00
Double convex, dorsal	1	.	.	1	2.13	5.00
Semi-trapezoidal, dorsal	.	1	.	1	2.13	5.00
Sub-trapezoidal, dorsal	.	1	.	1	2.13	5.00
Sub-rectangular, dorsal	1	.	.	1	2.13	5.00
Semi-crescent, dorsal, thinned back	1	.	.	1	2.13	5.00
Convergent, dorsal, unidentifiable	.	1	.	1	2.13	5.00
Convergent, alternative, unidentifiable	.	1	.	1	2.13	5.00
Bifacial points						
Sub-leaf, thinned base	.	.	1	1	2.13	5.00
Retouched pieces						
On flake, lateral, dorsal	4	4	.	8	17.01	.
On flake, bilateral, dorsal	1	.	.	1	2.13	.
On flake, transverse, dorsal	.	2	.	2	4.25	.
On blade, lateral, dorsal	1	1	1	3	6.39	.
On blade, lateral, ventral	.	1	.	1	2.13	.
Unidentifiable						
Unifacial tools fragments	5	6	.	11	23.39	.
Bifacial tools fragments	.	1	.	1	2.13	.
Total:	16	29	2	47	100.00	100.00

Table 13-16 Kabazi V, sub-unit III/7: tools.

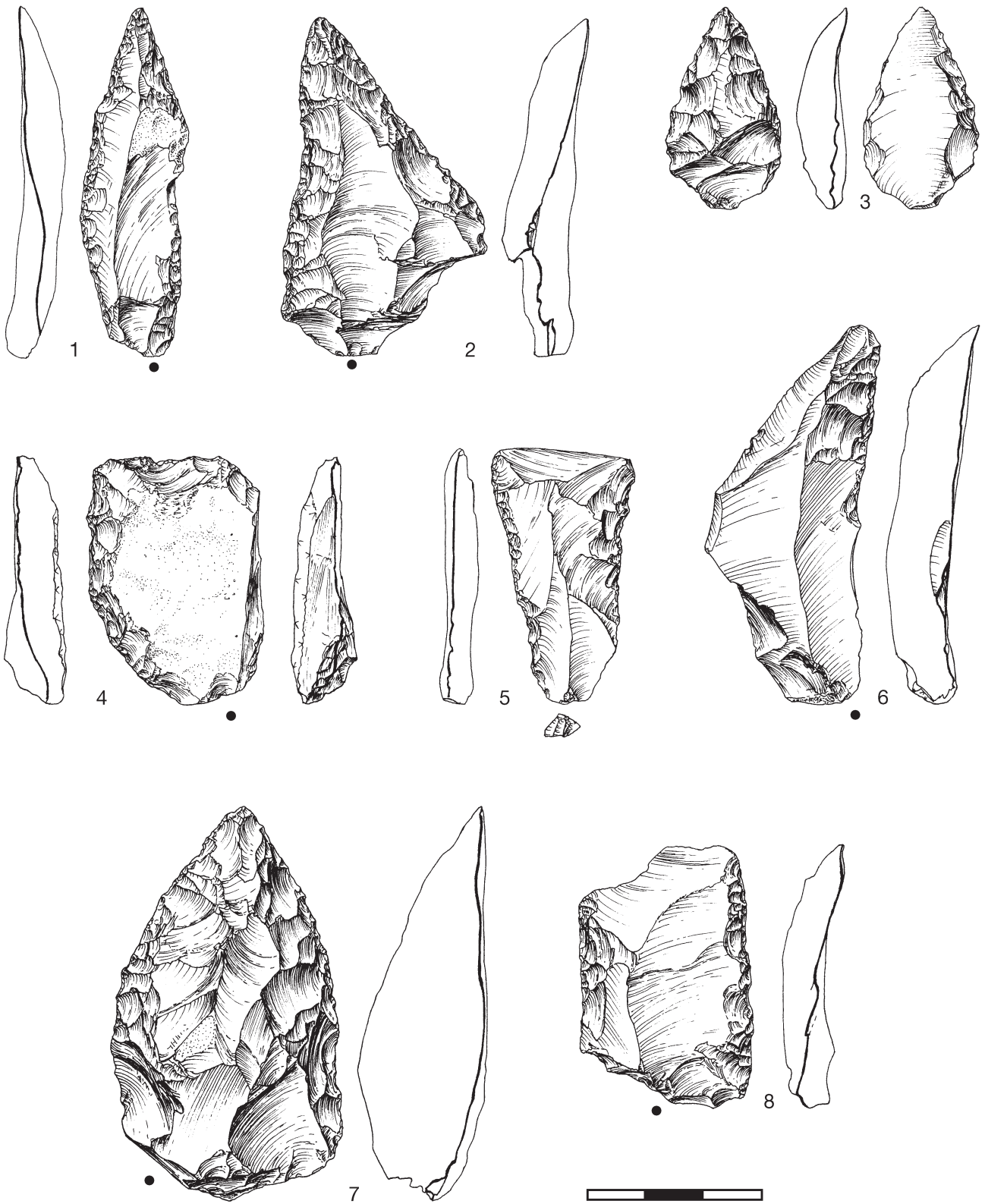


Fig. 13-3 Kabazi V, levels III/7-1 (2, 4, 6) and III/7-2 (1, 3, 5, 7, 8). Points: semi-leaf, elongated (1); semi-trapezoidal (2); semi-leaf, thinned back (3); semi-leaf (7). Scrapers: sub-rectangular, naturally backed (4); straight-concave (5); double straight (8). Retouched piece on blade (6). Tools made on blades (1, 6) and Levallois flake (5).

(Fig. 13-3, 3, 5) retouch. It is impossible to state unequivocally whether the collection of points corresponds more to the Western Crimean Mousterian or to Micoquian traditions; whereas the semi-leaf point with non-invasive retouch produced on a blade (Fig. 13-3, 1) is more typical of WCM complexes, the semi-trapezoidal point (Fig. 13-3, 2) is more important in Micoquian complexes.

Scrapers

Scrapers were found in two of the three levels (Table 13-16), the most pieces (N=10) stemming from level III/7-2. Scrapers are divided into 13 different types, whereby each of these is further subdivided into three basic morphological groups: simple (4), double (4) and convergent (6). Simple and double scrapers are represented by equal proportions of pieces. The most numerous pieces are convergent scrapers (42.86% of all scrapers). At the same time, in the level III/7-2 assemblage the sum of simple and double scrapers prevail over convergent scrapers (Table 13-16). In archaeological level III/7-1, in which four scrapers were found, the sum of simple and double types is equal to the number of convergent scrapers. Flakes are the basic blank for scraper manufacture (85.71%). Scrapers made on blades were recovered from level III/7-2. Among all scrapers, those pieces made on on-axis blanks prevail (12 out of 14 pieces); one item was made on an off-axis blank, and the axis type of one piece was not identifiable. There are nine unbroken scrapers. Whereas the majority of scrapers are between 4 and 5 cm long or wide, three complete scrapers are longer or wider than 5 cm. Scrapers were produced using different combinations of scalar, flat and/or semi-steep retouch, and sometimes even invasive retouch. Ventral thinning was observed on 4 of 12 of scrapers (Table 13-16).

Simple scrapers

Simple scrapers were recovered from levels III/7-1 and III/7-2 (Table 13-16). According to the shape of their working edge, simple scrapers are subdivided into three different types: straight – 2 items, convex – 1 item, and concave – 1 item. All simple scrapers display a dorsal retouch. Ventral thinning was carried out on two of four simple scrapers. One tool with a convex working edge has a distal thinned tip, and another concave scraper has ventral base thinning. With the exception of just one tool, all simple unifacial scrapers were made on flakes; in one case a blade was used. A similar situation was encountered with regard to the preference of on-axis and off-axis blanks for scraper production, with only one tool made on

an off-axis blank. Simple scrapers range in length from 30.70 to 74.02 mm, are between 21.76 and 74.95 mm wide, and from 8.79 mm to 15.91 mm thick.

Double scrapers

Double scrapers were discovered in the same levels as simple scrapers (Table 13-16), with the most pieces from archaeological level III/7-2. Consideration of their working edges allows a differentiation between double straight (Fig. 13-3, 8), straight-concave (Fig. 13-3, 5), and double convex pieces. All double-edge scrapers were treated by a dorsal retouch, and were produced on on-axis blanks. The straight-concave scraper from level III/7-2 was made on a Levallois flake (Fig. 13-3, 5). Double scrapers range in length from 36.67 to 47.14 mm, they are from between 24.64 and 31.88 mm wide and 6.00 mm to 12.00 mm thick.

Convergent scrapers

Convergent scrapers are the second most common morphological group of scrapers, being found in two levels of sub-unit III/7 (Table 13-16). Complete convergent scrapers can be assigned to one of three main shapes: trapezoidal (2 items), rectangular (1 item), and crescent (1 item). Trapezoid pieces are further subdivided into semi- and sub-trapezoidal scrapers (Table 13-16). There is only one rectangular (sub-rectangular) convergent scraper (Fig. 13-3, 4), and one crescent-shaped (semi-crescent) scraper. All convergent scrapers were made on on-axis flakes. Convergent scrapers are between 34.99 and 57.55 mm long, 28.18 to 44.10 mm wide, and 4.18 mm to 9.73 mm thick.

Bifacial points

The only complete bifacial tool was found in level III/7-3 (Table 13-16), a bifacial point, sub-leaf with thinned base (Fig. 13-4). This bifacial point was made in a plano-convex manner using a combination of scalar and sub-parallel retouch. The angles of the retouched edges vary from flat to semi-step. The bifacial point is 112.80 mm long, 37.54 mm wide, and 13.09 mm thick.

Retouched pieces

Retouched pieces were found in all levels of sub-unit III/7 (Table 13-16), although the majority actually stems from archaeological level III/7-2. Retouched pieces make up 29.77% of the total number of tools. Most pieces were made on flakes (78.57%). Blades served as the blanks for 21.43%

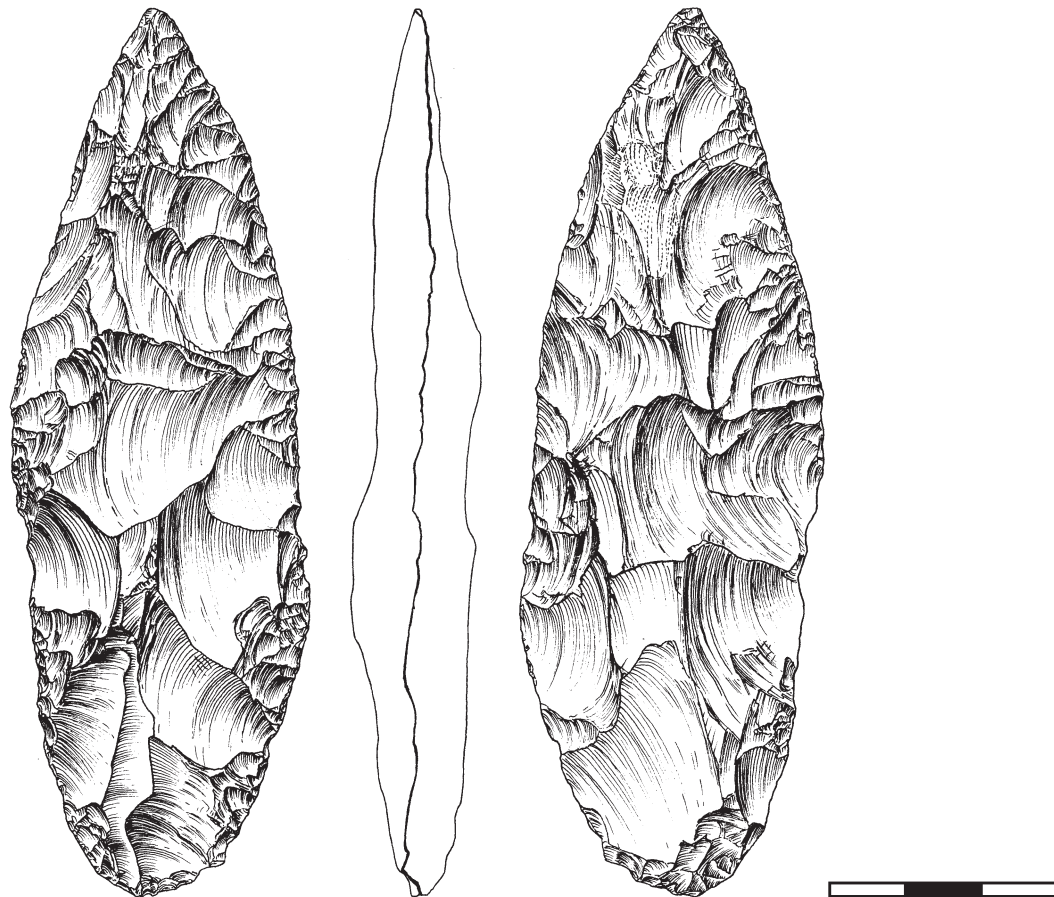


Fig. 13-4 Kabazi V, level III/7-3. Bifacial point, sub-leaf, thinned base.

of retouched pieces. The most common types of retouched pieces are either flakes or blades with one obversely retouched lateral edge (Fig. 13-3, 6), and correspond to 71.43% of all retouched pieces. Retouched pieces show no signs of elaboration, e.g. thinning or truncation.

Unidentifiable tools

All tiny tools fragments were assigned to unidentifiable tools. These tool fragments were found in all levels of sub-unit III/7. Unifacial unidentifiable tools comprise 23.39% of the entire tool assemblage. The fragments of bifacial tools were discovered in archaeological level III/7-2 (Table 13-16).

Bone retouchers

A small number of bone retouchers were found in all three levels of sub-unit III/7 (Table 13-1). The bone retouchers comprise two types: one-side simple (6 pieces) and one-side double (4 pieces). For a more detailed description of the bone retouchers see Chapter 15, this volume.

Pebbles

Three sandstone pebbles were found in sub-unit III/7; all were found in level III/7-1 (Table 13-1), and all are fragmented. They lack any traces of use. The largest piece is 52.03 mm long, 32.2 mm wide, and 17.74 mm thick.

DISCUSSION: CHARACTERISTIC FEATURES OF SUB-UNIT III/7 ARTEFACT ASSEMBLAGES

Artefact assemblages from archaeological complexes from sub-unit III/7 are characterised by bifacial tool production and core reduction. However, the technological chain of both these processes prove incomplete. In each level the initial stages of flint reduction are represented by flakes and blades. Even so, not only cores, but their preforms, as well as half-finished products of bifacial tools, are absent. The results of flint reduction comprise mainly unifacial tools and a few bifacials in archaeological levels III/7-2 and III/7-3.

The levels composing sub-unit III/7 differ with respect to the observed types of blanks. For all levels the ratios of "bifacial thinning" chips are very close to those encountered in the Crimean Micoquian assemblages at Kabazi V, levels III/1A and III/2 (cf. Table 13-17). The highest percentage of "bifacial thinning chips" (35.38 %) was shown for level III/7-3, with the smallest amount in level III/7-1 (23.39 %). At the same time, this latter value still very much exceeds similar parameters demonstrated for the WCM industry of Kabazi V, level IV/1.

Among removals larger than 3 cm, flakes and blades from "bifacial thinning" were found only relatively seldom in all levels of sub-unit III/7. However, in level III/7-1 the percentages of flakes and blades from "bifacial thinning" are the smallest to have been identified in a Micoquian assemblage from Kabazi V. Nevertheless, this amount of bifacial blanks is altogether lower than observed in the mixed assemblages from sub-unit III/4. For levels III/7-2, and especially III/7-3, the "bifacial thinning" blanks prevail just as they do in Kabazi V, levels III/1 and III/1A, but, at the same time, are lower than in Kabazi V, level III/2 (Table 13-17).

The blade indices for archaeological levels III/7-1 and III/7-2 are suggestive that these belong to a WCM industry. On the other hand, they contain too many blanks from "bifacial thinning" and "rejuvenation", and this factor is not particularly conducive of a Levallois-Mousterian techno-complex (Table 13-17). Among all levels of sub-unit III/7 the lowest blade index was found in level III/7-1. It should also be noted that the high index of blades encountered in level III/7-3 is not representative, as artefacts were collected from only 1 m², and these include 14 items larger than 3 cm (Table 13-2).

The indexes relating to striking platform preparation in sub-unit III/7 comply with those characteristic of Micoquian complexes (Table 13-17). Flakes and blades in archaeological level III/7-2 display scar patterns which are most typical for Western Crimean Mousterian complexes, e.g. unidirectional, bidirectional, different crossed combinations, and with numerous crested pieces (Table 13-6), although, at the same time, this level also produced five *débor-dante* removals and one Levallois flake. This may indicate indirectly the existence of a core reduction strategy which is specific for Levallois-Mousterian complexes.

Among the tools recovered from sub-unit III/7 unifacial forms dominate, with scrapers as the most commonly observed tool type (Table 13-16). Scrapers are represented by simple, double, and convergent types, whereby the later make up near to half of the entire scraper assemblage. The second important group of unifacial tools are the points. The majority of points was found in archaeological level III/7-2. They display characteristic features of both the WCM and the Micoquian. WCM point types

	III/1	III/1A	III/2	III/7-1	III/7-2	III/7-3	
"bifacial thinning" chips, 1.0-1.9 cm	13.86	21.78	27.00	17.86	19.60	24.61	
"bifacial thinning" chips, 2.0-2.9 cm	2.91	5.85	7.11	4.55	5.40	10.77	
"bifacial rejuvenating" chips, 1.0-1.9 cm	1.22	1.08	1.28	0.65	2.16	.	
"bifacial rejuvenating" chips, 2.0-2.9 cm	0.30	0.43	0.49	0.33	0.18	.	
"bifacial thinning" flakes (%)	5.66	6.75	18.41	1.79	5.30	10.00	
"bifacial thinning" blades (%)	4.98	7.01	15.38	.	8.33	25.00	
indices of blades	11.22	11.44	9.91	13.84	15.38	28.57	
indices of facetting	Ifs	23.52	43.85	14.65	14.81	19.76	22.22
	Ifl	66.24	72.81	52.27	74.07	67.44	55.55

Table 13-17 Kabazi V: lithic variability, by levels.

are, for example, the semi-leaf type (Fig. 13-3, 1) made on a blade with faceted platforms and with a non-invasive retouch. This type of point was discovered in all levels of sub-unit III/7. On the other hand, semi-trapezoidal points (Fig. 13-3, 2) are common to the Micoquian. Convergent (points and convergent scrapers) prevail over simple (transverse, simple and double scrapers) unifacial tools. Bifacial tools are very rare. A single complete bifacial point occurs in archaeological level III/7-3. An unidentifiable piece of a bifacial tool was also found in level III/7-2.

To sum up, both the technological and typological characteristics of flint assemblages from levels III/7-1 and III/7-2 demonstrate features common to both Levallois-Mousterian and Micoquian techno-complexes. The collection of artefacts from level III/7-3 is Micoquian without any admixture. A minimal Levallois-Mousterian component (tools typology) was found in level III/7-1. At the same

time, the blade and striking platform indexes, as well as the presence of "bifacial" thinning blanks among all kinds of debitage, leads to the assumption that the most part of blanks, including blanks for tools, in level III/7-1 stemmed from bifacial tool production.

In level III/7-2 the Levallois-Mousterian and Micoquian components are represented in approximately equal proportions. Micoquian features are most clearly observed in both the high percentage of "bifacial" blanks and in the presence of one fragmented bifacial tool. The most obvious evidence for Western Crimean Mousterian features, which include the structure of the unifacial tool assemblage, especially with its points, and the presence of *débordantes* and Levallois blanks among removals, is found in archaeological level III/7-2. Slope erosion probably contributed greatly to the heterogeneous character of the assemblages.

АБСТРАКТ

КАБАЗИ V, ПАЧКА ГОРИЗОНТОВ III/7: АРТЕФАКТЫ

ВЕСЕЛЬСКИЙ А.П.

В данной главе представлен анализ пачки археологических горизонтов III/7. В этом слое в процессе раскопок было выделено три пятна залегания археологического материала – археологические горизонты III/7-1, III/7-2 и III/7-3. Каждый из археологических горизонтов пачки III/7 представлен аморфными участками, которые сохранились в эрозионных понижениях, образовавшихся в верхней части литологического слоя 14А, и заполненных седиментами литологического слоя 12А. В целом, исследованная площадь каждого из археологических горизонтов не превышает 3,64 м².

Коллекция археологических материалов из пачки горизонтов III/7 составляет 8291 предмет. Все артефакты подразделяются на три основные группы. Первая группа представлена 8278 каменными предметами, разделенными на шесть категорий артефактов: обломки (27 экз.), преформы (1 экз.), чешуйки (8010 экз.), отщепы (164 экз.), пластины (29 экз.) и орудия (47 экз.). Две другие группы археологического материала представлены костяными ретушерами (10 экз.) и речными гальками без следов использования (3 экз.).

Для структуры археологических артефактов в пачке III/7 отмечаются следующие особенности: процент орудий (около 25 %) характерен для стоянок-мастерских; полностью отсутствуют нуклеусы и преформы двусторонних орудий; среди орудий преобладают

односторонние, которые представлены микокскими и леваллуа-мустьерскими изделиями, особенно, в археологическом горизонте III/7-2; количество двусторонних орудий слишком мало как для микокских индустрий, но абсолютно не приемлемо для леваллуа-мустьерских комплексов.

Коллекция орудий в пачке археологических горизонтов III/7 представлена 5 классами: остроконечники, скребла, двусторонние острия, сколы с ретушью и неопределимые фрагменты. Наиболее представительной группой являются односторонние скребла – 66,66 %. Конвергентные формы односторонних скребел в археологических горизонтах III/7-1 и III/7-2 составляют не менее половины всех односторонних орудий. Остроконечники составляют 28,58 %. Большая их часть обнаружена в горизонте III/7-2. Листовидные формы наиболее распространены среди остроконечников. Также в коллекции присутствуют дистальные и трапециевидные формы. Двусторонние орудия представлены только двумя изделиями. Для пачки горизонтов III/7 процент двусторонних форм составляет 4,76 % всех определимых орудий, без учета сколов с ретушью.

Технико-типологические характеристики горизонтов III/7-1 и III/7-2 сочетают черты леваллуа-мустье и микока. Материал из археологического горизонта III/7-3 не имеет каких-либо примесей и относится к микокскому технокомплексу. Наименьшая примесь леваллуа-мустьерского компонента характерна для горизонта III/7-1. Наличие этого компонента, в основном, прослеживается в типологической структуре остроконечников, где присутствуют, характерные для западнокрымской индустрии, дистальные формы орудий. В археологическом горизонте III/7-2 леваллуа-мустьерский и микокский компоненты представлены приблизительно в равных пропорциях. Наличие микокских характеристик наиболее четко в горизонте III/7-2 подтверждается достаточно высоким процентом сколов обработки двусторонних орудий и наличием одного фрагмента двустороннего орудия. Типология односторонних орудий, особенно остроконечников; высокий индекс фасетажа; большое содержание пластин; присутствие *débordante* и леваллуазских заготовок среди сколов демонстрируют наличие леваллуа-мустьерских характеристик в кремневом комплексе археологического горизонта III/7-2. Главную роль в неомогенном характере коллекций сыграли эрозионные процессы, способствовавшие горизонтальной и вертикальной транспортировке археологических материалов.

