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KABAZI II:
THE 70 000 YEARS
SINCE THE LAST INTERGLACIAL

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Chapter 13

Kabazi II, Level III/1A: Tools for Immediate Consumption, Cores for Future Needs

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Level III/1A was excavated over an area covering about 25 m² during the field seasons 1994/95 under the direction of Victor Chabai. It is situated within the upper part of the geological level 11 which is attributed to the transitional phase of the marine isotopic stages 4 and 5. According to pollen analysis this level is attributed to pollen zone VII which corresponds to the Ognon Interstadial.

The thickness of level III/1A ranges from between the thickness of a single artefact and 15 cm. It is separated from the underlying level III/1 by about “10 cm of sterile deposits” (Chabai 1998b, p. 183). The surface was covered mainly by bones and relatively few flint artefacts, while traces of charcoal or concentrations of burnt bones were missing. The archaeological remains were found dispersed over the southern part of the excavation area (Fig. 13-1). There are two clear borders of artefact and bone distribution: to the north the archaeological remains thin out from the middle of the excavation area, and at the southern end of the trench, a large limestone block prevented the sediment from gliding further down the slope.

As are the other levels of unit III, level 1A is attributed to the Ak-Kaya facies of the Crimean Micoquian (Chabai, Marks 1998, p. 360). In this small assemblage the attribution to the Micoquian can only be proven by some traces of bifacial technology, including some chips from surface shaping and three bifacial tools, one of the latter only a small tip.

RAW MATERIAL

In level III/1A flint was the only lithic raw material used. Of the 17 raw material units identified, a total of 11 were procured from a primary raw material source (Fig. 13-2) – this is indicated by white and chalky cortex rests. In four raw material units the residual character of the artefacts is indicated by thin and rugged cortex or by weathered cortex of yellow-grey colour. In two raw material units the cortex is completely missing, so that nothing can

be said about the character of the raw material source.

The matrix of the flint is in all cases shining pale. The colour is always grey, showing several nuances from greyish black to light grey – in most cases it is a medium grey. Only in one raw material unit is the flint of a brownish grey colour, and in another it displays a greenish grey matrix. Only in RMU 9 does the flint feature light grey and dark grey bands. The



Fig. 13-1 Kabazi II, level III/1A: artefact distribution.

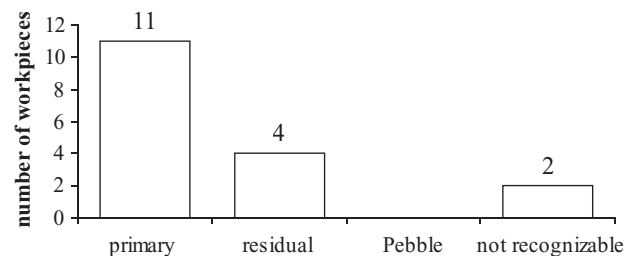


Fig. 13-2 Kabazi II, Level III/1A: raw material sources.

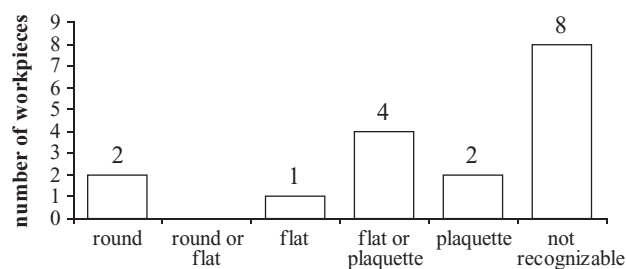


Fig. 13-3 Kabazi II, level III/1A: shape of nodules.

flint of all raw material units is interspersed with small fossil inclusions of either white, black or several nuances of grey colour.

Two of the 17 workpieces stem from round nodules, one from a flat nodule, and two from plaquettes. The original shape of four workpieces is unclear, i.e. it is not discernable whether they had been flat or round and flat (plaquette). In eight

raw material units the original shape of the nodules could not be reconstructed (Fig. 13-3).

All the above named features are common to the material from the flint outcrop located in the Bodrak Valley, situated about seven kilometres southwest from Kabazi II (Uthmeier 2004a, p. 180). Therefore, this represents the most likely raw material source for much of the level III/1a assemblage.

ARTEFACT DESCRIPTION

Only eight tools could be documented in this level (Fig. 13-4). Three were imported as single pieces: one backed knife with one lateral working edge continuing on the upper part of the opposite edge ("*Typ Klausennische*", according to Bosinski 1967), one distal fragment of a bifacial convergent scraper with alternating retouched edges ("*wechselseitig-gleichgerichtet*", according to Bosinski 1967) and one simple scraper.

Two double scrapers, one denticulate and one notched piece, as well as a small tip of a surface shaped tool are on-site products. Three are blank products from cores, one from a raw nodule and one

was flaked from a preform.

The fact that only two of the tools are not represented by fragments indicates that they were most likely used on-site, and were modified with the purpose of on-site application. The bifacial tool, from which the small tip derives, seems to be the only example in this level where modification took place with the aim of tool export (RMU 6).

Counting 21 pieces, chips represent the most numerous artefact category, followed by simple flakes with 18 pieces. Six chips are embedded into sequences of surface shaping (RMU 6, 4). Two of these are

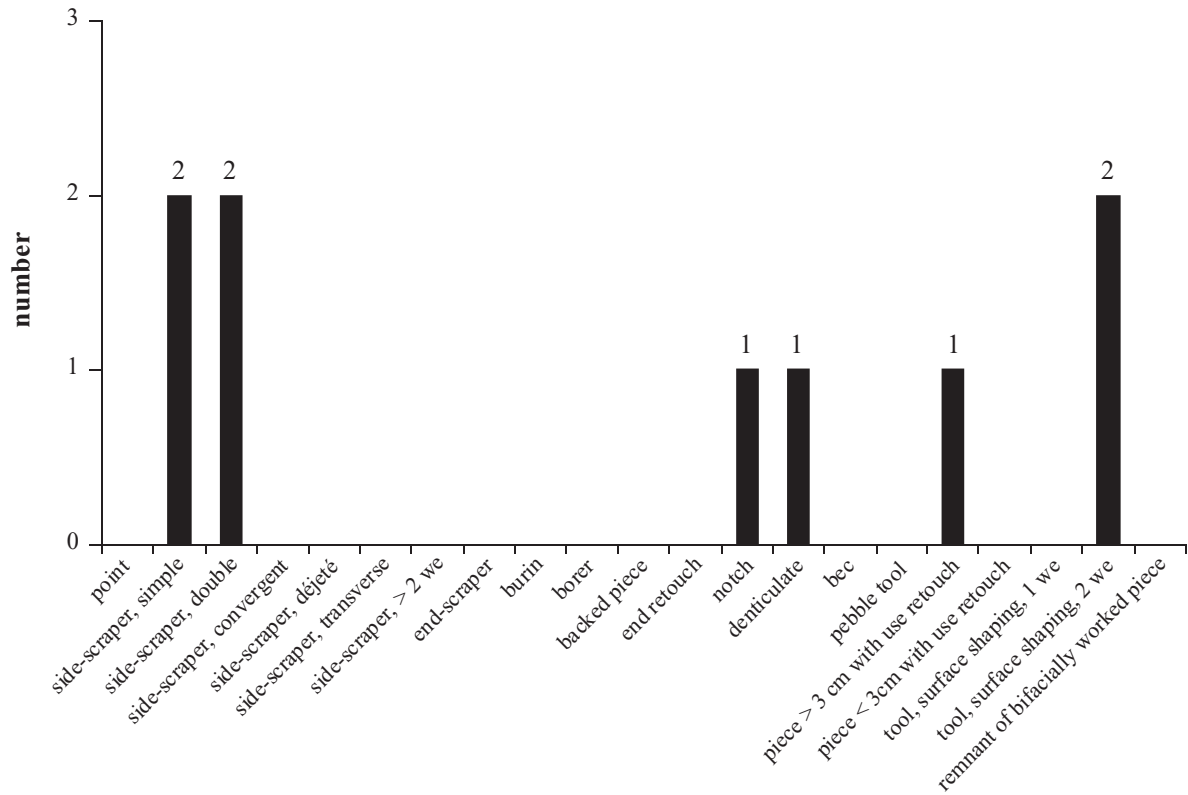


Fig. 13-4 Kabazi II, level III/1A: tools.

facial shaping flakes smaller than 3 cm. Apart from the backed knife and the small tool tip only a pre-form in its initial stage (RMU 8) directly represents the bifacial technology in level III/1A. The on-site production of bifacial artefacts is also indicated by five facial shaping flakes.

Two simple blades must not be the result of a blade production strategy (RMU 14, 3); further more

the artefact of RMU 3, classified as blade, is embedded in a surface shaping production sequence.

Among the eight chunks discovered there are two core chunks (RMU 10) and two fragments of a raw nodule (RMU 7). One of the three naturally backed flakes stems from an initial phase of core preparation (RMU 7).

Five artefacts show traces of marginal retouch.

TRANSFORMATION SECTIONS

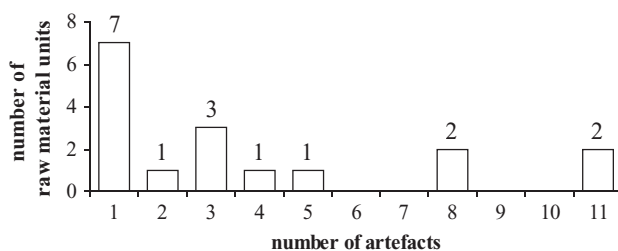


Fig. 13-5 Kabazi II, level III/1A: number of artefacts in raw material units.

From a total of 72 stone artefacts 68 pieces could be sorted into raw material units. Four patinated pieces could not be considered. The number of artefacts per workpiece is very low in most raw material units (Fig. 13-5). Besides seven single pieces, altogether six raw material units comprise only two to five artefacts. Two workpieces have each two artefacts.

From the number of transformation sections the single pieces dominate the assemblage (Tw, Tw/f, Bw, Nw) (Fig. 13-6). These are followed by raw material units which attest the on-site production of blank products (Cb, Cb/f, Nb/f) and those with

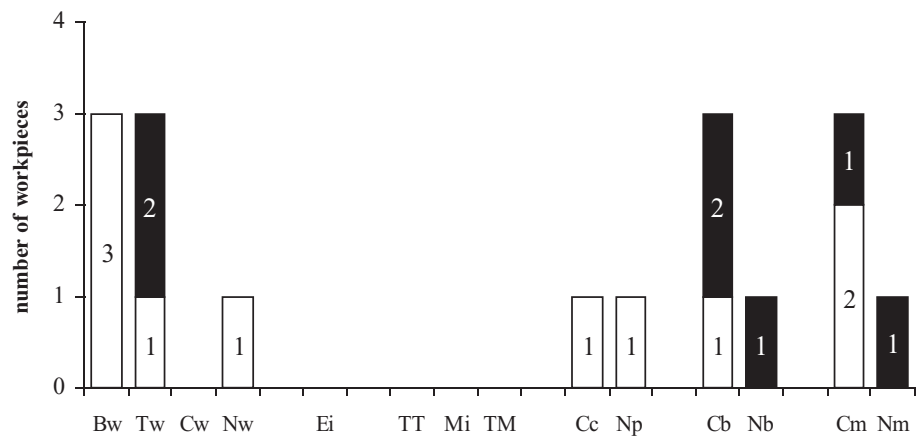


Fig. 13-6 Kabazi II, level III/1A: transformation sections.

	RMU	11	12	13	1	2	18	9	10	7	17
OFF-SITE	0 Import 	bifacial convergent side scepaeper 	simple scraper 	backed knife 	flake 	flake 	flake 	pre-core in initial stadium 	core 	raw nodule 	
ON-SITE	1 Preparation									1) core preparation 	
	2A Blank Production										
	2B Correction								1) core correction 		
	3 Modification										
	Discard 										
	Export 										
Transformation Section		Tw/f	Tw	Tw/f	Bw	Bw	Bw	Nw	Cc	Np	

Fig. 13-7 Kabazi II, level III/1A: transformation analysis (1).

tool production (Cm, Cm/f, Nm/f). While the former reflect more the needs preceding the arrival of the group at Kabazi, the latter reflect the activities during the stay, and may yield information about possible ensuing activities. Both core correction and the preparation of a raw nodule could be attested only once in each case (Cc, Np).

Single pieces

(Transformation sections Tw, Bw, Nw)

Altogether seven single pieces were brought to level III-1A and discarded (Fig. 13-7). Among the three imported flakes which fall to transformation section Bw (RMUs 1, 2, 18) two show traces of use retouch (RMUs 2, 18). Since RMUs 1 and 2 are decortication flakes it is possible that further pieces belonging to the same nodules could still be preserved in the unexcavated areas, and that these two flakes were flaked on-site.

As mentioned above, a total of three tools were brought to the site as single pieces and therefore belong to transformation section Tw (RMU 12) and Tw/f (RMU 11, 13) respectively: a simple scraper made on a blade whose distal end is missing (RMU 12), a backed knife (RMU 13) and the distal fragment of a bifacial convergent scraper (RMU 11). The basal part of the convergent scraper was not found. Since the terminal fragment still has a length of 68 millimetres it is possible that the base was large enough to fulfill other purposes, and was therefore re-exported.

Furthermore, a partially decorticated raw piece was imported (Nw; RMU 9). This piece may have been discarded owing to its poor quality resulting from many fissures.

Transformation sections Cc, Np

Core correction is evident in RMU 10, which is the only RMU attributable to transformation section Cc. During the unsuccessful attempt of core correction the imported core broke into at least three pieces; two large chunks were discarded, while the remaining core was re-exported.

Transformation section Np is only observed in RMU 7. Three chunks and one flake feature large quantities of cortex. These possibly stem from an imported raw nodule which broke during the preparation phase. These pieces were discarded while the pre-core was re-exported.

Transformation sections Cb, Nb

Four RMUs were destined for the procurement of blanks and the production of cores or preforms (RMUs 14, 3, 8, 5). In three cases imported cores (Cb), and in one case an imported nodule (Nb), were exploited (Fig. 13-8).

In RMU 14 a partially decorticated core was brought to the site. Among five blank products one piece is nearly completely covered with cortex on its dorsal side; it probably derives from the initial preparation phase of the core. Later on, a blade was detached. Whilst the blank products were discarded the core was re-exported from the site.

Transformation section Cb/f, Nb/f

In RMUs 3 and 8 preforms were produced on-site, i.e. transformation section Cb/f. In RMU 5 one of three artefacts is nearly entirely covered with cortex – most probably resulting from the initialisation of an imported raw piece (Nb/f).

In RMU 3 the cross-sections of the larger pieces bearing cortex rests show that a flat round nodule was brought to the site. The ratio of cortical remains indicate that the nodule was already partially decorticated when it arrived. Among the six flakes that could be sorted to this workpiece two are surface shaping flakes. Since one piece is a plan surface shaping flake a plano-convex cross-section of the bifacial blank is likely. Whereas the bifacially worked piece was re-exported, the “waste” from its production was left at the site.

In RMU 8 an imported preform was reworked. This attempt was unsuccessful, possibly due to the relatively high portion of fissures. Consequently, the preform was exhausted in its initial stage together with one chip from surface shaping and one chunk. Since the pieces could not be refitted further blanks must have been detached, but were not found in the excavation area.

In RMU 5 an imported raw nodule was prepared and transformed into a preform that was re-exported. One decortication flake and two flakes from surface shaping were left at the site (Nb/f or Cb/f).

In four RMUs tools were produced for on-site usage (RMUs 15, 16, 6, 4).

In RMUs 15 and 16 blanks were flaked from imported cores and further modified into tools which were left at the site, the cores being re-exported (Cm). In RMU 15 a blade-like piece was modified into a double scraper whose basal part is missing. In RMU 16 one denticulate and one notched piece were made and then discarded (Cm).

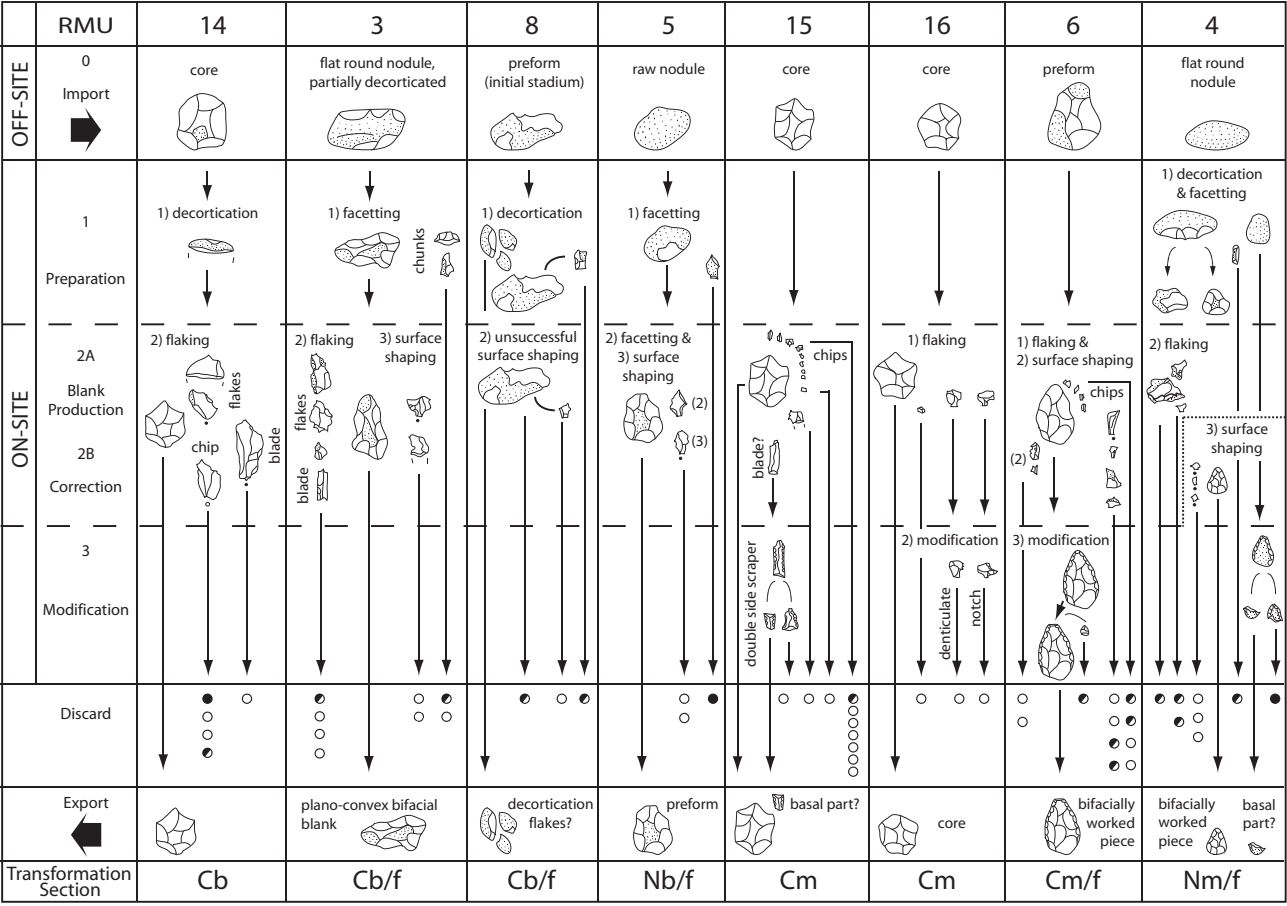


Fig. 13-8 Kabazi II, level III/1A: transformation analysis (2).

In RMU 6 the low amounts of cortex on blank products, and the presence of two flakes from surface shaping indicate that an imported preform was reworked at the site. This preform may have been modified into a bifacial tool: a small tip of a bifacial tool with dorsal retouch and a proximal breakage zone was found. On the ventral surface the negative of a distal thinning blow is present. It is not clear whether this tip belongs to the original preform, which in this case would have been modified into a bifacial tool. It seems very likely that a larger blank was flaked from the preform and then modified into a bifacial or unifacial tool. This would offer a better explanation for the remaining ventral surface of the tip. Furthermore, the tip broke during usage or

during the reworking of the tool, its main part then being exported together with the preform (Cm/f).

RMU 4 is the only unit where the whole sequence from preparation of an imported raw nodule (flat) to tool modification occurred at the site (Nm/f). In a first step the piece was decorticated and fractured into at least two pieces. One of these fragments, bearing the scars of initial preparation, was left at the site. Three discarded flakes from surface shaping prove that the other fragment was further prepared and then shaped into a biface. A decortication flake was, possibly at the beginning of the whole sequence, transformed into a double scraper. Only the distal part of the tool was found. The basal part, together with the biface, may have been exported.

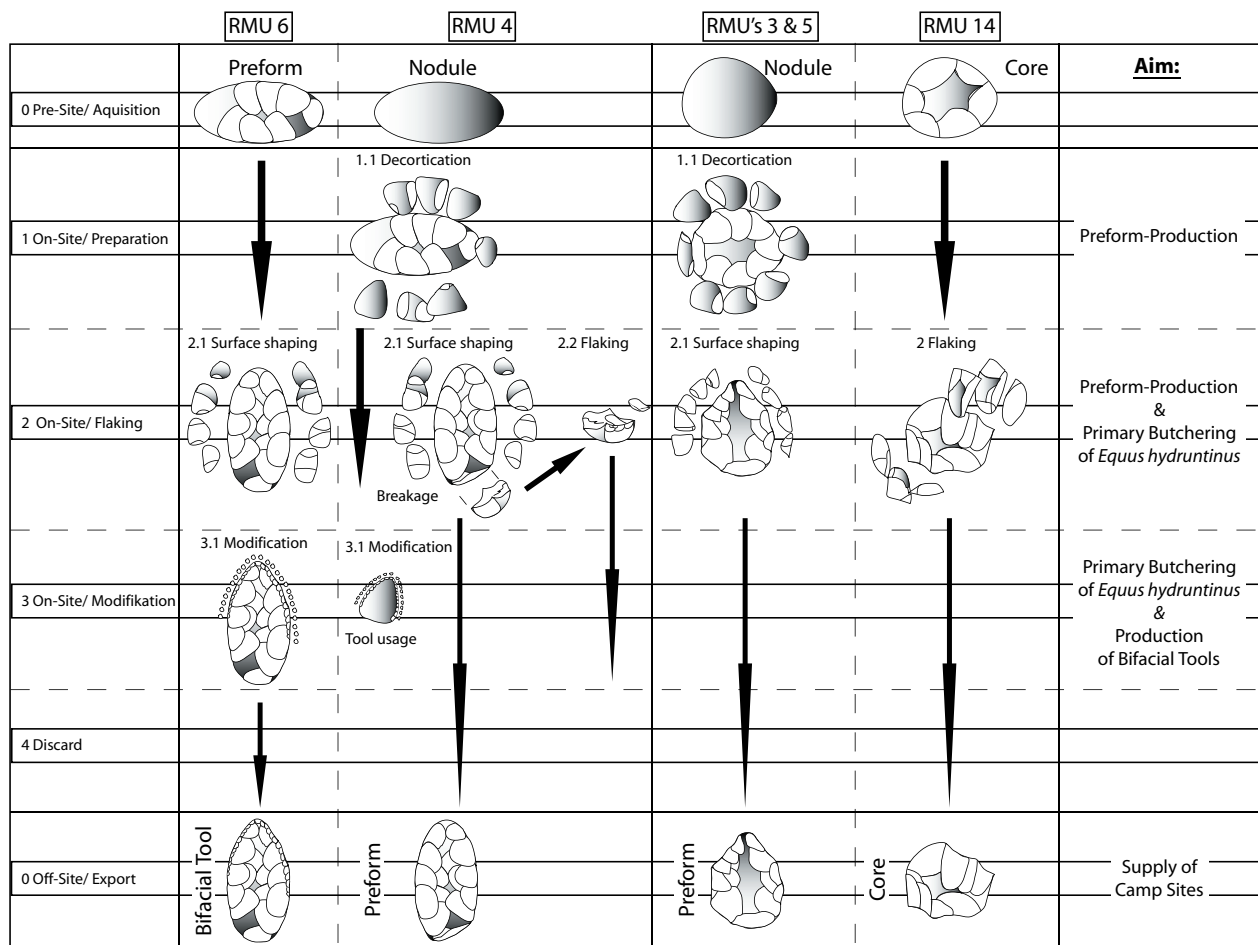


Fig. 13-9 Kabazi II, level III/1A: chaînes opératoires.

TOOLS FOR ON-SITE USAGE, CORES FOR FUTURE TASKS

The level III/1A assemblage is dominated by stone artefacts resulting from the preparation and production of cores and preforms. While low quantities of tools were present at the site (five pieces), a comparatively large amount of flakes and chunks and other blank products dominate the assemblage (Fig. 13-9). On the other hand, not one single exhausted core was found in this level that could quote the exclusive usage of cores as supply for blank products for on-site activities.

From 17 raw material units only two inherit one initial core (RMU 9) and one preform (RMU 8). In RMU 9 an initialised raw nodule was brought in as a single piece and consequently discarded, possibly owing to its more or less poor quality. Also, in RMU 8 a partially decorticated preform was imported. One chunk and one surface shaping flake

attest to a further attempt of preform production prior to the discard of these three artefacts. Once again, this may reflect the poor quality of the raw material for further bifacial production.

There are several indicies that flaking processes resulted from an intended core production which would have been required for activities following the group's visit to Kabazi II.

In this context RMUs 6 and 4 exemplify level III-1A as a highly export-oriented site.

In both cases bifacial tools or preforms were produced on-site and later exported. Further, the modification of tools is embedded in these export oriented activities. This is shown in RMU 4: the only recognisable modification was made to a decortication flake. The long operational sequence shows that in this case a bifacial piece was produced. All

artefacts identified as belonging to this workpiece are most likely the by-products of the production sequence of a surface shaped artefact. Thus, the decoration flake modified into a double scraper was chosen for a particular on-site task – here the short life span of this piece is the result of its conjunction with, maybe only one, special activity. In contrast, the biface may have been produced on-site with the intention of a longer time span of usage following the visit to Kabazi II.

In the same way RMU 6 shows also an export-oriented operational sequence with blanks as by-products and a bifacial tool or preform as the aim of the production process. Both RMUs show that the identified activities are more closely linked with events following the group's stay at Kabazi II than with on-site activities.

Turning to the raw material units 3 and 5 this interpretation becomes increasingly distinct. In both these units flakes from surface shaping testify to the production of a preform which was not found in the excavated area. Furthermore, in RMU 5 a cortical flake from the initial stadium of preform preparation and the two documented surface shaping flakes reflect the whole sequence from the preparation of a raw nodule to the production of a preform. In this case it seems that an on-site produced preform was exported at an early production stage. Also, in RMU 3 such an attempt of preform production for a later

usage is indicated by the presence of flakes from surface shaping. The other blanks resulting from the preparation phase of a flat nodule and from the following flaking process are embedded in this preform production sequence.

This must not mean that blank products were not used for on-site activities. The main reason for the group coming to Kabazi II was surely to butcher the game whose remnants are documented. Nevertheless, there seems to be a pronounced emphasis on core and preform production, whereby some of the resulting by-products, such as flakes and blade-like pieces, were used for activities connected with primary butchering activities.

In contrast, on-site produced tools were used up immediately. The breakage of the double scrapers from RMUs 15 and 4, as well as the broken tool tip from RMU 6, might stem from on-site activities. The fragmentation of two of the imported tools may also have resulted from their on-site usage.

In sum, it can be concluded that tools were modified at the site for immediate consumption. This consumption, most likely connected with butchering of wild game, was however embedded in the production of cores, preforms and large bifaces (RMU 6) required for off-site activities, such as hunting events in regions in which raw material sources or usable raw material would not have been accessible.

APPLICATION OF LITHIC ARTEFACTS IN CONTEXT OF THE LAND USE PATTERN

The varying compositions of the raw material units, the import and export of specific lithic artefacts, and the processing of game at the site are all factors connected with an either radiating or circulating cyclical land use pattern. In radiating systems there is one main habitational site (or base camp) from which different groups are sent forth to procure different resources. These resources are returned to the base camp (BC) where they are prepared for consumption and/or final exploitation. A series of different sites in the surrounding landscape from which the base is supplied makes up this land use system (Marks, Chabai 2001, p. 197). According to Bernbeck (1997, p. 156) in radiating systems the different stations with supply functions are situated at a maximal distance of three days journey from the residential base camp. In the following, I will refer to these stations as task stations (TS).

In circulating settlement systems a group moves in a seasonal round through the landscapes. At points located in the vicinity of plentiful resources an habitational site, this can be a base camp, is established.

The different task stations are situated in the vicinity of the base camp. The maximum distance between the base camp and the task stations is a one day walk. Since the residential camp is near to important resources, and accordingly different resources are to be found in close proximity to one another, it is possible that certain task stations fulfill more than one particular requirement, e.g. both the preparation of raw nodules and primary butchering. In this context I can imagine residential camp types which deviate from the base camp model. These may be referred to as short-term camps (SC) in which resources are exploited within a short time span. As a result, a higher mobility of the Neanderthal groups can be expected. After using up the resources in the vicinity of the short-term camp the groups move away into an adjacent region where it establishes a new main camp.

To ascertain which land use pattern would best fit to unit III of Kabazi II it may be of interest to consider what was brought to the site and what was possibly exported (Fig. 13-10).

Before visiting Kabazi II raw nodules were

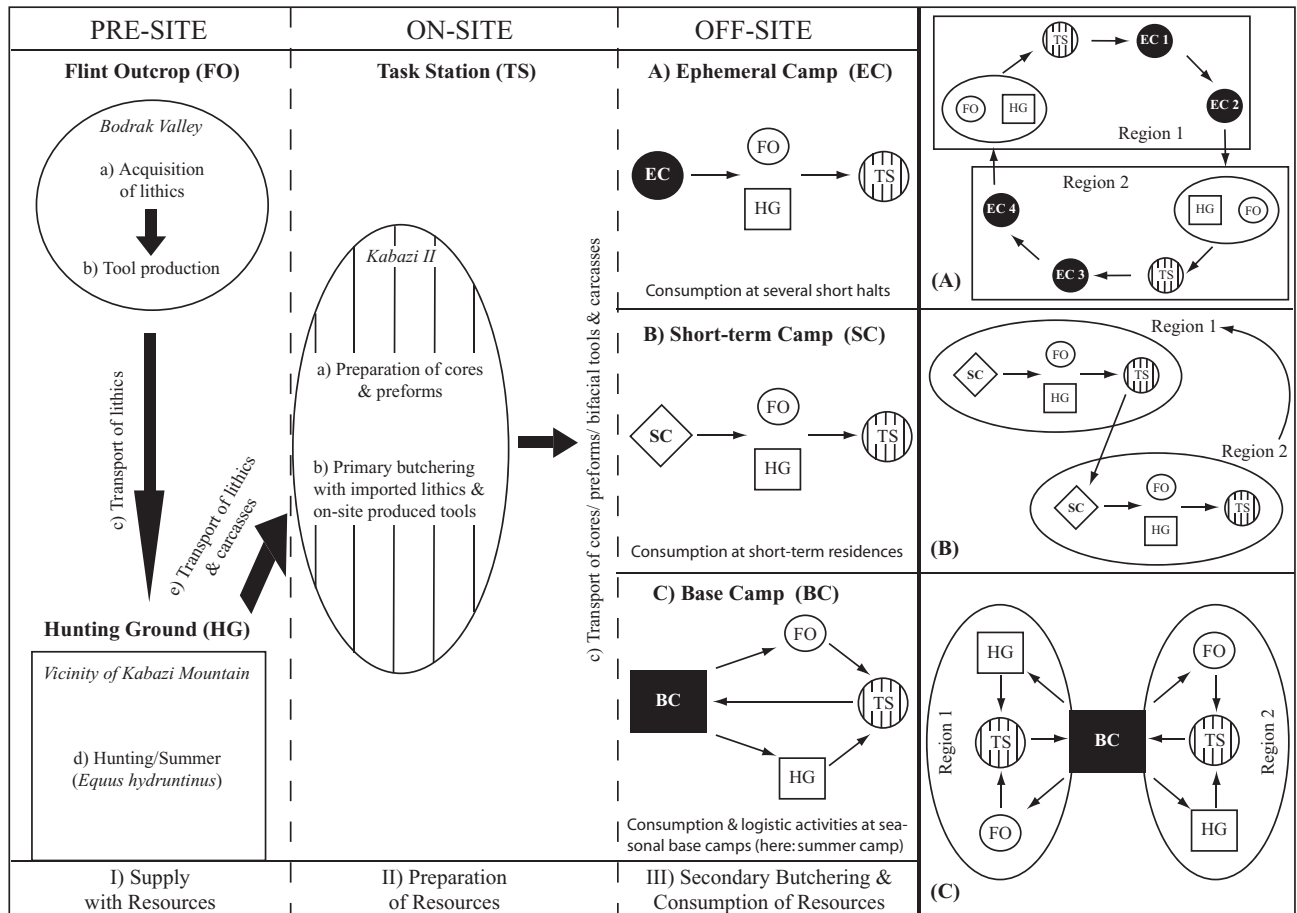


Fig. 13-10 Kabazi II, level III/1A: land use pattern.

collected in the Bodrak Valley and game was hunted in the vicinity of the site. Maybe the location of raw material sources played a role in the choice of the hunting ground. According to M. Patou-Mathis (Chapter 12, this volume) a small family herd of adult females of *Equus hydruntinus* was hunted in the summer time. The game, as well as raw nodules and lithics picked up in Bodrak Valley, were brought to the site.

In Kabazi II nodules and cores were modified to produce and rework cores and preforms/bifacial tools for future needs. Due to the fact that artefacts belonging to one workpiece could not be refitted, and therefore in all raw material units blanks are missing, it is possible that also blank products were taken away from the site by the Middle Palaeolithic hunters while others may remain undiscovered in the unexcavated areas of the site.

As mentioned above blanks and tools produced on-site were used for primary butchering. However, there is also evidence for single pieces which were used before they were brought to Kabazi II. Such

pieces may have played a role in on-site activities: a possible result of these activities, besides the breakage of the imported scrapers (RMU 11, 12), are the use-traces on two of the imported single flakes (RMU 2, 18). On the other hand, the state of the backed knife (RMU 13) suggests that this piece had been in use for a longer time span before it was finally discarded at Kabazi II. Thus, it is likely that this piece was in use prior to or at the time the hunters collected raw material in the Bodrak Valley.

At the end of the chain of activities that formed the assemblage of level III/1A stands the export of exploitable lithics such as cores and bifaces on the one hand, and meat for further utilisation and consumption on the other. Only the most nutritive elements of the animals were extracted. At least some of the exported lithics were surely needed for further exploitation of the fauna.

The place where and the context in which the exported products were consumed depends on the settlement pattern assumed for the Middle Palaeolithic people.

It is also possible that the meat was consumed on the way to other hunting grounds at highly ephemeral camp sites (EC) where blank products and tools were flaked from the prepared cores as required, while cores and preforms/bifaces were further exploited or reworked for different activities (Fig. 13-10.A). This may include several camps where the groups only dwelled for some days or even some hours. When the resources were exploited new supplies of lithics were collected at a different outcrop (FO) and animals were hunted again at a different hunting ground (HG). Again those resources were prepared for further transportation at task stations (TS) similar to Kabazi II, level III/1A. This model contradicts the circulating and radiating settlement model, it postulating an (ongoing) mobility of a whole group which moves from hunting ground to hunting ground. The stay at a particular location would have depended very much on the supply with meat and other resources required by the ephemeral camp. So, these ephemeral residences are of a transitional character, mediating between different exploitable landscapes. Features of this kind of camp would include only few traces of meat consumption, possibly traces of a fireplace, and some imported flakes and/or tools used to prepare the meat. Such a place is known from Kabazi V, level III-2 (Chabai, Pathou-Mathis, this volume). Here, some elements of *Equus hydruntinus* which had been hunted and butchered in springtime at another location were consumed. Only a few imported lithic artefacts were used in the course of these activities and then discarded.

Another possibility is that level III/1A functioned as a station where cores etc. were prepared

for usage at a more intensively used occupation camp in which the animals, for example, which were dismembered and disarticulated in level III/1A, were finally consumed (Fig. 13-10.B). Such a short-term camp (SC) would fit into the circulating settlement model, but this residential camp would not have been a base camp proper, since following the exploitation of resources the whole group would have moved into another region where lithics would again have been collected from local outcrops and game hunted in the vicinity. The preparation for consumption would again have taken place at special task camps similar to Kabazi II, level III/1A. Also this model postulates a fairly high mobility. Such short-term camps with traces of secondary butchering and residential features like pits and fireplaces can be found in Kabazi V.

Maybe the carcasses and lithics prepared in level III/1A were brought to a base camp for consumption (Fig. 13-10.C). From the long-term residential base camp (BC) different task groups were sent out to supply the group members with the required resources. Since the wild horses were hunted in summertime the base camp most probably represents a summer camp which functioned as a logistical and habitation focus. The base camp could be situated at the intersection of landscapes with different important resources. This hypothesis fits the radiating, as well as the circulating settlement model.

Since there are no real base camp features known from Crimean Micoquian sites, and the density of sites like Zaskalnaya VI is probably the result of palimpsests, this final hypothesis cannot be verified (Chapter 18, this volume).

CONCLUSION

The faunal remains and the composition of the lithic assemblage show that level III/1A of Kabazi II was a primary butchering station of short duration. No camp features, no signs for the consumption of wild game, and no indications of intense lithic exploitations, such as exhausted cores or on-site reworked stone artefacts, which would suggest a residential occupation are present at the site.

In this level, game was butchered to supply people with meat, either in residential camps of longer duration away from Kabazi II, or on the way to different short-term camps which may resemble level III/1A. On-site produced and imported tools, as well as the by-products of core preparation and bifacial shaping, were probably used to dismember the game

and to prepare the meat for export. At the same time the raw material collected from the flint outcrops of the Bodrak valley was used for the preparation of cores and bifacial blanks (preforms) required at other locations. Therefore, the lithic assemblage is in accordance with the faunal assemblage. Lithics and fauna were exploited and prepared for the consumption at locations which would have been frequented after the visit to Kabazi Mountain.

To sum up, level III/1A of Kabazi II appears to be the result of activities which were embedded in a sequence of raw material collection, hunting, preparation of game and lithics at task stations, like Kabazi II, for the consumption at camp sites of very short or longer duration.

ABSTRACT

КАБАЗИ II, ГОРИЗОНТ III/1A: ОРУДИЯ ИСПОЛЬЗОВАТЬ СЕЙЧАС, А НУКЛЕУСЫ ПРИГОДЯТСЯ ПОЗЖЕ

Г. БАТАЛИИ

Кремень, использовавшийся на стоянке горизонта III/1A, происходил из вторичного залегания. Скорее всего, он был найден в долине реки Бодрак, что расположена в 6-7 километрах от куэсты Кабази. Шестьдесят восемь артефактов были подразделены на сырьевые группы. Большинство найденных сколов является результатом подготовки и расщепления нуклеусов и преформ, которые затем были унесены со стоянки. С другой стороны, в коллекции артефактов присутствуют орудия, произведенные за пределами стоянки, импортированные на ее территорию и оставленные там после их использования. Утилизация на стоянке импортированных артефактов в сочетании с экспортом преформ и нуклеусов является отражением сложной пространственной организации системы поселений неандертальцев, использовавших Кабази II, III/1A в качестве стоянки по разделке гидрунтинговых лошадей.

