Buchbesprechung

Victor Chabai, Jürgen Richter and Thorsten Uthmeier (Eds.), Kabazi II: The 70 000 Years since the Last Interglacial.

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The present book is the second volume of a monographic publication of the site of Kabazi II, the excavation of which began more than 20 years ago after its discovery by Kolosov in 1985 and which represents the most important of a group of Middle Paleolithic sites in Western Crimea (Ukraine). While Kabazi II was initially thought to represent a collapsed rockshelter, it is now evident that it represents an open-air site that has been buried in slope deposits of the Kabazi Mountain, which were preserved from erosional processes down slope by a large 12m-high, vertically positioned rock. The exceptional character of the site is due to its deep stratigraphy reaching a depth of more than 14 metres containing at least 55 archaeological levels separated from one another by sterile sediments and covering a time span from the Last Interglacial to the Vytachiv, vt_{3b} Interstadial, that has tentatively been correlated with the Denekamp Interstadial, with a few gaps in the sedimentation.

The volume comprises a total of 19 Chapters. Apart from an introductory Chapter by V. Chabai aimed at presenting the sites' environment, its chronology and lithic industries (Chapter 1) and two Chapters by M. Patou-Mathis presenting the results of an archaeozoological analysis conducted on the Kabazi II fauna (Chapters 2 and 12), the rest of the volume is by different authors of the University of Cologne, including J. Richter, T. Uthmeier, G. Bataille, C. Kempcke-Richter, I. Kretschmer, M. Kurbjuhn, and A. Maier, dealing almost exclusively with the techno-economic behavior that can be inferred from single lithic assemblages of the Western Crimean Mousterian (WCM) (Chapters 3-8, 10-11, 13-17). V. Usik discusses the presence of the Levallois Method in the WCM of Kabazi II (Chapter 9), V. Chabai and T. Uthmeier model the settlement system of the Crimean Middle Paleolithic (Chapter 18) and V. Sitlivy and A. Zięba finally provide a general picture of the variability of the Mousterian industries in Central and Eastern Europe (Chapter 19).

As a consequence of a long and rich tradition of prehistoric research since the first discovery of Middle Paleolithic artifacts in a cave near the city of Simferopol in 1880 and the find of the first Neandertal skeletal remains at Kiik-Koba in 1924 – the first ones to be reported in Eastern Europe – Crimea contains the richest concentration of Middle Paleolithic sites in Eastern Europe. More than 100 Middle Paleolithic sites are documented at present, among which are 30 multi-layered stratified sites (see bibliography starting on p. 421 for numerous references). Based on radiometric and environmental studies, the Crimean Middle Paleolithic seems to cover a time range from roughly 127 kyr to approximately 29 kyr BP, though the majority of the Crimean Middle Paleolithic occupations date to OIS 3 (present volume: Table 18-1) (Pettitt 1998; Chabai et al. 2004, 2005). Since 1993, the Ukrainian archaeologists have been engaged in a series of collaborative, international research programs that have brought together specialists from the Ukraine, the Republic of Moldova, Russia, France, the United States of America, Canada, Germany, Britain and Belgium. The Institute of Prehistoric Archaeology of the University of Cologne that significantly contributed to the realisation of the two monographic volumes on Kabazi II in partnership with Victor Chabai and his colleagues has been involved in the field and laboratory investigations of Kabazi II since 1999 with a project supported by the *Deutsche Forschungsgemeinschaft* focusing on the functional variability and settlement systems in the late Middle Paleolithic of Crimea (Chabai et al. 2002). The major goals proposed in 1992 by the Ukrainians and the Americans (Marks and Chabai 1998) still determine the content of the present volume: dating the Crimean Middle Paleolithic through radiometric methods and environmental studies; studying the techno-typological variability of the Crimean Middle Paleolithic assemblages; elucidate the adaptive range during the Middle Paleolithic through the study of faunal material as well as the relationships between raw material economy and faunal exploitation.

The description of the environment, chronology and artifacts of the WCM and Crimean Micoquian at Kabazi II is provided in Chapter 1 by V. Chabai. It appears that one particularity of Kabazi II is the variability of the lithic assemblages along the sequence, with Crimean Micoquian industries (Units VI, V, IV, III and IIA from bottom to top) underlying the WCM (Units IIA, levels IIA/1 and IIA/2; II and A from bottom to top). Although no interstratification between Micoquian and WCM is attested at Kabazi II, the observation that in other Crimean sites the Micoquian extends until the Vytachiv, vt_{3b}-Denekamp Interstadial leads V. Chabai to the conclusion that Micoquian and Levallois-Mousterian technologies co-existed during at least 15,000 years. At Kabazi II, while the WCM is strictly correlated to OIS 3, the Crimean Micoquian is present from the beginning of the sequence onwards and seems to cover a time span from OIS 5 to OIS 3.

With a few exceptions the archaeological levels of Kabazi II had a fairly low density of artifacts (Chapter 1: Tab. 1-3) and were separated by sterile sediments (Chapter 1: Tab. 1-2). According to V. Chabai each archaeological level is considered to be the result of a short-term single occupation and economic episode connected with butchering activities. Moreover, most of the archaeological levels are interpreted as *in situ* occupational surfaces due to the "fresh" edges of most artifacts and the absence of patination, the low gradient angles of the archaeological levels as well as the general state of preservation of the bone surfaces.

The reader will search in vain for a description of the excavation methods and the stratigraphic nomenclature. Although more information is to be found in previous volumes, (Chabai 1998 177 ff.; 2005, 1 ff.), they are far from being transparent. It appears that the archaeological sequence of Kabazi II consists of 17 lithological entities labelled stratas that in turn comprise 8 main archaeological units which were further subdivided into occupational levels and horizons. While the levels represent clusters of lithics and bones located at about the same elevation following the lithological inclination, no explicit definition is given for the terms "unit" or "horizon". The observation that the archaeological levels were separated from each other by varying thickness of sterile sediments on the one hand, and that the thickness of the single levels usually did not exceed the thickness "of a single bone or artefact" (i.e. 3-5 cm), leads the author to conclude that they correspond to ancient "living floors" (Chapter 1: Tab. 1-2). Since the lithological

cal homogeneity of the stratum sediments hindered an accurate geological subdivision, though different levels of faunal remains and flint artifacts were identified, the excavation method consisted in the removal of 3 to 5 cm spits following the lithological inclination of the stratum. The documentation of the archaeological levels was obtained through the mapping of each object's position horizontally as well as by the recording of the elevations of no less than 10 objects per square meter. The sediments were sieved using a 1.5 mm screen. Water screening was employed for selected squares to recover snails and the remains of rodents. Without questioning the state of preservation of the site's stratigraphy, the author's statement that palimpsets are rare at Kabazi II (Chabai 1998, 12) and that the assemblages correspond to single economic episodes, though possible, is not entirely convincing. Given the homogeneity of the sediments and the fact that no evident features like hearths were documented, this would have been best demonstrated by systematic attempts of refits between levels and micromorphological sampling of the single archaeological levels.

V. Chabai then summarizes the most characteristic techno-typological features of the WCM and the Crimean Micoquian assemblages at Kabazi II. He proposes to divide the WCM into two sub-stages, whereas the main difference between them lies in the ratio to which Levallois or volumetric technologies were applied. In fact, the later stage is characterised by an increased production of blades although there are no significant differences in tool typology between early and late stage of the WCM. From a techno-typological point of view, the WCM fits into the common picture of Levallois-Mousterian industries of Eastern Europe, as they are to be found along the Prut and Dniestr, although the covered time span of the WCM is limited to OIS3. The difficulty to reconstruct the Micoquian technology at Kabazi II is directly tied to raw material economy. Tools were imported, resharpened and discarded there, but no blank production occurred at the site. The tool assemblage corresponds to the Ak-Kaya industrial facies of the Crimean Micoquian with a high percentage of bifacial tools. Contrary to the WCM, there is no evidence for Levallois and volumetric debitage method.

In Chapter 2 and 12, M. Patou-Mathis presents a comparative approach of the faunal exploitation strategies of some WCM and Crimean Micoquian assemblages (Units II and III). According to her archaeozoological analysis the subsistence strategy remained constant throughout the sequence with a prey species spectrum largely dominated by Equus hydruntinus. Moreover, according to M. Patou-Mathis the function of the site has been interpreted as a kill-butchery site throughout the sequence, based on the observation that the nutritious parts of the animals were removed from the site and the faunal remains were dominated by one prey species only. This means that over thousands of years (!) the nature of occupation remained absolutely unchanged, though pollen analyses seem to indicate that the climate during the Micoquian occupation was more humid than at WCM times. The conclusion is that the technical change observed in the lithic industries between the WCM and the Crimean Micoquian had no correlate in the subsistence strategies. With a few exceptions summer is the main season of occupation attested at the site, leading Patou-Mathis to assume that the area of Kabazi II served as a summer range for Equus hydruntinus. In the case of level III/1, Patou-Mathis assumes that Neandertals, next to hunting, practised scavenging of Equus hydruntinus based on the general mortality curve of the individuals attested at the site, particularly based on the presence of older individuals (Chapter 12: Fig. 12-9). Considering the implications a mode of food

procurement partly based on scavenging has in the debate concerning the modernity of Neandertal behavior, one might regret that this almost incidentally inserted statement (p. 216 and 217) has not been investigated, or at least exposed, more rigorously by the author through a detailed analysis of the butchering marks. At least when considering the atypical mortality curve for horizon III/1 (Fig. 12-9), one has to regret that the amount of individuals between 10 and 20 years of age is not specified any further.

Chapters 3 to 8, 10 and 11, and 13 to 17 provide a presentation of the stone industries of Unit II, archaeological levels 7, 7AB, 7C, 7D, 7E, 8, 8C, Unit IIA, levels 1 and 2, and Unit III, levels 1A, 1, 2, 2A, 4, 5, 6, 7 by different authors from the University of Cologne. The analytical method chosen by the authors is the reconstruction of the transformation state of different raw material units or workpieces documented in each archaeological level (Transformationsanalyse) combined with the reconstruction of the reduction sequence against the background of the cultural knowledge of the Neanderthals that occupied Kabazi II (Arbeitsschrittanalvse). This method, formerly used by W. Roebroeks (1988) and further developed by W. Weißmüller (1995), has been applied subsequently by J. Richter (1997) in the frame of his habilitation thesis dealing with the Late Middle Paleolithic industries (G-Layers) of Sesselfelsgrotte (Bavaria, Germany). This method aims to show in which reduction state a workpiece has been brought into the site and whether or not artifacts have been exported. Given that each workpiece is considered to represent a single event, the transformation analysis of an assemblage results in an appreciation of the techno-economic behavior of the occupants of a site. As one of the most striking features of the Crimean Middle Paleolithic chronostratigraphy is the interstratification and co-existence of WCM and Crimean Micoquian, this method is suitable in order to better understand the nature of the differences between these techno-complexes. However, a weakness lies in that patinated artifacts have to be rejected from the analysis (that represent nearly 30 % in case of level II/7E for example), and uncharacteristic raw material units cannot be securely attributed to one reduction event. Moreover, a considerable constraint affecting the method in the present study concerns the extent of the excavated area. Judging from the plans of the uncovered levels at Kabazi II (see Chapter 1) it is evident that the excavation areas represent merely "windows" on past occupation horizons, that have not been captured in their full extension. Consequently, one has to keep in mind that in the present studies the assemblages studied by means of the transformation analysis are assumed to represent closed ensembles.

The benefits of this kind of approach become apparent in pointing to the differences between WCM and Crimean Micoquian with regard to the raw material economy, e.g. the way lithic raw material was supplied. Regardless of the distance to the raw material sources, it appears that in the WCM the supply of blanks was assured by the carrying of cores, irrespective of the nature of the occupation, whereas in the Crimean Micoquian the bifacial tools served as tools as well as cores for blanks of unifacial tools obtained in the process of thinning. The authors advance the idea that this pattern could be explained by the fact that during OIS 3, to which correspond most of WCM sites, the incision of the river beds would have made more raw material sources available, while during OIS 4 and 5 (to which the majority of the Crimean Micoquian sites correspond) many raw material outcrops were still covered by sediments. However, the raw material supply strategies are not sufficient to explain the coexistence of different technologies of the Crimean Micoquian and WCM during OIS 3, especially since they correspond to occupations with identical function within an identical local environment (see Chapter 18). While their approach aims at explaining the character of the assemblages by means of their functional variability, it is somewhat surprising that the authors nevertheless tend to interpret the Crimean Micoquian and WCM as "an expression of two different traditions, which then should correspond to distinct social units" (p. 357).

One of the merits of Chapter 7 is to point to the existence of palimpsests in the archaeological sequence. Here G. Bataille proposes a reconstruction of two successive butchering events for level II/7E, comprising 295 lithic artifacts, by combining the transformation analysis with the archaeozoological results on bone processing. The interpretation is based mainly on a spatial setting of blanks and tools of the identified workpieces of the assemblage and the faunal remains. The two isolated events are correlated by the author to the hunting of three adult individuals of Saiga tatarica and a family herd of 23 (!) individuals of *Equus hydruntinus*, respectively. The isolation of two events is based on the concordance in the spatial repartition of the reduction products of most of the raw material workpieces following a bimodal distribution and the faunal remains of Equus hydruntinus, except for one workpiece. The observation that the latter, which is related to blank production, does not present a bimodal distribution as do the others and distributes along a row where at least three individuals of Saiga tatarica were dismembered, leads the authors to conclude that two temporally distinct events are embedded in level II/E7. In a final step, the assemblage of level II/E7 has been integrated in the general settlement system proposed by V. Chabai and T. Uthmeier for the Crimean Middle Paleolithic (Chapter 18).

In Chapter 9 V. Usik discusses the presence of the Levallois method *sensu stricto* in the WCM of Kabazi II based on the analysis of core and blank typology and reduction sequences in the light of preliminary results of refits from level II/8. Moreover, he questions the existence of the "Biache" uni- or bi-directional reduction strategy at Kabazi II as suggested by V. Chabai (Chapter 1). Instead, V. Usik proposes to assign the Levallois reduction strategy of Kabazi II (II/8) to the Molodova V type of the Levallois method since they are identical, and formulates the opinion that the Kabazi II Levallois method aimed at making the production of blanks less consumptive. In this respect, the WCM industry of the site would correspond to an intermediate position between the classical "tortoise" method with centripetal preparation and the Levallois method for uni-directional convergent points.

In Chapter 18, V. Chabai and T. Uthmeier propose a reconstruction of the settlement systems of the Crimean Middle Paleolithic using 16 out of 30 known multi-layered sites, nearly all located in the middle range of the Crimean Mountains. In total, assemblages from 80 levels, all considered as *in situ* occupations, have been studied. The result is a coherent (though not necessarily correct) model synthesizing the datasets of more than one century of intensive research and building upon a previous reconstruction of Middle Paleolithic settlement systems in Crimea (Marks and Chabai 1998, 2001). After a general overview of the Crimean topographical features, the archaeological richness and the ecosystem during the Upper Pleistocene in Crimea, the authors provide some general remarks on the exploitation of food resources on the peninsula by the Neandertals. Subsequently, the theoretical model used for the classification of the occupations is exposed, in which the occupations are classified following their position within the food acquisition process on the one hand, and the distance from raw material sources on the other (Table 18-2). In this respect, the occupations are classified into stations and camps that reflect respectively the emphasis on the extraction or consumption of food resources. Camps and stations are subdivided into different types from A to D depending on their distance from raw material sources.

The analysis shows that the Crimean Micoguian and the Western Crimean Mousterian show more similarities than differences, as both share similar systems of land use and logistical strategy for the acquisition of resources. Moreover, they both inhabit the mountain and sub-mountain regions. Although the explanation for the diversity of stations and camps for the Crimean Micoquian during OIS 3 in comparison to their low diversity in earlier stages (Chapter 18: Fig. 18-17) remains a matter of future investigations, this chapter nevertheless constitutes a most-valuable contribution to the reconstruction of patterns of Middle Paleolithic subsistence and settlement as it develops both a theoretically and empirically based model linking variables of time, space, group size and caloric input and output. Moreover, by demonstrating that the Neandertals of Kabazi II in both the Crimean Micoguian and the Western Crimean Mousterian followed logistical strategies of resource procurement, the authors shed new light on Binford's forager/collector dichotomy in which the strategies of resource procurement of Neandertals are characterised by a low amount of planning and can be contrasted to the more effective strategies of anatomically modern humans. The observation that faunal exploitation at Kabazi II was determined by the export of the meat-bearing parts and the recurrent presence of the same pattern of hunting strategy through time speaks against acquisition on an encounter basis. However, the authors stress that further investigations are required to answer the question of whether an all-year-round presence of human huntergatherers in the Crimean Mountains would have been possible.

In the last Chapter (19), V. Sitlivy and A. Zięba place the Crimean Mousterian within the context of the Eastern and Central European "non-Micoquian" Middle Paleolithic as well as Levallois-based Early Upper Paleolithic industries. Basing their comparisons on their own observations made on the Kabazi II material in 2003 and 2004, the authors provide a detailed picture of the variability of the Mousterian industries.

In contrast to previous publications on the Crimean Paleolithic by V. Chabai and colleagues in the E.R.A.U.L. series of the University of Liège (Belgium) (e.g., Marks and Chabai 1998), the absence of an editing board in the realisation of the present volume is reflected in several formal errors. In this respect, it is regrettable that next to some figures pasted over with corrected versions (Chapter 3: Fig. 3-5; Chapter 7: Fig. 7-13, 7-14, 7-15, 7-16) and the presence of double (p. 349) or missing (p. 347) pages, in some of the chapters the authors refer to figures that are either not found in the text (p. 345 with a reference to Fig. 18-19) or obviously do not correspond to the content of what is said by the author (p. 128 with a reference to figure Fig. 7-10 A-C). Moreover, one might regret the stylistic differences in the drawings of lithic artifacts when comparing the figures in the Chapters 3 (Fig. 3-7 to Fig. 3-9) and 10 (Fig. 10-5 to 10-13) to the figures in Chapters 1 and 9. The present volume nevertheless constitutes a welcome addition to the substantial corpus of publications exploring the Middle Paleolithic occupation of Crimea.

In addition to representing a valuable contribution to the Middle Paleolithic settlement and subsistence patterns of Crimea, the present book demonstrates once again the productivity of the international co-operations in which the Ukrainians were engaged for 15 years. The joint studies conducted in this volume on Kabazi II have raised some questions worth investigating in future research. Since the current low population density in Crimea has caused little landscape disturbance, it is to be expected that the potential of this "peninsular Perigord" is far from being exhausted.

References

- Chabai, V. P. 1998: Kabazi II: Introduction (with a contribution by C. R. Ferring). In: Marks, A. E. and Chabai, V. P. (eds.), The Middle Paleolithic of Western Crimea, vol. 1. The Paleolithic of Crimea I. ERAUL 84. Liège: Université de Liège, 167-200.
- Chabai, V. P. 2005: Kabazi II: Stratigraphy and Archaeological Sequence. In: Chabai, V. P., Richter, J., and Uthmeier, T. (eds.), Kabazi II: Last Interglacial Occupation, Environment & Subsistence. Palaeolithic Sites of Crimea, vol. 1. Simferopol-Cologne, 1-24.
- Chabai, V. P., Marks, A. E., and Monigal, K. 2004: Crimea in the Context of the Eastern European Middle Paleolithic and Early Upper Paleolithic. In: Chabai, V. P., Monigal, K., and Marks, A. E. (eds.), The Middle Paleolithic and Early Upper Paleolithic of Eastern Crimea. The Paleolithic of Crimea III. ERAUL 104. Liège: Université de Liège, 419-460.
- Chabai, V. P., Richter, J., and Uthmeier, T. (eds.) 2005: Kabazi II: Last Interglacial Occupation, Environment & Subsistence. Palaeolithic Sites of Crimea, vol. 1. Simferopol-Cologne.
- Chabai, V. P., Richter, J., Uthmeier, T., and Yevtuchenko, A. I. 2002: Neue Forschungen zum Mittelpaläolithikum auf der Krim. Germania 80, 441-473.
- Marks, A. E. and Chabai, V. P. (eds.) 1998: The Middle Paleolithic of Western Crimea, vol. 1. The Paleolithic of Crimea I. ERAUL 84. Liège: Université de Liège.
- Marks, A. E. and Chabai, V. P. 2001: Constructing Middle Paleolithic Settlement Systems in Crimea: Potentials and Limitations. In: Conard, N. J. (ed.), Settlement Dynamics of the Middle Paleolithic and Middle Stone Age. Tübingen Publications in Prehistory. Tübingen: Kerns Verlag, 179-204.
- Pettitt, P. 1998: Middle and Early Upper Palaeolithic Crimea: the radiocarbon chronology. In: Otte, M. (ed.), Préhistoire d'Anatolie: Genèse de deux mondes, vol. 1. ERAUL 85. Liège: Université de Liège, 329-338.
- Richter, J. 1997: Sesselfelsgotte III. Der G-Schichten-Komplex der Sesselfelsgotte. Zum Verständnis des Micoquien. Quartär-Bibliothek 7. Saarbrücken: Saarbrücker Druckerei und Verlag.
- Roebroeks, W. 1988: From find scatter to early hominid behaviour. A study of Middle Paleolithic riverside settlements at Maastricht-Belvédère (The Netherlands). Analecta Praehistorica Leidensia 21. Leiden: Leiden University Press.
- Weißmüller, W. 1995: Sesselfelsgrotte II. Die Silexartefakte der Unteren Schichten der Sesselfelsgrotte. Ein Beitrag zum Problem des Moustérien. Quartär-Bibliothek 6. Saarbrücken: Saarbrücker Druckerei und Verlag.

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