

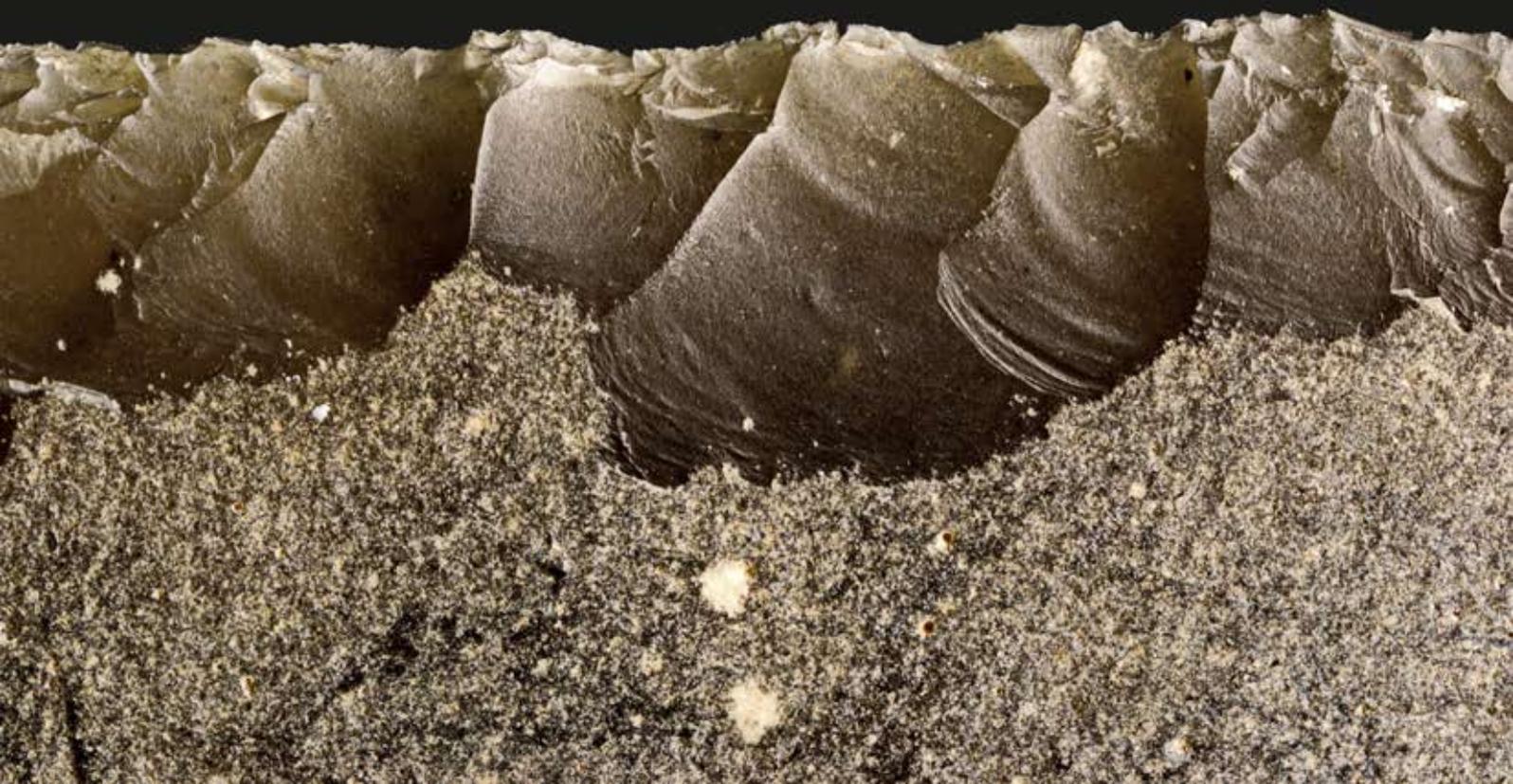
CROSSING THE BORDERS

Interregional and Cross-Cultural Interactions
in the Context of Lithic Studies

ABSTRACT BOOK

15th SKAM Lithic Workshop

17-19 October 2018 Minsk, Belarus



International conference
“Crossing the Borders. Interregional and Cross-Cultural Interactions
in the Context of Lithic Studies”
(15th SKAM Lithic Workshop)
17–19 October 2018, Minsk

Editors

Vitali Asheichyk
Dagmara H. Werra
Iwona Sobkowiak-Tabaka
Katarzyna Pyżewicz
Aliaksandr Vashanau

Layout

Vitali Asheichyk

Cover design

Lidziya Zinovich

Photography on the cover

Flint knife from a burial at the Drazdy 12 site, Belarus (photo by Y. Girya)

INSTITUTE OF HISTORY OF THE NATIONAL ACADEMY OF SCIENCES OF BELARUS
SKAM FLINTREADERS SOCIETY (STOWARZYSZENIE KRZEMIENIARSKIE SKAM)
INSTITUTE OF ARCHAEOLOGY AND ETHNOLOGY POLISH ACADEMY OF SCIENCES
INSTITUTE OF ARCHAEOLOGY ADAM MICKIEWICZ UNIVERSITY IN POZNAŃ

**CROSSING THE BORDERS.
INTERREGIONAL AND CROSS-CULTURAL INTERACTIONS
IN THE CONTEXT OF LITHIC STUDIES**

15th SKAM Lithic Workshop
17-19 October 2018, Minsk, Belarus

ABSTRACT BOOK

MINSK 2018

ORGANISING COMMITTEE

VIACHASLAU DANILOVICH

Director of the Institute of History of the National Academy of Sciences of Belarus

VADZIM LAKIZA

Deputy Director for Scientific Work of the Institute of History
of the National Academy of Sciences of Belarus

FEDOR SHEVKO

Deputy Director for General Issues of the Institute of History
of the National Academy of Sciences of Belarus

ANDREI SALAUYANAU

Academic Secretary of the Institute of History
of the National Academy of Sciences of Belarus

OLGA LEVKO

Head of the Centre of Archaeology and Ancient History of Belarus,
Institute of History of the National Academy of Sciences of Belarus

ALEKSANDR MEDVEDEV

Head of Department of Archaeology of Prehistoric Society,
Institute of History of the National Academy of Sciences of Belarus

SWIATLANA VELENT-SHCERBACH

Institute of History of the National Academy of Sciences of Belarus

MARYIA TKACHOVA

Institute of History of the National Academy of Sciences of Belarus

ALIAKSANDR VASHANAU

Institute of History of the National Academy of Sciences of Belarus

KATARZYNA PYŻEWICZ

Institute of Archaeology, Adam Mickiewicz University in Poznań

IWONA SOBKOWIAK-TABAKA

Institute of Archaeology and Ethnology, Polish Academy of Sciences, Poznań

DAGMARA H. WERRA

Institute of Archaeology and Ethnology, Polish Academy of Sciences, Warsaw

VITALI ASHEICHYK

Independent researcher, Minsk

WORKSHOP SCHEDULE

WEDNESDAY, 17 OCTOBER 2018

- 9.00–10.00** **Registration**
Institute of History of the National Academy of Sciences of Belarus
vulica Akademičnaja 1, 4th floor
- 10.00–10.40** **Workshop opening**
- 10.40–14.00** **Session 1**
The Lower Palaeolithic in Central Europe. Earliest evidences and the discussion about pseudo-artefacts
- 14.00–15.40** **Lunch break**
- 15.40–17.20** **Session 2**
Inter-group contacts in the Late Palaeolithic
- 17.40–19.00** **Poster session. Part 1**
- 19.30** **Welcome dinner**
Café 'Academy', vulica Akademičnaja 10

THURSDAY, 18 OCTOBER 2018

- 10.00–14.00** **Session 3**
Borders in the Mesolithic? Interactions and cultural changes as seen from lithics
- 14.00–15.40** **Lunch break**
- 15.40–17.20** **Session 3. Continuation**
- 17.40–19.00** **Poster session. Part 2**

FRIDAY, 19 OCTOBER 2018

- 10.00–12.20** **Session 4**
Lithic technology in the Neolithic and beyond
- 12.40–14.00** **Session 5**
Siliceous rocks used by prehistoric communities: places of extraction, desirable kinds, methods of obtaining
- 14.00–15.40** **Lunch break**
- 15.40–17.20** **Session 6**
Different regions and cultures – different lithic tool-kits?
- 17.40–18.00** **Meeting summary**

The technological direction of the stone tools production shows the strategy of obtaining a cutting edge by using bipolar technology.

At the present stage of the research, a collection of pebbles and small boulders belongs to the early Oldowan stone industries in Central Europe.

Ahova 1. A new Palaeolithic site in SW Belarus

Yury Seliazniou¹, Aleksandr Motuzka², Eduard Tsykunou², Vitali Asheichyk³, Aliaksandr Kolasau⁴, Aliaksandr Vashanau⁵, Kseniya Stepanova⁶, Alexander Otcherednoy⁶

¹Independent researcher, Ivanava, Belarus

²Faculty of Geography, Belarusian State University, Minsk, Belarus

³Independent researcher, Minsk, Belarus

⁴Mogilev State A. Kuleshov University, Mahilioŭ, Belarus

⁵Institute of History, National Academy of Sciences of Belarus, Minsk, Belarus

⁶Institute for the History of Material Culture, Russian Academy of Science, Saint Petersburg, Russia

Most of the Palaeolithic sites as far known on the territory of present-day Belarus are of the Late Glacial age, and the earliest of reliably dated ones (Bierdyž and Juravičy) came from the Late Glacial Maximum period.

The recognition of the sites of age that could correspond to the time intervals from the beginning of OIS 5 to the beginning of OIS 3 and, especially, to earlier epochs (OIS 6, OIS 7 and more ancient), was not very effective. During the 20th century, there were found only several sites with scattered artefacts with no clear stratigraphic context. Only three of them (Abidavičy, Padlužža, and Sviacilavičy) provided the artefacts with reliable Middle Palaeolithic morphology attribution that is beyond doubt for most researchers (Калечиц 1984; Абухоўскі 2004).

Due to the lack of the research results for such a long period, the opinion was made that on the territory of Belarus the Middle and, particularly, Early Palaeolithic sites could be present only hypothetically. However, the new evidences make it possible to raise this issue again. In the early 2000s, a site in the Liavončjeva quarry in the southeastern Belarus was discovered. Flint artefacts of most likely the Middle Palaeolithic appearance were found in stratified conditions there (Ободенко, Изотов 2011). This site is not yet widely accepted, since, unfortunately, the materials have not yet been submitted to specialists. According to the existing information, the site itself is not available for research (Ibid.).

A new site situated in close latitudes as the Liavončjeva quarry, but in the south-west Belarus, has better perspectives for the further research. This site is localized in a sand quarry near the village of Ahova, Ivanava district, Brest region. Here, starting from 2009, local independent researcher Yury Seliazniou is discovering a series of artefacts that lays in clear stratigraphical position. Up to now, the assemblage from Ahova quarry includes more than 600 finds. The morphology of flakes and tools may indicate its association with different epochs of the Early and/or Middle Palaeolithic. The most representative finds were demonstrated to specialists of the archaeological institutions of Belarus and Russia (Institute of History of the National Academy of Sciences of Belarus, Institute for the History of Material Culture and Institute of Archaeology of Russian Academy of Science) in 2018. During the discussion, most of the presented finds were recognized as artefacts, and the quarry was identified as an archaeological site, named Ahova 1.

The site of Ahova 1 lays in the area of concentration of the sites of late periods of the Stone Age (Final Palaeolithic – Mesolithic – Neolithic), which is well known as Zaharoddzie region,

geographically belonging to the Belarusian Polesia. The quarry for sand extraction is about 4 km to the east from Ivanava and 1 km to the north from the Ahova village. In geomorphological terms, the Ahova quarry is located in the central part of the southern margin of the Zaharoddzie Upland, which forms a watershed between the basins of the two major rivers of the Western Polesia – Pina and Yaselda, inflowing into the Pripyat River, one of the main tributaries of the Dnieper. Currently, the quarry is active and reveals multimeter sand formations of fluvioglacial deposits that form the right side of a glacial runoff hollow which was inherited by the well-developed valley of the Struha River flowing into the Pina River approximately 10 km to the southeast of the quarry.

Preliminary data on the geological structure of the Zaharoddzie Upland as well as on the structure of the Yaselda River valley suggests that the quarry reveals a sandy-gravel stratum that belongs to the fluvioglacial and fine moraine deposits associated with the Dnieper subhorizon of the Pripyat horizon (Pripyat stage) of the Middle Pleistocene of Belarus (Махнач et al. 2001). Therefore, it should belong to one of the stages of the Dnieper glaciation and, accordingly, is placed in the chronological range from OIS 7 to OIS 10. By now, only preliminary archaeological and geological observations have been conducted in the quarry with following results:

1. The discovered materials are deposited in two or three horizons of gravels or small pebbles containing bouldery and not frequent tabular nodules of flint. The horizons of the gravel are separated by interlayers of heterogeneous sands. At the same time, the upper horizon of the gravel is buried under sand strata, the thickness of which varies from 8 to 12 m. The materials were first discovered during the survey of the upper horizon of gravels, which was uncovered in different parts of the quarry.
2. The Ahova 1 site is probably associated with the deposits of flint raw material, originating from the eroded large Cretaceous chalk blocks that are part of the crest lines of the terminal moraines of the Dnieper glaciation. However, some fragments of flint probably originate from more ancient deposits, the outlets of which have not yet been traced in the immediate proximity of the quarry.
3. Both areas of archaeological material concentration and zones without artefacts have been observed in different parts of the quarry, which has been opened for 10 hectares.
4. Faunal remains that could belong to any species of Pleistocene faunal complexes have not yet been found in the horizons of the pebbles as well as in the overlaying or underlying sands.
5. The collection consists of products of different state of preservation (different degrees of the edges and ribs damage, roundness, flatulence, the loams and sands stuck on the surfaces) and different morphological characteristics. The artefacts most likely belong to different epochs of the Middle and, probably, the final Early Palaeolithic.
6. Preliminary examination of the collection as well as various areas of the Ahova 1 site indicates that the materials may be connected with different complexes of primary knapping or to different kinds of workshops. Most findings in the assemblage are various flakes, many of them are primary ones. The cores and core-like artefacts are not frequent. Unifacial tools with secondary treatment (different kind of retouch) are also very rare.
7. The degree of preservation of these complexes should be the subject of a special study.

We assume that the stratigraphic conditions at Ahova 1 as well as the peculiarities of sedimentation, which have provided the preservation of materials, can be similar to the ones of the Lower and Early Middle Palaeolithic sites of Saxony: Zwochau, Makkleerberg, Schladebach, which lays in similar latitudes (Grahman 1955; Toepfer, 1981; Pasda 1996; Eissmann 2002; Lauer, Weiss 2018).

The discovery of the Ahova 1 site could be very important for further study of early human settlement and migration to the territory of Central and Eastern Europe. The future investigations of the entire territory of Belarus may give us a revision of ideas about stages of human inhabitants and their migrations paths at the territory of Eastern Europe in the Early and Middle Palaeolithic.

The research was partly supported by Russian Foundation for Basic Research, project №17-06-00355a

References:

- Eissmann, L. 2002. Quaternary geology of eastern Germany (Saxony, Saxon-Anhalt, South Brandenburg, Thuringia), type area of the Elsterian and Saalian Stages in Europe. *Quaternary Science Reviews* 21, 1275–1346
- Grahmann, R. 1955. The Lower Palaeolithic site of Markkleeberg and other comparable localities near Leipzig. *Transactions of the American Philosophical Society, New Series* 45/6, 509–687.
- Lauer, T., Weiss, M. 2018. Timing of the Saalian- and Elsterian glacial cycles and the implications for Middle – Pleistocene hominin presence in central Europe. *Scientific Reports* 8, 5111. doi:10.1038/s41598-018-23541-w
- Pasda, C. 1996. Silixverarbeitung am Rohmaterialvorkommen im Mittelpleistozän - Ergebnisse einer Rettungsgrabung in Zwochau (Lkr. Delitzsch). *Arbeits- und Forschungsberichte zur sächsischen Bodendenkmalpflege* 38, 13–55.
- Toepfer, V. 1981. Das Acheuléen auf dem Boden der Deutschen Demokratischen Republik. *Anthropologie* 19/1, 55-77
- Абухоўскі, В.С. 2004. Палеаліт Беларусі – сучасны стан і перспектыва даследаванняў. In: A. Koško, A. Kaleczyc (Eds). *Wspólnota dziedzictwa kulturowego ziem Białorusi i Polski*. Warszawa: Ośrodek Ochrony Dziedzictwa Archeologicznego, 67–79.
- Калечиц, Е.Г. 1984. *Первоначальное заселение территории Белоруссии*. Минск: Наука и техника.
- Махнач, А.С., Гарецкий, Р.Г., Матвеев, А.В. (Eds.). 2001. *Геология Беларуси*. Минск: ИГН НАН Беларуси.
- Ободенко, Ю.В. Изотов, Л.П. 2011. *Нижнепалеолитическое Леонтьевское местонахождение в Посожье*. Unpublished manuscript in possession of Aliaksandr Kolasau.

A new method for studying the manufacture of Middle Palaeolithic bifacial tools

Witold Migal¹, Andrzej Wiśniewski², Marcin Chłoń²

¹State Archaeological Museum in Warsaw, Poland

²Institute of Archaeology, University of Wrocław, Poland

For many decades archaeologists have used a variety of methods leading to understanding the making of shaped tools in the Middle Palaeolithic. In this area, the Harris' matrix plays a significant role, especially during study of the final stages of object modification (Jöris 2001; Migal, Urbanowski 2006; Richter 2013; Kot 2016).

We aimed to present a new method, which focuses on the nature of the relationship between flake detachments, leading to the formation of the bifacial tool. This method is based on Allen's algebra (1983), which proposed several variations of spatiotemporal relations between objects. Recently, the concept of analysis has been developed by Y. Qiang et al. (2012), who applied the triangular model (TM) for visualization of relations. In case of bifacial tools this method allows to understand what kind of activity took place in a given point of time and whether the process was repeatable, and if so, to what extent. The significant advantage of this method is the fact that it allows us to compare many objects with each other.

In the first stage of our study, we performed several experimental bifacial tools. Then we carefully analyzed them using the new method to create a 'level of comparison' for the original artefacts. Finally, we took into consideration the richest refits from the Micoquian site Pietraszyn 49a, Racibórz County, Silesian Voivodeship, SW Poland, which provided artefacts