

A.G. Rybalko, V.N. Zenin, and A.V. Kandyba

*Institute of Archaeology and Ethnography,
Siberian Branch, Russian Academy of Sciences,
Pr. Akademika Lavrentieva 17, Novosibirsk, 630090, Russia
E-mail: rybalko@archaeology.nsc.ru; vzenin@archaeology.nsc.ru;
arhkandyba@gmail.com*

Early Middle Paleolithic Industries in Southeastern Dagestan

This study addresses lithic assemblages from the Middle Paleolithic sites Darvagchay-Zaliv-1 and Darvagchay-Zaliv-4, which are highly relevant to the understanding of this stage in Dagestan. We examine paleoclimatic conditions prevailing during the sedimentation at these sites. A detailed description of lithics is provided. Artifacts were discovered in a minimally disturbed paleosol. They represent the Middle Paleolithic, specifically Levallois technique of primary reduction. Judging by the presence of unlined fire-pits and the fact that finds are scattered over a large area, we infer that these sites evidence multiple short-term occupation. The dates of the sites fall within the Riss-Würm (Eemian, Mikulino) interstadial (MIS 5e)—ca 125–110 ka BP. Parallels with coeval sites in Dagestan and elsewhere in the Caucasus are discussed. Whereas no direct parallels with any Caucasian Middle Paleolithic industries can be found, those of Darvagchay-Zaliv-1 and Darvagchay-Zaliv-4 are consistent with the general evolutionary trajectory of the Caucasian Paleolithic.

Keywords: *Caucasus, Dagestan, Middle Paleolithic, Riss-Würm interstadial, primary reduction, lithic assemblage, Levallois.*

Introduction

Until recently, the territory of Dagestan has been one of the insufficiently studied regions in the Caucasus in terms of archaeology. The cultural horizons at the majority of Paleolithic sites discovered in the region have been completely destroyed (Kotovitch, 1964). Only in the case of preservation of culture-bearing deposits is it possible to identify the technical-typological features of sites; to establish their cultural and economic system, time, and paleoclimatic conditions; and/or to carry out a comparative analysis of lithic industries. Stratified, multilayered complexes occur extremely rarely in this region. Therefore, it is very important to describe new archaeological

materials recovered from clear geological contexts, which makes the obtained data highly reliable and informative.

In the last decade, Paleolithic studies in Dagestan have been noticeably intensified. During the multidisciplinary research in the region, about 20 non-contemporaneous Paleolithic sites were studied (Derevianko et al., 2012: 68–246). Among these, the stratified sites of Darvagchay-Zaliv-1 and Darvagchay-Zaliv-4, located in the Darvagchay geoarchaeological region, are the most informative (Rybalko, Kandyba, 2017, 2019). The present paper provides generalized analytical data obtained during many years of studies (archaeological and scientific), illustrating the Early Middle Paleolithic of Southeastern Dagestan.

Environmental conditions and chronology of the archaeological complexes of Southeastern Dagestan

Stages of human settlement in Southeastern Dagestan should be considered with regard to the environmental settings. At present, the climate of peri-Caspian Dagestan is dry; rivers and other sources of fresh water are scarce; evaporation significantly exceeds atmospheric precipitation. The population of this steppe and semi-desert area lacks fresh water.

To clarify the paleoclimatic situation during the accumulation of the unearthened sediments, 15 samples were taken for palynological analysis from the Darvagchay-Zaliv-1 section (excluding technogenic layer 1). The analysis* revealed an extremely low content of organic matter, which is probably due to post-sedimentation conditions and exposure to the aggressive chemical impact of the enclosing sediments. Miospores noted in the preparations are mostly of poor preservation; this did not allow for more precise definitions. Most plant-remains were identified in layer 3 (paleosol). The identifiable miospores belong to the following taxa: Pinaceae, *Tsuga* sp., *Yuglans* sp., Betulaceae, *Myrica* sp., Poaceae, Asteraceae, *Sphagnum* sp. Some miospores have been identified on the basis of artificial taxonomy: Tricolpollenites sp., and Triletes sp. Samples from layer 3 contain numerous charcoal particles, fragments of charred plant tissues, and phytoliths of arboreal and herbaceous plants. Moreover, indirect signs (abundant rodent burrows, pieces and smears of charcoal) suggest that the Darvagchay-Zaliv-1 area was not prone to droughts; this was most likely a zone of forest-steppe. Judging by the recovered phytoliths and miospores, during the accumulation of the paleosol layer the area was probably vegetated by trees and grasses.

In 2014–2015, the Paleomagnetic Center of the Trofimuk Institute of Petroleum Geology and Geophysics SB RAS carried out the petromagnetic and paleomagnetic analysis of 76 samples from Darvagchay-Zaliv-1 (complex 2) (Kazansky, 2015). The analysis has shown the reverse remanent magnetization of paleosol (Blake polarity episode, 120–100 ka BP) (Karta..., 2013: 21).

Establishing an accurate chronology for Paleolithic objects is one of the most difficult tasks. In the situation of the sheer absence of faunal material, it was only possible to estimate the age of the site with the help of the optically stimulated luminescence method (OSL). The total of 17 samples from Darvagchay-Zaliv-4 was collected for

OSL-dating in 2019. Sample-preparation was carried out in the laboratory of Moscow State University; the analysis was performed in the Nordic Laboratory for Luminescence Dating of the Department of Geoscience at Aarhus University (Denmark). The date of 111.9 ± 14.8 ka BP was generated on feldspars for the paleosol layer of the site (layer 1c)*.

For a more complete understanding of the paleoclimatic situation in the area under study, it was necessary to correlate the established chronological period with the phases of the Caspian Sea level fluctuations. According to T.A. Abramova, the analysis of paleobotanical data shows a direct relationship between the climate change, change in vegetation cover, and fluctuations in the level of the Caspian Sea. Comparing the palynological data has revealed a clear pattern: the maximum sea level during a particular transgression is characterized by the most “wooded” types of spectra (Abramova, 1982: 39). The studied interval (MIS 5) refers to the final stage of the Khazar cycle (Late Khazar transgression). This period in the Western Caspian region is characterized by the spread of arboreal vegetation represented by areas of mixed and deciduous forests. The presence of pollen from pine, birch, hazel, and alder is recorded. Meadow herbaceous vegetation covered the coastal plain and foothills (Abramova, 1974). The development of flora associations is inextricably linked with changes in faunal communities. Analysis of the composition of the large mammals indicates an increase in faunal communities typical of the forest-steppe ecozone (Aleksseeva, 1990).

Archaeological complexes of Southeastern Dagestan

The site of Darvagchay-Zaliv-1, discovered in 2007, is located on the steep southwestern slope of the ancient Caspian terrace (Fig. 1). Excavations at the site were carried out intermittently from 2010 to 2019. In total, four cultural-chronological complexes were identified and studied; the assemblages are dated to the range from the early to final Middle Paleolithic (Fig. 2). One of these, complex 2, was found on the upper portion of the terrace slope and contained lithic artifacts of the Early Middle Paleolithic. This assemblage was studied in 2012–2014 and in 2019 (Rybalko, Kandyba, Anoin, 2014; Rybalko, Kandyba, 2019). Excavations were carried out over an area of 87 m² and reached a depth of 3.6 m from the daylight surface. The section is described below from top to bottom (Fig. 3):

Layer 1a. Grayish-brown loam. Technogenic layer. Thickness 0.35–0.45 m.

*The study was carried out by E.M. Burkanova, a researcher at the Micropaleontology Laboratory of the Tomsk State University.

*Personal communication by R.N. Kurbanov.



Fig. 1. The site of Darvagchay-Zaliv-1. General view. Location of complex 2 is marked by the arrow.

Layer 1b. Light brown loam, partially disturbed by agricultural activities. Thickness 0.35–0.45 m.

Layer 2. Loess-like light brown loam of aeolian-deluvial origin. Thickness 0.6–0.85 m.

Layer 3. Reddish-brown heavy loam. Thickness 0.65–1.2 m.

Layer 4. Dense yellowish-brown heavy loam of aeolian-deluvial origin. Thickness 0.45–0.6 m.

The underlying layers were traced in the test-pit down to a depth of 8.5 m in the course of collection of samples for paleomagnetic studies (Kazansky, 2015).

This section (excluding the uppermost technogenic portion) is the reference for the Middle Paleolithic studies in the Darvagchay geoarchaeological area. The completeness and thickness of the uncovered loess-soil deposits, with their thorough examination, make it possible to carry out, on a new level, a comparative analysis of the discovered materials with those from other important Middle Paleolithic sites in Dagestan and the Caucasus.

Archaeological remains were embedded in layer 3. The texture of the horizon is not uniform, owing to the presence of numerous rodent burrows and carbonate ties. In the lowermost third part of the layer, numerous isolated pieces of charcoal were recorded, some of them in small clusters. The majority of lithic artifacts were recovered from the bottom part of the layer.

Here, several accumulations of artifacts were also noted (their vertical spread does not exceed 10 cm), with some fragments refitting. Judging by the clear pattern of distribution, these portions had not undergone significant deformation. In the lower third part of the paleosol layer, two fireplaces were found; these were represented by the unlined spots of burned soil 2–3 cm thick and 40–45 cm in diameter. In the fireplaces, charred lithic artifacts were found. No mammal fossils were uncovered: owing to the high degree of carbonation, organic materials had rapidly decomposed (Rybalko, Devyatova, 2015).

The lithic collection (443 artifacts) includes: core-like forms ($n=39$), blades and laminar flakes ($n=15$), flakes ($n=288$, including 6 charred specimens), technical spalls ($n=8$), fragments and shatters ($n=74$, including 2 charred specimens), chips ($n=14$), and pebbles ($n=5$). The percentage of the main lithic types in the collection is as follows: core-like forms – 9 %, blades and laminar flakes – 4 %, flakes – 65 %, technical spalls – 1.8 %.

Core-like forms include typologically distinct cores ($n=25$), core shatters ($n=7$), and fragments ($n=7$). The majority of cores ($n=20$) exhibit the Levallois technique of primary reduction (Fig. 4, 7, 8; 5, 1–4). The finds vary in their sizes and degrees of wear. The items are rounded or sub-rectangular; the flaking surfaces

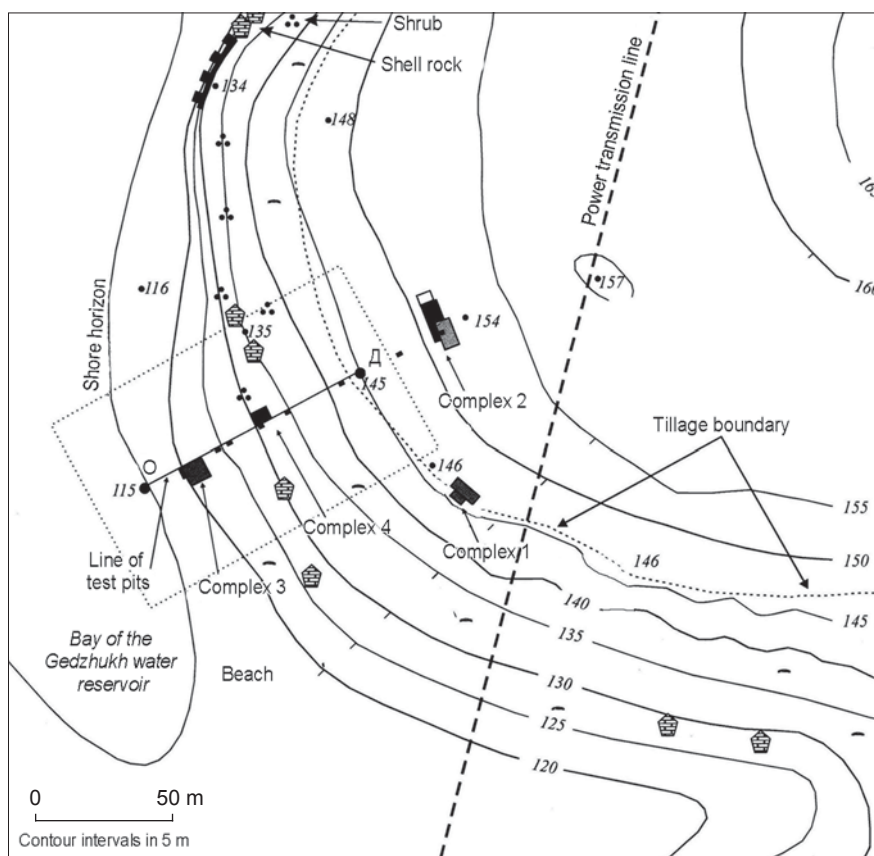
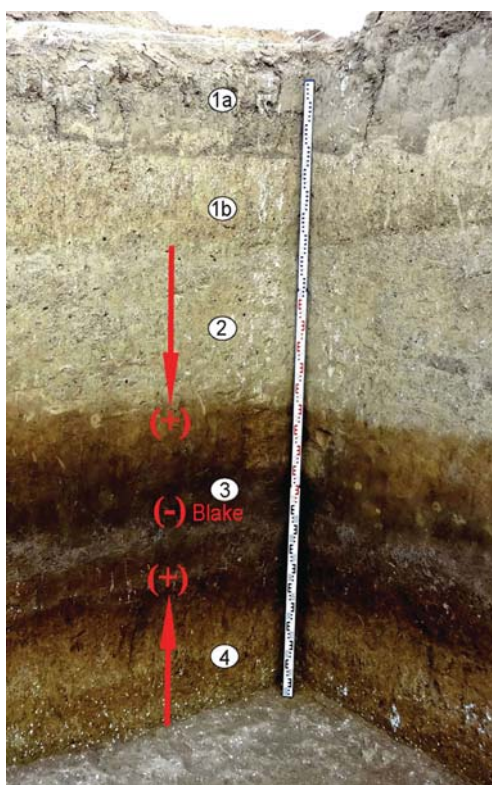


Fig. 2. Darvagchay-Zaliv-1. The topographic map of the area.



are prepared by centripetal detachments; the striking platforms are slightly convex. The cores showing a parallel flaking pattern include single-platform ($n=3$) and double-platform ($n=2$) unifacial varieties. The identifiable residual striking platforms on spalls are mostly plain (62 %) or retain natural cortex (16 %); dihedral (6 %), faceted (12 %) and punctiform (4 %) varieties are less common. Dorsal faceting was sub-parallel unidirectional – 46 %, bidirectional – 10 %, longitudinal-transversal – 15 %, natural – 12 %, radial – 8 %, and irregular – 9 %.

The toolkit ($n=30$; 7 %) comprises 23 artifacts with signs of secondary working; two Levallois flakes, four hammerstones (see Fig. 4, 4), and one retoucher. The group of the most distinct tools includes two retouched Levallois spalls (see Fig. 4, 1), four side-scrapers (see Fig. 4, 2, 5, 6), a knife, and an atypical point (see Fig. 5, 6). The most numerous categories are notches ($n=5$) (see Fig. 5, 5), retouched spalls, and retouched shatters ($n=10$) (see Fig. 4, 3; 5, 7).

Fig. 3. Northwestern and southwestern profiles at Darvagchay-Zaliv-1 (complex 2). Zones of remanent magnetization are marked.

Fig. 4. Lithics from Darvagchay-Zaliv-1 (complex 2).
1 – Levallois flake; 2, 5, 6 – side-scrapers; 3 – retouched flake;
4 – hammerstone; 7, 8 – cores.

The site of Darcagchay-Zaliv-4, discovered in 2010, is located 500 m away from Darvagchay-Zaliv-1, on the slope of the ancient Caspian terrace, at an absolute elevation of 135 m (Fig. 6). During the excavations of 2011 and 2014–2016, the abundant assemblage of Acheulean lithics was collected (Derevianko et al., 2018). In 2017–2019, excavations were executed over an area of 65 m². The uppermost portion of the uncovered sediments (layer 1c) yielded artifacts with Middle Paleolithic morphological features. Below is the description of the section from top to bottom (Fig. 7):

Layer 1a. Dark-gray humic loam. Modern soil. Thickness 0.15–0.20 m.

Layer 1b. Light-gray sandy loam. Thickness 0.15–0.35 m.

Layer 1c. Reddish-brown heavy loam. Thickness 0.25–0.45 m.

Layer 2. Loess-like brown loam. Thickness 2.7–3.15 m.

Layer 3. Gravel-pebble deposits. Thickness 1.15–1.6 m.

Layer 4. Light-gray layered sand. Thickness 0.3–0.45 m.

Layer 5. Pebble deposit in sand with admixture of marine mollusk shells. Thickness 0.2–0.45 m.

These artifacts were embedded in the same stratigraphic and planigraphic conditions as the cultural remains in the above-mentioned site, i.e., in small concentrations in the buried soil layer. The essential difference is that the upper portion of the cultural horizon (layer 1c) at Darvagchay-Zaliv-4 had been partially washed out as a result of slope processes.

The lithic collection ($n=114$) includes cores ($n=14$), flakes ($n=71$), blades and laminar spalls ($n=5$), a technical spall, shatters and fragments ($n=16$), and pebbles ($n=2$). The percentage of the main lithic types is as follows: cores – 12 %, blades and laminar spalls – 4 %, flakes – 62 %, and technical spalls – 1 %.

The majority of cores ($n=11$) show the Levallois reduction technique at various stages of core preparation: shaping of the striking platform and convex flaking surface ($n=3$), removal of target flake ($n=2$), and heavily exhausted cores

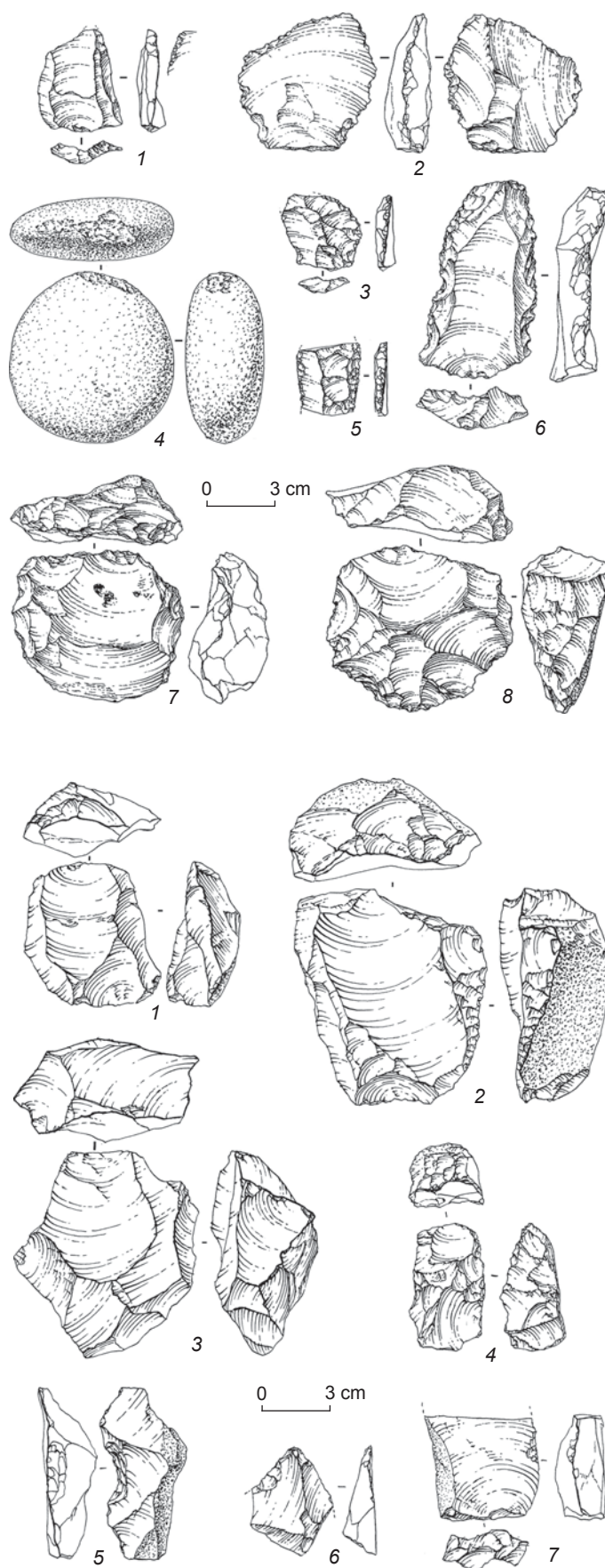


Fig. 5. Lithics from Darvagchay-Zaliv-1 (complex 2).
1–4 – cores; 5 – notched tool; 6 – point; 7 – retouched flake.



Fig. 6. The site of Darvagchay-Zaliv-4. General view. The location of the excavation area is marked by the arrow.

($n=6$) (Fig. 8, 1, 2; 9, 1, 2). In addition, two single-platform unifacial cores with natural striking platforms, and one core with the irregular reduction pattern were identified. Among the identifiable striking platforms, the share of plain platforms is 64 %, natural platforms – 18 %, dihedral – 2 %, faceted – 11 %, and punctiform – 5 %. The dorsal faceting of flakes is as follows: subparallel, unidirectional – 41 %, bidirectional – 14 %, longitudinal-transversal – 14 %, natural – 12 %, radial – 9 %, and irregular – 10 %.

The toolkit consists of 14 artifacts (12 %), including three Levallois flakes (Fig. 9, 3) and two hammerstones—large ovoid and flat pebbles with wear-traces. The point was fashioned on a shortened sub-triangular Levallois spall with a convex faceted platform; its pointed end was shaped with fine and medium-sized retouch at the distal edge (see Fig. 8, 5). A single side-scraper with a natural



Fig. 7. Northeastern profile at Darvagchay-Zaliv-4.

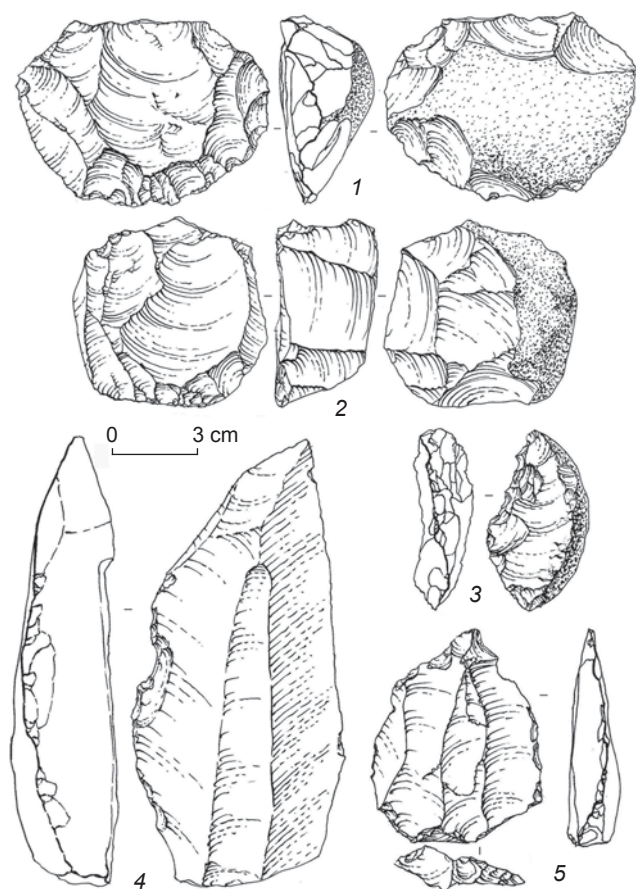


Fig. 8. Lithics from Darvagchay-Zaliv-4 (layer 1c).
1, 2 – cores; 3 – side-scraper; 4 – knife; 5 – point.

back was fashioned on a middle-sized flake; its straight cutting-edge was prepared through semi-abrupt, stepped, scalar, obverse retouch (see Fig. 8, 3). Three knives were fashioned on a laminar spall with a natural back (see Fig. 9, 4), a large flake, and a large and thick, subtriangular blade (see Fig. 8, 4). The long sides of the knives show utilization retouch. A notched tool was manufactured on a large elongated blank. The notch was made through small spall removals and multifaceted retouch. Two medium-sized flakes (see Fig. 9, 5, 6) and a large fragment show fine irregular retouch.

Discussion

The Darvagchay-Zaliv -1 and -4 artifacts were recovered only from paleosol layers. The under- and overlying horizons in both cases are archaeologically sterile, which excludes the possibility of the penetration of artifacts from other chronological-cultural groups into these assemblages. Judging by the distribution of the archaeological materials over the layers, the majority

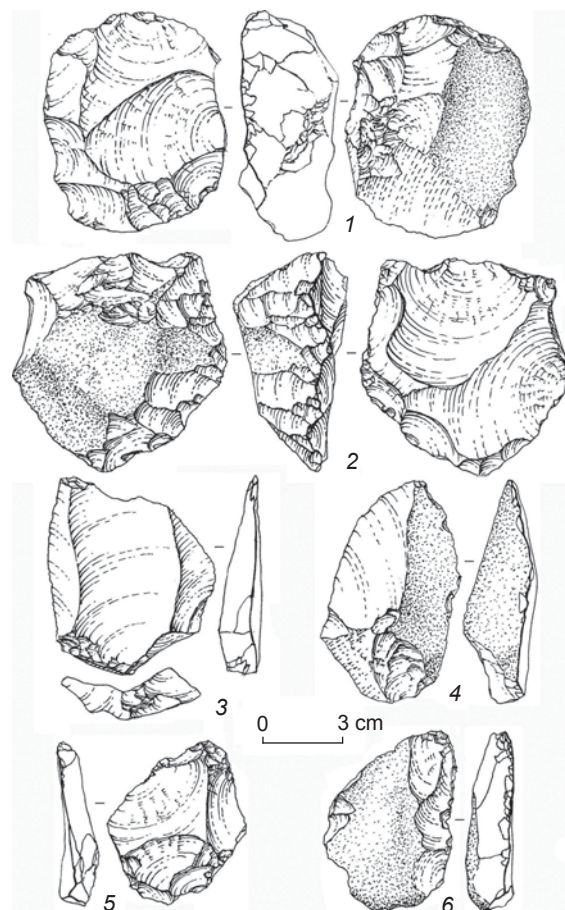


Fig. 9. Lithics from Darvagchay-Zaliv-4 (layer 1c).
1, 2 – cores; 3 – Levallois flake; 4 – knife; 5, 6 – retouched flakes.

of lithics were found *in situ*. Almost all finds, forming small isolated accumulations where the refitting items occurred, were oriented horizontally. An insignificant part of the artifacts were randomly distributed throughout the cultural horizons. This was possibly due to the burrowing animals' activities, and deluvial processes. All the lithic artifacts, regardless of the raw materials, show a similar state of surface preservation (very good). The collections contain all significant categories of stone implements typical of the Middle Paleolithic.

The industry is based on uniform raw materials. The majority of the lithic artifacts were made of silicified limestone (88 %); an insignificant part of the artifacts was made of flint (19 %) and limestone (2 %). Silicified limestone is abundantly available in the form of large and medium-sized pebbles; this is a plastic and hard rock (class 5–6 in Mohs' scale), which is perfectly suited to splitting. Flint occurs mainly in small pieces, with numerous internal defects*. These and other rocks in the

*Identification by N.A. Kulik.

form of pebbles and fragments are widely available in the natural exposures in the central part of the slope and at the terrace's bottom.

The primary reduction of the Darvaghchay lithic industry is based on the Levallois technique: it is represented by the tortoise cores aimed at detachment of flakes. The majority of the cores are characterized by their high degree of utilization; the target blanks were large and medium-sized flakes. Blades are few. Non-retouched Levallois primary and secondary points are absent. Identifiable striking platforms are dominated by plain and natural varieties; faceted and specifically dihedral platforms are less common. The majority of the spalls do not retain natural cortex on their dorsal surfaces; this suggests that the rocks were tested and the pre-cores were prepared outside the sites. Such operations were likely performed at the sites of raw material concentration. The toolkit is not numerous; yet, it includes isolated well-fashioned implements: Levallois spalls, side-scrapers, and knives. Side-scrapers are single, double longitudinal, or convergent. The knives with natural backs and those fashioned on the spall's edge were identified. However, the main categories of tools are indistinct notched forms and flakes with discontinuous retouch.

All the above-mentioned features allow us to attribute the Darvaghchay-Zaliv-1 and -4 sites to the short-term workshops. Here, knappers used to detach blanks for the subsequent manufacture of tools. The majority of these blanks, as well as all thoroughly prepared implements, were taken away from the sites. This explains the great number of heavily exhausted cores, hammerstones, and retouchers at these sites, and also the small number and the typological homogeneity of tools. This conclusion is supported by the small number of lithic implements in clusters and the fireplaces without any lining. The analyzed collections, despite their specificities relating to the features of the sites, provide the idea of the technical and typological appearance of the lithic industries. According to the analysis of the archaeological materials and the age estimates of the enclosing sediments, these industries belong to the Early Middle Paleolithic.

The results of the interdisciplinary studies at the sites, as well as the available OSL-data, suggest that the cultural horizons and the artifacts embedded therein were accumulated under warm and humid climatic conditions. Such conditions were typical of the recent Riss-Würm (Eemian or Mikulino for the East European Plain) interstadial in the range of 125–110 ka BP (MIS 5e). At that period, the paleoclimatic conditions in the Western Caspian region were favorable for floral and faunal communities, as well as for human dispersal.

The early stage of the Middle Paleolithic in Dagestan and the Caucasus

Currently, in the territory of Dagestan, only one stratified site is known—Rubas-1, which is comparatively close in age to the analyzed sites. Rubas-1 is located in the piedmont zone (Tabasaransky District, Republic of Dagestan). The Middle Paleolithic assemblage was found in association with layer 3 (general stratigraphic column), deposited in the alluvium of the 30 m thick terrace of the Rubas River. The lithic collection consists of artifacts differing in their degree of surface preservation. The archaeological material includes Levallois and parallel cores, Levallois and Mousterian points, and a great number of side-scrapers, as well as a few Upper Paleolithic tools. The composition of the lithic assemblage suggests that the artifacts embedded in the alluvial horizon pertain to various stages of the Middle Paleolithic. The chronological attribution of these finds is determined by paleomagnetic data. In the lower portion of layer 3, the reverse polarity zone was identified. Correspondence of the revealed magnetic zone to the Blake episode appears to be most probable (Anoikin, Rybalko, 2014).

In Dagestan, more than 15 Middle Paleolithic localities with surface occurrence of artifacts have been discovered, most of which are located in the Caspian Depression. The best-known is the site of Chumus-Initz, discovered in 1953 by V.G. Kotovich. The site is located on the right bank of the Darvaghchay River, 600–700 m to the north of the Gedzhukh water reservoir's dam. The artifacts were found on the plowed surface on the ancient Caspian terrace. In 2005, this area was revisited by the archaeological team of the Institute of Archaeology and Ethnography SB RAS. In total, 115 lithic implements were found at the site (Kotovich, 1964; Derevianko et al., 2009). According to the data obtained, there are at least two unevenly aged complexes at the site—the Acheulean and Middle Paleolithic. The Middle Paleolithic complex comprises mostly flat parallel cores, with a minor inclusion of Levallois and radial nuclei. The toolkit mainly includes side-scrapers and denticulate tools, as well as solitary Levallois and Mousterian points. Some of these artifacts can be dated to the Early Middle Paleolithic.

The cluster of seven sites of the surface occurrences of artifacts is located in the Manas-ozen River valley (Manas-ozen I–V and Gentorun I, II). The collections from these sites are sparse, and include artifacts of various ages. The majority of finds ($n=108$) were discovered at Manas-ozen IV. In terms of technical-typological features, the lithic industries of these localities were

determined by the researcher to be non-faceted and non-Levallois (Amirkhanov, 1986). However, the collection contains solitary core-like implements produced with the Levallois technique. On the basis of these features, Amirkhanov attributed the assemblages to the early stage of the Middle Paleolithic. Some other sites were found in 2003–2005 in the valleys of the Achisu, Kolichi, Rubas, and Darvagchay rivers. The collections from these sites are quite small. Judging by the presence of typologically distinct cores and tools, the sites have been attributed to the Middle Paleolithic, and some of them possibly to its early stage (Amirkhanov, 2015).

Thus, apart from the Darvagchay-Zaliv-1 and -4 complexes, to date no sites that can be reliably attributed to the Early Middle Paleolithic have been found in Dagestan. The other above-mentioned collections consist mainly of the surface collected artifacts and those having conventional stratigraphic associations, i.e. embedded in the alluvial sediments containing redeposited archaeological material. Considering the geomorphological situation in the places of artifact collection, the analyzed complexes may be associated with the Late Khazar or Early Khvalynsk transgressions of the Caspian Sea. The period of existence of these industries ranges from 130 to 60 ka BP (MIS 5-4).

In Eurasia, the Caucasus is the region richest in Middle Paleolithic sites. About 400 sites with Middle Paleolithic implements have been found here. The majority of these sites do not have stratigraphic context, and contain surface, redeposited, and/or mixed archaeological materials.

In the Southern and Central Caucasus, Early Middle Paleolithic complexes (MIS 5) have been found in the cave sites: Kudaro I (layers 4 and 3), Kudaro III (layers 4 and 3), Tsona (layer 5) in the Southern Ossetia; Jruchula in Georgia; Myshtulagty-lagat (layers 14–12) in the Northern Ossetia, Yerevan (layers 7–5A) in Armenia; and Azykh (layer 3) in Azerbaijan. The Middle Paleolithic industries from the cave sites of Kudaro I, Kudaro III, Tsona, and Jruchula are attributed to the Kudaro-Jruchula culture (Lyubin, 1977: 13–96). Materials from these sites show certain parallels with the Middle Paleolithic assemblages of Myshtulagty-lagat (Weasel) Cave in terms of chronology and technology. On the basis of the biostratigraphic data, layers 14–12 of the latter site have been dated to 128–70 ka BP (Hidjrati, 1987; Hidjrati, Kimball, Koetje, 2003). In general, these assemblages have been classified as Levallois, blade-based, with high faceting indexes. Their toolkits are dominated by elongated points and convergent side-scrapers. The specific technique of tool fashioning is additional ventral treatment. The closest parallels to these industries occur in the materials of the Early Middle Paleolithic of the Levant—the Mousterian of Tabun D-type (Lyubin, Belyaeva, 2006: 81).

The Middle Paleolithic industries of Yerevan and Azykh cave sites in the Transcaucasian Highlands show the use of the Levallois technique of primary reduction, high faceting indexes, and a comparatively small number of blades and laminar spalls. The toolkit is dominated by side-scrapers and points; an insignificant number of denticulate, notched, and Upper Paleolithic tools are also reported (Eritsyan, 1970; Guseinov, 2010: 146–168).

In the Northwestern Caucasus, the sites of Matuzka (layer 7) and Ilskaya (lower complex) are the best-studied complexes of the Early Middle Paleolithic; their archaeological materials were deposited in distinct stratigraphic sequences. The age of the industry in the Matuzka lowermost horizon has been established on the basis of the complex natural scientific data (layer 7 yielded the Blake episode of reverse polarity). The collection from this layer comprises 90 artifacts, of which 30 % are limestone pebbles and pebble fragments, and a single-platform unifacial core exhibiting a pattern of parallel flaking. The category of spalls is dominated by large thick flakes with natural and plain striking platforms. The toolkit consists of various side-scrapers and denticulate tools. According to the scholars, the industry belongs to the “archaic Middle Paleolithic” and doesn’t have parallels among the known sites in the Northwestern Caucasus (Golovanova et al., 2006: 50–51). The Ilskaya site is one of the first Paleolithic monuments discovered in the Caucasus (1898). The Ilskaya archaeological materials represent two lithic industries of different technical-typological parameters and age (Anisyutkin, 2007). The lower archaeological complex, relating to MIS 5, is classified as non-Levallois and non-blade-based. The toolkit is dominated by convergent side-scrapers and points. Numerous elongated foliate and thick bifaces with plane-convex cross-sections were identified. Given this feature, the complex was formerly related to the East European Micoquien. Researchers who have recently studied the site identify the original Ilskaya industry here (Shchelinsky, 2012).

Conclusions

In Dagestan, archaeological materials dating to the Early Middle Paleolithic (MIS 5) have almost been unknown until recently. It is very difficult to compile their general characteristics and compare the collections to the coeval industries of the Caucasus, because the majority of the materials were collected from surface or from mixed context. The stratified complexes of Darvagchay-Zaliv-1 and -4 don’t reveal all industrial parameters, because of the specific feature of the sites (short-term workshops). On the basis of the available data, these industries can be classified

as Levallois, non-blade-based, with low faceting-indexes. The Levallois flaking technique, represented by tortoise cores, was aimed at flake production. The toolkit includes side-scrappers of various types, knives, and notched tools. Levallois points and tools on blades occur rarely; artifacts with ventral thinning, bifacially worked tools, and Upper Paleolithic tool types, are absent.

These materials have their closest parallels in the artifacts from layer 3 at Azykh Cave and the lower horizons at Yerevan Cave. However, while the implements associated with primary reduction (Levallois cores for flake production) are quite similar, there is a significant difference in the toolkits. Furthermore, unlike the Southeastern Dagestan lithic industries, the Central Caucasus Middle Paleolithic complexes mostly contain Levallois blade industries, with convergent, significantly elongated forms making up a large proportion of the toolkit. Given the sheer absence of bifacial tools in the analyzed assemblages, it can be inferred that the Eastern Micoquien from the Northwestern Caucasus did not extend its influence over the territory of Dagestan.

Whereas the described Dagestan complexes have no direct parallels in the cultural and chronological scale of the Caucasian Middle Paleolithic, the archaeological materials from Darvagchay-Zaliv-1 and Darvagchay-Zaliv-4 are consistent with the general evolutionary trajectory of the Caucasian Paleolithic. However, they show the features typical of the local variant of the early stage of the Caucasian Middle Paleolithic, which can be explained by the specificity of the sites, paleoclimatic conditions, and the features of raw materials.

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