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# DISCOVERED ONCE AGAIN. INTERPRETATION OF FLINT ARTEFACTS FROM FUNERARY CONSTRUCTIONS OF THE LATE SCYTHIAN CULTURE

For a long time, the question of flint artefact occurrences in the northern Black Sea coast sites dated to the Early Iron Age and the Roman period was not tackled. Such a state of research resulted from the prevalent conviction among East European scholars that those »atypical« items had got accidentally to graves dated to periods when flint production had been long forgotten. In recent years, a gradual increase of scientific interest in this artefact category has been observed. It has contributed to creating several interesting publications revising those views. The studies concern the Early Scythian culture and objects dated to the Late Roman period (Hellström/Hochmuth/Zajcev 2009; Mączyński/Polit 2016a; 2016b; Tel'nov/Razumov/Sinika 2016).

Despite the fact that the publications present apt and interesting remarks, there are still many issues requiring detailed elaboration. One of such issues is the question of using flint by the people of the Late Scythian culture, which is dated to the period between the end of the La Tène C period and the Younger Roman period. As our studies have shown, this is an interesting and, what is more, not fully explored subject.

A considerable increase in the number of flint objects discovered in the Late Scythian culture cemeteries, and especially the lack of comprehensive studies, which would have included an attempt to explain and interpret the presence of flints in the funerary structures, impelled us to make an effort to solve this problem. Discussing the issue will contribute to introducing new and interesting information on these finds, as well as the spiritual culture of the people in question. Undoubtedly, the obtained results will fill the gap pertaining to the already elaborated finds from the northern Black Sea coast and will make a comparative base for other regions.

## CORPUS OF SOURCES

The available corpus of sources constitutes data provided by publications, archival documentation, and museum collections. The starting point for the ideas on using flint in the Late Scythian culture is a collection of artefacts from graves. The majority of the available finds come from the Crimean peninsula, only two of them from outside. They were discovered on the following sites: Beliaus (Chornomorske rai.), Bel'bek IV (Sevastopol), Chervonïĭ Maiak (Beryslav rai.), Kol'chugino (Simferopol rai.), Levadki (Simferopol rai.), Mologa II (Bilhorod-Dnistrovskyi rai.), Scythian Neapolis (Simferopol rai.), Opushki (Simferopol rai.), Ust'-Al'ma (Bakhchysarai rai.) and Zavetnoye (Bakhchysarai rai.) (**fig. 1**). The study also includes finds discovered at the bottoms of pit graves, alongside the skeletons and other artefacts belonging to the grave inventories. However, items from the fill of the graves, as well as those from robbed tombs, were omitted, because they may have got there accidentally in the process of filling the burial pits.

Among the corpus, flint objects collected during a query on academic publications are clearly predominant. Unfortunately, the published flint has not been subjected to a technological and functional analysis in most

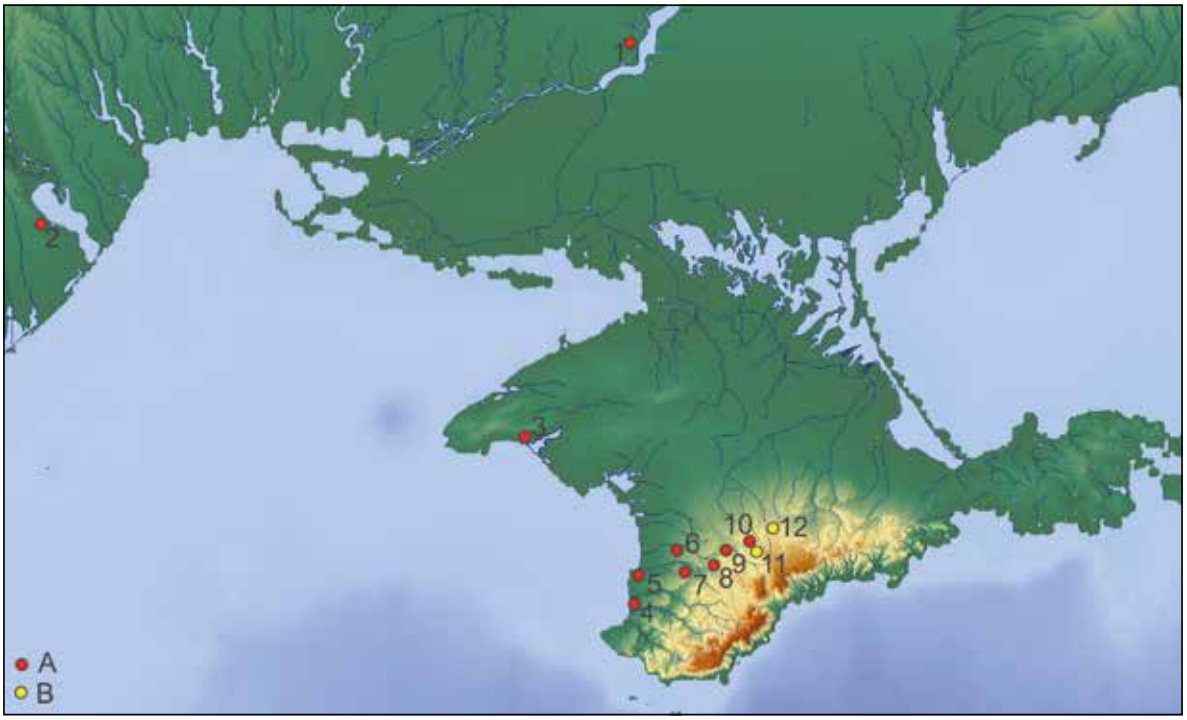


**Fig. 1** Locations of the sites: **1** Chervonīĭ Maiak (Beryslav rai.). – **2** Mologa II (Bilhorod-Dnistrovskyi rai.). – **3** Beliaus (Chornomorske rai.). – **4** Bel'bek IV (Sevastopol rai.). – **5** Ust'-Al'ma (Bakhchysarai rai.). – **6** Kol'chugino (Simferopol rai.). – **7** Zavetnoye (Bakhchysarai rai.). – **8** Levadki (Simferopol rai.). – **9** Scythian Neapolis (Simferopol rai.). – **10** Opushki (Simferopol rai.). – **11** Druzhnoe (Simferopol rai.). – **12** Neĭzats (Belogorsky rai.). – **A** Late Scythian sites. – **B** Late Roman period sites. – (Map B. Polit, based on https://maps-for-free.com/).

cases. Due to this fact, we do not have information about their morphology and utilisation. We cannot obtain such data from the published illustrations because most of them were drawn in an unmethodical manner. Available data, archival photographs of artefacts, and examinations make it possible for us to state that the majority of the analysed objects are flint chunks. Flakes and retouched flakes, as well as blades and blade fragments, also occur.

## LOCATION OF FLINT OBJECTS IN THE GRAVES

An analysis of flint artefacts from graves has proved that these objects occur in tombs of all types present in the cemeteries associated with the Late Scythian culture. They occur in pit, undercut, and vaulted graves. In the immediate vicinity of the skeletons, flint tools were deposited in various places (**fig. 2**), and their repeating arrangement indicates that, contrary to the previous belief, they were deposited deliberately. Flint artefacts occur mainly near the ilium, although, analogously to a custom widespread also in other cultures, placing them on the left side of the body prevailed (cf. Mączyński 2014). Flint artefacts were also found near the skull, the right arm, and the feet of a buried person. In the abovementioned schemes, mainly single flint objects occurred, less frequently sets composed of two or three pieces were found (Vysotskaia 1994, 68). In the Crimea, there were cases of recording a dozen or so, or even 100 flint objects. Such a location of flint artefacts has been noted in single, as well as in collective graves (Mul'd/Kropotov 2013, 117; Dashevskaia 2014, 50-51).

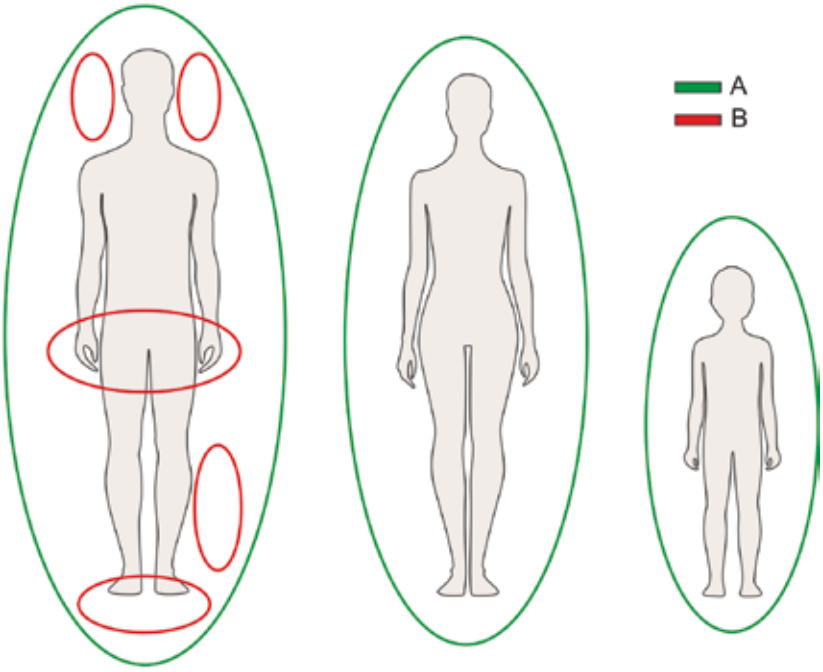


**Fig. 2** Locations of flint artefacts. They are interpreted as objects used for magical and ritual practices (**A**) or as strike-a-lights (**B**). – (Illustration P. Mączyński).

## USING FLINT MATERIAL

Due to sources, conducting a functional analysis of the flint items from the graves is somewhat difficult. Nevertheless, the obtained data make it possible to divide the flint objects found in the graves into three major groups: tools, jewellery, and items that were probably connected with magical and ritual practices. Reviewing each of these groups will allow us to draw interesting conclusions concerning the habits of the Late Scythian culture people.

### Tools

Flint objects deposited near the left or the right hip of a buried person were most probably used as strike-a-lights. This hypothesis is based on the examination results of flint items associated with various cultures, including the Early Scythian, the Sarmatian, and medieval ones, where flint artefacts of analogous location in graves were connected with the function of kindling fire (Korpusova 1983, 159-160; Mączyński/Polit 2016a; Tel'nov/Razumov/Sinika 2016, 133). The validity of such an interpretation has been corroborated by the analysis of flint objects from the Late Roman period Neĭzats cemetery on the Crimea (Belogorsky rai.; cf. Mączyński/Polit 2016b). The artefacts belonging to the analysed group bear numerous traces that typically appear on flint tools used in the process of striking fire (Mączyński/Polit 2016b, 187).
In the Late Scythian culture, the occurrences of flint objects near the ilium are very frequent. Not seldom, flints deposited this way co-occur with a sulphur lump, an iron knife, and/or an unidentified iron item (Vysotskaia 1971, 10; Bogdanova 1981, 3-4 fig. 9). Such items probably composed sets used for striking fire. It is possible that flint artefacts deposited by the head had the function of strike-a-lights, as well as flints placed at the legs. Artefacts of this type bear use-wear patterns and occur accompanied by other objects (Simonenko/Sikoza/Dzneladze 2015, 57-58). The finds from, among others, the Chervoniĭ Maiak (grave no. 129) and Ust'-Al'ma (graves nos 129, 179, 826a) cemeteries indicate that objects deposited in such a

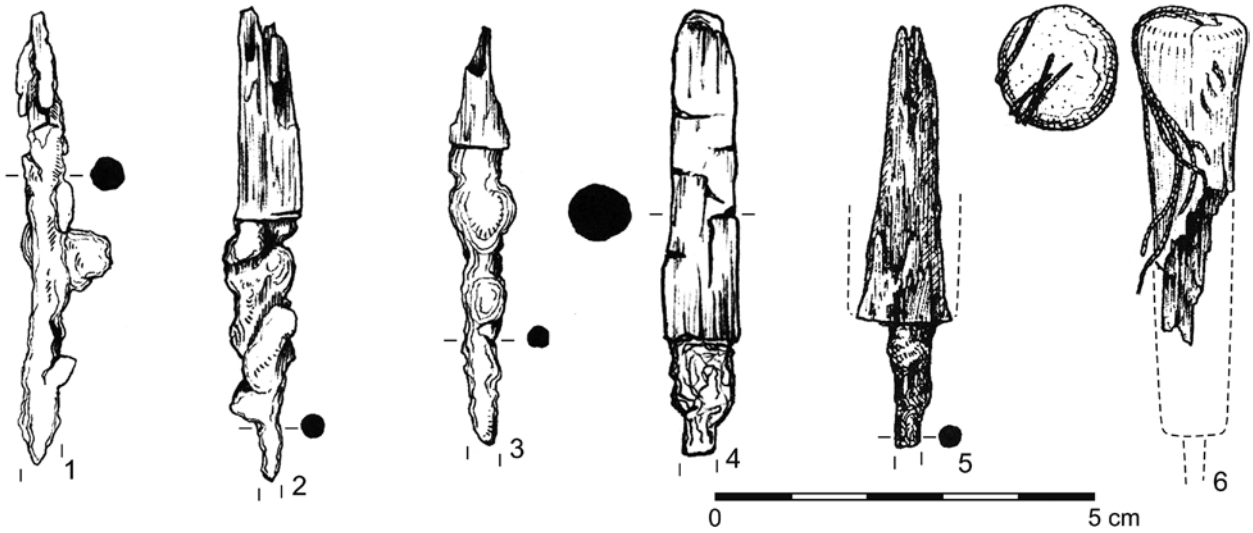


**Fig. 3** Needle-shaped firesteels: **1** Neĭzats (Belogorsky rai.), grave no. 302, burial no. 3. – **2** Neĭzats (Belogorsky rai.), grave no. 307, burial no. 3. – **3** Neĭzats (Belogorsky rai.), grave no. 321, burial no. 2. – **4** Neĭzats (Belogorsky rai.), grave no. 564. – **5** Druzhnoe (Simferopol rai.), grave no. 18. – **6** Druzhnoe (Simferopol rai.), grave no. 21. – (Illustration S. Mul'd).

way were most often accompanied by sets consisting of a belt buckle, an oblong iron object (firesteel?)/or a nail, a hone, a lump of yellow substance (sulphur?) (Puzdrovskiĭ/Medvedev 2005, 271 fig. 4; Simonenko/Sikoza/Dzneladze 2015, 57-58).

It is worth noting that such a seemingly atypical location of flint artefacts was also recorded in Scythian and Sarmatian graves, as well as in constructions dated to the Late Roman period (Glebov/Parusimov 2001, 60; Mączyński/Polit 2016a, 80; Tel'nov/Razumov/Sinika 2016, 133). Such locations of flint accumulations are particularly interesting. Taking into consideration the presence of flint artefacts along with a hone, a knife, and an iron buckle near the head or legs, we can assume that these were the places where belts with tools attached to them were deposited. At the same time, we can suspect that this arrangement, reoccurring on many sites, was connected with a funerary ritual that required placing belts, with utensils attached to them, near buried persons.

When analysing the presence of the flint objects, that were most probably used as strike-a-lights, in the Late Scythian graves, one can find that the absence of items which could be interpreted as firesteels is striking. This fact is undoubtedly conspicuous and makes us deliberate on how the Late Scythian culture people obtained fire with the use of flint. One of the most frequent methods of obtaining fire in ancient times employed an iron firesteel, a flint (strike-a-light) and flammable material (Mączyński/Polit 2016b, 188). In this technique, a flint is held firmly in the hand. In order to produce a spark, its lateral edge is hit with an iron firesteel. Here, it is worth mentioning that in the described technique a firesteel can be substituted with another object. In the funerary constructions of the Late Scythian culture, a set of flint artefacts was usually accompanied by an iron knife, which could have played the role of a firesteel. In academic literature, certain scholars make assumptions that iron knives were used in this character (Libera/Florek 2014, 1040). It is worth noting that the abovementioned method of obtaining fire, by using the blunt side of a knife, was probably utilised by the Early Scythian culture people (Tel'nov/Razumov/Sinika 2016, 135-136). Firesteels appeared in the Crimea not sooner than in the second half of the 3rd century. Most often, they are found in graves from the 4th century. From the morphological point of view, they are items analogous to the Scandinavian type firesteels (**fig. 3**). They occurred abundantly in the Neĭzats (Belogorsky rai.) and Druzhnoe (Sim-

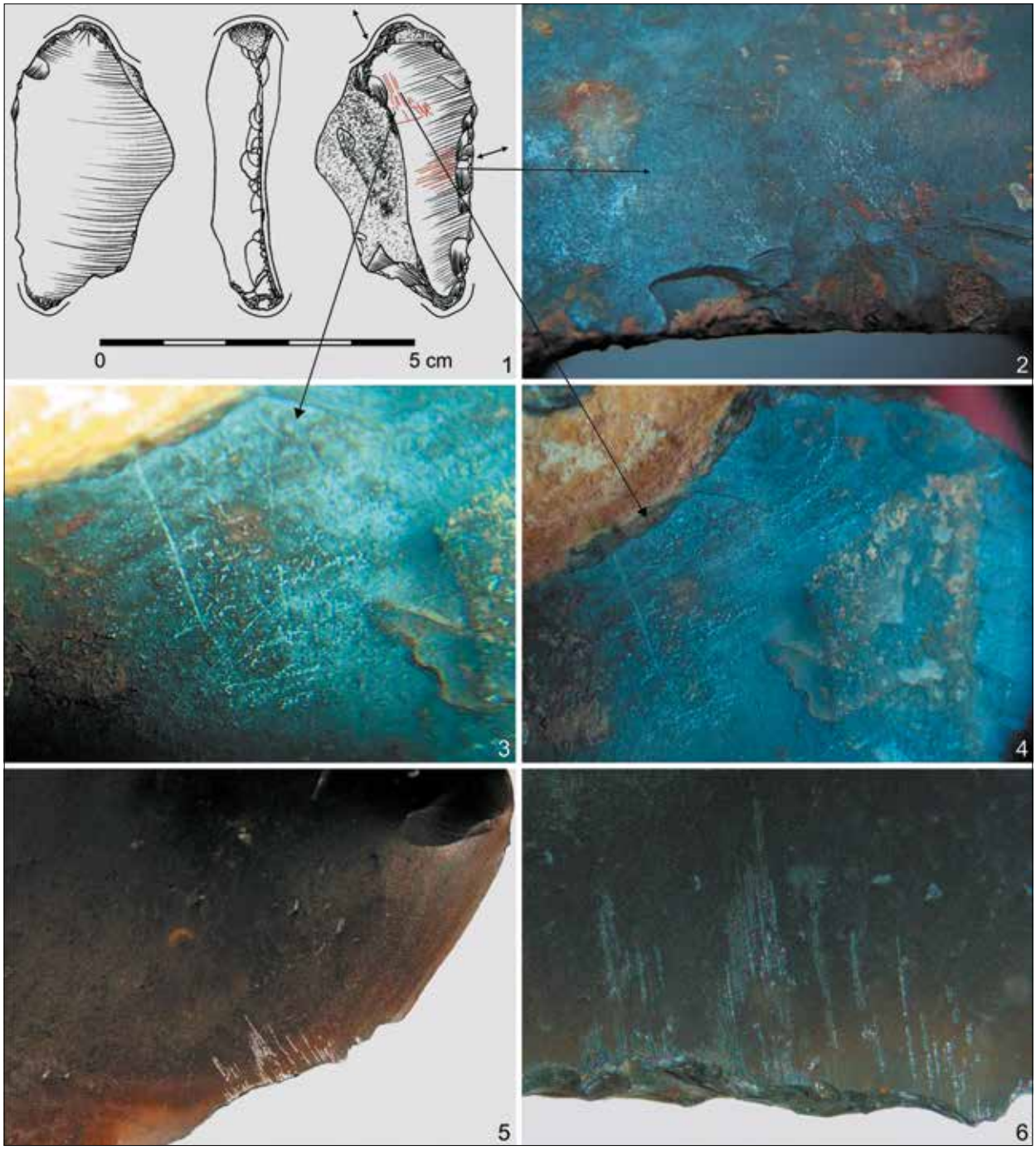


**Fig. 4** Neïzats (Belogorsky rai.), grave no. 60: **1** retouched flake bearing use-wear traces (↔ directions of the use-wear traces [bright scratches]). – **2-4** use-wear pattern, in the form of a bright scratch, on a flint (most probably resulting from a contact with an iron firesteel). – **5-6** use-wear pattern on an experimental strike-a-light (resulting from striking fire with the use of an iron firesteel; **5** magnified ×10). – (Photos and figures P. Mączyński).

feropol rai.; fig. 1) cemeteries, where they were often discovered along with flints and lumps of sulphur. Together, the items formed sets used for obtaining fire (Khrapunov 2002, figs 81, 8; 92, 21-22; 100, 3-4. 7-8 and others; Mączyński/Polit 2016a, fig. 1, 1-13)[1]. Flint objects co-occurring with needle-shaped firesteels bear use-wear patterns indicating that the two types of artefacts were used for striking fire (fig. 4).

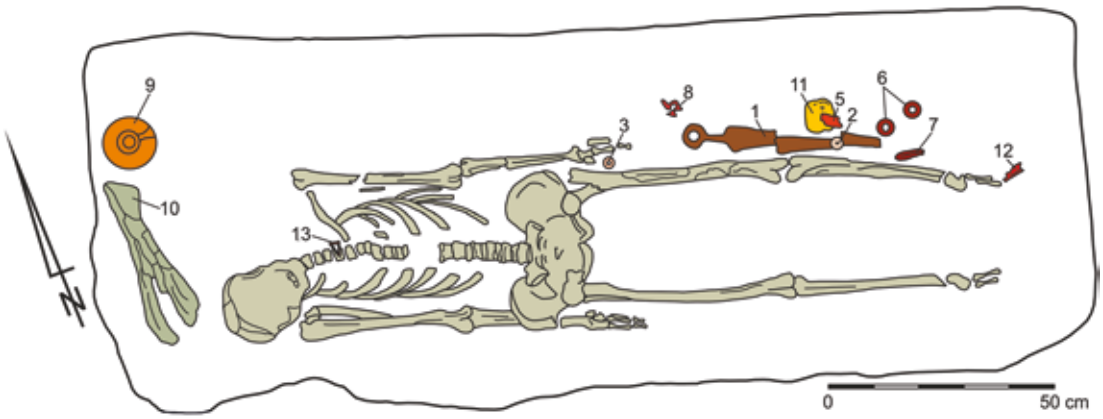


**Fig. 5** Ust'-Al'ma (Bakhchysarai rai.), grave no. 129. Plan of the burial: **1** iron sword. – **2-3** two beads. – **4** stone hone. – **5** flint. – **6** two bronze hoops. – **7** bronze buckle. – **8** four bronze nails. – **9** *terra sigillata* jug. – **10** animal bones. – **11** sulphur lump. – **12** two bronze pendants. – **13** bronze fibula. – (After Vysotskaia 1975, fig. 122 with changes by the authors).

For a long time, such needle-shaped items were erroneously called »awls« (Khrapunov 2011, 40; Kosianenko 2008, 155)[2]. Their occurrences in the Late Roman period indicate that a new method of obtaining fire, different from that used by the populations of the Early Scythian and the Late Scythian cultures, appeared in the Crimea. The appearance of firesteels analogous to the Scandinavian type in the discussed territory overlaps in time with the influx of Germanic tribes and the fall of the Late Scythian culture (see Istvánovits/Kulcsár 2017, 173-177 with further literature). This fact corroborates the hypothesis that the needle-shaped firesteels, and together with them a new technique of kindling fire, different from its predecessor, were brought to the Crimea by the Germanic people, who commonly used this type of tools (cf. Ilkjær 1993a, 253-255). It is also worth mentioning that in the Neĭzats cemetery, in grave no. 332, an ingot firesteel was discovered (Mączyński/Polit 2016a, fig. 2, 2).

Data obtained from ethnographic and archaeological sources indicate a different method of kindling fire. It was based on using a set consisting of a flint, a pyrite or a marcasite concretion, and flammable material that could catch fire (Sorensen/Roebroeks/van Gijn 2014, 477). This method is known mainly from European, African, and Australian ethnographic studies (Davidson 1947, 434-435). What is more, this manner of obtaining fire was described by Pliny the Elder in his »*Naturalis Historia*«. Discussing the subject of pyrite, he remarked that, by hitting this material with »another stone« (flint?) or a »nail« (needle-shaped firesteel?), one can strike a spark that, after falling on a sulphur lump, produces fire. Moreover, the author paid attention to the fact that this technique was popular among the *exploratores* (Plin. nat. XXXVI, 30).

Unfortunately, also in this case, detecting this technique in the Late Scythian culture is very problematic. Such difficulties are caused mainly by the lack of information regarding the type of use-wear patterns on flint artefacts, as well as by the absence of pyrite or marcasite in funerary constructions. The lack of these materials in graves can be explained by their properties. They are minerals that, under the influence of various factors, undergo rapid surface weathering or take forms resembling natural precipitations. It is worth mentioning that the analyses of flint tools from the Late Roman period Crimea indicate the possibility of using the discussed technique (Mączyński/Polit 2016b, 188). This fact should be not surprising since pyrite and marcasite occur commonly in the mountainous part of the Crimea (Pashnina 2008, 10). This is the reason why these materials were easily accessible and probably exploited by, among others, the Late Scythian culture people.

The information, provided by Pliny the Elder, about using pyrite, another stone, and sulphur in the process of obtaining fire by the camp *exploratores* is extremely interesting in the context of the discussed find category. As it was mentioned above, flint artefacts interpreted as strike-a-lights often occurred in male graves along with sulphur lumps. What is important, such sepulchres contained weaponry (swords, arrowheads). This was the case for, among others, the Ust'-Al'ma cemetery, graves nos 129 and 179 (Vysotskaia 1975, 25-26; 1981, 18; fig. 5).

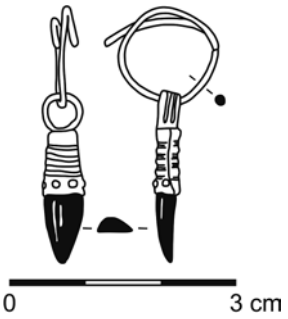


**Fig. 6** Levadki (Simferopol rai.), grave no. 25. Pendant with a flint insert. – (After Mul'd 2013, fig. 7q).

We may assume that flint artefacts playing the role of strike-a-lights belonged to male grave equipment, constituting important elements of warrior accessories. This thesis is also confirmed by the Sarmatian culture (Kosianenko 2008, 278-281). In the Late Scythian culture, the discussed artefacts composed tool sets. Each of them comprised flints (the number varied from one to three), a lump of sulphur, and probably pyrite. Most likely, such small items were kept in an organic container which was attached to the belt (alongside a hone and a knife).

Employing flints in the process of kindling fire by the Late Scythian culture did not represent the only field of activity that required the discussed raw material. It was also used in other spheres of life that were connected with farming. For instance, we know the example of flint tools in a threshing board (*tribulum*) from the area in question. The presence of a *tribulum* was recorded in two examined tombs (nos 450 and 550) from the Ust'-Al'ma site (Hellström/Hochmuth/Zajcev 2009). Unfortunately, there are no other recorded instances of this device in the discussed region.

### Jewellery

It is also interesting that the raw material in question was used in jewellery. The only, unique use of bijouterie ornamented with this mineral was recorded in the central Crimea. The pendant was found in the robbed undercut grave no. 25 from the Levodki cemetery (Mul'd 2013, 329). It is ornamented with an insert, that is a polished flint of a plano-convex cross-section, which imitates a claw of a predatory animal (fig. 6). It is worth noting that pendants of similar form were used as amulets and occurred commonly at the Kuban River in the 2nd-3rd centuries BC. Jewellery of this type was also found in Sarmatian burials, dated to the first centuries AD, from the areas at the Kuban River, as well as those neighbouring the Lower Volga, the Don River, and the north-western Black Sea coast (Mordvintseva/Treĭster 2007, 71). Most often, amulets of this type are ornamented with inserts made of beads, more seldom with material like amber or chalk. In light of the discussed issue, a pendant found in grave no. 15 from the »Oval'nogo« burial mound (Kalininsky dist.) is of considerable importance (Mordvintseva/Treĭster 2007, 71). In this ornament, an obsidian pencil-shaped core was used as an insert.

### Utilisation of flints for ritual practices

According to many scholars, the phenomenon of flint occurrences in funerary constructions dated to periods that follow the decline of flint production is connected with ritual practices (Mączyński/Polit 2016a, 84;

**Fig. 7** Ust'-Al'ma (Bakhchysarai rai.), grave no. 138. Flint artefacts (archival photograph). – (After Vysotskaia 1977, fig. 77).

Puzdrovskiĭ 2007, 122; Tel'nov/Razumov/Sinika 2016, 136). The presence of this raw material in graves is generally associated with cultic actions pertaining to funerary rites or magical practices that belong to the sphere of eschatological beliefs (Mogielnicka-Urban 1997, 282). Owing to the properties of flint that make it possible to produce sparks, the symbolical meaning associated with the cult of fire is attributed to objects made of this raw material. Most of the assumptions regarding the magical and ritual role of flint are corroborated by ethnographical data, which indicate that, according to the beliefs of primitive tribes, it had magical properties (Mogielnicka-Urban 1997, 282).

Arguably, the occurrences of flints in the Late Scythian culture graves can be associated with unspecified ritual actions. Such a statement was advanced by several researchers (Pogrebova 1961, 108; Puzdrovskiĭ 2007, 122). As we know, fire played an important role in the funerary rites of this culture. This belief is attested by the fact that the graves often contain censers, bonfire remains, charcoal lumps, as well as traces of scorching and of ochre (Gushchina 1967, 44-45; Vysotskaia 1976, 68-69; Mul'd 1996, 282). Flint, being the symbol of fire, is also included in this group. Nevertheless, selecting flints used for rituals, as well as any attempt to interpret their role, are extremely difficult tasks that have not been hitherto undertaken. However, it appears that deliberating this issue should be commenced by selecting graves containing atypically located flint artefacts that were deposited intentionally and find analogous arrangement schemes in other necropolises.

Following such indicators, we can state that flints atypically deposited in tombs occurred mainly in collective burials. In the Late Scythian culture, this sepulchre type was related to vaulted graves. We know several cases from the Crimea where a dozen or so flint items occurred in a collective grave. They were recorded in the bottom layers; the arrangement of the flint artefacts suggests that they formed a layer on which the buried persons were laid. At the same time, it is possible to determine the existence of various relations between them. In grave no. 78, dated to the second half of the 1st century BC to the 1st century AD, from the Opushki cemetery, the arrangement makes it possible to suspect that the bottommost layer was strewn

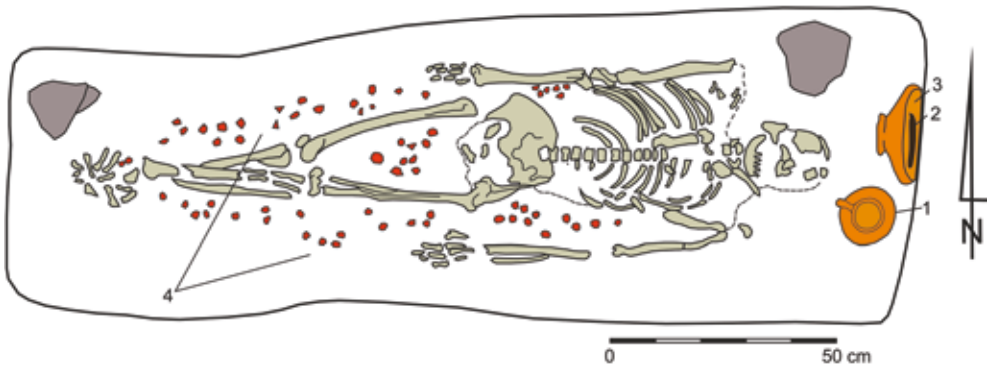


**Fig. 8** Ust'-Al'ma (Bakhchysarai rai.), grave no. 194: **1** *terra sigillata* jug. – **2** *terra sigillata* bowl. – **3** iron knife. – **4** flint artefacts. – (After Vysotskaia 1982, fig. 120 with changes by the authors).

with flint items. They formed a coat on which further layers of skeletons were placed. Such a procedure of strewing the bottom layers with flints is not an isolated case and was recorded also in the Ust'-Al'ma and the Scythian Neapolis cemeteries (Vysotskaia 1994, 68; Puzdrovskiĭ 2007, 122). Another type of flint arrangement can be noted in collective grave no. 974, dated to the end of the 1st century to the first half of the 2nd century, from the Ust'-Al'ma cemetery. Nevertheless, one can distinguish here two different types (Puzdrovskiĭ/Trafunov 2015, figs 15, 12; 17, 1; 18, 6; 20, 3). The flint artefacts formed a bed, on which one skeleton directly lied (stratum no. 2, burials nos 4 and 7; stratum no. 4, burial no. 12). It is worth mentioning that the layer separated the body from the soil. An interesting location of flint items was registered in two burials (nos 9 and 10, stratum no. 3). In both cases, women were buried in wooden constructions (coffins?), whose bottoms were covered with flint objects (Puzdrovskiĭ/Trafunov 2015, fig. 10).

As we can see, in collective graves, flints covered an entire layer of skeletons or formed a coat on which only one of the buried bodies rested. Such a procedure is particularly noticeable in grave no. 138 from the Ust'-Al'ma cemetery. 28 bodies, laid in five layers, were buried in this construction. On the level of layer 2, seven skeletons occurred, one of them rested on a layer of 75 flint artefacts (stratum no. 2, burial no. 14; **fig. 7**). The rest of them were laid directly on the ground (Vysotskaia 1977, fig. 61). Jointly 114 flints were obtained from this funerary construction.

Analogous procedures of strewing the soil of collective graves with flint artefacts are known also from the Beliaus, Levadki, and Scythian Neapolis cemeteries (Puzdrovskiĭ 2007, 122; Mul'd/Kropotov 2013, 117). In these cemeteries, as well as in the Mologa II necropolis, there were likewise cases of noting a dozen or so flints in child graves (Symonovich 1983, 63; Maliukevich 2008, 179; Dashevskaia 2014, 20. 25).

Flint items atypically deposited in graves, which can be associated with the sphere of religion, occur also in single-person burials. In graves of this type, they most often formed a layer on which a skeleton rested. Such a case was recorded, among others, in pit grave no. 194 from the Ust'-Al'ma cemetery. In the structure, the buried person rested on a coat of 120 flint tools, lying on the back, with the head pointing to the East (**fig. 8**; Vysotskaia 1981, 26). However, in pit grave no. 201 (dated to the 2nd-3rd century) from the Ust'-Al'ma cemetery, 45 flints covered the floor of the structure, forming a layer on which a wooden log, containing the skeleton of a 40-50-year-old woman, was placed (Vysotskaia 1982, 23).

Unfortunately, in most cases, the flint artefacts forming a layer have not been documented with drawings or described, and thus we do not have any information about their morphology. On the basis of archival photographs, we can suspect that the set consisted mainly of flake artefacts, chunks, and frost cracked concretion fragments (e. g. grave no. 138 from the Ust'-Al'ma cemetery). A set of flints found in grave no. 78 from the Opushki cemetery is very interesting[3]. Among others, a flake fragment used as a strike-a-

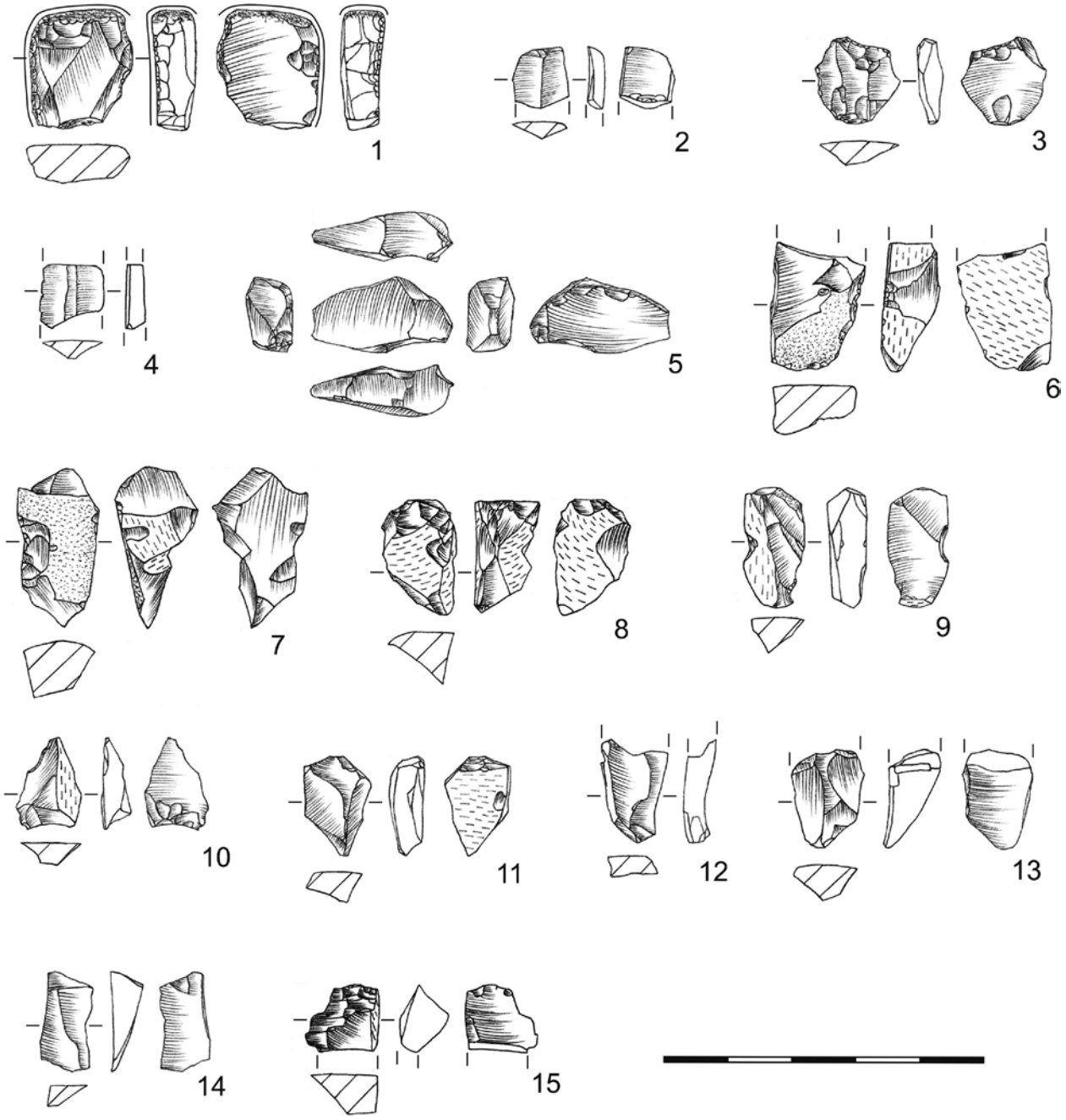


**Fig. 9** Opushki (Simferopol rai.), grave no. 78. Flint artefacts: **1** flake fragment. – **2-4** blade forms. – **5-15** forms difficult to determine. – (Drawings P. Mączyński).

light (**fig. 9, 1**), blade forms (**fig. 9, 2-4**) (possibly obtained from chronologically older, Palaeolithic/Neolithic sites), and forms difficult to describe (**fig. 9, 5-15**) (representing the largest group) which deserve careful attention, were discovered there. They are small artefacts of length not greater than 3 cm. Many of them bear fragments of multidirectional negative scars, but bulbs are not preserved (**fig. 9, 10-14**). Several artefacts have also natural cortical surfaces, as well as surfaces formed by frost cracking (**fig. 9, 6-11**). Only two specimens (**fig. 9, 5. 9**) can be classified as flakes. Some of them resemble forms associated with the splintering technique (**fig. 9, 8. 10. 15**).

In the context of the single burials from the Ust'-Al'ma cemetery that contain skeletons placed on layers of flints, it is worth considering whether some of them are not remains of threshing boards. Nevertheless, conducting specialist research, like analysing use-wear patterns, is required to corroborate this assumption. This would make it possible to determine if the discovered flint artefacts bear traces of being used in threshing.

As we can see, the occurrences of flint items forming layers in graves are not accidental. Stating that the presence of such arrangements was connected with cultic practices will not sound like a truism. It is difficult to tell whether their task was to protect the deceased persons or the soil from the impure process of decomposition. Undoubtedly, we can assume that the procedure of »separating buried persons from the soil« was of considerable importance. This fact is indicated by the frequent presence of layers of various substance types, on which skeletons were laid. Most often, chalk or charcoal was used as such a base. Ash was employed less frequently (Vysotskaia 1994, 66-67; Gushchina/Zhuravlev 2016, 13-14). Not seldom, a buried person was laid on an animal skin, on a grass mat, or directly in a wooden construction (coffin or tree trunk coffin) (Vysotskaia 1972, 93-94). Such a procedure was adopted by different cultures, among others by the Sarmatians and the Early Scythians (Puzdrovskiĭ 2007, 117). This fact was also noted by Herodotus in his »Histories« (IV, 17). Nevertheless, the Sarmatians and the Scythians did not bury their dead on layers composed of flint artefacts. Taking into account the fact that these two cultures influenced the formation of the Late Scythian culture, the lack of such a base is very interesting. This may indicate that using flint layers was a procedure created within the framework of the Late Scythian culture funerary rite. It appears that the discussed element of the ritual was not adopted by other cultures and it disappeared with the Late Scythian culture. This fact is attested particularly by findings from the Crimean peninsula dated to the Late Roman period, which show that coats made of scattered flints did not occur in graves at that time, although the practice of using flint items in magical rituals is indicated, among others, by the finds discovered in graves nos 307 and 556 from the Neĭzats cemetery (Mączyński/Polit 2016a, 84).

## CONCLUSION

Flints discovered in the Late Scythian culture graves played an important role in the everyday life of the discussed population. Items made of this rock undeniably occupied an important place in the material and spiritual culture, where they were connected with everyday activities and religious procedures. Despite the fact that this artefact category has been already studied, the debate concerning the use of flint material in the Late Scythian culture is not entirely closed. Above all, many questions about the morphology of flint artefacts, as well as the ones concerning use-wear patterns (in the form of retouching, polishing, rounding, etc.) remain unanswered. The newly discovered finds should be subjected to a morphological and traceological analysis. Only in this manner we will be able to confirm definitely the validity of our interpretation.

Translation: P. Moskała

### Notes

1) The firesteels from Neĭzats and Druzhnoe are highly corroded. On the basis of better-preserved specimens from the mentioned graves and analogies from other parts of Europe, mainly from Scandinavia, we can reconstruct their form. The items in question were made of an iron rod of circular or, less frequently, rectangular cross-section. Originally, one end was embedded in a large wooden frame that thickened upwards (**fig. 3**). The items are similar in their form to firesteels and awls used, among others, in leatherwork. Finds from the marshy site of Illerup (Mitteljütland/DK) indicate that owls, contrary to firesteels, are much heavier and longer and have fragile frames (Ilkjær 1993a, 242-246. 265-270; 1993b, pls 155-180. 228-239). The items from

the Crimea are massive, and their diameters are similar to those of the Scandinavian type firesteels (cf. Mączyński/Polit 2016a). What is more, the artefacts from Neïzats and Druzhnoe, like the firesteels from Illerup, did not have long working parts (peaks). Moreover, such items co-occur with flints, whose surfaces bear use-wear patterns indicating that they were used for striking fire with the use of an iron object.

2) It should be noted that the objects of the Early Scythian culture include tools interpreted by archaeologists as »awls«. They are morphologically akin to firesteels discovered in Neïzats and Druzhnoe. Part of them occurred in male burials, for example in graves from the central tomb of the Burial Mound of Ryzanovka (Chochorowski et al. 1997, 84. 88). Most probably, needle-shaped firesteels from the Early Scythian male burials were used in the process of striking fire.

3) We would like to thank Prof. I. N. Khrapunov for his agreement to use the unpublished material in this article.

## References


Bogdanova 1981: N. A. Bogdanova, Отчет об археологических исследованиях могильника первых вв н.э. у с. Заветное Бахчисарайского р-на Крымской области [unpubl. excavation reports, Scientific Archive of the Institute of Archaeology of the National Academy of Sciences of Ukraine, No. 1981/136].

Chochorowski et al. 1997: J. Chochorowski / S. Skoryj / V. Grigor'ev / J. Rydzewski, Centralny pochówek Wielkiego Kurhanu Ryżanowskiego. Materiały i Sprawozdania Rzeszowskiego Ośrodka Archeologicznego 18, 1997, 77-92.

Dashevskaia 2014: O. D. Dashevskaia, Некрополь Беляуса (Simferopol 2014).

Davidson 1947: D. S. Davidson, Fire-Making in Australia. American Anthropologist 49/3, 1947, 426-437.

Glebov/Parusimov 2001: V. P. Glebov / I. I. Parusimov, Позднесарматский могильник Кичкинский I. Историко-археологические исследования в г. Азове и на Нижнем Дону 17, 2001, 55-73.

Gushchina 1967: I. I. Gushchina, О сарматах в Юго-Западном Крыму (по материалам некоторых могильников I-IV вв.). Советская археология 1, 1967, 40-51.

Gushchina/Zhuravlev 2016: I. I. Gushchina / D. V. Zhuravlev, Некрополь римского времени Бельбек IV в Юго-Западном Крыму 1 (Moscow 2016).

Hellström/Hochmuth/Zajcev 2009: K. Hellström / M. Hochmuth / Ju. P. Zajcev, Dreschgerät und Totenbett. Hölzerne Dreschschlittenfragmente des 1. Jahrhunderts aus einer Nekropole auf der Krim. Prähistorische Zeitschrift 84/1, 2009, 73-89.

Herodotus, The Histories. Translated by P. Mensch; edited, with introduction and notes by J. S. Romm (Indianapolis et al. 2014).

Ilkjær 1993a: J. Ilkjær, Illerup Ådal. 3: Die Gürtel. Bestandteile und Zubehör. Textband. Jysk Arkaeologisk Selskabs Skrifter 25, 3 (Åarhus 1993).

1993b: J. Ilkjær, Illerup Ådal. 4. Die Gürtel. Bestandteile und Zubehör. Tafelband. Jysk Arkaeologisk Selskabs Skrifter 25, 4 (Åarhus 1993).

Istvánovits/Kulcsár 2017: E. Istvánovits / V. Kulcsár, Sarmatians – History and Archaeology of a Forgotten People. Monographien des RGZM 123 (Mainz 2017).

Khrapunov 2002: I. N. Khrapunov, Могильник Дружное (III-IV вв. нашей эры) (Lublin 2002).

2011: I. N. Khrapunov, Некоторые итоги исследований могильника Нейзац. In: I. N. Khrapunov (ed.), Исследования могильника Нейзац (Simferopol 2011) 13-113.

Kosianenko 2008: V. M. Kosianenko, Некрополь Кобякова городища (по материалам раскопок 1956-1962 гг.). Донские древности 9 (Azov 2008).

Korpusova 1983: V. N. Korpusova, Некрополь Золотое (К этнокультурной истории европейского Боспора) (Kiev 1983).

Libera/Florek 2014: J. Libera / M. Florek, Iskra święta i nieświęta. O użytkowaniu krzemienia we wczesnym średniowieczu. In: A. Sochacka / P. Jusiak (eds), Scientia nihil est quam veritatis imago. Studia ofiarowane Profesorowi Ryszardowi Szczygłowi w siedemdziesięciolecie urodzin (Lublin 2014) 1035-1048.

Maliukevich 2008: A. E. Maliukevich, Обряд захоронения детей на памятнике римского времени Молога II. Краткие сообщения Одесского археологического общества 2008, 172-183.

Mączyński 2014: P. Mączyński, Kilka uwag o zabytkach krzemiennych pochodzących z cmentarzyska Nejzac na Krymie. In: J. Libera / A. Zakościelna (eds), Badania archeologiczne w Polsce środkowowschodniej, zachodniej Białorusi i Ukrainie w roku 2013 (Lublin 2014) 27.

Mączyński/Polit 2016a: P. Mączyński / B. Polit, Fire Striking Tools from the Neyzats and Druzhnoe Cemeteries. In: I. N. Khrapunov (ed.), 20 лет исследований могильника Нейзац. Крым в сарматскую эпоху (II в. до н.э.-IV в.н.э.) II (Simferopol 2016) 76-96.

2016b: P. Mączyński / B. Polit, Wytwory krzemienne z cmentarzyska z późnej starożytności Nejzac na Krymie. Wiadomości Archeologiczne 67, 2016, 175-193.

Mogielnicka-Urban 1997: M. Mogielnicka-Urban, Rola krzemienia w obrzędowości ludności kultury łużyckiej na przykładzie cmentarzyska w Maciejowicach, woj. siedleckie. In: J. Lech / D. Piotrowska (eds), Z badań nad krzemieniarstwem epoki brązu i wczesnej epoki żelaza (Warszawa 1997) 277-287.

Mordvintseva/Treĭster 2007: V. Mordvintseva / M. Treĭster, Произведения торевтики и ювелирного искусства в Северном Причерноморье 2 в. до н.э.-2 в. н.э, 1 (Simferopol, Bonn 2007).

Mul'd 1996: S. A. Mul'd, Могильники варварского населения Крыма I-V вв. Материалы по археологии, истории и этнографии Таврии 5, 1996, 279-289.

2013: S. A. Mul'd, Die Nekropole von Levadki. In: S. Müller / M. Schmauder (eds), Die Krim. Goldene Insel im Schwarzen Meer: Griechen – Skythen – Goten [exhibition catalogue Bonn, Amsterdam] (Bonn, Darmstadt 2013) 324-331.

Mul'd/Kropotov 2013: S. A. Mul'd / V. V. Kropotov, Склеп 96 могильника Левадки (Центральный Крым). Российская археология 2013/3, 114-124.

Pashnina 2008: K. S. Pashnina, Пирит в гидротермальных и магматических породах Крыма. Вестник Института геологии Коми научного центра УрО РАН 6/162, 2008, 10-11.

Pliny the Elder: The Natural History of Pliny. Translated by J. Bostock / H. T. Riley (London 1857).

Pogrebova 1961: N. N. Pogrebova, Погребения в мавзолее Неаполя скифского. Материалы и исследования по археологии СССР 96, 1961, 103-213.

Puzdrovskiĭ 2007: A. E. Puzdrovskiĭ, Крымская Скифия. II в. до н.э.-III в. н.э. Погребальные памятники (Simferopol 2007).

Puzdrovskiĭ/Medvedev 2005: A. E. Puzdrovskiĭ / G. V. Medvedev, Погребения I-II вв. н.э. из Усть-Альминского некрополя. Херсонесский сборник 14, 2005, 271-282.

Puzdrovskiĭ/Trufanov 2015: A. E. Puzdrovskiĭ / A. A. Trufanov, Двухкамерный склеп с надгробным рельефом из Усть-Альминского некрополя в Крыму. Stratum plus 2015/4, 143-173.

Simonenko/Sikoza/Dzneladze 2015: O. V. Simonenko / D. M. Sikoza / O. S. Dzneladze, Пізньоскіфські могильник Червоний Маяк (Herson 2015).

Sorensen/Roebroeks/van Gijn 2014: A. Sorensen / W. Roebroeks / A. van Gijn, Fire production in the deep past? The expedient strike-a-light model. Journal of Archaeological Science 42, 2014, 476-486.

Symonovich 1983: S. A. Symonovich, Население столицы позднескифского царства (по материалам восточного могильника Неаполя скифского) (Kiev 1983).

Tel'nov/Razumov/Sinika 2016: N. P. Tel'nov / S. N. Razumov / V. S. Sinika, Кресальные кремни в погребальном обряде скифов (по материалам могильника у с. Глиное на Нижнем Днестре). Stratum Plus 2016/3, 129-141.

Vysotskaia 1971: T. N. Vysotskaia, Отчет о раскопках Усть-Альминского городища и некрополя в 1971 г. [unpubl. excavation reports, Scientific Archive of the Institute of Archaeology of the National Academy of Sciences of Ukraine, No. 1971/19a].

1972: T. N. Vysotskaia, Поздние скифы в юго-западном Крыму (Kiev 1972).

1975: T. N. Vysotskaia, Отчет о работе Альминского отряда в 1975 г. [unpubl. excavation reports, Scientific Archive of the Institute of Archaeology of the National Academy of Sciences of Ukraine, No. 1975/22a].

1976: T. N. Vysotskaia, Культы и обряды поздних скифов. Вестник древней истории 137/3, 1976, 51-73.

1977: T. N. Vysotskaia, Отчет о работе Альминского отряда в 1977 г. [unpubl. excavation reports, Scientific Archive of the Institute of Archaeology of the National Academy of Sciences of Ukraine, No. 1977/10].

1981: T. N. Vysotskaia, Отчет о раскопках Усть-Альминского городища и могильника в 1981 г. [unpubl. excavation reports, Scientific Archive of the Institute of Archaeology of the National Academy of Sciences of Ukraine, No. 1981/3].

1982: T. N. Vysotskaia, Отчет о работе Альминского отряда в 1982 г. [unpubl. excavation reports, Scientific Archive of the Institute of Archaeology of the National Academy of Sciences of Ukraine, No. 1982/25a].

1994: T. N. Vysotskaia, Усть-Альминское городище и некрополь (Kiev 1994).

*Zusammenfassung / Summary / Résumé*

**Wiederentdeckt. Interpretation von Feuersteinartefakten aus Grabbauten der spätskythischen Kultur**

Grabbauten der spätskythischen Kultur enthalten u. a. Feuersteinartefakte, die untypisch für diese Periode sind. Ihre Lage im Grab, nämlich im Bereich des Skeletts, deutet darauf hin, dass sie intentionell in den Gräbern deponiert wurden. Unter Heranziehung von Publikationen, archivierten Dokumentationen und Museumssammlungen wurden diese Stücke untersucht mit dem Ergebnis, dass die Feuersteine aus den spätskythischen Gräbern eine bedeutende Rolle im Alltag der Bevölkerung spielten. Silex wurde insbesondere für die Herstellung von Werkzeug (Feuerschlagsteine) und Schmuck verwendet und nahm in der materiellen Kultur eine wichtige Stellung ein. Es konnte außerdem ein Zusammenhang zwischen den untersuchten Feuersteinartefakten und dem Bereich der Spiritualität erkannt werden. Lagen von Silex in Gräbern, auf denen die Bestatteten gebettet waren oder welche die Bestatteten bedeckten, lassen vermuten, dass dieser Rohstoff für rituelle Zwecke – am wahrscheinlichsten verbunden mit dem Feuerkult – Anwendung fand.

Übersetzung: M. Struck

**Discovered Once Again. Interpretation of Flint Artefacts from Funerary Constructions of the Late Scythian Culture**

Funerary constructions of the Late Scythian culture contain, among others, flint artefacts untypical for this period. Their locations, in the skeleton's area, indicate that they were deposited intentionally in graves. On the basis of publications, archival documentation, and museum collections, an analysis was conducted. It has revealed that the flints discovered in the Late Scythian tombs had played an important role in the everyday life of the population. Flint was used particularly for making tools (strike-a-lights) and jewellery, occupying an important position in the material culture. The analysed flint artefacts were also associated with the sphere of spirituality. Layers of flints (found in graves), on which the dead were laid, or which covered them, indicate that this raw material was used for ritual practices that most probably were associated with the cult of fire.

Redécouverts. Une interprétation d'artefacts en silex en provenance de monuments funéraires de la culture Scythe tardive

Les monuments funéraires de la culture Scythe tardive contiennent entre autres des artefacts en silex atypiques pour la période. Leur localisation, dans la zone du squelette, indique qu'ils étaient déposés intentionnellement dans les tombes. Sur la base de publications, de données d'archives et de collections de musées, une analyse a été conduite. Elle a montré que les silex découverts dans les tombes Scythes tardives ont joué un rôle important dans la vie quotidienne des populations. Le silex était utilisé plus particulièrement pour faire des outils (briquets) et des bijoux, jouant ainsi un rôle important dans la culture matérielle. L'analyse des artefacts de silex a également été mise en relation avec la sphère spirituelle. Des couches de silex (découverts dans des tombes), sur lesquelles des défunts reposaient ou qui les recouvraient indiquent que cette matière première était aussi utilisée dans le cadre de pratiques rituelles qui étaient probablement associées avec le culte du feu. Traduction: L. Bernard

*Schlüsselwörter / Keywords / Mots clés*

Krim / Eisenzeit / römische Periode / spätskythisch / Feuersteinartefakt
Crimea / Iron Age / Roman period / Late Scythian / flint artefact
Crimée / âge du Fer / période romaine / Scythes tardifs / artefacts en silex

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