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## ON ONE OF THE WEAPON TYPES OF CIMMERIAN TIME

*The article is dedicated to the analysis of bimetallic swords and daggers of Cimmerian time, which were found both at Ukrainian territory and neighboring countries. The previously known and new findings are analyzed.*

*Key words: Northern Pontic Region, Cimmerians, Karasuk daggers, bimetallic swords and daggers.*

The subject of Cimmerian weapons of East and Central-East Europe was initially raised by O. I. Terenozhkin in his article “Kimmeriiskie mechi i kinzhaly” in 1975, which was a part of “Skifskiy mir” collection (Тереножкин 1975, с. 3—34). O. I. Terenozhkin further developed this topic in his work “Kimmerijczy” (1976), where a separate chapter is dedicated to the swords and daggers. However, Oleksii Ivanovych managed only to divide pre-Scythian daggers from North Caucasus into variants, leaving most of the weapons without further attention and division into types. Based on his work the type of bimetallic swords and daggers with cross-shaped handle was specified. In the scientific literature of that time, such type was called BMK KR (“Биметаллические мечи и кинжалы с крестовидной рукояткой” in Russian). In 1970—1990-ies the Cimmerian weapons were a subject of interest of many scientists, including V. Podborsky (1970), S. L. Dudarev (Дударев 1991; 1999), J. Chochorowsky (1993), S. V. Makhortykh (Махортых 1997) etc. Three assumptions were made about the genesis of the weapons:

— bimetallic weapons with cross-shaped handle originated from the North Pontic Region, based on

the Karasuk type daggers, which was supported by O. I. Terenozhkin himself;

— bimetallic weapons with cross-shaped handle originated from the Caucasus and spread to the East and Central-East Europe from there, which is supported by scientists including S. L. Dudarev and S. V. Makhortykh;

— B. A. Shramko in 1977 assumed that these weapons did not have a specific center of origin (Дударев 1999, с. 27—28). Later the subject seems to evade the attention of scientists, however, the amount of the artifacts found in recent years in Ukraine, which have the morphologic signs of BMK KR type allows returning to the subject.

The aim of the paper is the examination and analysis of bimetallic swords and daggers of Cimmerian time, the handles of which have the same or similar features, which allows combining them into one type. The weapons of this type are found on wide area: from the west region of modern Russia (at the east) to the east borders of the Germany (at the west).

The type has the following general features: non-ornamented bronze handle with cylinder hilt, mushroom-shaped pommel and the crossguard. The weapon is very practical: the guard provides the protection for the wrist against enemy blade, and with the required agility could have been used as the stunning weapon just as the pommel, which could have been no less dangerous than the blade. Also the pommel was used as the counterweight for the blade. Such handles were forged in ceramics forms. Such complexity of the handles can be the sign of the Cimmerian sword-fight development, possible even to the level of fencing. It is indirectly indicated by the absence of the stirrups at that time that makes mounting fighting impossible (even though

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some figures of that time (for example, on the sarcophagus at Klazomenai (fig. 1) (Дьяконов 1956, илл. 41), suggest otherwise), therefore, the combats happened on foot. Obviously, some features (the width of hilt, the length of the guard, etc.) can be different, since various weapons were crafted on different territories at different time by various masters, but the general pattern remained the same.

In order to make a picture of bimetallic swords and daggers of Cimmerian time spreading, the artifacts will be examined and analyzed from east to west.

The predecessors of these weapons are the so-called Karasuk daggers. According to N. L. Chlenova they originate at Minusinsk Hollow (Krasnoyarsk krai, Russia) (Членова 1976, с. 71; табл. 3). Later such weapons spread to the North China and Ordos (fig. 2: 1–5) in the east to the North Pontic Region in the west (fig. 2: 6–7) (Членова 1976, табл. 9; Mounted Nomads of Asian Steppe 1997, p. 37). Upon arrival to the North Pontic Region the people of Karasuk culture met with local people, who knew the iron at that time, judging by the archaeological findings. Therefore, as a result of combination of Karasuk technologies with local resources, the bimetallic swords and daggers with cross-shaped crossguard occurred.

The first weapon to be examined is the bimetallic sword with bronze handle and iron blade, which was found near Biljarsk village at modern Tatarstan (fig. 3: 1). The handle has big mushroom-shaped pommel and long straight crossguard. According to O. I. Terenozhkin, the sword's handle is i-beam in section (Тереножкин 1976, с. 117).

In the west (Diomkino village, Volsk district, Saratovo Region) the bimetallic dagger was found (fig. 3: 2). It has the following specifics within the type: narrow hilt, long and thin guard, small pommel, narrow and rhomboid in section blade. The handle is 10,5 cm long, the blade is 2 cm wide (Тереножкин 1976, с. 125). The lengths of the handle and of the blade are disproportional, which allows assuming that the blade was damaged and later the damaged edge was sharpened.

Three artifacts of the type were found in the north of Caucasus. The first one is the handle from Mugeran grave field (Dagestan) (fig. 3: 3). O. I. Terenozhkin called it the handle of the sword, however, it remains questionable since the blade decayed almost completely (Тереножкин 1976, с. 110). Comparing to others, this handle has a specific feature: the guard is not straight, but slightly inclined to the blade. It can be explained by either casting mold defect or the transformation into later forms. The latter would indicate that the finding

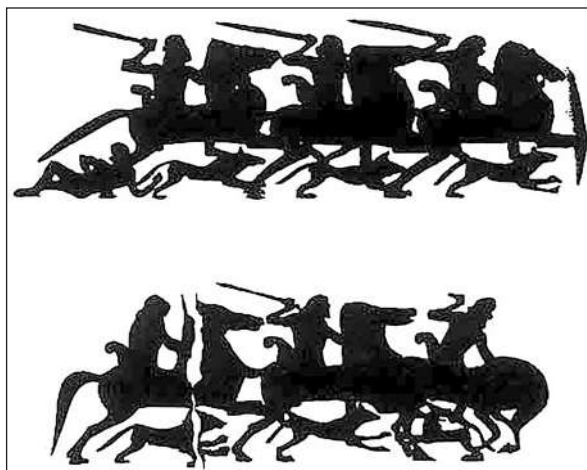


Fig. 1. The image from Klazomenai sarcophagus

from Mugeran grave field is somewhat earlier than others examined in the article.

The dagger from Serzhen-Yurt grave field has a little hole on one side of its crossguard (Тереножкин 1976, с. 114) (fig. 3: 4). There are only three daggers including this one, which have such feature. The blade of the dagger does not have the fuller. Only a few other artifacts have the same feature,

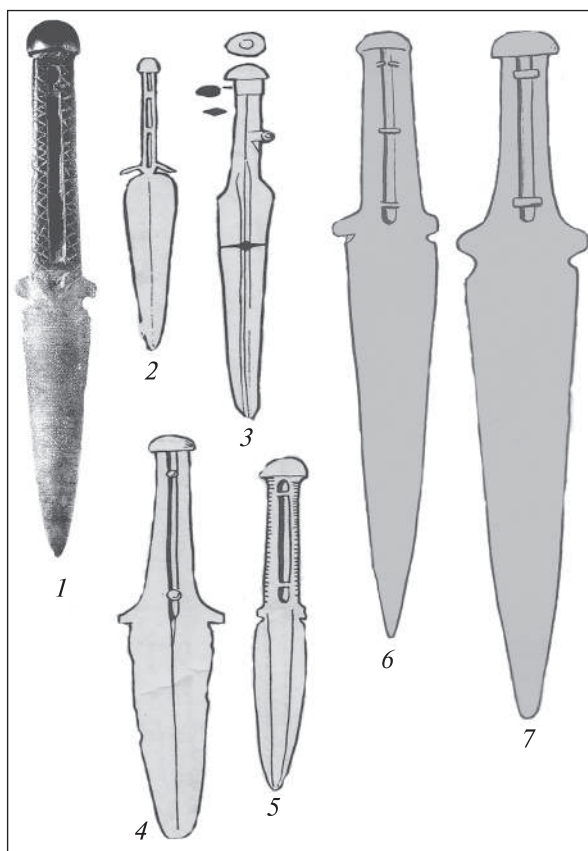


Fig. 2. The Karasuk type daggers: 1 – North China; 2 – North China; 3 – Ordos; 4 – Ordos; 5 – Ordos; 6 – Sybotiv; 7 – Kyiv Region

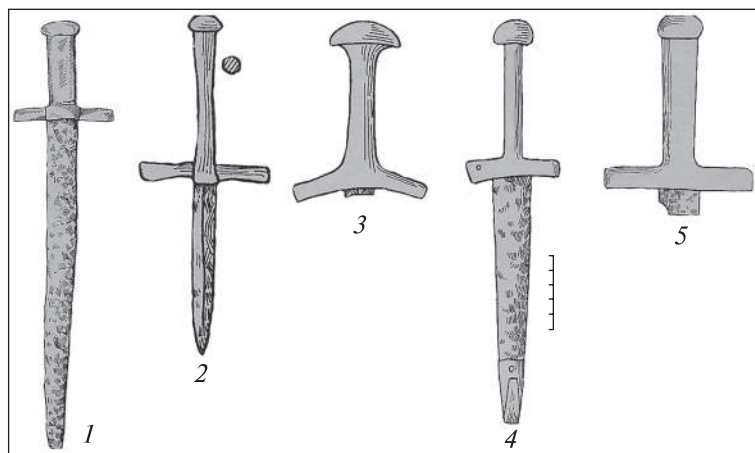


Fig. 3. Bimetalllic weapons from Russia: 1 — Biljarsk; 2 — Diomkino; 3 — Muger-gan grave field; 4 — Serzhen-Yurt grave field; 5 — Kislovodsk

however, it is impossible to be sure, since some of the findings do not have the blade. Still, the weapons without the fuller are probably older than those with it, as the appearance of such a detail is the sign of technology development. Also, the dagger from Serzhen-Yurt has a part of the scabbard on the edge of its blade.

At the grave field near the city of Kislovodsk the large amount of weapons of different variants and types were found in its time, including the one that this article is dedicated to (Тереножкин 1976, с. 125). Unfortunately, just as some other findings, it has only the bronze handle and small piece of the blade. Therefore, it's impossible to say whether it was a sword or a dagger (fig. 3: 5). Similar artifact (6 cm long) was found recently near Mariupol (accidental finding 17.05.19) (fig. 4: 1). However, the blade didn't remain.

Two other findings come from Kharkiv Region. The first one is a well-preserved bimetalllic sword (accidental finding 28.11.14) (fig. 4: 2). It has wide hilt with flattened mushroom-shaped pommel and long narrow crossguard. The blade most likely had the fuller. The second finding is a bronze handle with mushroom-shaped pommel which is similar to the one of the sword. The crossguard is approximately 8,5 cm long, the total length of the handle is 9 cm and it is wider than the blade. The blade is preserved partly, its width is 3 cm. The artifact was found in October 2019 (accidental finding 05.10.19) (fig. 4: 3).

The most famous Cimmerian time weapon, which was found in Ukraine, is the bimetalllic sword discovered as a part of the treasure at Subotiv settlement (Тереножкин 1976, с. 82—84). The total length of the sword is 1,08 m, the blade is 94,8 cm long. The bronze handle is inlaid with the imitation of the spiral (fig. 4: 4). It is assumed that this decoration had a practical meaning: for the better grip, the handle was coiled by the leather stripe,

which was fixated by the spiral. Despite these two specific features, the sword is within the type due to the materials and handle shape including the crossguard and the pommel. The bronze *bouterolle* was found at the edge of the blade. This indicates that the sword was carried on a belt with the edge of the blade touching the ground if not constantly being dragged. Could the swords of such size be carried behind the back? It is really doubtful, considering the number of anthropological nuances, first of all — the length of the hands. The alternative — on the shoulder with the scabbard, but such option does not require the tough *bouterolle* at the edge. Therefore, the owner of the sword was not a high man. It is possible that originally the sword (without the scabbard with bronze *bouterolle*) belonged to someone with more appropriate complexion and later became the property of his last owner as the inheritance, a gift or a trophy. The first two assumptions suggest the close relationship between people of Chernoles culture who occupied Subotiv settlement and people of Chernogorivka culture who were proto-Scythians, according to V. I. Klochko (Клочко 2009). The C14 dating indicates that the sword was the coeval of Subotiv settlement deace (the end of IX — beginning of VIII cen. BC) (Klochko et al. 1998, p. 672). However, the treasure, where the sword comes from, also included artifacts attributed to the local Chernoles culture, which means that the sword belonged to the settlement resident. The handle of the “Subotiv sword” has an analogy — the Karasuk sword from Andreevskoe lake (outskirts of Tumen, Russia) (Членова 1976, табл. 7: 1-Б) (fig. 5). The handles are identical: mushroom-shaped pommel, the hilt surrounded with the spiral, small and straight crossguard. However, the handle is the only similar thing of two swords: the blade of “Andreevskoe sword” is made of bronze and is much smaller comparing to “Subotiv sword” making it similar to Karasuk pro-

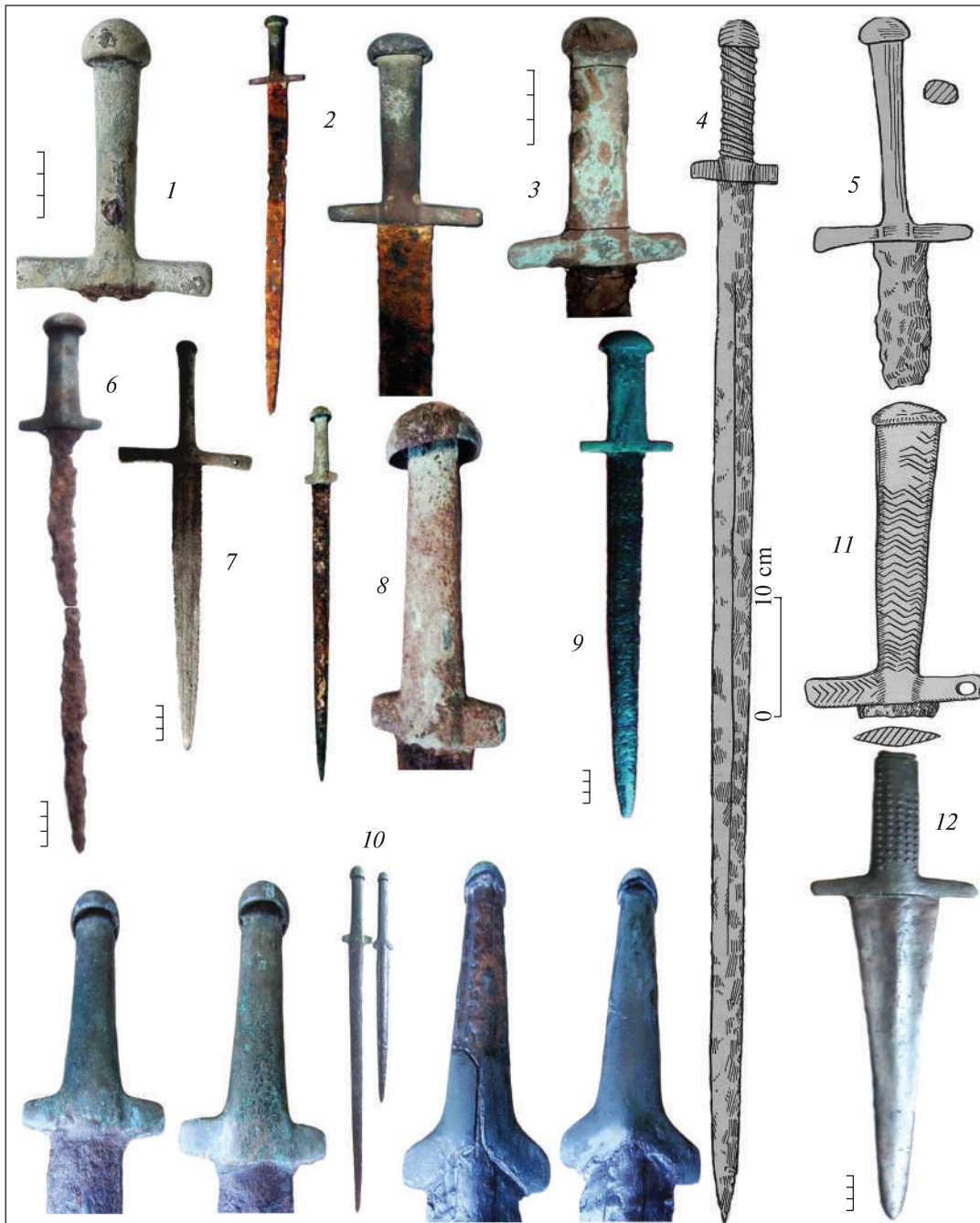


Fig. 4. Bimetallic weapons from Ukraine: 1 – Mariupol; 2 – Kharkiv Region; 3 – Kharkiv Region; 4 – Subotiv; 5 – Holoviatyno; 6 – Kropyvniyskiy Region; 7 – Vinnytsia Region; 8 – Vinnytsia Region; 9 – Vinnytsia Region; 10 – Khmelnytska Region; 11 – Suvorovo; 12 – Lviv Region

totypes. Despite this, the connections between the regions of initial Karasuk daggers spreading and North Pontic Region are obvious.

Another well-known (and also accidental) finding is a dagger from Holoviatyno village Smilian-skiy district in Cherkasy Region (Тереножкин 1976 с. 70) (fig. 4: 5). According to O. I. Terenozhkin, V. Podborsky named one of two dagger variants of Central-East Europe after this one. Other weapons included by V. Podborsky to this type will be exam-

ined later. The artifact has a typical bronze handle: a small mushroom-shaped pommel, a rather long crossguard. The handle is 10,5 cm long, the blade is 2,5 cm wide. The fuller is absent. The blade was preserved partly (approximately 6 cm), therefore, only a small pommel can be considered as a feature of this artifact in favor of being a dagger and not a sword, and it cannot be considered a solid evidence.

50 cm long bimetallic sword was found near Kropyvnytskyi at the end of 2018 (accidental find-

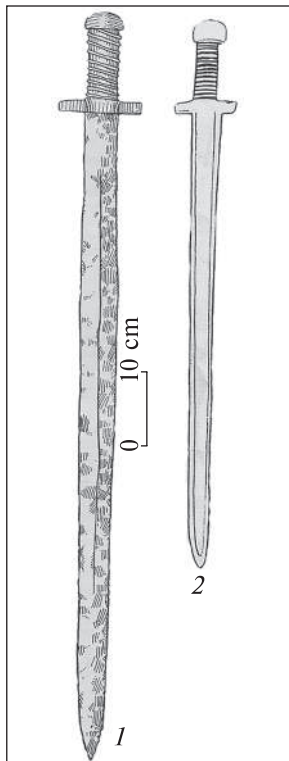


Fig. 5. Bimetallic sword from Subotiv (1) and bronze sword from Andreevskoe lake (2)

ing 12.12.18) (fig. 4: 6). The length of the handle is approximately 9 cm. The guard is short and somewhat asymmetrical. The iron blade is preserved completely, however, is in bad condition, therefore, it is impossible to determine the presence of the fuller.

The large amount of findings comes from Vinnytsia Region. The most recent is a 39 cm long weapon found in the middle of 2018 (accidental finding 24.05.18). The handle is 15 cm long. The pommel is small, the guard is long and has a small hole on one side, which is similar to the hole on the crossguard of the dagger from Serzhen-Yurt grave field (fig. 4: 7). The blade is well-preserved and has a fuller. It is possible that the blade was longer originally, just as with the dagger from Diomkino village. The handle of the sword that was discovered in 2017 has an unusual disposition of the pommel, which appears to be an added detail (accidental finding 27.08.17). It is possible that its own pommel was lost in the fight and later negligently replaced (fig. 4: 8). This fact indicates two things — the importance of the pommel and the caring attitude to the sword. The reasons for the latter can be different — from sentimental (the sword was a gift or a family relic) to economical (inability to acquire another sword). Short crossguard and the absence of the fuller are the signs of the sword's archaic origin. The third sword was found in 2016

(accidental finding 18.05.16). The total length is approximately 35 cm, the handle is approximately 8,5 cm. The bronze handle is quite wide, the guard is narrow and small (fig. 4: 9). Therefore, the sword has direct analogies with the examined swords from Kharkiv Region, Kropyvnytskyi and two former swords from Vinnytsia Region.

An interesting treasure was found in Khmelnytska Region in 2015 (accidental finding 27.02.15). It includes two bimetallic swords of different size (fig. 4: 10). The long swords have a wide handle, a large pommel and a short crossguard. The blade does not have the fuller. The guard on the short sword inclines to the blade. Its form and the size of the sword makes it similar to the weapons of Scythian time. In other words, the treasure contains swords of two types divided chronologically — archaic Karasuk form and transforming pre-Scythian. This does not mean that the swords themselves came from different periods, especially considering the fine preservation of them both. The archaic form could have been the tribute to the tradition. The usage of the swords remains questionable — either the long or the short ones could have been used depending on the situation, but also both of them could have been used simultaneously — the long sword was used for strikes, while the short one — for the blocks and counterattacks. The question of simultaneous usage of swords will be additionally examined below.

One more classical artifact of this type is a handle, which comes from the burial 2 of mound 5 near Suvorovo village (Ismail district, Odessa Region). It was described by O. I. Terenozhkin in his work (Тереножкин 1976, с. 64—65). Only the piece of blade remained, but its width was 2 cm. The handle is 9,6 cm long, its surface is covered by a zigzag ornament, the crossguard has a hole, which is much bigger than the hole on the crossguards of daggers from Vinnytsia Region and Serzhen-Yurt grave field (fig. 4: 11). It is possible that the hole was used for the noose, which surrounded the wrist in order not to lose the weapon during the battle. However, the presence of such a hole with a loop would negatively affect the efficiency of the attacks. An alternative was presented by S. L. Dudarev in 1999. Judging by the images from “Cimmerian steles” the author suggested that the loops, which were coming through the holes, were used to connect to the belt (Дударев 1999, с. 95). Primarily, such a stele was found at Kizburun-I settlement (Kabardino-Balkarian republic, Russia) (fig. 6: 1). The image from the sculpture can really be interpreted as the connection of the dagger to the belt through the hole. Also, this and other steles show that the

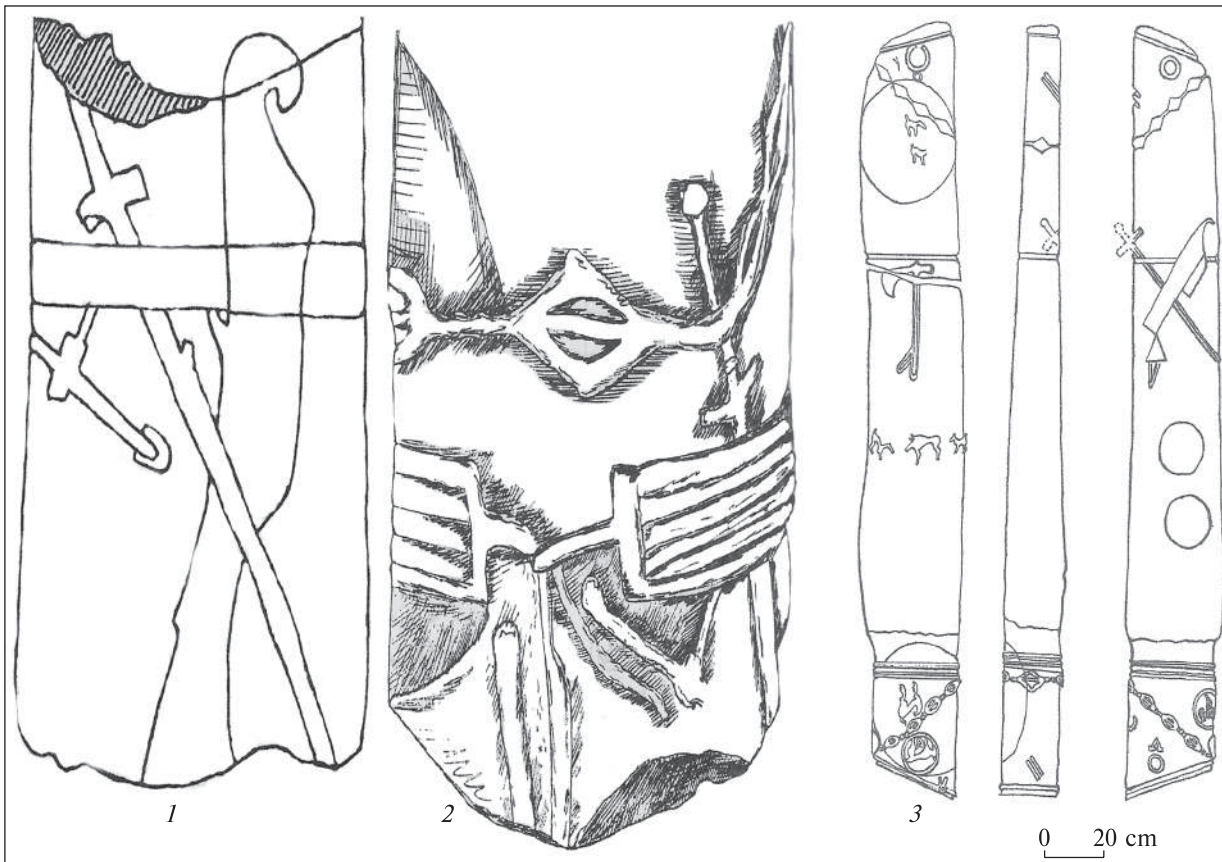


Fig. 6. Steles of Cimmerian time: 1 — Stele from Kizburun-I settlement (fragment); 2 — Stele from Armavir museum (fragment); 3 — Stele from Zubovsky small village

sword in the scabbard was held behind the belt or perhaps between its layers (fig. 6: 2). The questions rise: why were some daggers not carried the same way? And how practical this way of caring was? Two explanations are possible: the lace could have been weak enough to be torn by sudden and rush move or it could have been tied the way it could have been easily untied. Another explanation, which seems to be appropriate is that such daggers were the marks of a high rank in the society and were either completely decorative or were used only in ritual purposes (for instance, during a noble duel, etc.). The image on the stele is quite schematic, therefore it is hard to determine the connection algorithm between the dagger and the belt correctly as well as to answer to the raised questions.

Also, the steles provide us with the information about the battle arts in Cimmerian times: double caring (stele from Zubovsky small village (fig. 6: 3)) and possible simultaneous using of long and short weapons (a sword and an axe or a sword and a dagger), which also indicates the high level of sword-fight tradition at that time.

The bimetallic dagger found in Lviv Region in 2018 has interesting features (accidental finding 11.05.18). Its total length is 40 cm. The blade

is well-preserved and is approximately 5,5 cm wide at its top, but becomes thinner upon moving to the edge. The handle is approximately 9 cm long. The size of the crossguard is middle and the pommel is lost (fig. 4: 12). The hilt deserves a special attention. It is covered with small bolsters, presumably for the better grip. There is only one other object with this technique: bronze Karasuk dagger found at Tomsk grave field (West Siberia) (Членова 1976, табл. 7: 5) (fig. 7). Just as the handles of swords from Subotiv settlement and Andreevskoe lake it is a mark of close connections between Karasuk culture and North Pontic Region.

After reviewing the classical findings of Russia and Ukraine and also examining new artifacts in Ukraine, we are going to look at the western analogical findings. As it was said, the type of such artifacts was called after the artifact from Holoviatyno village by V. Podborsky. The alternative name was suggested by J. Chochorowsky — “Leibniz type” after one of the local findings (1993, p. 113). Such name seems incorrect since some scientists (including S. V. Makhortykh) consider that the sword from Leibniz as well as other artifacts of this “type” are not authentic products, but were brought to those lands by nomads during their campaigns. It is supported by the ab-

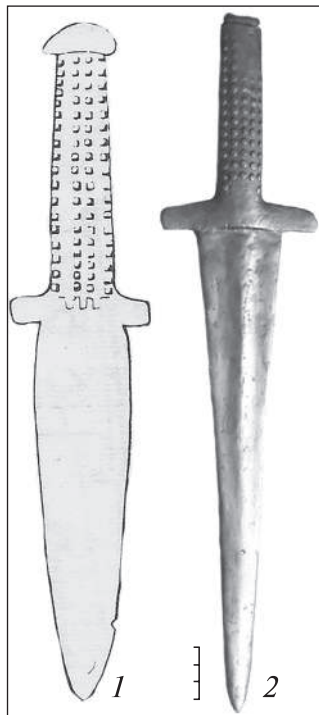


Fig. 7. Karasuk dagger from Tomsk grave field (1) and the dagger from Lviv Region (2)

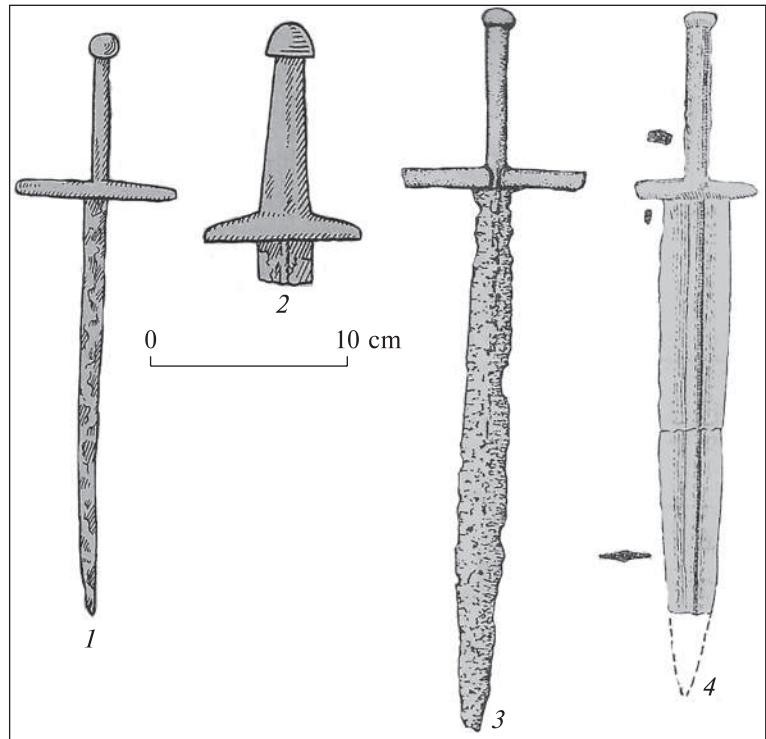


Fig. 8. Bimetallc weapons at Europe: 1 — Penade; 2 — Komarno; 3 — Leibniz; 4 — Klein Neudorf

sence of findings that would support the local origin of such weapon (Makhortykh 2008, p. 171). In other words, the so-called “Leibniz type” is the western variant of bimetallc weapons with cross-shaped handle from North Pontic Region just as findings from Russia are the eastern variant.

The most eastern artifact of this western variant is a bimetallc dagger found in Penade village (Romania) (fig. 8: 1). The total length of the dagger is 39 cm. The pommel is somewhat atypical: it is not mushroom-shaped, but has a shape of a ball. The crossguard on the other hand is rather typical — long and straight. Despite the advance form of the dagger, the blade does not have a fuller (Тереножкин 1976, с. 121).

From Komarno village (Slovakia) comes a bronze handle, which O. I. Terenozhkin considered as a handle of a dagger (fig. 8: 2). Generally, it is similar to the rest of the artifacts, however, the crossguard has a unique feature of the nervure (the protruding rib) (Тереножкин 1976, с. 120). The most obvious explanation is the production specifics, however, the possibility of aesthetic aspect is high as well. Last, but not least, such feature can be a result of damages inflicted on the crossguard by enemy’s blade. Also, the signs of a fuller are visible on the fragments of the blade.

The sword from Leibniz (Austria), which gave the name to J. Chochorowsky’s typology, has all

features of the type: a bronze handle, a small mushroom-shaped pommel and a long straight cross-guard (fig. 8: 3). The iron blade does not have a fuller and is 45,5 cm long. The rectangular piece of the scabbard remained as well near the handle (Chochorowsky 1993, p. 114).

The most western artifact of the type was found at the beginning of the previous century near Klein Neudorf village in Eastern Germany. The handle itself is typical, however, the dagger has some specific features (fig. 8: 4). First of all, unlike the rest of the examined weapons, it is completely bronze, similar to Karasuk prototypes. The blade is much wider comparing to bimetallc weapons. The wide blade is a typical feature of all bronze weapons that is a result of questionable toughness of the metal. The blade has a clearly visible fuller, the total length of the dagger is 34 cm (Тереножкин 1976, с. 121). Just as the finding from Khmelnytska Region in 2015, the dagger was found alongside weapons of another type.

To sum up, the following conclusions can be made: after spreading to the North Pontic Region from Siberia, the Karasuk daggers evolve on this territory into bimetallc weapons with cross-shaped handle. It happened as a result of two factors: the conflicts during the migration processes and the adaptation of iron. The effectiveness of the weapons is indicated by the wide area of their spread-

ing — from Northern Caucasus in the east (Tatarstan, if including the lone findings) to the eastern edges of Germany in the west — which marks the zone of Protoscythian campaigns. The theory of North-Pontic origin of the bimetallic weapons with cross-shaped handle is supported by a large amount of findings on this territory both classical and new. Most of them are concentrated in Podillia, therefore the conflicts between people of Chernogorivka culture (the owners of bimetallic weapons with cross-shaped handle) and local peoples happened quite often (but obviously were not constant), which seems natural considering their closeness. Unfortunately, the present findings cannot help us answer the question of the location, where proto-Scythian smiths “got acquainted” with the iron and adapted it to their products.

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## ПРО ОДИН З ТИПІВ ЗБРОЇ КИММЕРІЙСЬКОГО ЧАСУ

Біметалеві мечі та кинджали з хрестоподібним руків'ям були предметом активного вивчення у 1970—1990-х рр. Серед дослідників тією чи іншою мірою відзначилися такі науковці як О. І. Тереножкін, В. Подборський, С. В. Махортых, Я. Хохоровський, С. Л. Дударев та ін. Під час вивчення теми з'явилися три концепції походження зброї зазначеного типу: північно-причорноморська, кавказька та поліцентрична. За останні роки не було праць, в яких би дослідники розглядали мечі та кинджали цього типу. Значний обсяг нових знахідок на території України дозволяє повернутися до цієї теми, одночасно розглянути знахідки вже відомі, а також ввести до наукового обігу нові.

З урахуванням порівняння східносибірських та українських знахідок, пропонується така гіпотеза: прототипами біметалевої зброї з хрестоподібним руків'ям є бронзові кинджали карасукської культури, на подальшу трансформацію яких на території Північного Причорномор'я вплинуло опанування заліза, а також розвиток бою на мечах. Розвинута форма руків'я (наявність перехрестя (гарди) та грибоподібного навершя) вказує на існування повноцінного фехтування. Значна зона поширення знахідок (від Татарстану на сході до німецько-польського кордону на заході) вказує на територію військових походів загонів, озброєних біметалевими мечами та кинджалами з хрестоподібним руків'ям, а також засвідчує ефективність зброї. Значна концентрація знахідок цього типу на Поділлі свідчить про близькість цієї території до первинного центру їх виготовлення, однак точно встановити цей центр наразі не є можливим.

*Ключові слова:* Північне Причорномор'я, киммерійці, карасукські кинджали, біметалеві мечі та кинджали.

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## ОБ ОДНОМ ИЗ ТИПОВ ОРУЖИЯ КИММЕРИЙСКОГО ВРЕМЕНИ

Биметаллические мечи и кинжалы с крестовидной рукояткой были предметом активного изучения в 1970—1990-х гг. Среди исследователей в той или иной мере отличились А. И. Тереножкин, В. Подборський, С. В. Махортых, Я. Хохоровський, С. Л. Дударев и др. В процессе изучения, возникло три концепции происхож-



дения оружия данного типа: северно-причерноморская, кавказская и полицентрическая. В последние годы не было работ, в которых исследователями рассматривались бы мечи и кинжалы этого типа. Значительное количество новых находок на территории Украины позволяет вернуться к данной теме, одновременно рассмотреть уже известные находки, а также ввести в научный оборот новые.

Учитывая сравнение восточносибирских и украинских находок, предлагается такая гипотеза: прототипами биметаллического оружия с крестовидной рукояткой являются бронзовые кинжалы карасукской культуры, на дальнейшую трансформацию на территории Северного Причерноморья повлияло освоение железа, а также развитие боя на мечах. Развитая форма рукояти (наличие перекрестия (гарды) и грибовидного навершия) указывает на существование полноценного фехтования. Значительная зона распространения находок (от Татарстана на востоке, до немецко-польской границы на западе) указывает на территорию военных походов отрядов вооруженных биметаллическими мечами и кинжалами с крестовидной рукояткой, а также свидетельствует об эффективности оружия. Значительная концентрация находок этого типа на Подолье свидетельствует о близости этой территории к изначальному центру их изготовления, однако точно установить этот центр на данный момент не представляется возможным.

*К л ю ч е в ы е с л о в а:* Северное Причерноморье, киммерийцы, карасукские мечи и кинжалы, биметаллические мечи и кинжалы.

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