STUDIES IN ANCIENT ART AND CIVILIZATION, VOL. 29 (2025)
pp. 101-118, https://doi.org/10.12797/SAAC.29.2025.29.05

Tamar Giorgadze
Tbilisi, Georgia

URARTIAN-TYPE SWORDS FROM THE SAMTAVRO CEMETERY: EVIDENCE OF MILITARY CONTACTS AND CONFLICTS IN THE SOUTH CAUCASUS

Abstract: This paper investigates Urartian-type bimetallic swords unearthed from the second stage of Iron Age pit graves in the Samtavro cemetery. The Samtavro Necropolis in Shida Kartli, Georgia, represents a complex stratigraphic and chronological model, combining the successive stages of the Late Bronze and Iron Ages as well as the Classical and Late Antiquity. Based on a typological study of this group of swords, their provenance and distribution are discussed and compared with the counterpart artefacts found in Eastern Anatolia and North-Western Iran. The lack of any representational art or written sources inhibits the research from establishing a clearer picture of relations and mobility systems between the populations in the West and Central Caucasus and the Kingdom of Urartu in the region of Van. The paper focuses on the transmission, emulation and adaptation of Urartian metalworking techniques. However, the research aims to analyse the local replicas, morphological variants and Urartian influences that occurred in the first half of the 1st millennium BC in the context of burial practices and goods, relying solely on morphological and contextual methods. From this perspective, the research attempts to provide new insights into inter-tribal connections, eventual military pursuits and warfare in Shida Kartli and neighbouring regions.

Keywords: bronze, iron, bimetallism, weaponry, Caucasus, Urartu

Introduction

The Samtavro archaeological site is one of the first archaeological necropolis in the South Caucasus to be explored. It was first investigated by the Austrian naturalist and pioneering archaeologist Friedrich Bayern.

At the confluence of the Aragvi and Kura rivers, Samatavro is located on the right bank of the Aragvi River, near the town of Mtskheta, the ancient capital of Georgia and the seat of Georgian monarchs since the end of the 5th century. The Samtavro graveyard was originally discovered by chance during the construction of a military road. Bayern excavated 300 graves and donated all the artefacts to the *Museum Caucasicum*. Fieldwork continued by the Mtskheta Archaeological Expedition, led by Ivane Javakshishvili and later by Simon Janashia in the late 1930s and 1940s, revealed Urartian-type weapons in the second horizon of Samtavro culture when iron metallurgy was introduced in the area.

Typology and Morphology

Nevertheless, in the absence of archaeological records and metallurgical analysis, the study is confined to morphological, stylistic and comparative methods. The artefact selection criteria for this study consist of all known Urartian-type bimetallic swords, which, although few in number, have been thoroughly discussed in the present paper. The Urartian-type swords are mostly of bimetallic construction, consisting of bronze hilts and iron blades, which were produced in different compositions and were often accompanied by other materials such as wood, bone or ivory. These are important indicators of the level of iron-working that the Urartians achieved. The Urartian swords and daggers, which were produced using diverse techniques of riveting, cladding and application, were much more developed than any other contemporary examples, which their peculiar forms led them to be termed "of Urartian type".

While studying Urartian-type swords and daggers in the Van region, Hanifi Biber distinguished six types of weapon based on the shape and structure of the hilt, and it is worth following the typology set by him (Biber *et al.* 2008, 149-150):

A. Swords with single-edged blades and flanged hilts;
B. Swords with double-edged blades and flanged hilts;
C. Swords with double-edged blades and framed hilts;

D. Swords with double-edged blades and reeled hilts;
E. Swords with double-edged blades and cast-on hilts;
F. Daggers with crescent pommels and daggers with flanged hilts.

The Samtavro burials produced mostly double-edged swords with framed hilts (Tomb Nos. 48, 55, 72, 88, 174, 225) and double-edged swords with reeled hilts (Tomb Nos. 41, 79, 262, 272, 112, 123). Additionally, one object (GNM Inv. 12-54:4269) was found while making the trial trenches in 1938 (Pl. 1: 5). In the Shida Kartli region, Urartian-type reel-hilted swords were found in the Narekvavi No. 13[1] (Inv. 01/10-585, Pic. 94, Davlianidze, 1985), 71[2] (Tab. XII, 906; Nikolaishvili and Gavasheli 2007), Mukhatgverdi No. 59 (Aphakidze *et al.* 1989) and Natsargora No. 319 tombs (Gambaschidze *et al.* 2002). Swords and daggers with flanged hilts have not yet been found in the Shida Kartli region.

The framed hilts of the swords are characterised by a flat section grip; as can be seen at a glance, they have a rectangular flat section grip and crescent pommel (Pl. 1: 1, 3; 2: 1-2, 4: 1-2). In some cases, the pommels have not been preserved. The guards of the hilts are made of bronze framing. The bronze braces of the frames are open in the middle or the bronze framing of the guards is arched in the middle (Pl. 3: 1).[3] The main characteristic of this group of swords is that the iron tangs of the hilt are framed with bronze braces. The hilt is somewhat convex in the middle and in some cases has side protrusions in bronze or is surrounded by relief bronze rings. One example from burial No. 48, belonging to this group of swords, is different in its lateral and vertical framing and has a pommel capped with a semi-conical finial (Pl. 2: 4).[4] The single counterpart of the framed hilted bimetallic sword[5] found in Georgia is an item excavated from burial No. 14, Mzetamze cemetery (Borjomi municipality, South Georgia; Pl. 2: 1).[6] The parallels for this type of framed hilt sword encountered in the Van region (i.e. Van Kalecik cemetery (Biber 2023, 125-128) and a considerable number of chance finds with unknown provenance) are preserved in the Van

[1] It is worth taking into consideration that besides the sword, this grave contained an engraved bronze belt depicting the hanging scenes.

[2] It's noteworthy to mention that the bimetallic dagger (iron blade riveted with bronze braces) and pendants were found in this tomb.

[3] GNM Inv. 15-54-72

[4] GNM Inv. 12-54:1493

[5] BLM. Inv. 12-829.

[6] The item was found in 1988 during the Mzetamze archaeological campaign led by Vakhtang Licheli. Unpublished archaeological material.

and Elazığ Museums (Biber *et al.* 2008, 166, 169). For the comparative dating of this type of sword, it is worth mentioning two specimens from Karmir-Blur: one found outside the dwelling house in the courtyard, the other in room No. 10, where King Sardur's helmet was found (Piotrovsky 1950, 38-39).[7]

Double-edged reeled hilt swords are more numerous than the previous type of sword. The grip of the hilt is composed of an iron tang wrapped in a cast bronze crust. The pommel of the hilt consists of an iron tang capped with a mushroom-shaped or semi-conical bronze finial (Pl. 1: 3-4,[8] 4: 1-3).[9] The guards of both swords have the same structure: an iron tang is braced with a bronze frame, which is arched or open in the middle. These shapes of guards are also observed on the short daggers (Pl. 1: 3). The closest counterparts of these weapons are found in tombs Narekvavi No. 71, Mukhatgverdi No. 59 and Natsargora No. 319. The latter is the most well-preserved framed hilted sword found in Natsargora cemetery (Burial No. 319; Pl. 4: 3), which allows us to easily imagine and reconstruct this group of swords, which are poorly preserved. Frederick Bayern excavated the fragments of a bimetallic sword hilt (Pl. 3: 2)[10] in the village of Patardzeuli (Gurjaani municipality, Kakheti region), and further counterparts come from the Altın Tepe, Ağrı Patnos and Van regions (Biber *et al.* 2008, 170). Noteworthy is the bimetallic reeled-hilted sword found deposited with a "sacred weapon" at the entrance to the Haldi Gates, Karmir-Blur (Piotrovsky 1969, 158-159, Pl. 87).

The guards of framed hilt and reeled hilt swords have mostly the same shape, but the grip section protrudes horizontally in the middle. An exceptional variation of the reeled-hilt sword was unearthed in Samtavro Burial No. 272 and can be considered the original local version of the Urartian-type reeled-hilted sword (Pl. 4: 5).[11] On this artefact, the reeled grip is decorated with open-work triangles. The poor state of preservation does not allow us to determine whether these open triangles were inlaid or not. A typologically similar bimetallic sword, dated to the first quarter of the 1st millennium BCE, was recovered from

---

7 Though many artefacts are unprovenanced and potentially looted or forged, excavated evidence shows differing iron-use patterns between Urartian and post-Urartian periods, with production likely serving a centralised yet loosely structured state system, although the extent of administrative control remains uncertain.

8 GNM Inv. 12-54: 2129; 1828; 1923; 1924/1.

9 GNM Inv. 12-54: 2318; 23119; 2506; KHLM. Gh.-964.

10 GNM Inv. 10-02:228/2306.

11 GNM Inv. 12-54:7278.

Tomb 11 at the Bardzrial Cemetery in the Lori Region of northern Armenia (horizon dated to the first quarter of the 1st millennium BCE) (Saratikyan 2022).

Besides the Urartian-type swords, there is a straightforward example of a bimetallic sword that stands alongside Biber's elaborate chronology.[12] This is a double-edged iron sword, where the cast iron tang of the pommel is capped with a semi-conical bronze plate and the guard framing is barely visible (Tabl. 61). The analogous pieces in the territory of Georgia are found in Tsopi (context unknown, Tetritskaro Municipality, Kvemo Kartli region (Abramishvili 1961, 369-370) and in War Kabud Burial A10 burial grave (Pusht-I Kuh region, Iran) dated to Iron Age III (750-650 BC) (Haerinck and Overlaet 2004, 43-47).

Issues of provenance

Rostom Abramishvili did not share the ideas of Armen Martirosyan and Boris Piotrovsky that most of the metallic artefacts found on these sites were unrelated to local manufacture. He disagreed with the notion that they might have been imported from the Kingdom of Van in ready-made form (Abramishvili 1961, 299-302). The metallic personal ornaments and weapons (including the above-described swords) excavated at Karmir-Blur are paralleled by the counterparts found in Samtavro, Beshtasheni or Dvani by Boris Piotrovsky (Piotrovsky 1950, 42). He defined the kinship between the Karmir-Blur weaponry and the assemblages in Anker, Mousieri (in Armenia), Samtavro, Satovle-Nabaghrebi (Georgia) and Qazax, Mingechaur (Azerbaijan) (Piotrovsky 1959, 176-177).

When Rostom Abramishvili doubted the origin of these swords in the Van region, the aforementioned counterparts were not excavated, but the later discoveries do, however, support Boris Piotrovsky's suggestion about their provenance from the Van region. He believed that, at first, the iron and bimetallic objects were imitations of the "later predecessors" at the stage when independent iron metallurgy developed in the Central and South Caucasus based on local iron deposits (Pl. 7).

Urartian metalworking artefacts are either poorly represented or entirely absent in standard archaeological contexts. Consequently, Assyrian reliefs – renowned for their accuracy – serve as the primary comparative source for

[12] Biber relates the comparative dating and chronology of these assemblages to the northward expansion of the Urartians, particularly during the reign of King Rusas II (c. 685-645 BCE). According to the researcher, these processes likely contributed to the spread of these swords.

the identification and interpretation of military equipment and horse harness components. The majority of such objects recovered from well-documented archaeological contexts originate from the fortress of Karmir-Blur (Castelluccia and Dan 2019, 188-201).

It is observable that a certain number of Urartian metal artefacts are found beyond the recognisable borders of the state. This can be explained by the fact that the majority of Urartian metal objects were luxury goods intended for local political and military elites, not for large-scale international export. Manuel Casteluccia has attempted to explain the occurrence of Urartian metallic artefacts in Caucasian graves. He suggests that they might have been looted during the decline of the Urartian kingdom after the end of the 7th century, which was likely aided by some Scythian and possibly Transcaucasian "tribes" (Castelluccia 2014). It was a fact that numerous bronze artefacts, including shields, helmets and quivers, were preserved on Urartian archaeological sites, but not in the tombs. Quivers in particular were found to have been placed in the *susi* temples as offerings to the god Haldi. Only a few quivers have been discovered in a funerary context, and helmets and shields have never been found in a Urartian grave during excavations of multiple burial sites.[13]

On the other hand, evidence of iron mining and iron processing is uncertain to the south of Lake Van. Richard David Barnet suggested that iron began to appear in the highland region after the formation of the Urartian State. He proposed that Colchis may have exported iron to Urartu and Assyria and that control over this trade could have fuelled tensions between the two powers (Barnett and William 1952). A more recent suggestion has been that iron manufacturing at Urartian sites operated under state regulations and control (McConchie 2004, 79-80). Urartian metalworking over nearly a century shows a strong local tradition influenced by Assyria, highlighting cultural exchange and regional interconnections and conflicts, as the direct ownership and exploitation of metal deposits was certainly one of the main reasons for the conflict between Assyria and Urartu (Castelluccia and Dan 2014, 67-104). It seems more meaningful to

[13] During the 8th century BCE, the Urartian kings Argiști I and Sarduri II conducted several military campaigns extending into parts of modern-day southern Georgia, particularly the Samtskhe-Javakheti region. These incursions did not result in full annexation but reflected temporary influence through military actions such as raids, the imposition of tribute and strategic pressure. The Urartian presence in these areas was constrained by geographic and logistical challenges, including the mountainous terrain and the autonomy of local tribal populations. Nonetheless, these campaigns marked the northernmost extent of Urartian expansion and had lasting impacts on local defensive strategies and regional cultural developments (Dan and Trémouille 2024).

follow Castelluccia's suggestion that the Urartian-type weaponry discovered in the central and southern Caucasus was either acquired as gifts by the military in the Urartian army or political administration, or else given to local rulers (Castelluccia 2014, 113-114). On the other hand, it must be admitted that a comparative study of tin isotopic analysis could resolve the question of their origin. If they are local imitations of genuine Urartian weapons, the learning, adoption and implementation of new techniques could have taken some time; nevertheless, migrations and communications could have existed between craftsmen who produced, taught or sold the items. Besides the swords and daggers, there is a considerable quantity of bronze arrowheads and bone tools and weapons on Transcaucasian and Urartian archaeological sites, but the limited quantity of Urartian-type swords and daggers suggests that they were imported or even that they were imitations.

Conclusions

Regarding the shifts and changes in material culture during the Late Bronze and Iron Ages in Samtavro and the surrounding area, it seems that the Samtavro population faced through new economic and presumably social challenges. If the Late Bronze Age burial context clearly showed a vast quantity of splendid material, demonstrating a spectacular and considerable amount of Central Caucasian weaponry, along with a sumptuous burial inventory featuring massive black burnished pottery, the cemetery inventory from the first two stages of the Iron Age indicates that this population encountered new economic challenges. As in the southern neighbouring regions, the tribes of the central Caucasus underwent a stable transition to iron metallurgy during the early first millennium BCE, marking the region's entry into the Iron Age. The onset of the Iron Age in the Caucasus and Near East is characterised by numerous innovations that extend beyond the simple introduction of iron (Castelluccia and Dan 2013-2014). This period was subsequently followed by significant archaeological and cultural transformations during the 7th-6th centuries BCE (Tumanyan 2019). The economic challenges could be related to the decrease in political power, contacts with further allies and animosity with the local neighbouring rulers (Narekvavi, Tsitsamuri, Natsargora, etc.) in the region, whose social and economic emergence could be the reason for conflicts.

All of the above-mentioned archaeological sites in the Shida Kartli region display identical burial practices, including elements of Colchian material culture: pottery with zoomorphic handles (Pl. 5); bronze belt buckles with engraved ornamentation (Pl. 6: 2); typical local greyish jugs and jars (Pl. 5); archaic elements such as a bronze spearhead with a closed handle or an engraved bronze belt (Pl. 6: 4); open bronze bracelets and rings with etched surfaces (Pl. 6: 3); simple or engraved tweezers; hemi-spherical bronze buttons; bronze and iron needles; and the presence of cornelian and paste beads in almost every burial shows some kind of uniformity in the burial inventory and the needs and taste of their possessors and consumers.

Otherwise, the examples of iron and bimetallic (bronze-iron) weapons from the Samtavro cemetery and their counterparts allow researchers to reconstruct the model of iron adoption and the emergence of iron-working in Shida Kartli in the first half of the 1st millennium BC.

In the kind of burial inventory where Urartian-type swords are found, the presence of iron daggers with crescent pommels or bimetallic daggers is not surprising (Pl. 3).[14] It is noteworthy to mention that within this context, the co-existence of archaic bronze mace-heads and spearheads, as well as the presence of iron open-hilted spearheads, iron knives, iron horse harnesses and harnesses in general, is well documented.

At the beginning of the Early Iron Age, Urartian craftsmen frequently used iron to make personal ornaments and, in later times, they began the large-scale manufacture of sharp-edged tools like knives, though the hilts were still framed or riveted with bronze. Iron was preferred over copper or bronze for shaping the blades of swords, daggers, knives and other sharp-edged implements. The earliest iron and bronze-iron artefacts found in Central Transcaucasus were weapons, and their context shows the evident dominance of bronze jewellery and accessories. Otherwise, the first iron consumers were local rulers who had military requirements. It can be concluded that the introduction and emergence of ironworking in this region was a fast and gradual process, and Samtavro is an example. The owners of these weapons were residents involved in intertribal conflicts, were losing their predominance in the region and whose power was neutralised by adjacent neighbouring populations.

[14] GNM Inv. 12-54: 6126; 6127; 6128; 6129; 6130.

Acknowledgments

I would like to acknowledge my supervisor, Professor Vakhtang Licheli, for encouraging me to research unpublished evidence. I am incredibly grateful to the staff of the Georgian National Museum, Samtavro-Trialeti depository: Nikoloz Chaduneli, Tina Kakhelishvili and Maia Kublashvili; to Jondo Kitiashvili, the archaeological depository specialist at Khashuri Local Museum; to the staff of Borjomi Local Museum: Akaki Saralidze and Michael Orjonikidze; and to Saba Bugianishvili, the archaeologist at the National Agency for Cultural Heritage Preservation of Georgia, for their assistance and support.

List of abbreviations

BLM – Borjomi Local Museum
GNM – Georgian National Museum
KHLM – Khashuri Local Museum

References

Abramishvili R. 1961. The Issue of Iron Adoption in East Georgia's Area (in Georgian). *Bulletin of of the State Museum of Georgia. Volume 22-B*, 291-302.

Aphakidze A., Nikolaishvili V., Sikharulidze A., Bibiluri T., Giunashvili G., Iremashvili S. and Khetsuriani L. 1989. Archaeological Report of Mtskheta Fieldwork Research (in Georgian). In A. Aphakidze, *The Great Mtskheta. Volume 9*, 6-35. Tbilisi.

Badalyan R. S. and Avetisyan P. S. 2007. *Bronze and Early Iron Age Archaeological Sites in Armenia I: Mt. Aragats and Its Surrounding Region.* Oxford. https://doi.org/10.30861/9781407301396.

Barnett R. D. and William W. 1952. Russian Excavations in Armenia. *Iraq* 14/2, 132-147.

Biber H. 2023. Hilts Framed Urartian Swords and Making Techniques (in Turkish). *Van Journal of Humanities and Social Sciences*, 120-139.

Biber H., Sevin V. and Yalçin Ü. 2008. Technological and Archaeometallurgical Studies on the Urartian Swords and Daggers. In Ü. Yalçın, H. Özbal and A. G. Paşamehmetoğlu (eds), *Ancient Mining in Turkey and The Eastern Mediterranean*, 149-173. Ankara.

Castelluccia M. 2014. Urartian Metalwork in Caucasian Graves. *Studies in Caucasian Archaeology* 2, 83-114.

Castelluccia M. and Dan R. 2013-2014. Metal Horse Bits from Urartian Sites. *Armenian Journal of Near Eastern Studies* 8/1-2, 36-47.

Castelluccia M. and Dan R. 2014. Caucasian, Iranian and Urartian Bronze Bells. *Ancient Civilisations from Scythia to Siberia* 20/1, 67-104. https://doi.org/10.1163/15700577-12341261.

Castelluccia M. and Dan R. 2019. Some Remarks on Urartian Horse Harnesses. In M. D'Andrea, M. G. Micale, D. Nadali, S. Pizzimenti and A. Vacca (eds), *Pearls of the Past: Studies on Near Eastern Art and Archaeology in Honour of France Pinnock. Band 8*, 187-201. Münster.

Çifçi A. 2018. Religion and Kingship Ideology: The God Ḫaldi and the Urartian Monarch. *Ancient West & East* 17, 119-141. https://doi.org/10.2143/AWE.17.0.3284891.

Dan R. and Trémouille M.-C. 2024. From Ṭušpa to Apuni: An Analysis of 8th Century Military Campaigns at the Northern Border of Bia/Urartu. In M. Ramazzotti (ed.), *Costeggiando l'Eurasia / Coasting Eurasia: Archeologia del paesaggio e geografia storica tra l'Oceano Indiano e il Mar Mediterraneo*, 251-263. Rome. https://doi.org/10.13133/9788893773430.

Davlianidze R. 1985. Narekvavi Cemetery (in Georgian). In A. Aphakidze, *Mtskheta.* ***Volume 7*****, 6-42. Tbilisi.**

Gambaschidze I., Hauptmann A., Slotta R. and Yalçin Ü. (eds) 2002. *Georgien. Schaetze aus dem Land des goldenen Vlies.* Bochum.

Haerinck E. and Overlaet B. 2004. *Luristan Excavation Documents. Volume 5: The Iron Age III Graveyard of War Kabud, Pusht-i Kuh, Luristan.* Leuven.

Köroğlu K. 2012. The Kingdom of Urartu and Native Cultures. In A. Çilingiroğlu, A. Sagona (eds), *Anatolian Iron Ages 7: The Proceedings of the Seventh Anatolian Iron Ages Colloquium Held at Edrine, 19-24 April 2010*, 149-165. Leuven–Paris–Walpole.

Maxwell-Hylsop R. 1972. The Metals *amūtu* and *aši'u* in the Kültepe Texts. *Anatolian Studies. Journal of the British Institute of Archaeology at Ankara* 22, 159-162. https://doi.org/10.2307/3642560.

McConchie M. 2004. Archaeology at the North-East Anatolian Frontier, V: Iron Technology and Iron-Making Communities of the First Millenium BC. Louvain–Paris–Dudley.

Nikolaishvili V. and Gavasheli E. 2007. *Narekvavi archaeological sites* (in Georgian). Tbilisi.

Piotrovsky B. 1950. *Археологические раскопки в Армении* [*Arheologičeskie raskopki v Armenii*], *No. 1-3.* Yerevan.

Piotrovsky B. 1959. Город Бога Тейшебы (кармир-блур). *Советская археология* [Gorod Boga Tejšeby (Karmir-Blur). *Sovetskaja arkheologija*], 169-186.

Piotrovsky B. 1969. *Urartu.* J. Hogarth (transl.). London.

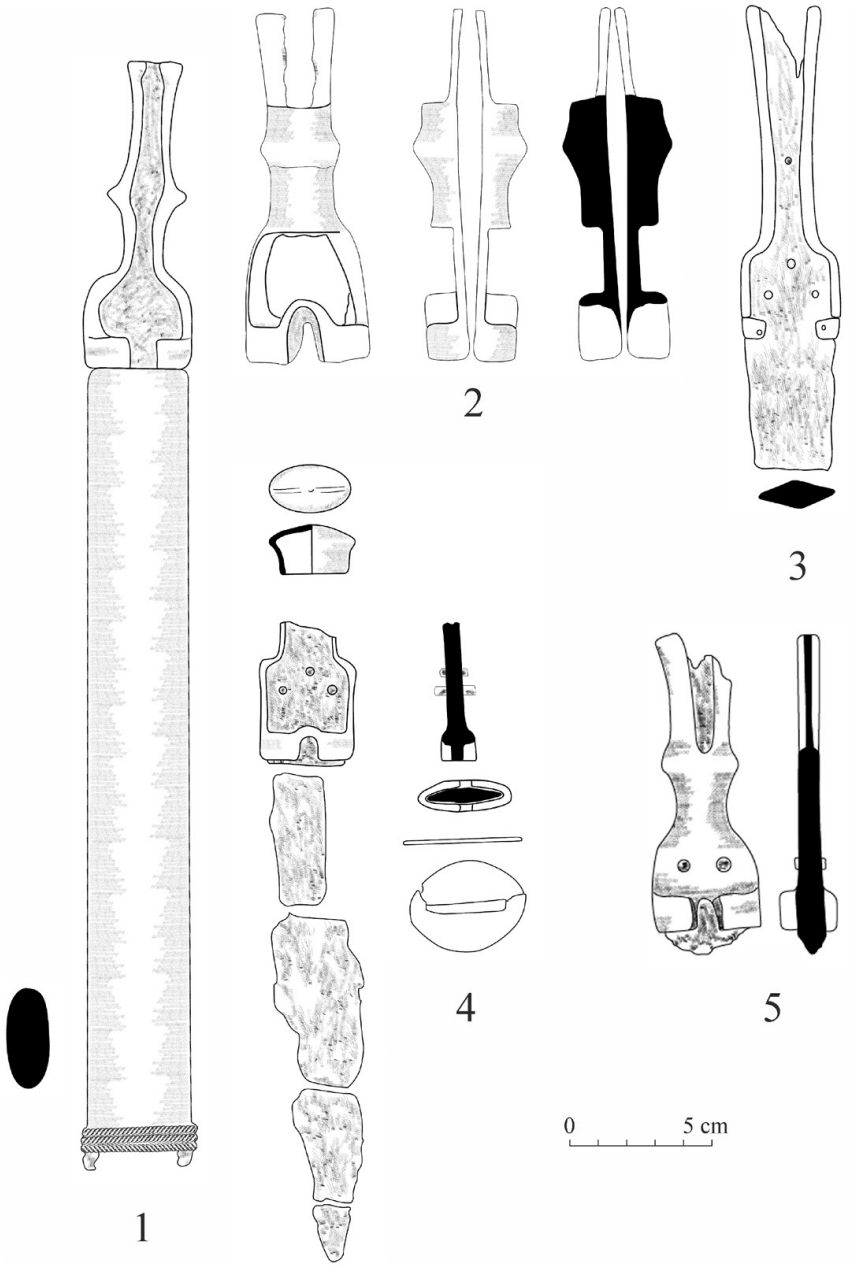
Saratikyan A. 2022. The Tombs of Warriors, according to the Data of the Cemetery of Bardzrial (Late II Millennium – First Quarter of I Millennium BC). *Journal of Armenian Studies* 2, 105-117. https://doi.org/10.54503/1829-4073-2022.2.105-117.

Tumanyan G. 2019. On the Problem of Dating of Iron Age Sepulchres in Armenia. *Российская археология* [*Rossiiskaia arkheologiia*] 3, 26-39. https://doi.org/10.31857/S086960630006040-3.

Yengibaryan N. 2002. The Graves of the Urartian Period of Kharchaghbyur. In R. Biscione, S. Gevorgi Hmayakyan and N. Parmegiani (eds), *The North-Eastern Frontier Urartians and Non-Urartians in the Sevan Lake Basin. Volume 1: The Southern Shores*, 417-454. Roma.

Tamar Giorgadze
c/o Ivane Javakhishvili Tbilisi State University
tamar.giorgadze207@hum.tsu.edu.ge

Plate 1



Pl. 1 – 1. Sword from Samtavro burial grave №72; 2. Sword hilt from Samtavro burial grave №79; 3. Dagger fragment from Samtavro burial grave №72; 4. Dagger from Samtavro burial grave №79; 5. Sword hilt from the trench №Vih, Samtavro archaeological site (Drawing and computer work by Mate Akhalaia and Tamar Giorgadze)

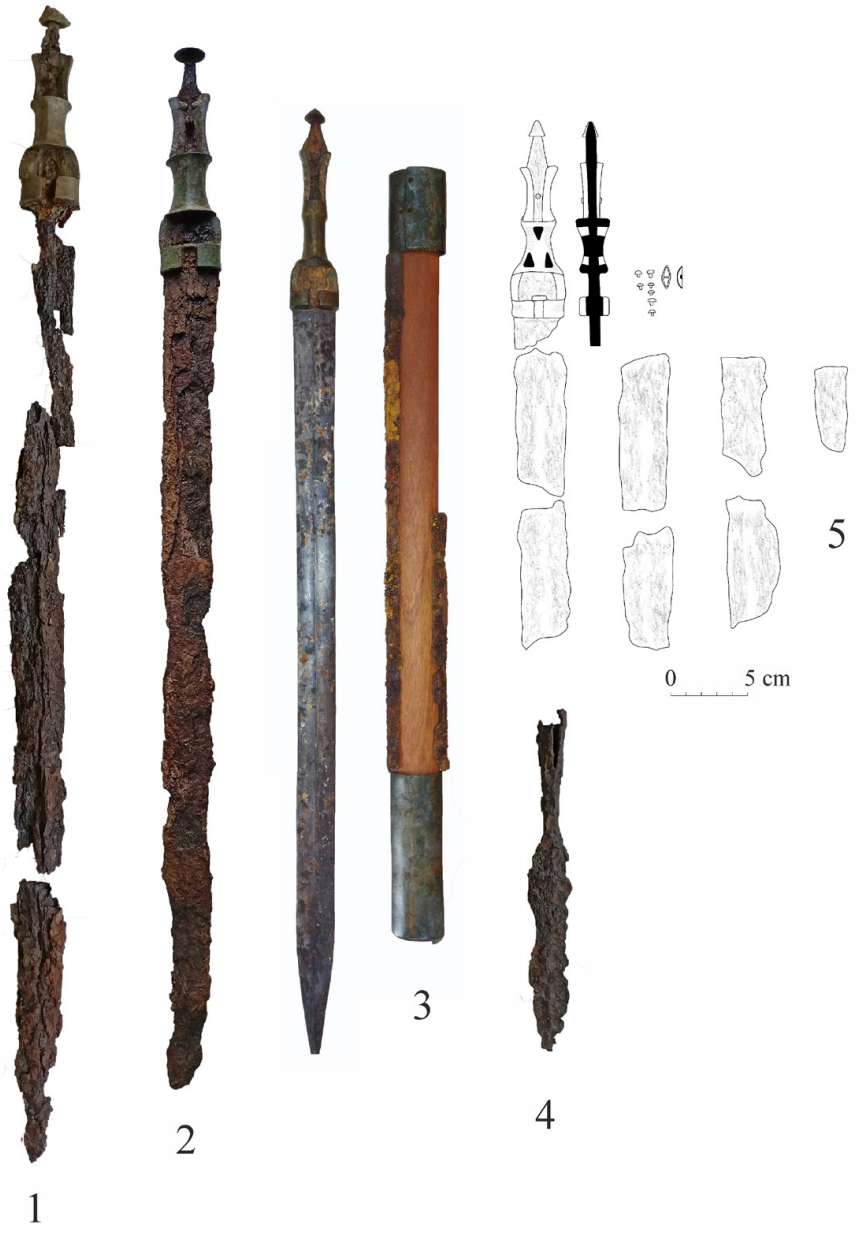
Plate 2

Pl. 2. – 1. Sword from Mzetamze burial tomb 14; 2-3. Sword and spearhead (two sides) from Samtavro burial grave №55; 4-9. Part of the burial inventory from the grave №48 (Images by Tamar Giorgadze)

Plate 3

Pl. 3. – 1. Fragments of the sword hilt (two sides) and scabbard from Samtavro burial Grave №88; 2. Fragment of sword hilt from Patardzeuli; 3-8. Part of burial inventory from Samtavro burial grave №225 (Images by Tamar Giorgadze)

Plate 4

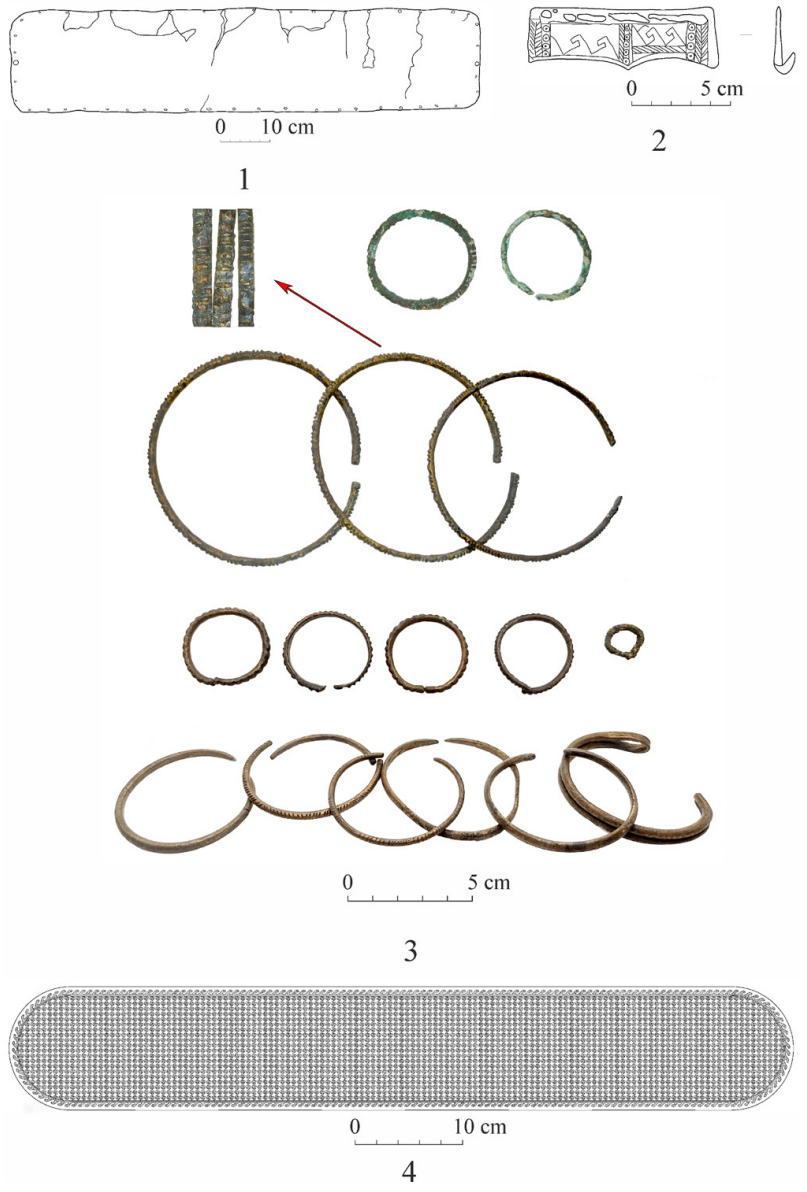


Pl. 4 – 1. Sword from Samtavro burial grave №112; 2. Sword from Samtavro burial grave №123; 3. Sword and scabbard with parallel sheeting from Natsargora burial grave №319 (Images by Tamar Giorgadze); 4. Spearhead from Samtavro burial grave №112; 5. Fragments of the sword from Samtavro burial grave №272 (Drawing by Mate Akhalaia)

Plate 5

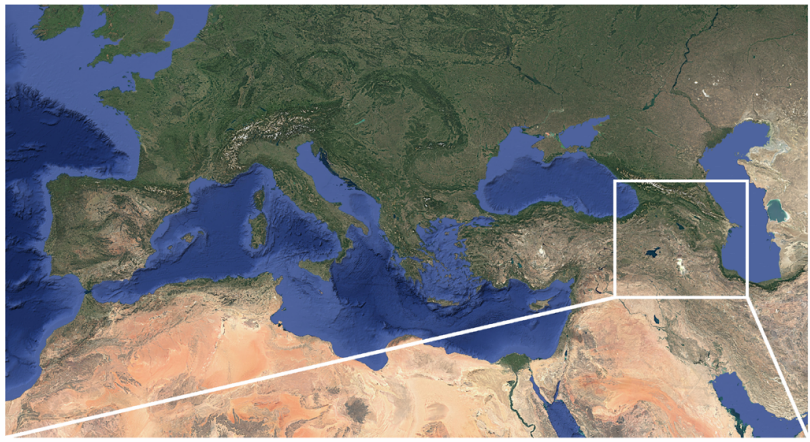
Pl. 5. – 1-4. pottery from Samtavro burial grave №79; 5-8. pottery from Samtavro burial grave №112; (Images by Tamar Giorgadze)

Plate 6

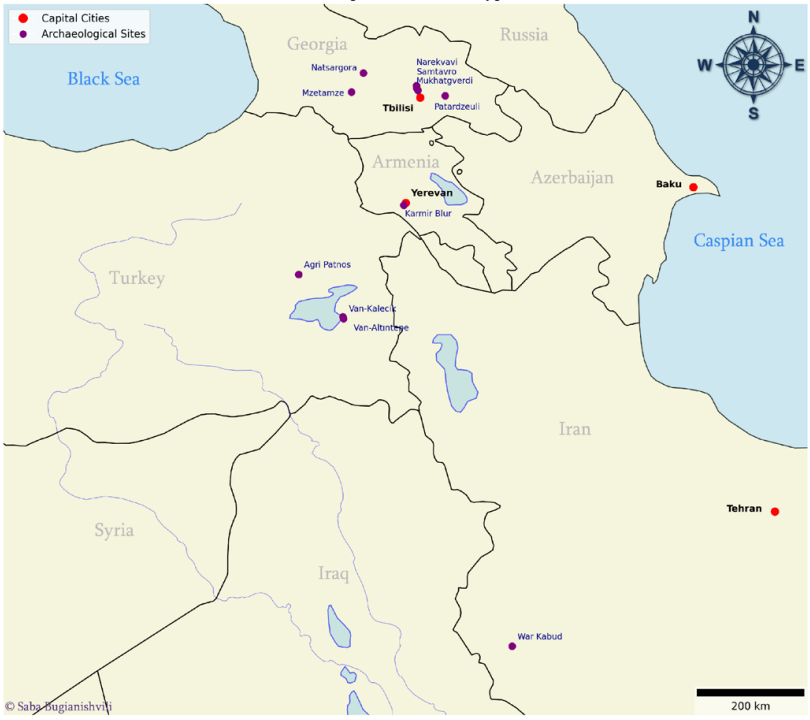


Pl. 6. – 1. Bronze belt from Samtavro burial grave №112; 2. Engraved bronze buckle from Samtavro burial grave №112 (Drawing and computer work by Inga Esvanjia and Tamar Giorgadze); 3. Bronze rings and bracelets from Samtavro burial graves №72; 272 (Images by Tamar Giorgadze); 4. Reconstruction of the engraved bronze belt from Samtavro burial grave №225 (Drawing and computer work by Bruno Vephkhvadze)

Plate 7



Distribution map of the Urartian-type swords



Pl. 7. Distribution map of Urartian type bimetallic swords