e-ISSN 2974-6051

Armeniaca
Vol. 4 — October 2025

A(nother) Urartian Royal Bowl Property of Sarduri (I), Son of Lutipri, from Karmir-blur, Stored in Hermitage Museum

Anna Novikova
State Hermitage Museum, St. Petersburg, Russia

Annarita Bonfanti
Institute for the Study of the Ancient World, New York University, USA

Roberto Dan
ISMEO Associazione Internazionale di Studi sul Mediterraneo e l'Oriente, Roma, Italia

Abstract A ribbed bronze bowl from Karmir-blur inscribed with the name of King Sarduri has been reinterpreted as the earliest known bronze inscription of Sarduri, son of Lutipri, the first Urartian sovereign. Another bowl in the Hermitage, bearing a similar inscription, shares the same features and can likewise be attributed to Sarduri I. Together they form the missing link between the earliest ribbed bowl and the later plain bronze vessels associated with subsequent Urartian kings.

Keywords Royal bowls. Inscriptions. Karmir-blur. Urartu. Assyria.

Edizioni Ca'Foscari

Peer review

Submitted 2025-06-04
Accepted 2025-09-23
Published 2025-12-12

Check for updates

Open access

Citation Novikova, A.; Bonfanti, A.; Dan, R. (2025). "A(nother) Urartian Royal Bowl Property of Sarduri (I), Son of Lutipri, from Karmir-blur, Stored in Hermitage Museum". *Armeniaca*, 4, 7-24.

DOI 10.30687/arm/2974-6051/2025/01/001

1 Introduction

Urartian research is characterized by several long-standing assumptions that are often taken for granted and considered unworthy of further discussion or detailed study.[1] One such assumption is that the Urartians began writing in Urartian at least a generation after the introduction of cuneiform script for royal inscriptions, around 840-830 BCE – a hypothesis drawn from the Hittite case (see van den Hout 2009a; 2009b). This view has recently been challenged by a re-evaluation of a ribbed bronze bowl bearing a Urartian inscription of a king named Sarduri (Dan, Bonfanti 2023). The epigraphic features, unusual morphology, and similarities with earlier Assyrian specimens suggest that the object's owner was not, as previously believed, Sarduri II, son of Argišti, but rather Sarduri I, son of Lutipri.

Until recently, this was the only bronze object from excavations that could potentially bear the name of this king. However, in the Hermitage collection, another bowl with similar epigraphic features has come to light, also inscribed with the name of a king called Sarduri. This article is dedicated to a morphological and epigraphic analysis of this item, its contextualization within the Urartian corpus of bronze artifacts, and a discussion of its significance, underscoring the exceptional nature of this particular bowl. This research forms part of a broader project aimed at reevaluating Urartian royal metallurgy, initiated through a comprehensive study of the Urartian royal bowls from Karmir-blur, now preserved in multiple museums across Armenia and the Russian Federation.[2]

1 The contents of this article were jointly prepared by all the authors. Specifically, A. Novikova wrote "Morphological Description of the Bowl ДВ-17749" and "A History of the Research on Urartian Royal Bowls"; A.S. Bonfanti wrote "Urartian Bronze Bowls: An Underrated Object" and "Analysis of the Inscription"; while R. Dan wrote "The Discovery of the Urartian Bronze Bowls: A View from Karmir-blur" and "Archaeometrical Analysis." The "Introduction" and "Conclusions" were written collaboratively by the authors. The authors are grateful to Igor Malkiel, the head of the Laboratory for Scientific Restoration of Precious Metals at the State Hermitage. We would also like to thank the History Museum of Armenia for the photos of the bowl 2010/325, and in particular the Museum Director, Davit Poghossyan, the Deputy Director, Nzhdeh Yeranyan, Sona Hovsepyan, Chief Curator, and Astgh Poghosyan. We are also grateful to Gagik Gyurjyan, former Director of the 'Erebuni' Historical & Archaeological Museum-Reserve and the archaeological area of Karmir-blur, at the time when I carried out the aerial imagery used in this contribution.

2 For the first results of these studies, see Bonfanti, Dan 2023; Dan, Bonfanti 2023.

2 The Discovery of the Urartian Bronze Bowls: A View from Karmir-blur

Karmir-blur is one of the most significant Urartian sites on the Armenian Highlands. It is situated on a low natural rise along the edge of the Hrazdan River valley. Excavations at the site took place between 1939 and 1971 (see Piotrovskij 1950; 1952; 1955; 1970; Oganesyan 1955).

The primary occupation phase dates to the Urartian period (seventh century BCE), during which Karmir-blur became one of the last Urartian fortresses in the Armenian Highlands. Cuneiform inscriptions on various materials, linked to rulers from Minua to Sarduri (III), son of Sarduri, were discovered during investigations, shedding light on the Urartian presence in the region. The site itself was founded by Rusa, son of Argišti, but the discovery of several inscribed bronze shields (CTU B 8-2, B 8-3, B 8-4) and a solid bronze cylinder (CTU B 8-21) attributed to Argišti (I), son of Minua, suggests that these objects, originally created and stored in Erebuni, were relocated to Karmir-blur when it became the new royal residence and the administrative center of the Ararat Plain.

The citadel was accompanied by a large settlement that partially overlapped an earlier one, which the Urartians themselves had destroyed. Its walls were constructed with stone foundations and mudbrick superstructures. The lower level of the fortress, partially subterranean, was inaccessible from the outside and could only be reached from the upper level. This lower section contained approximately 200 storage rooms, most of which were rectangular in shape, with the larger ones featuring central rows of pillars. These rooms primarily served as storage areas for food, preserved in partially buried *pithoi* (*karas*), over 500 of which were found *in situ*. Additionally, specialized workshops were identified within the complex, including facilities for sesame oil production, a brewery, granaries, and pantries for storing meat and dairy products. There were also arsenals for weapons, metal goods, and pottery.

Little is known about the royal palace, which was located on the upper floor, but excavations have uncovered architectural elements, furnishings, and prestige objects that collapsed into the lower structures. The palace was likely adorned with wall paintings, fragments of which were recovered during excavations. Karmir-blur is unique among Urartian sites as the only known palace built on an artificial terrace. This design choice, made by Rusa, son of Argišti, was likely inspired by Neo-Assyrian palatial architecture, particularly Sargon II's palace at Khorsabad, which was constructed on a similar terrace just a few decades earlier (Dan 2015, 48).

As mentioned, the 97 inscribed bronze bowls were discovered stacked inside *pithos* 5 in storeroom 25 (Piotrovskij 1952, 16-27).

Excavations of this room began in 1948 and continued into 1949, when the bowls were unearthed. Storeroom 25 was a large, partially subterranean space measuring 31 × 10.3 m, with three central quadrangular pillars and a buttress along the north wall (Piotrovskij 1950, 59). It contained 82 *pithoi* filled with wheat, barley, millet, and sesame (Piotrovskij 1950, 29; 1952, 8, 19-20). Twenty of these *pithoi* bore cuneiform capacity marks, while the rest featured hieroglyphic notations (Piotrovskij 1955, 23). By the time of the fortress's destruction – possibly in mid-August – these *pithoi* were already empty (Piotrovskij 1950, 31). The *pithos* used to conceal the bowls was positioned in the northern part of the storeroom, far from the entrance. The bowls were deliberately hidden beneath wooden boards (Piotrovskij 1952, 20; 1955, 8-9), suggesting they were part of a hoard, possibly due to their value. Alongside the bowls, storeroom 25 yielded numerous other significant artefacts, including 'Scythian' objects, which indicate interactions between Urartu and the nomadic groups that became increasingly influential in the Near East from the eight century BCE onward. The available data on storeroom 25 and other rooms at Karmir-blur highlight the site's complex history and raise questions about the timing and nature of the citadel's destruction. Evidence suggests that the fortress may have remained occupied beyond the traditional date assigned to the fall of the Urartian state in the second half of the seventh century BCE. As Piotrovskij observed, the absence of wine residue in the *pithoi* and the lack of everyday utensils suggest that by the time of the final assault, the fortress was already in decline (Piotrovskij 1952, 27; 1955, 22). The room had been thoroughly cleaned, implying that the site's downfall was a gradual process rather than a sudden, catastrophic event.

3 Urartian Bronze Bowls: An Underrated Object

The excavation of Karmir-blur **[figs 1-2]**, on the southwestern outskirts of modern-day Yerevan, led to the discovery of 97 bronze bowls stacked inside a *pithos* in a storeroom within the fortress (Piotrovskij 1952, 20). Their deposition does not appear to have occurred immediately before the fortress's final destruction, as they were carefully placed and covered. This suggests they were stored at an unspecified time between the second half of the seventh century BCE, when Karmir-blur was founded, and the Achaemenid conquest of Armenia in the mid-sixth century BCE.

Figure 1 Aerial view of the northern part of the Karmir-blur site (Kotayk Survey Project Archive)

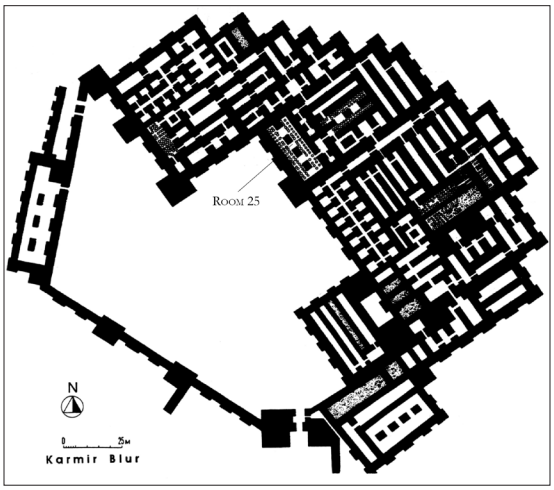

Figure 2
Plan of the Karmir-blur fortress with the location of storage room 25 (adapted after Seidl 2004, fig. 2)

The bowls exhibit a standardized morphology: they are shallow with a continuous profile, indistinct rim, and concave bottom. Made of bronze with a maximum tin content of 10%, they were designed to have a golden appearance (Piotrovskij 1952, 54). Their diameters range from 16 to 20.6 cm, with weights between approximately 280 and 450 gr. The depth varies between 4.3 and 6 cm, while the wall thickness ranges from 0.15 to 0.4 cm. All these bowls bear cuneiform inscriptions naming various Urartian kings, which initially allowed scholars to arrange them in chronological order with little difficulty. However, some of these chronological assumptions have recently been challenged (see Seidl 2004, 18; Dan, Bonfanti 2023). The

absence of patronymics in these short inscriptions often prevents definitive attribution to specific rulers, as multiple Urartian kings shared the same names (e.g., Argišti, Sarduri, and Rusa). Besides the inscriptions, the bowls feature a relatively simple but non-standardized iconographic repertoire.

Their significance lies in their uniqueness, as they are the only known royal bowls identified through regular excavations, aside from a few specimens found in Ayanis (CTU B 12-17, B 18-10). The fact that these bowls were discovered stacked together in a *pithos* raises several important questions, particularly regarding the nature of the Urartian royal court, the significance of these objects themselves, and the long-debated issue of Karmir-blur's destruction or abandonment, closely tied to the broader *vexata quaestio* of Urartu's collapse. These bowls also offer insights into more practical matters. The presence of roughly datable inscriptions, which can be arranged in a loose chronological order, provides an opportunity to study the development of Urartian cuneiform ductus on bronze. This, in turn, may help identify the uncertain owners of these objects.

Taken together, these factors underscore the importance of these items, which rank among the most significant discoveries related to the Urartian royal court.

4 History of the Research on Urartian Royal Bowls

To date, a systematic study of the entire corpus of Urartian metal bowls directed to an academic audience has yet to be undertaken, despite their frequent mention in Urartian research (but see Dan et al. 2024). The first reference to these objects appears in Boris B. Piotrovskij's 1951 article, where he compiled inscriptions found on bronze artifacts from the 1949 excavations at Karmir-blur. One specific bowl is briefly noted as bearing a text in Assyrian cuneiform characters (Piotrovskij 1951, 111, no. 5). In his second volume on the Karmir-blur excavations, Piotrovskij expanded on this finding, reporting that 97 bronze bowls were discovered inside *pithos* 5 in storeroom 25 (1952, 20). He provided a more detailed analysis in the section on inscribed bronzes (54-64),[3] noting that these bowls bore engraved inscriptions with the names of four eighth century BCE Urartian kings: Minua, Argišti, Sarduri, and Rusa. He attributed those mentioning Sarduri specifically to Sarduri (II), son of Argišti (ca. 757-735 BCE). Piotrovskij again highlighted that *two* of these bowls, one of which was ribbed **[figs 3-4]**, were inscribed with the signs "NÍG.GA ^{m}SAR-du-ri-e-" in Assyrian cuneiform. However, after this

3 Here, he reports that the bowls were found inside *pithos* 4 (Piotrovskij 1952, 54).

initial mention, the exact fate of these two bowls became unclear. Only the ribbed bowl occasionally appeared in publications (e.g., Piotrovskij 1970: figs. 73-4; Santrot 1996, 272), due to its unique features within Urartian toreutics.

Figure 3
The bronze ribbed bowl of Sarduri (2010/325 – Photo courtesy of the History Museum of Armenia)

Figure 4
Views of the gilded bronze ribbed bowl of Sarduri, with details of the inscription (2010/325 – Photo courtesy of the History Museum of Armenia)

The inclusion of these two bowls in Urartian text corpora began with Friedrich W. König (HChI 112E) and Giorgi A. Melikišvili (UKN 191-2), who listed them among the inscriptions of Sarduri II. However, Ursula Seidl later challenged this attribution, assigning them instead to Sarduri I, son of Lutipri (Seidl 2004, 18, A.1-2) based on the Assyrian style of the cuneiform signs (55). She also stated that both bowls were ribbed but only provided an inventory number for one, 2010/32/14, housed in the History Museum of Armenia. Conversely, Mirjo Salvini, in the fourth volume of his *Corpus dei Testi Urartei*, reaffirmed their attribution to Sarduri II, arguing:

> Vero è che la forma dei segni è particolarmente slanciata, e specie il DINGIR ha una forma arcaica, ma questo non basta per l'attribuzione; tanto più che il genitivo *Sarduri=ei* rivela la lingua urartea, mentre Sarduri I redigeva ancora i testi in assiro. (Salvini 2012, 52)

Another issue arose regarding the actual number of ribbed bowls bearing this inscription. Piotrovskij originally mentioned two such inscriptions, but only *one* was explicitly identified as ribbed (1952,

56). Later, in *Karmir-blur, Al'bom*, he mistakenly published images of two different ribbed bowls, both described as inscribed by Sarduri (1970: figs. 73-5); for this reason, since Seidl's study, these bowls have generally been regarded as two separate items.

The inventory number of one bowl, 2010/325 (formerly 2010/32/14), belongs to the History Museum of Armenia, while Salvini (2012, 52) identified the second as ДВ-17749, housed in the State Hermitage Museum. Only recently have these two bowls been systematically studied and published (Dan, Bonfanti 2023).

5 Morphological Description of the Bowl ДВ-17749

The bowl ДВ-17749 is well preserved and shares morphological similarities with the majority of known royal Urartian bronze bowls. It is a shallow vessel with a curved profile, an indistinct rim, and a concave bottom that seamlessly transitions into the profile **[figs 5-6]**.

Figure 5-6 Frontal and side view of the Sarduri bowl at the Hermitage Museum (ДВ-17749 – Photo courtesy of the Hermitage Museum)

Despite its overall preservation, the bowl exhibits some deformations, including a through hole, metal tears at the center, and dark spots. It measures 20 cm in diameter and 5.2 cm in height, with cuneiform signs ranging between 0.4 and 0.5 cm in height. The bowl weighs 258.6 g. The manufacturing process involved shaping the bowl in a circular form using a mold. The central point of rotation is still visible, along with concentric circles formed by a metal ruler, which can be observed on both the inner and outer surfaces. Various hand tools of different shapes were used in crafting the bowl. The cuneiform inscription, arranged in a circular pattern inside the bowl, was engraved using four distinct types of chisels.

5.1 Analysis of the Inscription

The epigraph inscribed in cuneiform on the internal side of the bowl's base follows a circular outline **[figs 7-9]**. The text of the inscription (CTU B 9-22) is the following:

NÍG.GA ^{mD}sar$_5$-du-ri-e-i, 'property of Sarduri'.

Figure 7
Detail of the inscription in the center of the bowl

Figures 8-9 Microscopic detail of the wedges on the bowl ДВ-17749

The Sumerograms NÍG.GA correspond to the Urartian term urišḫi, meaning "property" (Salvini 1980, 186; 2018, 423). These signs are rarely attested in Urartian bronze epigraphy; indeed, the two bowls bearing this inscription are the only known examples of these signs in epigraphs on metal objects found in regular excavation contexts. Among objects from the antique market, these Sumerograms have been found on a single horse blinker dating to the reign of Minua (Ghirshman 1964-5), which bears the inscription NÍG.GA *šá* ^{m}*mì-nu-ú-a* (property of Minua), Assyrian counterpart of the inscription on the bowl discussed in this article. The genitive case ending *-ei* in Sarduri=ei indicates that the language behind the use of Sumerograms is Urartian.

As Piotrovskij already noted, the shape of the cuneiform signs is peculiar, presenting a fine and particularly slender ductus, comparable to that of Assyrian inscriptions. This bowl, like the ribbed one (History Museum of Armenia, 2010/32/14), has been dated to the reign of Sarduri (I), son of Lutipri, by U. Seidl (2004, 18). However, this hypothesis was challenged by M. Salvini in his systematization of Urartian inscriptions on metal (2012, 52). Salvini argued that Sarduri (I) only used Assyrian for writing, based on the absence of cuneiform epigraphs written in Urartian and dated to Sarduri (I), son of Lutipri. The only text certainly attributed to him is the *Sardursburg* inscription (CTU A 1-1), which exists in six duplicates and is written

e-ISSN 2974-6051

in Assyrian. However, absence of evidence should not be considered evidence of absence: it is entirely possible that Sarduri (I) also wrote in Urartian, particularly given that the ductus of this inscription is not the only feature suggesting an early period.

This bowl, like the ribbed one bearing the same text, lacks the iconographical features typical of later Urartian bronze bowls. Starting with the reign of Argišti, son of Minua, inscriptions on these objects are accompanied by iconographic elements, such as temple-towers and lion heads. These motifs were consistently present on every bowl, including those belonging to the latest rulers of the Urartian state (see Dan et al. 2024). This absence of iconographic elements suggests an archaic characteristic, which aligns with the early-style ductus of the inscription.

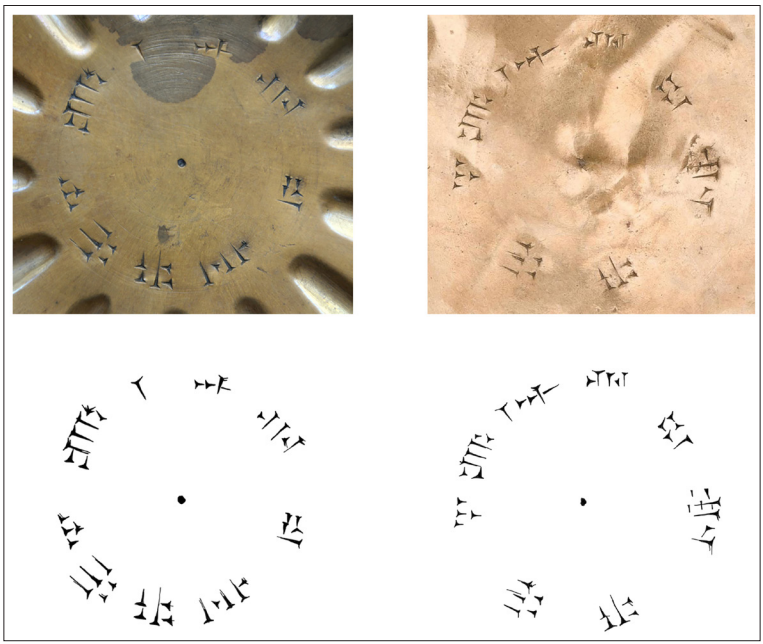

Figure 10 Comparison of the inscriptions on the Sarduri bowls 2010/325 and ДВ-17749

The palaeography of the signs on this bowl appears similar to that of those incised on the ribbed bowl (History Museum of Armenia, 2010/32/14) **[fig. 10]**, which has been suggested as belonging to Sarduri (I), son of Lutipri (see Dan, Bonfanti 2023). It is particularly noteworthy that the pattern of guide marks on both bowls is similar. The guides for the signs DINGIR, *ri*, e, and *i* are slightly misaligned and follow a similar, imprecise model. On this bowl, the sign *ri* shows several erroneous guide marks. Based on the position of the

preliminary wedges (two horizontals followed by three additional horizontals), it seems that the sketched sign may have originally been an *i*, rather than a *ri*. Whether this represents a mistake related to the adaptation of Assyrian cuneiform to write the Urartian language is unclear. However, it seems plausible that this is part of the adaptation process, possibly made by a recently trained Urartian scribe still unfamiliar with the system.

Another possible indication of archaicity lies in the use of NÍG.GA. These Sumerograms were employed in accordance with the Neo-Assyrian custom of indicating "property" both as *makkūru* and as NÍG.GA, with a meaning tied to "temple or palace property" (CAD M1, 135), which seems particularly fitting in this case. Their use may be connected to the absence of a specific Urartian word for this concept, which was later conveyed by the term *urišḫi*, attested in Urartian inscriptions from the time of Išpuini and Minua (see the bilingual Kelišin stele, CTU A 3-11, Ro. 8, where *urišḫi* corresponds to *TILLI* in the Assyrian version). The related Urartian term ^{É}*urisḫusi-*, translated as "(chamber) of the treasury" (Salvini 2018, 423), could easily overlap with the Assyrian *bīt makkūri*, also written as ^{É}NÍG.GA. The use of this specific combination of Sumerograms, which does not appear in later Urartian inscriptions, would be a clue pointing to the archaic date of the items bearing this inscription. It would still be possible to equate *urišḫi* with the Assyrian *TILLU*, indicating military equipment (CAD T, 411), except that bronze bowls do not belong to the category of weaponry. A plausible misunderstanding could be hypothesized, suggesting that the scribe who wrote the bilingual Kelišin inscription (CTU A 3-11) had limited knowledge of the Urartian language or the term *urišḫi*. Alternatively, it could reflect a broader use of the term indicating the "weapons" of the king to mean all of his belongings. This interpretation would be justified by the fact that the majority of the sovereign's possessions were, in fact, weapons.

All these small features, when considered individually, may seem insignificant, but together they form a concrete argument for the archaicity of these two bowls. The Assyrian ductus, the absence of a figurative apparatus, and the rare use of the Sumerograms NÍG.GA provide sufficient evidence to support dating them to the reign of Sarduri (I), son of Lutipri.

5.2 Archaeometrical Analysis

The metal is heavily work-hardened, with visible cracks and breaks in some areas. Additionally, the surfaces of the bowls are coated with an amorphous nanocarbon film on both sides, approximately 200 nm thick, which may have protected the bowls from corrosion. Metallurgical analysis of the bronze bowl was conducted using X-ray fluorescence (XRF) with the *Olympus Innov-X system*, revealing a consistent composition across both the bottom and side of the object. The alloy consists of copper (Cu) at approximately 90.3% and tin (Sn) at around 9.7%, with minimal variation between the two areas. This uniformity suggests a well-controlled production process, likely involving careful alloy preparation and casting. The binary copper-tin composition is a traditional bronze alloy, commonly used for its mechanical strength and resistance to corrosion. These characteristics are consistent with both the functional and possibly ceremonial purposes for which the bowl may have been crafted. The high copper content (approximately 90%) imparts a distinctive golden hue to the bowl. Copper's natural reddish tone, combined with the addition of tin, creates a warm, metallic sheen that can resemble gold, especially when polished or exposed to light. This aesthetic quality likely enhanced the visual appeal of the bowl, making it suitable for both functional and decorative or ceremonial uses. The analyses were conducted on the object's surface, so the chemical composition of the interior may differ, potentially showing even higher copper percentages **[tabs 1-2]**. Over time, the copper on external surfaces tends to oxidize, diminishing its presence, while leaving higher concentrations of tin on the surface. This phenomenon could explain the metal percentages detected in the analysis, as the outer layer may not fully reflect the original alloy composition.

These findings align with the metallographic analysis of one of the bowls by G.N. Kozlovsky, who determined that the bowl was made by hammering a cast preform, with intermediate annealing (Piotrovskij 1952, 54). Kozlovsky noted that the cups were made of high-quality bronze with significant tin content (up to 10%). F.N. Tavadze's examination revealed that, despite their great external similarity, the bowls were made from different bronze alloys and using distinct techniques (Piotrovskij 1952, 54). In addition to the hammered bowls, which were based on a cast preform, there are specimens with clear signs of disk-shaped preforms, a stamping method widely used in ancient Caucasian metallurgy (Piotrovskij 1952, 54). This difference could lead to further archaeological investigations of other bowl specimens, where colour alone suggests variations in the metal proportions.

Figure 11 Indication of the points where samples were taken for archaeometric analyses

Table 1 Archaeometrical analysis of the bowl: composition of the outside bottom **[fig. 11A]**

Element	%	+/-	Spec (C 524)
Cu	90.30	0.11	[88.30-90.97]
Sn	9.70	0.11	[9.00-11.00]

Table 2 Archaeometrical analysis of the bowl: composition of the outer rim **[fig. 11B]**

Element	%	+/-	Spec (C 524)
Cu	90.28	0.12	[88.30-90.97]
Sn	9.72	0.12	[9.00-11.00]

6 Conclusions

The origin of Urartian royal bowls may be traced back to a process of Assyrianization that began in the middle-Assyrian period, following the first Assyrian campaigns in the north. This process is particularly evident in the reign of Sarduri (I), who adopted and officialized several Assyrian features, linking them to the Urartian state (see Dan, Bonfanti 2023 for a detailed analysis). The reference models for the creation of the Urartian royal bronze bowls tradition can be found in the works of the Assyrian king Ashurnasirpal II (883-859 BCE) (see Frahm 2017, 615), who is depicted multiple times holding a ribbed bowl in the reliefs of the Northwest Palace in Kalḫu/Nimrud (e.g., BM 124535, BM 1849,0502.14, BM 124565). Bowls, mostly ribbed, with Assyrian inscriptions, have also been found archaeologically in the royal tombs of Assyrian queens at Nimrud (Hussein 2016, pl. 40), demonstrating the direct possession of these objects by the ruler and his consort. A key difference between Assyrian and Urartian bowls lies in their material: in Assyria, they are crafted from gold and silver, whereas in Urartu, only bronze is used. The high tin content in Urartian bronze, however, gives these bowls a golden appearance. This Assyrian tradition is still visible in the presence of ribs on the Urartian bronze bowl bearing an inscription of Sarduri, son of Lutipri (History Museum of Armenia, 2010/32/14) (Dan, Bonfanti 2023). Plain bowls have been thought to appear later, around the time of Minua. However, the bowl discussed in this article challenges this perspective, serving as a sort of missing link between the inscribed ribbed bowl of Sarduri, son of Lutipri, and the subsequent royal bowls with Urartian inscriptions: this bowl, it appears, marks the beginning of a centuries-long tradition that developed from this early specimen. The use of bronze by the Urartians to replicate what were likely originally gold Assyrian bowls provides a fascinating example of how metallurgy was employed to express power. By crafting these imitation pieces in a more accessible and durable material like bronze, the Urartians not only demonstrated their metallurgical expertise but also their intent to emulate the symbolic value of gold. Such objects would have been displayed in elite settings, reinforcing the authority of their owners and serving as a reminder of Urartu's connections to broader regional powers, such as Assyria.

Bibliography

Bonfanti, A.S.; Dan, R. (2023). "Assyrianizing Elements in the Iron Age cultures of the Highlands. The Decorated Bronze Bowl from the Yeghegnadzor Hoard". *Proceedings of the Museum of the History of Armenia,* 1(11), 8-18, 265-6.

CAD M1 = Oppenheim, A.L.; Reiner, E.; Biggs, R.D.; Renger, J.M.; Stol, M.; Elswick, M. (eds.) (1977). *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*. Vol. 10, *M1*. Chicago: University of Chicago.

CAD T = Reiner, E.; Caplice, R.I.; Edzardt, D.O.; Groneberg, B.; Hunger, H; Kienast, B; Ludwig, M.-C.; Parpola, S.; Renger, J.M.; Roth, M.T.; Van Soldt, W.; Stolper, M.W.; Wiggermann, F.; McLarnan, L. (eds.) (2006). *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*. Vol. 18, *T.* Chicago: University of Chicago.

CTU A = Salvini, M. (2008). *Corpus dei Testi Urartei*. Vol. 1, *Le iscrizioni su pietra e roccia: i testi*. Roma: CNR, Istituto di studi sulle civiltà dell'Egeo e del Vicino Oriente.

CTU A = Salvini, M. (2018). *Corpus dei Testi Urartei*. Vol. 5, *Revisioni delle epigrafi e nuovi testi su pietra e roccia (CTU A); Dizionario urarteo; Schizzo grammaticale della lingua urartea*. Paris: Éditions de Boccard.

CTU B = Salvini, M. (2012). *Corpus dei Testi Urartei*. Vol. 4, *Iscrizioni su bronzi, argilla e altri supporti; nuove iscrizioni su pietra; paleografia generale*. Roma: CNR, Istituto di studi sulle civiltà dell'Egeo e del Vicino Oriente.

Dan, R. (2015). *From the Armenian Highland to Iran. A Study on the Relations between the Kingdom of Urartu and the Achaemenid Empire*. Roma: Scienze e lettere.

Dan, R. et al. (2024). *The Urartian Royal Bowls*. Yerevan: History Museum of Armenia.

Dan, R.; Bonfanti, A.S. (2023). "Drinking Like an Assyrian King. A Urartian Inscribed Royal Ribbed Bowl Property of Sarduri (I), Son of Lutipri". *Journal Asiatique*, 311, 171-84.

Frahm, E. (ed.) (2017). *A Companion to Assyria*. Hoboken: Wiley Blackwell.

Ghirshman, R. (1964-5). "Notes Iraniennes XIV. Deux oeillères en bronze des rois d'Urartu". *Artibus Asiae*, 27, 49-60.

HChI = König, F.W. (1955-7). *Handbuch der chaldischen Inschriften*. Graz: im Selbstverlage des Herausgebers.

Hussein, M.M. (2016). *Nimrud. The Queens' Tombs*. Chicago: The Oriental Institute of the University of Chicago.

Oganesyan, K.L. (1955). *Karmir-blur IV: Arxitektura tejše-baini* (*Karmir-blur IV: Architecture of Teishebaini)*. Erevan: Izdatel'stvo Akademii Nauk Armianskoj SSR.

Piotrovskij, B.B. (1950). *Karmir-blur.* Vol. 1, *Rezul'taty raskopok 1939-1949* (*Karmir-blur.* Vol. 1, *Results of the excavations of 1939-1949*). Erevan: Izdatel'stvo Akademii Nauk Armianskoj SSR.

Piotrovskij, B.B. (1951). "Klinoobraznye nadpisi na bronzovyx casax iz raskopok na Karmir-blure v 1949 g." (Cuneiform Inscriptions on Bronze Objects Excavated at Karmir-blur in 1949). *Epigrafika Vostoka,* 5, 110-12.

Piotrovskij, B.B. (1952). *Karmir-blur.* Vol. 2, *Rezul'taty rabot 1949-1950* (Karmir-blur, Vol. 2, *Results of the Works of 1949-1950)*. Erevan: Izdatel'stvo Akademii Nauk Armianskoj SSR.

Piotrovskij, B.B. (1955). *Karmir-blur.* Vol. 3, *Rezul'taty rabot 1951-1953* (Karmir-blur, Vol. 3, *Results of the Works of 1951-1953)*. Erevan: Izdatel'stvo Akademii Nauk Armianskoj SSR.

Piotrovskij, B.B. (1960). "Urartskie nadpisi iz raskopok Karmir-blura 1939-1958 gg. (Obščij obzor)" (Urartian Inscriptions from the Karmir-blur Excavations of 1939-1958 (General Overview). *Epigrafika Vostoka*, 13, 105-9.

Piotrovskij, B.B. (1970). *Karmir-blur. Al'bom* (Karmir-blur, Album). Leningrad: Izdatel'stvo "Avrora".

Salvini, M. (1980). "Iscrizioni cuneiformi urartee su oggetti di metallo". *Studi Micenei ed Egeo-Anatolici*, 22, 181-90.

Santrot, J. (éd.) (1996). *Trésors de l'Arménie ancienne des origines au IVe siècle*. Paris: Somogy.

Seidl, U. (2004). *Bronzekunst Urartus*. Mainz: Von Zabern.

Spiridonov, J.; Malkiel, I.; Novikova, A.; Verevkin, M. (2021). "The Corrosion-Resistance Bronze Bowls of Urartu: A Microscopic Investigation" (ZEISS Microscopy Use Case/ White Paper; 7 pp.). Zeiss van den Hout, T. (2009a). "A Century of Hittite Text Dating and the Origins of the Hittite Cuneiform Script". *Incontri Linguistici*, 32, 11-35.

UKN = Melikišvili, G.A. (1960). *Urartskie klinoobraznye nadpisi* (Urartian Cuneiform Inscriptions). Moskva: Izdatel'stvo Akademii Nauk SSSR.

van den Hout, T. (2009b). "Reflections on the Origins and Development of the Hittite Tablet Collections in Hattuša and their Consequences for the Rise of Hittite Literacy". Pecchioli Daddi, F.; Torri, G.; Corti, C. (eds), *Central-North Anatolia in the Hittite Period. New Perspectives in Light of Recent Research*. Roma: Herder, 71-96.