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The Pectoral of Tovsta Mohyla: Understanding the Gold Insignia of Ancient Scythia

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Abstract: The gold pectoral from Tovsta Mohyla is a masterpiece of Greco-Scythian metalwork, the most prominent and esteemed of all the finds uncovered in 260 years of excavating the Scythian kurgans. After the pectoral was discovered on 21 June 1971 by B. Mozolevsky, dozens of other scientists joined him in studying it. The researchers have raised a wide range of interesting questions revolving around the origin of the pectoral, the technology involved in its production, its stylistic features, and the interpretation of its depictions. However, so far, none of these questions has been answered definitively. This article provides an overview of the author's recent interdisciplinary research on the Tovsta Mohyla pectoral.

Keywords: pectoral; Tovsta Mohyla; Boris Mozolevsky; Scythians; Greco-Scythian metalwork

1. Introduction

On 21 June 1971, during the excavations of Tovsta Mohyla (a Scythian burial mound of the 4th century BC), a pectoral was discovered—a gold neck or breast ornament of a noble Scythian (Figure 1). The honor of this discovery belongs to Boris Mozolevsky, head of the archaeological expedition of the Institute of Archeology of Ukraine. The object consists of four torques arranged in a concentric arc, forming three crescent-shaped ornamental fields. Each of the fields bears openwork figure decoration—scenes of predators pursuing and tearing into prey, vegetal ornament, and scenes of nomadic life. The item weighs about 1150 g and measures 30.5 cm in diameter.



Figure 1. Pectoral from Tovsta Mohyla. Treasury of the National Museum of the History of Ukraine. AZS-2494. Gold, enamel. Weight 1149 g, diameter 30.5 cm (source: Dally 2007, fig. 2).

Today, the pectoral is kept in the Treasury of the National Museum of the History of Ukraine and is a symbol of the archeology and ancient history of Ukraine. It has gained enormous popularity both in and beyond the scientific world. No other archaeological



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object has managed to become so deeply integrated in the life of modern Ukraine (Figure 2). Awards, festivals, cafes, and restaurants are all named after the gold pectoral. Its image is reflected in everything from cultural symbols and folk art to cosmetics and food industry products. The pectoral is one of the few ancient artifacts reproduced in a number of modern monuments, such as those in Kyiv, Donetsk, and Mykolaiv. The gold pectoral also became the official symbol of the Institute of Archaeology of the Academy of Sciences of Ukraine. Even though it has attracted the attention of scientists since its discovery, many mysteries connected with the study of this masterpiece of Greco-Scythian metalwork remain unsolved.



Figure 2. Pectoral in modern life: 1, 2—coins National Bank of Ukraine; 3, 4—postage stamp of the Ukrposhta (Ukrainian Postal Service); 5—cover of the journal «Archaeology» of the Institute of Archeology of the Academy of Sciences of Ukraine; 6, 8—pectoral monuments in Kyiv (6) and Donetsk (6); 7—commemorative sign of the theater award «Kyiv pectoral» (source: author of the collage, Leonid I. Babenko).

Since its discovery, the pectoral has been discussed by many researchers. An incomplete list of works in which it is mentioned consists of 1662 items (Babenko et al. 2021, pp. 21–144). The fiftieth anniversary of the pectoral's discovery brought renewed interest in the piece, causing an upsurge in publications. Within the last decade alone, more than two dozen works were devoted to the find, including several by the author of this article. However, almost all specialist studies were written in Ukrainian and Russian and, hence, remain prac-

tically unknown in the English-speaking scientific community. The purpose of this article is to acquaint readers with new ideas expressed in the pages of these little-known works.

The article first discusses what the pectoral's morphology and imagery might reveal about the type's long-distance cultural connections and references. The subsequent sections assess the object's technological characteristics and innovative design features in relation to other items of metalwork from the northern Black Sea region, and the paper ends by exploring the iconography and meaning of the figural scenes in light of the pectoral's find spot in a Scythian elite tomb.

2. The Origins of the Pectoral: From Archaeological Context to Interregional Connections

2.1. A Misplaced Insignia, a Diplomatic Gift, or a Trophy: What Was the Pectoral to Its Wearer?

Despite intense research and debate, no plausible explanation has yet been given for why the famous pectoral from Tovsta Mohyla was found at the bottom of the dromos near the entrance to the subterranean burial chamber of the kurgan (Figure 3).

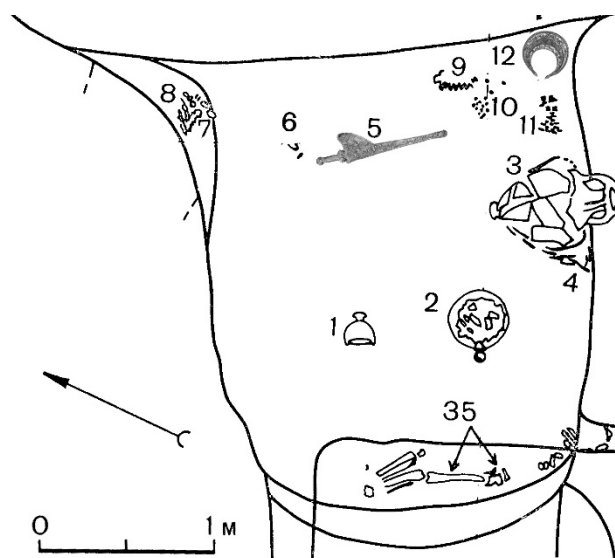


Figure 3. Plan of the dromos of the central tomb of Tovsta Mohyla (source: [Mozolevskiy 1979](#), fig. 31). (1—bronze vessel; 2—Greek bronze bowl; 3—amphora; 4—iron hook; 5—a sword; 6—fragment of a knife; 7—belt and quiver; 8—a knife; 9, 10—remnants of a whip; 11—quiver; 12—pectoral; 35—remains of the skeleton of a servant).

Researchers have attempted to come up with various reasons for the unusual placement, including the possible consequences of ritual sacrifice associated with the cult of Ares and Artemis ([Machinskii 1978](#), pp. 146–48). In favor of this theory, it has been argued that the objects involved in the ritual acts were carefully separated from the rest of the burial inventory ([Mozolevskiy 1979](#), p. 159; [Terenozhkin and Mozolevskii 1988](#), pp. 171–75). Another confounding detail of the archaeological context is that the social status of the deceased reflected by the rest of the finds from the tomb was not consistent with the status suggested by the pectoral's apparent role as a royal insignia ([Moshinskii 2002](#), p. 87). According to another view, the object may have belonged to the commemorative *trizna* (a rite after the funeral consisting of sacrifices, a feast, and military competitions in honor of the deceased) performed one year after the funeral, when a pectoral specially made for this event was delivered to the grave of the king by his dead 'guard' ([Mikhailin 2005](#), p. 175). Other researchers see the pectoral as a diplomatic gift ([Savostina 2019](#), p. 71; [Gavriliuk 2017](#), pp. 327–29), which could also explain its unusual location within the burial assemblage. The placement of the pectoral and some other valuable objects outside the burial chamber could also be related to unfinished or unsuccessful looting of the tomb. Perhaps the grave robbers did not recognize the object's magical properties, as Stepanov

argued. According to this account, the pectoral was left behind in the disturbed tomb as it was of no apparent interest to the looters (Stepanov 2015, p. 47). Despite the pectoral's well-recorded archaeological provenance, its deposition seems to present more questions than answers concerning the object's origins and meaning and the identity of its original owner. In light of these uncertainties, close analysis of the object's typology, technology, and iconographic features is all the more important.

2.2. Pectoral or Torque? Addressing the Correlation of the Term to the Morphology of the Adornment

The ornament from Tovsta Mohyla was identified as a pectoral from the moment of its discovery. However, pectorals are not widespread among the Scythians, and the genesis of that type of adornment is not fully understood. A direct succession from Urartian pectorals is not possible due to the considerable chronological gap. The Thracian breastplates do have a number of similar features, but they differ in structure and functional purpose. Meanwhile, many elements of the pectoral's morphology reveal correlations to torques of the same era. The most prominent correlations include the configuration of false twisted braids, adornments in the shape of animals and people, and ornamental finials in the form of lion heads (Figure 4). This leads us to concur with the numerous researchers who view the pectoral from the Tovsta Mohyla as a particularly complex version of a torque, which was regarded as one of the most prominent societal status symbols by the Scythians. Overall, the pectoral's design includes elements that suggest it was influenced by a variety of cultures—both by the local toretics from the region of the Bosporan Kingdom on the Kerch and Taman peninsulas and by innovations borrowed from the Achaemenid, Thracian, and Greek cultural environment (Babenko 2018, pp. 187–204).



Figure 4. Pectoral from Tovsta Mohyla and torques from other Scythian burial mounds. 1, 3, 6—Tovsta Mohyla; 2—Solokha; 4—Chertomlyk; 5—Karagodeuashkh; 7—Talayev barrow (source: Babenko 2018, figs. 5: 1, 2; 7: 1–4; 8: 5).

2.3. The Eastern Balkan Roots of the Pectoral

The metalsmith who produced this masterpiece borrowed many ideas from different cultural environments. One noteworthy influence may have been derived from the Eastern

Balkan prehistoric and ancient cultures. In particular, many researchers believe that Thracian and Macedonian breastplates could have had a considerable influence on the pectoral's design (Mantsevich 1976, pp. 83–98; Meliukova 1979, pp. 204, 205; Boardman 1994, p. 210; Treister 2005, p. 63). The similarities include the overall shape and size, the depiction of figural decoration in concentric compositions, and the centerpiece ornamentation consisting of intertwined plant shoots. The connection of the pectoral with the Western Balkan region is even more evident. Elements of the plant ornamentation, including the spiral tendrils, palm fronds, and acanthus leaves, constitute the central section of both the golden pectoral and the diadems from Vergina and Stavroupoli (Figure 5) (Babenko 2020, pp. 45–52).



Figure 5. Eastern Balkan roots of the pectoral from Tovsta Mohyla. Pectorals: 1—Vergina; 2—Pydna; 3—Tovsta Mohyla (detail). Headdresses: 4—Stavroupoli; 5—Vergina (sources: Andronikos 1984, fig. 151; Grammenos 2004, p. 173; Babenko 2020, fig. 3).

2.4. The Pectoral from Tovsta Mohyla as a Reminiscence of Achilles' Shield

The maker of the pectoral may have been influenced not only by the visual elements of other cultures but also by their epic traditions. An example of the latter is the eighteenth song of Homer's *Iliad*, which describes the forging of Achilles' shield by Hephaestus. It is worth noting that the pectoral from the Tovsta Mohyla has been compared with the shield of Achilles by multiple researchers, including I. V. Yatsenko (Iatsenko 1977, pp. 96, 97), L. A. Lelekov, and D. S. Raevsky (Lelekov and Raevskii 1988, pp. 222, 223), and V. Y. Mihaylin (Mikhailin 2005, p. 34). In essence, both the shield of Achilles and the pectoral are highly expressive works of art on which the cosmological image of the world is reproduced by means of opposing scenes decorated with figures in high relief. One of the sources that contributed to the conception of the pectoral could be the breastplates, which are well-known thanks to the finds uncovered at sites in Thrace and Macedonia. Such breastplates

were in fact small suspended shields that protected one of the wearer's most vulnerable areas in battle. As lightweight crescent-shaped leather shields, they were similar in form and function to peltae. Peltae became well-known to the toreutic masters who carried out the Scythian orders. Furthermore, they were depicted in the battle scenes featured on a gold comb from Solokha Kurgan and a kalathos from Bolshaya Blyznitsa. As such, the design of the pectoral is largely based on foreign but interrelated ideas that the ancient jewelers borrowed from the military sphere. The image, form, structure, and ornamental motifs of the pectoral were constructed through a combination of numerous influences and innovations. This demonstrates a complex transformation that originated with the associative chain of evolutions from Achilles' shield to pelta shield to breastplate shield (Figure 6) (Babenko 2021b, pp. 31–46).

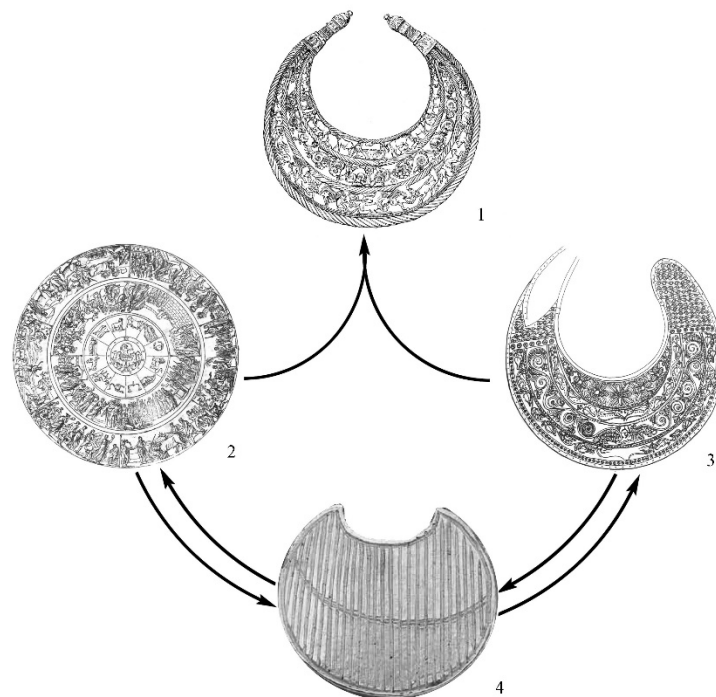


Figure 6. A hypothetical chain of influences that gave rise to the pectoral shape in the northern Black Sea region: 1—pectoral from Tovsta Mohyla; 2—a hypothetical reconstruction of Achilles' shield according to A. Monticelli; 3—pectoral from Varbitsa; 4—pelta shield on the gold comb from the Solokha mound (source: Babenko 2021b, fig. 6).

2.5. Ancient Coin Imagery Depicted on the Pectoral

A distinctive feature of Greco-Scythian metalwork is the widespread borrowing of various images and visual conventions from coins that the masters used to decorate their creations. On the pectoral from the Tovsta Mohyla, we can see the ornamental influence come full circle in the depiction of a calf being fed by a cow. A similar theme, with similar chronological and cultural attributes, can be found on a number of ancient Greek coins. Coins with analogous scenes were first minted in Corcyra (Corfu) in the 6th century BC, and, from the 5th century BC, this theme was also used on the coins of Apollonia, Dyrrachium, and Karystos (Figure 7). The widespread use of purely Greek visual narratives in the design of so-called Greco-Scythian works demonstrates the high degree of influence that foreign imagery and traditions exerted on Scythian toreutics (Babenko 2017a, pp. 30–39).



Figure 7. Scenes of a cow feeding a calf: 1, 2—details of the animal scenes on the pectoral from Tovsta Mohyla; 3–10—images on ancient coins (3, 4—Corcyra; 5, 6—Dyrrachium; 7, 8—Apollonia; 9, 10—Karystos) (source: Babenko 2017a, figs. 1, 3).

3. The Distinct Characteristics of the Pectoral Design

Movable Hinges as an Example of Weapons-Inspired Technological Transformation

One undoubtedly significant innovation among the technical procedures used by ancient craftsmen was the concept of adding adjustable cheek clasps to helmets with movable hinges. However, it is still not definitively clear where the idea of using pivot hinges originated (Figure 8: 1, 2).



Figure 8. Hinges of the Tovsta Mohyla pectoral: 1, 2—detail of the pivot hinges of the pectoral; 3, 4—helmets with hinged cheek guards (source: Babenko 2017b, figs. 2, 3).

In the Greek world of the Classical and Hellenistic periods, hinges were widely used both in everyday life and in weaponry, particularly in the construction of various elements

of armor. Relevant tomb finds from the Scythian world are often accompanied by stockpiles of Chalcidian helmets with cheek guards attached by means of joint hinges (Figure 8: 3, 4).

Helmets with cheek guards attached by hinged joints were well-known to the people of the northern Black Sea region and the Crimean Peninsula. They have been around since at least the first half of the 4th century BC, which was long before the pectoral existed. Thus, the maker of the pectoral may have borrowed the idea of using a movable hinge from this type of armor (Babenko 2017b, pp. 37–47).

4. Secrets of Technology

The Methodology of Producing False Harnesses

The pectoral from Tovsta Mohyla is an impressive artifact that combined a variety of technologies and was aesthetically inspired by ancient Greek art. Dozens of complex technical operations were utilized to make this piece of jewelry composed of over 160 individual parts. However, what remains least understood is the set of techniques employed in creating the four false twisted torques framing the openwork figural and plant ornaments in the three crescent-shaped friezes of the pectoral. None of the theories proposed so far provides an adequate understanding of the most important steps in the technological process of manufacture, namely the toreutic methods involved in creating a realistic braided torque from hollow tubes.

That being said, certain clues do exist in solving this issue, including the design of a torque from the destroyed Kul-Oba burial in eastern Crimea, the base of which consisted of twisted bronze tubes encased in gold sheet plating. Such a base may have been used to shape the hollow torque and imitate its twisting relief surface. In order to produce the twisting effect, the masters prepared a matrix made up of seven intertwined hollow copper tubes (Figure 9: 2, 3). Next, a tube rolled from a thin gold leaf was attached to the twisted copper base and sealed at the seam (Figure 9: 4). The gold was sealed using an embossing technique, i.e., by applying pressure to the gold with a softer tool (made of wood, bone, or metal) and winding the leaf into the shape of the copper base (Figure 9: 5). In order to detach the overlay from the copper tubes, the gold sheet was twisted from the rod by rotating it around its radial axis toward the thinner end of the matrix (Figure 9: 6).

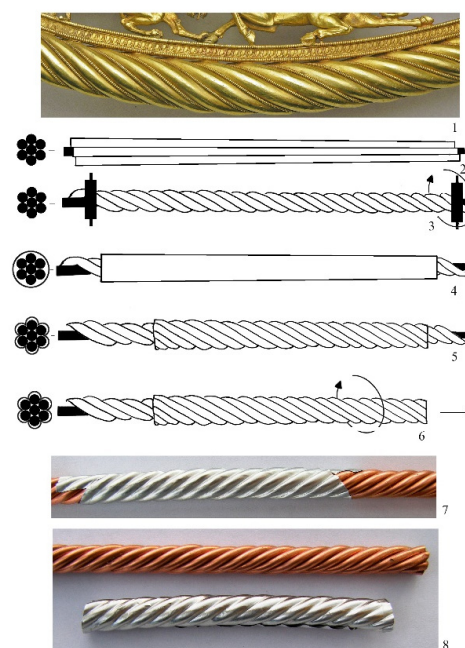


Figure 9. Technology of the torques of the Tovsta Mohyla pectoral: 1—detail of the lower torque of the pectoral; 2–6—reconstruction of the manufacturing stages of the torque; 7, 8—experimental production of the torque (source: Babenko 2022b, figs. 3, 6, 7).

The torque from the Solokha kurgan also features elements of a similar design (Figure 4: 2). This demonstrates the use of a very similar technique and the possibility that the pectoral and the comb were made in the same workshop, or even by the same jeweler (Babenko 2022b, pp. 19–32).

The extensive use of gold leaf gilding highlights one of the most distinctive features of the jeweler's technological style: namely his use of methods and forms devised to deceive the viewer. These include (1) the introduction of three-quarter figures in the upper and lower friezes, which appear to be worked completely in the round; (2) the four pseudo torques that frame the three pictorial panels and realistically imitate the surface of six separate intertwined rods; (3) the beaded wire applied to evoke a granulation fill in the spiral grooves of the torques; and (4) the deceptive monumentality of the pectoral, creating the impression of a solid piece of jewelry that is in fact (thanks to its gold sheet construction and hollow cast elements) much lighter than its appearance suggests. Thus, the extensive use of visual illusions and imitations in the making of the pectoral can be considered one of the characteristic traits of the master's creative choices.

5. The Pectoral in Context of Other Greco-Scythian Toreutics Masterpieces

5.1. Twisted and Pseudo-Twisted Neck Ornaments from the Workshops of the Bosporan Jewelers

To date, there are five known neck or breast adornments with twisted torques made in the workshops of the Bosporan jewelers. They can be divided into three different types of torques distinguished by their mode of construction. The first type includes the fragmentary necklace with lion head finials from the primary burial of Kul-Oba (Figure 10: 1). This type consists of a twisted bronze rod with a thin gold leaf applied to its surface. The second type is based on a single hollow tube whose surface imitates the winding relief effect of six spinning tubes, as exemplified in the Solokha torque and the pectoral from the Tovsta Mohyla (Figure 10: 2, 3). The braided strap is the final type, and it is formed by twisted tubes or rods, as observed in a torque with rider finials from Kul-Oba and the pectoral from Bolshaya Blyznitsa (Figure 10: 4, 5). Considering the mortuary context in which these items came to light, pectorals with massive gold torques or pseudo torques can be considered prominent signs of dignitaries or even royalty (Babenko 2019b, pp. 493–505).



Figure 10. Scythian chest and neck decorations—torques and pectorals: 1 Kul-Oba (detail); 4—Kul-Oba; 2—Solokha; 3—Tovsta Mohyla; 5—Bolshaya Blyznitsa (source: Babenko 2019b, figs. 3–5).

5.2. *The Two Pectorals: The Masterpiece and the Replica*

Several elements of the pectorals from Tovsta Mohyla and Bolshaya Blyznitsa (Figure 10: 3, 5) indicate that they may have both been made by one master or derived from the same workshop. The similarities can be recognized in the objects' form, general compositional structure, individual design elements, and some images and motifs, especially the animal friezes and vegetal ornament and the lion head finials with braided gold wire straps. However, closer comparison of the two ornaments suggests other interpretations. The pectorals differ in the construction of the torques and the system of reinforcing the pieces as a whole. Most of the animals depicted on the Bolshaya Blyznitsa pectoral are executed in an original, expressive style, which is otherwise unusual for the products of the Bosporan jewelers and differs from that of the figure decoration on the Tovsta Mohyla pectoral.

The constructive and artistic similarities observed in the pectorals from the Bolshaya Blyznitsa and Tovsta Mohyla have implicitly predetermined interpretative approaches to their figural representations. The interpretations of the motifs in the pectoral from Bolshaya Blyznitsa are often correlated with those of the pectoral from Tovsta Mohyla without proper justification. However, the motifs and structure of the first pectoral may have an independent background that is unrelated to the themes of the Tovsta Mohyla pectoral. Several features can serve as the key to its understanding.

It is important for iconographic interpretations to focus on the most sophisticated features of the Bolshaya Blyznitsa composition, namely the five scenes depicting goats and rams. Quantitatively and compositionally, the dominant figural elements of the pectoral are goats, represented by seven or nine individuals, one of which is placed in the center of the composition. The goat was one of the most common incarnations of Dionysus and a cult symbol of this god.

The iconography of the pectoral from Bolshaya Blyznitsa should also be considered in the context of the burial complex of Tomb no. 4 at the site and the identity of the cult, whose servant was possibly the buried priestess (see Meyer 2013, pp. 282–99, 357–59 for recent discussion in English). One of the most visible attributes that determines the affiliation of the buried woman to the priestly class is the ceremonial headdress—the kalathos. The kalathos was decorated with eleven relief figures of dancing maenads and satyrs of the traditional “entourage” of Dionysus.

The attributes of the Dionysian cult can also be observed in other objects from this burial, including a number of terracotta statuettes, a set of necklaces, and a set of miniature terracotta and bronze vessels. Therefore, L. E. Stefani's arguments for a connection between the pectoral and the “Bacchic cults” (Stefani 1871, p. 12) can be considered quite reasonable and worthy of attention.

We may, therefore, conclude that, despite their apparent similarities, the pectorals were most likely created not only by different jewelers but also by representatives of different workshops (Babenko 2019a, pp. 102–42).

5.3. *The Pectoral from Tovsta Mohyla and the Amphora from Chortomyk: Similar yet Unique*

The comparison of two masterpieces of Greco-Scythian toreutics—the silver amphora from Chortomyk and the gold pectoral from Tovsta Mohyla (Figure 11)—has become a tradition since the discovery of the pectoral. Both objects share a number of expressive similarities, such as the three-part structure of the composition with identical themes—scenes of nomadic daily life represented by miniature high-relief figures, griffins and feline predators tearing into prey, and zones of floral ornament animated by figures of birds and other figural details.

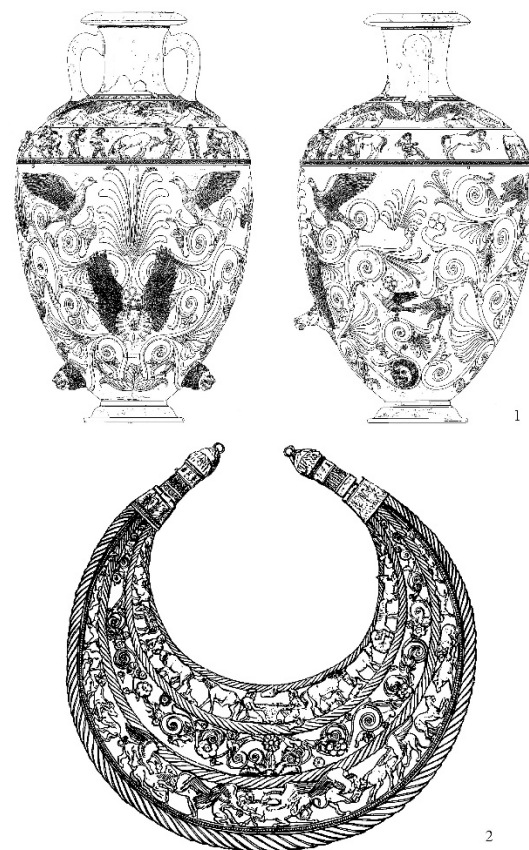


Figure 11. Amphora from the Chortomlyk (1) and pectoral from Tovsta Mohyla (2) (source: [Babenko 2021a](#), fig. 1).

Researchers have compared the amphora and the pectoral in different contexts. A.P. Mantsevich ([Mantsevich 1976](#), pp. 83–98) saw in them primarily the products of Thracian craftsmen. Many researchers interpreted the composition of the depictions on the amphora and the pectoral as a reflection of cosmological ideas about the threefold structure of the universe. They assumed that the scenes of predators tearing into prey related to the day of the vernal equinox and ideas about cyclical changes in natural phenomena, while the composition of plants was connected with symbols of the world tree, and scenes of horse breeding were entwined with ritual sacrifice during the coronation of the king or during his funeral ([Kuzmina 1984](#), pp. 105–8; [Mozolevskiy 1979](#), p. 219; [Raevskii 1979](#), pp. 70–82; [1985](#), p. 223).

E. Farkash ([Farkas 1977](#), pp. 124–38) treated the history of the amphora and the pectoral as a cosmological act of creation, while S. S. Bessonova ([Bessonova 1983](#), pp. 70–74) saw in them elements of cattle-breeding rites connected with calendar holidays. D.A. Machinsky ([Machinskii 1978](#), pp. 132–34, 144) associated both objects with the cult of the Great Female Goddess, and F.R. Balonov ([Balonov 1994](#), pp. 17–22) considered the composition of the amphora and the pectoral as a model of mythopoetic spacetime.

Researchers have not reached a consensus on the authorship of the objects; there are supporters of the theory that the amphora and the pectoral originated from the same workshop ([Rudolph 1991](#), pp. 30–36; [Williams 1998](#), p. 103; [Balonov 1994](#), pp. 20–22) or from different workshops ([Savostina 1999](#), pp. 200–2).

The list of other observations is mostly connected with the use of a ceremonial drink in rituals, compositional nuances of the ornithomorphic bestiary, numerical symbolism, etc. All in all, we may conclude that the comparison of the two masterpieces in different contexts remains a promising direction in their study ([Babenko 2021a](#), pp. 121–33).

5.4. The Compositional and Narrative Parallels of the Gorytoi of the Chortomlytsk Series: A Deceptive Similarity

A number of compositional and narrative parallels can be traced between the pectoral and the Chortomlytsk series of gold overlays for gorytoi (bow-and-arrow cases) (Figure 12). In particular, the composition of the overlay has a three-part structure, the subjects of each part (anthropomorphic and floral compositions as well as a frieze with scenes of mythological and animal predators tearing into their prey) conditionally corresponding to the composition of the pectoral. The friezes with anthropomorphic characters are the least similar. However, the friezes with plant ornaments and the scenes of violence are also characterized by the absence of a clear hierarchy and division into center and periphery, which is typical for the composition of the pectoral. In general, the composition of the overlays of the Chortomlytsk series does not seem to be fully consistent. This indicates that different molds were used to produce individual parts of the compositions. At the same time, the exceptional level of detail in the miniature figurines on the pectoral demonstrates the maker's close familiarity with military equipment.



Figure 12. Gold of gorites upholstery: 1—Chortomlyk; 2—Melitopol barrow (sources: [Farmakovskii 1911](#), fig. 1; [Polidovych 2022](#), fig. 1).

5.5. Pan and the Narrative Plot of the Pectoral: Non-Random Coincidences?

The gold overlay of the sword hilt from the Tovsta Mohyla was decorated with Pan playing the flute—a unique feature for the products of Greco-Scythian metalwork (Figure 13: 1). The appearance of this image in the decoration of the sword can be explained by a number of factors, including the deity's association with martial activity, the contemporary spread of Dionysian cults, and the reframing of Pan's image as an equivalent of the Iranian god of war, Verethragna ([Polidovich 2015](#), pp. 134, 135).



Figure 13. 1—crosshair of the sword with the image of Pan; 2—the central stage of the pectoral. Tovsta Mohyla (source: Babenko 2016a, fig. 2: 1, 2).

For a deeper understanding of the reasons for the use of this image, we should also take into account the archaeological context of the find. First of all, we need to note that it was found in the same complex as the pectoral. This allows us to venture a guess about the existence of a possible connection between the individual images and the subjects represented on both objects. It is probable that the three features of Pan's icons—shaggy feet, a flute, and horns—could have been reinterpreted by the Scythians to denote a person dressing in fur clothing and drinking from a ceremonial horn to obtain communion. If this is indeed the case, we may conclude that Pan was perceived as a symbolic master swordsman depicted in the midst of a ritual that assured his success as a fighter. The pectoral appears to depict various stages during the preparation for this ritual—namely the preparation by the young men of a drink for the initiation and by the priests of a shirt from a sheep's fleece (Figure 13: 2) (Babenko 2016a, pp. 9–26).

5.6. Non-Scythian Cultural Parallels in the Central Scene

B. Mozolevsky (Mozolevskiy 1979, pp. 221–24) proposed three cultural parallels to the central scene of the pectoral, in particular a scene on the gold bowl from Hasanlu, a marble tablet from Moesia, and a plaque of the outer cauldron lining from Gundestrup (Figure 14: 1–4). These analogies have been criticized by many scholars for their stylistic, iconographic, and thematic inconsistencies.

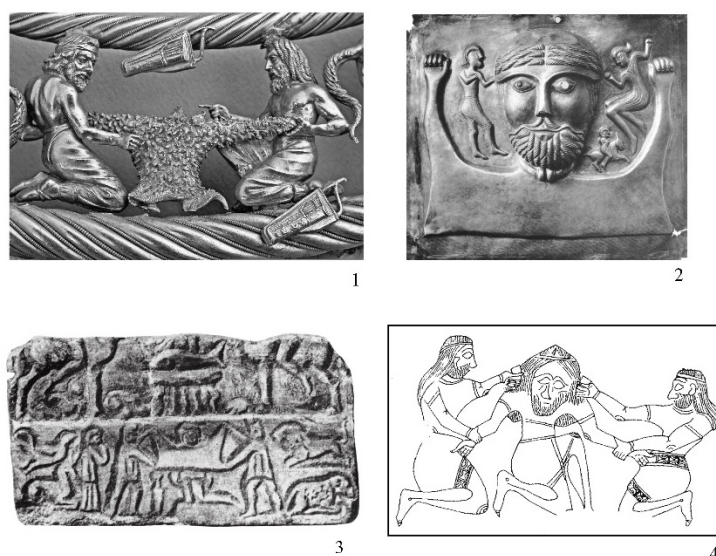


Figure 14. Foreign cultural parallels to the central scene: 1—pectoral from Tovsta Mohyla (detail); 2—Gundestrup cauldron (detail); 3—Moesia marble tablet (detail); 4—bowl of Hasanlu (detail) (source: Babenko 2022a, fig. 2).

One can certainly agree with the rejection of the scene on the chalice from Hasanlu, which is now interpreted by many scholars as the murder of Humbaba by Gilgamesh and Enkidu (Ornan 2010, pp. 235, 243, 244, 248; Winter 1989, pp. 95, 96; Francfort 2008, pp. 95, 97; Collon 2010, p. 119; Frayne 2010, p. 175; Lambert 2010, p. 103). At the same time, the analysis of the scene on the tablet from Moesia allows us to see some possible ritual parallels to the scene on the pectoral. The sword stuck vertically in the ground was one of the manifestations of the world tree. The object sacralized the space around it and provided communication between the three worlds of the universe, arranged vertically one above the other: the underworld of the dead, the earthly world in the middle, and the upper heavenly world—the abode of the gods (Raevskii 1985, pp. 114–22; Polidovich 2015, pp. 129–31). The pectoral is also interpreted as a pictorial cosmogram, a mythological model of the world of the Scythians, based on the concept of the world tree and ideas about the three-part vertical structure of the universe (Raevskii 1985, pp. 181–203, 229–33). In other words, there is a conceptual overlap that connects the scenes on the tablet with those on the pectoral (Babenko 2022a, pp. 31–48).

6. The Symbolism of the Pectoral

Since the discovery of the pectoral, researchers have expressed different interpretations of its various scenes and the figures involved in them. D. Raevsky's interpretation is widely known and accepted (Raevskii 1985, pp. 180–203, 229–33). Raevsky's interpretation of the pectoral as a pictorial cosmogram—a mythological model of the Scythian world—is based on the concept of a world tree and the notion of a three-part vertical structure of the universe. However, many of the meanings inherent in the themes of the pectoral remain unresolved. The following discussion engages with select details in the figure scenes of pectoral that have rarely been commented upon but may provide vital clues for understanding the mutual relationships and meaning of the compositions in the three crescent-shaped friezes.

6.1. Peripheral Imagery

Of the numerous images of the pectoral from Tovsta Mohyla, the figures of the peripheral areas of the composition have attracted the least attention from previous researchers. These figures consist of two pairs of locusts at the ends of the lower frieze, as well as the figures of two birds, a water bird and a “predator”, which complete the composition of the upper frieze (Figure 15: 1–4). At the same time, one related group of ornaments, which may

allow us to clarify the functions of these peripheral figures, has escaped the attention of researchers almost completely. These are the gold plaques from ceremonial headdresses with vegetal compositions containing images of locusts and birds (Figure 15: 5–7). This combination of motifs suggests the same connection of the peripheral signs with the plant elements of the pectoral frieze. Accordingly, their main function in the composition is as mediators, providing the connection between the upper and lower panels. Thus, this is once again proof of the semantic unity of the composition of the pectoral and the interrelationship of the characters and narrative plots of all three friezes (Babenko 2016b, pp. 90–104).

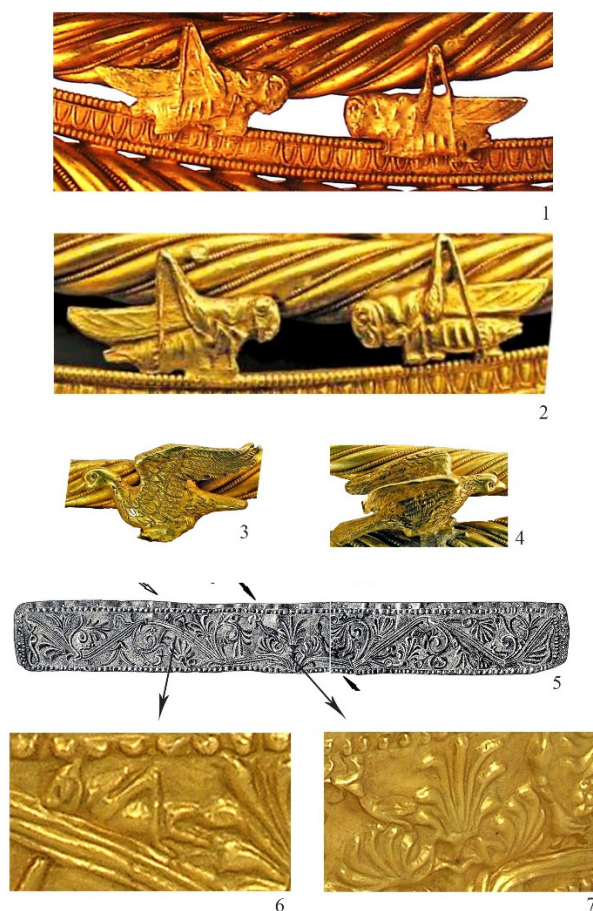


Figure 15. Peripheral characters of the pectoral: 1–4—pectoral from Tovsta Mohyla (details); 5–7—gold sheet plaque from Tovsta Mohyla headdress (6, 7—details) (source: Babenko 2016b, figs. 1–3).

6.2. The Sacred Amphora

In one of the scenes in the pectoral thought to represent the milking of sheep, an amphora is used as one of the vessels (Figure 16: 1–4). However, the actual release of milk into the amphora is not shown, in contrast to the amphora on the other side of the pectoral. Since the suitability of the amphora as a vessel for milking is questionable, it may not have been employed to store milk in this scene. A more plausible content is wine, which was widely used in ritual practices because of its accessibility. The amphora may also have been meant to suggest the use of a starter culture for the preparation of a fermented milk drink. During the coronation, the Persian king drank a small cup of sour milk (Plut., *Artaxerx.*, III). The people of Tuva kept sourdough starter from autumn and used it to prepare the first spring *hoytpak*—a sour milk drink (Vainshtein 1991, p. 127).



Figure 16. Scythian youth with an amphora: 1, 2—general view; 3—detail of Scythian holding a handful of grass; 4—detail of Scythian holding an amphora. Pectoral from Tovsta Mohyla (details) (source: [Polidovych 2021](#), figs. 64–67).

6.3. Death, Absence, Rebirth: The Initiation and Investiture Motifs in the Visual Narratives of the Pectoral

The interpretation of the central scene in the pectoral's upper frieze is plagued by the greatest diversity of opinions ([Babenko 2013](#), pp. 111–13). Additional information for solving this problem can be extracted from the compositional structure of the pectoral itself and the numerical structures embedded in it. The imbalance between the number of deaths in the lower frieze (seven) and births in the upper frieze (six) provides reason to interpret the dominant meaning of the central scene as also containing the idea of birth or rebirth, i.e., the seventh in number. The symbolism of the number seven is embodied in the composition of the pectoral and by the seven bird figures, as well as in the seven-part structure of the pectoral itself, consisting of four twisted torques and three figure-decorated or ornamental friezes between them.

When solving the problem of identifying the figures of the central scene, it is necessary to take into account the nature of the pectoral as a personal ornament and the participation of its owner or wearer, who was the central figure of the entire composition of the pectoral. The central scene of the pectoral illustrates the focal point of a vital cosmological event, meant to finally restore the broken world order. The event was usually the selection of a new king, which took place on the day of the vernal equinox ([Mozolevskiy 1979](#), p. 224; [Babenko 2013](#), p. 119). The ceremony consisted of a whole complex of procedures, such as an initiation rite with a sacred test and the transfer of investiture attributes (as described in Herodotus 4. 5). The ritual culminated with the king's receipt of royal glory—a divine grace designed to ensure the well-being of the entire collective. In this case, the pectoral, as sacred gold, was the material embodiment of royal power itself, and the king's wearing of the pectoral during the ceremony was intended to symbolize its receipt.

6.4. Time and the Pectoral as a Calendar: A Different Point of View

The cornerstone of many reconstructions, on which the whole chain of iconographic interpretations is based, is the calendar date of the central scene, namely the day of the vernal equinox. A possible asynchrony of the calendar time of the scenes depicted on the upper frieze (Polidovich 2020, pp. 136–8) allows us to make interesting observations about the direction of the flow of time reflected on both friezes and to coordinate the scenes with possible calendar dates. As observed in the upper frieze, the birth of domesticated young animals of different breeds takes place at around the same time of the year, but finer temporal distinctions were introduced by placing newborn calves and foals (denoting early spring) near the central scene, while the kids and sheep further to the left and right are already weaned and almost adults ready for independent existence (denoting early summer). In this manner, the flow of time on the upper and lower friezes is made visible through seasonal phases of growth and maturation, and distinctive human activities relating to them, and can be seen to unfold in different directions. On the upper frieze, from the central scene to the periphery, time flows from the present to the future (Figure 17). On the lower frieze, the opposite flow is from the periphery to the center, from the past to the present, approaching the moment of death. If the calendar date of the central scene of the upper frieze coincides with the day of the vernal equinox, the time of the following scenes, gradually moving forward, corresponds to the middle of spring and the beginning of summer. In the lower frieze, the progression of time is reversed: it begins with late summer in the peripheral scenes with locusts and moves toward the center, into autumn, to the day of death at the autumnal equinox. The middle frieze appears as a mediator in the calendar context, representing the summer season with its abundant vegetation.



Figure 17. Representation of time in the figure scenes and the pectoral as a calendar (source: author of the illustration, Leonid I. Babenko).

6.5. *The Eschatology of the Upper Frieze*

The central scene in the upper register of the pectoral can also be interpreted in the context of ideas about death as the highest form of initiation and the posthumous fate of the deceased. In this hypothesis, the characters of the central scene may represent the twin deities with forbidden names in Alano-Ossetian mythology, located between *zenet* (paradise) and the dead arriving in the underworld (Vertiienko 2010, p. 67). These twins met the souls of the dead and provided them with various items necessary for their journey into the afterlife. In this case, the whole complex of the upper frieze can be interpreted as gifts that the paired mediators should give to the deceased—that is, the owner of the pectoral—upon his arrival in the other world. Among them are the shirt with which the twin deities intend to clothe the newcomer, ceremonial weapons, and young slaves preparing various drinks. Everything on this list coincides with what we know from archaeological finds about the rituals conducted at Scythian royal burials (Olkhovskii 1991, pp. 94–135).

Thus, the upper frieze of the pectoral can be interpreted as one of the embodiments of the Scythian *Gerrhos*—the mythical other world of the heroic ancestors, warriors who fell on the battlefield (Herodotus 4. 71). As an archetypal depiction of the blessed life, the figures in the upper frieze of the pectoral also portend its owner's happy afterlife.

7. Resume

The pectoral from the Tovsta Mohyla is a masterpiece of Greco-Scythian toreutics, which, at the same time, became a symbol of Ukrainian archaeology and the ancient history of Ukraine. The phenomenon of the pectoral in Scythian culture reflects the synthesis of the manifold local and foreign cultural traditions embedded in its composition. On the one hand, the pectoral is a complicated modification of the torque—a traditional insignia of Scythian society with which the pectoral shares a number of morphological correspondences. In the shape of the pectoral, on the other hand, and the structure of its composition and figural scenes, numerous cross-cultural influences can be traced, including ancient Greek, Macedonian, and Thracian. One can glean the idea of Greek pedimental sculpture and of Thracian-Macedonian breastplates, the borrowing of plant motifs and of diverse Greek coin designs. Finally, one can recognize the influence of literary works, in particular, as we have argued, the *Iliad*. The central scene of the upper frieze is, however, an unparalleled innovation of the pectoral's artist. Analogies of this plot are still unknown either among artistic works of the nearest cultural circles or among the creations of more distant cultures and societies.

Such borrowings are not only pictorial in nature; they can also be seen among the constructive elements of decoration. In particular, the hinged joint used by the craftsman to attach the movable clasps to the main body of the pectoral was otherwise practically unknown among the products of Bosporan toreutics. Most likely, it was adopted from the design of Attic and Chalcidian helmets that were part of the armament of Bosporan and Scythian soldiers of that time.

The technological innovations drawn upon in the manufacture of the pectoral include four pseudo-twisted hollow torques framing the decorative friezes. It is interesting that the form of twisted torques had a deep tradition in the Scythian environment. This is evidenced by the depiction of torques with a similar texture on many stone statues. While imitating a traditional form, the master involved innovative technology, which achieved a number of tasks. In particular, he significantly diminished the weight of the ornament and made it cheaper and more comfortable to use.

In terms of shape, composition, and select subjects, the pectoral finds a number of correspondences among products of Bosporan toreutics, such as a series of ceremonial torques and a silver amphora from Chortomlyk. This corroborates the arguments of a number of researchers who prefer to see these products as creations of one jewelry workshop or even a single jeweler. However, a comparison of the pectoral from the Tovsta Mohyla with the most similar decoration, the small pectoral from Bolshaya Blyznitsa,

reveals significant differences in construction, manufacturing techniques, stylistic choices, and possible semantic references entailed in the pictorial narratives and burial context. In the view of this author, these differences show that multiple workshops were involved in the production of Bosporan and Greco-Scythian metalwork.

The iconographic references and meaning of the images and subjects represented on the pectoral have generated a prolific historiography and a significant number of interpretations. Researchers look for possible explanations in different cultural environments—local, Scythian, or Bosporan—or direct their gaze in search of acceptable interpretations to the east, to the Iranian-speaking world, or to the west, to Thracian or Macedonian parallels. However, it seems obvious that the scenes depicted on the pectoral, and, above all, the central scene of the upper frieze, must be consistent with the function of the object as such. The pectoral, as an insignia of power, a sign of the high social status of its owner, was the material embodiment of divine grace, designed to ensure the well-being of the ruler as well as the entire collective. Therefore, the central scene of the pectoral reproduced the ritual of the acquisition of divine favor by the king. This event took place during the ceremony of electing the king on the day of the vernal equinox. Important for understanding the essence of the central scene with its two opposing characters is the inclusion of the pectoral's wearer directly in its narrative when he puts on the item of jewelry. In this case, it was he who became the main character of the central scene as well as a participant in the ritual in which the pectoral was used.

No less complicated and still unresolved is the question of the relation between the pectoral and the deceased buried in the central tomb of the Tovsta Mohyla. As we have argued, the rank of the pectoral as a royal insignia does not correspond to the level of the other components of the burial complex: the size of the structure is insignificant compared to the mounds of the royal kurgans. Equally mismatched are the labor costs of the tomb's construction and the status of the equestrian decoration. Further complications are presented by the find spot of the pectoral and other valuable and status items outside the tomb's main vault (namely in the dromos in front of the entrance to the chamber). As our discussion has shown, this archaeological context has created a fertile environment for conflicting interpretations, considering the pectoral variously as a disused insignia, a military trophy, a diplomatic gift, or something else. The only thing that unites these interpretations is their speculative character.

As a historical source, the pectoral from the Tovsta Mohyla is a uniquely informative artifact capable of deepening our knowledge of the most diverse issues of Scythian culture. Quite rightly, this ornament is called the golden encyclopedia of Scythia. Despite the half century of history of studying the pectoral, scientists are still only on the threshold of understanding its many secrets.

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