

Article

Rediscovery of a 5th-Century BCE Burial Assemblage of the Dnipro Forest-Steppe Region

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Abstract

This article discusses an unknown Scythian burial discovered by Serhiy Mazaraki near the village of Velyki Budky (Sumy Oblast, Ukraine) at the end of the 19th century and previously unknown to researchers. An assemblage of gold objects from this burial is identified, including a ring and seven plate appliques depicting a scene in the Scythian “animal style,” dated to the second or third quarter of the 5th century BCE. The objects have numerous parallels, which help illuminate broader aspects of Scythian culture. The ring belongs to a small group of high-conical-shielded rings, likely crafted by Bosphoran jewelers catering to a Scythian clientele; it is suggested that they were common in the northern Black Sea region throughout the 5th century BCE. The image of a curled-up predator on the gold appliques corresponds, in both compositional and stylistic features, to the artistic tradition of the “animal style” of the 5th century BCE. Unique is the depiction of another image—the head of an antelope with a straight horn on the plaques. The assemblage of artifacts enables us to explore various aspects of the artistic traditions of the northern Black Sea region, the Kuban, the Cis-Urals, and even Western Asia.

Keywords: Scythians; North Pontic area; jewelry; finger ring; “animal style”

1. Introduction

Posullia, the Sula River basin (a left tributary of the Dnipro River), is one of the regions with a high concentration of Scythian-type sites. Several giant burial grounds with hundreds of kurgans were located here, on the high right bank of the Dnipro River, upstream from the city of Romny in the Sumy Oblast of Ukraine (Figure 1). Most of these kurgans were excavated in the last decades of the 19th and early 20th centuries. Their excavations were carried out by both professional archaeologists (Volodymyr Antonovych, Ivan Lynnychenko, Dmitrii Samokvasov) and amateurs (Serhii Mazaraki, Vikentii Khvoyka). These studies showed that the burial grounds functioned throughout the Scythian period: from the second half of the 7th century BCE to the second half of the 4th century BCE. Many of the kurgans had truly gigantic mounds. The early Scythian burial mound of Starsha Mohyla and near the Shumeiko farmstead, whose mounds were up to 20 m high, particularly stood out for their size. All this allowed Varvara Illinska, a well-known researcher of the burial mound antiquities of Posullia, to hypothesize that the mysterious Gerros region was located precisely here (Illinska 1968, p. 180). The ancient Greek historian Herodotus mentioned it as the eternal resting place of Scythian rulers (Herod. IV, 71).

Academic Editor: Caspar Meyer

Received: 29 April 2026

Revised: 23 July 2026

Accepted: 24 July 2026

Published: 4 August 2026

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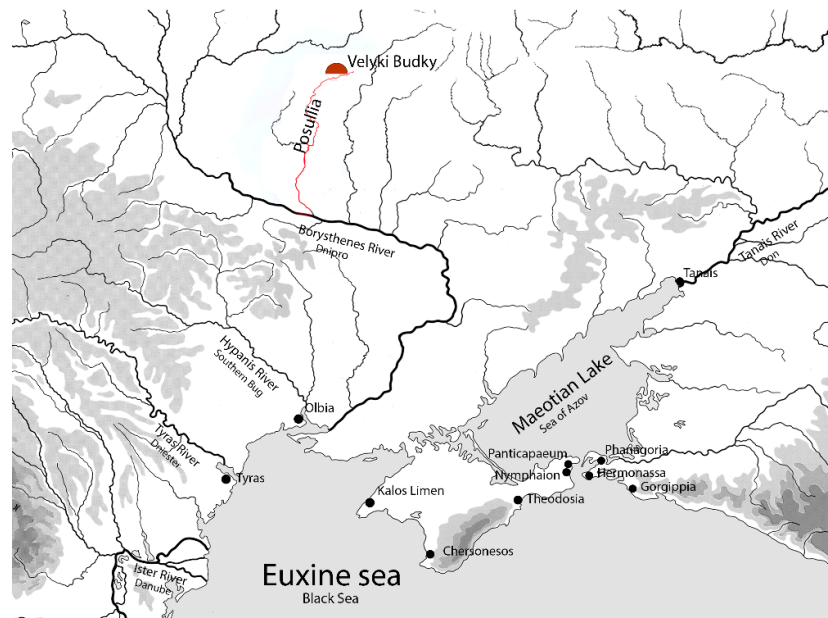


Figure 1. Location of the Posullia area in the North Pontic region. Map by Evgenia Velychko.

A variety of artifacts, currently stored in museums in Kyiv, Poltava, and Chernihiv, Ukraine, as well as Moscow and St. Petersburg, Russia, were found during excavations. However, the approach to these excavations lacked scientific rigor, resembling more of a treasure-hunting endeavor. Essential processes such as fixation and documentation were either not performed or carried out with minimal care, and much of the discovered material was not incorporated into an archaeological map. Consequently, artifacts were dispersed across different museums and private collections, many of which were never documented in publications and, as a result, lost their attribution or vanished entirely. In the 1950s–1960s, Illinska collected all available data on tumulus excavations in the Sula River basin, including those near the city of Romny (Illinska 1968). We continued this work and systematized information about the part of the Posullia mounds located near the village of Velyki Budky (Polidovych and Velychko 2023).

Thanks to archival museum documentation, we managed to identify materials from a kurgan discovered by Serhii Mazaraki at the end of the 19th century that had previously been unknown to researchers (Velychko and Polidovych 2020). The kurgan was provisionally designated Velyki Budky, Kurgan 2/M (Polidovych and Velychko 2023, p. 138, Figure 5, 7–8). Information about the kurgan's dimensions and architecture, as well as the burial rite, was lost. However, a gold ring¹ (inventory number $\Delta M-6471$) and seven appliqués (inventory numbers $\Delta M-6251/1-7$), excavated from this burial, are stored in the Treasury of the National Museum of the History of Ukraine (NMHU).

2. Kurgans near Velyki Budky Village: History of Research

Burial mounds near the village of Velyki Budky were excavated in the late 19th and early 20th centuries by Mazaraki, Samokvasov, Lynnychenko, and, probably, Khvoyka (Illinska 1968, pp. 10, 20–21). The excavated materials were mostly transferred to the Kyiv Art-Industrial and Scientific Museum.² According to the inventory of the museum's archaeological department, over 180 items were recorded as having been found in burial mounds near the village of Budky or Velyki Budky in the Romny district (Khvoyka n.d.).

Mazaraki probably compiled the first schematic plan of the Romny kurgans' location. It was published in the *"Древности Приднєпровья,"* together with a generalizing description of these burial mounds based on the researcher's excavation journal

(Khanenko and Khanenko 1899, p. 5). This plan marks two groups of burial mounds east of the village of Velyki Budky, separated by a deep ravine. No further details are provided in Mazaraki's account. Nor are these features mentioned in the reports of the Imperial Archaeological Commission (OAK 1891, pp. 146, 149), and Aleksei Bobrinsky offers no clarification (Bobrinsky 1901, pp. 61, 81).

Thorough inspection and documentation of burial mounds near the village of Velyki Budky (as, indeed, of other Romny burial mounds) were carried out in 1927 by employees of the Romny Local Lore Museum, headed by Mykhailo Semenchuk. They noted that, in this territory, "the mounds are scattered on a plateau, part of which is covered by a rampart. The rampart is only 2–3 m high and runs along the western and southern slopes (in the south, it is almost destroyed). In the north and east, the rampart runs across fields. ... All mounds have been excavated. In total, there are 36 mounds" (Semenchuk 1927, pp. 4–5). These examinations were repeated in 1946 (Illinska 1949, p. 141, Figure 2, 3), and again in 1959 by an expedition of the Institute of Archaeology of the Academy of Sciences of the Ukrainian SSR under the direction of E. Irytskyi (Illinska 1968, pp. 8–9). At that time, only 16 mounds were recorded (Illinska 1968, pp. 9–10, 14, 16, Figure 7, Table 3). The current inspection (Grechko et al. 2020, pp. 201–4, Figure 4; Korzh 2021, pp. 69–70, Figure 2) has focused on the technical condition of the mounds, most of which continue to be destroyed by plowing (Figure 2).

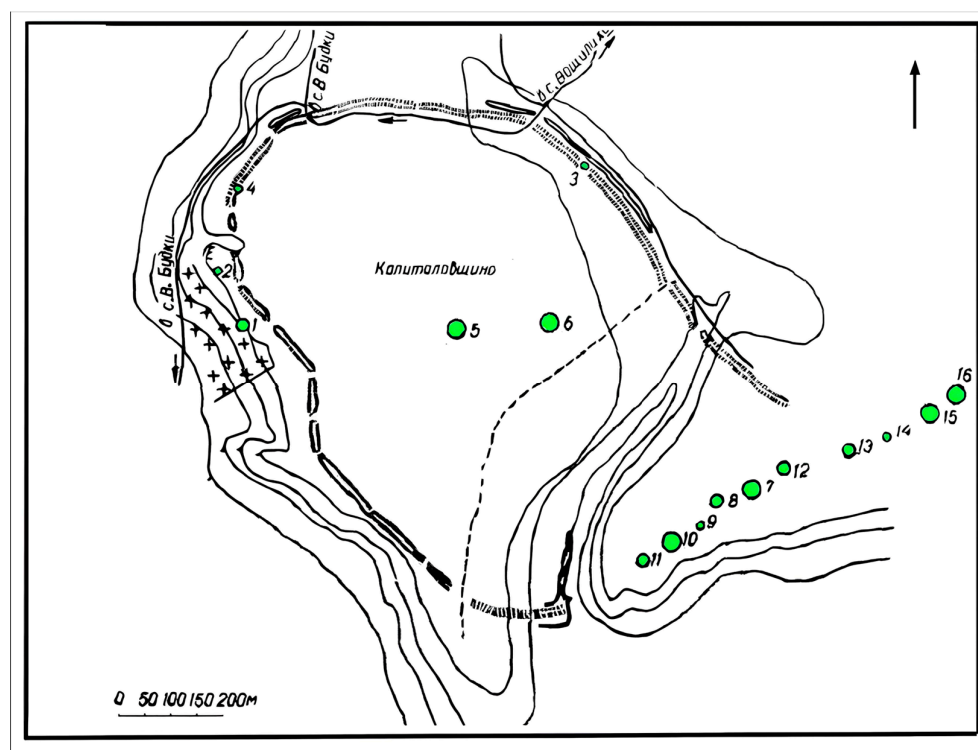


Figure 2. Location of burial mounds near the village of Velyki Budky. After Illinska (1968).

According to Semenchuk's observations, all 36 burial mounds he recorded near the village of Velyki Budky in 1927 had been excavated. However, it is impossible to correlate the preserved information about any particular excavated kurgan with the actual objects.

The first known excavations near the village of Velyki Budky were carried out by Mazaraki in 1886 under the auspices of the Imperial Archaeological Commission (OAK 1891, pp. 146, 149; Bobrinsky 1894, pp. 161–62). It is unknown whether the researcher continued excavations near Velyki Budky after 1886, as numerous materials from his

1887–1890 excavations, which entered Bobrinsky's collection and were later donated to the museum, lacked any provenance data (Bobrinsky 1901, pp. 62–81).

For many finds, the only source of information is the inventory book of the archaeological department of the Kyiv Art-Industrial and Scientific Museum, kept by Khvoyka, whose records at least allow the grouping of objects into single assemblages based on common origin (Polidovych and Velychko 2023). It is there, under inventory numbers IM-11480 (modern Δ M-6471) and IM-11481 (modern Δ M-6251/1–7), that we find the only record of gold plates and a ring from an unidentified burial in one of the kurgans near the village of Velyki Budky, explored by Mazaraki (Khvoyka n.d.):

- 7 gold, round plates with animal ornament. Found in a kurgan near the village of Budky, Romny district, Poltava Governorate. Excavations by S. A. Mazaraki;
- A gold ring with a stone and a spiral ornament. The same findspot.

3. The Finds

The finger ring (Figure 3) consists of an open ring-band, the ends of which are soldered to a high bezel (Petrenko 1978b, p. 63, pl. 52, 32; Berezova 2001, pp. 48–49, 52, Figure 25; Klochko 2015, p. 92, Figure 5, 3; Klochko and Bilan 2022, pp. 64, 68, Figure 7, 6). Dimensions: greatest overall width—33 mm, band— 27×21 mm; bezel: height—12 mm, diameter 14.0 (lower) and 10.5 (upper) mm. Material: gold 500.³ The rod ring-hoop is round in cross-section and thicker in the middle. The ends of the band have straight cuts, edged with a ribbed wire. The bezel takes the form of a truncated cone. Its side surface is decorated with a filigree-and-granulation pattern. The upper and lower edges are bordered by “braids” made of thin, twisted wires, with ribbed wires on each side of these braids. The central part features an ornamental strip composed of six S-shaped elements, with their ends twisted into spirals around granules (three turns from one end and 1.5 turns from the other). The elements are arranged horizontally in pairs, with separate granules surrounding them. The top of the cone is missing; remnants of an organic (?) mass are preserved inside. The conical bezel is soldered to the cut ends of the band at its flat faces.



Figure 3. Ring. Photograph by Dmytro Klochko and Evgenia Velychko. © National Museum of the History of Ukraine.

The rounded appliqués bear an image of a curled predator (Figure 4). Dimensions: $20\text{--}22 \times 18\text{--}22$ mm. Material: gold 583. The image is right-sided, and the composition is based on a circle. The legs are positioned opposite each other and parallel, and the tail is

extended. A large, round eye stands out on the head, and the nose is shown as an open circle, the line of which transitions into a semi-oval jaw. The long, leaf-shaped ear is pressed flat against the head. The shoulder appears rounded and segmented, featuring a prominent teardrop-shaped muscle. The torso is shown with ridges that may imitate ribs. The rump is massive and rounded. The legs are slender, with the paws rendered as two long, hook-shaped claws. The tail is thin, terminating in a round curl. Behind the back, a thin ribbed element composed of six parts is depicted. Along the inner edge of the plates, four to eight holes are punched for sewing.



Figure 4. Appliqués. Photograph by Dmytro Klochko. © National Museum of the History of Ukraine.

4. Discussion

4.1. The Ring in the Context of Greek Jewelry Art Development

Close parallels to the ring from Velyki Budky include two rings with similar high, truncated-cone bezels. The first ring (Figure 5a) comes from finds near the village of Tahancha from the Right-Bank Dnipro Forest-Steppe⁴ (Khanenko and Khanenko 1899, p. 32, cat. 431, pl. XXIX, 431; Onayko 1960, p. 35; Onayko 1966, pp. 32, 64, cat. 244, pl. XXII, 3; Petrenko 1978b, p. 63, pl. 52, 31; *Trésors* 1997, p. 86, Cat. 33; Pyötsiä and Fletcher 1997, pp. 66–67, 88, 89, cat. 85; Cajkovskyj 1997, p. 69, cat. 25; Berezova 2001, pp. 48–49, 52, Figure 24; Klochko and Bilan 2022, pp. 64, 67, Figure 7, 4), and the second (Figure 5b) from Burial 1 of Kurgan 8 near the village of Velyka Znamianka in the Steppe Dnipro region (Sorić 1989, pp. 120, 165, cat. 70; *Skytytien kulta-aarre* 1990, p. 50, cat. 90; Berezova 2001, pp. 48–49; Klochko and Bilan 2022, pp. 64, 67–68, Figure 7, 5).⁵

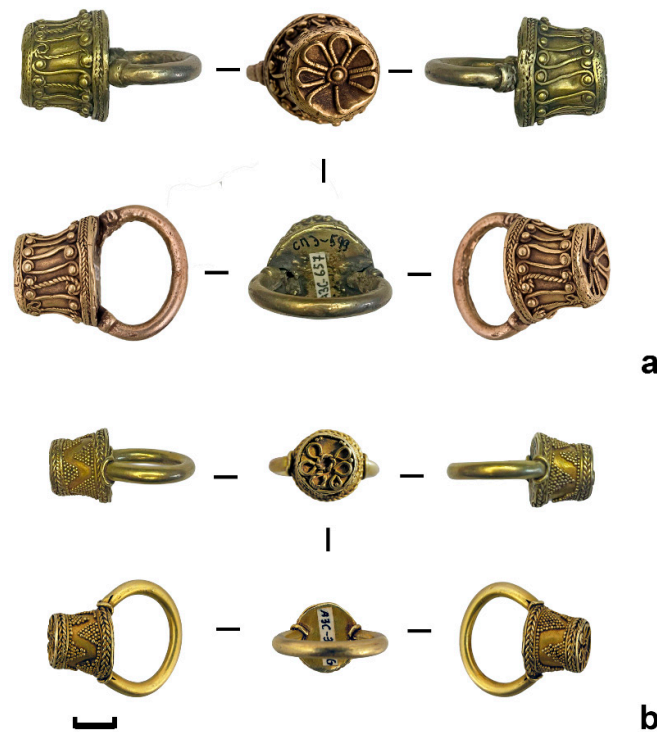


Figure 5. Rings. (a) find near the village of Tahancha, Cherkasy Oblast, Ukraine; (b) from Kurgan 8, Burial 1 near the village of Velyka Znamianka, Zaporizhzhia Oblast, Ukraine. Photograph by Dmytro Klochko and Evgenia Velychko. © National Museum of the History of Ukraine.

On both artifacts, the upper surface of the cone is covered by a plate adorned with a filigree seven-petaled rosette. It appears that such a plate was lost from the ring from Velyki Budky, as already noted in previous research (Berezova 2001, p. 48; Klochko and Bilan 2022, p. 68). According to the primary inventory book of the Kyiv Art-Industrial and Scientific Museum, maintained by curator Vikentii Khvoyka from 1898 to 1914, the ring was recorded as having a “stone” (without further specification). Nevertheless, the ring was likely already missing its upper part when it was found. There is no surviving evidence to suggest that either the upper section or the inset was present at the time of discovery and subsequently lost before the object reached the museum. It is thus possible that Khvoyka interpreted the bezel’s open cone as a setting for a stone. Upon examining the top of the cone (Figure 6a–c), no evidence of an attachment for an insert is visible—features that would typically be expected in such cases, for instance, the rim of a setting for securing a stone⁶ or triangular protrusions.⁷ Instead, the design of the edge at the top of the cone on the Velyki Budky ring closely resembles the bezel tops of the rings from Tahancha and Velyka Znamianka.

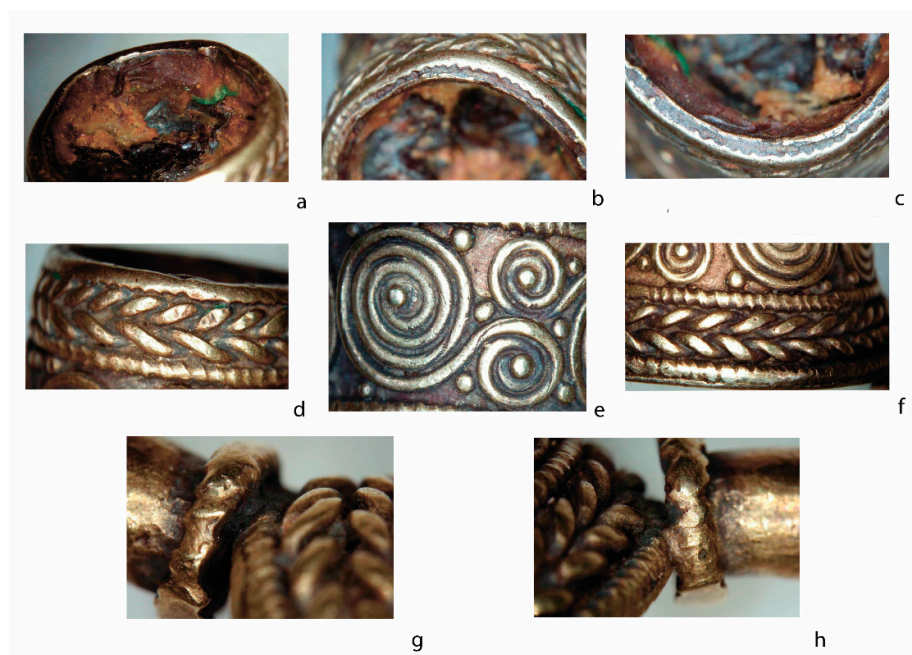


Figure 6. Ring from Velyki Budky. (a–h) details. Photograph by Evgenia Velychko. © National Museum of the History of Ukraine.

Unlike the bezel's top, the overall decoration of the conical bezels and the design of the ring-hoops are distinct in all three cases.

The ring from Tahancha is heavier and was probably assembled from parts of two different items. The rod hoop is silver, with a round cross-section; its ends are covered with braids and smooth wires, which were heavily damaged during reworking. The bezel is made of gold 583 and shaped as a truncated cone. The upper and lower edges of the cone are covered with ornamental belts of braids and smooth wires. Between them are vertically oriented wires (either smooth or double-twisted⁸), the ends of which are twisted around massive granules, forming S-shaped motifs with an elongated, almost straight middle part. The ends of the hoop are soldered to the lower part of the cone.

The ring from Velyka Znamianka is made of gold and, in size, is closer to the artifact from Velyki Budky. The hoop is formed from a rod of circular cross-section, with its ends joined by a smooth wire, somewhat carelessly soldered. A braid of wires, framed by smooth wires, likewise encircles the upper and lower edges of the conical shield. The main decoration consists of granulated pyramids, arranged along the upper edge (with vertices pointing downward) and the lower edge (vertices pointing upward) of the cone; rows of granules connect the bases of the triangles. The hoop is soldered to the lower edge of the conical shield.

The ring from Velyka Znamianka was found with an Attic black-gloss stemmed kylix. Sergei Polin dated the vessel from the last quarter of the 6th or the first quarter of the 5th century BCE (Polin 2014, p. 195), drawing on an analogy from the Athenian Agora. This date establishes the chronological position of the burial as well as that of the ring. The ring's decorative design broadly corresponds to the tradition of the second half of the 6th and first half of the 5th centuries BCE, a period during which compositions with granulation were prevalent in ornament design. Comparable examples include gold ear pendants consisting of wide convex shields featuring a sculpted lion's head at the center, and curved hoops ending in either a ram's head or a mushroom-shaped cap, from assemblages dating to the third quarter of the 6th century BCE through the first quarter of the 5th century BCE.⁹

Stylistically similar decoration is also characteristic of the series of boat-shaped earrings from the 5th century BCE, whose bodies are adorned with a band of braided and smooth wires and triangles of granulation. In total, 16 sets of earrings are known, both paired and single (see Polin and Daragan 2025, pp. 112–22, Figures 102–108; 110, 1–3; 115, 1–2; 116; 118). These items of jewelry are known from sites in the Dnipro Forest-Steppe on both the left¹⁰ and right¹¹ banks and from the Steppe Dnipro region, where they became widespread from the middle to the third quarter of the 5th century BCE.¹² Subsequently, such earrings continued in use into the late 5th and the first half of the 4th centuries BCE.¹³ During this later phase, the vast majority of boat-shaped earrings were combined with terminals in the shape of griffin heads¹⁴ or duck figures.¹⁵

The rings from Velyki Budky and Tahancha show distinctive decorative features that may indicate a later date.

The ring from Velyki Budky is characterized by its classical shape and perfectly executed filigree decoration. The hoop is wider in the middle and tapers toward the ends which are encircled by a ribbed wire; the bezel is soldered edgewise to the terminals of the hoop. This type of hoop characterizes rings from various regions of the Greek world dating to the second half of the 6th century BCE (see, in particular, the examples in the J. Paul Getty Museum collection: Spier 1992, cat. 16, 29–46, 48, 64). Also comparable are the proportions of the hoop of a ring from Panticapaeum composed of twisted rods and bearing the image of Penelope, dated to the mid-5th century BCE (Williams and Ogden 1994, p. 158, cat. 98; Y. P. Kalashnik 2014, pp. 74–75).

The filigree decoration on the sides of the cone-bezel from Velyki Budky lacks close parallels. It may be compared only with the decoration on the finials of spiral-shaped jewelry from the late 6th to early 4th centuries BCE, excavated in the necropolis of Panticapaeum by Anton Ashik in 1842. In these examples, the main ornamental field is framed by braided and smooth wires and decorated with S-shaped elements, the ends of which are twisted around granules in three-turn spirals, with additional granules complementing the design. However, these elements are arranged horizontally, and their ends terminate symmetrically (Silantieva 1976, p. 128, Figure 5 (bottom); Y. P. Kalashnik 2014, pp. 82–83), unlike the asymmetrical and differently sized decorative elements on the ring from Velyki Budky. Researchers generally consider such spiral-shaped ornaments characteristic of local Bosphoran metalwork (Silantieva 1976, c. 128; Y. P. Kalashnik 2014, pp. 82–83). Similar elements also appear in the decoration of the upper part of conical earrings, known in particular from finds in 5th-century BCE Scythian kurgans in the left-bank Dnipro region.¹⁶ To the same stylistic milieu belongs a type of boat-shaped earring found in Scythian assemblages of the late 5th to the first half of the 4th centuries BCE.¹⁷

In her study of ancient Greek antiquities from Scythian burial mounds, Nadezhda Onayko identified the ring from Tahancha as Mediterranean in origin (Onayko 1966, p. 32). She cited a single parallel—a ring in the British Museum collection (Marshall 1907, p. XLI, c. XVIII; p. 38, Figure 46, cat. 219). This piece shares a similar shape, differing only in the proportions of the conical bezel, which has a wider base and top and a lower overall height. In addition, the decoration on the British Museum ring is applied to both the upper and lower planes of the bezel, bringing it closer to rings with a cylindrical bezel, circular or oval in plan. Such rings were relatively common and may occur with fixed (Marshall 1907, p. 38, cat. no. 218; Figure 45, pl. VI, 218; p. 147, cat. no. 908, pl. XXIII, 908; Spier 1992, cat. 69, 70, p. 6, pl. I.) or movable¹⁸ bezels.

A pronounced, high conical bezel distinguishes all three rings from the territory of Scythia. Among them, the bezel ornament of the example from Velyki Budky is the most technically accomplished. A highly skilled craftsman undoubtedly made this ring. By contrast, the other two rings are characterized by relative simplicity and a certain lack of care. The hoops are attached to the bezels in a somewhat rough and technically imperfect

manner, and the ornament is simpler, not always adhering to principles of symmetry. The inconsistency in the technique of some elements is striking. In the ring from Velyka Znamianka, for instance, the treatment of the top of the bezel appears careless, despite the otherwise well-executed ornament of granulated triangles (Figure 5b). Likewise, the wires on the “braid” are twisted unevenly. These details suggest that some elements were made hastily or by a less experienced jeweler. For these reasons, it seems likely that the ring, in its present form, was crafted by a local artisan.

The ring from Tahancha appears to have been made from parts of two different pieces of jewelry: A crudely made bezel (Figure 5a) was presumably added to the hoop of a Greek silver ring. The bezel features unusual decoration, suggesting a local interpretation of Greek tradition. In the latter half of the 5th century BCE, various ornaments became popular, with a key decorative element featuring symmetrically arranged S-shaped components, whose ends twisted spirally around small granules.¹⁹ Such elements are also present on the bezel of the Tahancha ring; however, the craftsman did not group them into symmetrical pairs. Instead, they are arranged in a monotonous row, with the rhythm only interrupted by the twisted wire elements. This type of decoration may have meanings that remain unknown to us (the twisted wires were used in the rosette center and on one of the seven petals on the bezel of the ring from Velyka Znamianka, too). However, from a design standpoint, this approach contrasts sharply with Greek ornamental aesthetics, which emphasize symmetrical compositions.

The question remains: where exactly were the three rings under discussion made? The ring from Velyki Budky is distinguished by superior craftsmanship, which could indicate its origin in one of the well-known jewelry centers of ancient Greece, the Aegean islands, Cyprus, or other areas of the Eastern Mediterranean (Williams and Ogden 1994, pp. 47–83, 222–54), as was previously proposed by Onayko regarding the ring from Tagancha. However, no comparable rings are currently known from ancient Greek sites outside the Northern Black Sea region. This may be indirect evidence of its manufacture in one of the north Black Sea centers, most likely in Bosphorus (Panticapaeum). There is already a body of evidence for a Bosporan center that began operating at least in the first half of the 5th century BCE, and possibly in the first quarter. Among the productions of Bosporan jewelers, individual types of boat-shaped earrings, spiral pendants, necklaces, torques, bracelets, and rings are mentioned (M. Y. Treister 1988, 1996, 1998; M. Treister 2025). Rings with a high conical bezel may well belong to this group. At the same time, the sophisticated jewelry techniques employed in the manufacture of the rings, combined with the Greek artistic style of their decoration, point to artisans operating within the Greek cultural tradition (for a detailed discussion, see Redfern 2012).

The differences in the decoration of these rings suggest that they were manufactured at different times. The date for the earliest of them—from Velyka Znamianka—is determined by an Attic kylix from the last quarter of the 6th or the first quarter of the 5th century BCE. It can be assumed that certain technical imperfections in the manufacture of this ring are associated with the formation of the local jewelry tradition. The more technically perfect ring from Velyki Budky belongs to a later period, given the wider chronological range of analogies for its decorative elements, and can therefore be tentatively dated to the second to third quarter of the 5th century BCE. The ring from Tahancha is probably an incidental item, possibly related to the repair of a broken ornament. The decor with elongated S-shaped elements is characteristic mainly of the second half of the 5th century BCE, and probably dates from the time of its use. At the same time, it should be noted that all three rings are heavily worn, with some decorative elements missing, indicating prolonged high-intensity use.

The discovery of these three rings in different parts of Scythia (Figure 7)—the Right-Bank Forest-Steppe (lands of Σκύθαι ἀροτήρες²⁰—Scythian plowmen), the Left-Bank

Forest-Steppe (lands of Σκύθαι γεωργοί—Scythian farmers), and the Steppe Dniro Region (lands of βασιλήια Σκύθαι—royal Scythians)—suggests that these original jewelry pieces were made to satisfy the aesthetic and, quite likely, ritual-religious needs of the local population. The preference for such an unusual voluminous form of bezel recalls the enigmatic gold objects in the shape of a truncated cone, which emerged in the daily life of Scythian warriors precisely at the end of the 6th–5th centuries BCE.²¹ The fact that, of the three rings under consideration, at least two (Velyka Znamianka and Tahancha) are large and, presumably, male, only confirms this comparison.

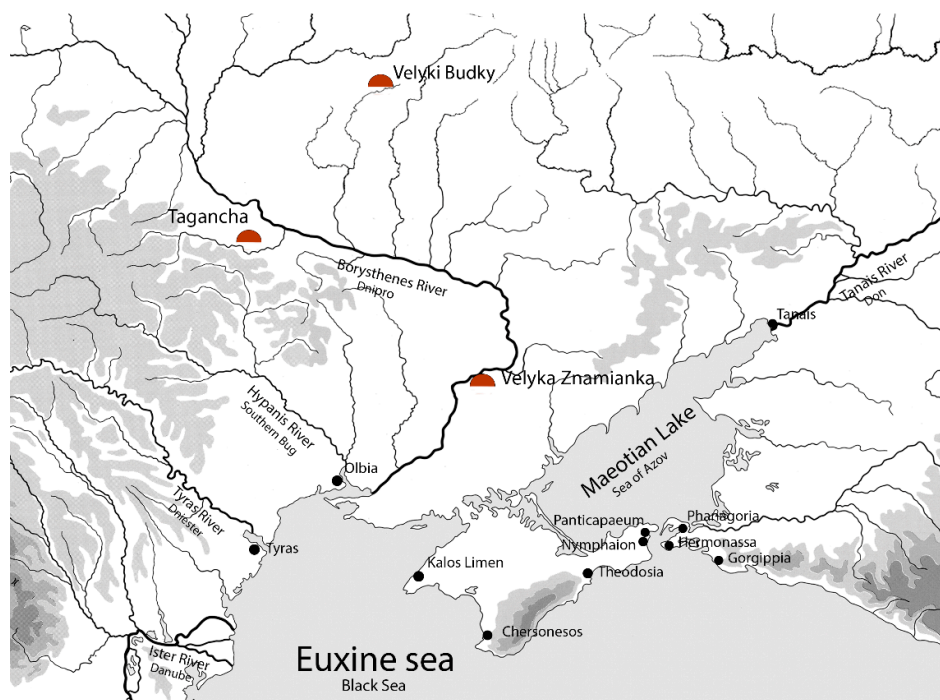


Figure 7. Distribution of high-conical-shielded rings in the North Pontic region. Map by Evgenia Velychko.

4.2. Appliqués with Predator Images in the Context of the “Animal Style”

The images of the predator on the appliques belong to the tradition of Scythian art, widely known as the “animal style” (Borovka 1928; Schefold 1938; Carter 1957; Farkas 1977; Brentjes 1982, et al.). The motif of the coiled beast is the most distinctive in this art form (Illinska 1971, pp. 76–78; Sorokin 1972, pp. 75–76; Polidovych 1994, et al.). It emerged during the initial stage of the “animal style” formation in the 7th century BC and persisted until the late 4th century BC across various regions of the Eurasian steppe. Naturally, depictions of the coiled predator exhibit regional and chronological variations (Polidovych 1994). To date, approximately 200 such representations are known, comprising both series of analogous images and unique individual specimens.

The coiled predator images on the Velyki Budky appliques are of considerable interest and warrant detailed analysis. Appliques depicting a curled-up predator are quite original and have no direct analogues. At the same time, certain compositional and stylistic features of the image find some parallels.

From a compositional perspective, which concerns the mutual arrangement of the main elements of the animal's image—its head, paws, and tail (for details, see Polidovych 1994)—the scheme fully corresponds to the tradition that became dominant in the 5th century BCE: The scheme is built on the principle of a circle, the lower parts of the legs are

arranged parallel to each other, and the curled tip of the extended tail is placed in front of the muzzle (Polidovych 1994, pp. 74–75).

Among the stylistic features, the following can be distinguished (Figure 8): large round eye (a); nose and lip line, marked with a single line (b); long leaf-shaped ear (c); separate depiction of the shoulder (d); ribbing of the torso (e); depiction of paws/tips in the form of two long, hook-shaped claws (f); long tail, curled into a ring at the end (g); additional image behind the animal's back (h).

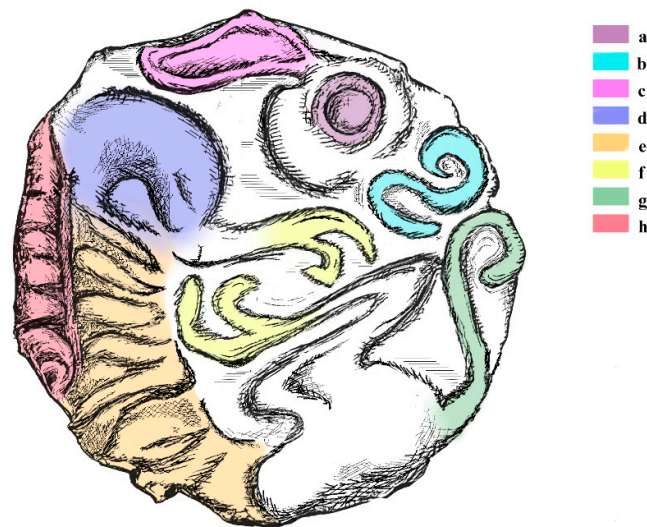


Figure 8. Appliqué: (a) large round eye; (b) nose and lip line, marked with a single line; (c) long leaf-shaped ear; (d) separate depiction of the shoulder; (e) ribbing of the torso; (f) depiction of paws/tips in the form of two long, hook-shaped claws; (g) long tail, curled into a ring at the end; (h) additional image behind the animal's back. Drawn by Evgenia Velychko.

The first two features are among the most common of the Early Scythian period, i.e., the second half of the 7th and the first half of the 6th centuries BCE. They primarily concern the accentuation of a large, round eye, consisting of a recessed ring surrounding a central, raised, round protrusion (pupil) (a). Such a technique is entirely symbolic, as it has no natural counterparts. Already in the second half of the 6th to the 5th centuries BCE, masters increasingly depicted almond- or tear-shaped eyes in animals, i.e., with one or two tear ducts marked, which more closely corresponds to a natural basis. At the same time, many images of birds of prey, predators, deer, and other ungulates are known in which the eyes were also marked with a large circle. The continuity of the traditions of the Scythian “animal style,” which had a mythological basis, can be traced in this.

(b) The designation of the nose and lip by a single line in predator images is characteristic of the Early Scythian period. It can be considered a variant of the “lotus-shaped jaw,” which appears in a range of images from the oldest examples of the Scythian “animal style,” including the Kelermes kurgans in the Kuban region (now the Republic of Adygea, Russian Federation) and the 1947 “treasure” of gold objects from the locality of Ziwiye near the city of Saqqez in Kurdistan Province, Iran. In this case, the open jaw of the beast takes the shape of the letter V, with its ends curled to designate the nose and chin. Once, Illinska compared this shape of the mouth to a lotus flower (Illinska 1971, p. 72; Perevodchikova 1994, p. 71). Subsequently, the jaw was depicted more openly—in the shape of the letter U, surrounded by a relief ridge that designated the ribbon of the lips. The nose was designated by a ring that could be combined with the lips or treated as a separate element. Meanwhile, the chin was either not distinguished at all or designated

by a relief protrusion. The most expressive predator images, dating as early as the first half of the 6th century BCE, in which the lip and nose are shown as a single line, originate from the Dnipro Forest-Steppe.²² This stylistic technique continued to be used at the end of the 6th and in the first half of the 5th century BCE.²³

(c) The depiction of a predator's ear as long and leaf-shaped is an original stylistic device. Usually, predators have small, rounded ears, characteristic of felines. In the Early Scythian period, such an ear was represented as a ring or, sometimes, as an oval or teardrop shape. From the late 6th century BCE, images of predators with sub-triangular ears were sometimes used, which are closer to the natural shape of canine ears. However, a long ear of a similar shape is characteristic only of a few images of coiled predators from the late 6th to the first half of the 5th centuries BCE—from Kurgan 512 near the village of Turia, Kirovohrad Oblast, Ukraine (Bobrinsky 1911, p. 52, Figure 11), as well as early examples from a large series of wolf-like predator images—from Burial 1 of Kurgan 6 in Burial Group II near the village of Kovalivka, Mykolaiv Oblast, Ukraine (Kovpanenko and Buniatian 1978, p. 139, Figure 1, 39), a burial mound excavated by Iurii Kulakovskii in 1895 near Simferopol (now Autonomous Republic of Crimea, Ukraine) (OAK 1897, pp. 17, 18, Figure 32; Piotrovsky et al. 1986, p. 61) and Burial 4/2013 from the excavation "Orient" of the Olbia necropolis near the village of Parutyne, Mykolaiv Oblast (Buiskikh and Ivchenko 2023, pp. 104–5, Figure 1). In other images of predators in this series, the ear is shorter and has an elongated teardrop shape.

(d) The separate depiction of the shoulder, with an accentuated highlighting of the triceps muscle, is a characteristic feature of images predominantly from the second half of the 5th century BCE. Probably the earliest examples are the depiction of a wild boar on the golden rhyton fitting and of a deer on the golden bowl decoration from Kurgan 13 near Velyka Znamianka village, Zaporizhzhia Oblast, Ukraine, mid-5th century BCE (Thrane 1994, S. 35, 71, Kat. no. 46; Cajkovskyj 1997, pp. 52–53, disegno n. 9–10). This element is also present in the image of a curled-up predator on a bronze plaque from Kurgan 5 on Cape Ak-Burun near Kerch, Autonomous Republic of Crimea, Ukraine, second half of the 5th century BCE (Yakovenko 1974, p. 104, Figure 43, 3; Piotrovsky et al. 1986, p. 92). Various versions of this element appear in a series of deer images from the second half of the 5th to the first half of the 4th centuries BCE from the following assemblages: Kara-Merkit, Autonomous Republic of Crimea, Ukraine (Piotrovsky et al. 1986, p. 101); Persha Zavad'ska Mohyla, Dnipropetrovsk Oblast, Ukraine (Mozolevsky 1980, pp. 99, 107, Figure 40; 44, 9; pp. 99, 109–10, Figure 40; 47, 3; pp. 99, 110, Figure 40; 44, 5); Haimanova Mohyla, Northern Tomb, Zaporizhzhia Oblast, Ukraine (Bidzilia and Polin 2012, pp. 412–13, cat. 213, Figure 579); Solokha, Side Tomb, Zaporizhzhia Oblast, Ukraine (Piotrovsky et al. 1986, p. 138; Mantsevich 1987, pp. 67, 68, cat. 46; Alekseev 2012, pp. 144, 145, 159); Bratoliubivka Kurgan, Kherson Oblast, Ukraine (Kubyshev et al. 2009, pp. 82–83, Figure 13, photo 26); Kurgan 7, Pereschepinsky burial ground, Poltava Oblast, Ukraine (Makhortykh 2019, p. 472, Figure 2, 1); and others. Such a technique is used in images of various animals (deer, leopard, dog/wolf, wild boar) on golden appliqué plates of a gorythos from the side tomb of Kurgan 5 near Arkhangelska Sloboda village, Kherson Oblast, Ukraine (O. M. Leskov 1974, pp. 67–70, 73–76, Figures 55–58; A. Leskov 1974, S. 72–78, Abb. 102, 107, 113–115). The burial complex is dated to no later than the turn of the 5th–4th centuries BCE (Polin 2014, pp. 227–28). Likewise, on the covering plaque of a sword scabbard from Kurgan 10/1910 near Yelizavetovskaya stanitsa, Rostov Oblast, Russia (Miller 1910, tab V, Figure 23; Ginters 1928, Taf. 21, f; Mantsevich 1969, p. 109, Figure 5, 1). Less pronounced, on a plate-frontlet in the decoration of a horse bridle from Berdyansk kurgan, Zaporizhzhia Oblast, Ukraine, first quarter of the 4th century BCE (Boltrik et al. 1994, pp. 145–46, 153–54; Schiltz 1994, S. 124–125, Abb. 93). This element already transforms into a line of spiral curls on the scabbards of swords from the third

quarter of the 4th century BCE from Kurgan 16/1901 near Yelizavetovskaya stanitsa (Artamonov 1969, pl. 329–330 Piotrovsky et al. 1986, p. 219) and from Kul-Oba kurgan near Kerch, Autonomous Republic of Crimea, Ukraine (Artamonov 1969, pl. 208, 209; Alekseev 2012, pp. 178–79).

(e) The distinctive feature is the ribbing covering the animal's torso. A direct analogy to this stylistic device is the depiction of a coiled predator on bridle bronze plaques (Figure 9a) from Kurgan 4 of the Seven Brothers burial mounds group, Krasnodar Krai, Russia, dated 440–430 BCE (Korovina 1957, p. 182, Figure 7, 5; Artamonov 1969, pp. 35, 96, Figure 62; Piotrovsky et al. 1986, p. 87): Ribbing decor covers not only the torso but also the animal's neck (the fluting, denoting a mane, is arranged horizontally). On the gold plaques of a wooden bowl from this assemblage, a scene of a predator attacking a deer is depicted (Artamonov 1969, pl. 120; Piotrovsky et al. 1986, p. 108). On this plaque, the predator's neck and body are also highlighted with a pattern, but in a different way: a reticulated ornament. The torso of a fantastic running predator, engraved on a bone plate from the 1938 Olbia excavations, is similarly marked with a reticulated pattern (Kaposchina 1950, pp. 51, 52, Figure 14). Only the torso is highlighted on a bronze figurine of a lioness from a burial of the late 6th–early 5th century BCE from the Zolotoi Kurgan, excavated in 1890 near Simferopol (now Autonomous Republic of Crimea, Ukraine) (Artamonov 1969, p. 105, pl. 75; Koltukhov 1999, pp. 14–15, Figure 5, 2; Alekseev 2012, pp. 122–23).

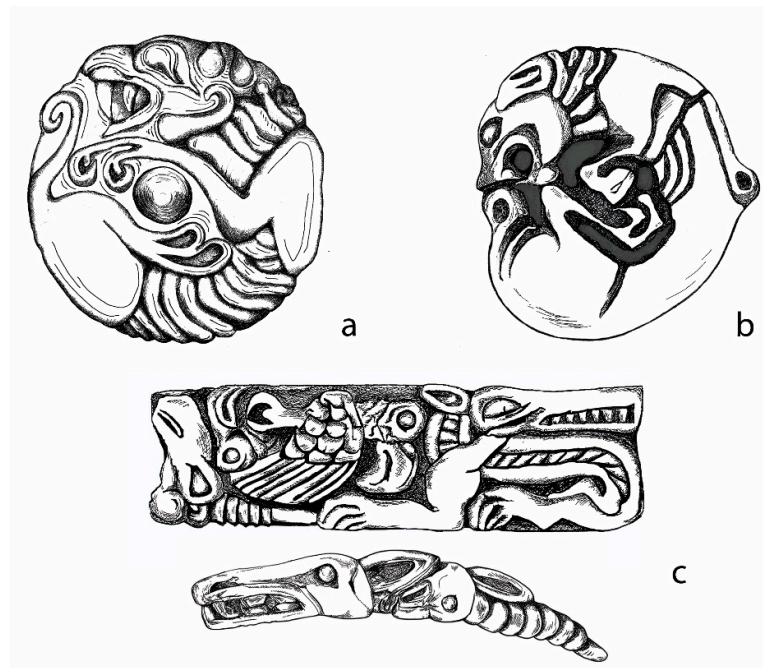


Figure 9. Parallels to the images on the appliqué: (a) from Kurgan 4 of the Seven Brothers burial mounds group; (b) Kurgan 5 on Cape Ak-Burun; (c) from Kurgan 1, Burial 3 of the Syntas I burial ground. Drawn by Evgenia Velychko and Yuri Polidovych.

(f) The rendering of the paw tips as two elongated, hooked claws is an uncommon stylistic device. The closest parallels are images of claws of curled-up predators on bronze bridle plaques from the mid-second half of the 5th century BCE, from Kurgan 4 of the Seven Brothers burial mounds group (Piotrovsky et al. 1986, p. 87) and Kurgan 5 on Cape Ak-Burun near Kerch, Autonomous Republic of Crimea, Ukraine, dated to the second half of the 5th century BCE (Yakovenko 1974, Figure 43, 3; Piotrovsky et al. 1986, p. 92) (Figure 9b). In general, the appearance of this claw depiction technique is consistent with broader stylistic trends of the 5th century BCE: images of predators with long, emphasized claws,

marked by curved relief lines, appeared at this time. A striking example can be seen in wolf-like predators from Kurgan 499 near Basivka village and Knyshivka settlement, Poltava Oblast, Ukraine (Galanina 1977, pl. 26, 20–23; Havrysh 1995, pp. 150–51, Figure 2).

(g) A long tail, curled into a ring at the end, is also a stylistic feature of the early Scythian period. At the same time, this element remained widely used in the 5th century BCE (Polidovych 1994, p. 66, Figure 2: 1–2, p. 68; Polidovych 2002, pp. 183, 184, Figure 1: 1–2).

(h) The additional elongated relief depiction behind the beast's back is the most enigmatic element. The artisan was forced to deform the predator's figure slightly to accommodate it within the circular appliqué. Without this constraint, the predator's back would therefore have been more rounded. On the majority of the appliqués, this edge is crumpled, rendering the additional element indistinct and altogether obscure. It is well-preserved in only a few instances, enabling identification of a sequence of rather large, convex bosses located behind a section of the beast's back. These bosses gradually decrease in size toward the top, with the uppermost boss having a pointed and elongated shape. Beneath these bosses is a relief oval, below which lies another scroll-like element. For certain representations from the late 5th to the first half of the 4th centuries BCE, a peculiar accentuation of the animal's vertebrae is characteristic—as seen, for instance, on the back of the fantastic horned predator on the golden plaque from the kurgans near Stanitsa Elizavetovskaya, Rostov Oblast, Russia (Borovka 1928, Pl. 20: B). Similarly, rows of bosses were used to depict hair (?) on the necks of ungulates, such as on the outer neckline of the fantastic moose-goat from the Solokha kurgan in the Zaporizhzhia Oblast, Ukraine (Borovka 1928, Pl. 3: G; Mantsevich 1987, pp. 63–64, cat. 39), or along the inner neckline of the stags from the same Solokha kurgan (Borovka 1928, Pl. 3: F; Mantsevich 1987, pp. 67–68, cat. 46) and Kurgan 5 near the village of Arkhangelska Sloboda, Kherson Oblast, Ukraine (A. M. Leskov 1972, pp. 31–32, 57–58, Photos 35, 36; O. M. Leskov 1974, p. 70, Photo 58). However, these represent different stylistic devices that circulated during a somewhat different, later period.

Likewise, the additional element on the depiction from Velyki Budky does not correspond to the accentuation of hair as seen on the shoulders of the coiled wolves rendered on the 5th-century BCE bronze plaques from Kurgan 499 near the village of Basivka, Sumy Oblast, Ukraine (Galanina 1977, Table 26: 20–23) and other similar images. On the Velyki Budky image, the row of bosses adjoins only a portion of the back, and the bosses themselves are uneven in size and shape. Furthermore, there are no grounds to interpret this element as a wing, as no feature points to such an identification.

The search for parallels has yielded an unexpected analogy: the image of an antelope head with a characteristic straight horn divided into separate bosses. In our case, the plausibility of such a comparison is suggested by the uppermost boss, which is elongated and pointed (=the tip of the horn), and the relief oval with a scroll beneath the bosses, which conventionally represents the animal's head—specifically, its eye and muzzle. Similar images are reproduced on objects originating from the sites of the Southern Urals region from the late 6th to the first half of the 5th century BCE, particularly from Burial 3 of Kurgan 1 of the Syntas I burial ground (Kadyrbaiev and Kurmankulov 1976, Figure 6, 4; 12, 1) (Figure 9c).

The image of the antelope spread across the eastern regions of the Eurasian steppe from the late 7th century BCE and became popular in the second half of the 6th to the first half of the 5th centuries BCE (Korolkova 2006; Bazarbayeva and Jumabekova 2023). Evidently, it replaced the more archaic image of the mountain goat, which was a prominent figure in the Iranian mythology of the Scythian period. However, the goat is not a steppe animal and was unfamiliar to its inhabitants. Perhaps for this reason, it was

replaced by an artistic image of an animal more familiar to steppe inhabitants: the antelope (saiga, dzeren) or the gazelle. The impetus for such a replacement could be the cultural circle surrounding the ruler from the Arzhan 2 kurgan, Tuva, Russia, dated to the last quarter of the 7th century BCE, where many artifacts with antelope images featuring short, straight or slightly curved horns were found (Čugunov et al. 2010, Taf. 4, 5, p; 9, 2, e; 13, 5–8; 14, 1, c; 36, 11; and others; Chugunov 2024, pp. 55, 61, 71, 319, 380–81, 412, and others, pl. 378, b). At the turn of the 6th–5th centuries BCE, antelope images appear on artifacts from kurgans in the Southern Urals, from which they presumably reached the inhabitants of the eastern borders of Scythia. It is important that antelope images, often only the head, were used primarily in combination with other images, particularly predators (Bazarbayeva and Jumabekova 2023, Figure 2), and these were not scenes of animal fights but compositions that, after Aleksandr Grach, can be called “enigmatic pictures” (Grach 1980, p. 78). The combination of animals in such compositions lacks an obvious plot; it appears as a gathering of figures, sometimes quite dense. The images on the appliqués from Velyki Budky, combining a curled-up predator figure and an antelope head, can also be interpreted as an abbreviated version of such an “enigmatic picture.”

The image of the predator from Velyki Budky combines diverse stylistic techniques—both archaic, traditional to the early Scythian “animal style,” and later ones—which makes it unique. The closest are the images of a curled-up predator on bronze plaques from Kurgan 4 of the Seven Brothers group and, to a lesser extent, from Kurgan 5 on Cape Ak-Burun. Both depict a lion, marked by a stylized mane and a typical muzzle with a toothed jaw. Seven Brothers Kurgan 4 is dated to the mid-third quarter of the 5th century BCE (Korovina 1957, p. 186; Goroncharovskii 2011, p. 122). A similar date is given for Ak-Burun Kurgan 5/1862 (Yakovenko 1974, pp. 104–5; Vinogradov 2015–2016, pp. 87, 90). It allows the image from Velyki Budky to be dated to the same period, which is not contradicted by the entire combination of analyzed stylistic techniques.

Another very similar image, stylistically belonging to the same group of curled-up predator images, exists. It is reproduced on a gold object identified as a sword pommel from the collection of the Metropolitan Museum of Art, New York, USA (Figure 10).²⁴ The image draws on stylistic elements from various traditions. The beast has a large head with an almond-shaped eye featuring a round pupil and two tear ducts, a heart-shaped ear, a spiral curl that extends from the lip line and marks the nose, and another spiral curl in place of the cheekbone. On the shoulder is the head of a bird of prey with a large, round eye, a cere in the form of a ribbed strip, and a short, massive beak with a hooked end. The torso is marked with ribbing. The hind part of the body and the paws are reproduced with a certain realism, in contrast to the symbolic depiction of other parts. Such stylistic eclecticism is unique and not found in other images of the Scythian period. Given its lack of archaeological provenance, this gold object could readily be regarded as inauthentic and attributed to a modern imitation of ancient artefacts. However, the cohesive integration of elements from different styles and periods may itself speak in favour of its authenticity, a view shared by the majority of researchers. Nevertheless, a comprehensive study of this artifact utilizing the full range of modern analytical methods has not yet been conducted, leaving room for doubt regarding its origin.



Figure 10. Object from Ziwiye assemblage. Metropolitan Museum of Art, New York.

The object entered the Met Museum in 1954 from a private collection. It was published by Charles Wilkinson, who noted its Persian origin (Wilkinson 1955, pp. 217, 218). André Godard and Roman Ghirshman (Godard 1962, p. 80, Figure 119; Ghirshman 1964, p. 117, Figure 158) included this image of a curled-up predator in their review of pre-Achaemenid art. Researchers noted its connection to the art of the 7th-century BCE Scythians and suggested that the object originated from Ziwiye.²⁵

The image of a curled-up predator from the Met Museum collection features vivid archaic stylistic elements of the Scythian “animal style,” particularly a heart-shaped ear and a lotus-like line of the lips and nose. This led early researchers to synchronize the image with the Ziwiye assemblage and attribute it to the circle of finds associated with the Scythian “animal style.” This assumption was accepted by many researchers of the early Scythian “animal style” (Bunker et al. 1970, p. 36, 52–53, cat. 13; Illinska 1971, p. 73, Figure 5, 7; Sorokin 1972; Artamonov 1973, pp. 126, 128, pl. 173; Lukonin 1977, p. 24; Zasedskaia 1979, p. 42, 43; Farkas 1979, pp. 47–48, 51, Figure 19; Barkova 1983, pp. 23, 24, pl. 2, 1; Illinska and Terenozhkin 1985, p. 43; Figure 2 on p. 40; Pogrebova and Raevskii 1992, pp. 87, 90–91, 105, 106, 115, 118, Figure 6, a; 14; Kurochkin 1993, pp. 93, 97, 180, Figure 1, 9; Perevodchikova 1994, p. 31, 43, 44, Figure 2, 12; Ivanchik 2001, p. 80, Figure 33, 16; Kantorovich 2002, pp. 97, 116, Figure 9, 2; Razmjou 2005, pp. 288, 311, Figure 36; Riabkova 2005, p. 61, pl. 5, 2; Makhortykh 2020, pp. 358–60, Figure 4, 1; and others).

However, in 1992, Pogrebova and Raevskii emphasized the stylistic distinctiveness of the curled-up predator image from all other objects from Ziwiye (Pogrebova and Raevskii 1992, pp. 90–91, 106). They also drew attention to the similarity of this image to the coiled predator image on bronze bridle plaques from Seven Brothers Kurgan 4 (Figure 9a), dated to the third quarter of the 5th century BCE (Pogrebova and Raevskii 1992, pp. 105, 106, Figure 6). True, the researchers did not date the predator from the Met Museum to the 5th century BCE. However, they noted that it is not early.

At the same time, stylistic parallels between the curled predator from the Met Museum and the one from Velyki Budky (images with a line for the jaw and nostrils, and a ribbed torso) provide further support for dating the artifact in the Met collection to the mid-5th century BCE. This date is also supported by the general composition of the image

(composition built on a circle, counter-parallel arrangement of legs, and the tail tip in front of the muzzle) and by placing a bird's head on the predator's shoulder, a feature characteristic of the late 6th–5th centuries BCE (Kantorovich 2002, pp. 97, 116, Figure 9, 2).

It can also be concluded that the gold object from the MMA is unrelated to the Ziwiye hoard, fully supporting Oscar White Muscarella's critical view of the attribution of many objects to the assemblage (Muscarella 1977). If authentic, the gold object is an interesting example of Achaemenid goldsmithing and evidence of contact with the population of the North Caucasus and the Dnipro Forest-Steppe region.

5. Conclusions

Based on archival documents, we identified an assemblage of gold objects originating from a Scythian kurgan, designated 2/M, excavated in the late 19th century by Serhiy Mazuraki near the village of Velyki Budky (now in the Sumy Oblast, Ukraine), which include a ring and seven plate appliques with images in the Scythian "animal style." The objects have a wide range of analogies, the analysis of which allows us to consider various issues of Scythian culture.

The ring belongs to a small group of items with a high conical shield, which also includes rings from Kurgan 8 near the village of Velyka Znamianka in the Dnipro Steppe region and a chance find near the village of Tahancha in the Right-Bank Dnipro Forest-Steppe. The decoration of these items is considered against a broad background of decorative traditions and the use of granulation and filigree in the ornamentation of various forms of jewelry from the second half of the 6th to the first half of the 4th century BCE. It suggests that conical-shielded rings were common in the northern Black Sea region throughout the 5th century BCE. The earliest of them is the ring from Velyka Znamianka, decorated with granulated triangles; its date is confirmed by the burial, which also contained a Greek black-glazed kylix from the last quarter of the 6th to the first quarter of the 5th century BCE. The ring from Velyki Budky, decorated with filigree spiral motifs, dates to a later period. Its use may be placed in the second to third quarter of the 5th century BCE. The ring from Tahancha, with filigree wire bent into the shape of the letter S, is tentatively dated to the second half of the 5th century BCE. All three signet rings were likely crafted by artisans working at different times in Bosphoran workshops, in response to the specific demands and aesthetic preferences of the local Scythian population. It cannot be ruled out that rings with conical shields were somehow connected to ritual gold cones, which spread throughout Scythia in the 5th century BCE.

The image of a curled-up predator on seven gold appliques from Kurgan 2/M near the village of Velyki Budky, in its compositional and stylistic features, corresponds to the artistic tradition of the "animal style" of the 5th century BCE. Using parallels, the appliques can also be dated to the second to third quarters of the 5th century BCE. Unique is the presence on the plaques of another image—the head of an antelope with a straight horn. Similar images from the late 6th to the first half of the 5th centuries BCE characterized the decorative art of the Southern Urals.

Stylistic elements, such as the depiction of the beast's lip and nose with a single line ending in a spiral curl and ribbed highlighting of the torso, allow the image from Velyki Budky and Kurgan 4 of the Seven Brothers group (Kuban region) to be compared with the curled-up predator on a gold artifact from the Met collection. Currently, this image is attributed to the 7th-century BCE assemblage, which comprises finds from 1947 near the village of Ziwiye, not far from the city of Saqqez in Northwestern Iran. The image has an eclectic character, as it contains elements from different periods and styles. If the authenticity of this object (regarding which doubts remain) is recognized, then, based on the available stylistic elements specific only to the 5th century BCE (the depiction of the lips, nose, and torso), the image on it should also be dated by later analogies. These include

the image's composition and the zoomorphic transformation technique, in which a bird of prey's head is superimposed on the predator's shoulder. It appears that the attribution of this object to the site of Ziwiye and its dating to the early Scythian period are both erroneous. This object undoubtedly belongs to the Achaemenid period, and its provenance could have been in the territory of Western Iran, Turkey, or another country in this region of Western Asia.

Thus, the assemblage of artifacts from Kurgan 2/M near Velyki Budky village, found in the collection of the Treasury NMHU, enabled us to study various aspects of the artistic traditions of the northern Black Sea region, the Kuban, the Cis-Urals, and even Western Asia. These observations and conclusions need to be corroborated by further research and new archaeological finds.

Author Contributions: Conceptualization, Y.P. and E.V.; methodology, Y.P. and E.V.; formal analysis, Y.P. and E.V.; investigation, Y.P. and E.V.; resources, Y.P. and E.V.; data curation, Y.P. and E.V.; writing—original draft preparation, Y.P. and E.V.; writing—review and editing, Y.P. and E.V.; visualization, Y.P. and E.V. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data used in this paper is all published and can be found in the referenced sources.

Conflicts of Interest: The authors declare no conflict of interest.

Abbreviations

AA	Artibus Asiae.
ESA	Eurasia septentrionalis antiquae.
АДУ	Археологія і давня історія України
АСГЭ	Археологический сборник Государственного Эрмитажа
ВДИ	Вестник древней истории
ИИАК	Известия Императорской археологической комиссии
КСИИМК	Краткие сообщения Института истории материальной культуры
МАИАСП	Материалы по археологии и истории античного и средневекового Причерноморья
НАВ	Нижеволжский археологический вестник
ОАК	Отчет императорской археологической комиссии
РА	Российская археология
СА	Советская Археология
СГЭ	Сборник Государственного Эрмитажа
ТГЭ	Труды Государственного Эрмитажа
ХСб	Херсонесский Сборник

Notes

1. The ring was considered to have lost its attribution (Petrenko 1978b, p. 63).
2. Currently, they are stored in the collections of the National Museum of the History of Ukraine and its branch, the Treasury of NMHU (formerly the Museum of the Historical Treasures of Ukraine).
3. The metal for the ring and appliqués was identified by a commission of the USSR Assay Service headed by Vera Zotova in 1988.
4. Treasury of NMHU, inv. A3C-657. Chance find of the late 19th century in Kaniv district of Kyiv Governorate (now Cherkasy district, Cherkasy Oblast, Ukraine).

5. Treasury of NMHU, inv. A3C-3656. Kurgan 8, Burial 1 near the village of Velyka Znamianka, Zaporizhzhia Oblast, Ukraine. Excavations by Vitalii Otroshchenko and Yurii Rassamakin, 1982.
6. For example, these are ancient Greek jewelry items from Scythian burials: a gold ring with a carnelian bead-insert from Kurgan 11, Burial 2 near the village of Lvove, Kherson Oblast, Ukraine (Berezova 2001, p. 47; Klochko and Bilan 2022, p. 55, Figure 4, 4); a ring bezel with a carnelian intaglio griffin from Haimanova Mohyla, late 5th century BCE (Bidzilia and Polin 2012, pp. 487–89, 744, Figure 225, 38, cat. 301; Velychko 2018, p. 79, Figure 1). Also, these are rings with carnelian inserts, specifically—from Amathus, Tomb 256, Sarcophagus II, 425–400 BCE (Williams and Ogden 1994, p. 233, cat. 167), or from a Hellenistic tomb on Mt. Aeto, Ithaka (Williams and Ogden 1994, p. 79, cat. 34).
7. Three gold rings with glass paste inlays from Scythian Kurgan 3, Burial 2 near Stare village, Kyiv Oblast, Ukraine (Illinska 1966, p. 157, Figure 2; Petrenko 1978b, pp. 63, 72, pl. 52, 22; Berezova 2001, p. 47, 52, Figure 21) or a ring with an emerald inlay from Thessaloniki, Greece, dated 330–300 BCE (Williams and Ogden 1994, p. 79, cat. 34).
8. The arrangement of the wires follows a pattern: Eight smooth wires are arranged one after another, followed by five twisted ones alternating with four smooth ones.
9. Such jewelry was found in five assemblages of the third quarter to the late 6th century BCE—in Graves 81/1911, 36/1912, 39/1912, 97/1913, and 100/1913 of the Olbia necropolis (Skudnova 1988, pp. 21, 84, cat. 122.17; p. 112, cat. 170.4; p. 114, cat. 172.1; p. 150, cat. 232.13, 234.4; Y. Kalashnik 2004, p. 39, 69, 70, Figure 11; Y. P. Kalashnik 2014, pp. 44–47). They also come from destroyed kurgans near the village of Yemchukha, Cherkasy Oblast, Ukraine (Onayko 1966, pp. 31–32, pl. XXII, 1–2; Kovpanenko 1981, pp. 21, 23, Figure 17, 8–9). In the “Zolotoi Kurgan”, excavated near Simferopol (now Autonomous Republic of Crimea, Ukraine) in 1890, three large golden “buttons” parallel to hemispherical ear-shield ornaments, decorated with granulation, were found (Artamonov 1969, pp. 18, 30, Figure 22; Koltukhov 1999, p. 11, 12, Figure 4, 10; 5, 6); the burial assemblage is dated to the first quarter of the 5th century BCE (Koltukhov 1999, p. 16). Hollow rhomboid beads from the second half of the 6th century BCE in graves 75/1910 and 97/1913 of the Olbia necropolis are also decorated with granulation (Skudnova 1988, pp. 21, 84, cat. 87, 1; p. 150, cat. 232.9; Y. Kalashnik 2004, p. 69; Y. P. Kalashnik 2014, pp. 42–43).
10. Finds from the Romny burial mounds (currently in the Sumy Oblast, Ukraine): Kurgan 4, Burial 4, excavated by Ivan Lynnychenko near the village of Vovkivtsi in 1897 (Illinska 1954, pp. 29–31, Figure 11, 5; Illinska 1968, pp. 52–53, 77, 139–40, pl. XLI; Klochko et al. 2021, p. 67, cat. 83); finds from the excavations of Serhii Mazaraki in the late 19th century and a jewelry piece of unknown origin (Khanenko and Khanenko 1900, p. 16, cat. 455, 455b, pl. XLIII, 455; Klochko et al. 2021, pp. 67–68, cat. 84–85).
11. Kurgan 383 near Hrushkivka village (now Cherkasy Oblast, Ukraine) (Bobrinsky 1902, p. 41, Figure 14; Klochko et al. 2021, p. 66, cat. 82).
12. Burial mound Malyy Chortomlyk and Kurgan 4 from the Didova Mohyla burial group near Nikopol, Dnipropetrovsk Oblast, Ukraine (Mozolevsky 1987, p. 73, Figure 6, 20; Klochko et al. 2021, pp. 68–70, cat. 86, 88).
13. Kurgan 3, Burial 6 near Yakymivka village, Zaporizhzhia Oblast, Ukraine ((Fialko 1991, p. 7, 10, Figure 6, 10; Klochko et al. 2021, pp. 70–71, cat. 89), Burial 1 of Kurgan 2 near Taborivka village, Mykolaiv Oblast, Ukraine (Klochko et al. 2021, pp. 71–72, cat. 91).
14. Kurgan 6, Burial 2 near Balabanu village, Moldova; Kurgan 3 of the Dort-Oba group in Crimea; Tomb 1-b of the Nymphaeum necropolis excavated by F. Biller, 1868 (Polin and Daragan 2025, p. 118, 121, Figure 106, 5–6; 107, 1–4).
15. Kurgan 4 near Novosilka village, Cherkasy Oblast, Ukraine (Bydłowski 1904, S. 59–60, Figure 64; Klochko et al. 2021, p. 75, cat. 96); Burial 2, Kurgan 8 near Vovchanske village, Zaporizhzhia Oblast, Ukraine (Polin and Kubyshev 1997, p. 9, Figure 9, 3–4; Klochko et al. 2021, pp. 76–77, cat. 97; Polin and Daragan 2025, pp. 111–12, Figures 102–103; 117, 1; 118, 3); Chmyreva Mohyla (Onayko 1970, p. 104, pl. XXXVI, 453; Petrenko 1978b, p. 30, pl. 19, 12, 13); Kurgan 9, Burial 4 near Mala Lepetykha village, Kherson Oblast, Ukraine (Vitryk and Danilko 2002, p. 139, Figure 5, 1); Kurgan 16 near Olefirshchyna village, Poltava Oblast, Ukraine (Kulatova 1990, p. 69, Figure 3, 3).
16. In particular, from the Romny kurgans (Illinska 1968, pp. 137, 140, Figure 38, 3–4; pl. VIII, 1; XLI, 6–10).
17. Boat-shaped earrings with the specified decor originate from eight assemblages (see full summary: Polin and Daragan 2025, pp. 112–22, Figure 104, 5–6; 105, 1–2; 109, 3; 111, 1–2; 113, 1–2, 5–6; 114, 1). These include two finds in the Dnipro Forest-Steppe region: Kurgan 6 near Lukashi village, Kyiv Oblast, Ukraine (Petrenko 1978a, pp. 47–48, Figure 2, 2–3; Klochko et al. 2021, p. 66, cat. 81) and Kurgan 5 of the Osnyagy burial ground, Poltava Oblast, Ukraine; four finds in the Steppe Black Sea region: Kurgan 7, Burial 2 near Serhiivka village, Kherson Oblast, Ukraine (Klochko et al. 2021, p. 73, cat. 93), Kurgan 38, Burial 3 near Liubymivka village, Kherson Oblast (O. M. Leskov 1974, p. 63, Figure on p. 37; Klochko et al. 2021, pp. 73–74, cat. 94), Kurgan 45, Burial 1 near Liubymivka village, Kherson Oblast (O. M. Leskov 1974, p. 62, Figure 51; Klochko et al. 2021, pp. 74–75, cat.

- 95), and a burial mound excavated in 1964 near Dniprorudne, Zaporizhzhia Oblast, Ukraine (Murzin 1984, pp. 32–33, Figure 18, 9); one find in the Middle Don region: Kurgan 6, Burial 1 of the Ternove I burial ground, Voronezh Oblast, Russia (Guliaev 2010, pp. 109, 110, Figure 10, 16–17; 11); and one other find from the purchases of the Imperial Archaeological Commission in 1903, which possibly originates from Olbia (OAK 1906, p. 148, Figure 288).
18. A ring, possible from Corfu (British Museum collection), c. 500 BCE, with a movable cylindrical bezel, on one side of which a six-petal rosette is depicted, on the other, a griffin, and the low side walls are decorated with a smooth wire that winds in a rounded meander between ribbed wires (Marshall 1907, p. 9, Figure 12, no. 41; Williams and Ogden 1994, p. 50, cat. 1).
 19. Similar elements are found on gold objects of Greco-Scythian origin from the second half of the 5th–early 4th century BCE (see summary: M. Y. Treister 2005, p. 515, footnote 192): on the ends of a torque from Burial 2 of Kurgan 2 near the village of Kornivka, Zaporizhzhia Oblast, Ukraine (Kovaliov and Polin 1991, pp. 39, 51, Figure 2, 2–3; Rolle et al. 1991, p. 315, cat. 106, photo on p. 386), and on the ends of a braided necklace and a rhyton from Bratoliubivskiy kurgan near the village of Bratoliubivka, Kherson Oblast, Ukraine (Kubyshev et al. 2009, pp. 70–72, Figure 11, photos 14–17; p. 83, Figure 13, photos 24, 25) and a torque from Talaivskiy kurgan of 1891 near the city of Simferopol, Autonomous Republic of Crimea, Ukraine (Petrenko 1978b, p. 46, pl. 31, 1; Piotrovsky et al. 1986, pp. 236–37; Koltukhov and Senatorov 2015, Figure 5, 6), on the jewelry top of a whetstone from the kurgan near the city of Berdiansk, Zaporizhzhia Oblast, Ukraine (Cherednychenko and Murzin 1996, pp. 73, 76, Figure 10) and the Central Tomb of Malaia Bliznitsa, Krasnodar Krai, Russia (Piotrovsky et al. 1986, pl. 177; Vinogradov 2004, p. 97, Figure 5, 16), on a gold tube from Kurgan 3 in the Staikyn Verkh locality near the village of Oksiutyntsi, Sumy Oblast, Ukraine (Illinska 1968, p. 28, pl. VIII, 4). These elements are also found on jewelry pieces from various regions of the Greek world—bracelets with lion-head ends from the “stone tomb of 1854” in Panticapaeum, Kerch, Autonomous Republic of Crimea, Ukraine (Williams and Ogden 1994, p. 156, 157, cat. no. 96; Y. P. Kalashnik 2014, pp. 80–81); spiral-shaped earrings from Panticapaeum (Williams and Ogden 1994, p. 152, cat. no. 93); earrings from Kourion, Cyprus, 450–400 BCE (Williams and Ogden 1994, p. 240, cat. 175); and others. At the same time, in the 5th–4th centuries BCE, another variety of this decorative element was popular—short S-shaped signs, the ends of which are twisted into spirals of two to three turns; they are paired with symmetrically opposite ones, forming a netted band. Such decoration can be seen on a golden rhyton from Uliap Kurgan 4, Republic of Adygea, Russia (A. M. Leskov 1985, p. 29, Figure XII, p. 117, cat. 364; A. Leskov 1990, p. 188, Figure 187, 188); on the metal top of a whetstone from Talaivskiy Kurgan of 1891 (Piotrovsky et al. 1986, p. 175; Koltukhov and Senatorov 2015, Figure 5, 6); on the ends of a torque with rider figures from Kul-Oba burial mound near Kerch, Autonomous Republic of Crimea, Ukraine (Piotrovsky et al. 1986, p. 126, 127; Williams and Ogden 1994, pp. 137–39, cat. no. 81); and on the frame of the fasteners of a pectoral from Bolshaia Bliznitsa, Krasnodar Krai, Russia (Piotrovsky et al. 1986, p. 255). Further transformation of the motif is seen on an *ampix*, a golden headdress jewelry piece, from Starshy Brat kurgan of the Try Braty kurgan group, near Kerch, Autonomous Republic of Crimea, Ukraine (Piotrovsky et al. 1986, p. 223). Subsequently, in the second and third quarters of the 4th century BCE, S-shaped elements remained widely used, but were predominantly incorporated into compositions alongside palmettes.
 20. Hereinafter, the names of Scythian peoples are given according to Herodotus’ *Histories* (5th century BCE): Herod. IV, 17–21.
 21. For a complete summary of finds and historiography of the issue, see Polidovych (2023). Indeed, golden cones mostly have a smooth surface. Among the 20 finds, two early 4th-century BCE artifacts stand out—a cone from the Bratoliubivskiy kurgan, whose surface is covered with embossed images of animal combat scenes (Kubyshev et al. 2009, pp. 32–34, Figures 9–10, photos 1–13), and an object from Perederiieva Mohyla near Shakhtarsk, Donetsk Oblast, Ukraine, on the walls of which scenes of Scythian confrontation are depicted, and on the top, a rosette (Moruzhenko 1992, pp. 70–74, Figures 3–7; Moroujenko 1994; Polidovych 2019, pp. 230–36, Figures 1–8).
 22. Images on a horn scabbard tip from sword sheaths found in burial mounds in the Darivka area near Shpola (Cherkasy Oblast, Ukraine) and on a bone bow tip from the Western Bilsk hillfort in the Poltava Oblast, Ukraine (Bobrinsky 1894, pp. 131–32, Figure 13; Shramko 2015, pp. 487–92, Figure 1, 1; 2, 1; p. 54, Figure 3, 3).
 23. Images on a boar’s tusk from the Romny kurgans (Khanenko and Khanenko 1899, pl. XXXI, 512), on bronze plaques from Group II, Kurgan 6, Burial 1 near the village of Kovalivka, Mykolaiv Oblast, Ukraine, and from Kurgan 1 of Group II near the village of Staryi Merchyk, Kharkiv Oblast, Ukraine (Kovpanenko and Buniatian 1978, p. 139, Figure 1, 39; Bandurovskii 2002, p. 90, Figure 1; Okatenko and Zymovets 2024, pp. 68–69, 92, Figure 8, 1, add. 13).
 24. The Metropolitan Museum of Art, Gift of Ernest Erickson Foundation, 1988. Object Number: 1988.102.38 (Available online: <https://www.metmuseum.org/art/collection/search/327362>; accessed on 15 July 2026).
 25. In 1947, local residents north of the village of Ziwiye, near the city of Saqqez in Kurdistan Province, Iran, discovered a complex, or “treasure,” of many artistically crafted items from the 9th–7th centuries BCE. Archaeological research conducted a few years

later investigated a fortress dating to the Mannaeen state. One of the excavated objects was the palace of local rulers. Researchers of the 1947 finds assumed that they originated from one or more burials of noble persons. The finds, among which were many gold items, were partially broken and dispersed among museum and private collections. André Godard was the first to gather them within a single publication (Godard 1949, 1950). Over time, researchers managed to create a comprehensive picture of the finds, which took their place in the history of ancient Iranian art (Ghirshman 1950; Porada 1962, pp. 123–41; Ghirshman 1964, pp. 98–125). The publication of artifacts that immediately spread to various museums and private collections, as well as exhibitions in France and the USA, provoked a fashion for Ziwiye among collectors. This led antiquities dealers to attribute various items to the “Ziwiye hoard,” which, at best, originated from Northwestern Iran (Muscarella 1977). Similarly, thanks to André Godard and Roman Ghirshman, a golden object depicting a curled-up predator also “received its residence permit” in Ziwiye. Among the finds of 1947, a group of objects decorated with animal images, executed in a style close to the early Scythian “animal style,” stands out (Lukonin 1977, pp. 23–25; Pogrebova and Raevskii 1992, pp. 85–88, Figure 1). Maria Pogrebova and Dmitry Raevskii identified the initial stage of the “animal style,” named after key reference assemblages, as Saqqez–Kelermes and dated it to the mid-to-late 7th century BCE (Pogrebova and Raevskii 1992, pp. 161, 197). At this stage, a unique artistic motif—the curled-up predator—became widespread. According to researchers’ general assertion, it is a creation of the “animal style” of the peoples of the Eurasian steppes and is unknown in the art of others.

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