THE GOLD TREASURES OF THE DACIANS

Review
DOI: 10.5937/RGD240028B

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Abstract: *Artifacts discovered in Transylvania attest to the fact that gold mining and processing began here 6,000 years ago. The Dacians took over the craft from the Thracians, the peremptory proof being the multitude of treasures kept in about 40 museums and collections in Romania and abroad. It is estimated that in the pre-Roman period the Dacians extracted about 200 tons of gold, mostly from alluvium, but also from the underground, as shown by the C14 dating of some fragments of wooden supports in the old mining works at Roşia Montană.*

Key words: DACIAN GOLD, GOLD TREASURE, KOSONS, DACIAN BRACELETS.

INTRODUCTION

The archaeological discoveries made in the Carpatho-Danubian area showed that the first metals used by our ancestors were copper and gold, known since the end of the Neolithic era. They were neither the first nor the last to use these metals, joining those who populated old Europe. The first metal tools and weapons were made of native copper, malleable, ductile and tenacious and particularly resistant to corrosion. Later, copper was obtained by reducing the ores, melting and casting it into pieces. The first copper objects were ornaments, small household utensils and cult objects, belonging to the Cucuteni (Moldova), Boian (Muntenia), Verbicioara (Oltenia) and Turdaş (Transylvania) cultures, so that towards the end of the Neolithic, tools appeared of copper (axes and hammers), in the cultures of Gumelniţa (Muntenia), Decea Mureşului and Ariusd (Transylvania), Sălcuţa (Oltenia) and Cucuteni (Moldova). In 2013, in Silistra, in the south of Dobrogea, the largest deposit of copper axes in Europe was discovered, dating from the period 4,500 – 4,200 BC. The deposit contains 18 ordinary axes and 4 hammer-axes, with a total mass of 11,629 kilograms and is exhibited at the History Museum of Russe - Bulgaria. During the time of Mircea the Elder, Silistra belonged to Wallachia, under the name of Dârstor (from the Latin Durostorum).

DACIAN TREASURES

Towards the end of the Neolithic, in parallel with the use of copper, gold was also used, especially to make ornaments. We assume that native gold found in river sands or vein outcrops was first used. Over the years numerous treasures have been discovered surviving from those ancient times. Thus, in 1912 a peasant from Moigrad – Sălaj, while ploughing his field near the Roman fort at Porolissum, found the oldest massive gold hoard in Romania. Later, it was established that it would be 6,000 years old, coming from the first half of the 4th millennium BC, that is, from the Neolithic era. He tried to sell the pieces of yellow metal at the fair in Zalău, but because no one bought them, he gave four of them to a curator in Cluj, for a ridiculous amount, after throwing away a few other fragments, which he did not know what to do. The four pieces, located today at the National History Museum of Romania in Bucharest, weigh 856.125 grams and represent the images of anthropomorphic idols, symbols of the earth's fertility. The main piece weighs 800 grams and is considered the largest Neolithic gold object discovered so far in the world.

In 1981, another gold treasure was discovered in Sultana – Călărași, dating from the last part of the Neolithic, consisting of four discoidal pendants, four stallions (spiral tubes) and a chain of seven links, all weighing 36.170 grams. There are similarities with the Moigrad hoard, although the pieces were found in remote areas of the country. All the objects were arranged around a small domestic sanctuary, either on the occasion of building a new hearth, or in a funeral space. The Sultana treasure is kept in the Gumelniţa Civilization Museum in Olteniţa.

Figure1, The treasure from Moigrad

Figure 2, The treasure from Sultana

An important stage in the evolution of mankind is the appearance and generalization of bronze metallurgy (3000 – 1200 BC), called the *Bronze Age*. Since the Neolithic, people have made tools and weapons from copper, a metal too soft for such uses. By alloying copper with tin, but also with other metals, bronze was obtained, a harder, elastic, corrosion-resistant material, with a lower melting temperature and which could be cast easily due to its high fluidity and lack of gas absorption. For almost two millennia, bronze was the main material for making tools (axes, hammers, sickles, knives) and weapons (battle axes, spear and arrowheads, daggers, shields). Deposits of such objects

were discovered especially in Transylvania and Banat, where there were raw materials for obtaining bronze.

In parallel with bronze metallurgy, the extraction and processing of gold was perfected. The number of treasures discovered in Romania dating back to the Bronze Age is impressive. Thus, in Perşinari – Dâmboviţa, several gold weapons were discovered between 1954 and 1962, estimated to be 3,700 years old: a sword weighing 3 kilograms and 12 short daggers, each weighing between 230 and 500 grams. The sword was preserved fragmentary, missing its point and handle, and was cast and finished by hammering and grinding. Unique in Europe, the sword has elements of Mycenaean influence, proving the close ties between the native population and that of Mycenaean Greece. The daggers have triangular shapes, are short and without handles, have lanceolate and flared blades arched towards the base, with a round median rib. All are kept at the National Museum of Romanian History in Bucharest (Figure 3).

In 1980, in Hinova – Mehedinţi, the largest prehistoric hoard in Romania was discovered, having 9,639 pieces and weighing almost 5 kilograms, dated to the 12th century BC. The largest piece weighs 580 grams and the smallest 7.5 mg. Excavations began in 1976, in the area of the Roman fort in the locality, before the construction of the Portile de Fier II hydroelectric plant. The treasure contains several types of ornaments for men and women: a diadem, bracelets, pendants, necklaces, earrings, rings and beads. The multitude and diversity of the pieces indicate the existence of a workshop that made such ornaments for the aristocracy of the North–Danube Thracian tribes. The objects were created with great talent, the skill of the craftsmen impressing even today with their beauty. And this treasure is kept at the National History Museum of Romania in Bucharest (Figure 4).

Figure 3, The treasure from Perşinari

Figure 4, The treasure from Hinova

Two more treasures dated to the end of the Bronze Age were discovered on the territory of Romania, one in Biia – Alba and another in Rădeni – Neamţ. The gold vessel from Biia (Figure 5) was discovered by chance in a sand quarry on the banks of the Târnava river in 1895 and dated as belonging to the 13th – 12th centuries BC. Made of hammered gold leaf, the vessel has a mass of 143.92 g, a height of 5.50 cm, a diameter of 9.80 cm

and is ornamented with concentric circles and conical projections and with zigzag incised lines, having a body flattened hemispherical, with the edge facing outwards and two arched downwards. It was probably a ritual vessel, used for sprinkling and ablation. It is kept at the Treasury Hall of the National History Museum of Romania in Bucharest.

Figure 5, The golden vessel from Biia

Figure 6, The Getae treasure from Rădeni

The treasure from Rădeni – Neamţ (Figure 6) has a more special history. Discovered during some agricultural work, in 1965, it originally had eight pieces, of which only five were later recovered, the others disappearing without a trace. Three are preserved in Piatra Neamţ, and two in Bucharest. From a morphological point of view, it is about cups with one or two slightly raised tops and weighing between 250 and 400 grams. Each piece was obtained from a gold leaf, by beating on a mould, and the turns were fixed by riveting. The treasure was dated to the 12^{th} – 11^{th} centuries BC, having a cultic purpose.

Then followed the first Iron Age (1200 – 500 BC), also called the *Hallstatt Age,* after the name of a locality in Austria where, in 1734, a well-preserved human corpse was found in salt. The main invention of the era was the metallurgy of iron, which had revolutionary effects in the field of making tools and weapons, but also in the production of goods, trade and in the development of social and political structures. At the beginning of the Hallstatt era, interest in iron was rather low, due to the fact that it was too soft for the manufacture of weapons and tools. The first improvement came with the use of natural draft, by forcing air into pits dug on steep slopes, lined with clay and filled with iron ore and charcoal. In this way the temperature in the furnaces increased, leading to the production of an iron-carbon alloy called *steel* and to the easy separation of the steel from the slag by forging. Steel has very good mechanical properties, especially resistance to breaking, elasticity, plasticity, tenacity, hardness and wear resistance.

The mining and processing of Transylvanian gold continued in the same centres as in the previous era. The hoards from Sacoşu Mare – Timiş and Peretu – Teleorman are representative of the first Iron Age. The treasure in Timiş was discovered in the fall of 1960 by a local who was digging holes for planting vineyards. The man did not realize that the unearthed pieces were made of gold, keeping them in a warehouse for almost a year, after which he handed them over to the state. The hoard is composed of 25 pieces (ingots, jewels and spiral wires), weighs 1,298.28 grams and is dated to the Hallstatt Iron Age. It is kept at the National History Museum of Romania in Bucharest (Figure 7).

The treasure from Peretu was found in a Thrace–Getic princely tomb following archaeological excavations in 1970–1971, in a flattened tumulus on the right bank of the

Vedea River and contains 50 gold-plated silver objects, among which notice a helmet of about 750 grams. The princely tomb was discovered by a tractor driver who was levelling the earth on the mound with the blade of the tractor (Fig. 8). The treasure helmet is part of a series of five almost identical artifacts, discovered at great distances from each other (Agighiol – Tulcea, Coţofeneşti – Prahova, Cucuteni – Iaşi and Portile de Fier – Mehedinţi), which demonstrates the close ties between the Thracian tribes of north of the Danube. Comparing all these helmets, the researchers concluded that the Thracians had an emblematic representation of their traditions, with faunal and plant elements.

Figure 7, The treasure from Sacoşu Mare

Figure 8, The treasure from Peretu

In 1931, after what was written by Pârvan, in the locality of Agighiol located in the north of Lake Razelm in Dobrogea, at the place called *Movila lui Uță,* an impressive treasure of gilded silver objects was discovered, in a funerary complex with stone and wooden constructions, consisting of two princely burial tombs and an access corridor. The complex was located in a mound with a diameter of 32 m and a height of 2 m. Among the gold and silver pieces, a helmet, two chnemids (foot protectors), two goblets, five phiales (hemispherical vessels with an upturned lip and neck short), numerous harness appliques of various shapes, decorated with zoomorphic motifs. Archaeologists have dated the treasure as belonging to the century IV BC. It is kept at the National History Museum of Romania in Bucharest (Figure 9).

Figure 9, The treasure from Agighiol

Figure 10, The treasure from Cucuteni

A little later, in 1959, a gold treasure of about 2.5 kilograms was discovered in Cucuteni – Iași. In its composition are artifacts with a ritual and apotropaic character, objects many of which are still present in a fragmentary state. The main parade object is the gold Mithraic helmet with various symbolic representations, two spiral bracelets (one of

which is only in fragmentary form), a necklace and a number of harness appliqués and clothing decorations. The lot of objects that we have today seems to represent the most important part of the original deposit, but not in its entirety. The quality of the gold from which the hoard is made is between 18 and 24 carats, whose base piece is a high helmet, worked by cold hammering through the *au repoussée* process (technique of processing a metal to obtain a decoration in relief). The height of the helmet is 34.50 cm, it has a maximum diameter of 25 cm, diameter at the base of 21 cm and weighs approximately 500 grams. Another high-value piece of the hoard is a cylindrical spiral bracelet of about 800 grams, with two bison or bour heads. The treasure also belongs to the 4th century BC. and can be admired at the National History Museum of Romania in Bucharest (Figure 10).

In 1913, a silver hoard with an unknown number of pieces was found in the area of the cataracts from Porțile de Fier – Mehedinţi, which entered a private collection in Vienna. Some pieces later ended up in the US. Among them, a silver bowl with birds and deer is at the Metropolitan Museum of Art in New York (Figure 11) and a helmet similar to that of Peretu – Teleorman, exhibited at the Museum of Art History in Detroit (Figure 12). The helmet has on the right cheek an eagle with a rabbit in its claws and a fish in its beak, and on the left cheek a stag.

Figure 11, The bird and deer bowl

Figure 12, Helmet similar to the one from Peretu

The hoard owned by the Museum of Art History in Detroit most likely dates from the 4th century BC, from when the hoard from Agighiol also dates, with which it is very similar, being discovered by a shipwrecked sailor in the waters of the Danube, on the rocks from the Porțile de Fier. The number of pieces in the hoard is unknown, but some of them ended up in the collection of Franz Trau in Vienna and in the Muzeul Porților de Fier in Turnu Severin. From here, also in pieces, it was acquired by various collectors, arriving, the helmet at the Museum of Art History in Detroit, and the situla-type vessel at the Metropolitan Museum in New York. At the museum in Detroit there is also an aryballos-type vessel, ornamented with specific Dacian motifs. Later, in the 70s, the hoard from Peretu – Teleorman county was also discovered in which there is also a variant of the same type of silver helmet, which made specialists talk about a workshop where both were made helmets. Given this origin, the helmet and goblets are also known as the

Treasure from Porțile de Fier. For a long time, this important discovery remained almost unknown to Romanian archaeologists, being for the first time treated in a specialized Romanian work, in 1969, when the historian and archaeologist Dumitru Berciu published his remarkable work *„Tracho-Getic Art”,* dedicated exactly to the aristocratic style animal from the 6^{th} – 4^{th} centuries BC.

We left behind two categories of gold artifacts that brought the Dacians fame all over the world: kosons and bracelets. Kosons are the only gold coins from the time of Dacian royalty, found only in Transylvania, in the area of the fortresses in the Orăștiei Mountains. They have not been discovered anywhere in the world, proof that they did not circulate. The obverse of the kosons represents an eagle sitting on a sceptre and holding a laurel wreath in one claw, and on the reverse three figures appear, of which the central figure is a leader, and the lateral ones, two lictors armed with a bundle of clubs and a double-edged hatchet, insignia of the magistrate who can sentence to the punishment of beating or beheading. The monogram ΚΟΣΩΝ also appears on the reverse.

There are two types of kosons (Figure 13): some with the monogram ΚΟΣΩΝ, more numerous and others without monogram, fewer. The first ones contain 94.70% gold, 5% silver and 0.30% copper, an alloy from the south of the Danube, somewhere in the Balkans, and the others come from a Transylvanian alloy with up to 88.44% gold, 10.71% silver and 0.85% copper, with traces of arsenic, tellurium and antimony. Vasile Pârvan states that the monogrammed coins were minted somewhere in the south of the Danube, having the weight of a Greek stater (8.40 – 8.50 grams), but with images inspired by the Roman republican denarius. Vasile Pârvan, Theodor Mommsen, Ludwig Friedländer, Ioan Mitrea, Hadrian Daicoviciu and Aurora Petan assume that the Roman senator Marcus Junius Brutus, the famous assassin of Caesar, would have paid a large group of Dacian mercenaries with these coins to fight alongside him at Philippi, in Macedonia, against the triumvirs Antonius, Octavian and Lepidus, in the battle of 42 BC. The assumption is logical: the kosons would have been minted in Macedonia, probably at Amphipolis, where there was a famous mint. Regarding the monogram ΚΟΣΩΝ, there are two hypotheses: either those who minted the coins only knew Greek writing, or they were intended for mercenaries who used the Greek alphabet. As for the kosons without monogram, they were probably minted by the Dacians, in a small number of copies, imitating the first ones.

Figure 13, Dacian koson

Almost 1,600 years have passed. In 1543, some fishermen on the Strei river, near the village of Sântămaria de Piatră, discovered a cache with many gold coins and some gold

objects, including a spiral snake. They shared the treasure in Băcia, in the house of one of them. The news quickly reached the ears of bishop Gheorghe Martinuzzi, the new governor of Transylvania (1541 – 1551), who arrested the discoverers and confiscated their gold. What is certain is that Martinuzzi became rich suddenly, throwing gold left and right. Moreover, it is said that the bishop would have given part of the money to the Moldavian voivode Petru Rareş, his ally against Habsburg influence. Martinuzzi did not enjoy much the brilliance of the yellows, because in 1551 he was killed in his castle in Vinţu de Jos by order of the imperial general Giovanni Battista Castaldo, with the approval of Ferdinand I of Habsburg, king of Bohemia and Hungary.

The second discovery of kosons dates back to the period 1803 – 1805. In 1803, two farmers found more yellow ones in the Orăștiei Mountains, which they began to sell. The Austrian authorities were alerted and sent a team of researchers to the area, which did not find much, but discovered the ruins of the Dacian residence at Sarmisegetuza Regia.

There have been sporadic discoveries of kosons, but the last and probably the biggest occurred after the Revolution of 1989, when cultural criminality took place aggressively and non-stop in the mountains of Orăştie, with great damage to the national cultural heritage. The treasure hunters then took advantage of the lack of legislation to protect the archaeological heritage. Equipped with high-performance metal detectors, they rummaged through all the archaeological sites unhindered, discovered kosons and put them on the Western market in such large quantities that their price dropped. No one will ever know how bad these bastards have done. The state recovered some from abroad, but at very high costs.

The Dacian gold bracelets were discovered through archaeological looting, on the rocky and steep slope of a valley about 600 meters from the sacred precinct of the Dacian capital at Sarmisegetuza Regia. Treasure hunters have found 24 spiral bracelets that they fraudulently smuggled out of the country and sold on the antiquities black market for huge sums. Until 2011, the Romanian authorities managed to recover 13 bracelets, with weights of 682.30 – 1,196.03 g, unfolded lengths of 177.20 – 288 cm and with coil diameters of 91 – 123 mm. The fact that the remaining 11 bracelets are still in the possession of unknown collectors represents a huge loss for the national cultural heritage. The spirals come from rectangular bars of gold, by cold hammering, followed by perforation and engraving, to obtain the decorations, this being a typical method used by the Dacians in the 10th century IV-I BC. The spirals end at both ends with ends. zoomorphic (wolf, snake or dog), with straight cut muzzles and eyes and eyebrows represented by curved lines. The bracelets were probably votive offerings brought to a telluric god, the rightful owner of gold from the earth, being used during initiations or occult ceremonies, by certain social categories, who had important positions in the state: king, nobles from the royal entourage, aristocrats and priesthood. Historians and archaeologists estimate that the bracelets were buried – but not necessarily made – in the period 100 – 70 BC, when the first Dacian religious sanctuaries also appeared.

The Dacian bracelets represent the most important archaeological discovery of gold objects on the territory of our country, after the Treasure of Pietroasele. The 13 recovered

bracelets weigh over 12 kilograms, compared to the 19 kilograms of the Treasure from Pietroasele. Their arrangement around the sanctuary and the fact that they were used very little or perhaps not at all, indicates that they were dedicated to the gods, to attract their favour in times of austerity. However, they have a much older history, going back to the Bronze Age. The first such spirals had zoomorphic heads, usually snake, wolf or ox. The spiral motif was associated with the solar cult, being a legacy of the local Chalcolithic culture or a Mycenaean influence (Sacoșu Mare, Firiteaz – Arad, Săcueni), and the animal head motif could have been brought by proto-Indo-European migrants (Pipea – Mureș, Biia – Alba, Șeica Mare, Cucuteni). All were made of unrefined gold, originating from the Apuseni Mountains or from Balkan sources, and are exhibited in warehouses or museums in Bucharest, Cluj-Napoca, Budapest, Vienna and Belgrade. Among these, two gold bracelets that are part of the Hinova – Mehedinți Treasure (12th century BC), discovered in 1980, stand out (Figure 14).

The first bracelet is made of a single sheet of gold, weighs 580 grams and is decorated with 5 gold buttons, riveted on each end. The second has 6 spirals and weighs 469 grams, being made from a solid gold bar.

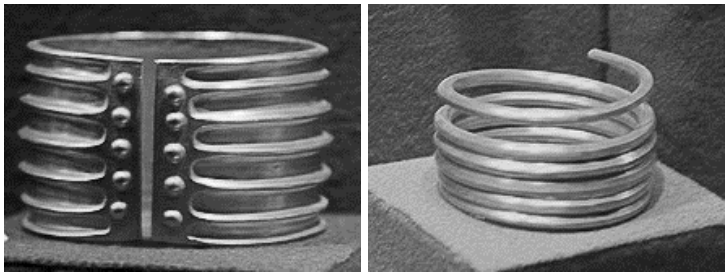

Figure 14, Dacian gold bracelets from the Hinova Treasury (12th century BC)

The existence in one place, at Sarmisegetuza, of the immense Dacian treasure looted by the Romans, suggests that there was a central control of the circulation of precious metals. According to most historians, this type of centralized control explains the rarity of archaeological finds consisting of gold artifacts for the period between the 3rd century BC and I AD. The existence of the treasures of the Dacian kings was also confirmed by the discovery of large spiral gold bracelets from Sarmisegetuza, which the Romans did not find.

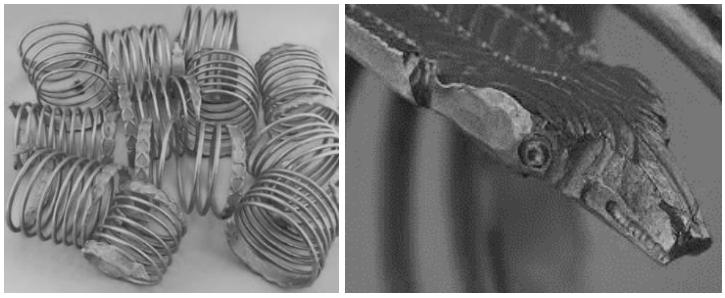

Figure 15, Dacian bracelets from Sarmisegetuza Regia

The bracelets were expertly examined in France, the USA, Germany, Italy and Romania, confirming without a doubt their Dacian origin, by comparing their chemical compositions with those of some samples from Valea Pianului – Alba and from the Brad area. All were made from a mixture of alluvial gold (which contains tin) with Philonian gold (which contains antimony). The results of the analyses are presented in the following table (Table 1).

Table 1, Chemical composition of bracelets

Bracelet number	**Gold [%]**	**Silver [%]**	**Copper [%]**	**Tin [mg/kg]**
1	89.8	9.5	0.6	200
2	78.2	20.3	1.5	Under 60
3	82.4	16.2	1.4	360
4	91.5	8.1	0.4	125
5	92.8	6.9	0.3	Traces
6	92.0	7.1	0.9	230
7	92.9	6.3	0.7	Traces
8	85.0	12.8	2.1	1500
9	87.1	12.2	0.6	Under 120
10	88.7	10.3	0.9	425
11	86.1	12.6	0.7	400
12	83.5	14.3	1.0	500

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