THE LAND OF WHITE GOLD

EXHIBITION GALLERY TEXTS (OUTSIDE THE DISPLAY CASES)

Exhibition title

The Land of White Gold
Galician Goldwork from Its Origins to the Roman Empire

Quotation from Strabo

"Among the Artabri, the most remote peoples of Lusitania to the north and west, [Posidonius] states that the earth is covered with silver, tin and white gold (for it is mixed with silver); that the rivers carry this earth along; and that the women dig it up with hoes and wash it in woven sieves"

Strabo, Geography, III, 2, 9

Exhibition introduction

The north-west of the Iberian Peninsula has been renowned since prehistoric times for its rich gold resources, described by classical authors such as Strabo and Pliny. Place names and an extensive oral tradition populated by mouras and treasures also reflect the region's long association with this precious metal.

The abundance of gold and the region's geographical characteristics help explain the development of a goldworking tradition that ranks among the most important in Europe at the time, both for the quantity and quality of its objects. This tradition dates back to the earliest stages of metalworking, in the mid-third millennium BC, and evolved until contact with Rome. Over these 2,500 years, influences from the Atlantic and Mediterranean worlds reached the north-west. Reinterpreted by the skilled hands of local craftspeople, they gave rise to distinctive creations of great technical sophistication.

Drawing on cutting-edge research, this exhibition explores how gold was obtained and accumulated, the techniques used to work it, and the functions and meanings of the objects made from it. As in other cultures of the past, communities in the north-west used precious metals to make personal ornaments. Yet these objects were far more than mere jewellery. Diadems,

torcs and earrings speak of technological innovation, communal property, power and inequality, gender identities, cosmologies and esoteric knowledge, journeys to distant lands, religious beliefs and different notions of value...

The full establishment of Roman rule in the region following the end of the Cantabrian Wars (19 BC) marked the decline of this goldworking tradition. Nevertheless, its legacy endured through subsequent periods of Galician history and into the modern world. Chance discoveries of these objects, and memories of them, gave rise to oral traditions, literary works and private collections, many of which eventually entered our museums. Today they inspire goldsmiths, have become powerful icons of collective identity and are studied in advanced research centres.

A 4,500-year spiral that, far from coming to an end, still has a long way to go.

SECTION 1 | OBTAINING GOLD

Gold is a rare, lustrous, corrosion-resistant, ductile and malleable metal. These properties explain why it has been prized since ancient times and invested with profound symbolic meaning. The earliest evidence of goldworking comes from the Varna necropolis in Bulgaria, in the mid-fifth millennium BC, followed shortly afterwards by evidence from Egypt and the Near East.

The north-west of the Iberian Peninsula was one of the ancient world's major gold-producing regions. Soon after the Roman conquest of the territory was completed (19 BC), the imperial administration organised the systematic exploitation of these resources on a large scale, significantly transforming the landscape in some areas. In prehistoric times, however, the main method of obtaining gold was panning river sediments. In the gold-bearing areas of Galicia, this could yield between 2 and 5 grams per person per day.

Gold contains varying amounts of silver. In the north-west, the proportion is relatively high, accounting for between 8 and 25% of the alloy by weight, which explains Strabo's use of the expression 'white gold'. From the end of the Bronze Age onwards, goldsmiths also commonly added silver and copper to alter the metal's properties (colour, hardness, melting point, etc.). Around the

turn of the era, the frequent presence of touchstones in hillforts indicates the importance attached to testing the purity of the metal.

The relative value of gold (compared with silver, for example) has varied throughout history. In antiquity, it reached its highest levels during the Roman period and rose further in subsequent centuries. Its extraction has given rise to predatory practices with high social and environmental costs in different parts of the world, particularly in the modern era. Today, annual gold production is divided in almost equal proportions between jewellery making and investment, while around 10% is used in industry.

Aureanas: searching for gold in the rivers

> Text beside a TVG video

Before hydroelectric dams became widespread across the river basins of the north-west, accounts still survived of the traditional practice of panning for gold in rivers, which flourished particularly during the 19th and early 20th centuries.

The work involved recovering gold from sediments deposited where the river current slows. It was carried out by women known as aureanas, oreanas, lavadoras or bateadoras. They used a concave pan, or batea, moving it gently in circles and back and forth to separate the gold from the sediment. The process is very similar to that described by Strabo, making this a practice with roots in prehistory that has survived into the present day.

Mythical aureanas

> Text beside an illustration of an aureana

In popular mythology, aureanas (also known as anas, oureanas, loureanas or mouras) are enchanted female beings who appear in rivers, springs and wells. They usually have fair skin and long blonde hair, and wear sumptuous dresses and jewellery. They often appear in groups of three and guard the treasures of hillforts and springs. Anyone wishing to possess these treasures must break the spell by offering three loaves of bread or three cheeses. These offerings turn into horses that bring the enchanted treasures out of the springs. Their name refers to the gold they protect.

The gold of the gods

> Text beside the illustration of Laxe dos Carballos

Cernunnos is the Celtic god of the forest, abundance and fertility. He is depicted as a male figure with deer antlers and a torc around his neck, surrounded by wild animals and plants. On the Gundestrup cauldron, he holds a torc in one hand and a ram-headed serpent in the other.

The deity's partly animal nature means that he can also be represented simply as a stag. One possible example is the rock carving at Laxe dos Carballos, in Campo Lameiro (Pontevedra), which depicts a large stag in a hunting scene. The carving is unusual in that the animal appears to wear a torc around its neck. Moreover, its forward-facing eyes and strongly defined mouth give it a somewhat human expression. These features suggest that it may represent Cernunnos or a similar deity.

Map of gold resources

Caption indicating the source of the data

The Atios cist (O Porriño, Pontevedra)

> Text beside the reconstruction of the cist

The Atios cist is an Early Bronze Age burial discovered in 1967 during ground-levelling work for the construction of the O Porriño industrial estate. Archaeological excavation uncovered a burial in a cist made of granite slabs, oriented towards the rising sun, in which the body may have been placed with its head facing east.

The buried person's bones had not survived, but the grave goods had: two copper daggers of different sizes, two cylinders made from thin gold sheet and a spiral made of silver wire. Assemblages of this kind are rare, and the discovery is all the more significant because the objects were found in the exact place where they had originally been deposited.

Circulation, Accumulation and Control

> display case 2

Precious metals can circulate and be accumulated in various forms, including bars, wire and fragments of objects intended for recycling.

From the end of the Iron Age, plano-convex ingots provide the best-documented evidence of circulation and accumulation. More than a hundred examples are known in the north-west, falling into two groups: those made from gold–silver–copper alloys and those made from silver. The latter are more uniform in size and weight (around 350 g). Both groups show cuts and marks indicating that they were divided. They served as raw material for making jewellery but also as a means of exchange. According to Strabo, 'instead of coins (...) they cut off a sheet of silver and give it in exchange'.

Touchstones also became increasingly common at this time for testing the purity of precious metals. Small in size, they were made from fine-grained rocks such as mudstone. The metal was rubbed against the stone, leaving a streak that could be compared with one produced by a metal of known composition.

Grave Goods from the Atios Cist (O Porriño, Pontevedra)

> display case 3

The Atios cist is an Early Bronze Age burial discovered in 1967 during ground-levelling works for the construction of the O Porriño industrial estate. Archaeological excavation revealed a burial in a cist built from granite slabs and oriented towards the rising sun; the deceased was possibly laid with their head towards the east. No human bones survived, but the grave goods remained: two copper daggers of different sizes, two cylinders made from thin gold sheet and a spiral made from silver wire. Assemblages of this kind are rare, and the find is particularly significant because the objects were discovered in the exact position in which they had been deposited.

SECTION 2 | BETWEEN THE ATLANTIC AND THE MEDITERRANEAN: WORKING GOLD

Like other crafts, goldworking arises from the interaction between raw materials, the means and tools used to transform them, and the ideas, knowledge and skills of those who work the metal.

We know about the gold found in the north-west and its properties, but very few tools have survived, and we cannot engage directly with prehistoric goldsmiths. The manufactured objects themselves are therefore our main source of information about metalworking processes. By examining and analysing them with the aid of scientific instruments, we can apply reverse-engineering techniques to reconstruct the materials, tools and technical decisions involved in their production.

The objects brought together in this section trace the evolution of goldworking from its origins to the full establishment of Roman rule.

The earliest gold objects were sheets produced using plastic deformation techniques such as hammering. The next development was casting in moulds, which eventually incorporated complex variations such as the lost-wax technique. During the Iron Age, techniques of Mediterranean origin, including soldering, filigree and granulation, became widespread. From the Late Bronze Age onwards, the composition of gold began to be altered by alloying it with other metals: first copper, then silver. Thus, by the end of the Iron Age, some objects were being made with cores of less precious materials.

Goldworking required complex skills and knowledge, probably passed down through prolonged periods of close contact between masters and apprentices. Alongside the raw material itself, the technical quality of the objects must have been a key factor in determining their value. Goldsmiths may have travelled across relatively extensive territories, carrying their tools and working with gold supplied to them in each place to produce commissioned pieces that had to conform closely to the established forms of each community.

Plastic Deformation Techniques

> display case 4

Plastic deformation techniques exploit gold's ductility and malleability to produce both sheet-metal objects and solid elements, such as bars and wires.

Their use is documented in the north-west from the mid-third millennium BC onwards and continued throughout subsequent periods. The principal method is hammering, together with variants such as beating and raising. These techniques, based on striking the metal, were often supplemented by heating to restore its ductility.

Associated decorative methods include incision and stamping. Repoussé is particularly important for sheet-metal objects: decorative patterns are created by working the metal from the reverse with punches. Few tools associated with these techniques are known from the north-west, although various types of hammers, anvils and chisels have been found elsewhere.

Solid Forms

> display case 5

Mastery of casting techniques characterised much of the north-west's goldsmithing from the middle of the Bronze Age, when forms such as torcs and solid bracelets first appeared.

These techniques include lost-wax casting and cast-on joining. The latter, used to join or repair objects, involves placing part of a metal element (such as a handle) inside a mould so that it bonds with the rest of the object when molten metal is poured in.

These methods are well documented in the Late Bronze Age, when two technological traditions can be distinguished in Atlantic goldwork:

- Sagrajas–Berzocana, characterised by solid ring-shaped torcs with incised decoration.
- Villena–Estremoz, characterised by solid bracelets with spike decoration, implying knowledge of the horizontal-axis lathe.

Lost-wax casting continued into the Iron Age, notably in the production of torc hoops and terminals.

The Mediterranean Triad: Soldering, Filigree and Granulation

> display case 6

In the early Iron Age, a number of techniques of Mediterranean origin reached the Atlantic seaboard and became particularly important in hillfort goldworking.

One of the most significant was soldering, the most widely used method of joining components. The best-documented variant in the north-west involved placing a solder with a lower melting point between the components, then heating the object until the solder melted.

Filigree and granulation are decorative techniques closely linked to soldering. Filigree creates patterns by soldering lengths of fine wire, while granulation involves soldering tiny spherical grains, either individually or in groups.

Related methods were also widespread in hillfort goldworking, including the manufacture of hollow wires by twisting thin strips of sheet metal.

Forms and Territories: Torcs

> display case 7

North-western torcs are rigid neck rings with open hoops and terminals at their ends, usually substantial in size and facing towards the chest. More than 200 examples have been recorded, making them the most representative objects of hillfort goldworking.

Their manufacture combined several techniques. Hoops were generally solid and cast, while terminals could be solid or hollow—the latter being more common—and were joined by soldering. Some contained a small rattle. Decoration chiefly consists of coiled wires, filigree, granulation and motifs produced using dies and punches. In later periods, cores of less precious metals (copper, bronze or silver) were covered using gilding techniques.

Torcs from the north-west display a formal rigidity that probably reflected ritual conventions. Different combinations of hoops—often with a three-part structure—and terminals gave rise to types associated with particular territories, possibly serving as markers of identity. Some silver examples reveal outside contacts and influences.

Device for activating the torc audio

Instructions and credits for the X-ray images

Panel on goldworking techniques and types of torcs and earrings

Texts of no more than 50 words

The Torcs from the Lanhoso Hillfort (Póvoa de Lanhoso, Braga)

> display case 7B

This group was discovered in the 1930s, hidden among rocks on the hillside below Lanhoso castle and hillfort, during construction of an access road.

The torcs have hoops with copper-based inner cores. Their central sections are covered in fine gold tubes decorated with granulation, filigree and incision. Coiled lengths of flattened wire were applied along the sides.

The terminals are hollow and have an S-shaped profile. They were made from very thin sheets forming two soldered sections finished with a closing disc. All bear filigree and granulated decoration. A rattling element is visible in the best-preserved piece, although the torcs are considerably damaged, making some details difficult to discern.

In formal terms, they belong to the so-called ‘Baroque torcs’. Their manufacturing techniques suggest a relatively late date within Galician goldworking. Their light weight and small size also suggest that they may have been intended for women or children.

Earrings, Bracelets and Other Objects

> display case 8 – Includes a drawing of earring types

Earrings, bracelets, belt-diadems, articulated necklaces, pendants and hair spirals complete the rich repertoire of hillfort goldworking.

After torcs, earrings are the second-largest group. Like torcs, they have rigid forms, and certain types are concentrated in specific geographical areas. Penannular earrings predominate in northern Galicia, whereas large appendages are common in the south. In both areas they display sophisticated

and elaborate decoration, with Mediterranean influences in both techniques and form (cluster-shaped pendants, chains suspended above the ear and other features).

Some bracelets resemble smaller versions of torcs. Other pieces, including belt-diadems, hair spirals and articulated necklaces, testify to the technological and symbolic complexity of this goldworking tradition, which differs markedly from those of neighbouring regions. Glass-paste necklace beads containing gold have also been found at hillforts, although local production has not been confirmed.

One Object, Several Recipes

> display case 9

Another characteristic of Galician goldworking, contrasting with the rigid forms of its principal object types, is technological diversity.

Objects of very similar appearance were not necessarily produced by a fixed method: different techniques and working practices are documented.

This is especially evident in the two best-represented types of this goldworking tradition: torcs and earrings. As the examples in this case show, variations affect both the structure and decoration of the objects.

The so-called Recouso Treasure, recovered from the hillfort of that name around 1923, includes 16 penannular earrings, among other objects. They differ in their internal construction and decoration: the lateral surfaces bear bands of filigree in some cases and granules in others.

The outer thirds of one of the Artabrian torcs found in Bergondo in 2023 are covered in gold sheet rather than the coiled wires typical of other examples of the same type.

Times of Change and Unconventional Objects

> display case 10

The rigid formal conventions of hillfort goldworking—particularly those governing torcs—underwent changes in its final phase, probably accompanied by social and symbolic transformations.

These changes reflect a weakening of the conventions that prevailed during the tradition's heyday and a departure from them, visible in both the construction and decoration of objects.

Some of these pieces are notably large and heavy, yet they were often made from less precious metals and alloys (silver or bronze) given a golden appearance through plating or mercury-amalgam gilding. Their decoration is also elaborate, incorporating three-dimensional elements and complex motifs not recorded in earlier phases of this goldworking tradition.

A recently discovered bronze bracelet from the Armeá hillfort shares features with some of these torcs, although it is smaller and there is no evidence that it was gilded.

Exceptional Torcs: Burela and Xanceda

> display case 11

Some hillfort torcs are exceptional because of their form, manufacturing techniques or dimensions.

The Burela torc (Lugo) is notable for its size, considerable weight (1.8 kg) and excellent state of preservation. It bears an unusual mark on the inside of its hoop, interpreted either as a maker's mark or as a sign of ownership. It must have held great ritual or symbolic value, perhaps as an emblem of the community.

The Xanceda torc (Mesía, A Coruña) is a fine example of the so-called 'transgressive' or 'Baroque' torc, probably dating to the final stages of Galician goldworking. Its hoop has a non-gold core, three-dimensional decoration, gilding on the outside and decorative motifs with no known parallels in the north-west. It formed part of a group containing at least two other objects of similar workmanship.

SECTION 3 | FUNCTIONS, USES AND MEANINGS: GOLDWORK AND SOCIETY

Goldworking in the north-west focused exclusively on producing personal ornaments. The forms of the objects themselves, their depiction in sculpture and some of the contexts in which they have been found provide valuable information about how they were used. Their ideological and symbolic significance, however, extends far beyond this.

The earliest gold objects appear among grave goods, alongside copper weapons or Bell Beaker pottery. With the arrival of the Bronze Age, gold began to be included in hoards or concealed deposits: objects were hidden for ritual reasons or simply to keep them safe in times of uncertainty. We do not know what actions preceded their burial, but we do know that significant locations were chosen, sometimes associated with astronomical phenomena. The archaeo-planetarium presents some of these sites.

During the Iron Age, the depiction of torcs in sculpture encouraged their association with warrior elites. These representations, however, belong to a specific historical context (the Roman conquest of the Iberian Peninsula) and are not representative of the long history of these objects. Torcs may also have been worn by women, as shown by certain funerary contexts in European prehistory. Bracelets, diadems and earrings would have formed part of this same diversity of uses and meanings. In some cases, jewellery may also have been communally owned. Where large accumulations or exceptional objects are concerned, this interpretation is consistent with societies characterised by moderate levels of inequality, as was the case in the north-west throughout prehistory.

The gradual appearance of bronze objects bearing sacrificial imagery, invariably including representations of torcs, offers previously unsuspected clues to their interpretation. These objects may have played an active role, perhaps as communal symbols or offerings, in rituals involving the sacrifice of several animals in a combined and hierarchical sequence to different deities.

Ritual or mythological scenes such as those on the Moñes diadems, which have parallels on the Gundestrup cauldron, reveal the diversity of uses and meanings of these gold objects. Their decorations and representations,

ranging from astral motifs to geometric and animal forms, convey messages that we understand only very partially.

Backlit panels on clothing

Texts of approximately 50 words

Gods, heroes or warrior chieftains? Gold in hillfort sculpture

Stone sculpture, another of the most remarkable material expressions of the north-western hillforts, helps us understand how gold objects were used. The main groups of sculptures depicting jewellery are warrior statues and seated statues. There are also other sculptures that are difficult to interpret and follow less standardised iconographic patterns.

The most emblematic warrior statues come from northern Portugal. They are large and exceptionally well crafted, with fairly standardised attire comprising a helmet, torc, armlets, tunic or sagum and cuirass, a circular shield over the abdomen, a belt, dagger or short sword, and greaves. More than 30 warrior statues are known and, although most were chance finds and are broken at shoulder level, we know that they generally wore torcs. They may have represented warrior chieftains or heroic ancestors and formed part of the monumental setting of hillforts, positioned at their entrances. Some stone heads, such as those from Anllo and Rubiás displayed here, may also have belonged to warrior statues. The head from Ralle (Taboada, Lugo) is particularly notable for its size. If it formed part of a warrior statue, the complete figure would have stood around four metres tall, making it the largest ancient sculpture in the Iberian Peninsula.

The seated statues, of which around five are currently known, come from the Braga district and the province of Ourense. They depict armlets and bracelets, but because they too are broken at shoulder level, a torc can be identified on only one of the examples from Xinzo de Limia, unusually with its terminals pointing backwards. The prevailing view is that they represent male figures, based on iconographic similarities with the warrior statues and the presence of a phallus on the Braga example.

Regardless of whom they represent (chieftains, gods or heroes), the statues exalt the male figure in his role as a warrior, probably around the time of the

Roman conquest of the region. Armlets, bracelets and, above all, torcs are essential elements of this iconography and highlight the importance of gold to these communities. The celebration of the warrior ideal embodied in these sculptures has shaped interpretations of the goldwork they depict, although its uses and meanings were probably more varied.

The Gundestrup cauldron + Decoration in hillfort goldwork

Text

SECTION 4 | FROM PREHISTORY TO THE PRESENT

The several hundred Galician precious-metal objects that have survived to the present day were mostly discovered by chance over the last 150 years. Many others were almost certainly found earlier and met a different fate: in most cases, they would have been melted down again in the crucible.

The repeated discovery of gold objects gave rise to a rich popular tradition. For centuries, legends, accounts based on real events and even treasure hunts formed part of our ancestors' lives. In the early 17th century, the cleric Pedro Vázquez de Orxás obtained a royal decree authorising him to excavate burial mounds and other monuments. This sparked a gold rush among the Galician peasantry, culminating in a legal dispute (1609).

The interest in antiquities that developed among educated and affluent circles during the 19th century led to ancient goldwork, frequently associated with the Celts, entering private collections and, later, our museums. Other finds, however, followed unusual paths. One was the Caldas de Reis discovery, as you will see in this section.

Over the course of this history, ancient gold acquired new layers of meaning, including associations with the high value placed on the metal under modern capitalism. Gold objects have a stronger iconic and identity-forming power than objects made from other materials: they appear on postcards and in municipal heraldry, are reproduced in many different media and inspire all kinds of artistic creations. They have also been the cause of disputes and even criminal activity.

The role played by ancient goldwork today runs in parallel with the opportunities offered by modern science to uncover aspects of these objects' history that were unsuspected until recently. Multiple interpretations intersect and enter into dialogue, extending into the future.

Jewellery, forms and symbols: from prehistory to the present

> Display case 20

The history of Galician goldworking, from its origins to the present day, has been marked by ruptures and continuities. The symbolic values and beliefs associated with these pieces, together with the powers of transformation, protection and empowerment attributed to them, date back to the distant past. The same is true of some of the techniques used to make them.

Sapo pendants are magical, emblematic pieces of traditional Galician goldwork. Made of gold, silver or gilt metal using filigree and pierced metal sheets, they consist of several interconnected, articulated sections. These pieces remain part of a living tradition, passed down from generation to generation as heirlooms.

The forms and motifs of ancient goldwork have also been revived in contemporary craft and design. The Laboratorio de Formas, founded by Isaac Díaz Pardo and Luis Seoane, was a project that transformed 20th-century Galician culture. One of its aims was to recover historical memory and the iconography of prehistoric Galicia. The Espiroide series, designed by Isaac and his son Rosendo for Cerámicas do Castro, draws inspiration from the Elviña diadem and other prehistoric spiroid forms.

The archaeology of gold

Short texts and images