DOSSIER

DIONISIO ON A SAILING BOAT COVERED IN GRAPE SHOOTS

QUOTATION € 55,000,000.00

Comitato Nazionale per la Valorizzazione dei Beni Storici, Culturali e Ambientali
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5. *Expertise concerning the monetary value of the gold artefact - Prof. Alessandro de Bonis*
6. *Final Considerations*

1- Foto in alta definizione del reperto orafo / High-definition photo of the goldsmith's find

PHOTO N. 1

PHOTO N. 2

PHOTO N. 3

PHOTO N. 4

PHOTO N. 5

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PHOTO N. 13

PHOTO N. 14

2- Expert report by Prof. Nicola Castellucci English/Italian

PROF. NICOLA CASTELLUCCI

FLORENCE

Gold artifact with filigree and granulation technique depicting Dionysus on a sailboat covered with grape branches.

The artifact depicting the prodigy of Dionysus covering the boat with grape branches, appears as a unique and unpublished testimony in the statuary and goldsmith representation, both in the Minoan-Mycenaean ambit and in the period High Hellenistic.

The artwork, originally intended for celebratory purposes can be chronologically classified in the late Minoan 1600-1425 BC, (TMI-B), probably in correspondence to the period of construction of the dome tombs that were started in the 15th century b.C. and through which faith in the cult of the dead and the preciousness of their funeral equipment appears to be alive.

The scientific conclusions conducted by Dr. Cecchin on 09/06/2010, through a chemical and morphological analysis performed using the Esem-Eds technique on the material employed and on the processing technique, allow us to detect the high degree of purity of the metal foil of the artifact made up of "red" gold. The artifact subjected to analysis through the EDS spectrum reveals that for the adhesion of the granulation spheres, with which Dionysus's boat is decorated, were not welded through the use of copper salts. This methodology therefore appears to be different from the one in use in the Etruscan goldsmith's art called crysolla (700 BC).

The detection of "relative silver content, in correspondence to the welds, indicates that the solder material used is composed by a metal alloy which is different from that of the metal foil and from that of the the spheres (...) the technique used is the granulation by metal alloy". (Report from Dr. Cecchin, 09/06/2010) This method of use is also expressed by the classification by the scholar Diane Lee Carroll, who associates the size of the spheres in relation to the particular technique of the welding typical of the Minoan art.

Having taken note of the scientific analyzes and stylistic features present in the artifact, in relation to the goldsmithing methodology and described at point 3 of my report, dated 07.11.2011, it emerges that the artifact under examination is to be considered an authentic work and in excellent condition. No elements have been detected through the scientific investigations, that could bring to the presence of signs of alterations or contemporary artisan production.

The stylistic analysis of the work also highlights a compositional dynamism that can be associated to the miniaturistic character of the artistic production, which can be reconducted to the late Minoan (I-II) period where, this technique assumes the purpose of representing a plastic and luminous simulation of shapes. There are also numerous examples of necklaces, pendants and decorative components found in the princely sepulchers Mycenaeans , (Divari-Valakou, Papazoglou-Manioudaki, 86-87).

In these examples, as for the artifact in question, the representation of figures or stylized animals through the use of the granulation technique, is used to draw and structure spaces e figures and not simply for the background. In this period, in fact, the

particular Granulation technique is often combined with filigree workmanship with particularly elaborate stylistic orientations conducted through depictions of plant or animal motifs represented within geometric spaces divided.

The gold artifact examined here, depicting the God Dionysus on the boat, is to be considered ofvery high artistic value, which allows to reconstruct, in a complete way, the strong link of technical and religious influence between the Minoan civilization and the Mycenaean one.

Considering what emerged from the expert surveys, the estimate of the work is of priceless value, however, not less than 70,000,000.00 euros (Euro Seventy million).

Florence, Italy
24 April , 2019

The Expert
Prof. Nicola Castellucci

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3. Chemical and morphological examination carried out using the Esen- Eds technique by Dr Michele Cecchin / Esame chimica e morfologica eseguita tramite tecnica Esen- Eds . dott. Michele Cecchin

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DIAGNOSTIC ANALYSIS ON A GOLDEN ANCIENT ARTEFACT

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DESCRIPTION OF THE OBJECT

The object of this research is a metallic artefact (dimension: 12 x 10 x 5 cm), fabricated with an Au-Ag- Cu metal alloy.

The artefact is Etruscan boat-shaped, with granulation and filigree decoration. The decorative elements on the keel and on the main sail can be distinguished in anthropomorphic type (warriors, kings or gods, musicians and farmers), animal type (panther and dolphins) and vegetables type (vine and bunch of grapes). The prow of the boat has the typical "apotropaico" motive (sea-monster with a big eye and scales) and a ram head on the stern. Inside the boat there is a human figure with a crown, holding vegetable elements.

The mythological subject is the famous legend of Dionisio (Fulfnus in the Etruscan mythology) depicted on the well-known Attic black-figure kylix (ca. 530 BC, from Vulci) while being kidnapped. The legend says that Dionisio was kidnapped by pirates during one of his travels through the Aegean sea. When the god realized that the pirates intention was to sell him as a slave, Dionisio converted the mainmast into a vine tree. Due to the sound of a thousand invisible flutes, the pirates became insane, dove into the sea and were turned into dolphins.

Below is the photographic documentation (fig. 1-2).

ANALYSIS PROSPECT

The object was studied with the aid of different analytical methods. The research aimed at characterizing the constituent materials, the surface patinas and the unique decoration technique, in order to estimate the possible age of the artefact.

Table 1. Scheme of the survey prospect.

Method	Instrumentation	Issue
Photographic survey	Reflex D3000, halogen lighting (150W)	General description of the object and documentation
Macro-photographic survey	Canon Powershot A450, solar lighting	General description of the object and decoration
Digital Microscopic analysis	Dino Lite AM211 (50X - 200X) Dino Lite AM313T5 (500X)	Microscopic analysis of the metal micro-structures, the granulation and filigree decoration and the surface patinas
ESEM-EDS (Environmental Scanning Electron Microscopy with microprobe chemical analysis)	ESEM Philips XL30 with X ray fluorescence system (CUGAS, Centro Universitario Grandi Apparecchiature Scientifiche, University of Padua).	Morphological analysis of the filigree. Chemical characterization of the metal alloys (base sheet, sphere, soldering), and the surface patinas.

PHOTOGRAPHIC SURVEY

Figure 1. Left side of the golden boat-shaped artefact.

Figure 2. Right side of the golden boat-shaped artefact.

MACRO-PHOTOGRAPHIC SURVEY

The analysis reveals several details of the decoration. There are visible halos around the decorative elements next to the granulation (fig. 3). In some parts, for example the human figure inside the boat, there are residual patinas and dust, that were not removed in past cleaning (fig. 4). We can see clear signs and incisions on the base golden sheet, next to the dolphins figures (fig. 5).

Figure 3. Halos and dark patinas around the granulation. **Figure 4.**

Residual dust on the human figure inside the boat. **Figure 5.**

Incisions around the dolphin figure on the left.

DIGITAL MICROSCOPIC ANALYSIS

With the microscopic analysis a pressed dendritic micro-structure of the metal sheet can be seen (fig. 6). In different areas there is the evidence of recent cleaning, caused by a small brushes that left parallel microscopic incisions (1 µm) (fig 7).
The granulation (fig. 8-9) can be divided into 3 dimensional classes:

- ~ 0.25 mm (human and animal figures);
- ~ 0.8 mm (vegetable figures and other decorations);
- ~ 1.6 mm (bunch of grapes of the mainmast).

Among the spheres and inside the surface irregularities there is a high quantity of micro-crystalline residual, with a middle size of ~10 micron (fig. 9).

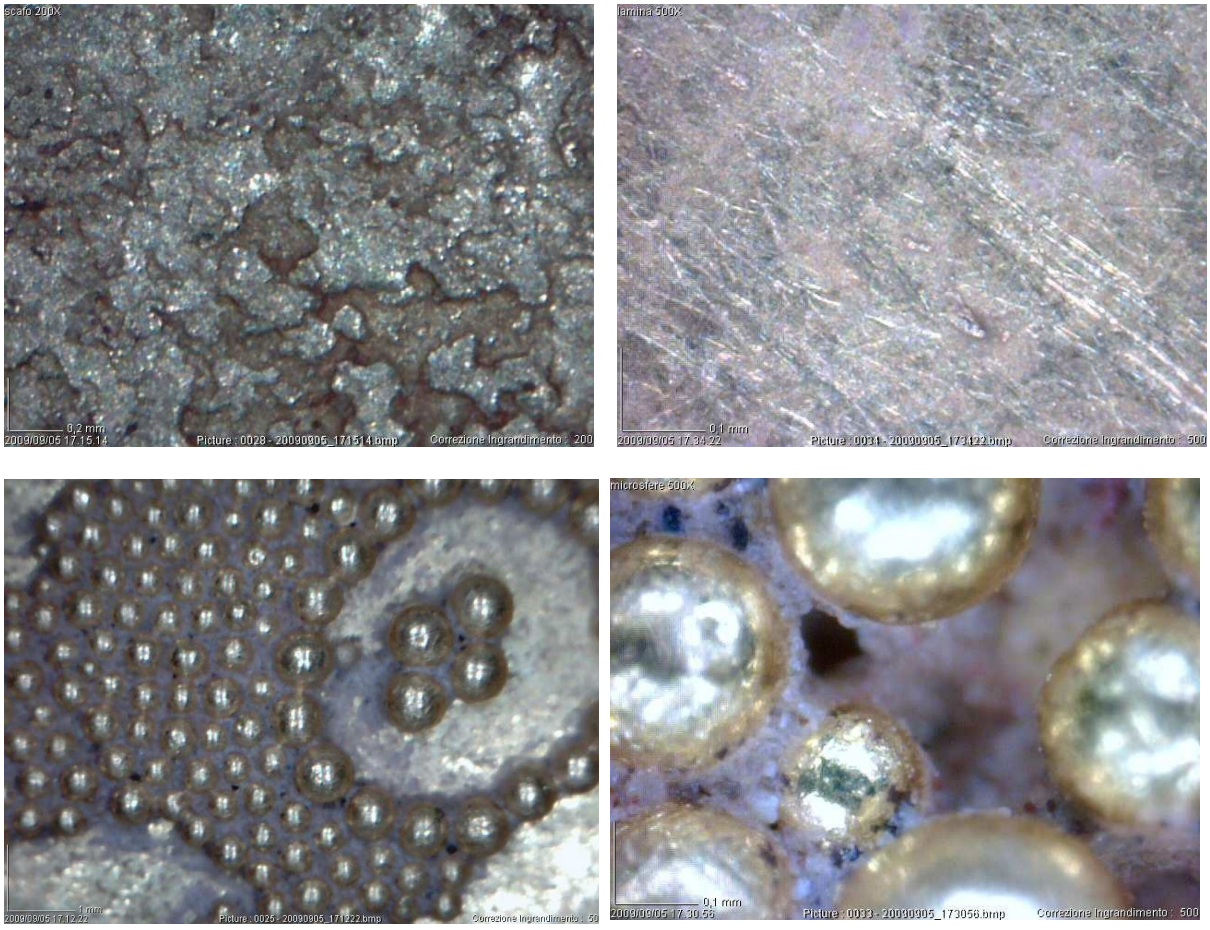

Figure 6. Dendritic micro-structure of the base golden sheet (base of the boat, 200X).

Figure 7. Parallel micro-incisions, evidence of cleaning actions (base sheet of the sail, 500X).

Figure 8. Detail of granulation (warrior's shield, left side of the boat, 50X).

Figure 9. Detail of granulation with saline depositions and residual dust (same position, 500X).

ESEM-EDS ANALYSIS

Morphological analysis of filigree.

The thread has a spiral conformation and a pressed dendritic structure. The high resolution images show no traces of industrial and modern manufacturing, like parallel signs made by rigmarole.

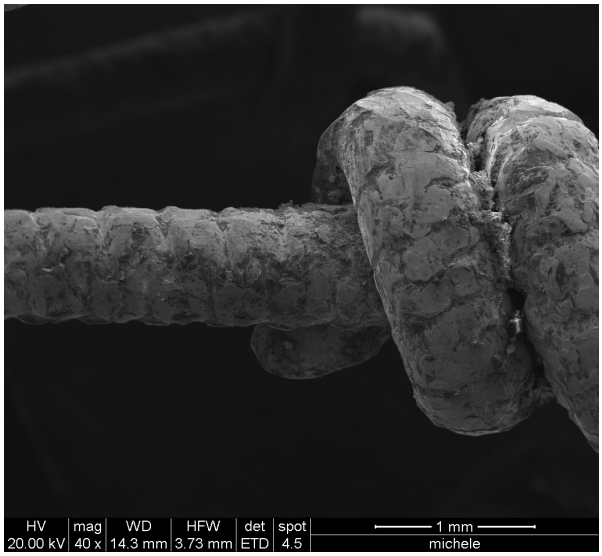

Figure 10. ESEM images (secondary electrons) of the filigree.

Figure 11. ESEM images (secondary electrons) of the filigree.

Qualitative analysis of residual dust and surface patinas

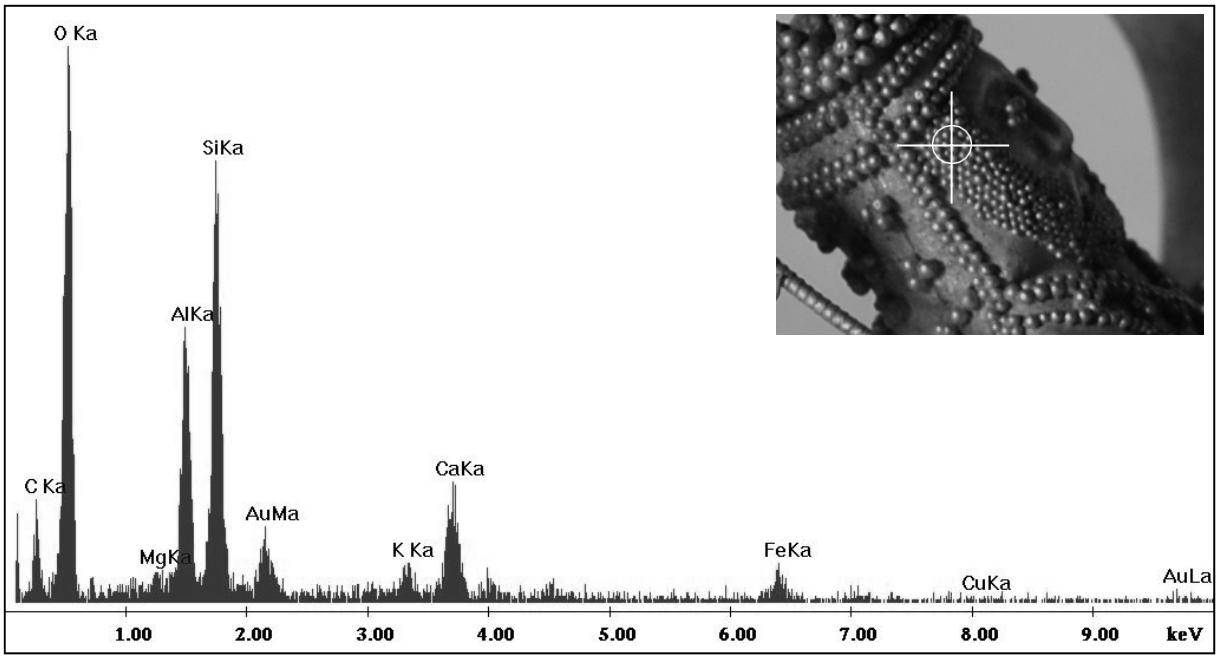

Figure 12. EDS spectrum of surface residuals.

Results shows the presence of elements like silicon (Si Kα: 1,73 keV), alluminium (Al Kα: 1,48 keV), calcium (Ca Kα: 3,69 keV), iron (Fe Kα: 6,40 keV), potassium (K Kα: 3,31 keV) e magnesium (Mg Kα: 1,25 keV). Detector relieves also the Mα radiation of the background gold. Copper (Cu) and carbon residuals are non influential.

Quantitative analysis of the base sheet alloy

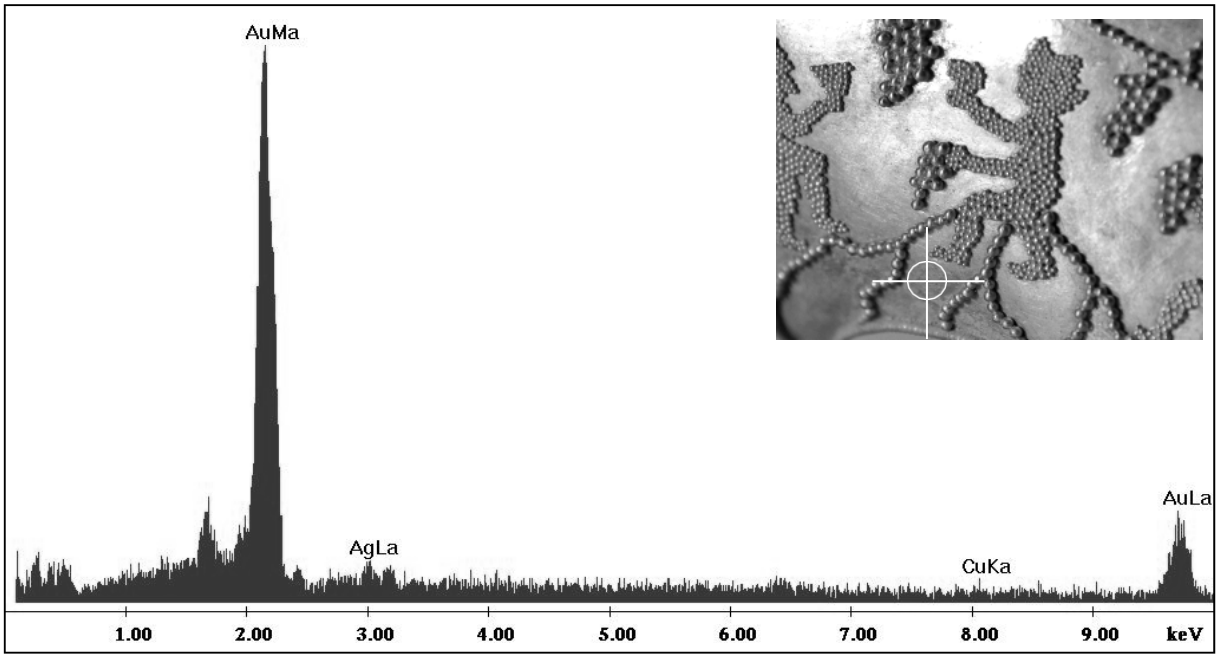

Figure 13. EDS spectrum of base sheet alloy.

Table 2. Quantitative analysis of the base sheet alloy.

EDAX ZAF Quantification (Standardless)
Element Normalized
SEC Table : Default

Elem.	Wt %	At %	K-Ratio	Z	A	F
AgL	4.15	7.04	0.0250	1.0918	0.5522	1.0000
CuK	2.02	5.82	0.0253	1.2281	0.9428	1.0786
AuL	93.83	87.14	0.9248	0.9861	0.9995	1.0000
Total	100.00	100.00				

Element	Net Inte.	Backgrd	Inte.	Error P/B
AgL	4.16	2.86	10.69	1.45
CuK	2.30	1.60	14.42	1.44
AuL	19.58	1.26	14.42	15.54

Acquisition Time : 10:24:06 Date : 31-Aug-2010 kV:
19.99 Tilt: 0.00 Take-off: 38.21 AmpT: 51.2 Det
Type:SUTW, Sapphire Res: 132.02 Lsec: 50

EDS spectrum shows the relevant presence of gold (Au Lα : 9.71 keV), with minor amount of silver (Ag Lα: 2.98 keV) and copper (Cu Kα: 8.04 keV).
The metal alloy of the sheet that composes the front of the main sail contains high standard of gold (93,83%), with silver and copper percentages of 4.15% and 2.02%.

Quantitative analysis of the granulation spheres alloy.

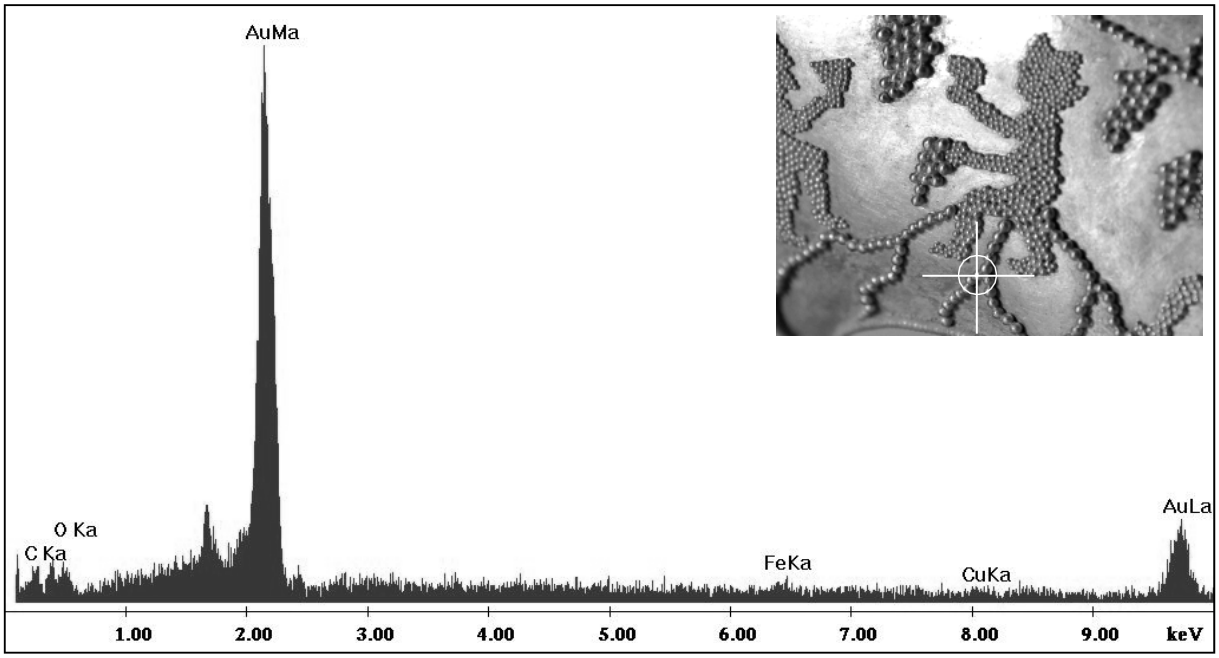

Figure 14. EDS spectrum of the granulation sphere alloy.

Table 3. Quantitative analysis of the granulation alloy.

EDAX ZAF Quantification (Standardless)
Element Normalized
SEC Table : Default

Elem.	Wt %	At %	K-Ratio	Z	A	F
AgL	3.25	5.41	0.0196	1.0898	0.5528	1.0000
CuK	3.26	9.24	0.0407	1.2254	0.9435	1.0782
AuL	93.49	85.35	0.9188	0.9836	0.9991	1.0000
Total	100.00	100.00				

Element	Net Inte.	Backgrd	Inte.	Error P/B
AgL	2.60	1.76	13.46	1.48
CuK	2.96	1.28	11.23	2.31
AuL	15.54	0.88	3.79	17.66

Acquisition Time : 10:26:55 Date : 31-Aug-2010 kV: 19.99 Tilt: 0.00 Take-off: 38.21 AmpT: 51.2 Det Type:SUTW, Sapphire Res: 132.02 Lsec: 50

Chemical analysis reveals presence of gold (Au Lα : 9.71 keV), silver (Ag Lα: 2.98 keV) and copper (Cu Kα: 8.04 keV). There are some iron (Fe Kα: 6,40 keV) impurities.
Quantitative analysis shows small variations in the amount of silver (3.25%) with a significant increase of copper amount in the alloy (3.26%). Gold percentage remains constant (93.49%).

Quantitative analysis of the soldering alloy (sphere diameter: 0.8 mm).

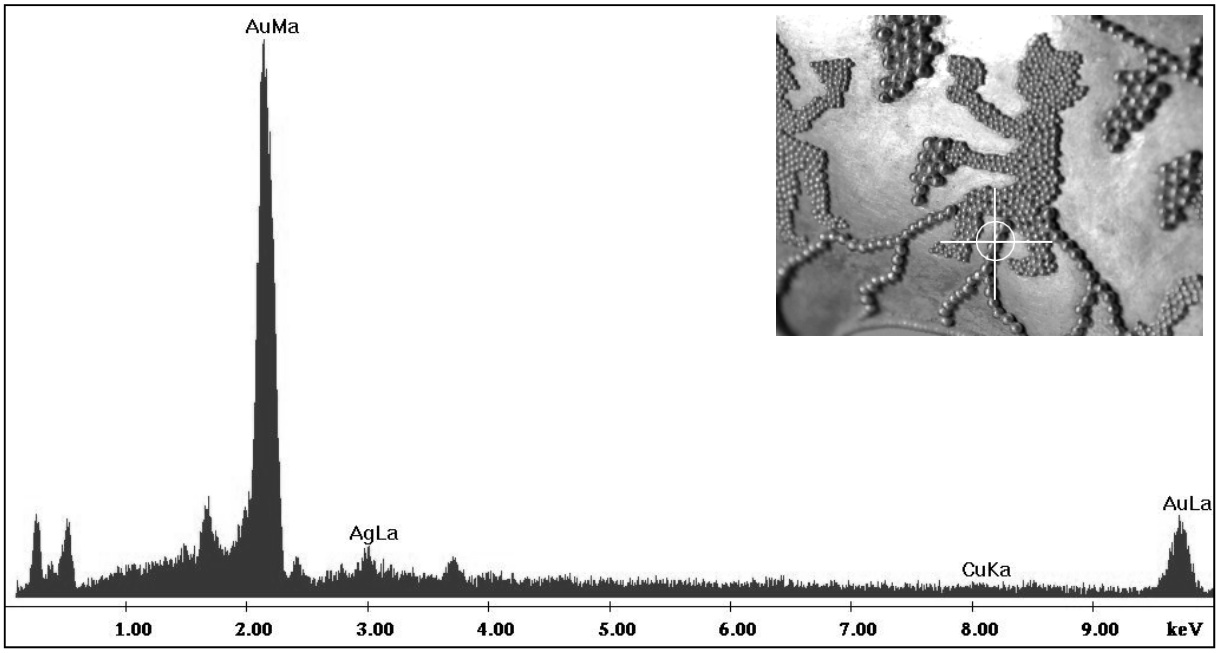

Figure 15. EDS spectrum of the soldering alloy.

Table 4. Quantitative analysis of the soldering alloy.

EDAX ZAF Quantification (Standardless)
Element Normalized
SEC Table : Default

Elem.	Wt %	At %	K-Ratio	Z	A	F
AgL	5.14	8.74	0.0307	1.0919	0.5478	1.0000
CuK	1.50	4.33	0.0187	1.2281	0.9411	1.0776
AuL	93.36	86.94	0.9204	0.9861	0.9997	1.0000
Total	100.00	100.00				

Element	Net Inte.	Backgrd	Inte.	Error P/B
AgL	9.10	7.28	7.56	1.25
CuK	3.04	4.66	16.36	0.65
AuL				

Acquisition Time : 10:29:42 Date : 31-Aug-2010 kV: 19.99 Tilt: 0.00 Take-off: 38.21 AmpT: 51.2 Det Type:SUTW, Sapphire Res: 132.02 Lsec: 50

The qualitative and quantitative analysis has been performed between 0.8 mm diameter spheres. The alloy contains gold (Au Lα : 9.71 keV), silver (Ag Lα: 2.98 keV) and copper (Cu Kα: 8.04 keV), as in the others points. The quantitative shows significant increase in the silver relative amount (5.14%), with decrease content of copper (1.50%).

Quantitative analysis of the soldering alloy (sphere diameter: 0.25 mm).

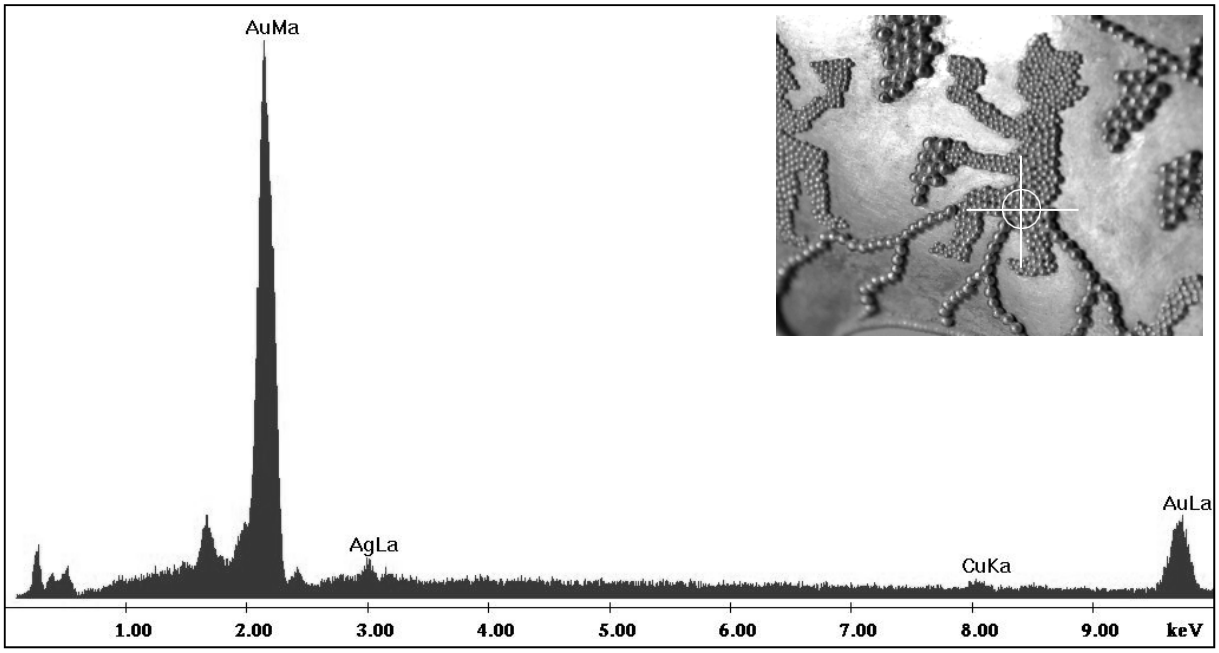

Figure 16. EDS spectrum of the soldering alloy.

Table 5. Quantitative analysis of the soldering.

EDAX ZAF Quantification (Standardless)
Element Normalized
SEC Table : Default

Elem.	Wt %	At %	K-Ratio	Z	A	F
AgL	3.46	5.93	0.0203	1.0935	0.5366	1.0000
CuK	1.71	4.98	0.0213	1.2304	0.9398	1.0782
AuL	94.83	89.09	0.9368	0.9883	0.9996	1.0000
Total	100.00	100.00				

Element	Net Inte.	Backgrd	Inte.	Error P/B
AgL	13.80	14.88	6.76	0.93
CuK	8.02	12.18	10.03	0.66
AuL	81.84	10.08	1.75	8.12

Acquisition Time : 10:33:37 Date : 31-Aug-2010 kV:
19.99 Tilt: 0.00 Take-off: 38.21 AmpT: 51.2 Det
Type:SUTW, Sapphire Res: 132.02 Lsec: 50

EDS spectrum reveals the main presence of gold (Au Lα : 9.71 keV), silver (Ag Lα: 2.98 keV) and copper (Cu Kα: 8.04 keV).
The soldering alloy in the finest granulation has small differences between the soldering alloy of previous analysis. Silver has a 3.46% percentage, while the poor amount of copper is a 1.71% percentage. Gold amount is constant.

Variation of the Au-Ag-Cu amount in the alloys.

Table 6. Quantitative analysis of alloys and variations of Au-Ag-Cu amounts.

	base sheet	soldering 1	soldering 2	sphere
Au (wt%)	93,83	94,83	93,36	93,49
Ag (wt%)	4,15	3,46	5,14	3,25
Cu (wt%)	2,02	1,71	1,50	3,26

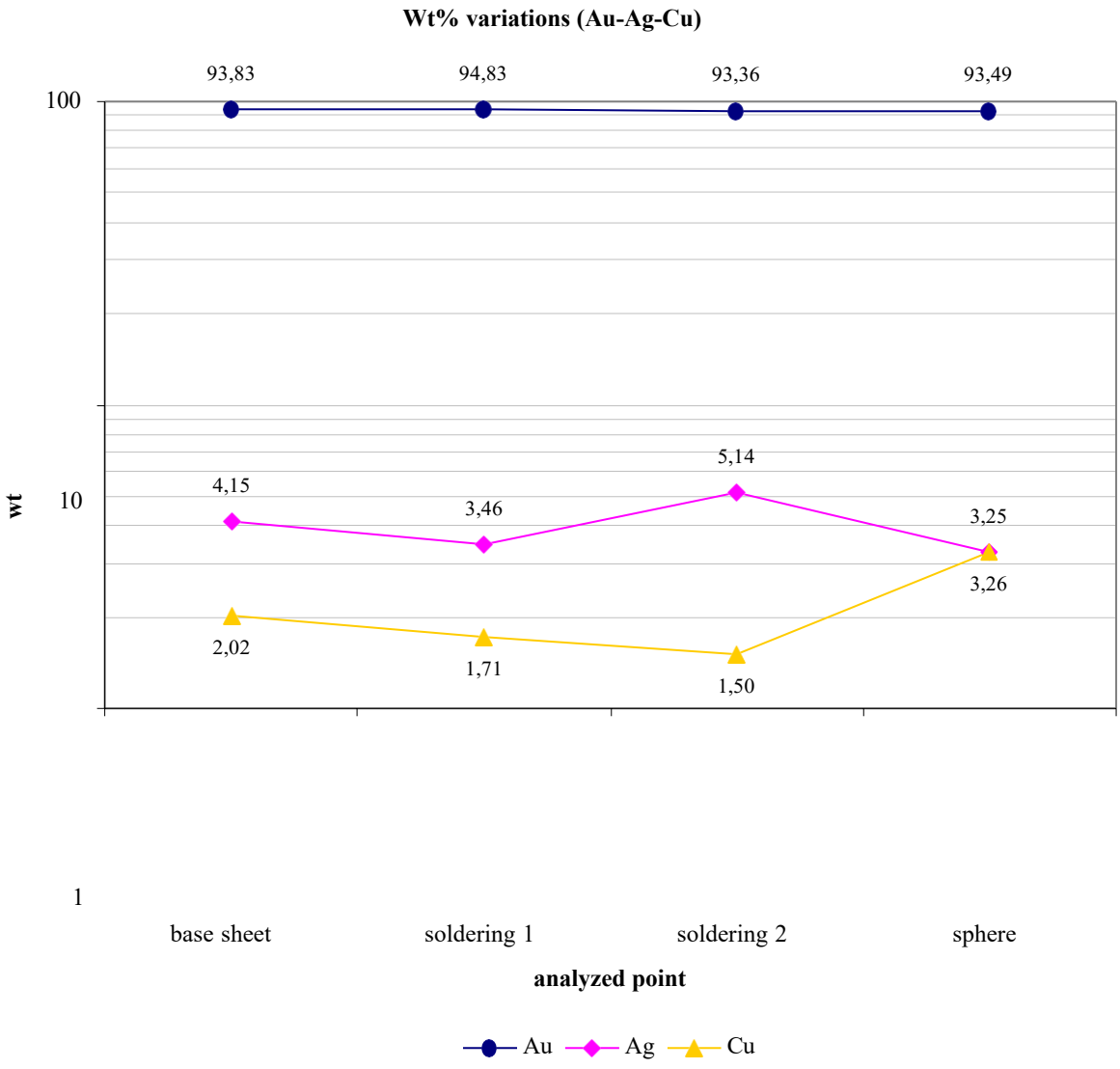

Figure 17. Graphic of the Au-Ag-Cu amount variations in the alloys (logarithmic scale).

While the amount of gold remains constant, there are significant variations in silver and copper amounts. The analysis reveals 3 different metal alloys used for base sheet, granulation sphere and soldering.

Considerations on the technological process by ternary state diagrams (Au-Ag-Cu).

Quantification of Au-Ag-Cu amounts can define the quality of the alloy, the principal optic (colour) and physics (melting point) properties. Considerations are possible thanks to ternary state diagrams consultation (fig. 18-19).
All the three different metal alloys of the artefact shows limit values of the red-yellow gold type, whose melting point temperature is higher then 1000°C.

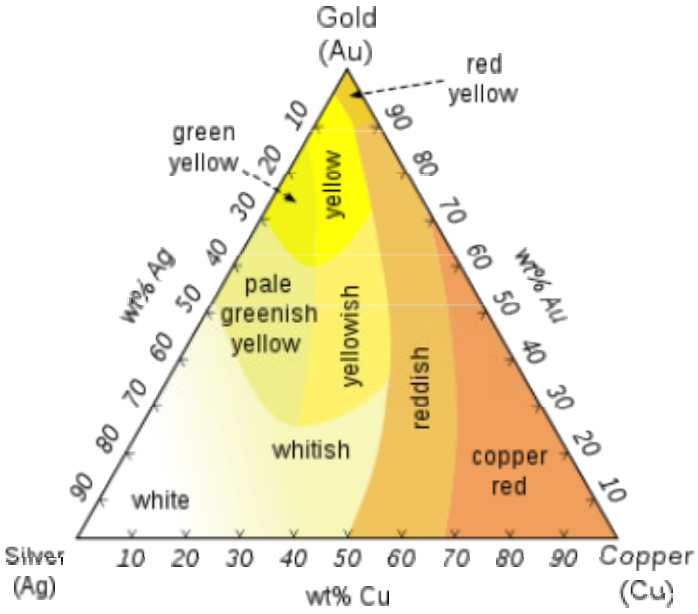

Figure 18. Diagram of the optic properties.

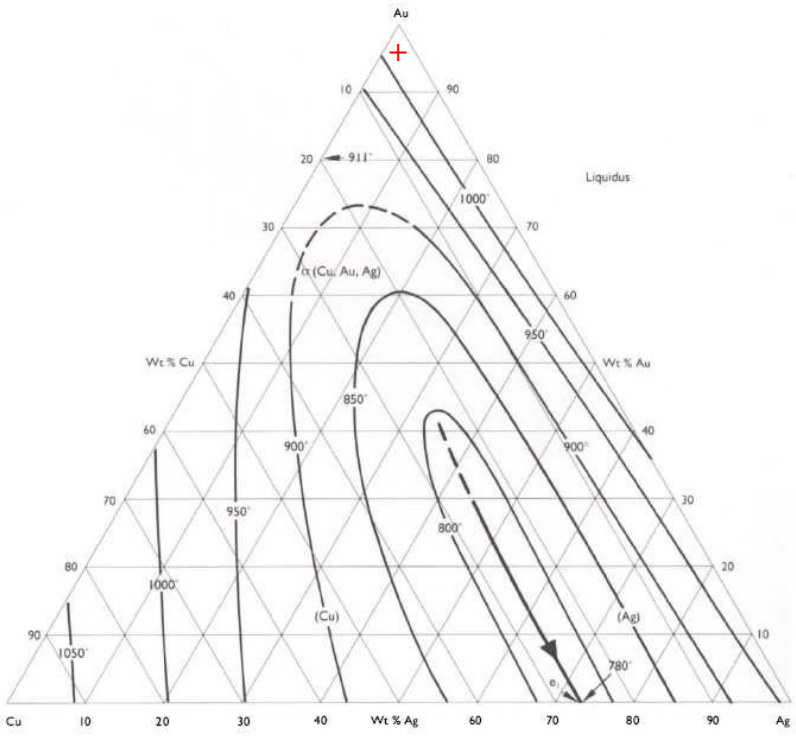

Figure 19. Ternary diagram of the liquid state alloy.

CONCLUSIONS

A diagnostic research has been performed on the golden artefact to study the composition and construction, in order to make it possible to estimate the age of the object.

Photographic documentation gives a clear indication of the complexity of the object and its decorations, realized with filigree and granulation systems.

Macro-photographic research reveals several halos near the granulation spheres that indicates the use of a soldering process. Incisions in some decorative motives (dolphins) indicates that the decoration has been traced before the soldering of the spheres. In some areas there's a high amount of dust and residuals.

Microscopic analysis shows the pressed dendritic micro-structure of the metal [1]. Several parts of the artefacts, as the base sheet, have been hand-wrought by hammer. The artefact has been recently restored by cleaning. This has left parallel micro-signs. In the surface irregularities a large amount of crystalline deposits can be found. The decorations have three dimensional classes of granulation: ~
0.25 mm (human and animal figures), ~ 0.8 mm (vegetable figures and other decorations), ~ 1.6 mm (bunch of grapes of the mainmast).

ESEM-EDS analysis results reveals the following points:

- the patinas and dust residuals of siliceous nature indicate a relative long period of deposition of the object in a certain alluvial soil;
- the filigree has a typical coil-spiral shape of ancient artefact [2]. There is no evidence of modern manufacturing like parallel signs of rigmarole;
- the base sheet of the artefact is made by native gold [3], with high amount of Au;
- the granulation spheres show a copper amount higher then 2.50%. They are obtained from an alloy of human voluntary intervention [3];
- the soldering analysis shows no evidence of significant copper amount increase, neither the presence of trace elements like zinc or iron, usually present in a copper-salt granulation with *crysocolla* or *malachite* (Etruscan technique of 700 BC) [4, 5, 6];
- quantitative analysis reveals variations between the sphere and the soldering alloys. This variations are not compatible with a sintering process. An increase of silver percentage indicates the use of the metal alloy soldering technique. The thin foil of welding alloy placed on the surface of the base sheet melts and fills the meniscus in the contact zone between sheet and granules [5]. The technique was used by civilizations before the introduction of the Etruscan copper salts technique [4];
- the amount of Au-Ag-Cu determine the quality of the alloy. The high percentage of gold implicates good abilities in the temperature control and welding process;
- there are no traces of elements like zinc (Zn), nichel (Ni), palladium (Pd), alluminium (Al) or tin (Sn), usually present in modern gold alloy (last 150 years) [7].

According to Diane Lee Carroll and his classification for granulation artefacts [4], the metal alloy soldering technique and the granules dimensions are suitable

to the Mycenaean civilization (Peloponnese, southern Greece, 1600 - 1100 BC) and its goldsmith's art.

The results of the survey can define the high value, the preciousness and the antiquity of the object. Loria, 17.09.2010

Dott. Michele Cecchin

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Artifact high 8,5 cm - long 12 cm - wide 2,5 cm ca. - weight 39 gr

The artefact considered in this technical analysis represents a clear reference to a well-known myth of Greek antiquity, which is recorded for the first time in the seventh Homeric hymn (1), in which the abduction of Dionysus in the guise of an ephebe by Tyrrhenian pirates is recounted. The ephebic representation of the god appears from 430 B.C., when the artist Phidias depicted Dionysus on the east pediment of the Parthenon in Athens, effectively changing the representation of the god from an adult appearance, close to the iconography of Zeus, to a beardless child; this in fact changed an iconography that would be maintained in all future representations.

If we consider the works of Athenian ceramists, whose productions date from before 430 B.C., we note instead the more adult image of the Greek god, more linked to ancient iconographies that lead Dionysus back to the role of patron of the polis. All this allows us to define with almost absolute certainty the 430 BC as the term of iconographic transition, relegating all other iconographies of the adult god to earlier times.

Certainly the dating of the Homeric hymn, which recounts the iconographic event even though it describes the god as an ephebe, should be dated to no earlier than the middle of the 5th century BC (2) while the depictions of the adult god on Greek vases are more archaic, the oldest being the kylix of Exekias, datable to the 6th century BC (3) .

Vascular iconography is therefore, as we know, much more consistent. The image of Dionysus created, as far as we know, in the Cycladic area in the 7th century B.C., then adopted by Attic ceramists from Sophilos onwards, remained the current one throughout Archaism: a dignified and measured father figure, bearded, wearing a long chiton and cloak (4) . This is what he looks like not only when he is depicted standing in front of a female figure or at the centre of his thiasos of satyrs and nymphs, but also when he is seated or semi-coric as a symposiast, or in the rare cases when he is in motion together with his followers (5) . This iconographic formula, which likens Dionysus to Zeus, is perfectly consistent with the role of guarantor of both cosmic and polis stability attributed to him, as far as we know, first by Sophilos (plausibly inspired by Solon) and then, albeit modified in a funerary sense, by Kleitias (6). An authoritative and reassuring father figure is in any case in in tune with the other role of Dionysus, parallel and complementary to the Polyad role, as patron of the inevitable and risky individual metamorphoses (7).

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[1] ISLER-KERÉNYI (2010, 257-79).

[2] MÜNCHEN (2004, 41).

[3] MÜNCHEN (2004, 41).

[4] ISLER-KERÉNYI (2001, 178-88); ISLER-KERÉNYI (2007, 171-87).

[5] Amphora of Lydos, Louvre Cp 10634; *Kylix* by painter of Heidelberg, Copenhagen, National Museum 5179;Amphora by painter of Amasis, Würzburg 265. In the red figures : amphora with tip by the painter of Kleophrades, München 8732 (2344).

[6] ISLER-KERÉNYI (2001, 89s. e 2007, 79). Cf. TORELLI (2007), which, however, glosses over the immediate precedent, the *dinos* by Sophilos.

The presence of Dionysus in archaic literature is sporadic and his image is not uniform (8) . In the famous episode of Lycurgus in the sixth canto of the Iliad, the god appears first with his nurses, then, at the bottom of the sea, protected by the "breasts" of Thetis (9) : one would therefore say that he was imagined as very young, if not as a child. The lyric sources of the seventh and sixth centuries do not seem, at least at first sight, to reveal the appearance of the god in the poets' imagination: Archiloco calls him anax, lord (10), which suggests an authoritative figure. Ion of Chios, in the fifth century, speaks instead of a 'boy with a taurine face, not a young man (11). While the god of the famous wedding rite with the basilinna on the occasion of the Athenian Antesters must certainly have been an adult figure (12).
A younger, but still bearded Dionysus appears in ceramics in Gigantomachia scenes from 570-560 BC (13). The majority of the fragments come from the Acropolis (14) : this is therefore the mythological version that was common in Athens, but evidently also valid elsewhere in Greece, as we find it in the northern frieze of the Sifni thesaurus (15) . It is not surprising that ceramics appear in greater numbers around 480 BC, i.e. during the Persian Wars, which the Greeks considered to be a reflection, on a human level, of the clash between the Olympians and their violent adversaries (16). In some cases we also find Dionysus in this context wearing a long, loose-fitting robe (17): proof of how appropriate this mode of presentation was for him. Usually, however, he wears, like the other participants in the fight, the short chiton that favours the dramatic gestures of the fight (18) : it is his attributes - the feline skin, the tyrus, the ivy branch, the cantharus - and the fact that he is often helped by animals (20) - panther and snake - that distinguish him from other allies of Zeus. Although belonging to the generation of sons, the beard continues to characterise Dionysus as a man.
Taking into consideration what has been documented about the appearance of this myth and considering the artefact to be an original of ancient production, as already certified by scientific examinations carried out on the piece by other technicians (19) , which presents a refined execution of granulation work, filigree and red gold embossing, one can consider with a good margin of reliability the artefact to be of Greek production, datable between the end of the 7th and the beginning of the 6th century BC, probably produced for ritual purposes.
The hypothesis could be put forward that the artefact in question could be the three-dimensional inspiration model for all the representations of the Dionysian myth later depicted on Attic ceramics.

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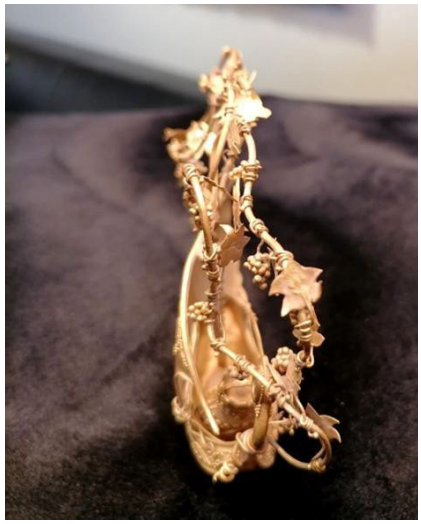
[7] ISLER-KERÉNYI (2001, 65s.; 2007, 59-61 e 2010, 257-58).
[8] PRIVITERA (1970).
[9] PRIVITERA (1970, 53s.).
[10] PRIVITERA (1970, 97).
[11] PRIVITERA (1970, 120).
[12] SPINETO (2005, 76-86).
[13] *LIMC* IV 1, p. 215, Gigantes 105; for reconstruction cf. MOORE (1979, 85ss. con ill. 1).
[14] *LIMC* IV pp. 215ss., Gigantes 104-106, 110, 175. Dall'Agorà come instead Gigantes 107 e 293.
[15] *LIMC* III 2, p. 374, Dionysos 651.
[16] ISLER-KERÉNYI (2000, 432).
[17] *LIMC* III 2, pp. 372s. Dionysos 625 e 648.
[18] The short chiton can, in the fight, also be the style of Zeus: *LIMC* IV 2, p. 146, Gigantes 329.
[19] The scientific conclusions carried out by Dr Cecchin in 2010, with the support of chemical analysis using the Esem-Eds technique, certify the high degree of purity of the metal used. Furthermore, the technique of adhesion of the spheres in granulation documents a more ancient technique different from that used in Italic territory by the Etruscans (crysolla), i.e. without the use of copper salts.

It should be noted that the metal has not been oxidised or discoloured by contact with the ground, so the hypothesis that the artefact had been placed in a sealed vase that had remained intact over time, a probable ritual offering for the temple of the god or for a funerary rite, remains plausible. A further specification should be made, taking up a previous expert opinion signed by Prof. N. Castellucci, since, as also reported in note (19), it is true that the granulation technique without copper salts excludes Etruscan manufacture, but it is also true that this granulation technique was instead well known throughout the ancient Near East and also used in Attica until at least the end of the dominance of Athens. This factor would lead us to confirm the proposed dating, also with reference to the type of vessel represented, between the end of the 7th and the beginning of the 6th century BC, perhaps due to techniques introduced into the Greek world, and then assimilated here by the great local craftsmen, the Phoenicians, skilled workers in general with metals, experts in granulation, embossing and filigree work.

Immagini



detail

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abbreviazioni

Beazley Addenda: *Beazley Addenda*. *Additional references to ABV, ARV*^{2} *&Paralipomena*. Compiled by T.H. Carpenter, Oxford 1989^2.

CVA: *Corpus Vasorum Antiquorum.*

Dionysos 1991: A. Lezzi-Hafter – C. Zindel (Hrsg.), *Dionysos. Mythes et mysthères. Vases deSpina*, Kilchberg-Zürich.

LIMC: *Lexicon Iconographicum Mythologiae Classicae*

DATA FIRMA

17/07/2021 Prof. Alessandro De Bonis

Economic evaluation of the gold artefact

The gold artefact examined, depicting the god Dionysus in a boat, is to be considered of excellent artistic value and this also confirms the strong technical and religious influence in the Greek world between the 7th and 6th centuries BC.
In view of the findings of the expert investigations, the gold artefact appears to be of great technical and artistic value. The unique characteristics of the work do not allow comparative assessments to be made.

The work under examination is therefore indicatively estimated at Euro 50,000,000.00 (Euro Fifty Million).

27/07/2021

FIRMA
Prof. Alessandro De Bonis

6 - Final considerations

The results of the technical-scientific examinations, the morphology of the gold artefact and the manufacturing technique are in agreement with the two expert reports by Prof. Nicola Castellucci and Prof. Alessandro de Bonis.
Although there are differences in date between Prof. Castellucci and Prof. De Bonis, both agree that Dionisio's composition is original and not the result of medieval or contemporary reproductions.
They both agree that this goldsmith's composition is of a high level of workmanship, the result of highly professional craftsmen, and that it should be placed in the category of top artists in the composition of a goldsmith's work.
It is an example of the work of craftsmen in full possession and application of techniques that refer to those used in the Minoan-Mycenaean period and that find their presence in the Greek-Arkic period of the seventh and sixth centuries BC.

16.08.2021

The President of the Committee
Dr Silvano Vinceti

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