

# GLASS BEADS AS IDENTITY ELEMENT OF THE AFRICAN IN THE CULTURAL PAST OF LISBON FROM THE MID XV CENTURY UNTIL THE 1755 EARTHQUAKE –A STUDY OF “NUEVA CADIZ” AND “CHEVRON” TYPE BEADS–

## *As contas de vidro como elemento de identidade do africano no passado cultural de Lisboa dos meados do século XV ao terramoto de 1755 –Um estudo sobre contas tipo “Nueva Cadiz” e “Chevron”–*

M. Conceição RODRIGUES

*Researcher at Instituto de Investigação Científica Tropical (IICT)-Lisboa*

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**ABSTRACT:** This paper is centred in the study of long glass beads, which can be considered as an identity element of some African communities. They were brought to Lisbon by slaves through the commercial routes developed between Portugal and the South Western African Coast, since the middle of the XV century.

The studied specimens came from the archaeological interventions carried out in the Lisbon downtown, of the period prior to the 1755 earthquake, in the end of the 1990's.

Among them are some “Nueva Cadiz” beads, as well as “Chevron” beads and the former deserved special mention, since they are a Mediterranean manufacture. The author did similar studies of other beads, which were used as comparative elements in this paper.

These beads mirror some of the events and socio-cultural aspects of the life of Africans in Lisbon since the XV century until the 1755 earthquake. Beads were used as a distinguishing element and a social valorisation. Through technical-morphological and mineralogical studies a connection between them and historical data is attempted.

*Key words:* Old Lisbon. Glass beads. Nueva Cadiz. Chevron. Trade. Kingdom of Congo. Slaves.

**RESUMO:** Este nosso trabalho centra-se no estudo de contas longas de vidro que consideramos ser um elemento identitário de algumas das comunidades africanas que foram trazidas como escravos, através das rotas comerciais desenvolvidas entre Portugal e a costa Ocidental da África Austral, desde meados do século XV.

Os exemplares aqui em estudo são um dos elementos materiais fornecidos como resultado das intervenções arqueológicas na Lisboa anterior a 1755, e que tiveram lugar nos finais da década de 90 do século XX.

Vamos procurar efectuar o estudo de um núcleo de contas de vidro, entre as quais se encontram as de cor azul tipo “Nueva Cadiz” e as contas “Chevron ou em Estrela” que apresentam várias tonalidades. As primeiras mereceram uma atenção particular por se enquadrarem num tipo de contas de fabrico mediterrânico, cujo estudo vimos desenvolvendo desde os inícios dos anos 90. Como metodologia, os exemplares que anteriormente estudámos irão servir como elemento de comparação.

Importa ainda enquadrar a sua presença nos acontecimentos e vivências socio-culturais dos africanos na Lisboa do século XV até ao terramoto de 1755, dado terem sido usadas como elemento de identidade para a sua valorização social, além de efectuarmos o seu estudo técnico-morfológico e mineralógico. Procurou-se ainda, estabelecer a ligação entre este tipo de elementos materiais e os dados históricos.

*Palavras chave:* Lisboa antiga. Contas de vidro. Nueva Cadiz. Chevron. Comércio. Reino do Congo. Escravos.

### 1. Introduction

This work focuses on the long glass beads, following a request to study this type of material, which had a great significance. The data used on this study came from the archaeological interventions carried out by the Lisbon Municipality's Museums Group in the down town area in the end of the 1990's.

As an easy way to allow a better identification, the beads were organized into groups, serving the purpose of pointing out their historical context. The specimens were also drawn in actual scale (typological drawing) and photographed for a better characterization.

Thus, Set I holds one specimen, collected by the team working in the actual “Praça do Município” (Municipality

Square) in front of the Mayor's office from March until August of 1997 (this intervention occurred due to the construction of an underground parking lot).

Set II consists of several specimens yielded by the intervention carried in the “Praça Luís de Camões” (Luís de Camões Square, in Chiado), from June of 1999 until January of 2000, due to the same reason stated above. The beads collected in both sets are fragmented, but well preserved, in a total of 10 beads of different types.

We are going to try to give a background to these long beads based on the livelihood of Lisbon since the XV century, define its provenience ascertained by the archaeological data, establish the chronology of events and suggest some of the likely causes for its presence in Lisbon prior to 1755.

Both sets show long glass beads, whose colour, morphology and manufacture technique are particularly interesting and rare. They have analogies with other specimens collected in interventions carried out in remains of the buildings prior to the 1755 earthquake and referred in Lisbon's downtown, more precisely in the actual "Praça de D. Pedro IV" (D. Pedro IV Square) and in the "Rua das Pedras Negras" (Pedras Negras Street) (M. Conceição Rodrigues, 2003: 207-233), and the ones from Luanda (see bibliography). We registered the presence of other type of long beads, but with different colours, morphology and bigger dimensions.

The conclusions drawn from the study of these specimens are going to be used as a comparison element to the beads presented on the current paper.

## 2. Historical Background

The most ancient reports of glass making in the antiquity are short and scarce: they were imprinted on clay tablets, dating one of them from the XVII century b.C. and found in Tell'Umar (Iraq) (Gadd and Thomson, 1936: 87-96). Others have their origin set on the famous library of the Neoassyrian King Assurbanipal in Nineveh (668-627 b.C.). These tablets contain, among other data, some rules and formulas to manufacture glass. The ones from Nineveh show different types of construction patterns for furnaces, as well as a series of ritual and selection procedures of the suitable days for the manufacture of glass.

Glass, according to "tradition", was discovered by chance on the Belus river shores (ancient Phoenicia), as Plínio refers (*História Natural*, Book XXVI: paragraph 191), when some merchants were preparing their food using blocks of soda (sodium hydroxide), which they traded, to support the cooking pots (no stones were available). They verified that the sodium hydroxide mixed with the sand melted into a new product. The excellent quality of the Syrian sand is very adequate to the glass making (Estrabão XVI, 758), and this glass was the basis for the manufacture of beads.

The small beads, known from the III millennium b.C. –moulded glass development period– are considered imitation of precious stones, which were very important in trade besides their magical and prestigious value with a social-culture significance. The glass manufacture came also to facilitate the imitations of lapis lazuli and malaquites or turquoises, which were obtained through blue or green glass with less cost and then much more accessible to other classes.

The blue glass was the manufacturer's favourite in the antiquity. It was obtained using cobalt and copper metallic oxides to produce the several shades of blue found in ancient glass. The cobalt blue glass shard, considered to be the most ancient, came from Eridu in the Mesopotamia and was dated back to 2000 b.C. The glass manufacturers, who produced it, used cobalt from Persia. Technically, it is possible to state that 0,05% of cobalt oxide is sufficient to give the cobalt blue colour.

Ancient Egyptian glass analysis shows that both cobalt as well as copper were used to allow the tuning of the colour shade. The glass manufacturers in the

roman period continued to use copper and cobalt, but the analyses have shown also that they knew how to achieve the blue colour based on oxidized iron. To obtain the blue glass they used a green wood trunk inside the furnace to reduce the oxygen level, according to R. Vose (1980: 30).

The dull white colour glass paste, used mainly to imitate other materials, was obtained among the first glassmakers by using a calcium and antimonium compound, and this chemical element was used as standard discolouring method in the antiquity (R. Vose, 1980: 32).

The glass manufacture technology developed in Venice around the VII century, when the glassmakers were strongly influenced by the Egyptian and Roman artisans. Beads started to be manufactured since the XI century. The initial method was very slow, but the new technologies made available by the arrival of glassmakers from the Middle East, due to political-social changes, with a long past in the glass manufacture, allowed some breakthroughs.

Beads were produced by the wounding method (whence the name "Wound Beads"), which was slow and not very profitable. The drawing method followed with a much higher success (whence the name "Drawn Beads"). This method developed from the beginning of the XV century, in Murano, since the Venetian glassmakers were compelled to leave their homeland for safety reasons. The then used furnaces worked at very high temperatures, which were a liability and a danger for the artisans.

The new method, more an *artisan production*, had great impacts, since it allowed the production without using very high temperature furnaces, brought down the price and allowed its mass production (M. Conceição Rodrigues, 2003: 208-209).

Among the studied specimens, there are some long beads, belonging some of them to the "Chevron or Star" type, considered to be the most beautiful ever produced ("drawn beads"). This type of beads results from a complex mixture of several consecutive glass layers, moulded and overlaid, which were heated afterwards, to strengthen the adherence, drawn, severed and hand finished by re-heating. This workmanship used oil lamps, whence the designation "lamp-wound beads" and allowed the body of the bead to present different morphologies and by the simple severing in truncated cone, several layers with a magnificent aesthetics were revealed. This technique is still in use today.

The Venetian glassmakers' activities were thrust forward with innovations and other methods, which allowed the production of different bead types with several designs, like the "Chevron" bead, which due to its great beauty was a "best seller" at the time.

The final shape of the bead depends mainly on the manufacture technology allowing the trace of its origin and even of the manufacture date.

It is worth to point out that the beads were part of a complex trade, which practically irradiated throughout the whole world from a technological and commercial centre –Venice– dominating worldwide in quality and diversity until the XX century. The Portuguese in their trade with Africa largely developed the use of beads, since the XV century, notably with the Western African coast populations.





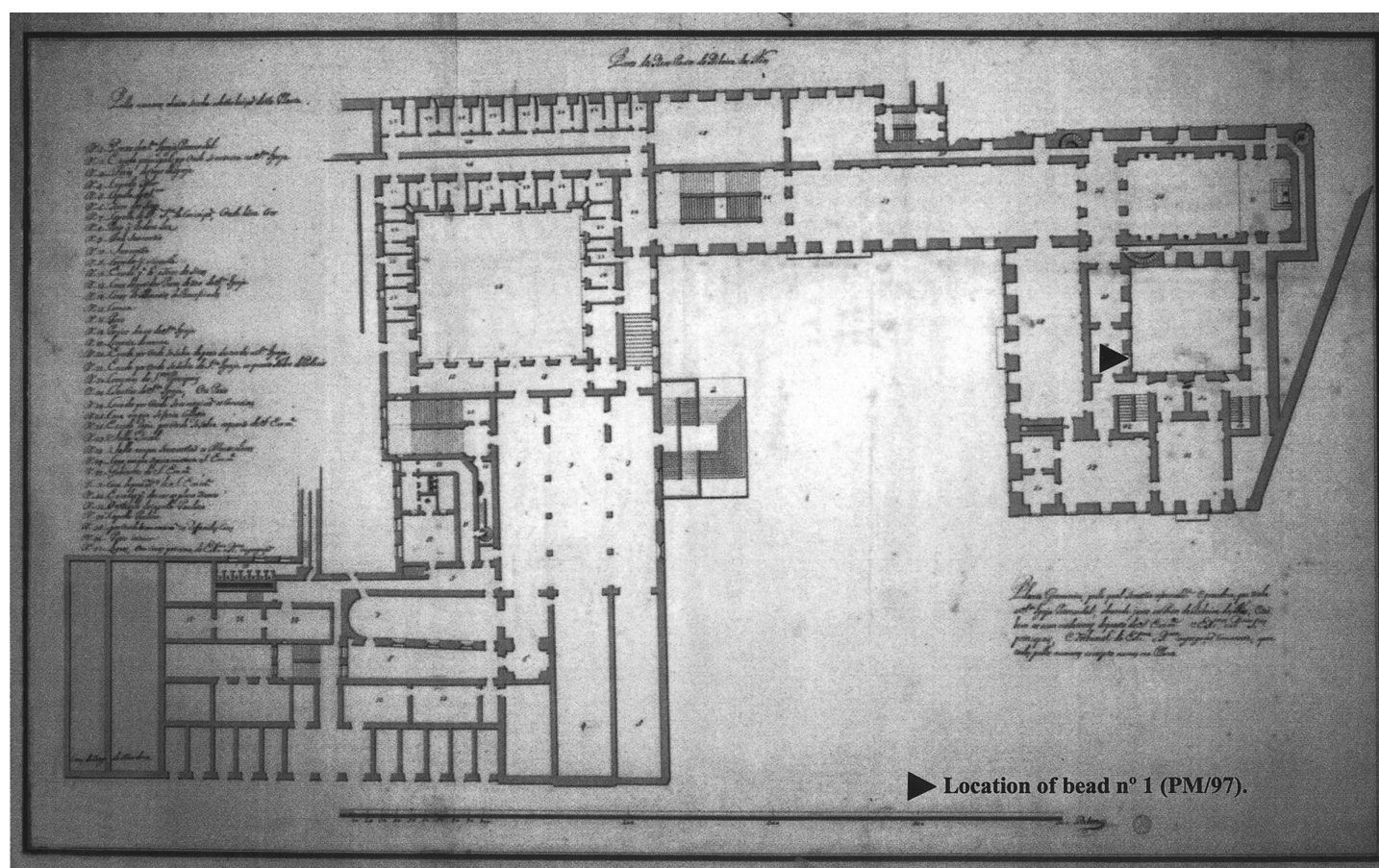


FIG. 3. Map of the urban complex of the Church of the Holly Patriarchal and reference of the place where bead n.º 1 was yielded – Set I.

is very interesting to document the previous occupation of the area, where the remains of the ancient Lisbon Patriarchal quarter: the Palace of the Patriarch, the seminary and a library once stood. This occupation dates back to the kingdom of D. João V, after the 20's of the XVIII century (Fig. 3).

The importance of this micro-space derives from the creation of the patriarchal and had direct origin on the King's prestige, who created (in 1710) the "Colegiada de S. Tomé" (Collegiate of St. Thome) in the royal chapel, which was dignified into Patriarchal Basilica by the Pope (Clement XI), in November of 1716 and was presided by a patriarchal.

King D. João V wanted to achieve the greatest distinctions to the new Basilica/Church, which had been enlarged, due to its reduced size. Another Pope eventually gave the title of Cardinal to the Patriarch of Lisbon, in 1737, and to the lawful successors.

Following these events the monarch created the Lisbon Archbishop, which was changed to "western Lisbon Archbishop"<sup>1</sup>. The King engaged himself on the valorisation of this church, which was considered one of the most luxurious of Europe and considered at the time as a great diplomatic achievement. The Holly Patriarchal Church was established and the surrounding and supporting buildings were located around the Square, with the same name, as

Manoel Portal (manuscript of 1756) refers. All this, as the map from the Religious Complex (Fig. 3) shows, was possible due to the gold mines in Brazil<sup>2</sup>.

Other constructions followed as part of the valorisation and re-planning, which Lisbon underwent at that time. The city began commercially to weight as an administrative counter power and in that modernization exercise the African slaves participated as cheap labour force.

#### 4.2. Praça Luis de Camões (PLC-99)

Set II originated after the archaeological intervention carried out in the "Praça Luís de Camões" (Luís de Camões Square). There was a great interest to record the information regarding the occupation of that micro-local unity during the earlier phases, since it is the most significant for this work and will be focussed below.

It was possible to identify the remains of the architectural structure of the lower floor in the ancient Palace of the Marquises of Marialva, in Loreto (Fig. 4) and some details of its construction and interior decoration (Fig. 5).

The palace's construction must have occurred throughout the forth decade of the XVII century, since the family of the Count of Cantanhede, who was the first

<sup>1</sup> Two dioceses were created in Lisbon, being the old dome the then designated "eastern Lisbon Archbishop". Due to some difficulties, in 1740, this Archbishop would be under the authority of the Holly Patriarchal.

<sup>2</sup> According to V. Magalhães Godinho, in *Ensaio II*, "in 1712, the gold from Brazil and officially registered in Lisbon was almost 15 tons and in 1720 that value would have been 25 tons". This sudden richness would have allowed the overwhelming expenses during the King D. João V's period.



Marquis of Marialva<sup>3</sup>, resided in the same place in 1651, as is referred in *Lisboa Antiga* by Júlio Castilho (1955: 78) and *Lisboa Desaparecida* by Marina Dias (1999: 51).

The noble owners abandoned the place right after the earthquake, since “a great part of the Palace came down and there was a fire”, according to Father Manoel Portal (1756). A reconstruction plan followed, by the Architect-Captain Eugénio dos Santos, which did not see the daylight, maybe due to his premature death, in 1760, or due to the lack of interest for the place.

The intervention actions aimed also at the remains of the reoccupation after the 1755 earthquake. There were some changes on that area, as a consequence of the presence of other stratum of the Lisbon population –victims of the catastrophe– who reused everything that was left standing and had not been recovered by the owners. A new residential and even commercial area surfaced, designated by “Casebres do Loreto”.

The historical route of the place is referred by several authors, of whose we point out Ribeiro Guimarães (1875, vol. V), who refers the presence of 28 shops located in the lower floor of the former Palace.

Due to the physical consequences of the earthquake, the survivors and inheritors cleaned and removed the debris, filled up walls for a better installation and simultaneously preserved (probably not conscientiously) a part of history while setting up the new one. Today the study of all the remains/materials found/collected in the archaeological works is of great importance in this urban matrix.

#### 4.3. The Archaeological Material collected

##### 4.3.1. Set I

Among the yielded artifacts by the archaeological works in the remains of the ancient Patriarchal church, it stands out a single glass bead, from a non-referenced layer. It was found isolated, more precisely in the geological substratum under the foundations of one of the structures about 2 m deep in relation to the current pavement (level 0).

– Bead (PM-97)

This specimen –bead n.º 1– would have been deposited or even lost in the west area of the square, previously a room where the priests (“mosenhores”) were dressed, and referred in the map (Fig. 3).

##### 4.3.2. Set II

The size of the area and the unknown structure of what laid below, lead to the execution of probes and the

<sup>3</sup> Title given by King D. Afonso VI to D. António Luís de Meneses for his contribution to the victory over the Castellan army in the “Batalha das Linhas de Elvas” (Battle of Elvas), in January of 1659.



FIG. 4. General view of the ruins of the Palace of the Marquises of Marialva, in December of 1999, at the time of the archaeological intervention (PLC-99) – Set II.



Fig. 5. Detail of the field works – Set II, –The internal walling in the southern sector III.

definition of different layers and sectors. The field work methodology made possible the schematic representation of the Palace area (Fig. 6a) and the partial map of the lower level (Fig. 6b) and yielded a significant set of data, among which the coat of arms, common pottery, porcelains and glazed pottery, glass, coins and several glass beads. The latter were analysed in this paper.

– Beads (PLC-99)

The collected glass beads were sorted out according to their features and referenced based on the data supplied by the responsible archaeologists:

– Bead n.º 1 –Sector SE-Layer 4-(Fig. 6b)– was found in the context of “Casebres do Loreto”.

– Bead n.º 2 –Sector W-Layer 12-Compartment F1-(2<sup>nd</sup> phase)-(Fig. 6b)– was found under the pavement, a pebbled walkway, which may have been connected to the Palace (probably the stables). The removed pavement is earlier than the palace, but the bead was found underneath.



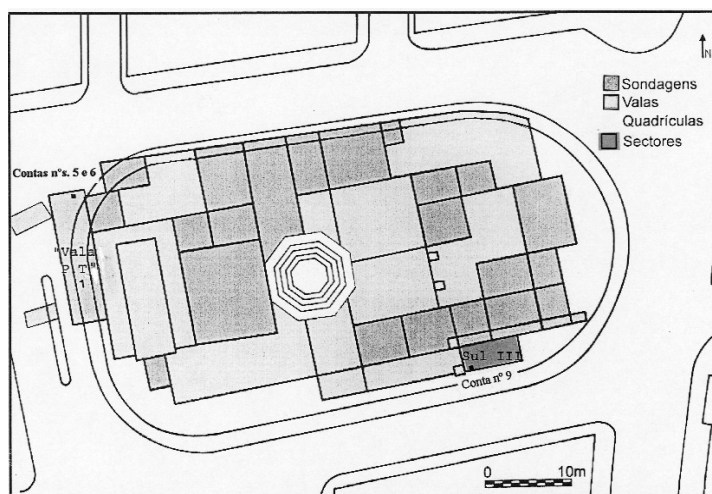


Fig. 6a) Schematic representation of the intervention area – ruins of the Palace of the Marquises of Marialva, where the divisions are only related to the methodologies used during the excavation.

– Reference to the places where beads n.º 5, 6 and n.º 9 were collected – Set II.

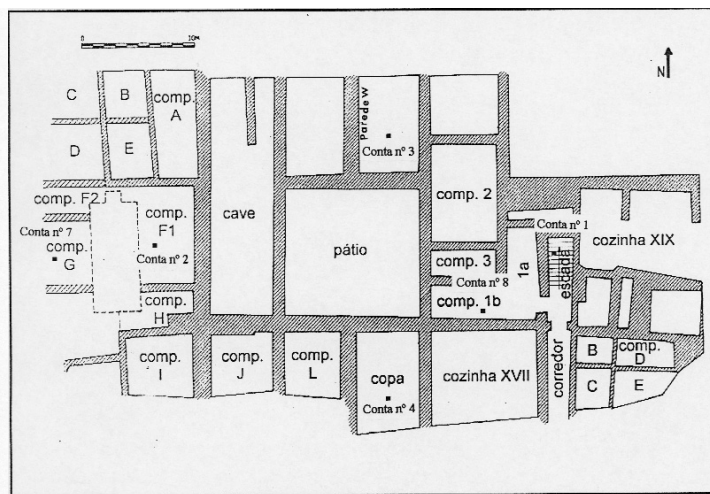


Fig. 6b) Partial plan of the rooms of the old Palace of the Marquises of Marialva with the names given to the several rooms of the lower floor.

– Reference to the places where beads n.º 1 to 4, n.º 7 and 8 were collected – Set II.

- Bead n.º 3 –Sounding 5-Layer 7-trench next to the wall at W– (Fig. 6b) in the context of the “Casebres do Loreto”.
- Bead n.º 4 –Sector S central-Layer 1 -(2<sup>nd</sup> phase)-(Fig. 6b)-(the former kitchen hall)– was under the pave way, constructed by the residents of the “Casebres do Loreto” after the earthquake, allowing the direct access to the internal divisions of the palace or what was left of them.
- Beads n.º 5 and n.º 6 –trench PT1-profile N (Fig. 6a)– Palace area, over the pavement in the waste material. It is worth mentioning that in the nearest area a copper coin (39 mm diameter) of X “reis”, from D. João III kingdom was found.
- Bead n.º 7 –Sector W-Layer 5-Compartment G-(2<sup>nd</sup> phase)-(Fig. 6b)– palace area, documented also with pottery from the XVI and XVIII centuries, under the pave way constructed after the reoccupation following the 1755 earthquake.
- Bead n.º 8 –Sector E 2 central-Layer 2-Compartment 1B-(Fig. 6b)– Layer 2 is at the surface, but still in the context of the palace structures of the XVII century, probably among the remains of the destruction harvested by the 1755 earthquake. It can also be prior to the settlement of the “Casebres do Loreto” or in its initial phase.
- Bead n.º 9 –Sector S III-wall 5 of the palace’s facade (Fig. 6a)– more precisely: integrated in the mortar layer of the internal back side of the access door’s masonry to the “Rua das Flores” (Fig. 6c).

## 5. Analysis and the Characterization of the Beads

The studied specimens were obtained by the “drawn beads” method, but differ on the manufacture. We have long beads, with only one or two colours in the exterior surface, due to the inlays. There is one specimen with stripes of a different colour.

The other type holds the “Chevron” beads, which differ on the manufacture technology since they present

an overlay of different coloured glass layers to obtain the star drawing chevron.

### 5.1. The bead of Set I (PM-97)

The archaeological intervention yielded (as previously referred) just one specimen: a prismatic opaque glass bead, with flat faces on the exterior (Fig. 7).

It is made of three overlayed glass layers, blue and white colours (Fig. 7b) and seems to have been severed into two pieces intentionally.

### 5.2. The bead of Set II (PLC-99)

In this intervention three different types of glass beads were collected; six of them are long glass beads, made of opaque glass, which are going to be characterized as following:

Beads n.ºs 1 and 2 present blue twisted prismatic faces and document the same manufacture technology (Fig. 8); bead n.º 3 presents blue flat prismatic faces (Fig. 8).



Fig. 6c) Detail of the mortar's structure, which supported the stone slabs of the walls' revetment - bead n.º 9 is seen in situ – Set II.



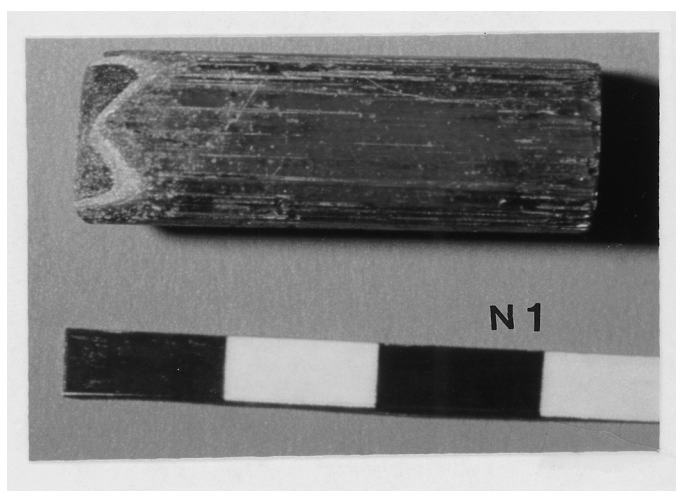


FIG. 7. Exterior face of the glass bead n.º 1 – Set I.  
a) Endpoint area; burilated zone as final finishing.



FIG. 8. Exterior face of the beads n.º 1 to 3; n.º 5 and 6 – Set II.

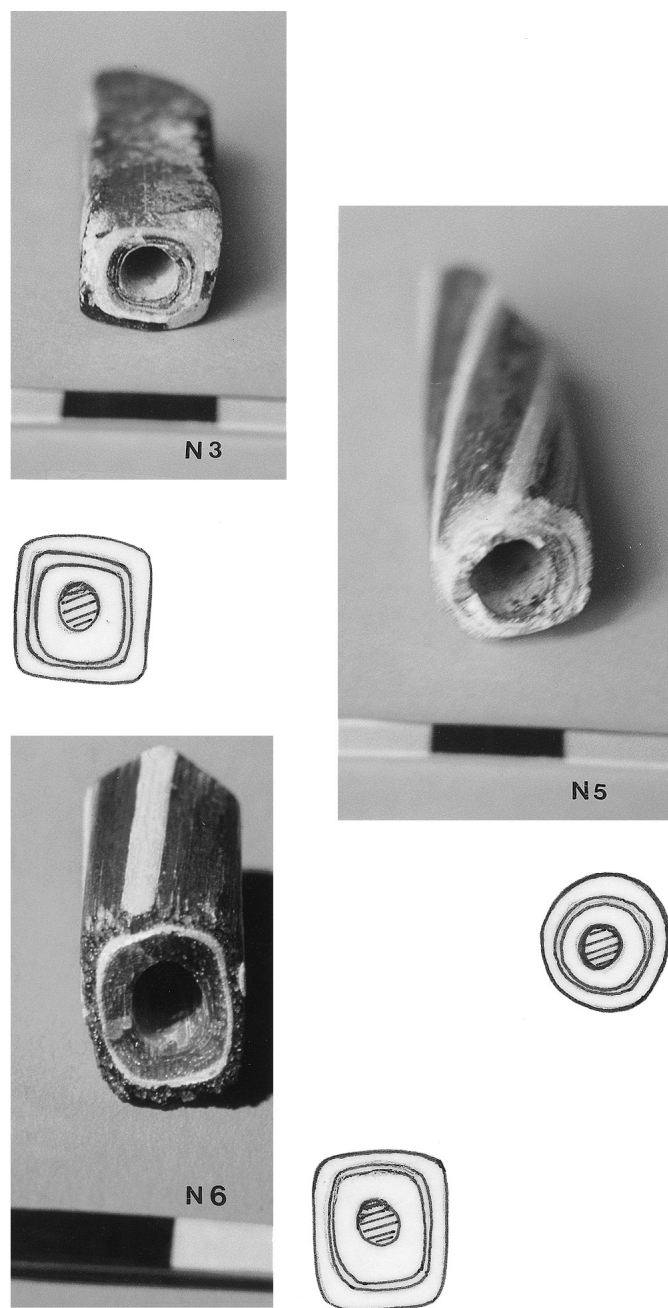


FIG. 9. Same morphological aspect and sequence of the vitreous paste layers of the "Nueva Cadiz" type beads.  
– Beads n.º 3, n.º 5 and 6 –Set II.



FIG. 10. Exterior face of bead n.º 4 – Set II.

On the other two specimens (beads n.ºs 5 and 6) the first presents a twisted and almost cylindrical body (Fig. 8); while the second is prismatic and flat faced (Fig. 8). Both feature longwise stripes on the exterior surface.

The internal structure of these six specimens is made of three layers of blue glass (Fig. 9), being the white at the middle, which allows featuring them in the "Nueva Cadiz" type, as bead n.º 1 of the Set I.

Bead n.º 4 presents a cylindrical body, obtained from a single glass paste core decorated with grooves filled with a different colour (Fig. 10), thus documenting other manufacture (though it is clear that the method of "drawn beads" was used).

The specimens designated by "Chevron" beads are long and large, with double chamfered end points and referenced by the numbers 7, 8 and 9.

Bead n.º 7 is the most complete (Fig. 11a-b) of all, while beads n.º 8 (Fig. 11c) and n.º 9 are documented by just two small fragments.

After analysis of the exterior face of bead n.º 7 it was verified that we have an opaque glass with different colours. This type of beads can be well characterized internally thanks to the fragmented specimens, featuring a series of overlaid glass.

All the studied beads have a cylindrical central perforation.

### 5.3. Preservation state

The condition of this set was stable, though every specimen is fragmented as well as irised. Only two specimens had to go over some extra care –the bead of Set I and bead n.º 4 of Set II– by adding a paraloid solution in the vacuum.

## 6. Morphological Study of the Beads

Morphologically, the studied specimens are of four separate types, which may document the same number of manufacturers. To better characterize them, they were drawn typologically, in their true size –Set I (Fig. 12); Set II (Fig. 13 and 14).

### 6.1. Set I (PM-97) and II (PLC-99)

The specimens n.º 1 of Set I and n.º 3 of Set II present a prismatic body and rectangular transverse section, show polished edges and a triangular shape on one end point, as a final process during the manufacture. The same feature would have been found in the other end point. Bead n.º 1 has one polished end point and the triangular shapes are more accentuated, showing the internal layers (Fig. 7b). Bead n.º 3 shows one fragmented end point (Fig. 13).

Beads n.º 1 and n.º 2 of Set II feature a twisted prismatic body and are only represented by tiny fragments. Only bead



n.º 2 registers one polished end point after the initial cut (Fig. 13). They show a sub-rectangular transverse section, clearly seen in the typological drawing (Fig. 13).

Beads n.º 5 and n.º 6 are similar morphologically, but document a more careful manufacture and whence more expensive. The former is highly twisted with sub-circular transverse section and the edges were gone (Fig. 14). Bead n.º 6 has a prismatic body with rectangular transverse section and well-pronounced edges. Both beads feature as well, a striped decoration, with beautiful oblique inlays, just one polished end point and one of them is fragmented (Fig. 14).

Bead n.º 4 (considered complete) has a cylindrical body, rounded transverse section and decorated by groups of stripes, each with three grooves filled with glassy paste. This technology documents a much poorer manufacture, perhaps an imitation and therefore a more popular bead (Fig. 14).

Pertaining the “Chevron” beads, just specimen n.º 7 can be morphologically defined and documents another manufacture type. The bead features a cylindrical body with double chamfered end points, six faces and a rounded transverse section. Some lobes are visible on the bead’s end points (Fig. 14). In the transverse section, the colours of the core form a star, thus the name “Chevron or Star”. The most common specimens show 12 points (as this studied specimen), which determined the type of its structure (Fig. 14).

Morphologically speaking and based on the typology propounded by Horace Beck (*Classification and nomenclature of beads*, 1981) these beads fit:

–Long Beads –Group IX (square transverse section) D.2.b. and Group I (rounded transverse section) D.2.b.;

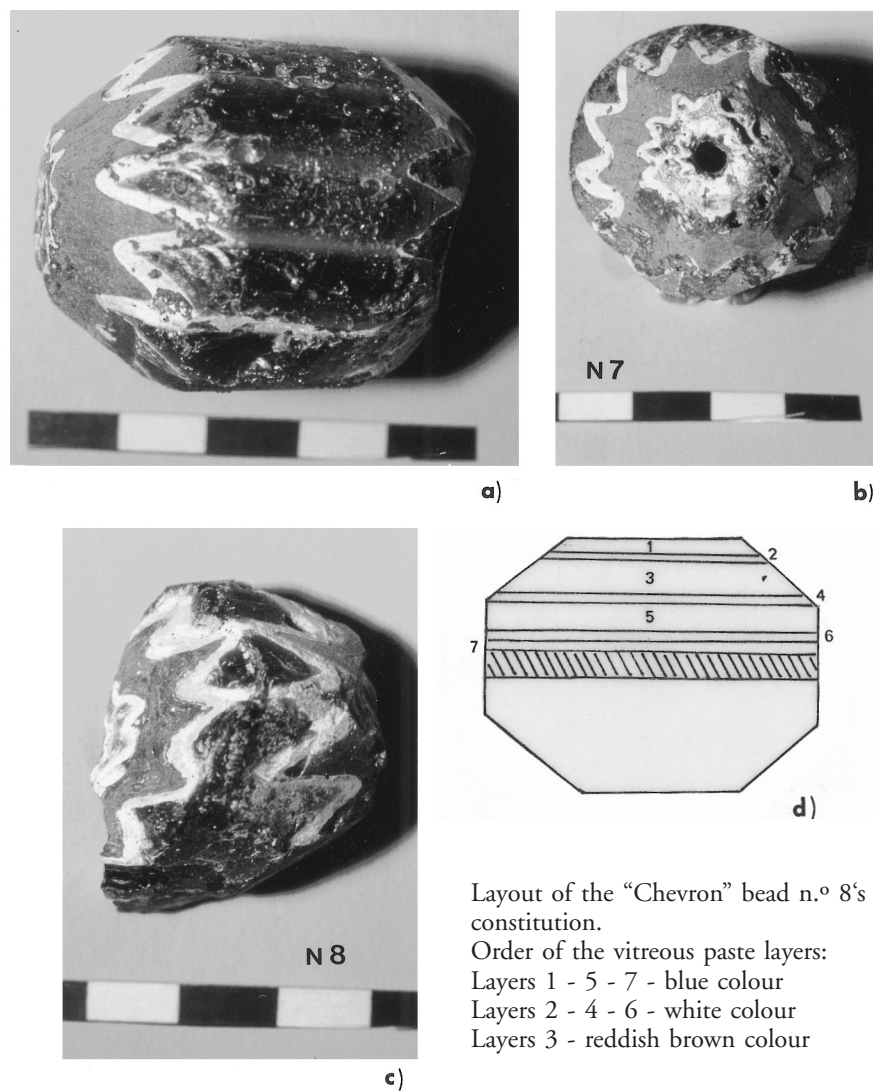


FIG. 11. Detail of the “Chevron or Star” type beads –Set II.

a) Bead n.º 7 –exterior face’s morphology.

b) Bead n.º 7 –top view.

c) Bead n.º 8 (fragment) –internal zone.

d) Bead n.º 8 –internal layers’ scheme and respective order of colours.

–Long Beads –Group I (long double chamfered cylinder) D.2.b.f.:

Among the two sets of beads four morphological patterns can be distinguished, documented on the typological drawings done by the author (Figs. 12, 13 and 14).

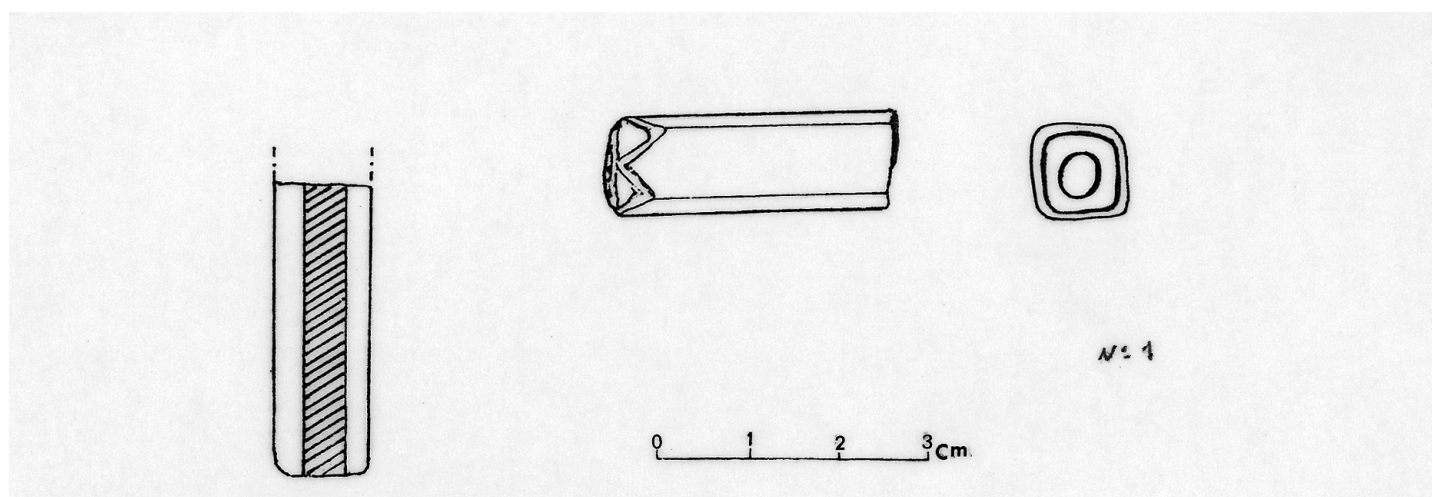


FIG. 12. Typological drawing of the bead n.º 1 – Set I.

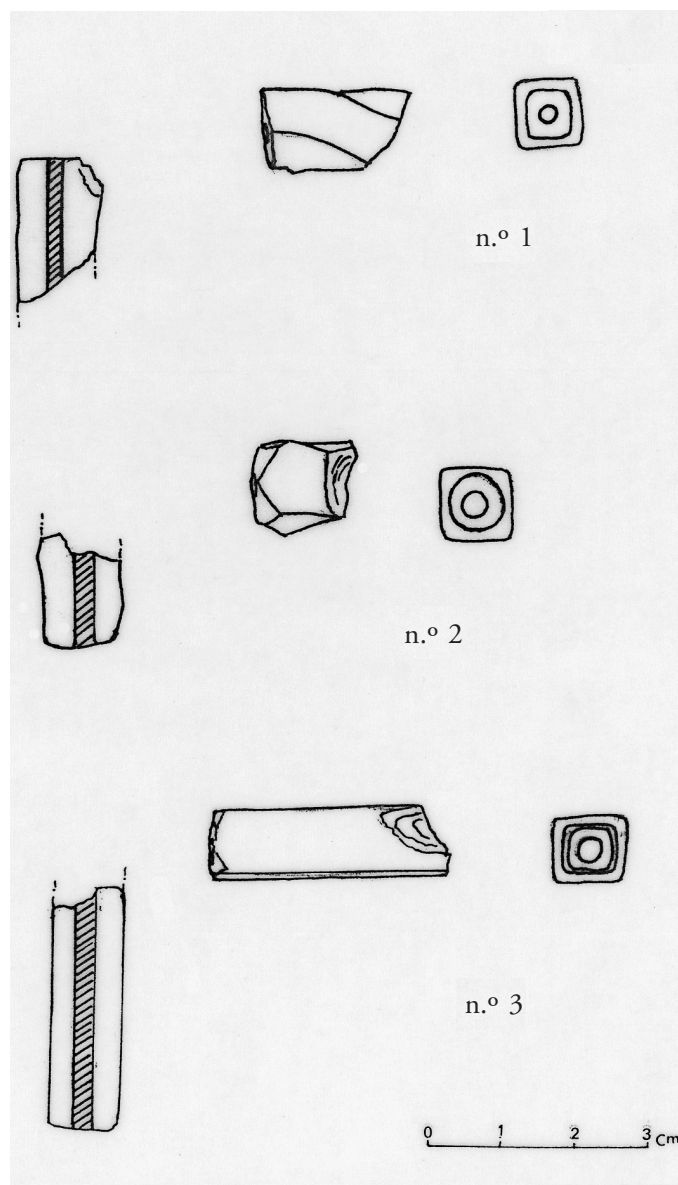


FIG. 13. Typological drawing of the beads n.º 1 to 3 – Set II.

- Type 1 – Flat faced prismatic beads
- Type 2 – Slightly twisted prismatic beads
- Type 3 – Cylindrical beads
- Type 4 – Double chamfered cylindrical beads

#### 6.1.1. Colour

Among the studied specimens, the colour tones of the vitreous-paste were defined according to the Methuen Handbook of colour (1978).

The drawn beads –“Nueva Cadiz” type– display blue colour on the exterior face, with different tonalities, namely:

23-D-7 –bead n.º 1 of Set I and bead n.º 6 of Set II;

23-D-8 –beads n.ºs 1 to 3 and 5 of Set II;

In beads n.ºs 5 and 6 the inlays stripes are milky white.

Bead n.º 4 of Set II have another type, the colour of the exterior face is blue –23-B-5, and the longitudinal grooves were filled with a dark brown colour paste– 6-F-4.

In the “Chevron” beads, the colours of the vitreous-paste are different and alternated in the layers. The exterior face of the cylindrical zone is blue and longwise there are

stripes due to the transparent white colour of the following layer (Fig. 11a).

In this bead and from the outside, the layers are blue, through which the next white chevron layer is visible (Fig. 11b), reddish brown, thin white chevron, reddish brown, tiny white chevron and reddish brown, which borders the perforation.

The colours of bead n.º 7 are presented according to the number of the layer, starting outside:

21-E-8 –Deep blue (1<sup>st</sup>);

1-A-1 –White (2<sup>nd</sup>, 4<sup>th</sup> and 6<sup>th</sup>);

7-D-7 –Brown (3<sup>rd</sup>, 5<sup>th</sup> and 7<sup>th</sup>).

On beads n.º 8 and n.º 9 the perforation area is blue and that shade (Fig. 11c) is repeated in the first layer.

Regarding bead n.º 8, the vitreous-paste layer sequence, starting on the interior, is blue, tiny white chevron, brown, a reduced white chevron (Fig. 11d), blue, white and blue.

The white colour layer was always the thinnest in all of the beads.

#### 6.1.2. Dimensions

The dimensions (longitudinal section) of the beads do not seem significant, because they are fragmented, but morphologically the diameters are worth to be referred, according to the methodology laid down by Horace Beck (1981):

*Type 1* –flat faced prismatic beads– three specimens: bead n.º 1 of Set I, n.º 3 and n.º 6 of Set II. The longitudinal section measures 33 mm, and 32,8 mm respectively on the 1<sup>st</sup> and 2<sup>nd</sup>. The wide transversal section of bead n.º 1 measures 11,5 mm and 11 mm in bead n.º 6, and 10 mm in bead n.º 3, the smallest.

*Type 2* –slightly twisted prismatic beads– two specimens: beads n.º 1 and n.º 2 of Set II. The longitudinal section in bead n.º 1 measures 20 mm and 14 mm in bead n.º 2, which is the shortest. The transverse section reaches in bead n.º 2 10,5 mm (the widest).

*Type 3* –cylindrical beads– two specimens: beads n.º 4 and n.º 5 of Set II. In bead n.º 5 the longitudinal section measures 55 mm, and in the other bead, almost intact, bead n.º 4 measures 31 mm. The wide transverse section of bead n.º 5 measures 14 mm, and 8,8 mm in bead n.º 4.

*Type 4* –double chamfered cylindrical beads– one specimen: bead n.º 7. The longitudinal section measures in this bead 45 mm, the bulkiest and densest of this set. The maximum transverse section measures 37 mm.

## 7. Comparative study of the analysis results

### 7.1. Technological details

The analysis ran on the “Nueva Cadiz” beads, when compared with previous studies share technologically the same appearance; it is even possible to visualize on the photographs, obtained by a binocular magnifier<sup>4</sup>, a series

<sup>4</sup> Photographs obtained with the support of the Geology Department of the Faculty of Sciences of Lisbon (n.º 15 to n.º 19).



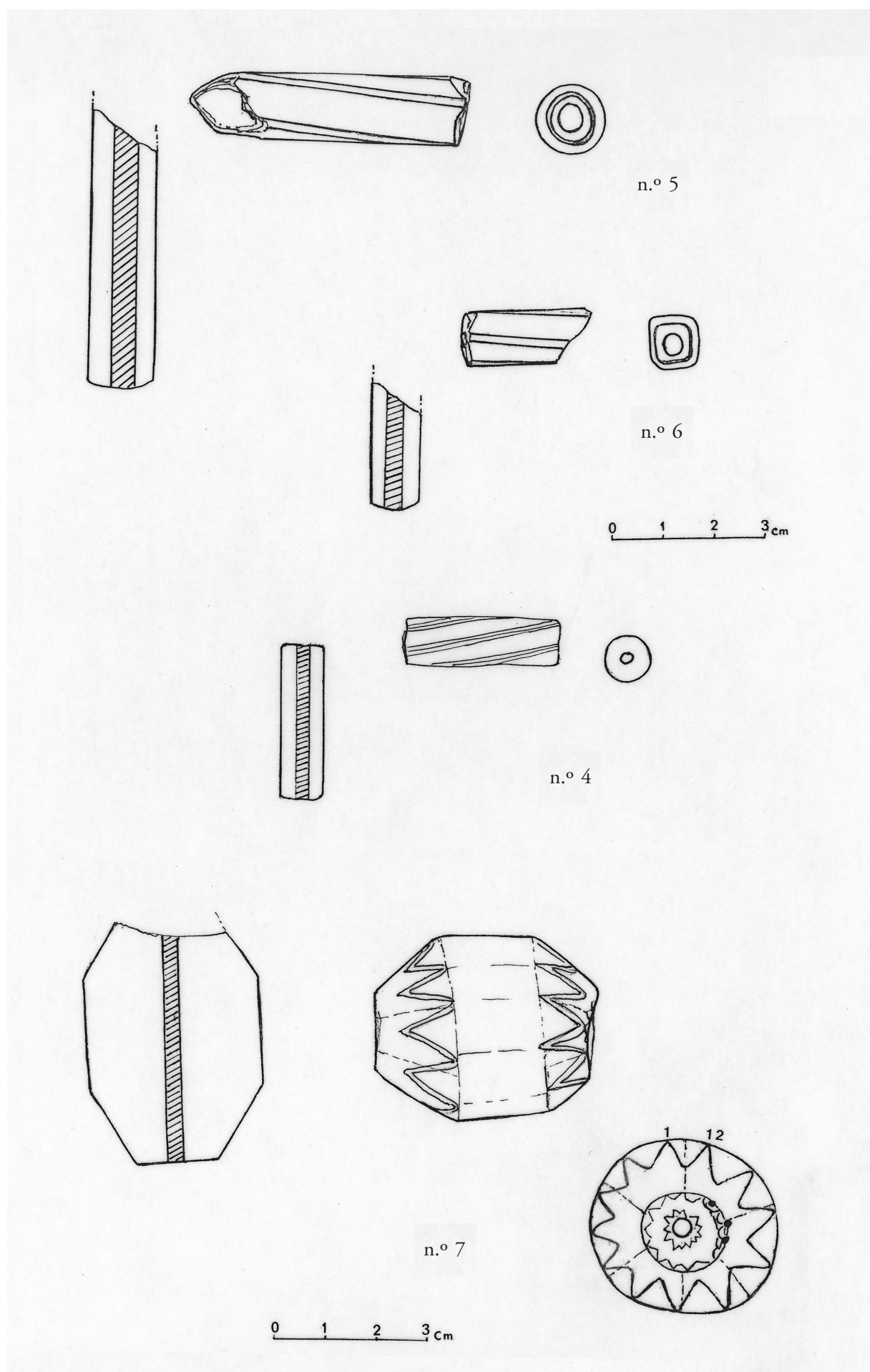


FIG. 14. Typological drawing of the beads n.º 5 and 6; n.º 4 and 7 – Set II.

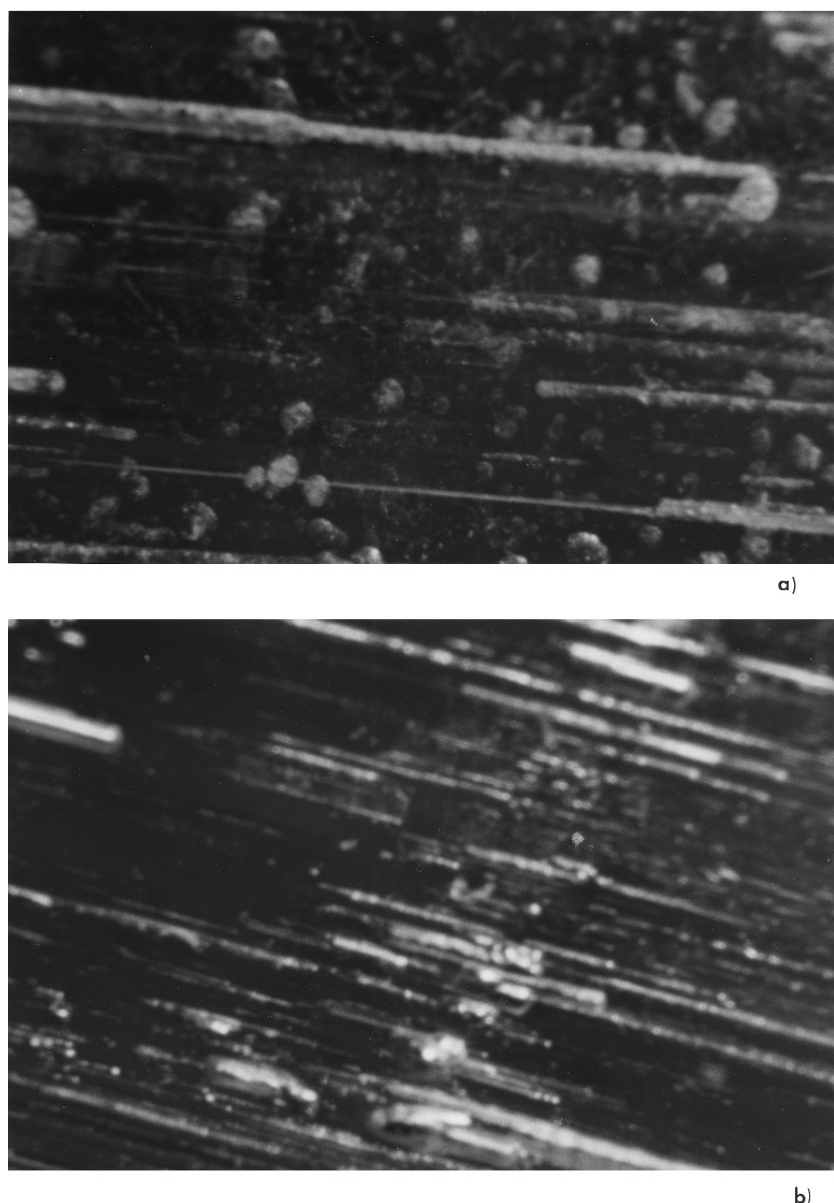


FIG. 15. Exterior surface of the beads, with "bubbles", witness of the drawing process.

- a) Bead n.º 1 – Set I.  
b) Bead n.º 5 – Set II.

of "bubbles" lined together lengthwise, clearly able to spot on the surface layer –bead n.º 1 (Set I): and n.º 5 (Set II) (Fig. 15a-b). These evidences demonstrate the manufacture used –"drawn beads"– that is: the glass paste was drawn to produce glass tubes, which after being cut were turned into beads. These beads came in different typologies, which are mainly confined by the size of the tube's diameter, the cut method –flat faced or twisted prismatic shaped bead– and by the finishing method. The beads were finished either by re-heating or polishing, defining some triangular shapes –showing the internal white coloured layers– embellishing the final product like bead n.º 1 of Set I (Fig. 7).

The glass used in these beads would have been "luminous", but today it presents the exterior face capped by a very thin ivory white film, as in bead n.º 3 (Fig. 16a) for instance, or slightly silver colour, as in bead n.º 1 (Fig. 16b), both from Set II. This should be the result of a buried-irised surface.

The analysis of the fractured area, where the beads were severed, reveals a sequence of layers or multi layer of blue and white coloured glass, well documented on beads n.º 1

(Fig. 17a) and n.º 2 (Fig. 17b) of Set II. The white coloured layer is always the thinnest and shows up after the layer bordering the perforation, as the referred specimens revealed.

The introduction of the white coloured layer could also be the attempt to turn the bead opaque, which was used in glass manufacture in the Antiquity. Comparing them with other blue beads, apparently of the same type and displayed in XIX century catalogues found in some British museums (like the one published by L. Dubin, 1987/1995: 109), the latter are transparent and single coloured and were used in the acquisitions of slaves in Africa. The manufacture is also already defined and is indeed a Venetian product.

Bead n.º 4 of Set II is a unique specimen, differing morphologically and in the manufacture. It is a tube of one monocolour layer, presenting on the exterior face lengthwise grooves filled with a different coloured paste (Fig. 18).

According to R. Vose (1980: 32), while referring to the white coloured glass as a decoration commodity, like specimens n.º 5 and 6 of Set II (Fig. 9), these beads are decorated with white coloured inlays, which would be afterwards painted with a golden colour, the edges define triangles, by showing the white, as bead n.º 1 of Set I (Fig. 7) and especially on the "Chevron" beads.

After careful observation on the magnifier, the "Chevron" beads reveal a manufacture technology, which is much different from the blue beads, though they are all "drawn beads". They all show an overlay of several glass layers of different colours and thicknesses, which can be well referenced in bead n.º 8 (Set II) and better analysed due to the fragmentation (Fig. 19a).

The colours of the vitreous-paste layers are altered (Fig. 19b) but similar to those on bead n.º 9 (Set II), showing also that just the third layer is reddish brown. The first and fifth layers as well as the last or seventh are blue, unlike bead n.º 7 (Set II) that is blue only on the exterior layer (Fig. 11a) and is complete.

These beads are certainly a product of different makers. Bead n.º 7 seems to be according to typology and colour a Venetian product, but on its initial phase, where this colour palette was used (L. Dubin, 1987/1995: 116). The specimens n.º 8 and 9 seem to have been from a broader production and are analogous to those from Luanda, which belong to the collection of IICT.

## 7.2. Chemical Characterization – The Analysis Results

The chemical characterization of the beads from Set I and II was done through X-rays fluorescence spectrometry –carried out by Eng. Maria Eugénia Moreira, of the "Instituto Geológico e Mineiro" (Geology and Mining Institute)– and confirmed the glass nature of the matrix and



displayed no traces of crystal components. This analysis contributed to draw a line between similarities and differences and document the manufacture, thus allowing the origin to be traced.

### 7.2.1. Blue glass beads

The analysis results confirm the affinity of these beads regarding their chemical elements, but there are some differences as well.

The flat face or twisted prismatic blue beads are all identical elements, displaying silicium (Si), calcium (Ca), potassium (K), iron (Fe), copper (Cu) and tin (Sn).

Bead n.º 1 of Set I is identical to n.º 3 of Set II, but the former has more iron than any other specimen as well as calcium and tin; copper is also significantly present. There are no traces of cobalt, which in the case of bead n.º 1 of Set I would have been the cause of the different blue shade, besides indicating that we are in the presence of a different glassmaker (Fig. 15a).

Bead n.º 3 of Set II shows a high density of silicium while calcium, potassium, tin and iron dominate. There are traces of cobalt (Co), cause for the light turquoise blue shade (Fig. 16a).

Beads n.ºs 1, 2 and n.º 6 of Set II are identical, displaying the same percentages of silicium, calcium, tin and iron, but n.º 6 has more potassium than any other specimen of this type of beads.

Due to the dimensions of bead n.º 5, no analysis could be made, but it suggests a different manufacture from bead n.º 6 of Set II, either morphologically or regarding the glass. The blue and the white coloured layers are intertwined, though the central white layer is highlighted (Fig. 9). Bead n.º 6 is similar to n.º 3, but the former has a higher concentration of tin and potassium, while bead n.º 3 has more calcium and displays the evidence of sodium. In copper terms they are analogous.

The flat faced or twisted prismatic beads still showed traces of titanium (Ti), nickel (Ni), cobalt (Co), strontium (Sr), lead (Pb), manganese (Mn), sodium (Na), zinc (Zn) and chromium (Cr). The chemical composition is very homogeneous and demonstrates a good metallurgical knowledge and know-how as well as an equally perfect manufacture. It is worth to notice that the set of “Nueva Cadiz” beads shows a very reliable presence of copper, tin and lead, independently of the morphology.

The colour of these beads would have been obtained by the addition of metallic oxides. The blue coloured glass layer contains mainly copper, iron, chromium, though the amount of cobalt confers the different shades of turquoise blue. Regarding the milky white colour of the intermediate layer, it is probably very similar in composition to the inlays present on beads n.ºs 5 and 6 of Set II, which would have been probably produced in a second phase, when the

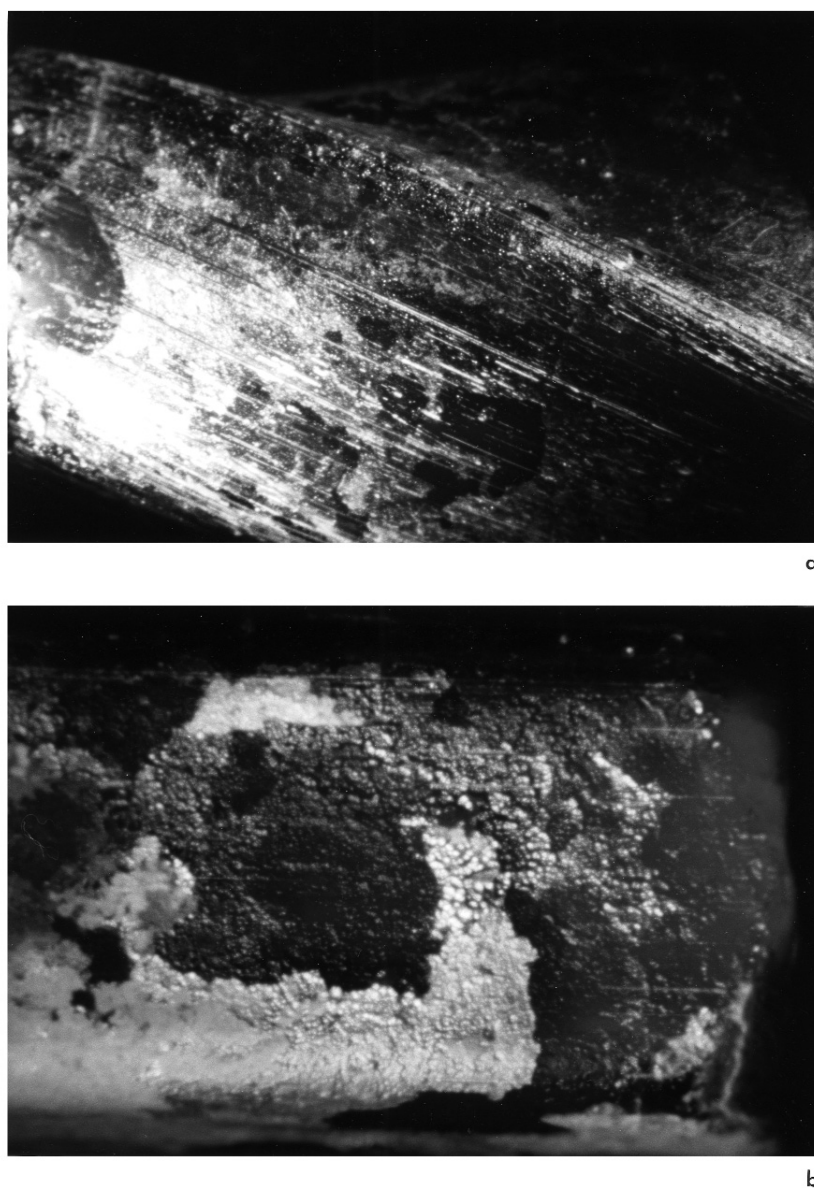


FIG. 16. Changes of the exterior surface of the beads – Set II.

a) Bead n.º 1.

b) Bead n.º 3.

glass paste was drawn (Figs. 8 and 9). These inlays present predominantly phosphorous (P) and sodium (Na) in their composition, after a qualitative analysis.

Regarding bead n.º 4 of Set II and comparison, among the main chemical elements we have antimony (Sb), only found on this bead, manganese (Mn) in great density, copper (Cu) in a tiny percentage and silicium (Si) also in short quantity. The antimony can be understood as the element used to facilitate the fusion of the vitreous-paste, showing a poorer technology and thus a cheaper manufacture, but valued for the groovy decoration (Fig. 10).

### 7.2.2. “Chevron” beads

These beads are chemically very similar to each other, though there are some differences. The analysis focussed the interior face of the beads, since they were fragmented. Due to the size, bead n.º 7 of Set II could not be analysed chemically (Fig. 11a).

The chemical analysis of beads n.ºs 8 and 9 of Set II show predominantly silicium, calcium, potassium. Sodium, iron and tin, but with some differences:



FIG. 17. Multi glass layers structure in the endpoint of beads – Set II.  
 a) Endpoint of bead n.º 1.  
 b) Endpoint of bead n.º 2.

–bead n.º 8 (Fig. 11c) displays a high concentration of tin and lead as well as calcium and in less quantity nickel, chromium, titanium and strontium;

–bead n.º 9 is probably from a different glassmaker, based on the low quantity of lead. Tin is present and the quantity of iron, copper and cobalt is similar on both beads.

The significant amount of lead registered might be a hint to the purpose of this element-fusion element. The same would have been true for the tin, but in a different stage of the beads manufacture.

The colours displayed would have been a consequence of the chromophorous chemical elements, being the blue coloured area richer in cobalt and the reddish-brown richer in copper and iron. In these specimens the presence of other chromophorous elements like chromium was registered. They would have been mixed to obtain the different colorations, since this is a very complex process, depending on several factors. The colour conferred by these elements is related to the structure of the material

as well as to the place occupied on the crystalline lattice, summing all up to the glassmaker's ability.

## 8. Discussion

### 8.1. History and Context

In this study a particular importance was lent to the presence of the glass beads as an element of social-cultural identity of the African native brought as a slave from the African coast. Then the objective of the Portuguese was trade and evangelisation (spread of the Christian faith). The African native became a subject of history itself, namely the slaves brought for centuries from the “Kingdom of Congo”, whose exploration began by the Portuguese, in 1483 (C. Santos, 1971: 403-404), though the central idea was the arrival to India. There was the need to establish commercial/trade points/places along the route. The seafarers would have interacted, initially, with the African chieftains by offering them presents maintaining a good relationship, especially on the religious-political level, developing the slave trade only afterwards. This approach seems to have pleased, at first, the African chieftains.

In the end of the 1<sup>st</sup> Portuguese monarchy dynasty, Lisbon was already a strong trading hub, highly credited in Europe. The Portuguese kingdom was a united country, with well-defined borders, comparing to other European countries. The development of the trade with the African world increased and in the beginning of the XVI century it took a new shape with the “Regimento of the Casa da Mina e da Índia” (Casa da Mina e da Índia's Regiment: set of rules to control and monitor all the Portuguese trade; the Institution had been moved from Lagos in 1481).

This Regiment ruled that all ships/vessels returning from Africa had to anchor in Lisbon (decree of Book 5 from 17<sup>th</sup> February 1558). The city of Lisbon had henceforth an always-growing population, based on the supplies of food and other goods, allowing the city to prosper social and culturally.

The interests of the Portuguese in Northern Africa, eased by the conquests in that area, supplied the information about the “Terras do Alto Níger e Senegal” (Upper Niger and Senegal), where the gold came from; it would circulate in the “Terra da Guiné” (Guinea), and the legend of “Prestes João”, a powerful Christian King. This was enough to steer the Portuguese to consider him as a good ally against the Muslims, which strengthened the continuation of the expansion and defence of the Christian faith. Papal bulls would have reinforced the situation as an appreciation for the work carried out by the Portuguese in the name of Christianity and God.



One of the first results of the expansion was the slave trade, result of the captures in the Saharan coast as well as in the African villages of Senegalese coast, described by Gomes Eanes de Azurara in 1442. The motives behind this first capture, done randomly, were to understand how the area was populated and show knowledge of the region. This trade was eventually developed/increased with the help of the African chieftains and local merchants, attracted by the items/merchandises taken to the “deals”. After the building of the trading post in Arguim, an island near to Mauritania, in the second half of the XV century, the Portuguese were able to shift the trans-Saharan trade to the coast and to their ships. The Atlantic route was open and running.

The trade would be even more increased by the Portuguese after the decision of King D. João II to establish a Fort in S. Jorge da Mina (Elmina) on the Gold Coast (today Ghana), in 1482.

The Portuguese were never able to build a trading post inland, thus reaching the origin of the gold. African and Arab middlemen wrought the gold and slave trade. To support the evidence of the dimension of this trade during the kingdom of D. Manuel I (1492-1521), it is worth to pin down the average year value of imports through Mina –170.000 “dobras de ouro” (golden pieces) (C. Boxer, 1992: 45), besides the slaves, who were considered a major “article” and highly profitable. The Portuguese crown eventually conferred the right to the slave and ivory trade and imports to private traders, but maintained the gold trade under its control.

The presence of native Africans in Lisbon dates back to the middle of the XV century. Diniz Dias, would have brought the first in 1444, when he returned from “a business trip” to the African coast, namely Cape Verde and the Senegalese coast. The trade of North African captives, had already some tradition in Lisbon –it existed the “Rua dos Cativos” (Captives Street)– according to Cristovão Rodrigues de Oliveira in *Sumário de Lisboa* (1554). This trade was carried out in a place/shop in the “Rua Nova de Lisboa”, since middle of the XIV century, as referred by Pedro de Azevedo in *Os escravos* (1903).

The slaves were an increasing reality, since the middle of the XV century, especially in the rural areas, mainly Alentejo, to work in the fields. The use of slaves was already a common practice, taking into account what was discussed in the *cortes* (council to discuss the matters of the Kingdom) held in Coimbra in 1472 and ended in the following year, in Évora (in which it was discussed the establishment of the land parcels for the nobles of the kingdom). The slaves were considered as “necessary elements to clear woods and advance the agriculture”. Since the beginning of the XV century to the first half of the XVII century around 1 million Africans were shipped mainly from the “trade posts” located from Arguim to Sierra Leone and in the Kingdom of Congo.

The relationship between the Portuguese and Congolese Kings deserve a highlight in the history of the Portuguese expansion, after the first maritime trip to the African coast

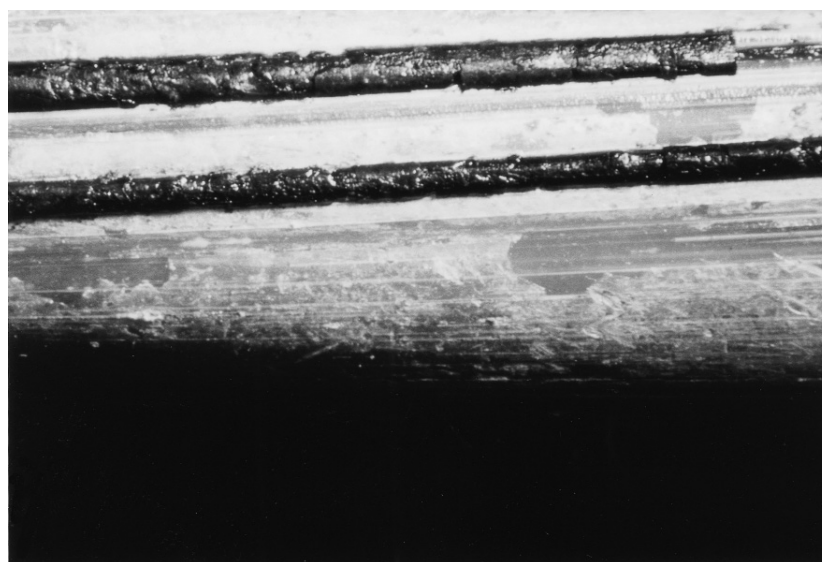


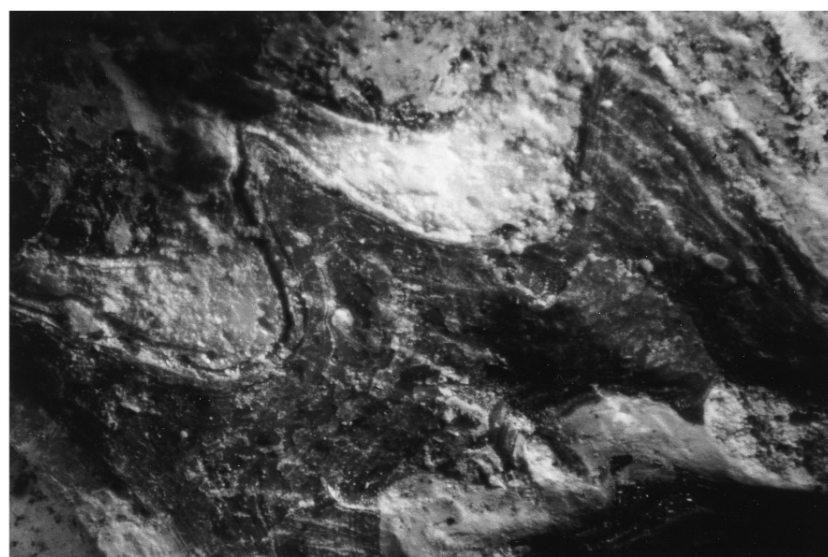
FIG. 18. Bead n.º 4 –exterior surface with the grooves filled with a brown paste– Set II.

by Diogo Cão and his arrival to the Zaire/Mpinda river mouth, according to M. Emília Santos (1988: 45), which would have occurred in 1482; date referred by A. Ferronha (1992: 7) as well.

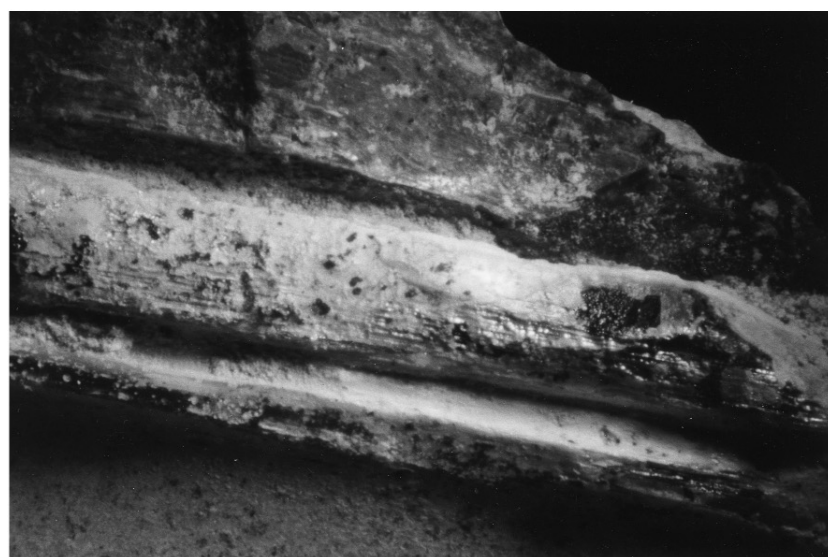
The navigation project was mainly commercial and the spread of the Christian faith was seen as a work of missionaries. They hoped that the captives would feel happy, as the chronicler João de Barros wrote. This alleged hope was used simultaneously to control the African elites, as it happened in the Kingdom of Congo. The priest “António Vieira” (1718) in *História do Futuro* (1992) refers “if there were no traders looking for treasures, who would transport the preachers, who would carry the heavenly treasures”. Thus the preacher took the bible and the trader the preacher, equally referred by C. Boxer (1992: 77).

As a direct result of this interchange and commercial understanding, cooperation with the African chieftains, the number of slaves increased to a great number, thus requiring a use of this “raw material”. It seems that the administrative structure of the Portuguese kingdom was not capable of that and the king’s decision weighted up to the side of the slave export business. The control belonged directly to the royal power as well as the licensing of the sells and Lisbon became a direct trading post for slave trade, which could be suspended on the country’s needs, according to the King. Such a proceeding and interests differ in great deal from the first activity carried out by the native Africans brought by the Portuguese seafarers –to learn Portuguese and serve as interpreters<sup>5</sup>, since the

<sup>5</sup> The interpreters’ institution at the Captain’s service –the employment of the African slave as a “turgimão”– became a routine, as Luís Cadamosto (1445) informs. Their owners, who had the right to select one of the new slaves, brought in the return journey, for each “turgimão”, who did a good service, rented them to the seafarers. To get the Africans interested, for 4 new slaves, the interpreter would be granted freedom. This model –“turgimania”– would have an original way of emancipation created by the Portuguese, after the model of enslavement developed for the trade market. The chronicler Gomes de Azurara notes, in 1445, another significant activity of the native slaves, by referring that they served as servants aboard on the first African coast recognition journeys.



a)



b)

FIG. 19. Internal glass layers structure of the "Chevron" bead n.º 8, which is fractured – Set II.

a) Overlay of the vitreous paste layers.

b) Layers near to the bead's perforation zone.

aim of the Portuguese rulers was to "get to know the extension of the power and richness of the Africans".

The African slaves were also preferred to serve as domestic servants, but not for the minor chores. It was rather their work capacity in the smith shops<sup>6</sup>, where they produced equipment for the vessels (as anchors and ironware), artillery and even specialized tasks, guns and other activities in the cities, among which Lisbon stood out.

In Lisbon, the city showed an urban reality, well present on the iconography (Fig. 20). Naval constructions bordered civilian and religious buildings, giving a frame to the city, which suffered a dramatic development since

<sup>6</sup> It is important to clarify that in Southern Africa, the population was still in the African Iron Age (began around 500 b.C.) and the knowledge of the forgers and smiths were magnificent, namely those from the Kingdom of Congo. These used to work the iron to produce agricultural tools and ceremonial as well as prestige objects, and the copper, which was used to produce different artifacts, mainly manilas.

the XVI century, when King D. Manuel I had the "Paço da Ribeira" (seafront royal grounds) built and all the administration headquartered there.

On the other hand, the census shown the figure –100.000 inhabitants– by middle of the XVI century (carried out by Cristóvão Rodrigues de Oliveira, in 1551). Another, by Damião de Gois (Évora, 1554) stated that Lisbon had 20.000 buildings and the slaves accounted for 10% to 20% of the population.

The presence of the native African –the "pequenos" (the young) as Fernão Lopes called them– was very significant, but they still lived at the margin of the social system. They were no longer considered a curiosity, since they were not shown at the royal court, but their high numbers had allowed them to take part in parties and commemorations organized in Lisbon.

It is worth mentioning that their great ethnic diversity was highlighted by several dances and combat exercises, the costumes, and attributes as beads, used as a prestige and an identity element<sup>7</sup>.

Even though the power tried every possible way to keep the black native African slave including the freed slaves –"forros"– at the margin of society, the relation with the lower strata of the society happened. The official will did not materialize in Lisbon, though the slaves had no rights and were immediately named "pretos" (niggers)<sup>8</sup>. The condition of slave excluded the right to justice, but in the XVII century, with all the terror spread by the Inquisition, the native African would have integrated himself even deeper among the populace, mainly in the capital of the Portuguese Empire.

## 8.2. Lisbon – The Native Africans in the Confraries and Religious Brotherhoods

The existence of the "Irmandade dos Homens Negros de Nossa Senhora do Rosário" (Native African Brotherhood of Lady of the Rosary) is documented since the first decades of the XVI century, in different places around the

<sup>7</sup> The native African slaves presenting their dances, was the theme of a news article, dated to the middle of the XV century, when the "Infanta" D. Leonor, sister of the King D. Afonso V, celebrated her wedding with emperor Frederic III of Germany. The description is of the priest Nicolau Langman from Falkenstein, encharged of the wedding by a procuration issued by the emperor, edited in Strasbourg in 1717 and mentioned by R. Cavalheiro and Eduardo Dias (1945).

<sup>8</sup> The term "preto" to designate a native African is found in the books of King D. Manuel I chancellery and is referred by Pedro de Azevedo (1903), when the King granted freedom ("forro") to an old slave inherited from King D. João II and dated to May of 1501.





FIG. 20. View of Lisbon –illustration of the XVI century (which belonged to Admiral Gago Coutinho).

country of Portugal. Though it may seem contrary to expected, the King approved the establishment of such confraries, in which the African slaves and the freed natives (*forros*) were in significant numbers.

The native Africans brought from the “Congo Kingdoms” were in great numbers and proudly stood by their origin and ancient society, as priest Cavazzi (1687) refers, who lived among the Africans. These feelings would explain the difficulty to accept their “Masters” as superiors and as a consequence they were punished. The royal power supported this *statu quo* and would interfere on the captives as well as on the slaves’ relationships. Memory is sheer power, as traditions weight on. Those who owe their past, use it according to their needs, reorganizing and transforming it into a communications network. The self-awareness of their differences allowed a contact with the past and at the same time preserved its origin in a culturally hostile world, as Lisbon would have been. Based on this perspective, the slave condition would have made a participation in professional association activities very difficult.

The Confraries (institution with great prestige in the epoch) would have gathered several professional associations activities and easily allowed the participation of (normal) workers, of a certain trade. A catholic Saint had to be chosen, whose biography was linked somehow to the professional activity in question, being then chosen as the patron.

In Portugal the organization of trades under corporations only began in the end of the XV century, in contrast with Flanders, France, Venice, Genoa or Naples, where it was present since the XI and XII century. Among the Portuguese it was the church with its power and

through social institutions (as the confrary<sup>9</sup>), which played the role of religious association, granting law protection, health care and mutual help.

The importance of these assistance centres was very meaningful, since there was no medical service for the people. King D. João II build the “Hospital de Todos os Santos” (All Saints Hospital) naming it after all patrons, elected by the different trades, and made it public.

The Confrary was still the entity responsible for the community’s spiritual activities. The native Africans, due to their status, were not allowed to participate on them as simple workers. Thus they formed their first own Confrary –Native African Brotherhood of Lady of the Rosary of Lisbon– in the church of the Convent of S. Domingos (Fig. 21). The original commitment of this confrary is unfortunately unknown, due to the fire, which destroyed the library of the convent, around the time of the 1755 earthquake.

The date of entry of the native Africans in this or other confraries is also unknown, but according to the resolutions of the “Cortes de Almeirim”, in 1524, on the “Relatório da Congregação dos Portugueses contra os negros” (Report of the Portuguese Congregation against the native Africans), cast some light regarding the creation date, which would have been around the second decade

<sup>9</sup> Confraria (confrary) = confrade/co-irmão (brother). Cristovão Rodrigues de Oliveira (1544-1545), in *Sumário*, refers the existence of seven confraries in S. Domingos Monastery and one belonged to the “black native African slaves and Lisbon *forros*”. This book was reedited in 1939 by A. Vieira da Silva, edition of the “Casa do Livro”.



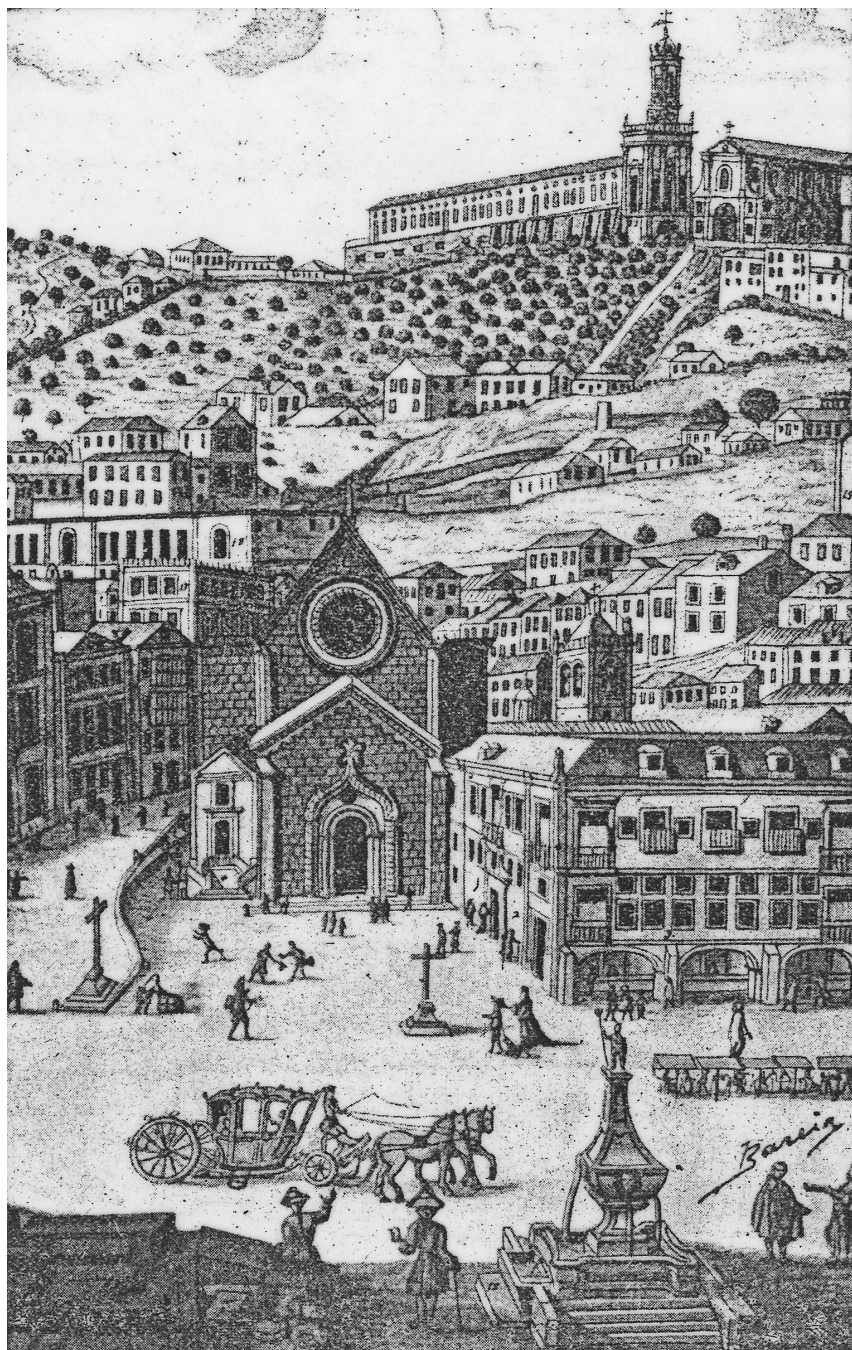


FIG. 21. The church of S. Domingos (detail of an illustration of Lisbon prior to the 1755 earthquake).

of the XVI century. One of the objectives was to complain about the requirements to be granted freedom (Carta de Alforria). On the other hand, the baptized native African could no longer be sold by their owner, only offered as gifts (Tinhorão, 1988: 85).

The acceptance of the “Congregação dos Negros do Rosário” (Congregation of the native African of the Rosary) where those from the Kingdom of Congo took part by invoking the Virgin (first in Lisbon and then in other Portuguese cities), shows that the royal power was backing the native Africans, due to the relevance of the historical moment lived in the XVI century. Therefore, the relation between the Portuguese King and the King of Congo –the “Manicongo”– was galvanized. Between the two sovereigns sprawled a peaceful diplomatic activity, while the slaves were shipped in greater numbers from the Congo, since they were mandatory for the commerce with India and the colonization of Brazil.

The political, religious and economical approach was developed by King D. Manuel I together with N’Gola Manicongo, who had been baptized, as well as his family. Christianity was seen as a reinforcement method and another solemnity to add to their own traditions.

The native Africans revealed themselves useful on the conversion of their brothers, leading the far away “Kings” to send offerings and ask for images or icons of the Lady of the Rosary, according to the *Livro de São Domingos*, quoted by Tinhorão (1988: 134). Certainly, this situation would have been highly appreciated by the Portuguese rulers, since it eased up the control of the native Africans and those who served on board of ships could spread and teach the importance and role of the Africans in the society.

The agreement between the Portuguese and the Congolese Kings got the native African slaves hoping to achieve some prestige, especially those who held elevated social positions in their distant Kingdom and considered themselves “politically” connected to the Manicongo. The only achievement was however under the form of a theatrical play.

The importance of the Kingdom of Congo, in the distant Africa, became theatrically played by native African slaves, from Congo, in the interior of the S. Domingos Church in Lisbon. These plays assumed the role of state visits of the different ethnies to the *Mbazi a Congo* (square or ground, near to the Residence of the Congolese Kings), to elect the King<sup>10</sup>.

The election process was based on the collegial system, by which the regional leaders accepted or pointed the successor in case the late King’s choice was not taken.

Time went by and the documents of the epoch eventually disappeared leaving the oral tradition alive in the slave’s memory as single witness. According to those traditions the plays were initiated in the Confrary of our Lady of

<sup>10</sup> The first references to any theatrical play would have been made by the Dutch Gaspar Barlaeus in *History of the deeds recently done during eight years in Brazil*, edited in 1647. The description conveys an image of the social-cultural and political life, where the slaves were described as “agile and healthy black native Africans”, with oiled arms and legs and executing traditional dances. The King sat on the floor awaiting for the arrival of the Ambassadors and their courtesies after accepting him as the “King”, it followed the imposition of the royal attributes: the royal mutt –the impud/impua– was laid on his head, afterwards a brass arm lace was wore on the left arm –the nlunga/malunga– ending with a chain of iron pendants wore as a baldric –simba valia– symbolizing the duty of the King to protect his people. This chronicle reports about the show in Pernambuco in the year 1642 (when the city was under Dutch rule).



the Rosary, in the Church of S. Domingos. Frei Luís de Sousa points out the date –1484– to the beginning of the confrary.

In the end of the decade of 1860, the chronicler José R. Guimarães writes an article in the *Jornal do Comércio* –a newspaper– with the title “The Congo in Lisbon”<sup>11</sup>. It mentioned a play with dance in the church of Saint Joana, next to the Confrary of the Rosary, titled “Kingdom of the Congo’s Empire”. This leads us to believe that the primitive form of theatrical play had evolved to a somewhat more urban representation.

It is worth mentioning that these plays about the Kingdom of Congo took also place, at least in Porto, with the title “The court of the King of Congo”. They are documented until the end of the XX century (Pedro de Azevedo, 1894) and they were even performed in the Island of S. Tomé. There, the historical plays are referred by António L. de Almada Negreiros, in 1895, in *História Ethnographica da Ilha de S. Tomé* with the following titles: “A tragédia do Capitão do Congo” (The tragedy of the Captain of Congo), “Reinado dos Congo” (The Kingdom of the Congo) and “Baile do Congo” (In the Congo’s ball dance), same as “*Dança Congo*”.

These plays had their origin in Lisbon as well and would have been associated to the Brotherhood of our Lady of Penha de França<sup>12</sup>, handed to the Hermits of Saint Augustine, in May 1598. In this church plays by the seamen would have been organized in the same year and Our Lady of Penha de França became the Saint (protector) of the City of Lisbon, in 1599, according to António Ambrósio in *O dança Congo de São Tomé e suas origens* (1992: 362).

The spread of the plays was partly done by the missionaries “Agostinhos”, an order that had housed in different places, like S. Salvador da Bafá, in Brazil, and S. Tomé. The play on that island is still referred by Prof. Santos Júnior, in 1945 (Anthropological Mission to Mozambique of the former –Overseas Research Institute– JIU), with the title *Dance of Congo*, but as a recreational event.

The Lisbon slaves participated also on the processions, namely on the “Corpo de Deus” (body of Christ), which was a very significant public and social event, according to the Regiment approved by King D. João II in the end of the XV century and not defined by the church.

The processions during the “Período Joanino” (Kingdom of D. João V) carried an enormous dramatic charge, including music and dances (Francisco da Fonseca, 1728) and were occasions where the slaves would show their identity symbols or attributes and even musical instruments. Their participation in the procession of “Corpo de Deus” would have been a consequence of the resemblance with Saint George. They acted as heralds, playing the drums and blowing instruments in the front of the knights, who escorted the holy image.

By allowing the slaves to participate on these social events, the royal power rendered them the possibility to

be both a bystander –audience– and an actor. Moreover they could express their capacities, associate their traditions and believes to a new symbology and might even have felt free.

The continuous presence in Portugal of the native Africans for 300 years, gave them the chance, mainly in Lisbon, to achieve a certain social and cultural relevance. Evidences are the professions, the religious belief, entertainment, songs, dances, bullfights and theatre, besides an original type of literature –soap opera Bulletin– as the one written by the black poet, known in Lisbon as the “Manicongo poet”, with the title *Testamento do Zangalheiro*, a typical mid XVIII century humorous piece of writing (Tinhorão, 1988: 196-197). These bulletins were subject to censorship and were taxed as the other written press.

The city of Lisbon had accepted the native African slave as part of its socio-cultural identity, who was a reference in the social, political, economical and religious context. This context evolved since the XVI century, with for instance a great variety of cultural expressions as a by-product.

The social frame came in decline with the royal decree of Marquis of Pombal, dated of 19<sup>th</sup> of September 1761, prohibiting the import of African slaves to Portugal. One of the reasons for this decision was the decline of jobs for young people. Nevertheless, the slaves continued to work, but in a dissimulated way, since their work was of the utmost importance overseas in the ploughing of the lands and in the mines. The interest for gold and silver seems to have been around since the 1500’s. The decree had not really stopped slavery, because the children might be free, but parents and grandparents were still slaves and exploited, according to another decree of 16<sup>th</sup> of January 1773, issued by the Marquis of Pombal. This decree exposed the powerful lobbies and interests of the slave traders.

The ideals and interests were changing: it was necessary to produce and not only look for merchandises, as unfortunately and sadly slaves were seen in the mercantilistic society since the XV century. Slaves were on the way to become a buyer and no longer a mere commodity. Time would do the rest.

## 9. Chronology

A precise date for the beads collected in the Lisbon prior to the 1755 earthquake is inexistent. The great majority of the studied specimens could be included on the type “Nueva Cadiz”, according to K. Deagan in *Artifacts of the Spanish Colonies 1500-1800*, 1987 and L. Dubin in *History of beads*, 1987/1995. We have identified five specimens of this type from the “Palácio dos Marqueses de Marialva” (Palace of the Marquises of Marialva), of the first half of the XVII century, and two of these beads have golden inlays as documented by some beads from Luanda (collection of IICT). Therefore these beads were a more careful and onerous production, reflecting an Islamic glass manufacture prior to 1517.

A proposition for the arrival of this type of beads to Southern Africa is based on the trade routes developed in Northern Africa from Cairo (M. Conceição Rodrigues,

<sup>11</sup> The text was published by J. Ribeiro Guimarães, in 1875, in *Sumário de Vária História* (vol. V: 147-149).

<sup>12</sup> This church would be completely destroyed by the 1755 earthquake, except for the holy image. The church was later rebuilt (A. Ambrósio, 1992: 364).

2003: 232). This has occurred before the termination of the glass manufacture in the cities of the western Mediterranean and besides it was no longer important after the arrival of the Ottoman Turks, in the second decade of the XVI century.

Chronologically, the “Nueva Cadiz” beads can be considered as a Venetian manufacture and would have been made after the glassmakers left Murano and the glassmaking methods were kept in secret (under death penalty), which occurs only after 1592, when they were returning to Venice<sup>13</sup>.

According to historical records and to K. Deagan (1987: 157-159), the “Nueva Cadiz” beads appeared only in archaeological contexts prior to 1560, in the Spanish colonies of the new world, namely Cubagua Island, near to the Venezuelan coast, occupied by the Castellans in 1498 as well as in the “Nueva Cadiz” site. Its presence was also registered in Peru, in dated sites prior to 1550. L. Dubin (1987: 258) points that these beads were destined initially to Peru, to where they were taken from the end of the XV century on, until the 1560’s. The manufacturing place is still under discussion.

Pertaining Angola, the presence of two specimens should be added to this discussion. They were yielded in archaeological excavations carried out in Caotinha, near to the village of Caota, south of Benguela. The beads were collected in an underground grave recognized as a very ancient burial, situated in a cliff facing the sea, very hard to access. Prof. M. Gutierrez (2001: 46-50) (University of Paris I), team leader considered the specimens also as “Nueva Cadiz” beads.

The studied beads from Luanda had no identifiable context (acquired from a private collector), but according to the research undertaken, it is possible to consider them as from ancient burials, dating perhaps prior to the arrival of the Portuguese, in mountains or cliffs facing the sea (M. Conceição Rodrigues, 1993: 349). This hypothesis has been strengthened by the yields in Caotinha.

Comparing all this data, the manufacture was from the mid XVI century, when the “drawn beads” manufacture had fully matured in Murano. There are no signs of a limited production and there are no similar specimens among the Venetian beads.

Set II (PLC / 99) supplied two other types of beads: specimen n.º 4 (Fig. 10), for example, may be a Venetian manufacture of the end of the XVII century, when the new technique of the “drawn beads” was completely developed, the production was already ahead on its way and even standardized to make the beads cheaper and more popular.

Specimens n.º 7 to n.º 9 document a reinvented/revamped production by the Venetian glassmakers –“Chevron” beads. The earliest manufacture dates to around 1500 and continues throughout the XVII century, being a production featuring patterns and standards (to this production many Middle East glassmakers would have contributed with their experience).

<sup>13</sup> The new technique –drawn beads– would have been developed in Murano (when the glassmakers were obliged to work only there) around 1490, after the fall of Constantinople (1453) and the sack of the cities of the middle East –as Sidon and Aleppo– by the Ottoman Turks. The local glassmakers took refuge in the Italian republics, mainly Venice and Florence.

Bead n.º 7 reflects, according to the morphology and the colours of the several vitreous paste layers, a XVI century production while beads n.ºs 8 and 9 represent one of the beginnings of the XVII century, because the colours of the different layers document a phase of a larger production, according to L. Dubin (1987/1995: 116-117).

## 10. Final Considerations

The cultural identities in the Lisbon universe of the XV century until the 1755 earthquake period expanded with the arrival of the slaves, who transformed the social fabric of the city in every aspect: social, economic and religious.

Mobility mattered and thrust the city to emerge from its past: the city’s limits were no longer confined to the medieval walls, but a sprawling area to the east and the west since the kingdom of D. Manuel I until the middle of the XVIII century.

One of the objectives of this work was to contribute to the study of glass beads, in particular the “Nueva Cadiz” type. The aim was not a systematic typological study, but instead a stress was laid on the significance of its presence in the Lisbon of the XVI century until the middle of the XVIII century. The difficulty in pinpointing the exact place of manufacture and explaining their diffusion besides the low representativity of these beads in the world, according to K. Deagan or L. Dubin, contributed to that decision.

The significant number of these beads discovered in the last decades of the XX century in Lisbon’s downtown in contexts prior to the 1755 earthquake and in areas destined normally to qualified slaves, allows the interpretation that they [beads] were somehow seen, by their owners, as prestige elements and used simultaneously as an identity element of their cultural group, brought from his homeland. This would have maintained a symbolic relation with the far away African past-motherland.

Several authors support the great interest shared by the Africans on glass beads, when they point the different varieties used throughout time on the trade with Southern Africa.

The heart beat of the Lisbon population, especially from the beginning of the XVI century mirrors the importance granted to the capital, as the cross point of all trade routes to Europe and Western Africa, and later to India and Brazil. This major change is portrayed on the population figures: 70.000 inhabitants in 1530’s, around 5% of the Portuguese population; in 1620 this figure was already 165.000 (T. Rodrigues, 1997), comparable in size to Venice and Amsterdam.

Special attention was lent to the interests and the trade developed with the kingdom of Congo, in the beginning of the Portuguese maritime expansion. This trade brought slaves, then spices, mainly from India. In the latter slaves played a major role.

Lisbon and the fortress of S. Jorge da Mina, in the Gulf of Guinea were bond together by the gold trade; on the other hand the fascination exerted by the catholic faith on the slaves (the Africans considered the sailors as supernatural, because they arrived from the sea) kept the route Lisbon-Congo open. After the arrival of Diogo Cão



the commercial activities with the “Kings” of the West African coast and this trade raised the number of slaves in Portugal, who were kept in “Lisbon’s downtown”. Mainly due to their work: loading and unloading ships, smith’s workshops, construction works both of new buildings and helping restoring old ones –especially religious ones (as the reconstruction of the Patriarchal Church)– agriculture, domestic work, city cleaning, entertainment and other occupations.

King D. Manuel I was the initiator of the expansion of the city, by allowing the construction outside of the medieval city walls, as was the case of the “Paço da Ribeira” (water front royal grounds) situated above the “Casa da Mina e da Índia” (House of the Mine and India). The King and the court resided now in the entrance of the mercantile Lisbon, which may have somehow stimulated the development of the city’s urban matrix. The “Administrative centre” was located after the royal grounds and held the “Tribunal do Desembargo do Paço” (Royal Court of Customs), the “Conselho da Fazenda” (Treasury Department), the “Casa da Moeda” (place where money was cast and issued) and the “Alfândega” (Customs). This U-shaped building complex is now known as “Terreiro do Paço” (Royal grounds).

The city sprawled from this new area: “Rua Nova dos Ferros” until the “Rossio” (a square where a fair was held). The areas became urban centres as well as entertainment places and were where merchants, captains, naval workers, moneylenders, bankers and slaves went about their lives.

The development privileged the palace, the church and the convent: a trinity, which came in support of each other in an evolutive process. The investments were done with the money obtained in the trade of spices, slaves, sugar, gold and precious stones from Brazil. Lisbon continued to expand: “Cais do Sodré”, “Chagas”, “Bairro Alto”, “Santa Catarina” (names of neighbourhoods). In this context, palaces as the one of the “Marquises of Marialva” in Loreto (already a religious parish in 1551) emerged. The expansion was followed by the construction of dozens of convents, granting the city some “urban anchors”, as Luís de Matos refers (1997). The new areas soon became peripheral centres rendering the city with a social and cultural meaning, side by side with the religious.

King D. João V founded the holy Patriarchal Church (west) in luxury and splendour, totally in contrast with the harsh living of the people: hunted by the Inquisition, fearing hell and the state taxes. The valorisation of the religious and urban matrix would have counted most likely with the help of qualified African slaves, probably connected with the powerful Confrary of Our Lady of the Rosary, in the church of S. Domingos.

Regarding the construction of the Palace of the Marquises of Marialva there is no available data. It is a construction of the first half of the XVII century and thus older than the renovated patriarchal. The glass beads of Set I would have therefore belonged to a slave involved in the construction works. The other specimens yielded in the several rooms of the palace would have belonged to slaves involved in different tasks (specimen n.º 9) was found inside a wall (Fig. 6c). There was also the need to maintain the well being of the “masters” who inhabited the palace until the 1755 earthquake, besides the participation in social-cultural activities outside the working places.

Lisbon lived, during the reign of the D. João V, very sumptuously, mainly the church. The control of the society was in the hands of the church (based on the ideology of the Counter-Reform), which benefited from the royal powers. The power of the church could be felt in the Confraries and Brotherhoods, controlling and granting benefits to the members simultaneously. This was meant to safeguard the social and the political stability, so dear to the Portuguese kings. This had been developed since the kingdom of D. Manuel I (namely with the kingdom of the Congo) and were considered as very important to the religious conversion of the native Africans and to the political, social and religious prestige of Portugal.

The presence of the African slaves, in great numbers, since the 1500’s in Lisbon and the interest demonstrated by the roman-catholic religion may have facilitated their acceptance in the Confrary of Our lady of the Rosary of the native Africans of Lisbon, which included both slaves and freed slaves. This confrary was created in the church of S. Domingos and the slaves started then to gather next to the church for reunions. They tried somehow to seek some prestige among a society, which continuously explored and held them back.

Following the good relations with the native Africans, the “Plays of the Coronation of the King of Congo” appeared. They would have been played in the interior of that church and the glass beads would have been used as prestige elements of the actors. These beads would pass from generation to generation, like knowledge, so typical in the African culture.

The glass beads were not used or valued by the Portuguese elite. Gold and silver were the major ornaments, a jewellery was highly valued by the bourgeoisie and considered symbols/evidences of the faith and prestige, increasing their economical power. Golden jewels have always fascinated the western culture.

Slaves took part in religious activities, as processions –during the Barroc period of the kingdom of D. João V– but would not fully understand the themes. It allowed them anyway to show their capabilities, maintain some traditions and simply take part in public activities, which gave them great joy.

Following the identity and the population of Lisbon, as capital of the kingdom and the empire, facing the Tagus river, the gateway to the rest of the world, the glass beads deserved a thorough study to reveal the reason why they were there until the middle of the XVIII century.

The glass beads followed the routes of the vessels/ships between 1500 and 1600, since the Portuguese used these commodities to trade in Africa. From the 1600, the English, the Dutch and the French and after the Germans also used beads to do business with the Africans, boosting the economic activity with Southern Africa. The Venetian glassmakers would have been involved directly at the beginning in this trade, but they eventually helped other glassmakers in different European cities to manufacture beads. The fact that the beads were famous and treasured by African societies as prestige and social cohesion elements is prior to the arrival of the Portuguese to the African coast.

The chemical characterization of the beads showed the resemblance regarding their chemical elements in the Set

of the “Nueva Cadiz” type as well as in the “Chevron” beads. This similarity is enough to insert them in contexts referred by other researchers. The only exception is specimen n.º 4 (PLC / 99), which seems to be a more economic production and may be the result of the slave trade developed in the second half of the XVII century, where this type of beads would have been shipped away from Lisbon, to be used in the acquisition of slaves.

Based on the chronological classification and taking the chemical characterization into consideration, the “Nueva Cadiz” beads picture a great quality and certainly expensive manufacture. Pointing towards the result of great metallurgical knowledge, besides the perfect mastering of glass production. Thus the manufacture is most likely of an Eastern Mediterranean origin, perhaps Syria until the end of the XV or beginning of the following century, that is in the Mameluk Period. The dynasty ruled also in Egypt until its inclusion in the Ottoman Empire, thus it might not have been a Venetian production. The arrival to sub-Saharan Africa might have been the result of the gold trade developed in Northern Africa. Cairo was one of the entry points, when the eastern Mediterranean was the centre of all trade.

Two specimens of turquoise blue prismatic long beads, recently collected in Caotinha, near to Benguela in Angola, placed side by side and next to the dead, were considered by M. Gutierrez (2001: 50) as belonging to the “Nueva Cadiz” type. There were also other types of globular beads made of ostrich eggshell, besides some kauris (*Cypraea moneta*) and other artifacts.

These findings suggest that this burial can be considered to be from the first phase of the Later Iron Age of Bantu Africa and it shows that the beads arrived first than the Portuguese, similarly to the specimens from Luanda, previously referred.

The changes in course in the eastern Mediterranean, since mid XV century, opened the door to the conquest of Egypt by the Ottoman Turks. These situations caused dramatic changes regarding glass production, beads included, since the glass production was no longer considered interesting, opposite to what went on in Venice. There, the glass manufacture was in a steady pace, after the glassmakers had acquired a great capacity to produce glass and beads in particular. The merchants of the African routes and the explorers of the New World used them in great extent.

Glass beads appeared for the first time in the New World with Cristóvão Colombo, in 1492, used as prestige element and currency. The “Nueva Cadiz” beads are not present in places, where the Europeans have been, which might confirm its uniqueness.

The south of Spain came to control the production of goods to be traded in the New World, manufactured by the glassmakers, who had come to this part of the Mediterranean and who eventually disappeared. Beads continued however to circulate in Central and South America (Spanish colonies), although in 1580, the church changed the glass ornaments for wooden and bone rosary beads.

The number of “Nueva Cadiz” beads in the Lisbon of the Renaissance since the 1500’s until 1755 yielded until now revealed crucial to the study of these artifacts of great beauty and socio-cultural meaning as well as historical-

archaeological. There are no evidences in the New World, after 1560 A.D., of these beads according to K. Deagan (1987). The data and information presented aimed to clarify the issue of the manufacturing place and consequent diffusion of these beads. It also tried to explain the role played by Lisbon in the commerce with the West African coast since the XV century.

Regarding the “Chevron” beads, morphologically and by the colours used, they are a Venetian manufacture, from the XVI and XVIII century, according to L. Dubin (1987/1995).

Nonetheless, more data and specimens must be collected and studied to strengthen and confirm these hypotheses.

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