

Mimicking ‘marble’ in Roman Mosaics in Conímbriga (Condeixa-a-Velha – Portugal) Discovered Between 1938 and 1941 in the Time of Professor Vergílio Correia (1888-1944): A Reflection 1938-1941 Yılları Arasında Professor Vergílio Correia (1888- 1944) Döneminde Conímbriga’da (Condeixa-a-Velha–Portugal) Keşfedilmiş Roma Mozaiklerindeki ‘Mermer’ Taklidi: Bir Yansıma

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Abstract

Mosaic that imitates marble, which is the subject of this reflection, is evidence that takes us back to the stylistic currents of several periods of the Roman Era. The representation of this ornamental rock containing rudists harks back to remote geological periods of the Earth’s history. In addition, the way the mosaicist goes about his work, choosing the most elaborate geometric motifs and imitating a kind of ornamental rock with a ‘fossil signature’, reveals contacts, influences and technical resources that only a College of Arts can provide.

This museological action is an initiative of the Movement to Promote the Candidature of Conímbriga for inclusion on the UNESCO World Heritage List, under the programme to link up Conímbriga, Alcabideque, Chão de Lamas, Rabaçal, Santiago da Guarda and Tomar in a single area of interest. This initiative is the outcome of local, national, international and intergenerational cooperation, on a volunteer basis.

Keywords: Conimbriga, Roman mosaics, Low Empire, Rudists.

Öz

Bu yansımanın konusu olan mermeri taklit eden mozaikler, bizi Roma Çağı’nın bazı dönemlerinde görülen üslup akımlarına geri götürmektedir. Süs/dekor olarak kullanılan bu rudistik kayaya kulak verildiğinde Dünya’nın jeolojik dönemlerine doğru bir yolculuk yapmak mümkündür. Buna ek olarak, mozaik sanatçısının işini yapma şekli, en özenli ve ayrıntılı geometrik motifleri seçmesi, “fosil imza” ile dekoratif bir taşı taklit etmesi anlaşılabilir gibi, bağlantıları, etkileşimleri ve sadece bir Sanat Okulu’nun sağlayabileceği teknik imkanları da gözlemlemek mümkündür.

Bu müzecilik hareketi Conímbriga’nın Unesco Dünya Mirası Listesi’ne eklenmesi hareketini destekleme girişimi olup, Conímbriga, Alcabideque, Chão de Lamas, Rabaçal, Santiago da Guarda ve Tomar’ı aynı ilgi alanı altında toplama programıdır. Bu girişim; gönüllülük esasına dayanan ve yerel, ulusal, uluslararası, bölgeler arası işbirliğinin bir sonucudur.

Anahtar Kelimeler: Conimbriga, Roma mozaikleri, Çökmüş İmparatorluk, Rudistler.

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Introduction¹

It has often been said that ancient civilisations freely used ornamental stone to decorate both monumental public buildings and their more elegant residences, and they did so with grandeur and technical skill. As marble and other similar stone are rare in nature and their extraction and transport very costly, they were regarded as a luxury product. This technical expertise in the embellishment of buildings can be seen in Conímbriga, for example, *in situ*, in the centre of the *triclinium* of the House of Cantaber, discovered in the time of Professor Vergílio Correia² between 1930 and 1934³ (Figs. 1-2), and *ex situ*, in the remains found in the *forum* between 1964 and 1969 (Alarcão – Etienne 1977: 27-39, 87-133; Tavares 1977: 271-273; Alarcão – Etienne et al., 1979: 241-242) (Fig. 3).

The craftsmen and artists who designed and executed the *crustae marmoriae* in the workshops of Conímbriga endowed the city with an authentic school of arts. This is borne out by the scrupulous choice of materials, the refined

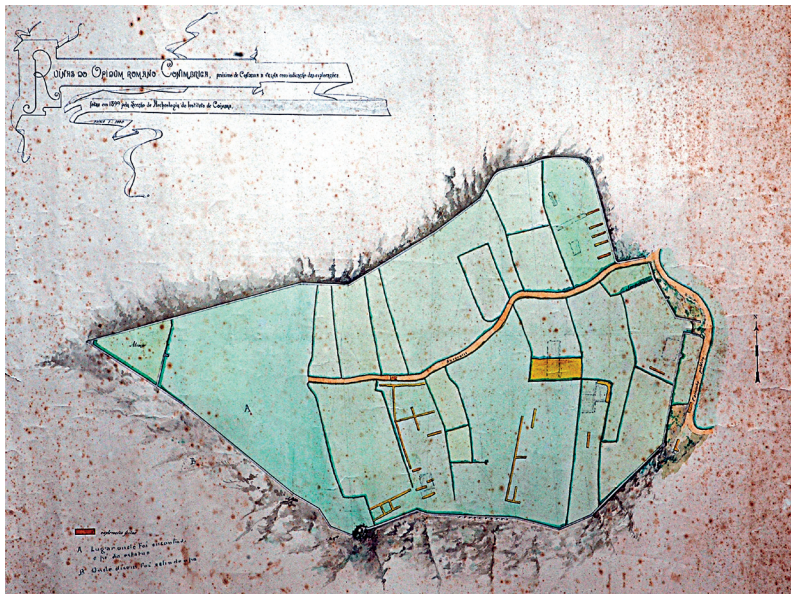


Figure 1
**Map of Conímbriga, Almedina of
 Condeixa-a-Velha**

Indian ink and watercolour drawing on sheet of cardboard, with the surveys carried out in 1899 marked by António Augusto Gonçalves (Pessoa - Rodrigo 2005: 186 fig. 1a). The blue arrow indicates the area where the House of Skeletons was found, Zone B, between 1938 and 1941. Collection: Museu Monográfico de Conímbriga Archive. Photograph: Francisco Pedro. 2005. Author: Eduardo Belo Ferraz. 1899

¹ Salutation: “The study and preservation of an archaeological site is a cultural and social project of searching and showing respect for the men and women who created, preserved, enjoyed and are enjoying it and trying to pass it on to future generations!”

² It was Vergílio Correia who discovered 76 of the 93 known Roman mosaic floors in Conímbriga, which are preserved *in situ* and on view to the public and scholars. These 76 floors were all found between 1930 and 1941, with 40 being in the House of Fountains (Oleiro 1992: 37-82 no. 19 1.25, 83-141 no. 2 to 16), 12 in the House of the Swastika (Oliveira 2005: 32-41 no. 17.1 to 24.1), 4 in the House of Skeletons (Oliveira 2005: 44-47 no. 25 to 28), and 24 in the House of Cantaber (Oliveira 2005: 50-68 no. 29-31, 33-53). In 1899 António Augusto Gonçalves (Oliveira 2005: 51 no. 32; 84 no. 60; 85 no. 61; 86 no. 62), had coordinated excavations that had revealed 4 mosaic floors. These were taken to the Museu do Instituto de Coimbra and later, in 1911, to the Machado de Castro National Museum (they came back to Conímbriga when the Monographic Museum was built, in 1962). In the 1950s, the General Directorate of National Buildings and Monuments (DGEMN) was responsible for the discovery of 4 more mosaic floors in the House of the Trident and the Sword (Oliveira 2005: 72-74 no. 54-56). And then, between 1964-1971, Jorge de Alarcão and Robert Étienne led a joint Portuguese-French team in excavations that unearthed a further 5 floors (Oliveira 2005: 78-79 no. 58, 59, Fragmento A and B; 82 Fragmento C). Over 254 sites in Portugal with Roman mosaics have been inventoried (Abraços 2005: 15).

A considerable part of the bibliography on Vergílio Correia has been referenced in works coordinated by Maria Teresa Pinto Mendes (1970), Jorge de Alarcão (1972, 1979) and João Manuel Bairrão Oleiro (1973, 1992).

³ Correia 1935: 16 - page brochure, updated and re-edited in 1936 and 1938. Idem, 1941: 263; Oleiro – Moutinho – Alarcão 1963: 25; Correia 2001: 108; Sala C 20; Pessoa – Rodrigo 2005: 214-217, 260-261; Oliveira 2005: 58 no. 40.

Figure 2

Map of Conímbriga, Almedina of Condeixa-a-Velha

Oil on canvas, second drawing dated 1899. It was altered between 1930 and 1936 to highlight the discoveries inside the walls, coordinated by Vergílio Correia, with the map in Figure 1, on which the surveys conducted by António Augusto Gonçalves in 1899 were marked, being extended (Pessoa – Rodrigo 2005: 192-197 fig. 2c). The blue arrow indicates the area where the House of Skeletons was found, Zone B, between 1938 and 1941. Collection: Museu Monográfico de Conímbriga Archive. Photograph: Francisco Pedro. 2005. Author: Eduardo Belo Ferraz. 1899

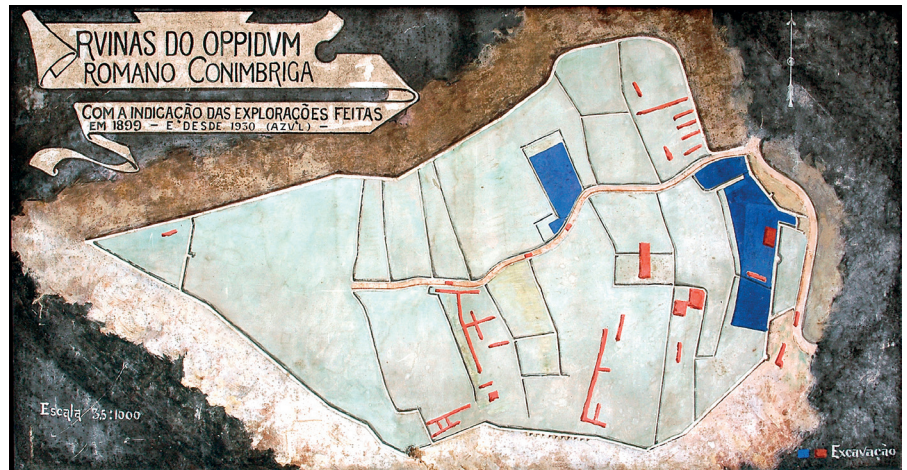
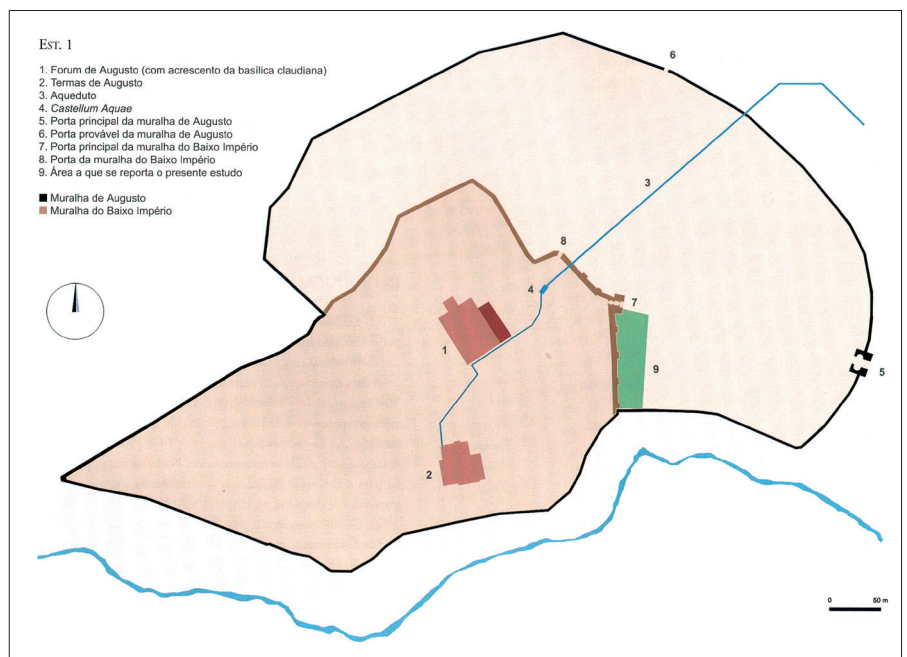


Figure 3

General map of Conímbriga

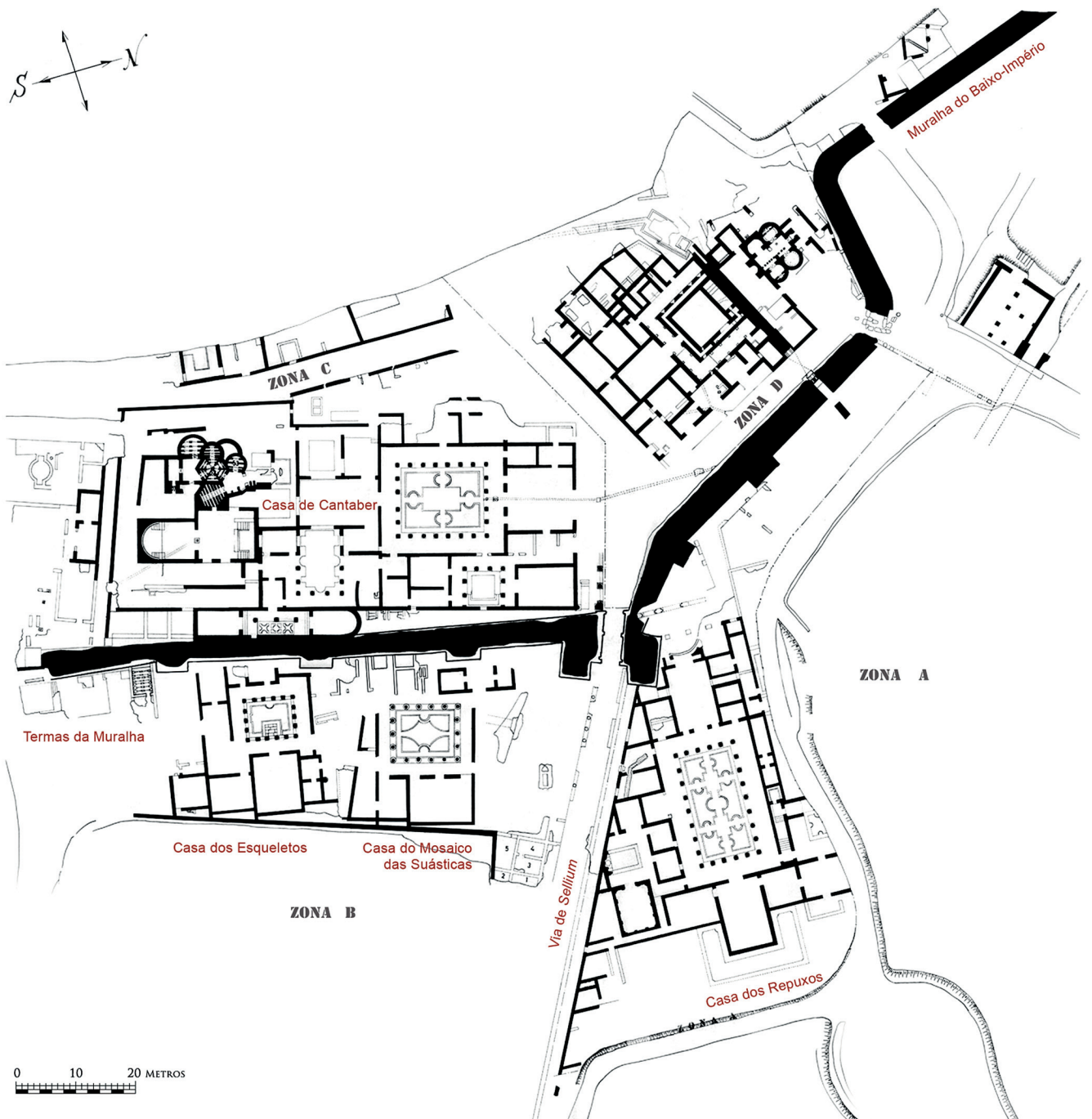
Location of Zone B (Alarcão - Madeira 2010: 8, Print 1). The blue arrow indicates the area where the House of Skeletons was found, Zone B, between 1938 and 1941. Author: José Luís Madeira. 2010



finish of the pieces and the skilful layout of the spaces to be decorated. Further proof can be found in the decorative stone panels preserved *in situ*, such as the panel inlaid in the mosaic in the centre of the *triclinium* in the House of Cantaber, Zone C (Correia 2001: 108 Room C 20) (Fig. 4), and in the temple of the Flavian *forum*, under the project to extend the Augustan *forum* (Alarcão – Etienne 1977: 83-111; Tavares 1977: 275-276) (Fig. 3). And still more examples can be seen in the permanent exhibition of the Conímbriga Museum, through an ensemble containing every kind of stone-type material capable of being cut and polished, used in ornamental stone panels discovered here (Alarcão – Ponte 1994: 25, 31, 88, 89 no. 216 Inventário 67.484, 101 no. 282 1-6) (Figs. 5, 6, 7).

This is mentioned because we want to stress that not only are bichrome and polychrome stone artefacts, sometimes in the form of inlaid panels, widespread in Conímbriga (Tavares 1977: 271-273; Correia 2001: 108 C 20)⁴, but

⁴ We find embedded marble panels and bas-reliefs used as wall coverings in the territory of the ciuitas of Conímbriga (Pessoa 2005: 365 Fig. 1), in the palace of the Roman Villa of Rabaçal (Pessoa et al. 2004: 19-43 no.1-67; Lima – Vilarigues 2011: 66-68).



so, too, are imitations of them⁵. Interesting examples of imitation ornamental stone incorporated into wall paintings have survived to the present day, related to the first Pompeian style, which, according to Vitruvius (Maciel 2006)⁶, is

⁵ The general layout of the composition of wall painting that mimics opus sectile, in Sala 29, House of Fountains, in Conímbriga, is practically the same for all the panels on the four walls: a rectangle delimiting an inner area on which rest horizontal lozenges, sometimes extended in other smaller interiors with a longer vertical axis. These are marbleised imitations composed of straight, curved and wavy veins, isolated in a field or used to supplement other geometric shapes such as circles, ovals, etc. (Pedroso 1992: 161 est. 71.1). From simple shapes, inscribed in rectangular panels, with strongly linear characteristics that were in evidence in the 1st century (Idem 164 Notes 11, 12, 13) to the examples found (Idem Notes 14, 15, 16) in the 4th century A.D., the variety is huge and the use constant (Idem).

⁶ Vitruvius – Tratado de Arquitectura: Tradução do Latim, Introdução e Notas, p. 272, 7. 5. 1. “... In fact, painting shows us an image of what is or can be, ... Thus the Ancients who established the principles of finishes first imitated the varieties and applications of marble panels and then explored various

Figura 4
Map of Zone B, in Conímbriga.
 Location of the *triclinium*, B 21 (blue arrow), in the House of Skeletons, and the *triclinium*, C 20 (green arrow), in the House of Cantaber (Alarcão – Madeira 2010: 10 Print 2).
 Author: José Luís Madeira. 2010

Figure 5
 Samples of polished ornamental stone from
 Conímbriga
 Collected during the Portuguese-French
 excavations, between
 1964-1971 (Tavares 1977,
 in Alarcão – Etienne 1977:
 271-273 pl. CI)

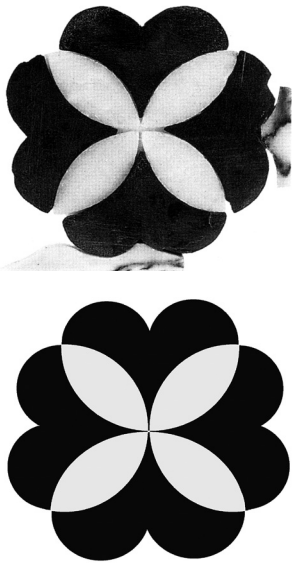
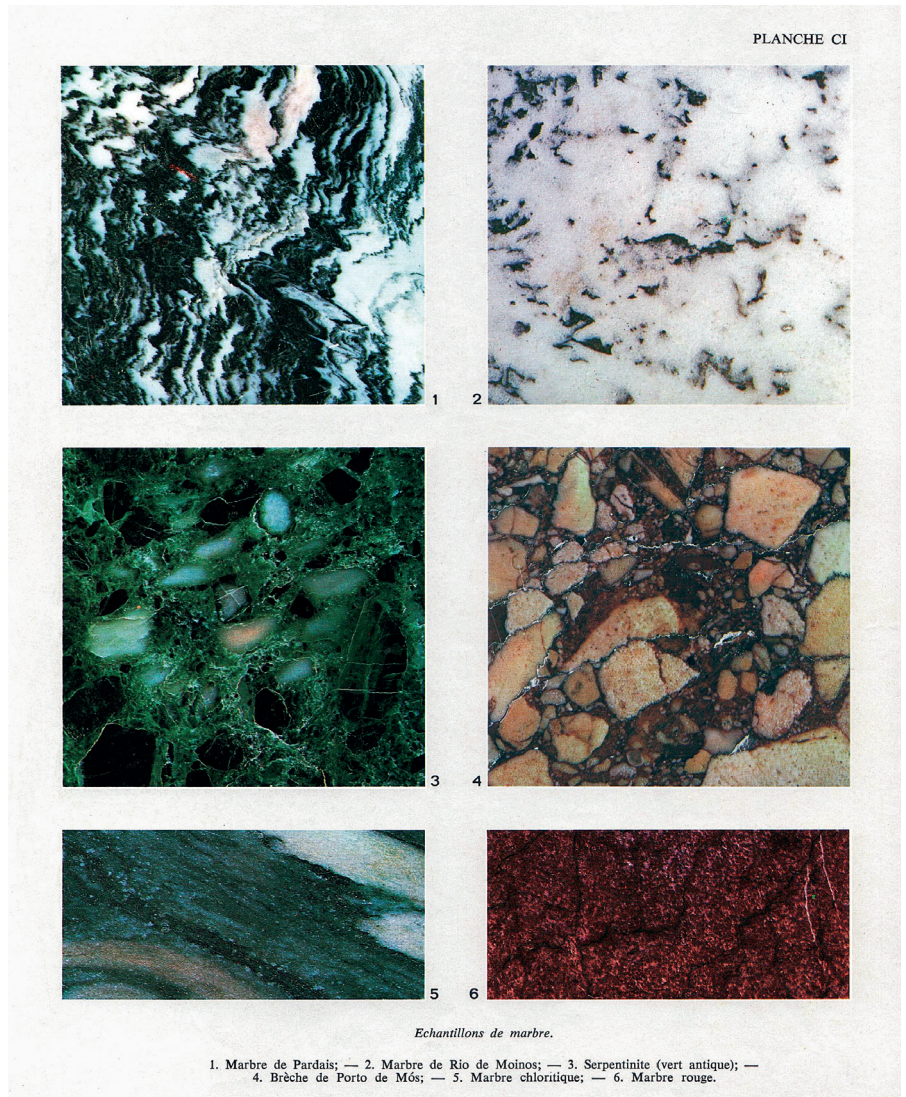


Figure 6a, 6b
Elements for wall covering.
White marble and slate (6a).
Reconstruction of decorative motif
in ornamental stone (6b).

This illustrates the quatrefoil motif,
 in white marble from Estremoz-Vila
 Viçosa, confined by four scales, with a
 double-lobed side. The material is slate,
 delimited by small profiles in white
 marble with greyish veins, from Rio de
 Moinhos, Borba. Collected during the
 Portuguese-French excavations,
 between 1964-1971 (Tavares 1977,
 in Alarcão – Etienne 1977: 271-273
 pl. XCIX, 7; Alarcão – Ponte 1994:
 88-89 no. 216 inventário 67.484).
 Computer drawing.
 Author: José Augusto Dias. 2013

Figure 7
Reconstruction of a panel
based on decorative motif in
ornamental stone
 Alarcão – Ponte 1994: 88-89
 no. 216 inventário no. 67.484.
 Computer drawing.
 Author: José Augusto Dias. 2013

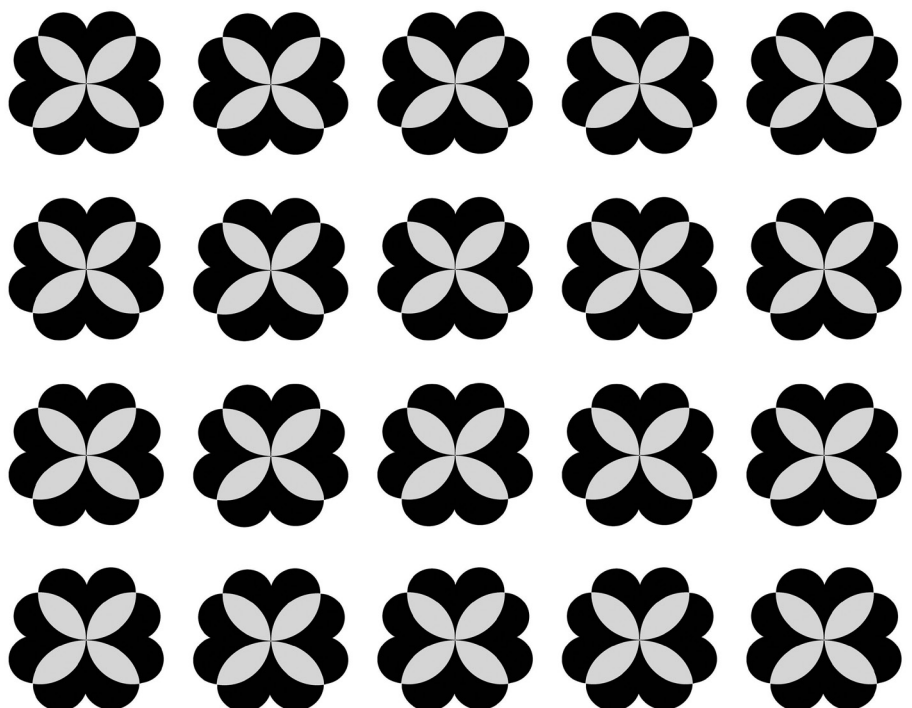




Figure 8
**Photograph. Aerial view
of Conímbriga.**

Photograph taken after the conclusion of the discovery of the Zone within the walls, between 1930 and 1936, coordinated by Vergílio Correia; the works are marked on the map in Figure 2. This picture was used to illustrate the article on Conímbriga published by Vergílio Correia in the *Grande Enciclopédia Portuguesa – Brasileira*, Lisbon – Rio de Janeiro, VII, 1941: 444-445. The arrow indicates the area where the House of Skeletons was discovered, Zone B, between 1938 and 1941. Private Collection. 1937



Figure 9
**Photograph of women, men
and young people working**

Excavation of the House of Swastikas, House of Skeletons and the baths outside the walls of Conímbriga, beside and under the public road marked on Figures 1 and 8, in the area outside the walls, beside the Late Empire wall, as shown in Figure 8. Foto Rasteiro. 1938 (Pessoa – Rodrigo 2005: 229-230 fig. 12). Collection: Museu Monográfico de Conímbriga Archive.

characterised by mimicking *opus sectile*. They were incorporated into a mosaic floor, too, as we shall see later. Painting was, in fact, the most significant artistic expression of stonework in the context of mimicry. It was very useful for painting walls that should have been made of stone, but the high cost made this impractical. The same has happened in quite recent times (Coutinho 2010: 446) and it even happens today. There are several examples of painting in imitation of ‘marble’ in Conímbriga. They are ‘composed of straight, curved or wavy veins, alone in a field or added to other geometric forms such as circles, ovals, ovoids, etc.’ in the House of Cantaber, the House of Fountains (Oleiro 1992: appendix II 164 pl. 71.1; Pedroso 1992; Sales 2006: 79-81) (Fig. 10a)⁷ and in

possibilities of cornices, mouldings and separating bands”. Note 69 – When referring to the pictorial imitation of marble panels, the author evokes the first Pompeian style.

⁷ The decorative paintwork in the Roman Villa of Caldeas (Tomar-Sellium) also has remarkable examples of faux marble (Felix et al. 1992: 177). We find an interesting variation on the topic of

Figure 10 a
Photograph. Painted wall panel in the Deer Hunting Mosaic room, in the House of Fountains, Conímbriga.
 Painting with faux marbling of various kinds, where the motif in the centre of the composition is an imitation of rudist limestone (Sales 2006: 79-81).



Figure 10 b
Representation of technique of filling the flat areas, marking decorative motifs, with contrasting coloured paste, now red, now black, bearing in mind the traces of painting found on fragments of bas-reliefs discovered in the Roman Villa of Rabaçal, in 1987
 Pessoa et al. 2004: 29 no. 3.
 Collection: Mosaics from the Roman Villa of Rabaçal, Penela, Portugal:
 Graphics and computerisation:
 José Luís Madeira. 2009



Figure 11
Photograph of the mosaic in the triclinium, in the House of Skeletons, Conímbriga
 Oliveira 2005: 45 no. 26 – Floor with T+U arrangement of panels.
 Author: Danilo Pavone. 2005

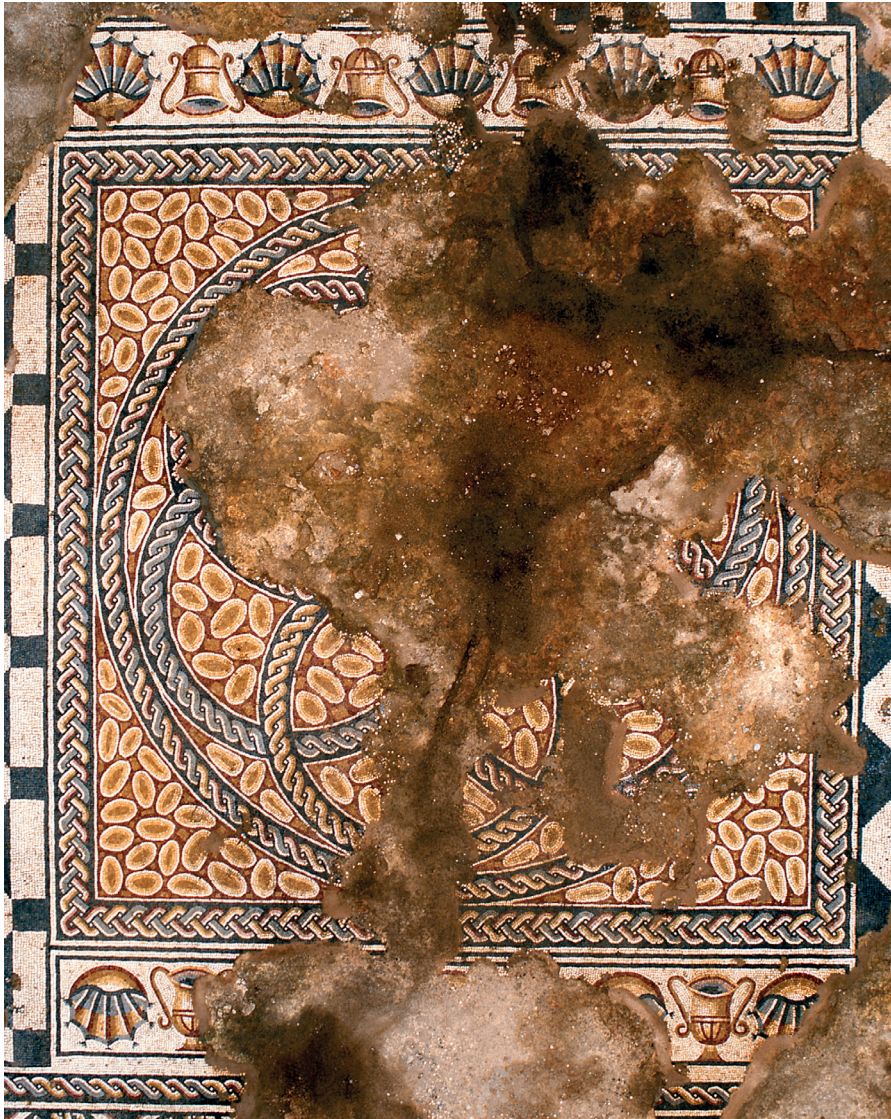


Figure 12
Photograph of the central panel of the mosaic in the *triclinium*, in the House of Skeletons, Conímbriga
 Panels 1, 2, 3.
 Author: Danilo Pavone. 2005

a mosaic in the House of Skeletons (Figs. 8, 9, 11, 12). This is the *leitmotiv* of this reflection.

The Mosaic Floor of the *Triclinium*, in the House of Skeletons, Zone B, Outside the Walls

That said, we can see the general composition of the mosaic in the *triclinium* of the House of Skeletons (Figs. 11, 13). We can perhaps see similarities with various kinds of mimicking of the decoration in the technique of producing works with inlaid stone, either polychrome or bichrome. This idea seems to reinforce the choice of the decorative theme of the mosaic floor in the centre of the room, that is, the representation of panels of ornamental stone, cut and polished in the

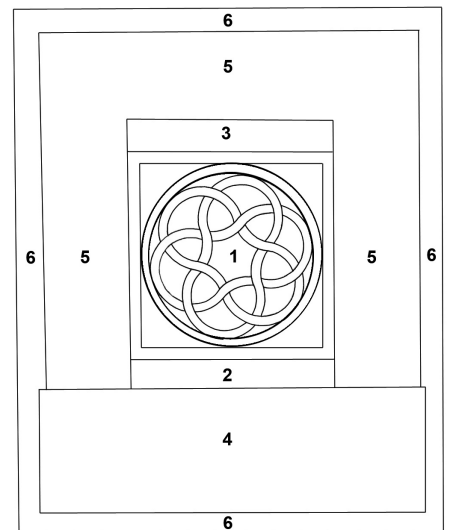


Figure 13
Drawing of the scheme of the panels of the mosaic in the *triclinium*, House of Skeletons, Conímbriga
 Entrance panel (4), central panel (1, 2, 3), area for the lecti (5), and outer border (6).
 Record and computerisation:
 José Augusto Alves Dias. 2013

painting and 'marble' wall covering in the decoration of some fragments of bas reliefs friezes of the wainscoting in Estremoz - Vila Viçosa marble, that embellish the peristylum and triclinium of the Roman palace of Rabaçal, Penela. Here, the technique involves filling the flat, background, parts of the pattern of motifs with paste of a contrasting colour, sometimes red (inside the central band) and sometimes black (parallel bands of chequered squares) (Figure 10b) (Pessoa et al. 2004: 29 no. 30).

technical style of *opus sectile*, highlighting the natural geometric motif of shells, with a more or less conical shape of rudists, in a cross section (Fig. 12).

This close relationship of the geometric-based compositions with identical decoration in *opus sectile* was highlighted by Bairrão Oleiro, for example, in his study on geometric mosaics, discovered in Conímbriga in 1899, in the days of António Augusto Gonçalves (Fig. 1), on permanent display in the Museum since 1962. It dates from the first half of the 2nd century (Gonçalves 1903: 359-365; Oleiro 1973: 130 mosaic no. 4; Alarcão – Ponte 1994: 156 no. 508; Oliveira 2005: 80 mosaic 62; Pessoa 2013: 47).

Outer Border

The outer border of the mosaic in the *triclinium* of the House of Skeletons (Figs. 11, 12, 13-6, 14c) has a band of white tesserae embellished with a line of small squares in steps, equally spaced, standing on their tips (Décor I: pl. 5a Antioch, Turkey; Décor II: 39).

U Panel

The U panel (Figs. 11, 12, 13-5, 14a) covers the largest surface area of the mosaic. It is an orthogonal bichrome composition in black and white, with adjacent octogons that define squared of opposite colours (Décor I: variant of pl. 163b Lucera, Italy), which reminds us of the *opus sectile*. There are parallels in various groups of mosaics in the wealthy residences in Conímbriga.

The Entrance Panel

The rectangular panel at the entrance of the *triclinium* in the House of Skeletons, on the general level of the T/U layout of the mosaic panels, on the beam of the T (Figs. 11, 12, 13-4, 14c), has a grid of opposing non-contiguous sinusoids in a two-strand polychrome plait on a black background, arranged obliquely relative to the sides of the panel, forming a composition of adjacent concave and convex squares (Décor I: pl. 251c Bardo Museum, Tunisia).

Central Panel

Now let us look at the rectangular central panel of the mosaic (Figs. 10, 11, 12, 13-1, 2, 3, 14c). Given the general layout of the floor mosaic in a T/U arrangement, panels 1, 2, 3 occupy the surface of the shaft of the T. At the top of it we can see bands (Figs. 13-2, 3) with vases and shells and, in between, a geometric composition that we think consists of three intertwined eights, centred in a circle inscribed in a square panel on whose background we find an imitation of inlaid polychrome stone, which is, as we know, the *leitmotiv* of our reflection. Nowhere outside Conímbriga⁸, in the mosaics of Spain and Portugal, do we find other representations of either the three intertwined 8s⁹ or the background motif of the composition that mimics inlaid polychrome decorative stone, or 'imitation marble' (Figs. 15, 16), as in the background of this composition. Similar instances of either motif, taken as parallel, can be found in north Africa and in its sphere of influence, in Sicily, as we shall see.

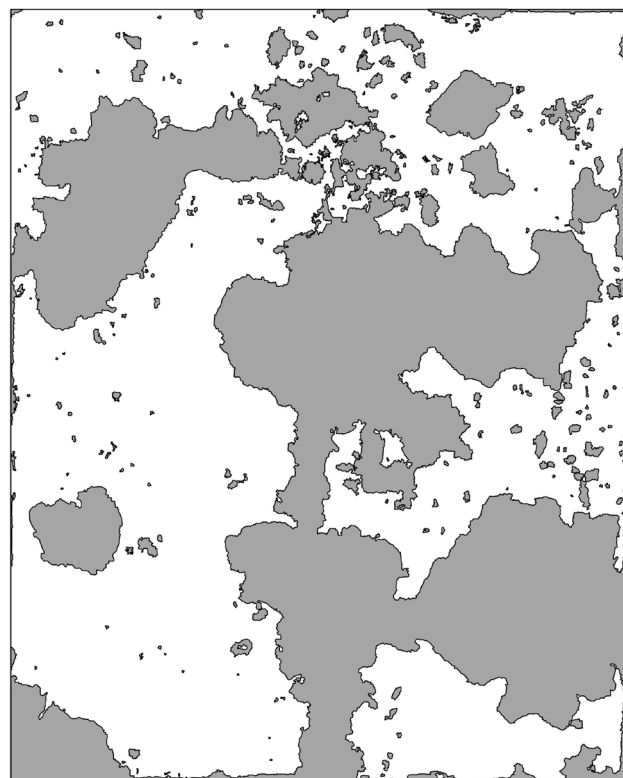
⁸ The three figure-eight motif is found in Conímbriga, in Mosaic 1.21 of the peristylum of the House of Fountains, dating from the 3rd century AD. (Oleiro 1992: 75 est. 22).

⁹ We see the representation of this motive in the mosaic 204.5 of the Villa of Keynsham, in Somerset, South-west Britain, dated from the late third – or early fourth-century. See Roman Mosaics in Britain, Vol. II, Cosh – Neal 2005: 236 n° 229.



1m
 Lacunas
 Área Total: 73,32 m²
 Área de Lacuna: 30,16 m² (41,1%)*

*Estes valores são aproximados, uma vez que foi impossível registar gráficamente lacunas de pequenas dimensões (1- 4 tesselas).



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Figure 14 a
General layout of the gaps in the mosaic floor of the *triclinium*
 Drawing on photograph.
 Room B 21, in the House of Skeletons, Zone B, in Conímbriga. Panels 1, 2, 3, 4, 5 and outer border 6 – B 21. Total dimensions: length 9.40 m; width 7.80 m. Total area: 73.32 m². Area of gaps: 30.16 m² = 41.1 %. Record and computerisation: Ana Ravara Mendes. 2013

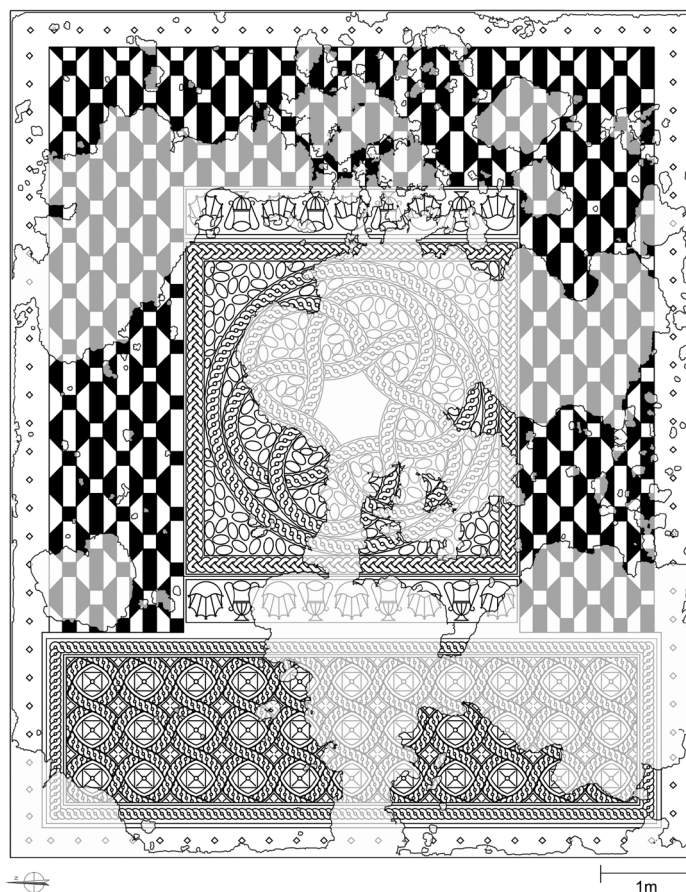


Figure 14 c
Black and white drawing. Graphic reconstruction of the composition, motifs and gaps.
 General layout of the gaps in the mosaic floor of the *triclinium*.
 Record and computerisation: Ana Ravara Mendes. 2013

Figure 14 b
General layout of the gaps in the mosaic floor of the *triclinium*
 Black and white drawing. Record and computerisation: Ana Ravara Mendes. 2013

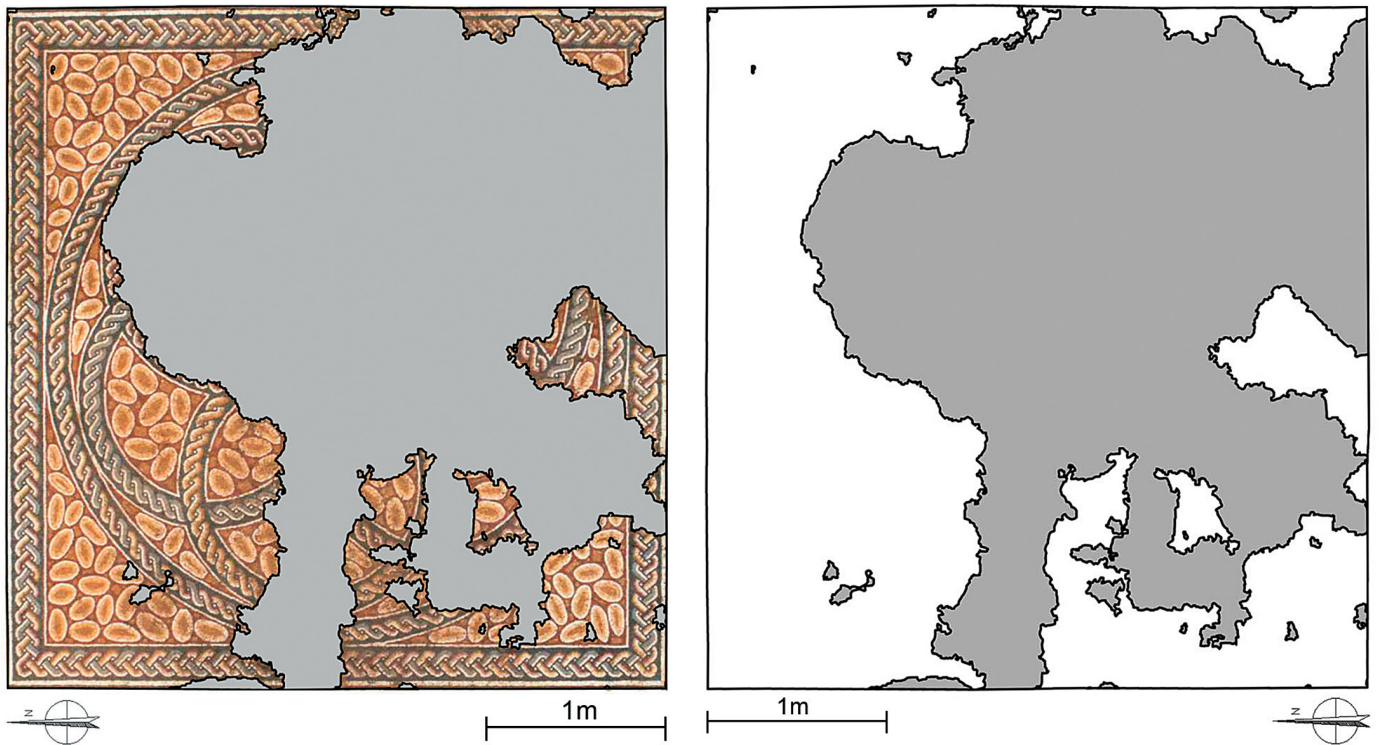


Figure 15 a **Layout of the gaps in the centre of the mosaic in the triclinium**

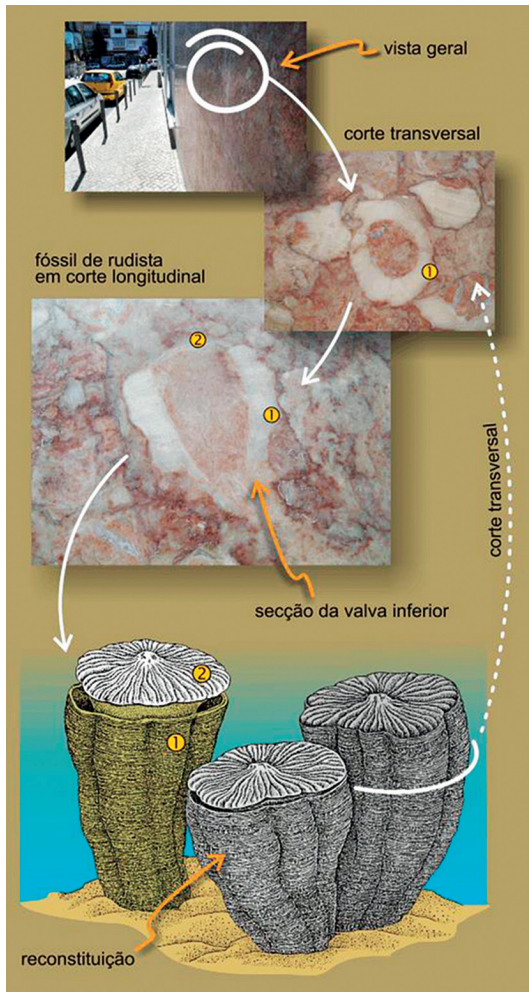
Drawing on photograph. House of Skeletons, Zone B, in Conímbriga. Detail of rectangular panel 1 – B 21. Dimensions: length 3.72 m; width 3.72 m. Total area: 13.84 m². Area of gaps: 7.43 m² = 53.40 %. Record and computerisation: Ana Ravara Mendes. 2013

Figure 15 b **Layout of the gaps in the centre of the mosaic in the triclinium**

Black and white drawing. Record and computerisation: Ana Ravara Mendes. 2013

The use of ornamental stone is a way of decorating 'in a pictorial manner'. It exploits the intrinsic motifs of the actual material by assigning it to benches, laminating and polishing stone panels based on the original quarries, which brings us closer to the source of inspiration of the mosaicist who decorated the floor of the *triclinium* in the House of Skeletons. Note that the limestone breccia (Tavares 1977: 272 pl. CI 4; Alarcão – Ponte 1994: 101 no. 282.6) is a rock formed by angular fragments bound together with cement, whereas the fragments in rudist limestone are rounded¹⁰.

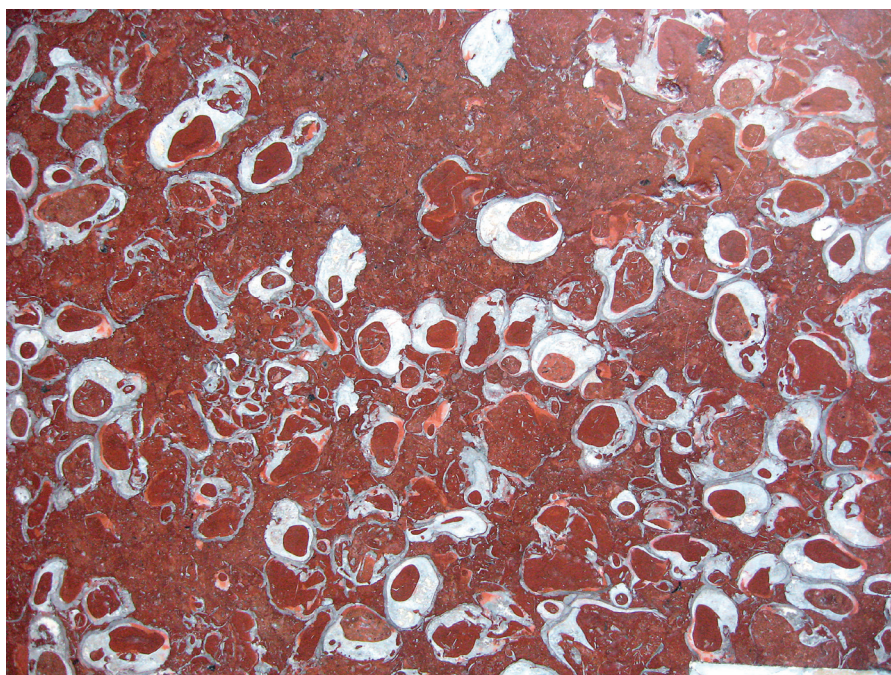
¹⁰ There is an interesting resemblance between the combination of elements of the mosaic panel in situ in the triclinium, room C20 in the House of Cantaber, in which part of the back of the room has been preserved, and the layout we can see in the mosaic panels of the triclinium in the House of Skeletons, both in Conímbriga. A black and white geometric composition was chosen for both floors, to surround a central embedded panel with ornamental rock inlays. What we see in the mosaic in the House of Cantaber are original polished panels of limestone breccia from Alvados – Porto de Mós (Tavares 1977: 272), applied using the technique for inlaying polychrome stones, or *opus sectile* (Correia 2001: 108 Sala C 20), whereas in the House of Skeletons, instead of a floor in *opus sectile* we have a mosaic floor that mimics *opus sectile*. It should also be noted that what is mimicked in the floor of the House of Skeletons is a panel of ornamental polychrome rock, inspired by 'lioz' (a kind of limestone), and what we see in the House of Cantaber are panels of breccia limestone, from Alvados – Porto de Mós. Actually, the two floors are linked to one another, but the mosaicists opted for creativity in terms of aesthetic effect and avoided repeating themselves by means of 'variations on a theme' (Correia 1941: fig. 2a; Pedroso 1992: 161). It is thus clear that 'the output from the Conímbriga workshops, at the western extremity of the Empire, while it undoubtedly shows influences from other regions, nonetheless has its own features which bestow an individuality on certain compositions' (Oleiro 1986: 111. 'Golden breccia', yellow ochre, conjures up contexts of quarried from the western part of the Empire, whether from Africa, Italy or Gaul. The cipolino verde, evokes the eastern part, or *pars graeca* of the Empire (Darmon 2011: 419).



a



c



b

Figure 16 a
Panels of limestone covering with rudists in the façade of a house
 General view, cross section and longitudinal section of rudist fossils, showing the lower valve, and a reconstruction (Silva 2008: 1. <http://paleoliva.fc.pt/almafossil/Radiolit/Radiolit 01.htm> – Viewed on 6 February 2014)

Figure 16 b
Photograph. Detail of rudist limestone panel.
 Floor of the entrance to St Peter's Basilica, in the Vatican.
 Author: Miguel Pessoa. 2013

Figure 16 c
Photograph. Detail of wall covering panel in rudist limestone.
 Crypt of the church of Santa Maria Maggiore, in Rome. Ornamental stone known as *lumacellione* or *occi di pavonne*, according to Federico Guidobaldi it is probably from the vicinity of Istanbul, Turkey.
 Author: Miguel Pessoa. 2013



Figure 16 d
Photograph. Showing the variety of decorative covering panels from the side entrance of St Mark's Basilica, in Venice
 Two kinds of fossil-bearing limestone used as ornamental stone for the floors of the inside of this mediaeval monument have been identified. They are from Asia Minor with roots in the tradition of using material from quarries that were exploited in the Roman era (Vio 2012: 83, *Lumachela da Megalodon* – bivalve *Megalodon* sp.; p. 87, *Occhio di pavone* – bivalve, order Rudista).
 Author: Miguel Pessoa. 2013

Figure 16 e
Photograph. Detail of polished rudist limestone or lioz limestone panels.
 Polychrome inlays, using various kinds of cretaceous limestone, and the blue limestone from Sintra. Background shaded with yellow and red. Preserved in situ in the floor of the corridor on the west side of the 1st floor of the National Palace of Mafra. It resembles the one preserved in the floors of the Estrela Basilica (Aires-Barros 2001: Vol. I 93, Photo 29).
 Author: Miguel Pessoa. 2013



e

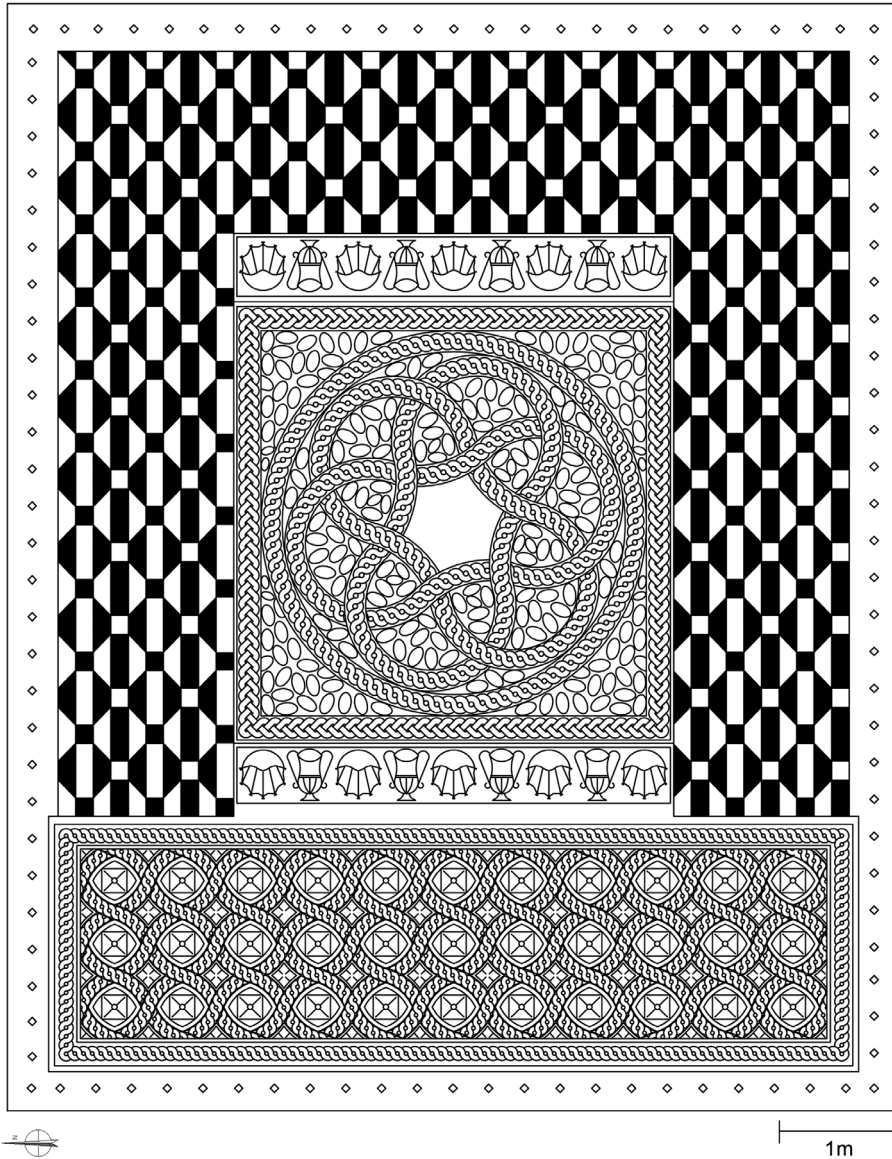


Figure 17
Drawing, reconstruction of the composition and motifs
 Mosaic floor in the *triclinium*,
 in the House of Skeletons.
 Record and computerisation:
 Ana Ravara Mendes. 2013

Figure 19
Photograph. Mosaic in the House of Fountains, Conímbriga, with motif of three intertwined eights.
 Composition of a circle circumscribed in a square and inlaid geometric motif composed of a knot of three intertwined eights, defined by a border decorated with a two-strand plait.
 Oleiro, J. M. Bairrão, 1992 = CMRPI, 1, – *Corpus dos Mosaicos Romanos de Portugal: I – Conventus Scallabitanus, 1 – Conímbriga, Casa dos Repuxos*, Instituto Português dos Museus – Museu Monográfico de Conímbriga, Lisbon, p. 74-75, Mosaic 1.21, Print 22



Figure 18
Photograph. Set of colourful two- and three-strand plaits.
 Detail of the mosaic floor in the *triclinium*, House of Skeletons, in situ, protected with geotextile fabric and a layer of river sand (Sales 2014: 52). 2013



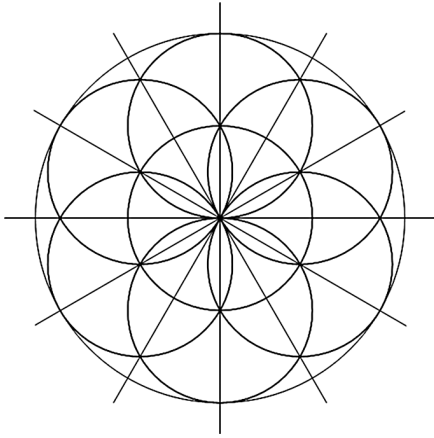


Figure 20
Interpretation of basic design of the knot motif, with three intertwined eights
Circle divided into twelve spokes with six inscribed circles to form a central six-petal rose, doubly inscribed in a hexagon with curved sides and a circle.
Record and computerisation:
Miguel Bandeira Pessoa. 2013

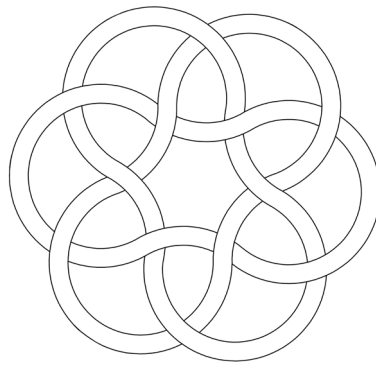


Figure 21
Design of the three intertwined eights motif
Blanchard et al. 1973: no. 603;
Décor II 290 c, 290 and, Timgad, Algeria.
Record and computerisation:
José Augusto Dias. 2013

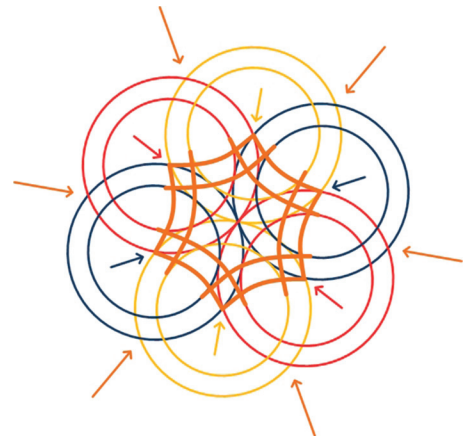


Figure 22
Basic design of the knot motif, with three intertwined eights
Six inner and six outer circles underlying the marking of the three figure-eight knot.
The arrows show the position of the compass point of the mosaicist when outlining the basic or preliminary design.
Record and computerisation:
Miguel Bandeira Pessoa. 2013

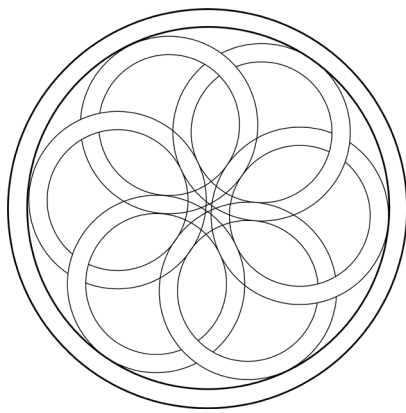
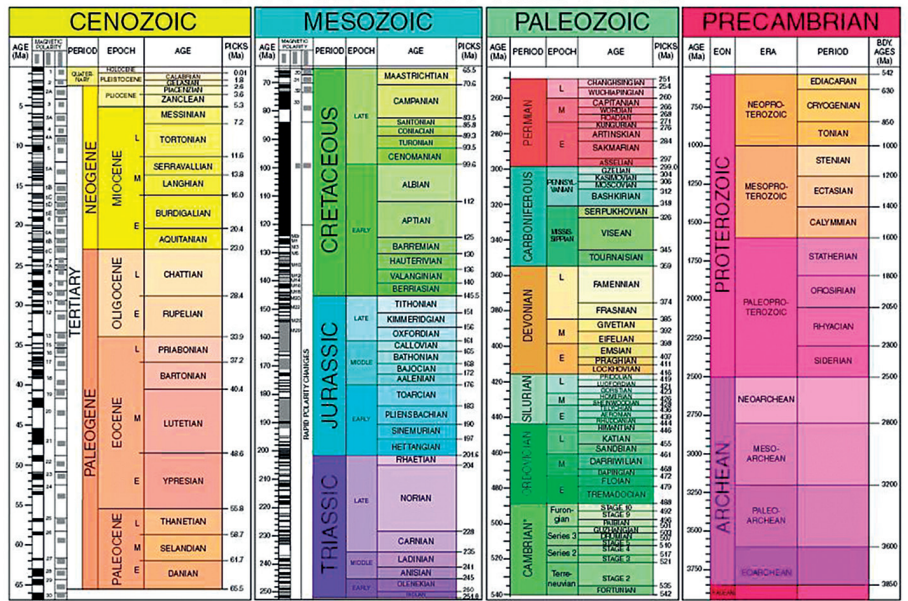


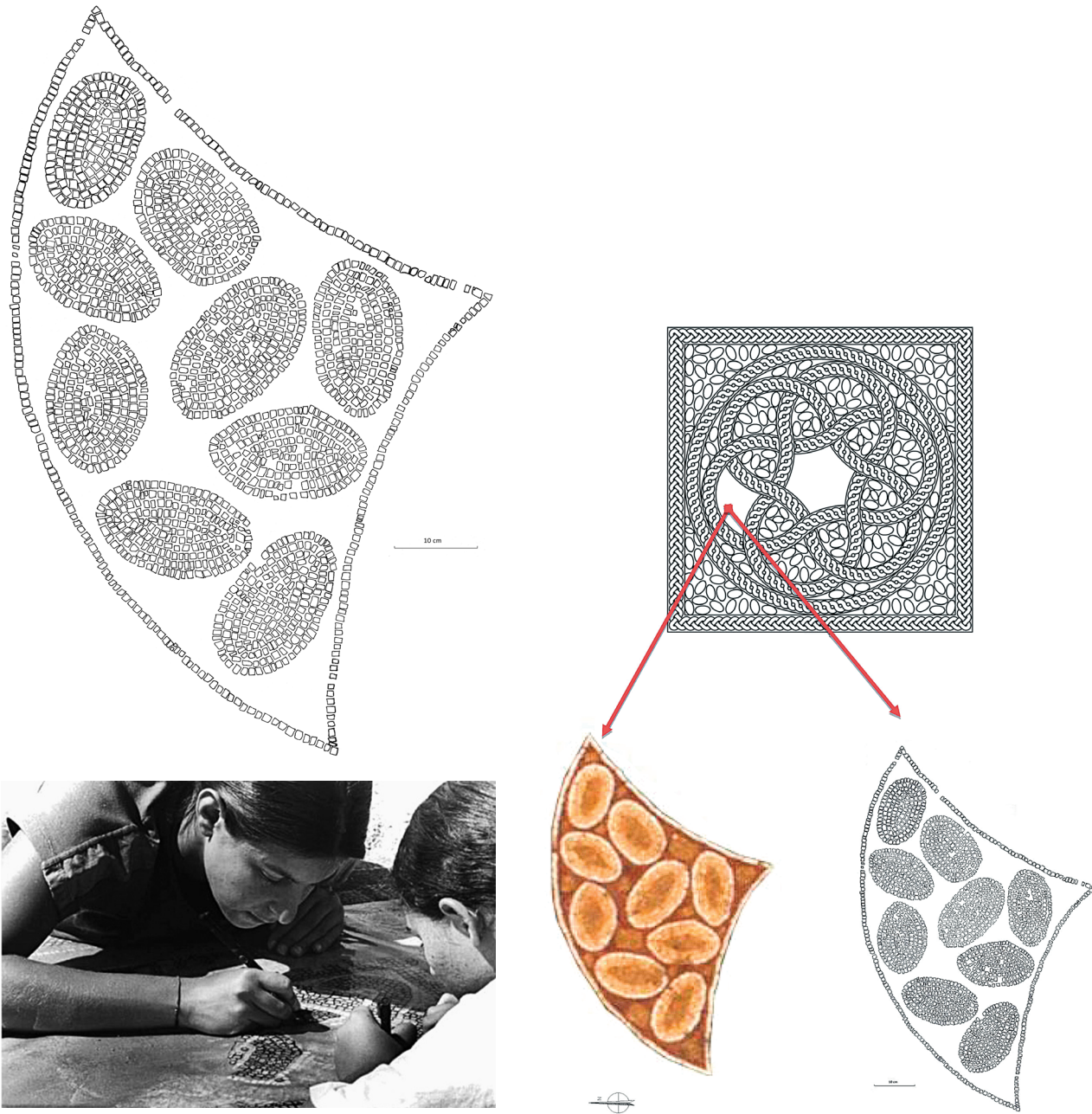
Figure 23
Design of the three intertwined circles motif
Décor II: no. 310 b,
Clunia, Spain, variant.
Record and computerisation:
José Augusto Dias. 2013

2009 GEOLOGIC TIME SCALE



International ages have not been fully established. These are current names as reported by the International Commission on Stratigraphy. Walker, J.D., and Geissman, J.W. compilers, 2009, Geologic Time Scale: Geological Society of America, doi: 10.1130/2009.CTS004R2C. ©2009 The Geological Society of America. Sources for nomenclature and ages are primarily from Gradstein, F., Ogg, J., Smith, A., et al., 2004, A Geologic Time Scale 2004; Cambridge University Press, 589 p. Modifications to the Triassic after: Furlin, S., Pires, N., Rigo, M., Roghi, G., Gianola, P., Crowley, J.L., and Ebering, S.A., 2006, High precision U-Pb zircon ages from the Triassic of Italy: Implications for the Triassic time scale and the Cretan origin of calcareous nannoplankton and dinosaurs. Geology, v. 34, p. 1006-1012. doi: 10.1130/G2267A.1; and Kent, D.V., and Olsen, P.E., 2008, Early Jurassic magnetotratigraphy and paleolatitudes from the Hartford continental rift basin (eastern North America): Testing for polarity bias and abrupt polar wander in association with the central Atlantic magmatic province. Journal of Geophysical Research, v. 113, B06105. doi: 10.1029/2007JB005607.

Figure 24
Table with dates of the Earth's Geological Periods
Walker, J. D., and Geissman, J. W. compilers 2009, Geologic Time Scale:
Geological Society of América, doi: 10.1130/2009. CTS 004 R2C



The panel that contains the mimicked ‘marble’ motif on the floor of the *triclinium* in the House of Skeletons (Fig. 25) has the highest density of tesserae (Figs. 26-1, 2, 3, 4, 5, 6). As we see in *Bulla Regia* in Tunisia (Fig. 27), this conjures up the first Pompeian pictorial style. As far as we know this was confined to mimicking the marble inlays, as occurred throughout the Roman world in general.

Architectural representation in this style is rare and where it does exist it goes no further than an addorsed pilaster, frieze, and so forth. Actually, ‘imitation marble’ cannot be dated, as such. As mentioned earlier, the wall paintings in the House of Fountains in Conímbriga (Fig. 10a)¹¹, with fresco imitations of *opus sectile*, are hard to date because there are both black and white and polychrome examples from the first four centuries of our era¹².

Figure 25
Examination and recording, by tracing directly, tessera by tessera, the design of rudist motifs (ovals and egg-shapes)
 Detail of the central panel in the *triclinium*, in the House of Skeletons. 2003.
 Computerisation:
 Ana Ravara Mendes. 2014

¹¹ Oleiro 1973: 130. Pedroso in Oleiro 1992: 164. See Fig. 10b.

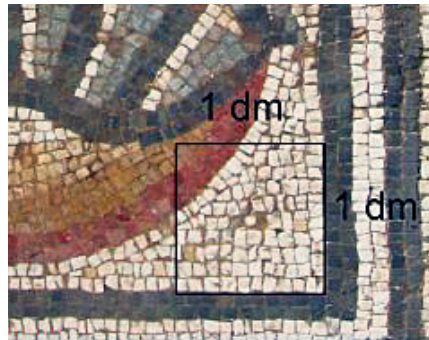
¹² Idem.

Tapete 1



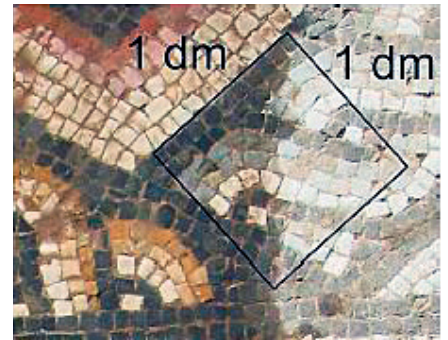
Densidade (dm²) ≅ 105 tesselas

Tapete 2



Densidade (dm²) ≅ 109 tesselas

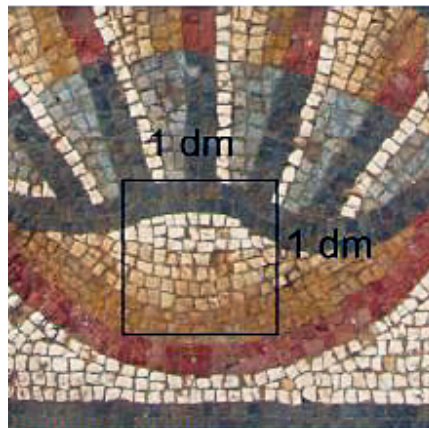
Tapete 4



Densidade (dm²) ≅ 93 tesselas

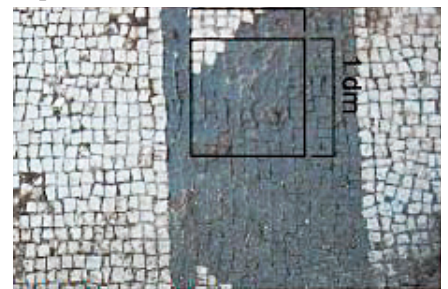


Densidade (dm²) ≅ 122 tesselas



Densidade (dm²) ≅ 132 tesselas

Tapete 5



Densidade (dm²) ≅ 86 tesselas

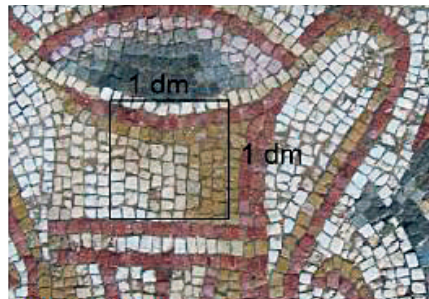
Figure 26

Recording density of tesserae per dm²

Central panel 1 – 105 / 122 tesserae per dm². 2 and 3 – Central panel – 82, 109, 132 tesserae per dm². 4 – Entrance panel – 93 tesserae per dm². 5 – U panel – 86 tesserae per dm². 6 – Outer border, 77 tesserae per dm².

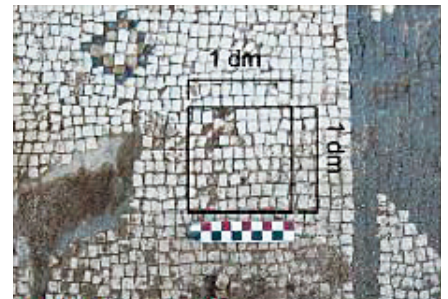
The need for greater detail when representing mosaic motifs (vases, shells and rudists) led to the inlaying of smaller pieces which resulted in a higher concentration of tesserae per dm².

Collection and computerisation:
Ana Ravara Mendes. 2014



Densidade (dm²) ≅ 82 tesselas

Orla de remate 6



Densidade (dm²) ≅ 77 tesselas



Figure 27

Photograph. Mosaic panel in the New Hunt room, in Bulla Regia, Tunisia.
Mimicry of rudist limestone
(Darmon 2011: 414 fig. 4)

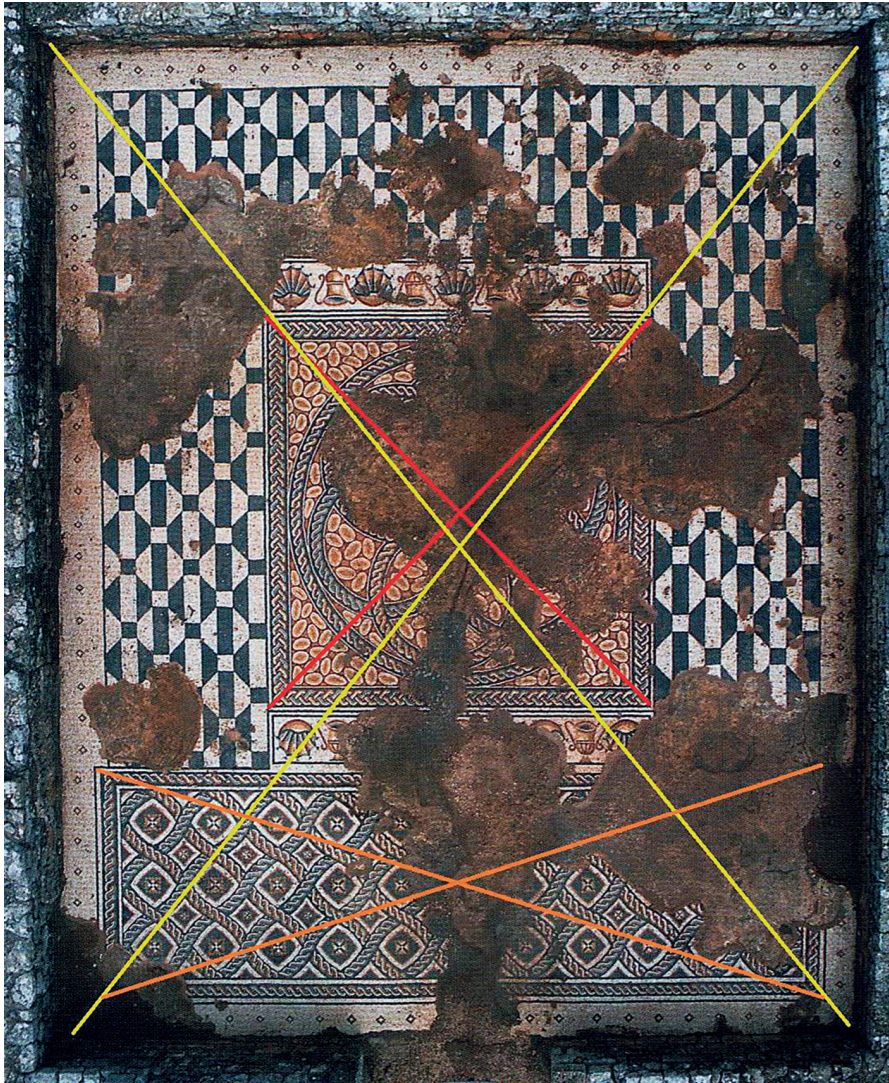


Figure 28

Diagnostic marking on the mosaic in the *triclinium*, House of Skeletons, Conímbriga

Diagonals on the total area of the room, in yellow (1, 2, 3, 4, 5, 6); on the rectangular entrance panel, in orange (4) and on the square central panel, in red (1).

Computerisation:

Miguel Bandeira Pessoa. 2013

Considerations

The themes chosen for discussion (*kantharoi/canthari*, scallop shells, rudist fossil shells, *opus sectile* in black and white, *opus sectile* with mimicry of coloured ‘marble’) reveal an attachment to traditional culture (Oleiro 1992: 171). The meticulous technical execution of the design of this mosaic, its motifs and the vibrant effect of the colours are a fine illustration of a period of strong development and dissemination of mosaic art in Conímbriga, throughout the 2nd century A. D. In this period, the Italian tradition is refreshed by the North African schools and by artistic streams from the Near East, indicating economic growth and a taste for life in the *urbs*.

While mosaic is ‘one of the most typical, most interesting, most widespread and richest forms of Roman art’, the mosaic in the *triclinium* in the House of Skeletons seems to corroborate the statement that the output of the Conímbriga workshops has its own characteristic features and individuality (Oleiro 1986: Alfa, 111).

It should be noted that we are looking at a Conímbriga mosaic that shows that there really was a School of Arts in the city. Furthermore, this is also demonstrated in the fresco wall paintings, the marble incrustations, the civil and

military architecture, the monumental and domestic architecture, the bas-reliefs, the stonework, the epigraphy, the glass-ware, the metallurgy, the metalwork, the gold and silver work and the sculpture. This is all reflected in the ability of the artists and craftsmen and their knowledge of how to execute motifs inspired by nature, as we find in the schools of North Africa¹³ or their area of influence¹⁴, and how they search for colour effects, with influences from the Middle East. Similarities are seen in mosaics from Zeugma and Antioch, for example (Cimok 2005: 48-49; Önal et al. 2007: 189, 197). The recreation of models found in other artistic areas, such as *opus sectile* and wall paintings, is a sign that the artists and clients from Conímbriga knew about trends in the decorative arts and, at the same time, were able to create new artistic programmes.

In the field of preservation and restoration, too, this mosaic in the *triclinium* is in an excellent state, apart from some fairly large gaps, and it has only needed minor consolidation work, mostly on the peripheral strands of the tessellation. This mosaic floor is a benchmark in terms of assessing the performance of techniques for protecting mosaics *in situ*, exposed to the open air (Sales 2014: 52).

According to some authors, the mosaic is from the middle of the 3rd century (Alarcão – Madeira 2010: 47), while others believe it dates from the 3rd-4th century (Correia 2003; Oliveira 2005: 45 mosaic 26 triclinium B21).

We submit that the chronological evolution of the mosaics in the site within the area *Conimbriga – Aeminium* and Vale do Mondego, in the territory of *Conuentus Scallabitanus* (Pessoa 2011: 209-216), indicates seven major phases, non equally represented. Some of them will be mentioned here in their relationship based on this mosaic, we are discussing today, as a sign that 'art born of the spirit of an age also shapes the culture of that age and the times that follow' (Upjohn et al. 1965: 28).

Given that the range of influences is evidence of the volatility and interlinking of styles¹⁵, we would say that the outer border of the floor in the *triclinium* in the House of Skeletons (Figs. 13-6, 14 c), may be more related to the First Phase, from the 1st century B.C., or even earlier. Some examples of floors from this period, with an incipient decorative pattern¹⁶ are known in the Augustan Baths and House of Cantaber, in Conímbriga (Alarcão – Etienne 1977: 43, 44; Oliveira 2005: 78 no. 58, 59; South Baths – Augustan building; 57 no. 38; Zone C – House of Cantaber. *Idem* 2006: 282 *Conímbriga*). This phase is represented in Roman-era Portugal by some fragments of *opus Signinum* floor with encrusted tesserae, in simple geometric motifs, in Beja and Aljustrel, for example (Oleiro 1986: 112 no. 142, 150, 118; Oliveira 2006: 286 Praça da República e Fonte das Figueiras, Beja).

Although we are far from reconstituting in this paper the chronological phases of the mosaicists who worked in Conímbriga as we would wish, in accordance with purely stylistic, but nearly always inaccurate, criteria, it seems clear that

¹³ Bulla Regia, Tunisia (Darmon 2011: 415 fig. 4), Cyrene, Libya (Michaelide 1981-1983 : tav. 1, 4. This is the composition that most closely resembles that in the House of Skeletons, given that it features the combination of a three figure-eight knot and the mimicked *opus sectile*).

¹⁴ Michaelides 1981-1983, Agrigento, Sicily, Italy, *Idem*, Tav. 2, 3; Bir-Chana, Tunisia, *Idem*, Tav. 3,1; Sousse, Tunisia, *Idem*, 3, 2; Thina, Tunisia, Tav. 4.2, 4.3, 4.4.

¹⁵ As happens in nature, *Natura non facit saltus* (loc. Lat.), 'nature does not jump', that is, there are other intermediate steps that link the most rudimentary to the most complex (Leibniz).

¹⁶ See the example of this in mosaics in the Villa of the Mysteries, in Pompei (Darmon 1976: 30).

the geometric pattern on the U panel (Fig. 13-5) does evoke floors from earlier times. These would have been favoured by the mosaicists and clients of Conímbriga between the first half of the 1st century AD and continuing into the 2nd century. This corresponds to the Second Phase of the site within the *Conimbriga – Aeminium* and Vale do Mondego area, when the floors were wholly, or almost wholly, bichrome with older, rather plain, motifs (Oleiro 1973: 130 mosaic 4; Oliveira 2006: 282).

However, the polychrome panels discussed here (Figs. 13-1, 2, 3, 4; 18), clearly show the adoption of a much richer and more varied decorative scheme, one that is concerned with colour enrichment and diverse motifs and themes, even in the 2nd century AD (last quarter) and the beginning of the Severian period (first quarter of the 3rd century AD) (Oleiro 1992: 168-169). Panels 2, 3, and 4 may correspond more to what we deem the Third Phase of the chronological evolution since it displays a great development in mosaic art, with the emphasis on polychrome and the introduction of small panels in the decorative scheme, seen here in a line of vases and scallops (Figs. 13-2, 3)¹⁷.

It may be that the choice of original or unusual motifs, as seen here in the knot of three intertwined eights and the background that mimics *opus sectile*, on panel 1 of the mosaic we are discussing (Fig. 13-1)¹⁸ corresponds to the Fourth Phase of the chronological evolution of mosaic production in Conímbriga. This is in the post-Severian period, the time of the soldier emperors, when geometric decoration again predominates and the loss of symbolism of the decorative elements throughout the 3rd century AD, which is offset by the variety of colours (Pessoa 2011: 211) (Figs. 11, 13-1, 2, 3, 4).

It is, in fact, in the **Fifth Phase** that we find the increase of colour in the motifs of the polychrome panels in all its splendour. It is less common in the European parts of the Empire but far more widely used in the mosaics in North Africa and the Middle East. This influence must have come to the provincial, peripheral workshop of Conímbriga in the period of Severus. It contains features that continue into the next phases¹⁹, in which, for example, there is an attempt to return to mythological themes, as seen in the group of mosaics of Torre de Palma, dating from the end of the 3rd and early 4th century AD (Lancha – André 2000: 306).

It is in the **Sixth Phase** of the chronological evolution that we see the renewal of the geometric, plant and figurative decorative schemes. While it denotes a tendency to schematise the motifs and for them to lose their symbolism, the new style nonetheless leads to the production of work, in this period, that is extremely rich in oriental-style decorative features. These are introduced from the middle of the 4th century AD onwards (Pessoa 2011: 212), as we see in the territory of the *ciuitas* of *Conimbriga*, in the mosaics in the Roman *Villae* of Rabaçal,

¹⁷ Mosaics with figurative themes and those inspired by classical mythology belong to this phase – mosaics with mythological themes would represent a luxury category of floors, like those exhibiting a taste for real-life representations (Oleiro 1992: 171).

¹⁸ This option of decorating a showy room with faux *opus sectile* in mosaic is the only one known so far in mosaics in Portugal and Spain. It could be a means of identifying the people involved in either the conception or execution of the work, and other examples of their work may come to light in the future.

¹⁹ In this case, the choice of the three figure-eight knot motif leads us to include it as one of the features of the Fourth Phase. On the other hand, the colourful treatment might indicate that the mosaic from the triclinium could belong to the Fifth Phase of the chronological and stylistic evolution that may have arisen in an advanced stage at the end of the 3rd century (cutting through the period of containment of the Empire's frontiers, initiated by Aurelian between 270-275 and consolidated by Diocletian from 285, in the period of the tetrarchs, who managed to impart a new sense of security throughout the Empire) and continuing in the first half of the 4th century, as part of the constantinian Renaissance.

S. Simão and Santiago da Guarda. This phase is regarded as a harbinger of the division of the Empire into West and East, deeply influenced by the latter and its capital, Constantinople, today's Istanbul. The figures dressed in the manner of the ladies of the court that are preserved in the mosaics of Rabaçal, displaying ornaments and jewellery, testify to an environment of luxury that was part of life in an imperial palace in the Byzantine East.

Meanwhile, the restoration of the mosaics in certain floors of the House of Fountains (Oleiro 1992: 45 mosaic 1.4, 73 mosaic 1.20), and in some floors of the Roman *Villa* of Rabaçal (Pessoa 2011: 213) would belong to the **Seventh Phase**. This relates to the 'most recent time limits of this decorative art used for centuries in the territory that today is Portugal' (Oleiro 1986: 118, 127), that is, in the 5th, 6th and 7th centuries AD (*Idem*: 213-215), after the creation of the new, so-called barbarian, kingdoms in the Iberian Peninsula from 411 AD, in the wake of Rome's effective loss of control over this area. In the latter period we find examples of extraordinary renewal of the decorative schemes, such as those in the mosaics at Tongobriga and the baptismal complex of Mértola (Oliveira 2006: 287; Lima 2012: 51; Lopes 2008: 32-41), and in some mosaics in the Roman *Villa* of Rio Maior (Oliveira 2005: 85 mosaic no. 5, 105 mosaic no. 7). The new schemes often have a Christian religious content (the *crismon* is depicted in a mosaic floor in the Roman *Villa* of Quinta das Longas, in Elvas). Some of them may be contemporaneous with the effective establishment of the Byzantine administration in southern Hispania, between 551 and 624 AD, and they have a more complex design with geometric motifs, based on the traditional repertoire. Such linkages and interweaving were to inspire the prodigious geometric variations of the 7th century, transposed using stucco, in the Umayyad dynasty, of Damascus (Lavagne 1977: 81 note 5).

The mosaicist's work has come down to us as testimony of the Greco-Roman and other civilisations. Mosaic is regarded as an inlay technique, like the encrustation of panels of varying shape, carved in ornamental stone using the *opus sectile* technique (Maciel 2011: 35-40). Like the mosaics that have survived, albeit on a smaller scale and in *opus sectile* and not only geometric compositions such as those depicted here (Alarcão – Ponte 1994: 88-89 no. 216, Inventário no. 67.484), but of a vegetal nature and even components of scenes, with a prominent place in Roman art, as we see, for example, in Milreu (Teichner 2008: 263 Abb. 136) and many other places (Guidobaldi 2003: 15-75). Other examples may come to light as excavations continue in Conímbriga.

Having considered this Roman mosaic floor discovered in Conímbriga in the days of Vergílio Correia, between 1938 and 1941, we can pose two questions. Do we have an example of the mosaics of Conímbriga of marked originality? Do the 'mosaicists of this peripheral workshop use common themes and motifs and group them, combine them or modify them in such a way that they create an individual style that is clearly distinct at a global level'? (Oleiro 1992: 172)

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