Some Geometrical Patterns and Decorative Motifs Occurring in Roman Portuguese Mosaics: A Comparative Approach with Eastern and Western Mosaics

Comparing some geometrical patterns and decorative motifs occurring in Roman mosaics from the West and the East, namely from Portugal and from Turkey, we aim to understand the reasons for the similarities and the divergences between them, attending also to the chronologies.

In the first place we will focus on the “compass drawing” composition, its geographical expansion and some achievements of this schema on mosaics from the Western and Eastern Roman Provinces such as Dalmatia, Macedonia and Pontus. From Lusitania, we will focus particularly on mosaics proceeding from some villae located in the Portuguese territory comparing them with a mosaic proceeding from Pontus, attending their chronologies and their decoration.

Secondly, we will do a first approach to the analysis of a mosaic, unpublished, and reported by Abraços 2005, proceeding from the Roman city of Bracara Augusta, nowadays Braga, in the NW of Portugal. On this interesting mosaic, we can see some decorative motifs that are quite common on the Eastern and North African realisations, though restricted to a group of Portuguese mosaics belonging to Conuentus Scalabitanus: from «Casa de Cantaber» at Conimbriga and from the Roman villa of Santiago da Guarda and of Rabaçal, both in the area of the Conimbriga ciuitas. The stylistic comparisons of Bracara Augusta’s mosaic and these of Portuguese and also eastern and western realisations point to an achievement from the 3rd/4th c. A.D. This chronology seems coincident with the urban improvement that Bracara Augusta benefited under its promotion to the capital of the Province Gallaecia.

Keywords: Roman mosaic; «compass drawing schema»; peltae with hedera in the central point; tangent cuboids; alternate bells.

Özet

Bu çalışmada, Türkiye ve Portekiz başta olmak üzere, doğu ve batı’daaki Roma mozaiklerinde görülen bazı dekoratif ve geometrik desenler, kronolojileri de dahil ederek karşılaştırıldığında aralarındaki benzerlik ve farklılıkların nedenleri ortaya koyulacaktır.

İlk olarak pergel çizimi kompozisyonları “compass drawing”, Pontus, Makedonya, Dalmaçya gibi doğu ve batı Roma eyaletlerindeki coğrafı yayılım ve bu tür şemaların başarılı kullanımı içerisinde durulacaktır.

Portekiz sınırları içinde bulunan Lusitania’da bazı villaların mozaik uygulamaları, kronolojileri ve süsleme-leri de göz önde bulundurulup Pontus’taki bir mozaikle karşılaştırılacaktır.

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This paper, presented in the frame of the 1st International Olympos (Uludağ) Studies Workshop is part of the studies we are developing under the Project RoGeMoPorTur (Roman Geometric Mosaics from Portugal and Turkey) that among other goals aims to identify reciprocal influences in Roman geometric mosaics of the eastern and western world, namely of Portugal and Turkey. The two teams of researchers involved belong to the Institute of Art History, Faculty of Science and Social Humanities, New University of Lisbon (team coordinated by Dr. Phil. Maria de Jesus Duran Kremer) and to the Department of Archaeology, Faculty of Science and Literature, Uludağ University, Bursa (team coordinated by Prof. Dr. Mustafa Şahin).

First, we discuss the compositional schema called «compass drawing»¹, an italic creation with a geographic expansion eminently Western and North African. Next, we analyze a fragment of mosaic from the Portuguese territory in which the decoration with tangent cuboids and alternate bells takes us to a set of geometric themes with three-dimensional effects quite used on mosaics of the Mediterranean East, in tradition of Greek and Hellenistic pictorial art.

1. The «compass drawing schema»

The earliest examples of mosaics with the «compass drawing schema» are from Pompeii (Blake 1930: pl. 5, fig. 4 and pl. 22, fig. 4), in pictorial context of IV Style, occurring in mosaics of other Italian cities still in the 1st century A.D. (e.g. Aquileia (Blake 1930: pl. 43, 2)) and in the 2nd century A.D. (e.g. Rimini, Ostia, Oderzo, Forlimpopoli etc.). Its expansion into Western and North African Roman provinces occurs in the 2nd and 3rd centuries A.D. Also dating from the late 2nd and early 3rd centuries A.D. are the few examples that we recorded in mainland Greece (Fernandez-Galiano 1980: 52)², in Dalmatia (Cf. Buzov 2011: 489)³, in Macedonia (Cf. Anamali – Adhami 1974: 5; 30)⁴ and in Pontus (Aybek – Öz 2012: 14)⁵.

¹ The expression «compass drawing» is the English translation from the Spanish language «esquema a compás» used by D. Fernandez-Galiano 1980.

² Is to refer to in the XVIII International Congress of Classical Archaeology, Mérida, 12-17 May 2013, Jorge Feio and I we had the opportunity to present a Poster about this Schema which text waits for publication in the Proceedings of the Congress.

³ Orpheus Mosaic from Salona, dated A.D. 2nd mid-century.

⁴ Nereid Mosaic from Apollonia, dated from the early 3rd century A.D.

⁵ Dating the mosaics of the ancient Amisos from the 1st half of the 3rd century A.D. We must note that the mosaics examples we give for Eastern Mediterranean are those we could access in the bibliography available for us.
As regards the Western provinces of Hispania (Tarracconensis, Baetica and Lusitania) the earliest examples of floors with this compositional schema date from the 2nd century A.D. In the capital of Lusitania, colonia Augusta Emerita, we found this schema curiously used in filling up small squares as in the peristylum mosaic of the so called «Casa del Mitreo» (Fernandez-Galiano 1980: 45) (Fig. 1), dated from the end of the 2nd century A.D. (CME I: 39-40, nº 21, láms. 44 b and 45 a (mosaic from the 2nd century A.D.). Id. Ib. Introduction: 15-16).

It seems rare use since this schema is usually used in relatively large panels inserted in the decoration of all floor or even covering the entire mosaic pavement. Such is the case of the mosaic also proceeding from the capital of Lusitania, signed by Seleucus and Anthus, mosaicists names pointing to the Hellenistic East, particularly to Syria as the name Seleucus.

Both in North Africa and in the western provinces, this schema continues to be used in the 3rd century A.D. and subsequently as seen in different mosaics from late Villae. The only example known to date from the Portuguese territory, in Lusitania province, is the floor of a room from the Villa of Pisões, Beja (Fig. 2), dated from the first half of the 4th century A.D. (Costa 1985: 121). The schema is designed in a central panel with 2,45 x 2,38 m, following the canonical Pompeian drawing: «in a square and around a circle, 4 lateral semicircles and four quadrants in the corners, these tangent motifs forming 4 concave poised squares» (Décor II 403a). Although it has figured in semicircles themes that were identified as depicting the seasons (Duran-Kremer 1998), the filling up of two visible corners and concave squares is done by a hedera, a quadrilobe of

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6 Mosaics of Baetulo (Badalona) in Tarracconensis; of Marbella in Baetica; of Mérida, in Lusitania. Cf. Fernandez-Galiano 1980: 35; 47-48, fig. 9; 36, fig. 10; 44, fig. 17.

7 Mosaic exposed in one of the rooms of the «Museo Nacional de Arte Romano de Mérida», in which the predominant bichromy allies with some polychromy, with figurative scenes in all spaces and laterally surrounded by Nilotic scenes. For this mosaic and other mosaics from Mérida see: Alvarez Martinez – Nogales Basarrate 2006.

8 CME I, nº 9: 30-32, Lam. 12-20 (mosaic dated from the end of the 2nd century A.D.). Seleucus and Anthus would be itinerant mosaicists possibly freed. See: Alvarez Martinez – Nogales Basarrate 2006: 247; 288 fig. 1-2.
pelae with four hederae, concentric squares and by a swastika containing, in each space formed by the arms, four other small swastikas, in a very sui generis representation of this motif.

Comparing the two panels with the same composition, the Portuguese mosaic from the Villa of Pisões and the Turkish mosaic from Amisos, this one chronologically preceding the other, we can see that both have the layout designed for simple guilloche that is already used in a Pompeian mosaic (Blake I: 118) and that in both mosaics the concave squares and the corners are mostly filled by geometric and plant decoration. On the mosaic from Pisões the hederae in the two corners and in the quadrilobe fall into a fairly sharp preference for these vegetal motifs present in the mosaics of this Villa and of others from the southern Portuguese territory (Fig. 3). So we can see hederae composing a rosette in the center circle and decorating the corners of two other mosaics whose schemas are related with the «compass drawing»: one from the Villa of Boca do Rio, Budens, Vila do Bispo9, from which only a drawing is existent (Fig. 4) and another from the Villa of Milreu, Estói, Faro, in situ, dated from the 3rd century A.D.10.

2. Analysis of a mosaic fragment from Bracara Augusta

The mosaic we analyse afterwards is a fragment proceeding from the Portuguese territory of the former Bracara Augusta, a civil foundation city, created ex nullo by Augustus, integrated in Tarraconensis province and capital of the Comitatus iuridicus Bracaraugustanus (Martins et al. 2012: 31-34). The region in which Bracara Augusta is situated occupies the southern area of NW, integrated in the new province Gallaecia after the administrative reorganization in the 3rd century A.D. The current name of the city is Braga, capital of the Braga District.

9 Veiga 1910, drawing of the mosaic from the pavement J, N°3-B.
10 CMRP II, 2: 326-329, nº 51. The author C. Oliveira considers the schema as a variant of the wreath-like pattern (Décor II 314), nevertheless she also joins it to the «compass drawing schema». We prefer this association, in relating the tracing schema on these two Portuguese mosaics with a mosaic preserved in the «Casa da Condesa de Lebrija», Sevilla, dated from the end of the 2nd century A.D. Cf. CME II: 38, nº 15, lám. 38.
This mosaic, unpublished, is first noted by Abraços 2005: 218-219. The author indicates that it was found in 1990, in the so-called «Casa da Roda», Rua de S. João, in Braga. The *tessellatum*, with original support, in breakdown, was cleaned and consolidated, leaving the mosaic *in situ*, covered. From six photographs, the author referrers have made a montage and a drawing from the decal on the photographs. Dom Diogo de Sousa Museum of Braga registered this mosaic with the inventory number: 2003.0515 (Fig. 5).11

2.1. Description of the decorative motifs

An «undulating row of alternately inverted *peltae*, outlined, the *peltae* with a heart on the central point» (Décor I 58e, polychrome variety) (Fig. 6).
We believe that this is an exterior frame surrounding the mosaic mat, as is visible a band of attachment to the wall with a row of spaced saltires of tassels (florets). The *peltae* and the *hederae* are delineated by double filet in black and the interior filled with *tesserae* in red, pink in lighter tone and white.

This frame is followed by a white band five *tesserae* wide. Another band comes as «a row of tangent juxtaposed bells, forming tangent inverted bells and an undulating line, with each bell horizontally shaded» (Décor I 60e, variety). The bells are filled with tones of dark red, yellow and white in a dark background. It is interesting to note that the front most line of the bells is dentilled. This band is followed by another as «a row of tangent cuboids with serrated sides» (Décor I 154f) from which a few cuboids are visible. The top of the cuboids are white with a black *tessera* in the centrum.

2.2. Comparative analysis of the decorative motifs

2.2.1. Returning to the outer band with *peltae* and *hederae*, we underline that these two elements presented together reinforce the prophylactic symbolism of each *per se* adapting to its location on the exterior frame of the mosaic carpet.

The *pelta* motif that one can see already in the 1st century B.C. on mosaics from Italy (Pompeii, Reggio Emilia) (Ovadiah 1980: 145 (PELTA); Blake I: 104 (Cf. Oleiro 1973); Levi 1947: 386) will be used more frequently from the early 2nd century A.D., starting to lose the geometric stiffness as “Scythian shield”. Over the centuries of its permanence in this art, in different regions of the Empire, we can see involuted *peltae* or *peltae* with stylized vegetal extensions or *peltae* with small ornaments in the *apices*: heart leaves, tassels, lilies, calices, double volutes etc. A *pelta* with a *hedera* in the *apex* is used in one Italian mosaic, bichrome, from Cividale del Friuli (Blake I: 115 pl. 38, 1) may be one of the earliest examples of a *pelta* decorated with a *hedera* on the central point.

The examples pointed out in Décor I 58 for this type of decoration used on the outer band of Braga’s mosaic come from western provinces but also from North Africa (Tunisia) and Eastern Mediterranean as the example from *Apollonia* (58e), in which the forms of the small *peltae* and large *hederae* resemble most to those on the Portuguese mosaic (Fig. 7). This mosaic from *Apollonia* dates from the 3rd century A.D.14.

From the Portuguese territory, the most similar parallel of the Braga’s mosaic band decoration comes on a mosaic from the *Conuentus scalabitanus*, of the Villa of Martim Gil, Leiria (Costa 1905: 49-50 fig. 2 - polychrome drawing of the mosaic)15, with the *hederae* involved by a filet forming another heart (Fig. 8) (Correia (Wrench) 2005: 65-67 est. 23, fig. 19 (apud Costa 1905 fig. 2). The mosaics from this *Villa* can be dated from the end of the 3rd century or from the 4th century A.D.16.

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12 Note that the possible material referent was a small light shield, crescent shaped (πέλτη), a defensive weapon characteristic of Asian peoples and Thracians by which the Greeks knew it. Cf. Daremberg-Saglio, Dictionnaire des Antiquités Grecques et Romaines, 1969: 1257, V, La *pelta*.

13 The example is cited by Oleiro 1973: 106, note 138, suggesting the 2nd century A.D. to the chronology of this mosaic and not the 1st as proposed E. Blake.

14 That is a polychrome mosaic of a vestibule of the baths, dating from the 3rd century A.D. It is the outer band of a quadrangular panel belonging to the entire decoration of the pavement. At the center of this square we can see a linked swastica with a central square (Cf. Anamali – Adhami 1974: 41-42).

15 The author informs that two Roman coins, one from Probus and the other from Magnentius were found in the *Signinium mortarium* over what the *tessellatum* was fixed.

16 Another mosaic from this *Villa*, shows the figuration of Orpheus, called «Orpheus II», in reserve at the National Archaeological Museum of Lisbon.
In Hispanic mosaics from the 4th century, undulating rows of alternately inverted *peltae* with or without decoration on the *apices* are quite frequent. For the *peltae* with hart leaves in the central point, we underline an example of the *«Villa de los Quintanares»*, Rio Seco de Soria (Cf. Correia 2005: 66).

The same type of decoration, having the *peltae* an half floret on the *apices*, occurs in mosaics from the southern Portuguese territory as, among others, a mosaic pavement of *«Villa of Boca do Rio»*, Budens, Vila do Bispo, exposed in the Regional Museum of Lagos (Correia 2005: 57 est. 17 fig. 13, *apud* a drawing of the pavement 3-C, in Veiga 1910, AP, XV; Abraços 2005, Anexo I: 367-368).

This mosaic from the *balnea* of the *Villa* presents an interesting composition that seems to reflect a cross vault in the pavement.

The *«running-pelta pattern»* is also quite common in the Portuguese mosaics. Specifically with the *peltae* connected to *hederae* we can give the example of a panel in the late mosaics from the *Villa* of Santiago da Guarda, Ansião, *Conuentus Scalabitanus* (Pereira 2008: fig. 7). Another example comes from the *Villa* of Pisões, Beja, *Conuentus Pacensis*, where this pattern covers the entire pavement of a corridor (Oliveira 2003: 116).

2.2.2. An undulating row with the bells horizontally shaded and a row of tangent cuboids (Fig. 9).

This kind of three-dimensional geometric decoration: the two examples above, the undulating ribbon, the swastika meander etc., follow the tradition of the Greek and Hellenistic mosaic that *Plinius* considers an art elaborated in the way of the art painting\(^\text{17}\). It’s interesting to note that on a mosaic from Morgantina in the Occidental Hellenistic Magna Graecia, we can also see the swastika meander with squares in perspective, done with *tesserae*, one of the earliest example using this technique (Darmon 1976: 29).

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\(^{17}\) *Plin.nat.*, XXXVI, LX «*Pavimenta originem apud Graecos habent elaborata arte picturae ratione…».
The plastic cubes as a pattern appear on mosaic pavements from the 2nd century B.C. onwards (Ovadiah 1980: 160, 55 K3). In the «Casa dei Grifi», Rome, Palatine, 100 B.C., a panel in opus sectile and the low part of the mural painting are associated by the same decoration: three-dimensional parallelepipeds. At Pompeii, the oldest example of that sort of painting comes from the 1st Style (Barbet 1985: 29-30 fig. 18: «Casa dei Grifi», central cubiculum, n° II; fig. 17: Pompeii, house VI, 16, 26).

So, an architectural reference (structural, painted or plastered) can be in the origin of these presentations on mosaics pavements (Oleiro 1973: 73 note 53.)

18. The rows of solids in perspective can also simulate the mutuli of the classical Doric order (Alves 2011).

A row of tangent cuboids in this mosaic from Bracara Augusta makes us to join it to another few examples with this type of decoration, all concentrated in the Conuentus Scalabitanus, the only group known till nowadays in the Portuguese territory. The earliest of them are two pavements proceeding from Conimbriga19, analysed by Oleiro 1973 (Oleiro 1973: 76-110 Mosaic n° 1 fig. IV; Mosaic n° 2 fig. V), who dated them, one from the half or the 3rd quarter of 2nd century A.D. and the other from the end of the Antonine Era. The author, attending to the simulation and visibility of the support function of the parallelepipeds, identifies the cuboids as «consoles in perspective» (Fig. 10).

The other examples come from the late Villa of Santiago da Guarda, Ansião, and from the Villa of Rabaçal, Penela, both located in the area of the ciútas of Conimbriga. Miguel Pessoa (2011), on his exhaustive analysis about the very interesting mosaics of «Villa of Rabaçal», specifically about this kind of decoration, gives north African examples, but mainly Eastern parallels from Antioch, Zeugma-Belkis, dated from the 2nd and 3rd centuries A.D. onwards. M. Pessoa dates the mosaics of the «Villa of Rabaçal», in genere, from the 2nd half of the 4th century A.D.

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18 For the plausible origin of this architectural decoration, the author gives the example of the paintings in a tomb at Palmira, in reference D. Levi, AMP: 550-552, fig. 205.

19 Oliveira 2005: 51: 84; nº 32 (mosaic pavement proceeding from the «Casa de Cantaber»; nº 60 (mosaic pavement from unknown origin).
To propose a reliable dating for the mosaic from *Bracara Augusta*, important archaeological data are missing out. However, the stylistic analysis and some comparisons found, either inside or outside the Portuguese territory, it appears that overall, these achievements point to 3rd and 4th centuries A.D. Considering that *Bracara Augusta* these centuries had a significant phase of constructive development as capital of *Gallaecia* (Martins et al. 2012: 57), we suggest this timeline to complete this mosaic.

To finish the exposure above and highlighting the points we believe are most relevant, we note:

About the «compass drawing» schema there is a clear preference for this composition in the western Mediterranean and North African provinces. It is, however, to emphasize that this type of tracing on a mosaic from the end of the 2nd century A.D., proceeding from Merida, was possibly designed and filled the spaces with figures by itinerant mosaicists from the eastern side of the Empire as *Seleucus* and *Anthus*. The example from *Amisos*, the beginning of the 3rd century A.D., follows the canonical Pompeian schema designed by a simple guilloche. Although, on contrary of other examples approximately contemporaneous whether of the East and the West and North Africa, mostly filled by figurative themes, the *Amisos’* mosaic shows vegetal and geometric motifs in the semicircles, concave squares and corners. In this respect, we can relate it with the diffuser centers from Italy as Pompeii or Aquileia. Nevertheless, some of the filling motifs are characteristic from the eastern mosaic as the zigzag with the rainbow technique inside the concave squares. For the decoration into the semicircles with involuted *peltae* combined with heart-shaped ivy leaves, we can add to the parallels...
gave by the authors who studied this mosaic (Aybek – Öz 2011: 11) the examples on the Portuguese mosaics with the same schema or related to, reported above. We can also note that the same type of *pelta* and its connection with heart-shaped leaves appears fairly widespread in the mosaics of the Portuguese territory, especially in the *Conuentus pacensis* and in the region south of that *Conuentus*.

About the fragment of mosaic from *Bracara Augusta* which uses these motifs in the outer band, it falls within the Western mosaics, namely the Portuguese ones, who show this decoration. If we underline the decoration of tangent cuboids with three-dimensional effects, it may be also integrated, according to the tradition of the Eastern Roman mosaics, in a set of other Portuguese examples belonging to the *Conuentus scalabitanus*: the two mosaic pavements from *Conimbriga* and some of the mosaics from the *Villae* of Rabaçal and Santiago da Guarda in which the Eastern and North African influences are well evident. Thus, the mosaic of Braga comes to extend this group to the *Conuentus bracaraugustanus*.

Regarding the city *Bracara Augusta* is not to forget its importance in the Roman times and the importance of its population, the *Bracari* that since the beginning of Romanization initiate and consolidate relationships with southern *Hispania*, allowing “*the increment of the Atlantic route, vital to the contacts between the people of the NW Peninsular and the Mediterranean orbit*” (Martins et al. 2012: 33).

We conclude that the examples of mosaics here presented reinforce the idea that the Roman mosaic art, mostly in the Late Antiquity, uses a common geometric/vegetal decorative language. This unity, however, does not erase the existence of “marks” and preferences that point to different source areas of the motifs leading us to research the influences and also the specificities.
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