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#### OFFPRINT / AYRIBAŞIM

# JMR

Volume 11

2018

Bursa Uludağ University Press  
Bursa Uludağ University Mosaic Research Center  
Series - 3  
JMR - 11

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JMR is published each year in November.

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The abbreviations in this journal are based on German Archaeological Institute publication criteria, Bulletin de l'Association internationale pour l'Etude de la Mosaïque antique, AIEMA - AOROC 24.2016, La Mosaïque Gréco-Romaine IX and Der Kleine Pauly.

Journal of Mosaic Research

ISSN 1309-047X

E-ISSN 2619-9165

Nato Cad. No: 14 Kat: 1

12.matbaa

34418 Seyrantepe / Kağıthane-İstanbul

Tel: +90 (212) 281 25 80; www.onikincimatbaa.com

Certificate No: 33094

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Bursa Uludağ Üniversitesi Mozaik Araştırmaları Merkezi

Serisi - 3

JMR - 11

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Bu dergideki makalelerde kullanılacak olan kısaltmalar Alman Arkeoloji Enstitüsü yayın kuralları, Bulletin de l'Association internationale pour l'Etude de la Mosaïque antique, AIEMA - AOROC 24.2016, La Mosaïque Gréco Romaine IX ve Der Kleine Pauly dikkate alınarak yapılmalıdır.

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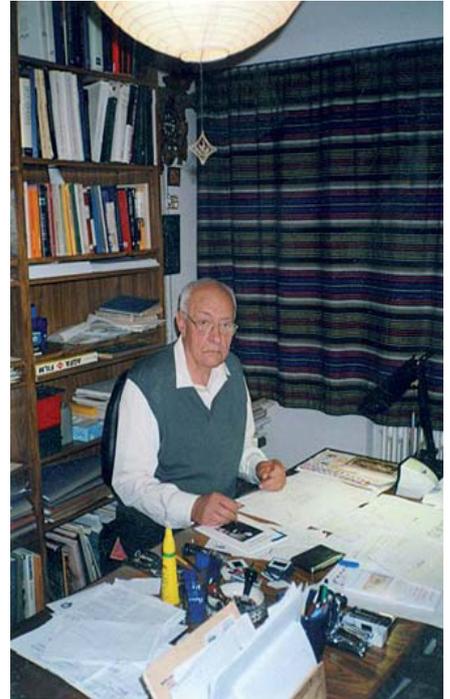
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## *José María Blázquez Martínez in memoriam (1926-2016)*

José María Blázquez Martínez (Professor of Ancient History and Fellow of the Spanish Royal Academy of History) passed away on March 26, 2016, in the city of Madrid (Spain) after a full life devoted to teaching, scientific research and the spread of antiquity; and leaving all of us -who have had the immense fortune to enjoy his mastership and overwhelming personality-, with an immense sadness.

Prof. Blázquez graduated in Philosophy and Letters from the University of Salamanca in 1951 and defended his PhD in the Complutense University of Madrid in 1956. During the next decade, Prof. Blázquez continued his training under the supervision of Prof. Pallottino at the University of La Sapienza in Rome and, granted by the DAAD, at the University of Marburg, under the supervision of Prof. Matz and Prof. Drerup. Subsequently he made other successful research stays at the University of Tel Aviv, the British Academy of Rome, the University of Catania, and in the German Archaeological Institute branches at Istanbul, Damascus and Riyadh. In this regard, Prof. Blázquez always defended the importance of international networks that, through academic contact with other schools and colleagues, conceived as essential for personal development and the progress of scientific research.



After this intense formative period, José María Blázquez obtained a position as Professor of Ancient History at the University of Salamanca (1966-) and shortly after at the Complutense de Madrid (1969-), where he was designated as Professor Emeritus. At the same time, he was an active member of the former Institute of Archaeology "Rodrigo Caro" (CSIC), that he directed during more than ten years (1973-1985). Finally, in recognition to his academic trajectory, Professor Blázquez was elected as a Fellow of the Spanish Royal Academy of History. In all these institutions Prof. Blázquez developed a brilliant contribution to the promotion of Ancient History in Spain, especially important was his capacity for mentoring (he supervised more than 40 PhDs during his academic life) large teams of teachers and researchers, that obtained several tenured positions in different universities and academic institutions. He was also a prolific author publishing many handbooks and monographs that are authentic milestones in history the Spanish scholarship (i. e. *La Romanización, Historia social y económica. La España Romana. Economía de la Hispania romana*, Bilbao, 1978, *Historia de España Antigua, I. Protohistoria*, Madrid, 1980; *Historia de España Antigua II. Hispania romana*, Madrid, 1978). Largely influential was also his leadership in the direction of the scientific journals as *Archivo Español de Arqueología* (1973-1987) and *Gerión* (1983-2010). In addition, Prof. Blázquez directed numerous archaeological excavations at Caparra (Cáceres), Cástulo (Jaén), La Loba (Fuenteovejuna, Córdoba), and in the Monte Testaccio (Rome).

By virtue of its training and its wide perspective, Prof. Blázquez's research trajectory was the reflection of the scientist dedicated to the study of antiquity, with a masterful management of

diverse written and archaeological sources, always connected with current intellectual debates of all social and human sciences. During his career published more than 37 books, acting of editor in other 9 monographs. He also published 234 articles in the most prestigious, both Spanish and International, scientific journals and several chapters in collective volumes. His research interests covered multiples areas on the study of antiquity: the Phoenician and Greek colonization of the Western Mediterranean, the Late Iron Age communities of the Iberian Peninsula, the study of Pre-Roman religions, the Impact of primitive Christianity in the Late Roman Empire, and, of course, the ancient economy of Roman Spain, with an special focus on the exports of *Baetican* olive oil.

Finally, we would like to highlight his research on Roman mosaics, whose first publication dates from 1975 - "Arte y Sociedad en los mosaicos del Bajo Imperio" [Art and Society in the mosaics of the Late Roman Empire] *Bellas Artes* 75, 1975, pp. 18-25 -soon followed by- "Mosaicos romanos del Bajo Imperio" [Roman mosaics of the Late Empire], *Archivo Español de Arqueología* 50-51, 1977, pp. 269-293., In this regard, Prof. Blázquez continued the a research line previously initiated by his teacher Prof. Antonio García y Bellido. Since 1976 to 1996, Prof. Blázquez promoted and directed the Corpus of Mosaics of Spain, within the framework of the international project sponsored by the AIEMA. Through this monumental labor, Prof. Blázquez contributed to establish the study of Roman mosaics as an authentic sub-discipline in the field of the Spanish Classical archaeology.

The obtention of several I+D Research projects, funded in competitive calls by the Spanish Ministry of Science (acting as Principal Investigator from 1976 to 1997) and an International Project of the Joint Hispanic-American Committee, with the University of West-Lafayette, Purdue (Indiana-USA), allowed Prof. Blázquez to create a permanent research team on the study of Roman mosaics. This team, which I (Prof. Neira Jiménez) am honored of have been part, managed the realization of the above mentioned *Corpus de Mosaicos de España* (CME), a work continued afterwards by its dear colleague, Dr. Guadalupe López Monteagudo (CSIC). In addition to the publication of 12 volumes of the CME, he presented numerous papers on the Hispanic, African and Near Eastern Roman mosaics in the most prestigious conferences on these topics, such as the International Congresses organized by the AIEMA or *L'Africa romana* conference, organized by the Centro di Studi sull'Africa Romana of the Università degli studi di Sassari, as well as in countless courses and seminars in other institutions and universities, such as the Roman Mosaic Seminar of the UC3M, to which he attended every year, without missing any of the 9 editions celebrated.

Prof. Blázquez was a firm believer in the work developed by AIEMA, having been named member of Honor of this scientific association. He also formed part of the editorial board of the Journal of Mosaic Research, where he published various articles, and presented papers in both the 11th International Colloquium on Ancient Mosaics, held in Bursa on 2009, and in the 5th Colloquium of AIEMA Turkey, held in Kahramanmaraş on 2011. Prof. Blázquez was a true lover of Turkey.

Prof. Blázquez was an unavoidable reference in the international scholarship on ancient mosaics, many colleagues who share our pain remember his vitality even in the XIII. AIEMA Congress held in Madrid on September 2015, where he gave the inaugural conference. As a testimony of his enthusiasm for the study of ancient mosaics, he was already thinking of traveling to the next AIEMA Congress scheduled for 2018 in Cyprus. Proof of his infinite generosity, he prepared

tirelessly until the end of his days a text on Diana in the mosaics of Roman Spain for X SMR, held in September 2016 at Universidad Carlos III de Madrid.

His decisive contribution to the study of antiquity has earned him numerous recognitions from many international academic institutions and associations: Fellow of German Archaeological Institute (1968), Board member of the L'Association Internationale d'Epigraphie grecque et latine (AIEGL), Member of the Hispanic Society (1974); Fellow of the Academy of Arts and Archaeology of Bologna (1980), Fellow of the Spanish Royal Academy of History (1990), Fellow of the New York Academy of Sciences (1993), Fellow of the Academia Nazionale dei Lincei (1994), Fellow of the Fine Arts Academy of Santa Isabel de Hungría (Seville) (1995), Fellow of the Real Academia de Bones Letres de Barcelona (1997), or Fellow of the Académie de Aix-en-Provence (1999), among others. He also received many prizes as the Franz Cumont prize from the Académie Royale de Belgique (1985), the Great Silver medal of Archaeology from l'Académie d'Architecture de Paris (1987), or the Cavalli d'Oro prize from Venice (2003). Prof. Blázquez was named *doctor honoris causa* by the universities of Valladolid (1999), Salamanca (2000), Bologna (2001), León (2005), and Universidad Carlos III de Madrid (2015), and received the *Orden del Mérito Civil*, one of the highest recognitions granted by the Spanish govern.

He was a genius as scholar, but also a genial person. For both reasons, colleagues, students, and friends of many countries, that have the fortune of meet Prof. Blázquez during his life, feel a great emptiness for the loss of our dear teacher.

Prof. Dr. Mustafa Şahin  
Bursa Uludağ University

Prof. Maria Luz Neira Jiménez  
Universidad Carlos III de Madrid





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# A New Mosaic Workshop in South Sardinia?

## Güney Sardunya'dan Yeni Bir Mozaik Atölyesi?

Simonetta ANGIOLILLO\*

(Received 30 October 2017, accepted after revision 22 June 2018)

### Abstract

*Up to now, two workshops have been identified in South Sardinia, at Nora, but the recent discovery in the surroundings of Cagliari of two late polychrome mosaics, one at Sarroch, the other at Settimo San Pietro, yielded new data, increasing our knowledge. Both of them present the same patterns - a chevrons rainbow style pattern and an orthogonal pattern of adjacent imbricated scales - and strong similarities in the style, while nothing similar has been found in the whole Sardinia; an unknown, common workshop can therefore be assumed.*

*But the floor at Settimo San Pietro includes a third panel which shows a geometric mosaic "à trame végétalisée", exactly alike to other two which were found in Carthage and Maiorca, and we can assume a Carthaginian origin of this pattern. So, can we think to only one workshop for the three floors, even for the panel with chevrons and adjacent imbricated scales, and for the mosaic at Sarroch too? And responsible for these mosaics could be African itinerant workers or Sardinian craftsmen, with African models at their disposal? Literary, documentary and archaeological sources witness for the existence of cartoons and pattern books in the ancient world, but we know for sure that itinerant craftsmen too existed. The present study will debate and analyze the different working hypotheses, but the answer is not yet possible, and we have to wait for more archaeological data and findings.*

**Keywords:** Sardinia, mosaic, itinerant craftsmen, stationary workshops, pattern books, transmission of motifs.

### Öz

*Yakın zamana kadar Güney Sardunya'daki Nora'da iki atölyenin varlığı bilinmekteydi fakat Cagliari Bölgesi'nde yapılan son çalışmalarda birisi Sarroch diğeri Settimo San Pietro'da tespit edilen geç döneme ait iki çok renkli mozaikten yeni veriler elde edilmiştir. Her iki mozaik de aynı desenlerden oluşmaktadır, gökkuşağı gibi renkli şevronlardan oluşan bir desen ve bitişik düzende dikey olarak birbiri üstüne binmiş balık pulu deseni. Tüm Sardunya'da benzer desene sahip başka bir mozaik olmadığından bu mozaiklerin şimdiye kadar bilinmeyen fakat tek bir atölye tarafından yapıldığı varsayılabilir.*

*Ancak Settimo San Pietro'daki mozaik döşemedeki üçüncü bir panelde bitkisel çerçeve (à trame végétalisée) içinde geometrik bir motif yer almaktadır ve bu motif Kartaca ve Mayorka'da tespit edilen iki mozaikle benzerlik göstermektedir. Bu bakımdan bu desenin Kartaca kökenli olduğu varsayılabilir. Öyleyse, üç mozaik döşeme için de, yani şevronlarla bezeli panel, bitişik düzende üst üste bindirilmiş balık pullarıyla bezelenen panel ve Sarroch'taki mozaik için, sadece bir atölyenin söz konusu olduğu düşünülebilir mi? Bu mozaikleri yapanlar Afrikalı seyyar zanaatkarlar mıdır yoksa Afrika kökenli desenleri bilen Sardunyalı zanaatkarlar mıdır? Yazılı kanıtlar ve arkeolojik bulgular Antik Dünya'da desen kitaplarının ve çizim taslaklarının var olduğunu göstermektedir ancak aynı zamanda seyyar zanaatkarların da var olduğu kesin olarak bilinmektedir. Bu makalede farklı çalışma hipotezleri tartışılıp analiz edilecektir. Ancak kesin bir cevap henüz mümkün değildir, bu yüzden yeni arkeolojik veri ve bulgulara ihtiyaç vardır.*

**Anahtar Kelimeler:** Sardunya, mozaik, seyyar zanaatkarlar, geçici atölyeler, desen kitapları, motif yayılımı.

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Two interesting late mosaics have recently come to our knowledge in Southern Sardinia, one at Settimo San Pietro, 20 km E of Cagliari, in a site identified with *Assinarium*, mentioned by the Anonymous from Ravenna<sup>1</sup>, the other, now lost, was at Sarroch, 28 kilometres SW of Cagliari, not far from *Nora*<sup>2</sup>.

The Settimo San Pietro pavement has not yet been completely unearthed; the part we can see consists of three contiguous carpets: a geometric mosaic “à trame végétalisée”, a chevrons rainbow style pattern and an orthogonal pattern of adjacent imbricated scales (Angiolillo 2007; Angiolillo 2011) (Fig. 1). We know about the pavement of Sarroch thanks to meagre news and a detailed watercolour painted in 1889, immediately after the excavations (Olevano – Esposito 2014) (Fig. 2). In this mosaic there were two contiguous rectangular panels, only one existing when it was excavated, and one semicircular. The preserved panels were framed by a polychrome guilloche and contained rainbow style chevrons and adjacent scales respectively.



Figure 1  
Settimo San Pietro, mosaic.  
Photogrammetry by Marco di Lieto.

Figure 2  
Sarroch, mosaic: Watercolour by  
Vincenzo Crespi, 1889 (Roma,  
Archivio Centrale dello Stato,  
AABBAA II versamento, I serie,  
Busta 2, f 107, Allegati grafici).



Although our knowledge of the mosaics of Settimo San Pietro and Sarroch is not homogeneous - the first is still *in situ*, the other exists just in a watercolour - we cannot avoid to see good similarities between them because of the same selection of patterns (Fig. 3) and, most of all, on account of the way they were carried out. Similarity is especially clear in the case of adjacent imbricated scales, where we notice some features which were not widespread all over the Empire. In both of them, scales are painted in shaded colours, according to a semicircular line and are arranged so that they produce a slanting colour alternation, but colours are somehow different. The core of the scale is always black at Settimo San Pietro (Fig. 4) and it is surrounded by polychrome curvilinear rows of two different kind: in the first a green row, then a grey-blue and finally a

1 Cf. Didu 1980-81: 211. The site Assinarium was along the way which went to the east coast of Sardinia from Karales, and Didu thinks that this name comes from Ad septimum miliarium.

2 This site too lies along the important via a Caralis Nura, or, as some milestones attest, a Nora Karalibus. About this road cf. Mastino 2005: 381-382.

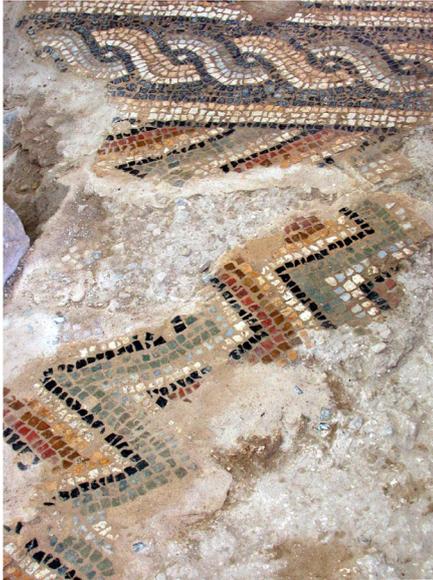


Figure 3  
Settimo San Pietro, mosaic:  
Rainbow style chevrons.  
Photograph by the Author.



Figure 4  
Settimo San Pietro, mosaic:  
Adjacent imbricated scales.  
Photograph by the Author.

white one; in the other a red row, then a dark yellow ochre, a yellow and finally a white one (Décor I: pl. 219a, variety). In the pavement of Sarroch the core is yellow, or brown, or green, or red or blue and the lines around it take up the same colours only with white, the palette seems to be more various and bright, but perhaps it is just a different choice of nuances: light blue and green prevail in the mosaic of Sarroch, yellow ochre, brown and red in that of Settimo San Pietro. Furthermore, we do not know the watercolour reliability about the range of colours which were used in the mosaic.

Yet the 19<sup>th</sup> century drawing is certainly reliable when it shows the kind of scales and their layout in the carpet. Actually, if imbricated scales are widespread all over the Roman Empire, not so favoured are curvilinear arrangement of coloured tesserae and slanting colour alternation. In Sardinia, where some pavements follow the imbricated scales pattern, only two of them (just the ones of Sarroch and Settimo San Pietro) show these peculiar features; in the others we find particoloured black and white or polychrome scales (Décor I: pl. 217d, e, variety)<sup>3</sup>. In other provinces of the Empire we know only a few examples of curvilinear arrangement of coloured tesserae and slanting colour alternation<sup>4</sup>.

As for rainbow style chevrons, Africa has yielded many floors decorated with them<sup>5</sup>, above all from 3<sup>rd</sup> century on, but there is some evidence of them

3 Angiolillo 1981: n.12 (Nora, first half 3<sup>rd</sup> century AD), 103 (Cagliari, 3<sup>rd</sup> century AD), 107 (Cagliari, middle-end 2<sup>nd</sup> century AD), 119 (Capo Frasca 3<sup>rd</sup> century AD), 125 (Tharros, middle 3<sup>rd</sup> century AD).

4 Palo Laziale, Roma, (Cosentino - Foschi 1998: fig. 4). Bulla Regia (Hanoune 1980: 90-91 fig. 165, 170-171; 42 fig. 104), 3<sup>rd</sup>-4<sup>th</sup> century. Thuburbo Maius (Alexander - Ben Abed Ben Khader 1994: 82 n. 408 F table XXXVI), end 5<sup>th</sup> - beginning 6<sup>th</sup> century. Pupput (Ben Abed Ben Khader - Hanoune 2011: 105 fig. 12). Sufetula (Duval 1971: 286 fig. 327), end 5<sup>th</sup> - first half 6<sup>th</sup> century. Cillium (Darmon - Gozlan 2015: 117-118 fig. 11), second half 4<sup>th</sup>-beginning 5<sup>th</sup> century. Timgad (Germain 1969: 128 n. 194 table LXVI; 141-145 n. 222 table LXXVI). Burgos (López Monteagudo et al. 1998: 29 n. 11 tavv. 14, 43), end 4<sup>th</sup> century. Lescar (Balmelle 1980: 134-138 n. 132 tables LXXII-LXXIII), end 4<sup>th</sup>-beginning 5<sup>th</sup> century. Dax (Balmelle 1987: 59-60 n. 189 table XXII), 4<sup>th</sup> century. Bordeaux (Balmelle 1983: 27, table XVI), 5<sup>th</sup>, or better 6<sup>th</sup> century, (De Matteis 2004: 72-76 n. 14 table XXIII, 5<sup>th</sup>-6<sup>th</sup> centuries; 91-92 n. 24 table XXX, 5<sup>th</sup>-6<sup>th</sup> centuries; 107-108 n. 38 table XLII, first half 6<sup>th</sup> century); De Matteis 2013: 47-48 and 124 n. 35, table XXXIII/3.

5 Utica (Alexander et al. 1973: 128 n. 145), second half 4<sup>th</sup> century. Bulla Regia (Hanoune 1980: 7 n. 5 fig. 10), not before 4<sup>th</sup> century. Dougga (Jeddi 2005: 536 fig. 5). Thuburbo Maius (Alexander et al. 1980: 45-46 n. 38D, table LXXVIII (beginning 4<sup>th</sup> century); 56-57 n. 45A table XXII, end 2<sup>nd</sup> - beginning 3<sup>rd</sup> century; 127 n. 101 table XLIX, 3<sup>rd</sup> century; 133-134 n. 105 table LI, beginning 3<sup>rd</sup> century. (Ben Abed-Ben Khader et al. 1985: 104 n. 235 table LVII, end 2<sup>nd</sup> - beginning 3<sup>rd</sup> century; 104-105 n. 236 table LVII, end 2<sup>nd</sup> - beginning 3<sup>rd</sup> century). (Alexander - Ben Abed Ben Khader 1994: 5-6 n. 346 table V, 4<sup>th</sup> century; 44-45 n. 375A table LXXIII, beginning 5<sup>th</sup> century; n. 408 G, end 5<sup>th</sup> - beginning 6<sup>th</sup> century). Pupput (Ben Abed Ben Khader 1994: 240 fig. 8) end 4<sup>th</sup>-beginning 5<sup>th</sup> century. Sousse (Foucher 1958: 21 table VI b), 3<sup>rd</sup> century. Sufetula (Duval 1971: 286 fig. 327), end 5<sup>th</sup> - first half 6<sup>th</sup>

elsewhere too<sup>6</sup>.

It is difficult to date our pavements. About the lost mosaic of Sarroch, the archaeologist Filippo Vivonet did not give meaningful news, as he wrote: “Vi riconobbi un bellissimo pavimento di mosaico policromo, parte a squamme (sic), parte a zig-zag, chiuso da cornice a nodi, il tutto a vivi colori e ben distribuiti; del pavimento fu fatto un disegno dal sig. prof. Vincenzo Crespi” (Vivonet 1889). The one of Settimo San Pietro, in its turn, has not yet been completely brought to light and till now excavations have given no diagnostic findings. So we have just to make an analysis of comparanda: they belong to a chronological range between 4<sup>th</sup> and 5<sup>th</sup> century, but some of them are later. More useful is to examine the third carpet (Fig. 5), the biggest of the room, a geometric mosaic “à trame végétalisée” (Angiolillo 2007; Angiolillo 2011), exactly alike to other two which were in Carthage (Beauregard et al. 1976: 66 figs. 13-15) and Maiorca (De Palol 1967: 220-221 fig. 76 table XXXIX), so that one could think that all of them come from the same *atelier*, or are made from the same cartoon. According to stratigraphy, the mosaic of Carthage has been dated to the end of Byzantine period: more exactly K. M. D. Dunbabin hypothesizes the decades AD 533-583 (Senay - Beauregard 1978: 75-85; Dunbabin 1985: 14-15). In default of diagnostic findings we have to accept this datation for the mosaic of Settimo San Pietro too.



Figure 5  
Settimo San Pietro, mosaic:  
Panel “à trame végétalisée”.  
Photograph by the Author.

century. Acholla (Gozlan 2001: 29-32 n. 57 table XLII) 1, 2<sup>nd</sup> century. Djemila (Dunbabin 1978: 256), end 4<sup>th</sup> - beginning 5<sup>th</sup> century. Timgad (Germain 1969: 108 n. 158 table L, 3<sup>rd</sup>-4<sup>th</sup> century; 123 n. 185 table LXI; 125-126 n. 190 table LXIV).

6 Aquileia (Bertacchi 1986: figs. 188, 201). Ravenna (Berti 1976: n. 41, 62) half - second half 6<sup>th</sup> century. San Giusto, Lucera (De Santis 1998: 164 figs. 225, 230), 5<sup>th</sup> - first half 6<sup>th</sup> century. Catania (Branciforti 1997: 179 fig. 11). Enna (Cilia Platamone 1997: figs. 6, 9). Aphrodisias (Campbell 1991: 20 -21 n. 7 tables 72-73, 76 -77, half 5<sup>th</sup> century; 28-29 n. 10 tables 101, 103, AD 365-380). Antiochia (Levi 1947: 211 table XLVIIa, AD 235-312; 349 table LXXXIVb ca 475; Campbell 1988). Misis-Mopsuestia (Budde 1969: 33-34). Gaza (Blanc-Bijon 2016: 390-398, 391-392 fig. 4), end 4<sup>th</sup> - beginning 5<sup>th</sup> century.

But let us go back to the mosaics with rainbow style chevrons and adjacent scales. Nothing similar has been found in the whole Sardinia, not even in the site of Villaspeciosa<sup>7</sup> (not far from Cagliari), where a pavement with rainbow style and shaded colours, dated to the end of the 4<sup>th</sup> century but reworked until the beginning of the 6<sup>th</sup>, can be ascribed to African workers. Therefore, a common workshop for both the mosaics of Settimo San Pietro and Sarroch can be suggested, however it is hard to determine whether it is an African or a local one.

Let us consider again the above mentioned carpet “à trame végétalisée” of Settimo and the others at Carthage and Maiorca: despite their great likeness, a few small variants suggest that the craftsmen are not the same. Instead of the birds painted in the middle of the circles on the pavements of Carthage and Maiorca, at Settimo there are geometric motifs and there are also some differences in colours and details. Literary, documentary and archaeological sources confirm that in the ancient world cartoons and pattern books did exist and travel remarkable distances<sup>8</sup>; responsible for the mosaic of Settimo was therefore possibly a local *atelier*<sup>9</sup> which had an African model at its disposal<sup>10</sup>. On the other hand, because of the slight differences between Carthage, Maiorca and Settimo San Pietro mosaics the possibility should not be ruled out that the workshop was the same for the three floors<sup>11</sup>. Up to now, two workshops have been identified at Nora (Lately, Angiolillo 2017): the first's features are an original, and sometimes unique, revision of very popular geometric patterns and the use of just three colours, white, black and ochre. It was at work from the end of the 2<sup>nd</sup> century. The second was trained at the school of the African craftsmen who worked in the so-called Casa dell'Atrio tetrastilo in the Severan period and who created very innovative mosaics, of a high technical level, with extremely small tesserae, new and complicated patterns and a rich polychromy. The local workers, who constituted this second *atelier*, learned repertoire, use of colours, magnificence of decorative framework from their African colleagues, but did not become as skilled as these were. Anyway, they made mosaics not only at Nora, but also in *Karales* and at *Sulci*, now Sant'Antioco. Beside these *ateliers*, as we said, African craftsmen worked at Nora (Casa dell'Atrio tetrastilo: Angiolillo 1981: 42-56, nn. 41-48, in particular nn. 43, 47), in *Karales* (Orpheus mosaic: Angiolillo 1981: 99-101 n. 101) and Villaspeciosa (Angiolillo 1999).

Shall the authors of the pavements of Sarroch and Settimo San Pietro belong to a new local workshop? The answer is not easy now, and we have to wait for more archaeological data and findings. At present we can just observe the close relationship between the mosaics of Sarroch and Settimo San Pietro, and between the panel “à trame végétalisée” at Settimo and the others in Carthage and Maiorca, but it is still very difficult to say whether the craftsmen were itinerant Africans or Sardinians. In this case they could probably come from *Karales*, but the mosaic production of the town is just partially known (Angiolillo 1981: 79-112).

7 Angiolillo 1999. Villaspeciosa is possibly situated along a diverticulum of the road a Karalibus Sulcos: Pianu 2006: 21-24.

8 On cartoons and pattern books, recently Angiolillo 2011; Poulsen 2012, with previous literature.

9 For a similar case in SW Caria and the Dodecanese, Poulsen 2012: 135-142.

10 The discovery of one more similar mosaic at Carthage suggests a Carthaginian origin of the pattern; see Angiolillo 2007: 17.

11 I previously favoured the hypothesis of local workers who had African patterns at their disposal (Angiolillo 2007 and 2011). On thinking it over, I am now inclined to have a greater caution, due to the lack of good photographic documentation of either Carthage or Maiorca mosaic. I believe therefore that, taking for granted that cahiers de modèles existed in the ancient world (see Angiolillo 2011), there is no sufficient evidence to ascribe the pavement of Settimo San Pietro either to local mosaicists or to African itinerant craftsmen: in dubiis abstinere.

## Bibliography – Kaynaklar

- Alexander et al. 1973 M. A. Alexander – M. Ennaifer – J. Gretzinger – G. P.R. Metraux – D. Soren – M. Spiro, Utique, CMT I 1, Tunis.
- Alexander et al. 1980 M. A. Alexander – A. Ben Abed – S. Besrou – B. Mansour – D. Soren, Thurburbo Majus, CMT II 1, Tunis.
- Alexander - Ben Abed Ben Khader 1994 M. A. Alexander – A. Ben Abed Ben Khader, Thurburbo Majus, CMT II 4, Tunis.
- Angiolillo 1981 S. Angiolillo, *Mosaici Antichi in Italia. Sardinia*, Roma.
- Angiolillo 1999 S. Angiolillo, “Il programma decorativo dell'aula di culto di Villaspeciosa (Cagliari)”, *CMGR VII*, 751-758.
- Angiolillo 2007 S. Angiolillo, *Trasmissione di modelli e maestranze itineranti: a proposito di un nuovo mosaico da Settimo San Pietro, Cagliari*, S. Fortunelli (ed.), *Sertum Perusinum Gemmae oblatum. Docenti e allievi del Dottorato di Perugia in onore di Gemma Sena Chiesa*, Napoli, Loffredo, 9-23.
- Angiolillo 2011 S. Angiolillo, “Cartagine, Maiorca, Cagliari: trasmissione di modelli o maestranze itineranti?”, *CMGR X*, 581-592.
- Angiolillo 2017 S. Angiolillo, “Il patrimonio musivo della provincia Sardinia alla luce delle recenti acquisizioni”, J. M. Teutonico et al. (eds.), *The Conservation and Presentation of Mosaics: At What Cost? Proceedings of the 12<sup>th</sup> Conference of the International Committee for the Conservation of Mosaics, Sardinia, October 27-31, 2014*, Los Angeles, 7-15.
- Balmelle 1980 C. Balmelle, *Recueil Gaule. IV, 1*, Paris.
- Balmelle 1983 C. Balmelle, “Une mosaïque de Bordeaux”, *Mosaïque, Recueil d'hommages à Henry Stern*, Paris, 21-32.
- Balmelle 1987 C. Balmelle, *Recueil Gaule. IV, 2*, Paris.
- Beauregard et al. 1976 M. Beauregard – L. Guimond – P. Senay, “Fouilles du monument circulaire”, *CEA VI*, 19-97.
- Ben Abed-Ben Khader et al. 1985 A. Ben Abed-Ben Khader – M. Ennaifer – M. Spiro – M. A. Alexander, *T. Majus, CMT II 2*, Tunis.
- Ben Abed Ben Khader 1994 A. Ben Abed Ben Khader, “L'Édifice du Satyre et de la Nympe de Puppit”, *CMGR VI*, 239-251.
- Ben Abed Ben Khader - Hanoune 2011 A. Ben Abed Ben Khader – R. Hanoune, “Les pavements mosaïqués des Thermes à l'octogone de Puppit (Hamamet, Tunisie)”, *CMGR XI*, 99-105.
- Bertacchi 1986 L. Bertacchi, “Architettura e mosaico”, B. Forlati Tamaro et al. (eds.), *Da Aquileia a Venezia. Una mediazione tra l'Europa e l'Oriente dal II secolo a.C. al VI secolo d.C.*, Milano, 95-332.
- Berti 1976 F. Berti, *Mosaici Antichi in Italia, Ravenna*, Roma.
- Blanc-Bijon 2016 V. Blanc-Bijon, “Les pavements en mosaïque de la basilique d'Hilarion (Nuseirat, Gaza). Nouveautés sur les ateliers”, *CMGR XIII*, 390-398.
- Branciforti 1997 M. G. Branciforti, “Mosaici di età imperiale romana a Catania”, *AISCOM IV*, 165-186.
- Budde 1969 L. Budde, *Antike Mosaiken in Kilikien, Band I, Frühchristliche Mosaiken in Misis-Mopsuestia*, Recklinghausen.
- Campbell 1988 S. D. Campbell, *The Corpus of Mosaic Pavements in Turkey. The Mosaics of Antioch*, Toronto, Ontario.
- Campbell 1991 S. D. Campbell, *The Mosaics of Aphrodisias in Caria*, Toronto.
- Cilia Platamone 1997 E. Cilia Platamone, “Rinvenimenti musivi nel territorio di Enna tra passato e presente”, *AISCOM IV*, 273-280.
- Cosentino - Foschi 1998 R. Cosentino – E. Foschi, “Ladispoli (Roma). I mosaici della villa romana di Palo Laziale. Conservazione e fruizione”, *AISCOM V*, 307-316.
- Darmon - Gozlan 2015 J.- P. Darmon – S. Gozlan, “La Maison des Muses de Cillium (Kasserine, Tunisie)”, *CMGR XII*, 111-122.
- De Matteis 2004 L. De Matteis, *Mosaici di Cos. Dagli scavi delle missioni italiane e tedesche (1900 - 1945)*, Monografie S.A.I.A. XVII, Atene.
- De Matteis 2013 L. De Matteis, *Mosaici tardoantichi dell'isola di Cos. Scavi italiani 1912 - 1945*, BAR S 2515.
- De Palol 1967 P. De Palol, *Arqueologia cristiana de la España romana, siglos IV-VI*, Madrid-Valladolid.
- De Santis 1998 P. De Santis, *San Giusto, la villa, le ecclesiae*, Bari.

- Décor I C. Balmelle – M. Blanchard Lemée – J. Christophe – J.-P. Darmon – A.-M. Guimier Sorbets – H. Lavagne – R. Prudhomme – H. Stern, *Le Décor Géométrique de la Mosaïque Romaine I*, Paris, 1985.
- Didu 1980-81 I. Didu, "I centri abitati della Sardegna romana nell'Anonimo Ravennate e nella Tabula Peutingeriana", *Ann-Cagl III (XL)*, 203-213.
- Dunbabin 1978 K. M. D. Dunbabin, *The Mosaics of Roman North Africa, Studies in Iconography and Patronage*, Oxford.
- Dunbabin 1985 K. M. D. Dunbabin, "Mosaics of Byzantine Period in Carthage: problems and directions of research", *CEA XVII*, 8-29.
- Duval 1971 N. Duval, *Sbeitla et les églises africaines à deux absides, I. Sbeitla*, Paris.
- Foucher 1958 L. Foucher, *Thermes romains des environs d'Hadrumète*, Tunis.
- Germain 1969 S. Germain, *Les mosaïques de Timgad*, Paris.
- Gozlan 2001 S. Gozlan, "Les mosaïques", S. Gozlan et al., *Acholla. Les mosaïques des maisons du quartier central et le mosaïques éparses*, Rome, 29-68.
- Hanoune 1980 R. Hanoune, *Recherches archéologiques franco-tunisiennes à Bulla Regia. IV. Les mosaïques*, Rome.
- Jeddi 2005 N. Jeddi, "Les mosaïques de la Maison des escaliers à Dougga", *CMGR IX-1*, 533-544.
- Levi 1947 D. Levi, *Antioch Mosaic Pavements*, Princeton.
- López Monteagudo et al. 1998 G. López Monteagudo – R. Navarro Sáez – P. De Palol Salellas, *Mosaicos romanos de Burgos, Corpus España XII*, Madrid, Consejo Superior de Investigaciones Científicas, Centro de Estudios Históricos.
- Mastino 2005 A. Mastino, *Storia Della Sardegna Antica (La Sardegna E La Sua Storia 2)*, Nuoro: Il Maestrale.
- Olevano – Esposito 2014 F. Olevano – M. Esposito, "Il disegno ottocentesco del mosaico di Sarroch (Cagliari)", *AISCOM XIX*, 241-251.
- Pianu 2006 G. Pianu, *La mansio di San Cromazio, Ortacesus*.
- Poulsen 2012 B. Poulsen, "Identifying mosaic workshops in late antiquity: epigraphic evidence and a case study", T.M. Kristensen - B. Poulsen (eds.), *Ateliers and Artisans in Roman Art and Archaeology*, Portsmouth, Rhode Island, 129-144.
- Senay - Beauregard 1978 P. Senay – M. Beauregard, "Fouilles du monument circulaire", *CEA IX*, 19-97.
- Vivanet 1889 F. Vivanet, "Sarroch. Avanzi di edificio romano", *NSc 1889*, 170-171.

