The mosaics with irregular tesserae in Albania (3rd - 1st century BC) Arnavutluk'taki Düzensiz Tesseralı Mozaikler (İ.Ö. 3. yy. - 1. yy.)

Elda OMARI*

(Received 5 August 2014, accepted after revision 19 January 2015)

Abstract

This research is a small part of my PhD project, a comprehensive study focused on the cataloguing and the analysis of all the mosaics and floor decorations found in modern Albania.

To date, 43 sites with 265 prestige pavements (tessellatum, irregular tesserae, opus sectile, caementicium etc.) have been found in Albanin territory. From five of these sites come our examples: 10 floor decorations were made with the irregular tesserae technique and are likely to date back to the period between the 3^{rd} and the 1^{st} century BC.

The goal of this research is to carry out a critical analysis of the motive decorations of the mosaics with irregular tesserae in Albania from 3^{rd} to 1^{st} century BC.

Keywords: Albanian mosaics, irregular tesserae, technique, ancient floor, floor decorations.

Özet

Bu araştırma, günümüz Arnavutluğu'nda bulunmuş olan tüm mozaikler ve yer döşemelerini kapsamlı bir şekilde inceleyen ve kataloglayan doktora projemin bir parçasıdır.

Bugüne kadar 265 adet tanınan yer döşemesine (*tessellatum*, *irregular tesserae*, *opus sectile*, *caementicium* vb.) sahip 43 alan Arnavutluk sınırları içerisinde açığa çıkarılmıştır. Bu alanlardan 5 tanesi bizim örneklerimizi oluşturmaktadır: 10 adet zemin süslemesi düzensiz tesserae tekniği ile yapılmıştır ve bunların büyük olasılıkla MÖ 3. ile 1. yüzyıllar arasındaki döneme tarihlendirilmeleri mümkündür.

Bu araştırmanın amacı, İ.Ö. 3. ile 1. yüzyıllardan itibaren Arnavutluk'taki düzensiz tesserae tekniğine sahip mozaiklerin kritik bir analizini gerçekleştirmektir.

Anahtar Kelimeler: Arnavutluk Mozaikleri, düzensiz tesserae, teknik, antik zemin, zemin süslemeleri

In his 1982 research, Salzmann has brought some mosaics found in the Mediterranean area to the attention of the researchers which were irregularly tessellated with geometric and figurative patterns (Salzmann 1982: 59-77). In 1999 Dunbabin dealt with this mosaic typology when she studied the invention of opus tessellatum (Dunbabin 1999: 18-25).

Subsequently, taking for granted that this mosaic typology originated from the Eastern part of the Mediterranean sea between 3rd and 2nd BC, other researchers have focused their attention on functional aspects (Fiori – Tolis 2000: 17-23) and on the terminology used to identify the floor decorations as well. They defined them as irregularly tessellated, because they consist in irregular pieces of stone or marble with irregular shapes and dimensions, inserted into the mortar to compose geometric and figurative motives (Grandi – Guidobaldi 2006: 37-38).

^{*} Elda Omari, University of Padua, Piazza Capitaniato, 7- 35129 Padua, Italy. E-mail: elda.omari@unipd.it; eldaomari9@gmail.com

In the Adriatic area, Albania is one of the most representative places for the production of these floor decorations. Through the systematic findings and the census of the published data, supported by the examination of archives material and the archaeological data derived from the most recent excavations, it was possible to identify and collect in five sites in Albania nine mosaics with irregular tesserae – some of them unpublished or not well-known – which confirm the expansion of this floor decoration in this part of Balkan Peninsula.

The study and the identification of these examples enable us to enlarge the small corpus of mosaics with irregular tesserae processed by Salzmann. Furthermore, they enable us to limit the distributions area of these mosaics in the middle-west of the Balkan Peninsula and to confirm that these mosaics are also present in Albania in both private and public buildings (Omari 2009: 69-73; Omari 2011: 675-692; Omari 2013: 373-384).

The Albanian Mosaics in Irregular Tessellated

In the technological era, using new computer applications in the archaeological field is a very important step in the study, the conservation and the preservation of mosaics. An on-line database called "TESS" was developed at the University of Padua. This database was created with a hierarchical structure which allows for the insertion of data entries about the findings. The analysis starts from the general level and moves on to a more specific level and from the external to the internal level (Fig. 1 a-b). This way of conceiving the database starts from the description of the building and moves on to the room, followed by the floor decorations and eventually to an exhaustive presentation of the models that compose the mosaic and the elements which form the artefact (e.g. the tesserae, as they are stone, marble or glass tesserae).

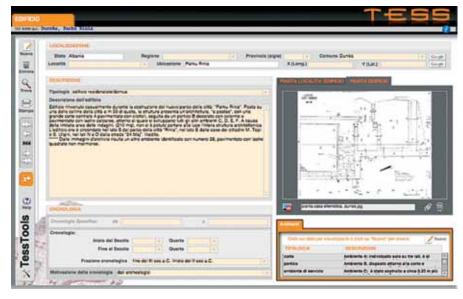
On the first level of the data entry are two pages called "building" and "room", with the typological description of the architectural context and of the typology of the room. On the second level, the two pages "covering floor" and "decoration" are devoted to the description of the cover floor which decorates the pavement. In the page "covering floor" a part of the page is dedicated to the description of the laboratory researches, in our case the tesserae.

On the following page, which is devoted to the texture of the mosaic surface, the decoration is described in detail using specific terms. In this section, every component which forms the floor decoration is dismembered, in order to single out its basic pattern. In order to better manage the quantity of information, the database is supported by three external archives which are connected to the computer system. These three archives make reference to the bibliography, the "Décor géométrique" pattern and to the conservation areas (Ghedini – Clementi 2001: 661-672; Ghedini et al. 2007: 13-43; Rinaldi 2007: 5-19; Bueno 2012: 26-33).

The data collection of the mosaics found in Albania shows that up to today, 265 mosaics have been discovered, decorating rooms of private and public buildings. The majority of the mosaics are in three colours and contain geometrical and geometrical-figurative patterns. The Albanian mosaics were produced in the time span from the 4th century BC to the 6th century AD (Omari 2009: 59-399; Omari 2011: 675-692; Omari 2013: 373-384).

During the data collection for the description of the mosaics in the database "TESS", it was possible to observe that in 7 private buildings dated from 3rd to 1st century BC in 5 sites in Albania, 9 floors are covered with mosaics produced with the irregular tesserae technique. Based on these findings, we intend

Figure 1 a-b "TESS" Database, building and covering floor pages.



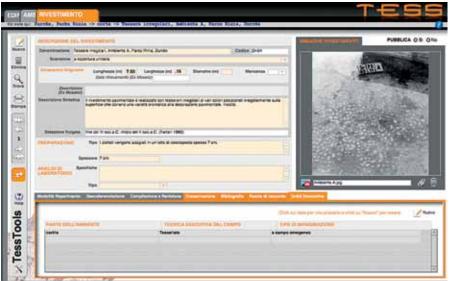
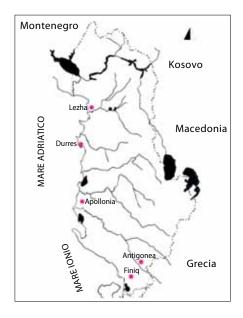


Figure 2 The map of Albania with sites with the irregular tessellation technique.



to summarize here the Albanian documentation on irregular tessellation mosaics, to focus on the topographic distribution, on the functional, decorative and chronological aspect of the floor decoration, which up until now has not been studied systematically and exhaustively.

From the topographical point of view, this class of floor decorations is documented in some centres located along the Adriatic coast and cover a time span ranging from the 3rd to the 1st BC (Fig. 2). By analysing each specific site in chronological order, we can better understand the specific characteristics of each decoration from the north to the south of the Albanian territory and why they were distributed in this way:

1. Lezha (Lissos): during the excavations carried out in 2007-2008 under the coordination of professors Lahi B. and Hoxha G., in this site in the central area of the modern city next to the Mausoleum of Scanderbeg came to light some walls of an unidentified building, where two rooms are visible: "room 1" and "room 2", both decorated with mosaics. These rooms are located approximately two meters below the modern level and were built with irregular monochrome

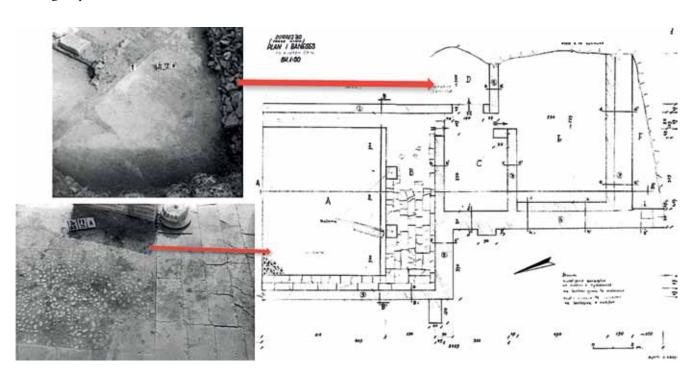


Figure 3 Lezha, excavation area with irregular tessellated mosaics (photo by E. Omari).

tesserae placed on the mortar to form parallel lines (Fig. 3). Currently, only in "room 2" it is possible to notice a small part of two pseudo-emblems with inscriptions in Greek that disrupt the uniformity of the decoration. The bands of the pseudo-emblem consist in large irregular pieces of pottery, thought which the craftsman created a darker background where he inserted the white letters of the inscriptions. The materials which the archaeologists currently have at their disposal (share level and various artefacts) have allowed us to assume that they date back to the 2nd century BC (Omari 2009: 70-71).

2. Durrës (*Epidamnos - Dyrrhachion*): this is the most important coastal city not only in Albania but in the whole Balkan area, in that Durrës has always been the largest port in the Adriatic area and in the middle of the route between the

Figure 4
Durrës, Hellenistic house at
"Rinia Park", building plan and
the irregular tessellated mosaics
(courtesy of the Archaeological
Institute of Tirana).



East and the West. In this city archaeologists have found a large number of examples of irregularly tesselated mosiacs. Since 1970 until today, three sites have been found in the city center that preserve mosaics produced with this technique.

In the 70s of the last century, during the works for the construction of the "Rinia" Park", a Hellenistic house was found. This hous contains two rooms, "peristyle A" and "room D", the floors of which are decorated with homogeneous irregular tessellated; the first floor is made up of polychrom stones and the second one of monochrom stones (Fig. 4). Only a small part of the building was excavated, but the archaeological material found (architectural and decorative elements: walls and floors) has enabled us to date the complex back to the end of the 3rd and the beginning of the 2nd century BC (Hoti 2003: 134-138; Santoro – Monti 2004: 567).

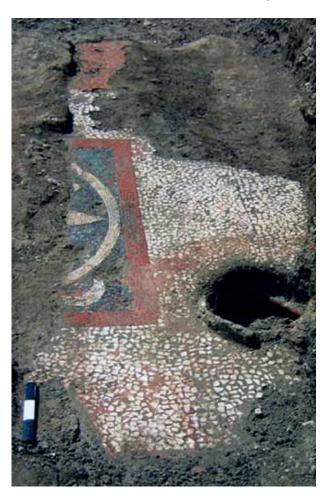


Figure 5 Durrës, the dolphin mosaic (courtesy S. Santoro).

The third example dates from a later time. It was discovered accidentally in 2007 during the construction of a modern building in the city center. It was preserved in very bad conditions. Based on the data available for the reviewed period (3rd-1st century BC), this mosaic is the most elaborate decoration in Albania from the point of view of style, geometrical-figurative aspect, and was also realized with a mixed technique of irregular tessellation and opus tessellatum. From the preserved portion we can see a border made up of with irregular ceramic fragments, while the field is composed of irregular tiles in parallel rows interrupted in the middle by a pseudo-emblem in a mixed technique: with large irregular pieces of marble tiles and small geometric shapes with two dolphins in-between (Fig. 5). On the basis of the amount and the level of the archaeological material gathered the researchers have dated this mosaic back to the 2nd century BC.

In Durrës this technique is also found in the following century, thanks to a fourth floor decoration which is much simpler than the previous mosaic, which, once again, stresses the persistence of the decorations realised with the technique of irregular tessellated.

The mosaic, also found by chance in 2008 in the city center during the excavations for the construction of a modern building, was in very bad conditions. The fragment presents a geometric decoration, but in this case the artisans used large tiles in two colors, white and yellow, to form alternating regular squares, a chessboard-counterchanged pattern color (Décor 115b). Very few data is now available to the archaeologists, but it is enough

to date this mosaic from the 1st century BC. Now the floor decoration has been lost (Omari 2009: 71-72) (Fig. 6).

- 3. Apollonia (Απολλωνία): in the site where Augustus and Agrippa studied rhetoric, the international archaeological mission composed of French and Albanian archaeologists brought to light part of a private building with three rooms, of which only the peristyle is covered with monochromatic parallel lines in irregular tessellated (Fig. 7). The floor decoration is preserved only in a small part of the room, and is placed on a very thick layer of mortar, about 30 cm long (Lamboley 2007: 233-240).
- 4. Antigonea (Αντιγόνεια): in this ancient city, founded by King Pyrrhus in honour of his wife Antigone, Albanian archaeologists have discovered a



Figure 6 Durrës, the geometric mosaic (courtesy B. Shkodra).

residential neighbourhood with shops and connecting roads in the 80s of last century. During the excavations it emerged that the peristyle in one of this Hellenistic houses was decorated with mosaic made with the technique of irregular tessellated with one colour only: white. The mosaic (Fig. 8), unknown in the literature, is preserved in very small fragments. Studies of archives have allowed us to also get hold of photographic material useful for the precise identification in the corresponding technique (Budina 1966; Budina 2002: 111-122).

Figure 7 Apollonia, building plan and the irregular tessellated mosaic (photo by E. Omari).

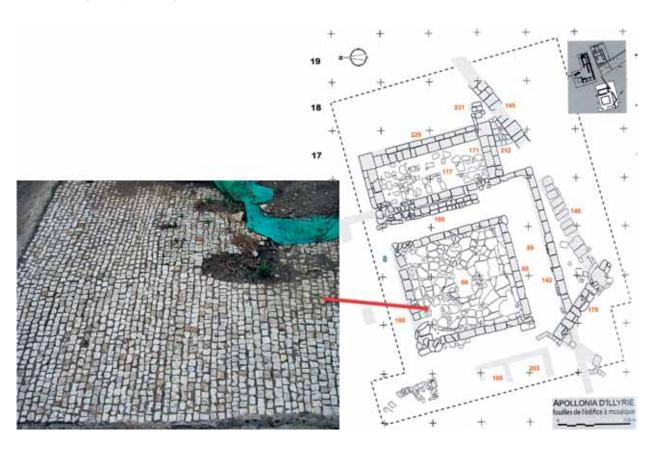


Figure 8 Antigonea, irregular tessellated mosaic from the Hellenistic house (courtesy of the Archaeological Institute of Tirana).



Figure 9 Finiq, the irregular tessellated mosaic from the peristyle of the Hellenistic house (courtesy of the Archaeological Institute of Tirana).

5. Finiq (Phoinike): this is the capital of Epirus, and is located close to the site mentioned above. Thanks to an excavation that began in the 80s of the last century and conducted by Albanian archaeologists a residential building known as the "House with two peristyles" was discovered. In 2000, the resumption of the investigation by the Italian-Albanian joint mission led the rediscovery and reinterpretation not only of the building, but also of the pavement decorations and especially of the "I" peristyle, the largest one that still retains fragments of the floor decoration (Fig. 9). In this case, differently from the examples mentioned



above, the homogeneity of the mosaic with irregular tessellated is interrupted by the insertion of irregular pottery fragments. Their distribution in the field, apparently by chance, allows the craftsmen to carry out a decoration in a variety of colours (De Maria – Gjongecaj 2001: 63-83; 2003: 21-28; 2005: 59-62).

The decorative and functional aspects

As we can seen from this brief presentation of the Albanian artefacts, these mosaics can be divided into three groups:

- a) the first group includes mosaics with hongeneous decorations: irregular big tesserae placed in parallel lines. The tesserae can be either monochrome (as are the floor decorations founded in the "room 1" in Lezha, in the "peristyle A" in Durrës and in the peristyles of Hellenistics houses in Apollonia and Antigonea) or polychrome (as is the floor decoration founded in the "room D" in Durrës);
- b) the second group includes mosaics in **irregular tessellation with inserts in opus tessellatum** or **with inserts in pottery fragments**. An example is the one discovered in Durrës (the mosaic with dolphins) and the one in Finiq (mosaic peristyle "I");
- c) the third group includes mosaics with **irregular tessellation in bi-chrome** placed to form geometric patterns, as are the example in Durrës (colour counterchanged chessboard-pattern), or used to break the chromatic monotony, like the case of the pseudo-emblem in Lezha (the mosaic of "room 2").

Therefore, the decorative motifs chosen are exclusively simple and geometric in form i.e. with an homogeneous field with monochrome or polychrome parallel lines (Décor 105a). If the overall theme of the pattern were made up of the rows of parallel lines, in order to revive and break away from monotony the craftsmen sometime included large pieces of marbles or stones in another colour within the monochrome field, without following a specific design (as are the mosaics founded in Finiq and in Durrës). In other cases, for the same reasons, the craftsmen interrupted the homogeneity of the field drawing a pseudo-emblem that affects the layout of the composition and the patterns selection (as are the mosaics founded in Lezha and in Durrës).

As previously announced, both the investigation to frame the typology by Salzmann and the analytical work to highlight the technical functions by Fiori and Tolis, and the classification made by Grandi and Guidobaldi have enabled scholars to the detailed characteristics of the mosaic technique, the spread of their production and the artisans' purpose for creating them.

Therefore, the systematic census of the floor decorations has revealed a wide-spread distribution of the mosaics in irregular tessellated from the North to the South of Albania, and helps us give them a functional position within the architectural structure. The nine mosaics found in this territory come mostly from residential contexts. At the same time, the presence of drafts of similar mosaics in buildings which have not yet been identified supports the hypothesis that this mosaic typology was not only used in private buildings, but also in other types of buildings.

Due to the lack of documentation and to the absence of comprehensive plans for the buildings, only in some cases was it possible to precisely define the relation between room function and floor decoration. With reference to the rooms in private buildings, the presence of homogeneous field decorations in uncovered areas, i.e. the peristyle, supports the hypothesis that in order to remove moisture from their houses, the costumers covered and, at the same time, decorated the most affected rooms with irregular tessellated, "poor" but functional mosaics. This hypothesis is confirmed by archaeological evidence found in four cities out of five, to be precise in Durrës, Apollonia, Antigonea and Finiq.

Of particular interest is the presence of this mosaic typology in several rooms of the building, which stresses the presence of the same hierarchical range of rooms within fruition paths, as documented in the Hellenistic house of Durrës. The other mosaics found in Durrës and Lezha were probably indoors rooms decorations, although we do not know the intended use of the rooms and of the buildings.

Certainly, the unearthed mosaics testify the fashion that was spreading in the coastal area of Albania, the costumers' tastes, the simplicity of execution, as well as the skill of the artisans in developing stylish and functional coatings mosaics with waste materials from the sculptor workshops.

The Chronology

Despite the absence of stratigraphic data for some of the floors, the dating of the Albanian mosaics was made possible by the analysis of stylistic decoration. Thanks to the comprehensive study of the whole Albanian mosaic production, the typology of irregular tessellated can be inserted into reliable chronologicaltypological grids for working out the features of single mosaics. The analysis of techniques and decorative motifs, which as we have seen fit in well with the mosaic culture of Aegean and the Adriatic area, has enabled us to identify the peak of the production of these decorations which are dated back between the Hellenistic and the Republican age. The dating is confirmed by comparisons with technical and stylistic choices made for mosaics which fit in the same chronological period and which, as documented by Salzmann (Salzmann 1982: 62-67), were found in the Mediterranean area and mostly in the adjacent area, Greece and Italy.

In the Greek area, some meaningful comparisons between techniques used and decorative motifs can be made between mosaics found on the island of Delos, for example perystile "B" in the Diadumenos house (Bruneau 1972: 19 fig. 99-101), in one of the rooms of house "F" on the East road of the ancient city (Bruneau 1972: 197 fig. 112), in the portico of the Sanctuary of Syrians Gods, located in front of the Temple of the island (Bruneau 1972: 223-226 fig. 155), in one of the rooms of the building found in the Bronze Insula (Fiori - Tolis 2000: 41 fig. 33a-b). Another instance close to the Albanian mosaic was found in Athens (Salzmann 1982: 121 taf. 78). All mosaics date from mid-2nd century BC and the half of the 2nd century BC.

Even in Western Adriatic areas good examples can be found. In Italy a large number of instances of mosaics displaying the irregular tessellated technique can indeed found in various areas, and the repertoire is enriched every year by the new discoveries that are exhibited on the occasion of the Acts of the Italian Association for the Study and Conservation of Mosaics. A few examples can be found in sites located near the Adriatic coast. In public (temples) and private buildings (houses) in this area archaeologists have found some floor decorations consisting of cropped stones placed on the mortar, e.g. in Venosa, Canosa, Arpi, Larino and Atri, all of them dating from late-3rd and early-2nd century BC (D'Alessio – Guidone 2010: 561-571). Another simple mosaic with irregular tesserae, with only white tesserae laid in parallel lines, was found in Teramo in one of the houses from the 1st century BC (Mancini 2012: 25-26 fig. 1); another similar examples were found, of course in the two most important archaeological cities, at Rome (Saguì 2012: 343-347 figg. 8-10) and Pompeo (Romizzi 2008: 269-273 figg. 4-5).

This brief overview shows that at the end of the 3rd century BC craftsmen in the Aegean and Adriatic area began to abandon the flooring technique with pebbles and started working the material in the attempt to making the floor as smooth as possible, mixing pebble mosaics with irregular tessellated, irregularly tessellated with tessellated ones, to finally use opus tessellatum only.

Up on now, the phases of transition from pebble mosaics to opus tessellatum has been ascertained in Albania only in Durrës, in the polychrome mosaic with dolphins. Here the two pavement techniques merge together: irregular tessellated and opus tessellatum are both used. The pattern presents decorative themes which are ubiquitous both in space and in time, yet in this case both the stratigraphy and the floor technique leave no room for discussion and confirm the chronology hypothesised above, that is 2^{nd} century BC.

Conclusions

In conclusion, it can be affirmed that the comprehensive examination of Albanian mosaics has confirmed the profile already proposed on other occasions, i.e. that this part of the Balkans was an important passageway between East and West and that it was a privileged centre for the production of mosaics and in our case of irregular tessellated decorations. The analysis of the motifs decorations,

Figure 10 Apollonia, the mortar of the irregular tessellated mosaic from the Hellenistic house (photo by E. Omari).



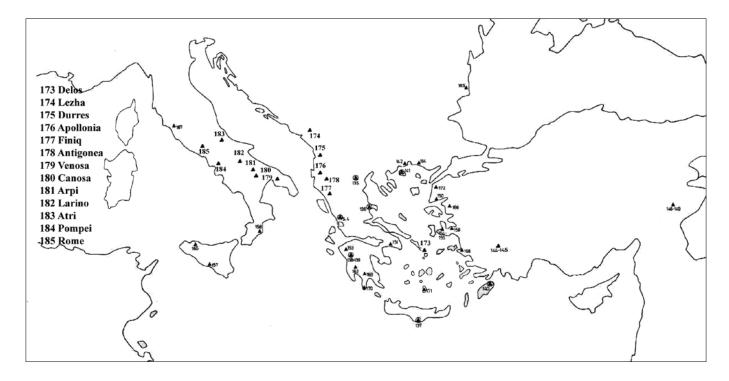


Figure 11 The Aegean and the Adriatic area with the sites where irregular tessellated mosaics are preserved (from Salzmann 1982, Karte 2, elaborated by E. Omari).

of the colours used to carry out the patterns and of their chronological expansion allows us to advance some considerations.

Although the mosaics are mostly documented in domestic rooms, especially in uncovered areas such as the peristyle, and in the interior rooms of not documented buildings, their distribution on the territory leads us to assume that these mosaics could have been used to decorate buildings that had different purposes from purely residential ones.

The decorative repertoire of the floor decorations of Albania obtained with the technique of irregular tessellated is fully embedded in the mosaic culture of the 3rd-1st century BC, proposing motifs widely distributed throughout the Aegean-Adriatic area.

The precise relation of the mosaic floors discovered in Albania with other Aegean-Adriatic areas is characterized in particular by the use of "poor" materials, wasted or recycled ones (marble, pottery or limestone), which suggests the involvement of local craftsmen specialized in floor decorations who experimented with new techniques with inexpensive materials in their shops.

Although the peak of the production of irregular tessellated mosaics can be dated from between the 3rd and the 2nd century BC, the examples which were stratigraphically certificated in the 1st century BC testify to the long life of this mosaic technique, which began to intertwine with regular tessellation already in the 2nd century BC, sticking to a decorative tradition established and well-rooted in the community.

The development of the irregular tessellation technique was due to the greater availability of materials with better functional and technical characteristics, to the impermeability and the resistance of the mosaics due to a thick layer of mortar which in some cases was more than 30 cm long (Fig. 10). In fact, the customers ordered the decoration of the uncovered areas with the aim of removing moisture from their homes, and the artisans prepared floor decorations which could withstand severe weather conditions.

Finally, thanks to computerized filing, which allows for the collection of data and the division into categories, and to the study of the discovered specimens the fact emerged once again that Albania was part of the Aegean-Adriatic culture (Fig. 11). Thanks to its geographic position Albanian craftsmen who worked here were in contact with colleagues from abroad with whom they exchanged new ideas on mosaic patterns. They then put these ideas into practice for the creation of floor decorations, and the experimented with new techniques which they in turn transmitted to other people.

Bibliography - Kaynaklar

Bruneau 1972	Phillip Bruneau.	Exploration archéologique de	e Délos faite par l'Éco	ole Française d'Athènes.	Les mosaïques.

Paris.

Budina 1966 Dhimosten Budina, Raporti i gërmimeve në Antigone në vitin 1966, unpublished report, Archaeologic Institute,

Tirana.

Budina 2002 Dhimosten Budina, "Antigonéa d'Épire et son système urbain", L'Illyrie Méridionale et l'Épore dans

l'Antiquité. Actes di IVe colloque international de Grenoble (10-12 Octobre), Grenoble: 111-122.

Bueno 2012 Michele Bueno, Mosaici e pavimenti della Toscana II secolo a.C.-V secolo d.C., Antenor Quaderni, 22,

Roma: 26-33.

D'Alessio - Guidone 2010 Alessandro D'Alessio - Serena Guidone, "Pavimenti in cementizio a ciottoli dimezzati di area Italica.

Testimonianze e inquadramento di una singolare "tipologia" pavimentale", Atti del XV Colloquio dell'Associazione Italiana per lo Studio e la Conservazione del Mosaico (Aquileia, 4-7 febbraio 2009), Roma:

561-571.

De Maria - Gjongecaj 2001 Sandro De Maria - Shpresa Gjogecaj (a cura di), Phoinike I: rapporto preliminare sulla campagna di scavi e

ricerche 2000, Firenze: 63-83.

De Maria – Gjongecaj 2003 Sandro De Maria – Shpresa Gjogecaj (a cura di), Phoinike II: rapporto preliminare sulla campagna di scavo e

ricerche 2001, Firenze: 21-28.

De Maria – Gjongecaj 2005 Sandro De Maria – Shpresa Gjogecaj (a cura di), Phoinike III: rapporto preliminare sulle campagne di scavo e

ricerche 2002-2003, Firenze: 59-62.

Dunbabin 1999 Katherine M.D. Dunbabin, Mosaics of the Greek and Romain world, Cambridge.

Fiori – Tolis 2000 Cesare Fiori – Nikolaos Tolis, "Mosaici di frammenti di marmo opus segmentatum a Delos (Grecia)", Quaderni

IRTEC, 9, ed. CNR-Istituto di Ricerche Tecnologiche per la Ceramica, Faenza: 17-23.

Ghedini et al. 2007 Francesca Ghedini - Federica Rinaldi - Paolo Kirschner - Marco Tognon, "TESS. la banca dati on-line dei

rivestimenti a mosaico", Archeologia e Calcolatori 18, Firenze: 13-43.

Ghedini – Clementi 2001 Francesca Ghedini – Tatiana Clementi, "Proposta di scheda informatizzata per una banca dati sul mosaico", Atti

dell'VII Colloquio dell'Associazione Italiana per lo Studio e la Conservazione del Mosaico (Pompei, 22-25

marzo 2000), Roma: 661-672.

Grandi - Guidobaldi 2006 Monica Grandi - Federico Guidobaldi, "Proposta di classificazione dei cementizi e mosaici omogenei ed

eterogenei, Atti del XI Colloquio dell'Associazione Italiana per lo Studio e la Conservazione del Mosaico

(Ancona, 16-19 febbraio 2005), Roma: 37-38.

Hoti 2003 Afrim Hoti, "Il patrimonio archeologico del museo e della città di Durrës", Antichità Alto Adriatiche LIII,

Trieste: 129-148.

Lamboley 2007 Jane Luc Lamboley, "Les fouilles actuelles", Apollonia d'Illyrie. 1. Atlas archéologique et historique,

Collection de l'École Française de Rome – 391, Rome: 233-240.

Maria Cristina Mancini, "Pavimenti musivi in edifici privati di *Interramnia Praetuttiorum*: nuovi rinvenimenti",

Atti del XVII Colloquio dell'Associazione Italiana per lo Studio e la Conservazione del Mosaico (Teramo,

10-12 marzo 2011), Roma: 25-29.

Omari 2009 Elda Omari, Storia e sviluppo dei rivestimenti pavimentali nell'area sud-occidentale dei Balcani. L'Albania

(fine del IV /inizio del III sec. a.C. - VI sec. d.C.). PhD Thesis, Padua, Padua University.

Omari 2011 Elda Omari, "The history and development of the mosaics in Albania (4th/3rd century B.C. – 6th century A.D.)",

CMGR XI: 675-691.

Omari 2013 Elda Omari, "La banca dati "Tess" e la cultura musiva in Albania", AAC 23-24: 373-384.

Rinaldi 2007 Federica Rinaldi, Mosaici e pavimenti del Veneto. Provincia di Padova, Rovigo, Verona e Vicenza (I sec. a.C.-

VI sec. d.C.), Quaderni di Antenor 7, Roma: 5-19.

Romizzi 2008 Lucia Romizzi, "Pavimenti sannitici in acciotolato da Pompei, a partire da un disegno degli scavi del Macellum",

Atti del XIII Colloquio dell'Associazione Italiana per lo studio e la Conservazione del Mosaico (Canosa di

Puglia, 21-24 febbraio 2007), Roma: 269-273.

Saguì 2012 Lucia Saguì, "Pendici nord orientali del Palatino: «Terme di Elagabalo». Pavimenti tardorepubblicani, medio

imperiali e tardo antichi", Atti del XVII Colloquio dell'Associazione Italiana per lo studio e la Conservazione

del Mosaico (Teramo, 10-12 marzo 2011), Roma: 343-347.

Dieter Salzmann, Untersuchungen zu den antiken Kieselmosaiken, Berlin. Salzmann 1982

Santoro - Monti 2004 Sara Santoro - Alberto Monti, "Carta del rischio archeologico della città di Durazzo", Antichità Alto

Adriatiche, LXII, Trieste: 527-586.