

# Late Byzantine Jewellery from Thessaloniki and its Region: The Finds from Ippodromiou 1 Street and Other Excavations

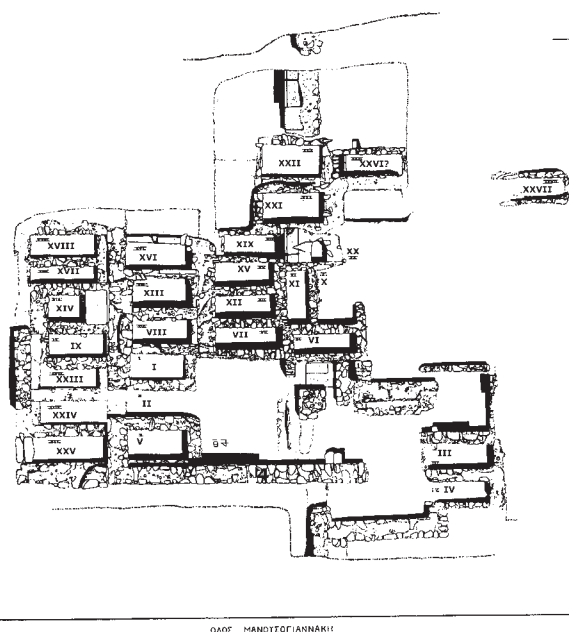
This chapter will examine the jewellery from a Late Byzantine to Early Ottoman period cemetery, which was unearthed during salvage excavations in 1972 in south-eastern Thessaloniki, as well as some Late Byzantine finds from Thessaloniki and the surrounding area.

The excavation was conducted in the plot where the post-Byzantine St Constantine and Helen's Church stood and was rebuilt in 1972<sup>1</sup>. The church is known from early 18<sup>th</sup>-century sources and it has been proposed that it was originally a monastic dependency that became a parochial church in the 17<sup>th</sup> century. This area was originally part of the palace of the Tetrarch Caesar Gaius Galerius Valerius Maximianus, built after 297 AD. A hippodrome was constructed to the east of the palatial complex and along the walls; the plot with the cemetery that is presented here was situated on the long eastern side of this hippodrome.

The area of the hippodrome, retaining its name to the present day, was one of the main quarters of the city. In the Byzantine era, Thessaloniki was organised in quarters, typically named after the church of the neighbourhood, such as Hagios Mēnas, Acheiropoiētōs etc., or after the most important monument that was still standing at this time, such as Chrysē (Gate), Omphalos, and Hippodromos. It appears that in the Late Byzantine period, the Hippodrome – a part of the racing area, which was used as an open market place – was occupied by housing developments, monasteries and at least one cemetery. Free-standing houses and housing arranged around courtyards, with vats and reservoirs for the production of wine, wells and water channels, gardens, monasteries, and monastic dependencies are mentioned in legal deeds of the monasteries of Mount Athos in this neighbourhood<sup>2</sup>. A built reservoir and parts of the pipes leading to it were unearthed during the excavation. This was possibly part of a wine vat, like the ones mentioned in the legal documents of the era.

In the Late Byzantine and Ottoman periods, potteries operated in open spaces at the centre of the city and close to the western and eastern city walls. According to the archaeological evidence, potteries were also active in the northern part of the Hippodrome and in the vicinity of the plot with the cemetery<sup>3</sup>. Finally, it is well known that a market was held on the site, since at least the 9<sup>th</sup> century and up to the 19<sup>th</sup> century. This was probably an open-air one, selling agricultural produce from the city's hinterland<sup>4</sup>.

A total of 32 built graves were unearthed at the plot (fig. 1). However, numerous clay and glass vessels found



**Fig. 1** Ippodromiou 1, excavation plan, archive of the Ephoreia Archaioetōn Polis Thessalonikē. – (From O. Alexandrē, *ΙΣΤ' Ephoreia Proisthorikōn kai Klassikōn Archaioetōn. Archaioetētes kai Mnēmeia Kentrikēs Makedonias 1973. Anaskaphikēs ergasies. N. Thessalonikēs. Thessalonikē. Odos Ippodromiou 1 kai Manousogiannakē. ADelt29, 1973-1974, Chronika B3, 656*).

1 The earliest mention of the church is by the French traveller Jean-Baptiste Souciet in 1734. In a decree of 1833-1834, the church was already considered an old building and a permit for its renovation was granted, see Mantopoulou-Panagopoulou, *Threskeutikē architektonikē* 406-412. It has been proposed in Dēmētriadēs, *Topographia Thessalonikēs* 260-261, that the church was a dependency of one of the Mount Athos monasteries and that it was later evolved into a parochial church, due to the raise of the population in the neighbourhood during the 17<sup>th</sup> c. In the 19<sup>th</sup> c., it was one of the most important churches of the

Greek community. It was renovated in 1908 and a bell tower was added to the three-aisled basilica.

2 For a recent overview of these references, see Antonaras, *Arts, Crafts and Trades* 44. 62-64.

3 On the finds from Ippodromiou 1 plot, see Antonaras, *Arts, Crafts and Trades* 140-141.

4 Bakirtzis, *Imports, Exports and Autarky* 111. – Raptis, *Seeking the Marketplaces* 240-241. – Antonaras, *Arts, Crafts and Trades* 46 with further bibliography.



**Fig. 2** Bronze earrings. Museum of Byzantine Culture, Thessaloniki, inv. nos BKO 247/2, BKO 247/13, BKO 277/5, BKO 277/7. – (Photo A. Antonaras).

during the excavation that were unassociated with any of these graves would indicate that more graves existed at the site. Jewellery was found in 14 graves and in two »stray« groups that are not associated with an identified grave. A wide variety of glazed clay vessels were unearthed in the graves that have been divided into nine Late Byzantine and one early Ottoman classes on the basis of their decoration. The dates of the clay finds define the time frame of the period of use of the cemetery as being between the late 13<sup>th</sup> and the 16<sup>th</sup> centuries. Furthermore, the great number of clay vessels (9, 12, 13, up to 16 in a single grave) affirm that these built graves were used for consecutive burials over a longer period of time. In addition, the coins found in the fill of some of them range from Early Byzantine to Ottoman issues<sup>5</sup>. There is no reference to skeletal remains in the cemetery, the number of individuals per grave nor the preservation and placement of the bones in each grave.

There is no clear archaeological evidence of the church, parochial or monastic, around which the cemetery was formed. Parts of a couple of walls were found on the site, comprising rubble stones connected with mud, which could belong to it, and fragments of wall paintings scattered in different areas of the excavation, indicating that it had been a decorated church. This was possibly the church that stood on the site until the 20<sup>th</sup> century, or its predecessor. Unfortunately, the

excavator's notebook makes no further remarks about the correlation of the cemetery and the church.

Parts of the Hippodrome were revealed under the Medieval layers preserved under the foundations of the new church.

## Earrings

The majority of our finds consists of small-sized examples (fig. 2). They are quite sumptuous; several among them are made of silver or gilded copper decorated with small pearls. The simplest forms are plain rings made of a bent wire, some of them with an »s«-shaped fold at one end to form a hook to secure the ring into the loop formed at the other end. In addition, one example has a fine wire coiled around the lower, visible part of its body, probably intended to secure a bead in place. It cannot be excluded that other examples were also adorned with coiled wires that have not been preserved. Exact parallels were not found, although comparable finds from the Balkans are dated to the Middle and Late Byzantine times<sup>6</sup>.

The most common group of earrings present are small (fig. 3), relatively simple rings, or simplified crescent-shaped earrings, occasionally gilded, sometimes with cast pseudo-granulation and additionally decorated with glass gems, or tiny pearls<sup>7</sup>. A single example of this group (fig. 4 top)

<sup>5</sup> In total 65 coins were unearthed in the excavation: including six Roman, ten Early Byzantine, five Middle Byzantine, eight Late Byzantine, seven Ottoman, two Western modern; 50 were reported to be from the graves and among them four Early Byzantine, three Middle Byzantine, four Late Byzantine, one Ottoman and two Western European were identified. For the identification of the coins I would like to thank Maria Polychronaki, archaeologist in the Museum of Byzantine Culture, Thessaloniki.

<sup>6</sup> Cf. Maneva, *Srednovekoven nakit* 41-43. – Zečević, *Nakit novog Brda* 34-36 type 3. – Bikić, *Vizantijski nakit* 54-56.

<sup>7</sup> For bronze, silver and golden finds from FYRO Macedonia and Serbia with further bibliography, see Maneva, *Srednovekoven nakit* 55-56 pl. 22. – Zečević, *Nakit novog Brda* 47-48, type 7. – Bikić, *Vizantijski nakit* 51, dated to the second half of the 14-15<sup>th</sup> c.

**Fig. 3** Bronze earrings. Museum of Byzantine Culture, Thessaloniki, inv. nos BKO 247/4a, BKO 247/4β, BKO 247/5, BKO 247/22a, BKO 271/81, BKO 271/82. – (Photo A. Antonaras).

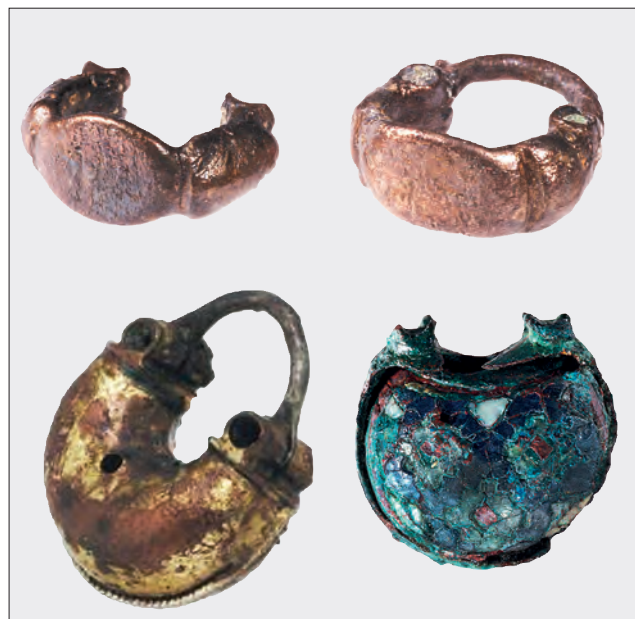


differs in its flat, band-like body, which forms an ovoid, bezel-like surface flanked by two raised areas.

In addition, one gilded copper alloy crescent-shaped earring (**fig. 4 bottom left**) was found, which was made of two concave parts, soldered together. The seam at the join is concealed by a twisted wire placed on top of it<sup>8</sup>.

All earrings of this group were suspended from short semi-circular wires, flattened on both ends, with a perforation opened in the middle of each end – a characteristic known from other Palaiologan earrings. A pair of parallel hoops was formed at each end of the body and in the slot between them suspension wires were secured with a rivet passing through all three layers. The suspension wire in Late Byzantine earrings is noticeably smaller than that used in Middle Byzantine examples.

Finally, a quite exquisite earring with mosaic decoration was unearthed in this cemetery (**fig. 4 top right**). *Cloisonné* enamel with undulating fields, which was imitated in book illumination and in micro-mosaic precious icons, was also used in the decoration of metal jewellery, such as crescent-shaped earrings, found both in Thessaloniki and in rural sites in Chalkidiki, dated to the late 13<sup>th</sup>-14<sup>th</sup> century<sup>9</sup>. It has been proposed that such pieces are not real earrings, but temple pendants. Looking at surviving examples, the suspension loop is very long and the upper part of the object is apparently open.



**Fig. 4** Bronze earrings. Museum of Byzantine Culture, Thessaloniki, inv. nos BKO 247/9, BKO 247/17, BKO 247/22β. – (Photo M. Skiadaresis).

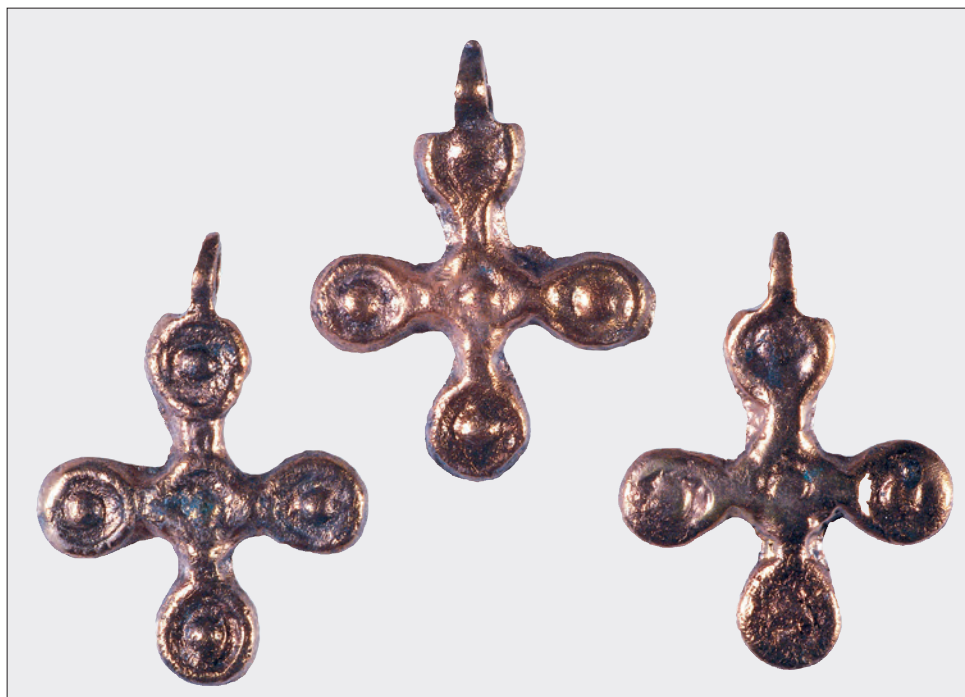
Identical finds from Corinth have been dated to the 11<sup>th</sup>-12<sup>th</sup> centuries<sup>10</sup>, and other finds from the FYRO Macedonia to the late 12<sup>th</sup> to first half of the 13<sup>th</sup> century<sup>11</sup>, but neither

8 Maneva, *Srednovekovn nakit* 58-59 pl. 23 dated to the late 14<sup>th</sup> and 15<sup>th</sup> c. – Zečević, *Nakit novog Brda* 44-46, type 6 dated to the 15<sup>th</sup>-16<sup>th</sup> c. – Bikić, *Vizantijski nakit* 51-54, dated to the middle of the 14<sup>th</sup> to the 16<sup>th</sup> c. with further bibliography.

9 Moutsopoulos, *Rentina* fig. 170. – Antonaras, *The Use of Glass* 333. – *Cat. Thessaloniki 2007*, 127. – *Cat. Athens 2007*, 52. – Antonaras, *Middle and Late Byzantine Jewelry* 122. – Toska/Chatzakis, *Valta* 162 fig. 10.

10 Davidson, *The Minor Objects* 250. 254.

11 Maneva, *Srednovekovn nakit* 59 pl. 23.89/19; 23.23/1ab.



**Fig. 5** Bronze crosses. Museum of Byzantine Culture, Thessaloniki, inv. no. BKO 247/11. – (Photo M. Skiadaresis).

the sites in Chalkidiki nor the Thessalonian cemetery bear any indications of a Middle Byzantine period use. Therefore, it was necessary to re-examine the date of the three Corinthian finds using information taken from the inventories and notebooks of the excavation. The first one is found loosely connected to a Middle Byzantine earring and a ring, and coins issued under Manuel I (1143-1180). The second was found with coins issued under Alexios I (1081-1118) and the third one is a very early find with no particular information retained about the context within which it was found<sup>12</sup>. Thus, I am inclined to consider the Macedonian finds as heirlooms remaining in use for several centuries.

Another type of Middle Byzantine heirloom, which appeared among Palaiologan finds in Thessaloniki, is a golden earring formed by a thick wire bent to form an open circle. It is decorated at the lower part with a vertical composite element, like a multi-tiered filigree bead, which is flanked by fine, twin-coiled wires<sup>13</sup>.

In addition to the crescent-shaped earrings from the cemetery in Ippodromiou 1, another type of crescent-shaped

earring, which was additionally decorated with glass gems, was unearthed in Thessaloniki<sup>14</sup>.

Crescent-shaped filigree earrings were another type of late Palaiologan product present in the region<sup>15</sup>. Finally, it must be noted that many of the bronze examples retain a layer of gilding, indicating their original, golden appearance<sup>16</sup>.

## Pendants and Crosses

Three small Greek crosses were found in the cemetery (fig. 5). All of them are cast in bronze, with flat backs and cast decoration on the front, imitating the inlaid decoration of their golden prototypes<sup>17</sup>. At the end of all four arms and at the centre of their junction, there is a notch in which a circular knob is formed, apparently imitating insets made of glass or semiprecious stones. Very similar, if not identical, finds have been unearthed in FYRO Macedonia and Serbia. It is quite safe to ascribe them to Thessalonian jewellers, as well. Firstly, because at least five of these pieces were found in three

12 I wish to thank the director of the Corinth Excavations of the ASCSA, Dr Guy Sanders, and the assistant director, Dr Ioulia Tzonou-Herbst, for their permission to examine the earrings and their help in the research in the archives and the database of the excavation from where the following information was taken. MF 7648: Corinth XII, no. 2046. Forum N-NW-W. North of Tower. Bema area. Near the church that once stood over the Bema. 31 March 1938. Context discarded. It was found with coins issued under the Byzantine Emperor Manuel I (1143-1180). A bronze ring MF 7966 and earring MF 7954 (both Middle Byzantine products) were found together, in addition to pottery C. 38.405. MF 6258: Corinth XII, no. 2047. South Stoa M. South of »Senate House«. Practically above Shop XX. 3 October 1936. It was found together with two coins of Alexios I, and six of Manuel I. The earring is quite heavy 5.87 g. It is filled with some heavy substance, possibly lead. MF 3391: Corinth XII, no. 2045. Find from the excavations for the »New Museum« conducted on 4 April 1931. There is no special information in the notebook. »Found in red soil above black soil«.

13 Cat. Thessaloniki 2002, 437 (I. Kanonidis). On this type of earrings, see Maneva, *Srednovekovna nakit* 51-52 and Bikić, *Vizantijski nakit* 39-44 both with earlier bibliography. This type is considered to be a Byzantine product and it is dated to between the 9<sup>th</sup> and 11<sup>th</sup> c., although 12<sup>th</sup>-c.-examples are known as well.

14 Antonaras, *The Use of Glass* 333. – Antonaras, *Middle and Late Byzantine Jewelry* 122.

15 Moutsopoulos, *Rentina* fig. 238. On metal revetments and other filigree objects produced in Late Byzantine Thessaloniki, see Antonaras, *Arts, Crafts and Trades* 73.

16 Personal observation on unpublished material, partly exhibited at the Museum of Byzantine Culture, Thessaloniki.

17 Kanonidis, *Enkolpia* 69. 75. On their decoration, see Antonaras, *Gyalina me-sobyzantina brachiolia* 431. – Antonaras, *Middle and Late Byzantine Jewelry* 123. For the metal production in Late Byzantine Thessaloniki, see Antonaras, *Arts, Crafts and Trades* 72-75.



**Fig. 6** Bronze bracelets. Museum of Byzantine Culture, Thessaloniki, inv. nos BKO 247/1a, β, γ. – (Photo A. Antonaras).

different parts of Thessaloniki; and secondly because of the stone moulds unearthed in the workshops at the central part of Via Regia, the main street of the city, which match perfectly with these crosses and are probably the ones in which they had been cast<sup>18</sup>.

Small bronze crosses, almost all of them with arms of equal length, have been unearthed in other Palaiologan cemeteries as well. They bear cast decoration that imitates the inlaid decoration of their golden prototypes<sup>19</sup>. Few Middle Byzantine stone crosses have been unearthed in Late Byzantine cemeteries. Those that have, are apparently heirlooms that were in use for some centuries before being deposited in a grave<sup>20</sup>.

## Bracelets

Bracelets (**fig. 6**) are rare in Palaiologan finds in Thessaloniki. Glass bangles and band-shaped bronze bracelets, amply represented in the Middle Byzantine period, fall out of fashion in the first half of the 13<sup>th</sup> century, and by the end of the century they no longer appear<sup>21</sup>. Among our finds from the Ippodromiou 1 plot, only a more subtle version of the wired, Middle Byzantine bracelets occurred, differing from their predecessors by the void hoops in which they end and the wire that was bent to form two hooks securing it to the hoops and

thus securing the bracelet at the wrist<sup>22</sup>. In addition, another bronze bracelet was partly preserved from the same burial with the twisted bracelets. The band-like body of the bracelet widens and forms four equidistantly arranged square plaques, which were probably decorated with engraving.

## Rings

Four rings are among our finds, all of them made of cast bronze (**fig. 7**). Three of the rings are made of undecorated plain wire with a circular cross-section<sup>23</sup>. The fourth ring has a flat band hoop and a slightly raised, pyramidal or square bezel. If it is not a Middle Byzantine heirloom, then it is a later derivation that is still very close to its Middle Byzantine prototype<sup>24</sup>.

On average, Late Byzantine rings are larger and more massive than the Middle Byzantine examples. Most of the finds are simple creations with raised bezels, usually bearing engraved, geometrical and floral decoration<sup>25</sup>. Also, a group of massive, cast examples, which often have plain, undecorated bezel, or bear intaglio decoration, are known<sup>26</sup>.

A chalcedony ring (**fig. 8**) was unearthed in a very early Muslim graveyard excavated in Themi, a settlement in the plain east of Thessaloniki, which, in all probability, is datable to the first century of the Ottoman occupation of the region<sup>27</sup>.

18 On the metal production in Late Byzantine Thessaloniki, see Antonaras, *Arts, Crafts and Trades* 72-75, esp. on these crosses and their moulds see p. 73.

19 On their decoration, see Antonaras, *Gyalina mesobyzantina brachiolia* 431.

20 Kanonidis, *Enkolpia* 69. 75.

21 For an overview of Middle Byzantine jewellery from Thessaloniki, see Antonaras, *Middle and Late Byzantine Jewelry* 117-126. *Cat. Thessaloniki* 2002, 420 (A. Antonaras).

22 On Middle Byzantine glass bracelets, see Maneva, *Srednovokoven nakit* 75-78. – Antonaras, *Gyalina mesobyzantina brachiolia* 423-434. – Bikić, *Vizantijski nakit* 87-89, dated between 11<sup>th</sup> and early 13<sup>th</sup> c. – On Middle Byzantine bracelets, made of twisted bronze wires, see Maneva, *Srednovokoven nakit* 73-74. – Antonaras, *Middle and Late Byzantine Jewelry* 119-120.

23 Zečević, *Nakit novog Brda 178-182*, dated to the late Medieval-Early Ottoman period. Cf. also Maneva, *Srednovokoven nakit* 83 for similar, Middle Byzantine examples.

24 Maneva, *Srednovokoven nakit* 88-89 t. 77-79 dated between the 10<sup>th</sup> and 12<sup>th</sup> c. – Bikić, *Vizantijski nakit* 103-104, dated to the 11<sup>th</sup> c. with further bibliography.

25 *Cat. Thessaloniki* 2002, 453 (I. Kanonidis).

26 *Cat. Thessaloniki* 2007, 107. 125 (A. Antonaras).

27 On the excavation, see Pappa et al., *Neolithikos oikismos* esp. 344-345. On the form with further bibliography, see Zečević, *Nakit novog Brda* 95-100. 196-197 no. 72.



**Fig. 7** Bronze rings. Museum of Byzantine Culture, Thessaloniki, inv. nos BKO 247/10, BKO 247/12, BKO 247/18, BKO 247/25. – (Photo A. Antonaras).

The ring has a planoconvex hoop with a small projection at the middle of the bottom. The hoop is raised on the shoulders, forming triangular projections. The ovular, raised bezel is slightly undercut to project, and its upper surface is flat and plain. Furthermore, a group of small rings should be added to this overview, although they are probably of a later, Early Ottoman, date. These small bronze rings have a fine band body and a square bezel embellished with a smooth, planoconvex glass gem in a striking colour<sup>28</sup>.

Archers' rings are a particular type of rings, which appear after the late 13<sup>th</sup>-14<sup>th</sup> century<sup>29</sup>. They are fine band rings, with a triangular, oblique projection for the bezel. The feature that identifies them is their smooth, flat, triangular bezel, originally designed to protect the thumb of the archers when releasing the string of their bows. Several examples have been unearthed in Late Byzantine cemeteries of Thessaloniki and its hinterland. In addition to the bone examples, a few bronze ones are also known. The rings, which are made of bone are either smoothed and left otherwise plain and undecorated or in some cases fine bronze inlays are added to form geometrical and floral patterns on their bezel. Bronze examples bear shallow, engraved, floral decoration.

## Buckles

Although one would expect buckles to be a relatively common find, there is only one example from the Ippodromiou 1



**Fig. 8** Carnelian Ring. Ephoreia Archaiotētōn Periphērias Thessalonikēs (no inv. no.). – (Photo A. Antonaras).

cemetery (fig. 9). It is made of copper alloy covered with a layer of silver and has an elaborate shape. It appears to have belonged to a wealthy lady of Thessaloniki. It was found in a grave with a pair of earrings indicating the sex of the deceased; however, it was not mentioned in the excavation notebooks whether there was only one burial in the grave.

## Buttons

Although buttons are not strictly speaking jewellery, I have included them (fig. 10) because it is obvious that they were not merely practical items. Particular effort was put into making them decorative embellishments of the clothing to which they would have been fastened. It appears that during the Late Byzantine and Ottoman period, brooches, which were already almost non-existent during the Middle Byzantine period, were completely replaced by buttons<sup>30</sup>. In total, 142 buttons were found in eleven graves, in groups ranging from 3 or 4, up to 31, offering an indirect glimpse into the design of the costume the deceased was buried in. They are made of bronze, which in some cases has been gilded, and usually spherical, less often ellipsoidal, in shape, comprising two hemispherical cast pieces joined together, one of which bears an inherent or applied suspension ring.

Finally, according to the archaeological finds, it seems that flat, discoid, bone buttons were used at least in one case, being part of the cloth, which was embellished with hundreds of glass beads.

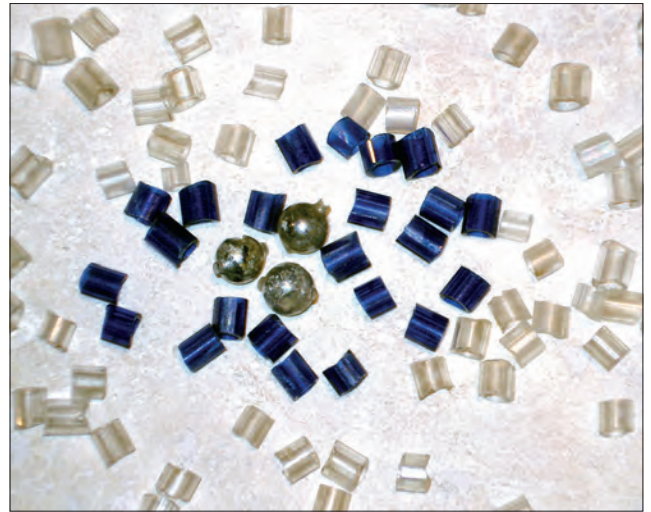
28 Cat. Thessaloniki 2007, 124-125 (A. Antonaras). For parallel finds from Serbia, see Zečević, *Nakit novog Brda* 95 no. 85.

29 Antonaras, Contribution 50-62, with further bibliography on analogous Balkan finds.

30 On buttons, see Maneva, *Srednovekovni nakit* 34-36 pl. 99-100. – Zečević, *Nakit novog Brda* 119-133 type 1, globular buttons dated to the mid-14<sup>th</sup> to late 15<sup>th</sup> c. and type 4, ovular buttons dated to the late 15<sup>th</sup>-16<sup>th</sup> c. with further bibliography. In addition, see Bikić, *Vizantijski nakit* 113-114.



**Fig. 9** Silver-plated bronze belt buckle. Museum of Byzantine Culture, Thessaloniki, inv. no. BKO 247/4ε. – (Photo M. Skiadaresis).



**Fig. 11** Glass beads. Museum of Byzantine Culture, Thessaloniki, inv. nos BYM 44/2, BYM 44/3. – (Photo M. Skiadaresis).



**Fig. 10** Bronze buttons. Museum of Byzantine Culture, Thessaloniki, inv. nos BKO 247/3, BKO 247/14, BKO 247/15, BKO 247/16, BKO 247/20, BKO 247/22Γ, BKO 247/23, BKO 247/24. – (Photo A. Antonaras).

In addition to these, heavy, cast, lead buttons, bearing relief decoration in the form of ribs or granules have been sporadically reported<sup>31</sup>, as are also a few large filigree buttons<sup>32</sup>.

## Beads

Beads are not present among the finds from the cemetery (fig. 11), although a very large group of glass beads – more

than 700 pieces – is present in one single find. These were fastened on a garment – identified by the excavator as an »ecclesiastical vestment« – which was found buried in a 60 cm-wide clay vessel. The vast majority of the preserved beads (several hundred) are colourless or blue, hexagonal beads, made out of a hexagonal perforated cane, cut quite carelessly in lengths varying between c. 0.5-1 cm. Among them were found several dozen spherical, colourless beads, with a metal lining in their interior, giving them a reflective

31 Cat. Thessaloniki 2007, 90. 93 (A. Antonaras).

32 Cat. Thessaloniki 2007, 93 (A. Antonaras).

quality. The small number of spherical beads is probably connected to the fact that they are very fine and fragile, and being easily crushed would not survive the conditions of interment, and/or could well go unnoticed by the excavators of the time. This particular find quite probably is of a considerably later date, possibly 19<sup>th</sup> century, as the beads' technology indicates<sup>33</sup>. For instance, 19<sup>th</sup>-century traditional

female Slovak cloths comprise great numbers of the spherical, metal lined beads, either as part of the bridal headdress or in long strands used as necklaces, offering a quite safe date and geographical attribution for the Thessalonian find as well<sup>34</sup>. But since there is no other indication of such a late use of the cemetery it seemed appropriate to present them along with the rest of the cemetery's finds.

## Conclusions

In closing this presentation of the jewellery from the Ippodromiou 1 plot in Thessaloniki and selected other Late Byzantine Macedonian jewels, a few remarks can be made that, although far from being real conclusions of some general value, nevertheless sum up the material. Based on the finds, which may only reflect the burial customs and not the actual way of living of the society under examination, the following can be noted: Middle Byzantine jewellery, heirlooms, or venerated objects such as stone crosses and amulets, are occasionally found in graves dated by pottery finds to the

Palaiologan period (probably 13<sup>th</sup> century). Less than half of the Ippodromiou 1 graves contained jewellery, some of which was decorated with pearls, especially the earrings. Some glass gems and cut pieces of coloured glass were used as insets in earrings. The majority of the jewels were made of cheap metals, copper alloys and silver of low purity, while gold articles are almost non-existent. Glass continues to be used as substitute for semiprecious stones, quite rare anyway, while bone and stones are used for the production of certain artefacts, such as crosses, pendants, or special types of rings.

## Bibliography

Antonaras, Arts, Crafts and Trades: A. Ch. Antonaras, Arts, Crafts and Trades in Ancient and Byzantine Thessaloniki. Archaeological, Literary and Epigraphic Evidence. BOO 2 (Mainz 2016).

Contribution: A. Antonaras, Contribution to the Study of Archers' Rings. Museum of Byzantine Culture 11, 2003, 50-62.

Gyalina mesobyzantina brachiolia: A. Ch. Antonaras, Γυάλινα μεσοβυζαντινά βραχιόλια. Συμβολή σε θέματα διάδοσης, παραγωγής, τυπολογίας και χρήσης. DeltChrA 27, 2006, 423-434.

Middle and Late Byzantine Jewelry: A. Ch. Antonaras, Middle and Late Byzantine Jewelry from Thessaloniki. In: B. Böhlendorf-Arslan / A. Ricci (eds), Byzantine Small Finds in Archaeological Contexts. Byzas 15 (Istanbul 2012) 117-126.

The Use of Glass: A. Antonaras, The Use of Glass in Byzantine Jewelry. The Evidence from Northern Greece. In: Annales du 16<sup>e</sup> Congrès de l'Association Internationale pour l'Histoire du Verre, London 2003 (Nottingham 2005) 331-334.

Bakirtzis, Imports, Exports and Autarky: Ch. Bakirtzis, Imports, Exports and Autarky in Byzantine Thessalonike from the Seventh to the Tenth Century. In: J. Henning (ed.), Post-Roman Towns, Trade and Settlement in Europe and Byzantium 2: Byzantium, Pliska and the Balkans (Berlin 2007) 89-118.

Bikić, Vizantijski nakit: V. Bikić, Vizantijski nakit u Srbiji: modeli i nasleđe (Beograd 2010).

Bosselmann-Ruickbie, Byzantinischer Schmuck: A. Bosselmann-Ruickbie, Byzantinischer Schmuck des 9. bis frühen 13. Jahrhunderts. Untersuchungen zum metallenen dekorativen Körperschmuck der mittelbyzantinischen Zeit anhand datierter Funde. Spätantike – Frühes Christentum – Byzanz. Kunst im ersten Jahrtausend, Reihe B: Studien und Perspektiven 28 (Wiesbaden 2011).

Cat. Athens 2007: A. Tsakalos (ed.), Σμάλτα: χρώμα μέσα στο χρόνο. Αθήνα, Βυζαντινό και Χριστιανικό Μουσείο [exhibition cat.] (Athēna 2007).

Cat. Thessaloniki 2002: D. Papanikola-Bakirtzi (ed.), Everyday Life in Byzantium. Byzantine Hours – Works and Days in Byzantium [exhibition cat.] (Athens 2002).

Cat. Thessaloniki 2007: E. Skouterē-Didaskalou (ed.), Τα πολύτιμα της παράδοσης: Κοσμήματα, στολίδια και φυλακτά από τις συλλογές του Λαογραφικού Μουσείου του Αριστοτέλειου Πανεπιστημίου Θεσσαλονίκης, του Μουσείου Βυζαντινού Πολιτισμού και του Μουσείου Μπενάκη, και τα γλυπτά-δαχτυλίδια της Αφροδίτης Λήτη [exhibition cat.] (Thessalonikē 2007).

Davidson, The Minor Objects: G. R. Davidson, Corinth XII. The Minor Objects (Princeton NJ 1952).

Dēmētriadēs, Topographia Thessalonikēs: B. Dēmētriadēs, Τοπογραφία της Θεσσαλονίκης κατά την εποχή της Τουρκοκρατίας 1430-1912 (Thessalonikē 1983).

Kanonidis, Enkolpia: I. Kanonidis, Enkolpia Excavated from Late Byzantine Cemeteries in Thessaloniki. Museum of Byzantine Culture 9, 2002, 55-76.

33 I thank Ingeborg Krueger, Torben Sode and Jan Kock for their information on this topic.

34 At least two 19<sup>th</sup>-c. examples of necklaces and one headdress were presented in Novi Sad, Serbia in the temporary exhibition of the Museum of Vojvodina, »Iza gora i dolina – tri veka Slovaka u Vojvodini« in 2016.



- Maneva, Srednovekoven nakit: E. Maneva, Srednovekoven nakit od Makedonija (Skopje 1992).
- Mantopoulou-Panagopoulou, Thréskeutikē architektonikē: Th. S. Mantopoulou-Panagopoulou, Θρησκευτική αρχιτεκτονική στην Θεσσαλονίκη κατά την τελευταία φάση της Τουρκοκρατίας (1839-1912) (Thessalonikē 1989).
- Moutsopoulos, Rentina: N. Moutsopoulos, Ρεντίνα IV. Οι εκκλησίες του βυζαντινού οικισμού (Thessalonikē 2000).
- Pappa et al., Neolithikos oikismos: M. Pappa / A. Antonaras / E. Blioa / S. Nanoglou, Νεολιθικός οικισμός Θέρμης 2008-2009. To Archaialogiko Ergo stē Makedonia kai Thrakē 22, 2008 (Thessalonikē 2011) 343-350.
- Raptis, Seeking the Marketplaces: K. T. Raptis, Seeking the Marketplaces of Byzantine Thessalonike. In: Niš and Byzantium, Thirteenth Symposium, The collection of scientific works XIII / Niš i Vizantija, Trinaesti naučni skup, Zbornik radova XIII (Niš 2015) 237-250.
- Toska/Chatzakis, Valta: L. Toska / G. Chatzakēs, Βυζαντινό νεκροταφείο στη Βάλτα (Κασσάνδρεια). To Archaialogiko Ergo stē Makedonia kai Thrakē 15, 2001 (Thessalonikē 2002) 161-166.
- Zečević, Nakit novog Brda: E. Zečević, Nakit novog Brda: iz arheološke zbirke poznog srednjeg veka = Jewelry from Novo Brdo: From the Archaeological Collection of the Late Middle Ages (Belgrade 2006).

## Summary / Zusammenfassung

### Late Byzantine Jewellery from Thessaloniki and its Region: The Finds from Ippodromiou 1 Street and Other Excavations

The jewellery from a Late Byzantine to Early Ottoman period cemetery of 32 built graves is the subject of the present chapter. The cemetery was unearthed during salvage excavations conducted at the south-eastern part of Thessaloniki in the area of the former post-Byzantine Church of SS Constantine and Helena that was built over the ruins of the Roman hippodrome. Glazed pottery bowls were found in every grave, which date the period of use of the cemetery to between the late 13<sup>th</sup> and the 16<sup>th</sup> centuries. In addition, Late Byzantine jewellery from burials in other parts of Thessaloniki and its hinterland are presented, offering a wider typology of items circulating in Thessaloniki of that era. In short, among burial finds, the following have been noted: some Middle Byzantine jewellery is occasionally found in graves dated by pottery to the Palaiologan period; pearls and glass insets are occasionally used, especially in earrings; the majority of the jewellery was made of copper alloy and low-purity silver, while gold objects remain elusive; bone and stones were used for the production of crosses and special types of rings.

### Spätbyzantinischer Schmuck aus Thessaloniki und Umgebung: die Funde aus der Straße Ippodromiou 1 und anderen Ausgrabungen

Der vorliegende Aufsatz behandelt den Schmuck aus einem spätbyzantinisch-frühosmanischen Friedhof mit 32 gemauerten Gräbern. Der während Notgrabungen freigelegte Friedhof liegt im südöstlichen Teil Thessalonikis auf einem Grundstück, auf dem sich die post-byzantinische Kirche der Heiligen Konstantin und Helena befand, die wiederum auf den Ruinen des römischen Hippodroms errichtet worden war. In jedem Grab wurden glasierte Keramikschalen gefunden, welche die Friedhofsnutzung auf die Zeit zwischen dem späten 13. und dem 16. Jahrhundert eingrenzen. Zum Vergleich wird spätbyzantinischer Schmuck aus anderen Grabkontexten Thessalonikis und seines Hinterlandes vorgestellt, der eine umfangreichere Typologie von in Thessaloniki im Umlauf befindlichen Objekten dieser Zeit ermöglicht. Zusammenfassend lässt sich zu den Grabfunden Folgendes bemerken: Einige mittelbyzantinischer Schmuckstücke wurden gelegentlich in Gräbern gefunden, die anhand der Keramik in die palaiologische Zeit datierbar sind. Perlen und Glaseinlagen wurden gelegentlich verwendet, besonders bei Ohrringen. Der Großteil des Schmucks wurde aus Kupferlegierungen und Silber geringer Reinheit gefertigt, während goldene Schmuckstücke fehlen. Knochen und Stein wurde für die Herstellung von Kreuzen und besonderen Ringtypen verwendet.