

**AVARI I SLAVENI
DVIJE STRANE
POJASNOG JEZIČCA —
AVARI NA SJEVERU I
JUGU KAGANATA**

**AVARS AND SLAVS
TWO SIDES OF A BELT
STRAP END —
AVARS ON THE NORTH
AND THE SOUTH
OF THE KHAGANATE**

**ZBORNIK RADOVA S MEĐUNARODNOG
ZNANSTVENOG SKUPA ODRŽANOG
U VINKOVCI 2020. GODINE**

**PROCEEDINGS OF THE INTERNATIONAL
SCIENTIFIC CONFERENCE HELD
IN VINKOVCI 2020**

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**Collectanea Archaeologica
Musei Archaeologici Zagrabienensis**

SVEZAK 5
VOLUME 5

Avari i Slaveni

Dvije strane pojasnog jezičca —
Avari na sjeveru i jugu kaganata

Avars and Slavs

Two Sides of a Belt Strap End —
Avars on the North and South
of the Khaganate

**Zbornik radova s međunarodnog
znanstvenog skupa održanog u
Vinkovcima 2020. godine**

**Proceedings of the international
scientific conference held
in Vinkovci 2020**

Tiskanje Zbornika radova financijski
je pomogao Arheološki muzej u Zagrebu,
Gradski muzej Vinkovci
i Ministarstvo znanosti i obrazovanja.

This Volume is financed
by the Archaeological Museum in Zagreb,
the Municipal Museum of Vinkovci,
and the Ministry of Science and Education
of the Republic of Croatia.



ISBN 978-953-8143-58-8

CIP ZAPIS je dostupan
u računalnome katalogu
Nacionalne i sveučilišne
knjižnice u Zagrebu
pod brojem 001155023.

NAKLADNIK
PUBLISHER

**Arheološki muzej u Zagrebu
Archaeological Museum in Zagreb
Gradski muzej Vinkovci
Municipal Museum Vinkovci**

ZA NAKLADNIKA
FOR THE PUBLISHER

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OBLIKOVANJE I PRIPREMA ZA TISAK
DESIGN & DTP

**Sensus Design Factory
atelier ANII**

TISAK
PRINTED BY

Tiskara Zelina

NAKLADA
PRINT RUN

300

← NASLOVNICA:
Pojasni jezičac, Nuštar-Dvorac, grob 34

FRONT COVER:
Belt Strap End, Nuštar-Dvorac, grave 34

← UNUTARNJE KORICE:
Okov falere u obliku veprove glave, Sisak-Kupa
Fibula, Zagreb-Stenjevec

INSIDE COVER:
Fitting for a phalera in the shape of a boar's head, Sisak-Kupa
Fibula, Zagreb-Stenjevec

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archaeological
museum
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2022.

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FOREWORD

The international scientific conference „Dvije strane pojasnog jezičca – Avari na sjeveru i jugu kaganata“ / “Two Sides of a Belt Strap End – Avars on the North and South of the Khaganate” was unique in many ways. It was planned as a closing event of the “Avars and Slavs” project, a project that included two exhibitions, several public lectures and workshops, led by the Archaeological Museum in Zagreb in partnership with the Municipal Museum of Vinkovci. The project was prepared for more than two years and included the Slovak exhibition “Avars and Slavs North of the Danube” and the Croatian exhibition “Avars and Slavs South of the Drava River” with a comprehensive bilingual (Croatian-English) catalogue. The international exhibition project “Avars and Slavs” received the annual award of the Croatian Museum Association in 2020 in the category for inter-museum cooperation.

But, just as the Avars came and changed the picture of Europe after their arrival, a few weeks after the conference that was held in Vinkovci, the global pandemic of Covid-19 changed our lives as well. So, this conference was among the last, if not perhaps even the very last big conference held in person and not online or in the now very popular – hybrid form. Additionally, a few weeks after that, a devastating earthquake shook Zagreb and its surroundings, and critically damaged, among others, the building of the Archaeological Museum. All of the above reasons have slowed us down during the preparation and completion of these Proceedings that we are now proudly presenting.

This volume rounds up the contributions from the international conference that took place in Vinkovci, Croatia from February 6th to 7th 2020. The main theme of the conference was divided into six sessions, presenting new finds, cultural interaction, funerary rites, belt sets, Slavs, and the post-Avar period. Themes were discussed by some forty colleagues from ten European countries, who answered the call for papers, submitted an abstract published in the book of abstracts, and presented their results at the conference. The conference, as noted in the title, showed us that the huge area occupied by the Avars had many similarities, but also specific, local versions, just like one of the most recognisable items from the period, the two sides of a belt strap end.

We are extremely pleased to present twenty submitted papers from this conference. Due to various reasons, some colleagues were not able to provide their papers, as some had to publish them elsewhere. The book follows the conference structure, so we start with a theoretical introduction, followed by case studies from different parts of the Khaganate or areas influenced by the Avars.

The last day of the conference (the 8th of February), the participants took a field trip to Zagreb, where we participated in a programme of the exhibition closure that was a start of a new project that never had the opportunity to be fully realized – *The EU Archaeology Festival* – an event meant to present the European archaeological heritage in the year when Croatia was presiding over the EU.

We would like to thank our colleagues from our home institutions who helped us in the organisation of the project, as well as our directors, who showed full understanding every step of the way. A special *thank you* goes to the members of the scientific and organisation committee of the conference, and the reviewers, but foremost we would like to thank our colleagues, who have patiently waited for their works to be published.

This volume is financed by the Archaeological Museum in Zagreb, the Municipal Museum of Vinkovci, and the Ministry of Science and Education of the Republic of Croatia, for which we are deeply grateful.

Anita Rapan Papeša and Anita Dugonjić

Vinkovci – Zagreb, summer 2022

AVARI I SLAVENI AVARS AND SLAVS

Međunarodni znanstveni skup

DVIJE STRANE POJASNOG JEZIČCA:
AVARI NA SJEVERU I JUGU KAGANATA

International scientific conference

TWO SIDES OF A BELT STRAP END:
AVARS ON THE NORTH
AND THE SOUTH OF THE KHAGANATE



GRADSKI MUZEJ VINKOVCI / ARHEOLOŠKI MUZEJ U ZAGREBU
MUNICIPAL MUSEUM VINKOVCI / ARCHAEOLOGICAL MUSEUM IN ZAGREB

VINKOVCI – ZAGREB
6 – 8 FEBRUARY 2020

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VINKOVCI 2020

THE BUDAPEST— NÉPFÜRDŐ STREET FIND: THE CULTURAL BACKGROUND OF EARRINGS WITH A FLAT TRIANGULAR GRANULATION ORNAMENT

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The present paper began with the discovery of an artefact in 2019. During the excavation of a Roman imperial period fort (Transaquincum) in Népfürdő Street on the Pest side of the Danube in Budapest, remains from the Avar and Árpád period also came to light in the area under investigation. From one of the settlement features, a pit – which, in the absence of other finds, cannot be dated – a piece of golden jewellery came to light. The unique nature of the artefact made it difficult to determine whether it (and the feature from which it came) belonged to the Roman, Avar, or Árpád period phase of the site. Through an extensive collection of materials and an overview of research history, we have been able to show that this piece of jewellery is characteristic for the late Antique, early Mediaeval period. While earlier researchers dated similar artefacts to the late Roman period, based essentially on Frederick Henry Marshall's 1911 survey and dating suggestion, in our overview we argued for a later period of use. We presented the misunderstanding, which may have misled the noted English specialist, and we pointed out that – contrary to Marshall's early (but uncertain) dating suggestion – finds of this jewellery type from clearly datable contexts were dated without exception to the 6th – 8th century. We collected and evaluated the parallels found in the Carpathian Basin, the Balkans (among others, in modern-day Croatia), and the Mediterranean, presenting and describing examples of the object made of gold, silver, or copper, with real granulation or pseudo-granulation ornaments. In our paper, we also drew attention to further parallels from the Caucasus, which some researchers (primarily in works on the Avars) have analysed together with the present jewellery type. Concerning this question, we outlined the misunderstandings and difficulties that emerged during the interpretation of the jewellery type.

Key words:

Avar period, Byzantine jewellery, late Antique earring

In place of an introduction

The subject of this article is a unique find, for which we could discover no close match in the Roman, early Mediaeval, and Árpád period archaeological record of the Carpathian Basin. In a wider context, however, it shows interesting connections. These pieces of information can – even if only to a small extent – offer new angles for other researchers for the ever more comprehensive study of the early Mediaeval material culture of the Carpathian Basin.

The primary question was: in the case of the find-spot under investigation, which had Roman, Avar, and Árpád period remains, and the layers of which were in several cases disturbed by pits, is it possible to tell to what period this unique piece of jewellery belongs? And, if the rough dating is successful, does it help to establish a closer time frame? The earring's material (gold) and decoration (granulation) were equally puzzling. It did not seem to belong to the Roman or the Árpád period, and no such piece of jewellery is attested for the Avar period. Precious metal earrings of the Roman period are well known from Aquincum;¹ however no similar item has been published to date. As for the Avar village in the find's wider archaeological context – given its poor archaeological record – it did not seem probable at first that the piece of jewellery could be connected with it, especially if we take into account that no such earrings are attested in this period from elsewhere either. For the early Árpád period, the discovery of high quality, gold jewellery in settlements is not unprecedented;² furthermore precious metal earrings with granulation are also attested in the record.³

In spite of the simplicity of the object – after all it is a piece of wire jewellery – it is uniquely ornamented (with a triangle-shaped granulation ornament on the lower part of the suspension hoop), and as such is without parallel in the archaeological record of the Carpathian Basin. This made it more difficult initially to decide to which period exactly to date the artefact. What further complicated the task was that the surveys of Roman period,⁴ early Mediaeval,⁵ and 10th – 11th – 12th century⁶ small finds from the wider contemporary region, which treated earrings from the area in more detail, had not published a similar piece of jewellery. A broader and more detailed investigation was therefore necessary in order to establish the period and connections of the artefact.

The find (Fig. 1)

In late November 2019, at the excavation in Népfürdő Street in the Vizafogó neighbourhood of District 13 in Budapest, an earring made from gold wire came to light. The piece of wire jewellery with a circular cross-section and bent oval circler, had a hook-and-eye fastening and was slightly deformed. The height of the object is 2.22 cm, the diameter of the hoop 1.4 – 1.63 cm. The thickness of the wire is 0.12 cm. The diameter of the eye from the hook-and-eye fastening is 0.13 cm. The weight of the earring is 1.3 g. At the terminals, it can clearly be seen that the end of the wire was pinched off using a pair of pliers, afterwards, however, the tapering end of the wire was not polished straight. The eye was formed by bending the wire back, then soldering the bent-back part to the inner curve of the wire so that the hook was perpendicular to the eye.

On the lower part of the earring a flat triangular granulated ornament, organised in a linear structure (*Liniengranulation*, *linear granulation*) is connected to the outer surface of the hoop.⁷ The spherical gold granules are located directly on the outer surface of the wire. The first row attached to the wire contains five granules, the next has four, and the number of granules decreases gradually in each row until the final row has only one. The granules are spherical with the exception of the elongated truncated cone-shaped one soldered to the last piece.⁸ The total length of the granulated ornament is 0.74 cm; its width 0.68 cm. The diameter of the spherical granules is 0.14 cm. The width of the final truncated cone-shaped granule is 0.18 cm, its length 0.26 cm.

The site (Fig. 2)

Budapest History Museum archaeologists have carried out several rescue excavations since 2006⁹ in the area between present-day Jakab József Street and Bodor Street in the Vizafogó area. In the western part of the area, by the mouth of the Rákos Stream, a Roman bridgehead fort is attested, which lay opposite the legionary fortress on the other side of the Danube. Antal Haliczky, curator of the Hungarian National Museum, began the investigation of the remains already in the early 19th century,¹⁰ then in the 1860s Gusztáv Zsigmondy made surveys of the Transaquincum fort. From autumn 2019, József Beszedes had the opportunity to lead a new excavation there.¹¹ During the excavations, a longer stretch of the fort's southern wall, a part of the colonnade along

1 Facsády 2003; 2009, 71–84.

2 Juhász 2000, 290.

3 Langó 2010.

4 Поповић 1996, 112–118; 2001; Миловановић 2007; Kušan-Špalj, Perok (ed.) 2012.

5 Бајаловић – Хаџи-Пешић 1984; Riemer 2000; Garam 2001; Menghin (ed.) 2005; Григоров 2007.

6 Марјановић-Вујовић 1982; Кóчка-Krenz 1993; Григоров 2007; Bikić 2010; Petrinec 2010; Bosselmann, Ruickbie 2011; Sokol 2016.

7 For the classification, see Wolters 1986, 14–16.

8 Wolters 1981, 120; 1986, 19.

9 In 2006, Eszter Kovács and József Beszedes (Esztergomi Road – Dagály Street – Jakab József Street – Bodor Street phase I.: Budapest History Museum Archaeology Archives [BTM RA] cat. no. 2749-2008, Roman period, Migration period, and Mediaeval settlement features), in 2008, József Beszedes (in the area between Jakab József Street – Esztergomi Road – Bodor Street. phase II: BTM RA cat. no. 2983-2009, Avar and 13th – 14th century settlement features; phase V: BTM RA cat. no. 2982-2009, Avar and 13th – 14th century settlement features), in 2017, Attila M. Horváth (2–4 Bodor Street: BTM RA cat. no. 5949-2017, Mediaeval settlement features), and in 2018 – 2020, Boglárka Mészáros (19 Jakab József Street: BTM RA 6935-2018, Avar and 13th – 14th century settlement features; 21 Jakab József Street: BTM RA cat. no. 7058-2018, 7673-2019, 8120-2020, Avar and 13th – 14th century settlement features) carried out excavations on the sites marked on the map.

10 Halitzky 1820.

11 At the Népfürdő Street excavation the archaeologists from the Mediaeval Department were Judit Benda and Ágoston Takács.

the inside of the wall, and a stone building with several rooms (headquarters?) could be identified. Numerous carved and inscribed stone remains were found in a secondary position, built into a well head. Most of the stamped bricks are known 4th century types.¹²

In addition to the Roman remains, a few Avar features and traces of an Árpád period settlement (Besenyő) also came to light at the Népfürdő Street excavation. The excavating archaeologists identified three layers of the settlement. The lowest layer appeared directly above the yellow subsoil; to it a refuse pit (SU 537), a well (SU 544), and two ditches (a double ditch: SU 525, SU 530; a ditch with a side-ditch: SU 536) could be connected. Based on pottery, the well was dated to the Roman period, the SU 536 ditch to the Avar period, and the refuse pit to the first half of the 13th century. In the middle Árpád period layer, several small sunken ovens (SU 516–522) were uncovered. Based on observations at the site, the excavators believe the use of the ovens discontinued at the same time; finds from them point to the 13th century. The upper Árpád period layer contained more organic matter than the previous two. In this layer a large, oval refuse pit was dug (SU 530), which contained 12th – 13th century – including imported Austrian – pottery. Two layers of a late Mediaeval village (Szentlászló) could also be identified in the area.¹³

On 25 November 2019, at the eastern edge of the excavation site the excavation continued deeper into the compact brown layer (SU 523), and the underlying light layer (SU 534) was showing in places. The latter was sloping sharply to the east. From that depth, in the south-eastern corner of the site, thanks to metal detecting,¹⁴ a gold earring came to light. In the immediate vicinity of the object, by the wall of the temporarily extended trench, a quarter pit (SU 537) appeared in a higher layer, dated to the mid-Mediaeval period. It is worthwhile to emphasize the ditch alongside the find-spot (SU 536), which had become filled in by the time the gold earring entered the ground. As we can see, the object from this layer lay in the immediate vicinity of Roman, Migration period, and Mediaeval features. These features, however, did not disturb the area in which the find was uncovered. It therefore remained uncertain to which period the layer in question belonged.¹⁵

On account of the aforementioned context of the find, we consider it important to present the plots some 100 metres to the west of the Népfürdő Street remains, at 19–21 and 25 Jakab József Street. There we found a part of a relatively large Avar period settlement,¹⁶ which in all likelihood also extended to the

Népfürdő Street excavation site.¹⁷ The site lay on what was once the ridge of a hill some 500 metres from the current bank of the Danube. It was likely bounded to the north by the Rákos Stream, to the west by the Danube, and to the east by a branch of the Rákos Stream flowing south parallel to the Danube. The settlement was girded by north – south and east – west ditches, which likely played a role in draining water. Clear indicators of the settlement's life were the sunken rectangular buildings instead of semi-subterranean rectangular houses with rounded corners, the ovens of which were built using stones and clay. During the excavation at 19 Jakab József Street, 10 sunken buildings were uncovered (SU 11, 17, 18, 26, 35, 37, 42, 48, 49, 54), which were mostly oriented north – south, but there were also ones oriented west – east and northeast – southwest. Of these, 6 had an oven, mostly built from stone and tegulae. All of the ovens, bar one, were in the north – eastern corner of the houses.¹⁸ Postholes belonging to the houses could also be observed, though in the case of some features, the discolouration from the posts holding the roof did not appear at all. During the excavation at 21 Jakab József Street, only one sunken building (SU 137) oriented northeast – southwest could be documented. Along its western long wall was one posthole. At the northernmost plot, at 25 Jakab József Street, 7 sunken buildings, oriented mostly northeast – southwest (SU 6, 8, 10, 11, 12, 14, 15) were uncovered. Of these, 3 had an oven made from stones, and here, too, these were placed in the north – eastern corner. The units presented above were in all likelihood part of an Avar-period settlement. From the Avar site, however, only a limited number of finds were discovered; mostly fragments of hand-made, coarse-tempered, poorly fired vessels. Occasionally sand-tempered pieces with wavy line decorations were also found. The scarcity of the finds, however, did not allow for dating the site's period of use more precisely within the second half of the Avar period. Found further at the site were two certainly Árpád period, free-standing ovens and their ash pits (SU 63, 71; SU 151, 159), which indicate clearly that 13th century materials appeared not only at the Népfürdő Street site, but here as well.

Parallels and dating of the earring

As shown by the account above, the object lies at the intersection of several periods. Based on its find-spot, it is not possible to ascertain unequivocally the date and connections of the artefact; hence only a survey and evaluation of the earring's parallels may help settle this question.

On the relatively simple piece of wire jewellery only two special features, already mentioned, can be observed: the design of the

12 We would like to thank József Beszédes for the information on the Roman remains and for the chance to publish the earring. The Népfürdő Street excavation will likely continue in 2020. We may, therefore, gain a more detailed picture of the site in the future.

13 We would like thank Judit Benda and Ágoston Takács for sharing with us data from the ongoing excavations indispensable for the find-context of the earring.

14 For the discovery of the object, we would like to thank Lajos Sándor, contract staff member at the Budapest History Museum.

15 We acquired the data and descriptions from the excavation diary made available to us.

16 Eszter Kovács and József Beszédes in 2006 found south of the area indicated a few N – S and E – W ditches dated to the Migration period (BTM RA 2749-2008), which likely belonged to the Avar period settlement found at 19–21 and 25 Jakab József Street.

17 This is also suggested by the Avar period features in Népfürdő Street.

18 In house SU 11, the oven – made from stones – was in the southwestern corner.

fastening and the granulation ornament.¹⁹

The hook-and-eye fastening was equally characteristic of both Roman artefacts and items from the Avar period, and it can also be found on early Árpád period jewellery.²⁰ Unique, however, is the reinforcement of the eye by soldering. We could not find the use of this practice on either Roman or early Árpád period items. This solution, however, is used on Byzantine artefacts from the Avar period;²¹ and it can be clearly demonstrated that the reinforcement of the eyes in this manner was widespread in the Mediterranean jewellery culture of the middle Byzantine period.²² We did not find a similar practice in the case of western and northern European 4th – 10th century jewellery with hook-and-eye fastening. Naturally this does not mean that this technique could not have been present in those territories, yet, based on the review of the literature, we may at least conclude that this practice was much more common in the southern parts of the former Roman Empire than in the west and the north.

Beyond the design of the earring's fastening, a more important feature in terms of production technique is the granulation ornament soldered onto the outer surface of the earring hoop's lower part. The technique was widely used since antiquity, becoming a popular tool of goldsmiths. It was present in the late Roman period, just like in early Mediaeval western and northern Europe.²³ There are, however, numerous small differences that can be observed between the different periods and areas concerning how they used this technique, what they decorated, and in what form it was applied. It is worthwhile to review these features, as their classification – in our opinion – can help ascertain

the object's date and connections.

Granulation had already been known in ancient Mesopotamia, and the innovation spread from there to the ancient Mediterranean world.²⁴ It was also widely used on Roman jewellery.²⁵ In the late Roman period, this technique was primarily utilised for surface ornamentation, using massed or field granulation (*Flächengranulation*),²⁶ but by then separate or point granulation (*Einzelgranulation*) was also attested, as was cluster or grape-like granulation (*Traubengranulation*).²⁷ Additionally, if not in great numbers, the flat triangular granulation ornament currently under investigation also appears. Its earliest occurrence is already attested in the 1st century BC. On one piece of jewellery from Italy, found in Vulci, triangular granulation was already used to decorate the base of an earring.²⁸ A similarly triangular granulation, but in a solid cluster, also appeared in the Near East in this period. An artefact discovered in the early 20th century in Sidon (present-day Lebanon) in the tin coffin of a child is the earliest piece of jewellery we could find with such a granulation ornament soldered onto the outer surface of the earring's hoop in the axis of the find (Fig. 3).²⁹ The hoop of the golden artefact – unlike the other items we came across – was much thicker; it was not made by bending just a single wire.³⁰

The flat triangular ornament was already used in several other ways in antiquity,³¹ which is not surprising given that this arrangement of granules had been used in field granulation even before the Romans. We can see their use already on Mesopotamian artefacts (e.g. in the Achaemenid Empire; Fig. 4),³² and later on

19 In numerous reviews of earrings, the suspension hoop design and the fastening are usually the main aspects used for classification, cf. Ђоровић-Љубинковић 1951; Поповић 1996, 111–113; Facsády 2006; Milovanović 2004; Миловановић 2007.

20 For Roman finds, see Coarelli 1966, 106–108; Ruseva-Slokoska 1991, 94; Поповић 1996, 112–118; 2001; Миловановић 2007; Facsády 2006; 2009, 73–84; 2013, 103–109; Kušan-Špalj, Perok (ed.) 2012; Daňová 2013. For the Avar period: Garam 2001, and for the early Árpád period: Szabó 1979.

21 Garam 2001, 32.

22 See e.g. Berti 2012, 193; Пapanikola-Bakirtzē (ed.) 2002, 426, no. 547; Wamser (ed.) 2004, 322, no. 616; Chatzidakis, Scampavias (ed.) 2007, no. 50; Пиотровский (ed.) 2017, no. 53.

23 Roth 1986, 57.

24 Wolters 1986, 68–75; 79–84; Prévalet 2014, 427–428; Минасян 2014, 321–326; Roßberger 2015, 78.

25 Wolters 1986, 85–87; Facsády 2013, 73.

26 Wolters 1981, 121; 1982, 4–5; 1986, 16–18.

27 Wolters 1981, 120–122; 1982, 4–5; 1986, 14, 18–19.

28 Wolters 1986, 118, Fig. 101. Jochem Wolters considered the pendant with enamel decoration from Vulci to show Hellenistic influence, and based on the literature dated it to the late 2nd, early 1st centuries BC (cf. Wolters 1986, 78).

29 Macridy 1904, Pl. 5: 1.

30 The terse description of the find does not mention how the piece of jewellery was made. Based on its photograph, however, the earring is probably hollow on the inside, meaning that it was made from a thin sheet (cf. Macridy 1904, 561).

31 For instance, on another piece from the 1st century BC, it was used not as part of the ornament connected to the lower part of the hoop, but to hide the joints of the eye terminal, fastening directly to the eye the granules arranged in a triangle (cf. Wolters 1986, 147, Fig. 170).

32 In Jochem Wolters's study we can observe the use of flat triangular granulation with a linear structure on the lion's head terminal ornament of a neck-ring (cf. Wolters 1986, 77, 114, Fig. 90).

it was also used on ancient Greek jewellery (Fig. 5),³³ but it only became truly popular on Roman jewellery.

For the ornamentation of the hoop's lower part with triangular granulation there are also examples from late antiquity. One such example is an earring from Santolìo in Sicily.³⁴ However, the decoration of that part of the suspension hoop using granulation only became truly widespread in the 6th – 7th centuries (primarily in the jewellery culture of southeastern Europe).³⁵ The practice seen on the earring under investigation, however, cannot be considered common: i.e. that the lower part of the hoop is decorated only with a single ornament of this kind. In most cases, triangular granulation was used as a complementary ornament.³⁶ It appeared on jewellery next to or together with decorations made using other techniques, as in the case of the aforementioned artefact from Vulci (Fig. 6).

The ornamentation of the lower part of wire jewellery hoops primarily using granulation, in light of the uncovered finds, became truly popular between the 7th and the 11th centuries.³⁷ On the simplest variants (which, however, are not the earliest), we can see decorations consisting of a single granule, or three grains,³⁸ arranged in a triangle.³⁹ At the same time grape-bunch-shaped or raceme ornaments also appeared, which belong in the group of solid clusters of grains placed on top of each other (Wolters type 17: *Traubengranulation als steifer Anhänger an Draht*).⁴⁰

Triangular granulation also appears as a complementary ornament, for instance in the 6th – 7th centuries on Byzantine star-shaped earrings, at the edge of the disc soldered onto the lower part of the hoop.⁴¹ This practice – or its imitation, pseudo-granulation – was also used for other types of earrings.⁴² Interestingly, however, the concrete parallels for the type under investigation were not common in the 6th – 11th centuries either. We could not find such an artefact in Western Europe,⁴³ or in the north, among Viking artefacts decorated with granulation,⁴⁴ or among northern Slavic artefacts,⁴⁵ or in the former territory of Moravia,⁴⁶ where the decoration of jewellery with granulation was very popular in the 9th century.⁴⁷ Similarly, we could not find an object similar to ours during our survey of Western European artefacts dating to the Carolingian period and that of the Salian dynasty.⁴⁸

Fortunately, however, this piece of jewellery, though rare, is not without parallels. Following the piece from Sidon mentioned above, further such earrings were published in 1911 by Frederick Henry Marshall from the collections of the British Museum. Marshall placed these artefacts among the Greek, Etruscan, and Roman jewellery of the museum,⁴⁹ and dated them to the 2nd century AD.⁵⁰ In his catalogue, however, it can be clearly seen that some pieces dating to later than the period mentioned in the title and the text were also included. This was partly because at that time the author and his contemporaries did not have access

33 Wolters 1986, 77, 115, Fig. 93.

34 More recently the earring has been dated to the 6th – 7th centuries by Germanà (2019, 640). The first publication of the object was Orsi (1942, 145–146). Regarding these artefacts, it is worthwhile to note that Jochem Wolters also mentions the Esquiline Treasure among the late antique examples (cf. Wolters 1986, 85). This, however, is due to a misunderstanding, as the renowned 4th century treasure contained no such earring (cf. Shelton 1981; Shelton 1985; Cameron 1985). From Wolters's references, it is clear that he merely misread the data and accidentally included with the treasure an earring with an unknown provenience held at the British Museum (Wolters 1986, 305, n. 262; cf. Dalton 1901, 37, no. 236). As the closest parallel for the artefact in question, the catalogue compiled by Ormonde Maddock Dalton (on him, see Dennert 2012) – also used by Wolters – mentions a Ukrainian find held at the time in the collection of Bogdan Hanenko (Hanenko IV. 25, no. 392). It is not only a perfect parallel of the artefact mentioned by Dalton, it also helps ascertain the age of the earring type in question. In the Hanenko collection, after all, there were a number of pieces of jewellery with a similar design: Hanenko IV. 25, no. 394–396, and these date the example held in the collection in England to the 12th – 13th centuries (cf. Рябцева 2005, 138–151).

35 Григоров 2007, 17–18; Petrinec 2010, 205–207.

36 Ibler 1991, 54.

37 Marin, Pilet (ed.) 1997, 80; Григоров 2007, 18; Langó 2010; Bosselmann-Ruickbie 2011, 84–85; Petrinec 2019.

38 Granulation consisting of three grains also appeared already on earrings from the imperial period (cf. Riha 1990, 148, no. 701).

39 For the dating, see Mitrea 1989, 147; Станюков 1997, 203–204; Eichert 2010, 113–114; cf. Григоров 2007, 17–18.

40 Wolters 1986, 17–19, Fig. 5; cf. Schwarz, Varga 2010, 215. For this kind of granulation, see Toropu, Voicu 1972, 168; Mitrea 1988, 116; 1989; Григоров 2007, 17–18. In his jewellery typology for early-Mediaeval Bulgaria, Valeri Grigorov included ornaments with one and three grains and the grape-bunch-shaped decorations in one sub-group (Grigorov type II.1).

41 Ibler 1991, 53–54, already drew attention to this feature.

42 Orsi 1942, 144–145; Vinski 1952; Garam 2001, 20–23; Papanikola-Bakirtzè (ed.) 2002, 429, no. 553; Ross, Zwirn, Boyd 2005, 66–67, no. 85.

43 Roth 1986; Menghin (ed.) 2005; Wamers, Périn (ed.) 2013.

44 Duczko 1985; Eilbracht 1999, 51–65; Kershaw 2013.

45 Kóčka-Krenz 1993; 2017; Zoll-Adamikowa, Dekówna, Nosek 1999.

46 Galuška 2013, 174–182, 186–192; 2015; Kouřil (ed.) 2015, no. 201–266.

47 Dostál 1965; Galuška 2013, 251–253.

48 Wolters 1986; Schulze-Dörrlamm 1991. With regards to the region neighbouring the Carpathian Basin, see also Eichert 2010, 19–26. In the collections of the Germanisches Nationalmuseum in Nuremberg, there is an artefact that features the triangular granulation ornament. In the case of the pendant, however, the ornaments are on the inner and not outer surface of the hoop. Jochem Wolters considered the piece to be Italo-Byzantine (cf. Wolters 1986, 170, 213).

49 Marshall 1911, 300.

50 The date suggested by Marshall may have been influenced by his German contemporary, Georg Karo, whose study (Karo 1901) he cites in the description of the artefacts. The German researcher – whose main research areas were the Etruscan and Mycenaean civilisations (Cook 1997, 304) – referred to the artefact type as without parallels (Karo 1901, 211), and, along with the Hellenistic animal-headed earrings mentioned in his description, dated them to the 3rd century. (For the dating of the Hellenistic animal-headed earring type in question, see e.g. Ogden 1990, 151–159; Pfrommer, Markus 2001, 5; Eisenberg 2014, 68, no. 146.) The artefact presented by Georg Karo, however, differs in its design and characteristics of form from the Népfürdő Street find. The photograph of the object is of poor quality and it actually likely depicts the intact half of a pair of earrings with a beaded pyramidal pendant, which was later published by Émile Vernier in 1909 (Vernier 1909, II. 165, no. 52504–52505). The small photograph in all likelihood misled Marshall as well, who hence considered this item from Egypt to be a parallel for the artefacts published by him and did not cite Vernier (with whose work, based on other references in his book, he was familiar). That the artefact from Egypt published by Karo was considered to be a parallel was most likely also influenced by a note in the Franks bequest stating that one of its artefacts had been acquired in Cairo.

to such a body of sources that would have allowed them conclusively to ascertain the period of use for the various artefacts of every object type.

Consequently, several find types – later identified as Byzantine – could not be dated accurately at the time, and were therefore considered to be Roman, from the imperial period.⁵¹ The classification of the various artefacts as Roman or Byzantine is by no means an easy task. Just how difficult the analysis of these finds could be is indicated by the study of earrings with a pyramidal pendant. This type of jewellery can be traced back to the Hellenistic period – even if it was not widely and constantly in fashion – and it appears in later periods as well. In the Carpathian Basin, however, this jewellery type became iconic primarily among the Avar period material, as a proof of the network of connections that the ethnic group from the steppe had with Byzantium.⁵²

Presumably these difficulties also influenced the evaluation of the 6 earrings of this type at the British Museum. Marshall likely considered them to be from the Roman period based on the 1901 opinion of Georg Karo.⁵³ It is therefore possible that we must follow the same path as we did in the case of the dating of the similarly 6th – 7th century crotalia earrings. These pieces of jewellery are all made of gold; the find-spot of a pair of earrings could be established as a village in Cyprus,⁵⁴ and a further piece was pur-

chased in Cairo by Sir Augustus Wollaston Franks,⁵⁵ one of the founders of the collection. The provenience of the other finds is uncertain; all we know is that they too became part of the collection through the Franks bequest (Fig. 7).⁵⁶

Based on the published photographs, the earrings at the British Museum are similar in terms of granulation design. The final grain, which completes the triangular structure, is followed by another granule. It can be said, therefore, that as on the artefact from Budapest, in these cases, too, the final grain is doubled. The terminals of the pieces are not uniform; a hook-and-eye is attested, and there is also an example where the tapering end of the wire is free and there is no fastening. This is by no means unique. It is perhaps enough to mention the star-shaped earrings, which also feature various fastening types, known in the case of examples from the Carpathian Basin.⁵⁷

Among numerous pieces of jewellery of other types from the burials at Al-Bassa there was also a golden earring of the type found in Budapest. On the lower part of the hoop, made of a thin wire with hook-and-eye fastening, the granulation had – unlike on the other artefacts – an irregular structure. In the row attached to the wire there are six granules, in the row after that there are three, after that there are two, and in the next three rows there

51 A good example of this are two pairs of earrings in that collection from the Fayum (Marshall 1911, no. 2581–2582; Baldini 1999, 95, no. 5, Fig. 7), which Marshall identified – based on pieces at the Cairo Museum with a similar design (Vernier 1909, II. no. 52.437–52.440), labelled Graeco-Roman – as dating to the 2nd – 3rd centuries. The identification of pieces classified as *crotalia* earrings (for the background of the classification, see Székely 2006, 36) was clearly influenced by jewellery depicted on mummy portraits found in the Fayum (Thompson 1982, 13, 20, 32–33; Marchin (ed.) 1997, no. 59, 70, 78, 92, 102). For the background of the question, see also Weitzmann (ed.) 1979, no. 306. Unlike on examples from the imperial period, on the jewellery published by Marshall and Vernier the chains containing the beads were not suspended next to each other from a bar (cf. Marchin (ed.) 1997, no. 162–165; Papanikola-Bakirtzē (ed.) 2002, 421–425, no. 537–542, 545); the rings used for fastening the pendants were placed on the lower part of an oval hoop. As Walter Dennison pointed out a few years later (Dennison 1918, 151) concerning a similar earring from Asyut held at the Morgan Collection, these artefacts with an oval hoop (too) were very difficult to date at that time, even though – at the same time as the aforementioned catalogue – a colleague of Marshall's dated the pieces of the same kind from Cyprus to the 6th century (Dalton 1911, 541–543; cf. also de Grüneisen 1930, 93, no. 495). The development of this jewellery type was successfully traced years later by Marvin Chauncey Ross (Ross 1959), while its iconographic background was clarified by Étienne Coche de La Ferté based on one of the textile remains from the Bliss Collection at Dumbarton Oaks. He, too, dated an example of this type at the Stathatos Collection from Chios to the 6th – 7th centuries (see de La Ferté 1957, 14–15; cf. Ogden 1990, 174). Pieces of this type discovered more recently – e.g. those found with coins in a hoard from Samos (Caramessini-Oikonomidés, Drosoyianni 1989) – confirmed the 6th – 7th centuries date suggested also by Dalton and Ross (Papanikola-Bakirtzē (ed.) 2002, 431, no. 555; Калантарян 2003, 322; Wamser (ed.) 2004, 301, no. 498). For an overview of the earring type, see Ogden 1990, 171–175; Baldini 1999, 71–77, 94–96. A similar difficulty in dating arises, for instance, regarding a middle Byzantine mould from Ruvo di Puglia referenced by Marshall (Marshall 1911, 296. no. 2565; cf. Langó 2010).

52 Garam 2001, 28–29; Balogh 2014, 92–93; Vida 2019, 44.

53 It is worthwhile to point out also that he was not certain about the dating of this jewellery type. After all, in the introductory essay Marshall does not preclude the possibility that these artefacts are from later than the 2nd century (cf. Marshall 1911).

54 The pair of earrings came from the village of Kouklia in the Paphos district, in southwestern Cyprus (cf. Marshall 1911, 300, no. 2596–2597).

55 Marshall 1911, 300, no. 2601.

56 Augustus Wollaston Franks is considered not only the British Museum's curator (and 'second founder'), but one of its most significant benefactors, who established the Mediaeval collection of the museum. Following his death, Franks's private collection became part of the museum. On his personal significance and his collection, see Caygill, Cherry (ed.) 1997; Polm 2016. Cf. Anderson 2016, 69.

57 Garam 2001.

is only one grain in each. The final granule – as on the example from Budapest – has an elongated tear shape.

The early date suggested by Marshall has been accepted by later research.⁵⁸ The other early find, mentioned above, from Sidon further supports the idea that in the Near East we can already expect to see such earrings in this period. It is, however, important to point out that – unlike in the case of earrings with a pyramidal pendant, mentioned above – such pieces of jewellery are not known from the area that belonged to the province of Pannonia,⁵⁹ or from portraits from the Roman imperial period.⁶⁰ Parallels, which could serve as proof for this early presence, are known from the eastern Mediterranean, and – with one exception from Palestine – they are all stray finds. Unfortunately, it appears that the British Museum catalogue mentioned above influenced the dating of a significant part of these objects to the 2nd – 4th centuries.

The difficulty of dating the pieces from the Near East is illustrated by the context of such an earring from the Al-Bassa site in Palestine (Fig. 8).⁶¹ In the rock-cut tomb there were three places for burial (loci). During the excavation, 55 coins minted in the second half of the 4th century were found.⁶² Based on these coins, John Henry Iliffe dated the finds without exception to this period, and did not anticipate burials post 396. He also ruled out the possibility of a later date (6th – 7th centuries) for the lamps found in the tomb and the earrings found in one of the graves.⁶³ His opinion was accepted by later research. Unfortunately, however, the noted British archaeologist – who, between 1931 and 1948 served as curator of the Palestine Archaeological Museum – did not mention whether he found human remains at the site. More recent research, however, on metal finds,⁶⁴ glass objects,⁶⁵ and pottery lamps considers Iliffe's date too early and would suggest the 6th – 8th centuries instead.⁶⁶ Consequently, it is possible to date similar pieces of jewellery from Izmir (ancient Smyrna),⁶⁷ Tafas in Syria,⁶⁸ Egypt,⁶⁹ and Tamassos in Cyprus to the 6th – 8th centuries,⁷⁰ as suggested by Mechtild Schulze Dörrlamm and Andrea M. Pülz in connection with the piece held in Mainz based on their collection of parallels from the Mediterranean.⁷¹

Similarly in doubt is the early date of an artefact found at Kostolac (on the territory of ancient Viminacium). The find was discovered in grave no. 4521 at Pećine.⁷² For the dating of the grave, investigated in trench no. 326, however, the date suggested by Marshall was once again used as the standard, even though, at this highly significant early Byzantine site, 6th century graves and 7th century Byzantine artefacts, too, were unearthed.⁷³ Here, too, a more accurate date for the grave find can only be established once the find-context becomes known. Until then the 2nd – 3rd century date for the silver earring found here remains uncertain.

Jewellery of this kind was discovered in greater numbers during the second half of the 20th century in the former Yugoslavia; hence the find group has been studied in detail primarily by Yugoslavian, and nowadays by Croatian researchers. We must mention first the work of Mirjana Ćorović-Ljubinković, who in her 1951 survey of “the Bijelo brdo type” (in reality 7th – 11th centuries) jewellery – found at the time in Yugoslavia – writes about a piece of gold jewellery from the Archaeological Museum in Split (from the territory of ancient Salona?).⁷⁴ Her study classified the artefact as belonging to type 1 of earrings with grape-bunch (raceme) decoration.⁷⁵ According to the classification by this researcher – which grouped the artefacts based on the design of the suspension hoop, taking into account the complexity of the ornament on the lower part of the hoop – artefacts of this type had antecedents in antiquity, and eastern influences played no role in their design.⁷⁶ In her opinion, these artefacts dated to earlier than the 10th century. Their suspension hoops were, in all cases, unadorned, while the structure of the ornament on the lower part of the hoop was not complex.⁷⁷ Although the classification established by Ćorović-Ljubinković requires modification based on more recent research,⁷⁸ it is clear that already even then the find type was considered to be Byzantine from the early Middle Ages (though pre-10th century).⁷⁹ Zdenko Vinski regarded the object as the product of a local workshop tradition.⁸⁰ This piece without a find-context, however, was only analysed in detail significantly later. In her doctoral dissertation, Ursula Gertrud Ibler already collected the artefact's parallels from the Balkans and the Mediterranean,⁸¹ while Ante Piteša analysed the object through the evaluation of similar finds from Bosnia and Croatia.⁸²

58 Миловановић 2007, 49; Piteša 2014, 36, no. 10; Vida 2019, 43, n. 315.

59 Lányi 1972, 171.

60 Berg 2002, 69; Facsády 2008.

61 The golden earring with hook-and-eye fastening is one of the best parallels to the earring from Budapest.

62 Iliffe 1934.

63 Iliffe 1934.

64 Berti 2012, 192.

65 Barag 1978, 55; Vitto 2011, 118.

66 Kindler 1958; Hadad 1997, 165, 171.

67 Ibler 1991, 53, n. 35.

68 El-Chehadeh 1972, 5.

69 Cat. London 1979, 2, no. 9; Ogden 1990, 170.

70 Greifenhagen 1975, 61.

71 Schulze-Dörrlamm (ed.) 2020, 14–15.

72 Миловановић 2007, 49. Cf. Milovanović 2004.

73 Милошевић 2002a, 216–221; Milošević 2002b; Снасић-Ђурић 2015.

74 Anita Rapan Papeša has informed us that the provenience of the artefact held at the museum is not more closely known and it could also have ended up in the collection from another part of Dalmatia.

75 Ћоровић-Љубинковић 1951, 40.

76 „црноморски градови као да нису играли никакву улогу” (Ћоровић-Љубинковић 1951). For the evaluation of the role of these cities in the argumentation of the researcher, see Ћоровић-Љубинковић 1951, 23.

77 Ћоровић-Љубинковић 1951, 41.

78 She also included in group 1 a piece of jewellery from the Staré Město site, which was clearly made using a piece of ring-shaped jewellery with an S-shaped terminal with a secondarily-used bronze cast placed on the hoop (cf. Ћоровић-Љубинковић 1951, 40, Fig. 3. 9). For the spread of ring-shaped jewellery with an S-shaped terminal, see Brather 2004.

79 For the place of Mirjana Ćorović-Ljubinković in the history of research, see Стевановић 2019, 106–107.

80 Vinski 1974, 16.

81 Ibler 1991, 52–54.

82 Piteša 2014, 36, no. 10.

In Croatia, one of the artefacts was found north of Zadar, at a site between the villages of Kašić and Glavčurak. By the time of the excavation, a significant part of the site had been disturbed, hence only a few assemblages could be observed *in situ*. Unfortunately, in the case of the earrings – which came to light as stray finds – the precise context could not be established. The remains of the two silver earrings could only be salvaged in fragments by Janko Belošević (Fig. 9: 3).⁸³ At the site, two find groups dating to different periods were also uncovered. The archaeologist dated the early finds to the mid 6th century and connected them with the Ostrogoths and the heritage of the late antique population; while the finds dated to the second half of the 8th century and to the 9th century he considered to be from the burials of an early Croatian community.⁸⁴ Belošević grouped the earrings with the early horizon, dating them to the mid 6th century essentially based on their form, which he considered to be an archaic type.⁸⁵ His opinion was also accepted by later research. Nada Miletić followed the opinion of Vinski and Belošević while evaluating the finds from the Korita site near Duvno in Bosnia and Herzegovina. The artefact deposited in grave no. 59 of a young woman in the cemetery excavated at the site was one of the first of its kind to be discovered *in situ*. The piece of silver jewellery with a hook-and-eye fastening was dated by the excavator to the mid 6th century (Fig. 9: 2).⁸⁶ Zdenko Vinski established a similar date for the earring from grave no. 82 at the Knin-Greblje site,⁸⁷ which was the second such well-observed artefact. The silver earring from the female grave differs from the other pieces in that the lower part of the hoop was ornamented with pseudo-granulation and had a socket-and-pin fastening. The item, found on the left of the corpse – as was the case for the example found at Korita – did not have a pair; on the right of the body was a circular bronze band (Fig. 9: 4). The grave finds further included 9 beads around the neck and a bronze ring.⁸⁸ He also accepted the 6th century date, but pointed out that similar artefacts were also attested later on in the region (citing the items found at the Golubić site).⁸⁹ Taking the above into account, Piteša's dating was

unequivocal. He, too, suggested the 6th century regarding the artefact unearthed in the territory of Salona.

In Brateiu, on the right bank of the Târnava Mică river, in Transylvania, in the southeastern part of the Carpathian Basin, a simpler parallel of the earring, cast in bronze, was uncovered from grave no. 52 of the Gepidic cemetery. The date of the disturbed grave of an adult can be established primarily based on a Byzantine buckle.⁹⁰ Based on the design of the buckle's shield-shaped body and profiled frame, it can be dated primarily to the first half or middle third of the 6th century (Fig. 10: 3).⁹¹

The find type has also been attested more recently in the central regions of the Byzantine Empire. From present-day Greece we know of many such finds. The early dating is supported by the finds discovered in the cemetery at Limori near Thessaloniki.⁹² This could be corroborated by the 4th century coins found together with them.⁹³ However, if we take into account that the burial places found here – as in the case of other late antique burials – were repeatedly reused, the contemporaneous dating of the coins and these finds becomes doubtful.⁹⁴ We believe it cannot be precluded that these pieces of jewellery belong to a later phase of the cemetery, marking the 6th – 7th century phase of the site.⁹⁵ One of the assemblages is from a cemetery excavated at Azoros in Thessaly. At this middle Byzantine site south of the present-day village (the finds of which are also interesting from the point of view of the 10th century material culture of the Carpathian Basin),⁹⁶ over 300 burials were excavated and dated to the period between the 7th and 10th century.⁹⁷ The pair of silver earrings was unearthed in an early grave discovered in the baptistery (Fig. 10: 1).⁹⁸ Such a find also came to light in the territory of Thessalian Thebes (modern-day Nea Anchialos);⁹⁹ there is, however, no firm evidence for its more specific dating.¹⁰⁰ The other piece of jewellery was found in one of the 7th century graves discovered on Antikythera. The bronze earring belonged to one of

83 Belošević 1968, 228.

84 Belošević 1968, 237–239.

85 Belošević 1968, 228.

86 Miletić 1979, 149.

87 The basis for the date was provided by the characteristically 6th century buckles with a Byzantine background found at the cemetery (Schulze-Dörrlamm types A and D1). See Schulze-Dörrlamm 2002.

88 Vinski 1991, 29–30.

89 Vinski 1991, 30. Influenced by Vinski, Ibler (1991, 53, n. 34) also assigned this find to the type presented here. For a more recent treatment of the finds from Golubić, see Petrinc 2019.

90 The grave goods comprised 5 items: two iron knife fragments, an iron buckle, the bronze earring, and a bronze buckle. See Bârzău 2010, 185.

91 Ligia Bârzău created a detailed classification of the buckles found in the cemetery. Based on her typology, the artefact from this grave – along with buckles from graves no. 124, 192, and 194 – belongs to group 16a2b11. These artefacts, according to the researcher, are similar to those in group 16a2b10 (which she identifies with the Schulze-Dörrlamm D2 type). Based on this, the grave can be dated to the first half or middle third of the 6th century (See Bârzău 2010, 109–110; cf. Schulze-Dörrlamm 2002, 152–155). For a more recent treatment of the Byzantine parallels of the site, see Vida 2019, 44.

92 Παζαράς 2009, 145.

93 Παζαράς 2009, 145.

94 In connection to the aforementioned burial place, Professor Teocharis N. Pazaras mentioned 5 skulls and bone remains belonging to numerous skeletons (Παζαράς 2009, 70). Finds date the use of the cemetery up until the end of the 7th century (Παζαράς 2019).

95 Παζαράς 2019.

96 Δεριζιώτης, Κουγιουμτζόγλου 2005, 130, 132.

97 For the distribution of the graves by period, see Δεριζιώτης, Κουγιουμτζόγλου 2005, 139.

98 Papanikola-Bakirtzē (ed.) 2002, 428, no. 552. Cf. Pyrrou, Tsaravopoulos, Bojica 2006, 227. For the questions concerning the dating, see also Δεριζιώτης, Κουγιουμτζόγλου 2005, 140.

99 Laskaris 1991, Pl. 142: 4.

100 For the analysis of the Byzantine material of the site in Thessaly, see more recently: Karagiorgou 2013. For the analysis of the coins found here, see: Ντίβα *et al.* 2001.

the three corpses found in the grave (Fig. 10: 2).¹⁰¹ More recently, a further find became known from Porto Rafti, not far southeast of Athens. The example of golden jewellery found in grave no. 143 of the cemetery excavated there was considered to belong to the 5th century, however its dating, too, has come into question.¹⁰² The find type also appeared in the eastern part of the Byzantine Empire in the late 7th and early 8th centuries. A specimen was found together with a pectoral cross in grave no. 189 at the Eski-Kermen site (Fig. 10: 4).¹⁰³

The description of the earring

Altogether we have found 34 pieces of jewellery connected to 20 sites, as well as four stray finds (Fig. 11; Tab. 1). A common trait of the object type is that the suspension hoop of the earring is made in all cases of a wire with a circular cross-section, and the granulation (or its imitation) appears on the lower part of the hoop. Beyond these shared traits, the collected artefacts can be placed in several groups based on their materials or design.

The most beautiful examples were made of gold, like the artefact recently found in Budapest. Their sizes are quite varied: their height is between 1.8 and 3.1 cm, their diameter between 1.4 and 2.2 cm, and their weight between 1 and 3.3 grams.¹⁰⁴ In terms of its size, the example from Budapest belongs to the middle third among the finds; not too big and not too small. On all earrings made of gold the granulation was real. The ornament – as in the case of the piece from Budapest – usually begins with 5 grains, but there also are pieces that have fewer granules,¹⁰⁵ and on the piece from Al-Bassa there are 6 grains in the first row.¹⁰⁶ Hook-and-eye fastening is the most typical,¹⁰⁷ but there are also examples that were penannular by design and had no fastening.¹⁰⁸ The suspension hoop is usually undecorated, but – as the stray find from Mainz also shows – the inner and outer surfaces of the hoop can be ornamented by granulation.¹⁰⁹

Of somewhat poorer quality are the examples made of silver. In terms of their size, they match the larger golden pieces, but on the silver items in several cases we can observe pseudo-granulation. Hook-and-eye as well as socket-and-pin fastenings are

both attested. The structure of the granulation ornament on these pieces is like on the golden earrings. Additionally, as the finds from Limori indicate, there were also earrings made without a fastening,¹¹⁰ and on a part of the finds the fastening likely broke off during use and the artefacts were deposited in the grave without them.¹¹¹ The artefact found in Azoros is a special case within this group: here it is not the last grain that is elongated, but the one before it in the previous row with one granule.¹¹² There is also an example from Kostolac with only three grains and not five in the first row of granulation attached to the hoop.

Of the poorest quality are the cast bronze parallels. These are smaller than both the gold and the silver earrings. They are penannular and have no fastening. On these artefacts we cannot even observe pseudo-granulation, only schematic imitations of the ornaments seen on the golden earrings. Mostly the triangular shape survived, and in places we can see traces of the dividing lines used to form ‘substitutes’ for the granules.

The evaluation and analysis of the extant artefacts is rather varied.¹¹³ Contemporary researchers usually work with the assumption that this type of jewellery was already in use during the Roman period.¹¹⁴ Hence Marshall’s early (but uncertain) dating suggestion has not been called into question so far. The datable finds of this jewellery type, discovered in context, are however, without exception dated to the 6th – 7th centuries by researchers.¹¹⁵ Artefacts found in the Balkans and Transylvania are dated primarily to the 6th century, and those unearthed further south to the 7th century.¹¹⁶ There is furthermore also an example, which, according to the excavator, was deposited in the grave during the late 7th, early 8th century.¹¹⁷

Taking into account the dating suggestions, it appears that the examples found in the Balkans are earlier than similar items found in central parts of the Byzantine Empire. The theory of Zdenko Vinski regarding the piece from Salona – namely that in the case of this find group we may perhaps also reckon with a local tradition¹¹⁸ – receives further support in light of Tivadar Vida’s observations concerning earrings with a pyramidal pendant.¹¹⁹ These items from Bosnia and Dalmatia are namely ear-

101 Pyrrou, Tsaravopoulos, *Bojica* 2006, 227.

102 Schulze-Dörrlamm (ed.) 2020, 14–15.

103 Макарова, Плетнёва (ed.) 2003, 125. On the site, see also Айбабин 2003, 42–47; Ajbabin 2010; Шпер 2009. For the dating of the pectoral cross to the early 8th century, see Khairedinova 2012, 420–427.

104 The size and weight are based on the reviewed finds with data published regarding their dimensions. Those parallels for which we could not find such data could naturally further refine the above picture.

105 E.g. the piece from Split, or the stray find held at the British Museum.

106 It is also important to point out that this find from Palestine is the only artefact where the granulation ornament does not form a regular triangle. Here, the first row contains six grains, the second row has 3, the row after that has 2, and the two rows after that have one granule each. As on the artefact from Budapest, the final grain of the ornament is cone-shaped.

107 For instance, the pieces from Budapest, Split, and Cyprus, or the pair of golden earrings held at the British Museum and the golden earring held at the Römisch-Germanisches Zentralmuseum in Mainz.

108 E.g. the stray find held at the British Museum or the early piece from Sidon.

109 Schulze-Dörrlamm (ed.) 2020, 14.

110 Παζαράς 2009, 145.

111 Παζαράς 2009, 71.

112 A further special aspect of this pair of earrings is that one of the pieces was damaged (the rows containing a single granule broke off), but was not repaired.

113 For the reasons, see Ibler 1991, 53.

114 Миловановић 2007, 49; Piteša 2014, 36, no. 10; Vida 2019, 43, n. 315.

115 Belošević 1968, 228; Miletić 1979, 149; Vinski 1991, 30; Макарова, Плетнёва (ed.) 2003, 125; Pyrrou, Tsaravopoulos, *Bojica* 2006, 227; Bärzu 2010, 109–110; Piteša 2014, 36, no. 10; Vida 2019, 43.

116 Δεριζιώτης, Κουγιουμτζόγλου 2005, 140; Pyrrou, Tsaravopoulos, *Bojica* 2006, 227.

117 Айбабин 2003, 42–47.

118 Vinski 1974, 16.

119 “The find-contexts of the earrings with a pyramidal pendant show that these appealing but simple pieces of jewellery were valued and used by a local late antique population. The production of this jewellery type is an indication of their needs.” (Vida 2019, 45.)

lier than those from ancient Greece and the Crimea. This picture can, however, be significantly altered by new finds, as this theory, too, is not free of problems: in this case, we would need to explain how it is possible that the gold, the silver, and the simpler bronze find groups are attested in the regions in question in both the 6th and the 7th centuries. Furthermore, the bronze examples are so similar to each other that we would suspect them to be derived from the same innovation.

The sporadic occurrence and paucity of the finds, however, should make us cautious, as a later increase in their number will necessarily bring new suggestions for the analysis of the find type. One source of caution is a parallel – not included in our survey – from Georgia (Fig. 10: 5). According to some, a similar pair of earrings from Tsebelda (Tsbilium) in Abkhazia dates to the same period (6th – 8th centuries) as a significant part of the earrings mentioned above;¹²⁰ some, however, are of the opinion that these finds – along with the late antique find group described – should be dated to the 4th – 5th centuries.¹²¹ Among experts on the issue there is no agreement even regarding whether the earring types attested in the early Mediaeval materials of the region may be seen as the result of local, autochthonous development,¹²² or – taking into account the significant late antique and Byzantine connections of the site¹²³ – the connections and background of these objects should be studied together with the find group analysed by us.¹²⁴ Given the simplicity of the form, neither the former possibility (of parallel development), nor the latter can be excluded.

Many researchers considered this earring type to be a derivative or an antecedent of the early Mediaeval earrings with a pyramidal pendant,¹²⁵ while others experts either treated this find group as a separate type altogether,¹²⁶ or – in the case of the earrings with a pyramidal pendant – refrained from including the earrings with a triangular granulation ornament on the lower part of the hoop in their discussion of the group of artefacts they studied.¹²⁷ We, too, believe that these objects cannot be seen as the antecedents or simplified versions of earrings with a pyramidal pendant. All they have in common is that granulation (or pseudo-granulation) ornaments could be used on the lower part of the hoop in the case of both types. However, as we have written above during the discussion of granulation types, the triangular ornament investigated in this article belongs to the group of granulation ornaments with a flat structure, while pyramidal pendants were decorated using field granulation. These, however, represented different techniques, even if the knowledge

required for making both was available to those goldsmiths,¹²⁸ who knew how to make granulation ornaments.¹²⁹ If we necessarily want to find points of connection with the triangular ornaments, then in terms of technique they are closer to earrings ornamented with one, three, or four granules.¹³⁰ It is, however, important to point out once again that they do not belong to a shared group or type in any way. The only similarity is that on the latter artefacts, too, the granulation was directly applied to the lower part of the hoop. In our opinion, therefore, the artefact group presented here constitutes an independent type within 6th – 7th century, Eastern European jewellery. In this period, triangular ornaments were popular. They appeared on necklace ornaments,¹³¹ and dress fittings;¹³² and these may have had an influencing role in the appearance of triangular ornaments on earrings as well. They, however, were not as common as earrings with a pyramidal pendant, mentioned above, or, for instance, basket-shaped earrings.

Therefore, the earring from Budapest, in our opinion, belongs to the early Mediaeval find group. Interestingly, however, based on the chronology of the Avar period settlement found here, it can be connected primarily not with the early, 6th century earrings from the Balkans, but with the later, Byzantine pieces dated to the 7th century.¹³³

120 Макарова, Плетнёва (ed.) 2003, 401.

121 Трапш 1971, 194–195; Kazanski, Mastykova 2007, 40. In his study, Mihail Trapš cites a publication by Aleksey Sergeevich Uvarov, which mentions that a similar artefact was found in Komunta, North Ossetia.

122 Трапш 1971, 194–195; Рамишвили 2003, 292.

123 For the Byzantine connections, see Воронов, Юшин 1971; Воронов 1975; Sarantis 2013, 344; Mania, Natsvlshvili 2013, 280; Dadiani, Khundadze, Kvachataдзе 2017, 230–231; Khrushkova 2018; Pishchulina, Argun 2019; Endoltseva 2019.

124 Kazanski, Mastykova 2007, 40.

125 Kazanski, Mastykova 2007, 40; Blay, Samu 2016, 303–304; Vida 2019, 42–45.

126 Ibler 1991, 52–54; Schulze-Dörrlamm (ed.) 2020, 14–15.

127 Ormányi 1995; Garam 2001, 28–29; Balogh 2014; 2016, 153–158.

128 Facsády 2018.

129 Wolters 1986, 34–66; Минасян 2014, 321–326.

130 Mitrea 1989; Григоров 2007, 17–18.

131 Vida 2019, 44, n. 329.

132 Khairedinova 2012; Минасян 2014, 278–281; Айбабин, Хайрединова 2017, 260–267.

133 We would like to thank Zoltán Quittner for the translation.

ABBREVIATIONS

Напенко I–VI – Древности Приднепровья I–VI. Кульженко, 1899–1907.

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FIGURE 1.
 Photograph of the earring from Népfürdő Street, Vizafogó, Budapest, with enlarged photographs of the fastening and the granulation ornament (photo by P. Langó, drawing made by O. Kangyal).

→ **FIGURE 2.**
 The location of the site in Vizafogó, Budapest and a section of the site (black frame) with the features found near the earring (map by T. Kovács, I. Fábrián, K. Kolozsvári).

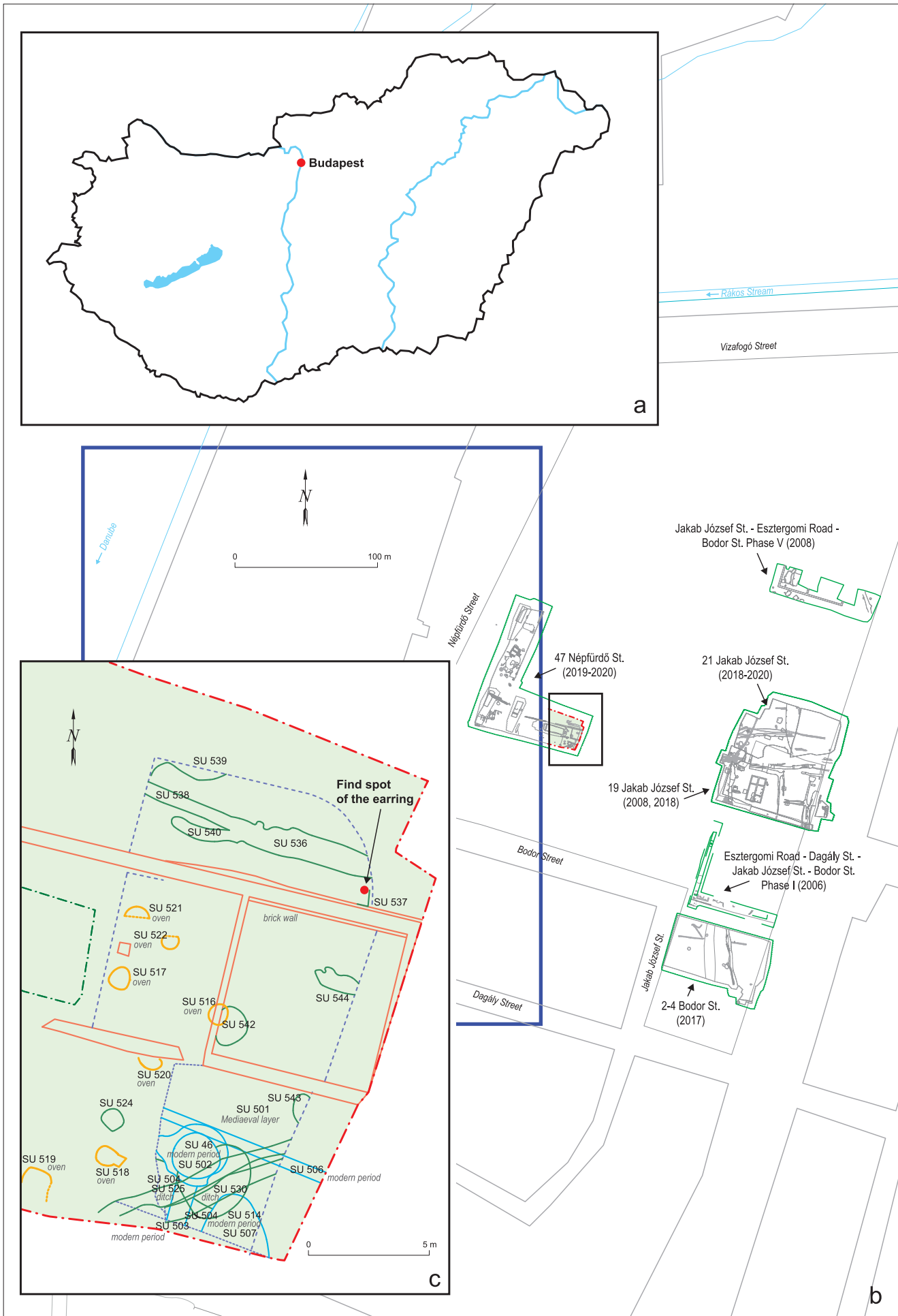


FIGURE 3.
The earring found in Sidon (made by Z. Varga after Macridy 1904, Pl. 5: 1).

FIGURE 4.
Drawing of the Achaemenid period neck-ring lion's head terminal ornament, with triangular field granulation ornaments on the edge and on the lion's back (made by Z. Varga after Wolters 1986, 114, Fig. 90).

FIGURE 5.
A Greek earring with triangular granulation ornaments on the surfaces (made by Z. Varga after Wolters 1986, 115, Fig. 93).

FIGURE 6.
Golden earring (2nd – 1st century BC) from Vulci, with triangular granulation ornaments on the base (made by Z. Varga after Wolters 1986, 118, Fig. 101).

→ **FIGURE 7.**
Earrings with a flat triangular granulation ornament (2596, 2600) and the *crotalia* earrings (2581–2582) published by Frederick Henry Marshall in 1911 (Marshall 1911, Pl. 54).

→ **FIGURE 8.**
Photographs of the earrings found in the Al-Bassa tomb (Iliffe 1934, Pl. 24: 5–9).

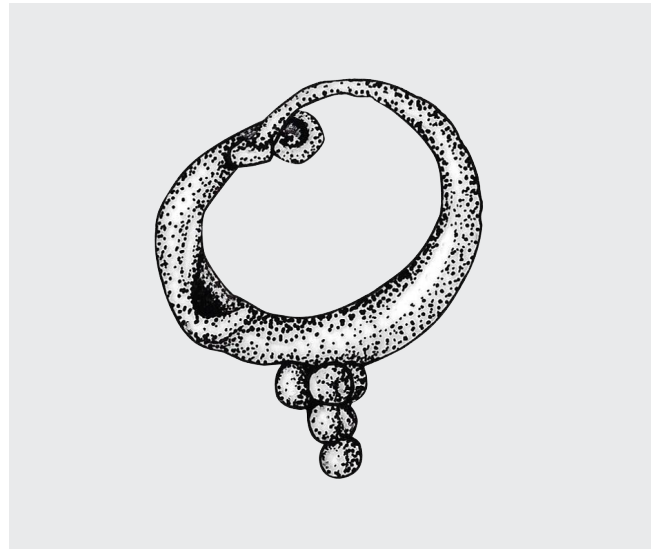


FIGURE 3.



FIGURE 4.

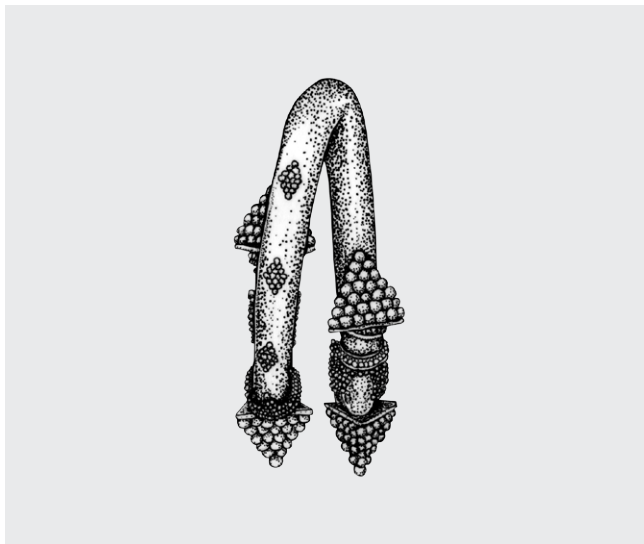


FIGURE 5.

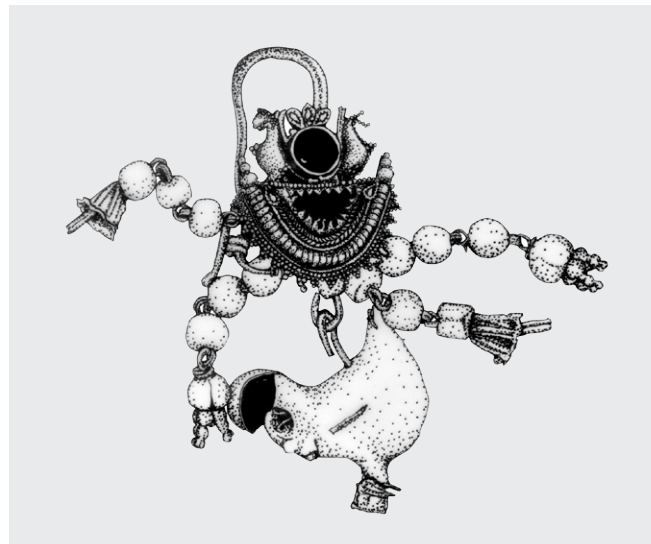
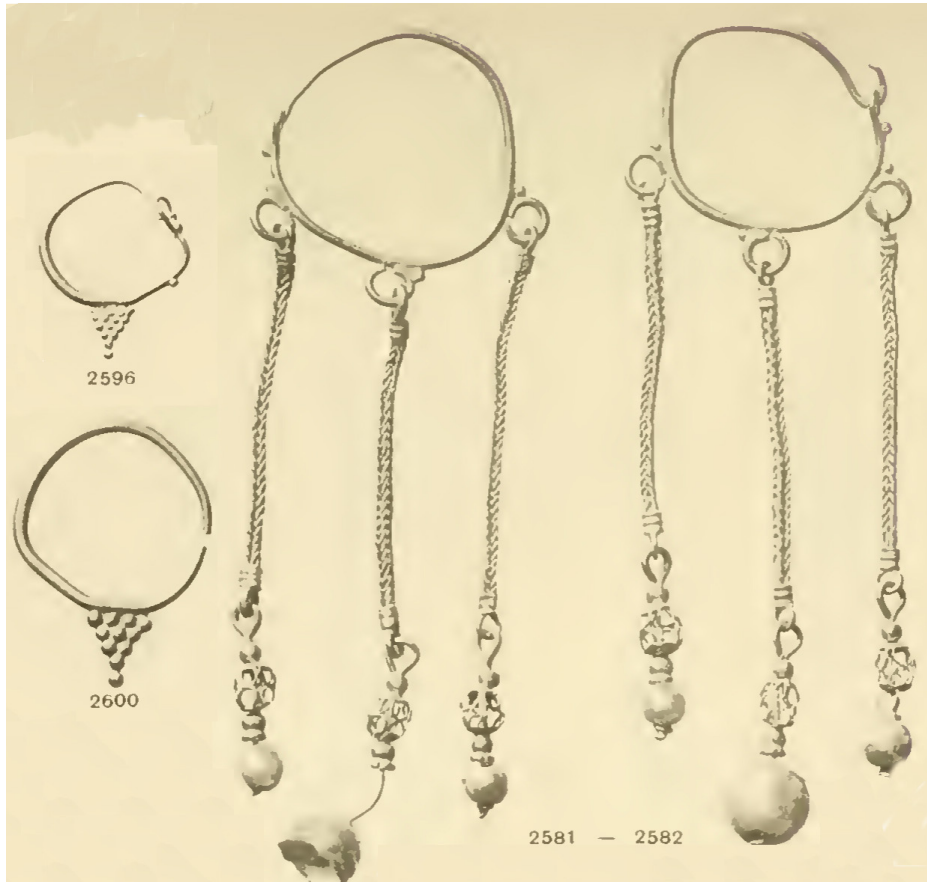


FIGURE 6.



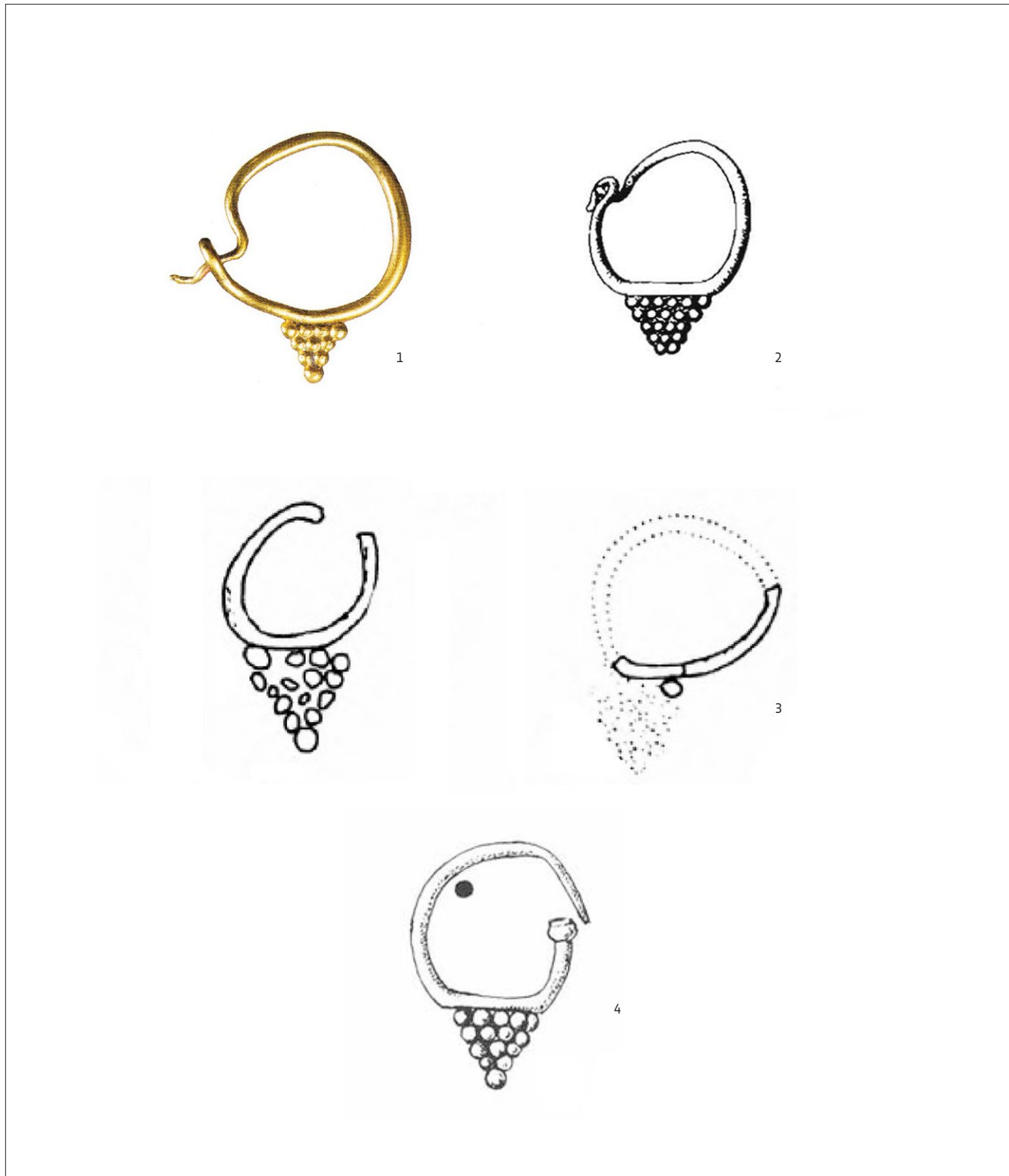


FIGURE 9.

(1) Photograph of the golden earring found in Split (Piteša 2014, 36, no. 10); (2) Drawing of the earring found in grave no. 59 at Korita (Miletić 1979, Pl. 21); (3) The pair of earrings found at Kašić-Glavčurak (Belošević 1968, Pl. 10: 18–19); (4) The earring found in grave no. 82 at Knin-Greblje (Vinski 1991, 62, Pl. 13: 10).

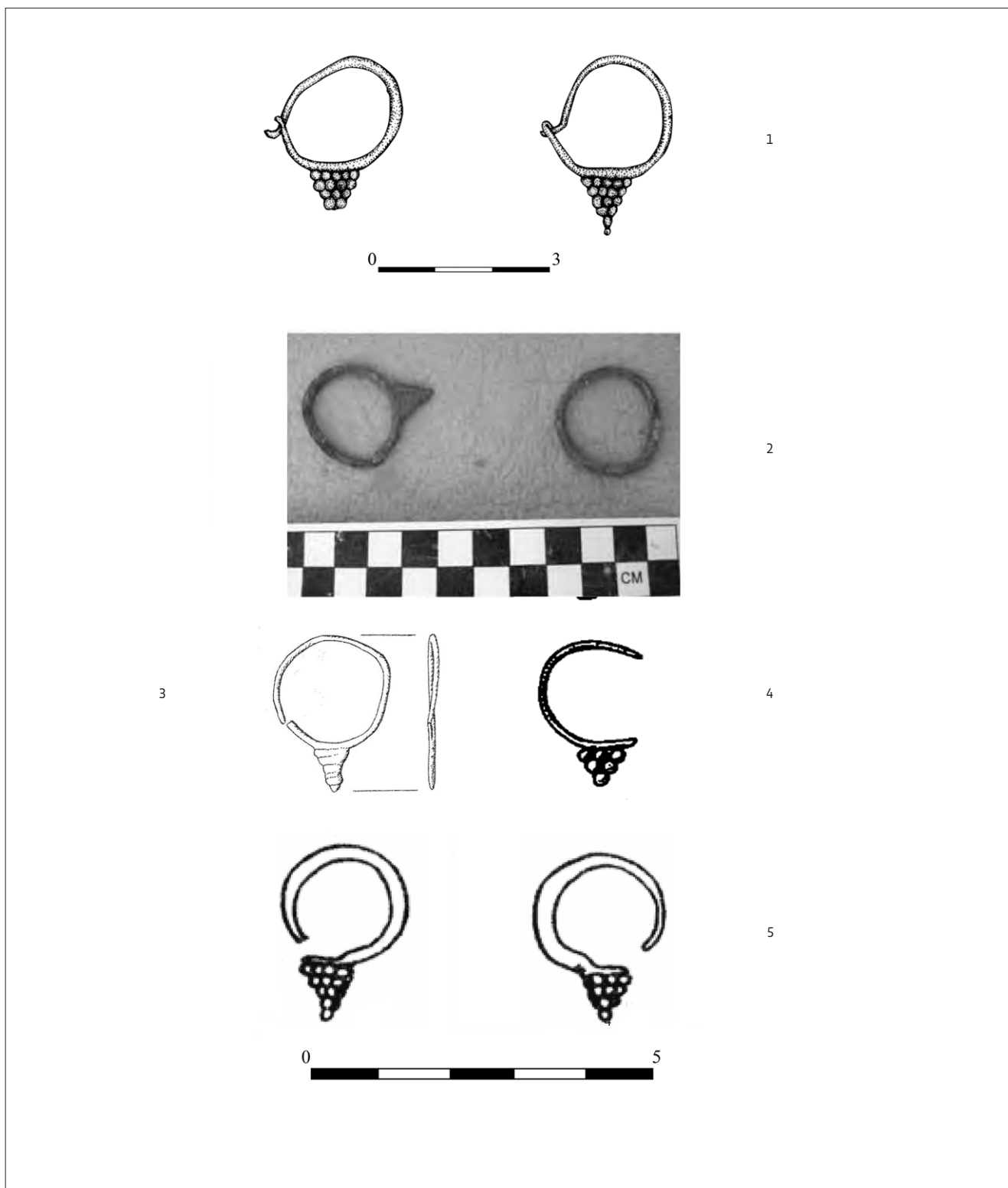


FIGURE 10.

(1) The pair of silver earrings found at Azoros (made by Z. Varga after Papanikola-Bakirtzē (ed.) 2002, 428, no. 551); (2) The earrings found in grave no. 5 of the Byzantine cemetery excavated on the island of Antikythera (Pyrrou, Tsaravopoulos, Bojica 2006, 235, Pl. 6: 4); (3) The earring found in grave no. 52 at the Baráthely cemetery (Báru 2010, Pl. 11); (4) The piece of jewellery found in grave no. 189 at Eski-Kermen (Айбабин 2003, 125, Pl. 39: 13); (5) The pair of earrings found at Tsebelda (Tsibilium) in Abkhazia (Транш 1971, Pl. 26: 16–17).

No.	Site	Find context	Number of pieces	Held at	Material of the earring	Dimensions	Fastening type	Granulation type
1.	Budapest – Népfürdő Street, layer no. 534	From a settlement layer	1	Budapest History Museum Inv. no. 2021.4.534.1.	gold	Height: 2.22 cm Diameter: 1.63 cm Weight: 1.3 g	hook-and-eye fastening	Real granulation
2.	Brateiu, grave no. 52	Cemetery find connected to a grave	1	No available data	bronze	No available data	penannular	Cast ornament, imitating granulation
3.	Kostolac – Pećine grave no. 4521, trench no. 368	Cemetery find connected to a grave	1	National Museum, Požarevac Ц-11568	silver	Height: 2.5 cm	hook-and-eye fastening	Real granulation
4.	Kašić – Glavčurak	Stray find from a cemetery, could not be connected to a grave	2	Archaeological Museum, Zadar	silver	No available data	One was penannular, the other was very fragmented and the fastening could not be determined	Real granulation (?)
5.	Knin – Greblje grave no. 82	Cemetery find connected to a grave	1	No available data	silver	No available data	Socket-and-pin fastening	Pseudo-granulation
6.	Split	Stray find	1	Archaeological Museum, Split Inv. no. H 5523	gold	Height: 1.8 cm Diameter: 1.4 cm Weight: 1.08 g	hook-and-eye fastening	Real granulation
7.	Korita grave no. 59	Cemetery find connected to a grave	1	National Museum of Bosnia and Herzegovina Inv. no. 6739	silver	Height: 2.2 cm Diameter: 1.6 cm	hook-and-eye fastening	Real granulation
8.	Antikythera grave no. 5	Cemetery find connected to a grave	1	No available data	bronze	Height: 1.83 cm Width: 1.7 cm	penannular	Cast ornament, imitating granulation
9.	Azoros – From a grave found in the baptistry	Cemetery find connected to a grave	2	Ephorate of Byzantine Antiquities Inv. no. M 13 14.	silver	Height: 3.2 cm Diameter: 2.5 cm	hook-and-eye fastening	Pseudo-granulation
10.	Limori grave no. 1.4	Cemetery find connected to a grave	1	Ephorate of Byzantine Antiquities	silver	No available data	penannular	Pseudo-granulation
11.	Limori grave no. 13.3	Cemetery find connected to a grave	2	Ephorate of Byzantine Antiquities	silver	No available data	hook-and-eye fastening	Cast ornament, imitating granulation
12.	Limori grave no. 14.11	Cemetery find connected to a grave	1	Ephorate of Byzantine Antiquities M 14/96,2209	silver	Height: 2.2 cm Diameter: 2 cm	penannular	Real granulation
13.	Limori grave no. 14.12	Cemetery find connected to a grave	2	Ephorate of Byzantine Antiquities M 14/96,2210	silver	Height: 2.9 2.6 cm	hook-and-eye fastening and penannular	Granulation

No.	Site	Find context	Number of pieces	Held at	Material of the earring	Dimensions	Fastening type	Granulation type
14.	Limori grave no. 37.7	Cemetery find connected to a grave	1	Ephorate of Byzantine Antiquities	silver	No available data	hook-and-eye fastening and penannular	Granulation
15.	Phthiotic Thebes (Nea Anchialos)	Cemetery find	1	Nea Anchialos Archaeological Collection	No available data	No available data	hook-and-eye fastening	Granulation
16.	Porto Rafti grave no. 148	Cemetery find connected to a grave	1	No available data	gold	Height: 2 cm	hook-and-eye fastening	Granulation
17.	Izmir	Stray find	1	Antikensammlung, Munich, room 10. case 4.	gold	No available data	No available data	Granulation
18.	Kouklia	Stray find	2	British Museum – purchased 1899.	gold	Height: 2.1 cm Weight: 0.97 g, 0.45 g	hook-and-eye fastening	Real granulation
20.	Eski-Kermen – grave no. 189	Cemetery find connected to a grave	1	No available data	No available data	No available data	penannular	No available data
21.	Tafas	Stray find	1	No available data	gold	No available data	No available data	Real granulation
22.	Sidon	Cemetery find connected to a grave	1	No available data	gold	No available data	penannular	Real granulation
23.	Al-Bassa tomb	Cemetery find connected to a grave	1	No available data	gold	No available data	hook-and-eye fastening	Real granulation
24.	Cairo	Stray find	1	British Museum – Franks bequest 1898	gold	Height: 3.1 cm Weight: 3.3 g	penannular	Real granulation
25.	Unknow site from Egypt	Stray find	1	Private collection	gold	No available data	hook-and-eye fastening	Real granulation
26.	Unknown site	Stray find	1	British Museum – Franks bequest 1898	gold	Height: 3.1 cm Weight: 3.1 g	penannular	Real granulation
27.	Unknown site	Stray find	2	British Museum – Franks bequest 1898	gold	Height: 2.5 cm The combined weight of the two pieces: 3.9 g	hook-and-eye fastening	Real granulation
28.	Unknown site	Stray find	1	Römisch- Germanischen Zentralmuseum, Mainz	gold	Height: 1.8 cm	hook-and-eye fastening	

TABLE 1.
The find-spots of the earrings (made by P. Langó).

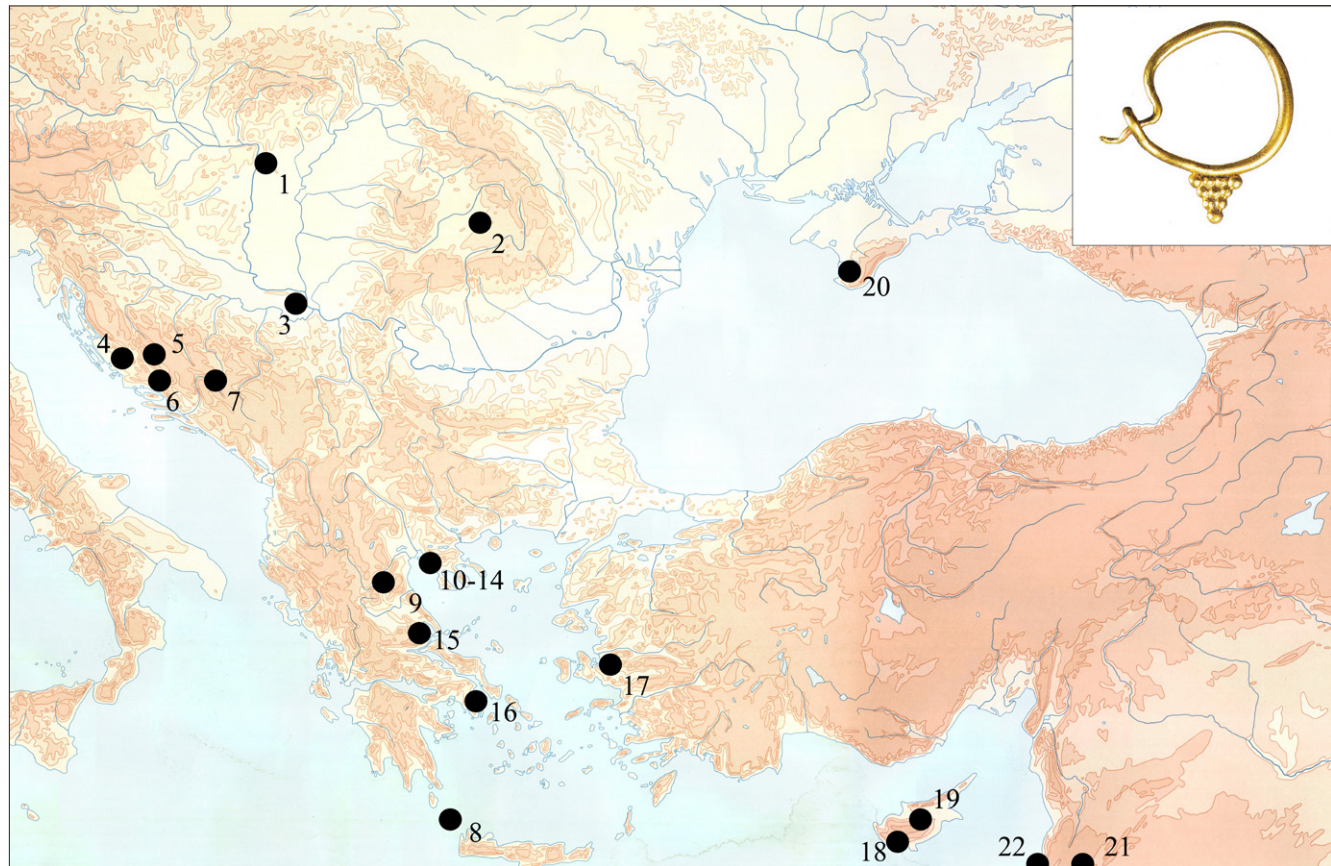
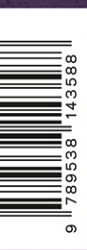


FIGURE 11.

The find-spots of the earrings: (1) Budapest-Népfürdő Street, layer no. 534; (2) Brateiu, grave no. 52; (3) Kostolac-Pećine, grave no. 4521, trench no. 368; (4) Kašić-Glavčurak; (5) Knin-Greblje, grave no. 82; (6) Split; (7) Korita, grave no. 59; (8) Antikythera, grave no. 5; (9) Azoros; (10–14) Limori; (15) Phthiotic Thebes (Nea Anchialos); (16) Porto Rafti grave no. 148; (17) Izmir; (18) Kouklia; (19) Tamassos; (20) Eski-Kermen, grave no. 189; (21) Tafas; (22) Sidon (made by P. Langó).





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