

OTTOMAN PETTY COINAGE IN PRE-OTTOMAN BELGOROD, LATE 14th c. – 1484

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Abstract: *The article deals with the problem of the influx of the Ottoman coins to Belgorod (Cetatea Albă) that preceded its conquest by the Ottoman Sultan Bayezid II in 1484. The majority of the early Ottoman coins found in Belgorod belongs to the copper denomination – mangir, though the copper coinage was used for internal circulation. However, in the late 14th – early 15th c. these coins could have restrictedly participated in local circulation along with Juchid copper coinage.*

Since the 1430s, the role of the Ottoman silver coinage (akçes) had gradually increased in the Carpatho-Danubian area because of their high silver content and the strengthening of the Ottoman influence in the Black Sea region. At the same time, the Ottoman copper mangirs continued to come to this region as well, but the basic area of their finds is restricted to Belgorod. The majority of these coins turned out to be struck in 1450-1460s, during the second reign of Mehmed II (1451-1481), coinciding with the time of the intensive influx of the Ottoman silver akçes, interrupted by the outbreak of the war between the Ottoman Empire and the Principality of Moldavia in the early 1470s. This article suggests that the copper mangirs of Mehmed II could hardly have had an important role in the monetary circulation of Belgorod, while the increase of their finds in this city, in comparison with the previous issuers, was rather determined by the other factors.

Rezumat: *Articolul dezbate problema pătrunderii monedelor otomane la Belgorod (Cetatea Albă) înainte de cucerirea sa de către sultanul Bayezid II în anul 1484. Majoritatea celor mai timpurii monede otomane găsite la Belgorod este alcătuită din mangâri din metal comun utilizați în cadrul circulației monetare interne. La sfârșitul secolului al XIV-lea și la începutul secolului al XV-lea aceste monede puteau să circule, limitat, pe plan local, împreună cu emisiunile din metal comun ale Hoardei de Aur.*

După anii 1430, rolul monedei de argint otomane (akçe) a crescut semnificativ în regiunea Carpato-Danubiană datorită conținutului superior de metal prețios, dar și a întăririi prezenței otomane în zona Mării Negre. În același timp, mangârii otomani din metal comun au continuat să vină în această regiune însă principala zonă cu descoperiri se află la Belgorod. Majoritatea acestor monede a fost pusă în circulație

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în anii 1450-1460, în timpul celei de-a doua domnii a lui Mehmed II (1451-1481), când se constată un intens flux de aspri otomani din argint, întrerupt de războiul dintre Imperiul otoman și Moldova în anii 1470. Acest articol sugerează că mangârii din metal comun ai lui Mehmed II ar fi putut cu greu să aibă o importantă participare la circulația monetară din Belgorod, în timp ce creșterea descoperirilor lor în oraș, în comparație cu emitenții anteriori, a fost mai degrabă determinată de alți factori.

Introduction

Medieval Belgorod (now Bilhorod-Dnistrovskiy, Odessa oblast, Ukraine; also known as Aqchakerman, Moncastro, Asprokastron, Cetatea-Albă, Akkerman etc.)¹, being incorporated into the Principality of Moldavia from the late 14th c. to 1484, was one of the most important ports of this state that supported the transit trade connecting Central Europe with the Black Sea region. After it was captured by the troops of Ottoman Sultan Bayezid II (1481-1512) and Crimean Khan Mengli Giray I (1467-1515, with interruptions) on August 5th, 1484², the Ottoman coins predominated in circulation³. However, the Ottoman coins struck before Bayezid II's reign are also known among recently introduced or still unpublished finds from Bilhorod-Dnistrovskiy. It is noteworthy that the majority of these coins belongs to the Ottoman copper denomination – mangir. At the same time, the fact that the copper coins were intended for small daily transactions and internal circulation is well known, so they did not usually get outside the internal market⁴.

Over the last three decades there has been a dramatic increase in the study of Ottoman coins in Romania and Moldova. E. Nicolae determined that the influx of Ottoman coins to the Principality of Moldavia preceded its incorporation into the political system of the Ottoman Empire⁵. The researcher made an important contribution regarding the influx of the Ottoman copper mangirs in the late 14th – early 15th c. and the Ottoman silver akçe since 1430s, as well as the production of forgeries and imitations of the Ottoman types in the late 15th – early 16th centuries.⁶

The finds of coins struck before the Ottoman conquest of Belgorod will supplement the representation of the influx of the Ottoman coins to the Carpatho-Danubian area with new details, especially regarding the influx of the mangirs of Mehmed II (1444-1446, 1451-1481) to Belgorod.

The aim of this article is to ascertain the time and circumstances of the influx of the early Ottoman coins⁷, especially the copper ones, to Belgorod, as well as their role in local circulation.

¹ Since this article deals first of all with the Moldavian period of Bilhorod-Dnistrovskiy, the name Belgorod, as it is known in the early Moldavian chronicles will be used henceforth.

² Boguslavskiy 2013, p. 773.

³ Yanov 2016, p. 92.

⁴ Pamuk 2000, p. 38.

⁵ Nicolae 2003, p. 45; Nicolae 2005, p. 124-125.

⁶ Nicolae 2003, p. 45-50, 53-69; Nicolae 2005, p. 124-131; Moneda 2015, p. 170-171, 181-182, 183-184.

⁷ In this article the term *early Ottoman coins* indicates the issues that preceded the mass penetration of the Ottoman currency to the examined region, i.e. the coins struck before Bayezid II's reign.

Overview of the coin finds

The following finds of the early Ottoman mangirs from Belgorod are presented in this article: one coin of Murad I (1359/62-1389), six coins of Murad II (1421-1444, 1446-1451), twenty-nine coins of Mehmed II (Pl. I-III). One earlier unpublished coin of Mehmed II (cat. no. 13) is stored in the Bilhorod-Dnistrovskiy Local Lore museum. It was found in the territory of Belgorod fortress by a private person. The rest of the coins are stored in the Odessa Archaeological Museum. They were found during the archaeological excavations of Belgorod fortress and the adjacent area carried out by Belgorod-Tyra's expedition of the Institute of Archaeology of Ukraine between 1999 and 2015. These finds, except for one coin (cat. no. 24) found in 2015, were presented by the author of this article co-authored with G. Boguslavskiy at the 14th and 15th national numismatic symposiums in Chişinău⁸. Among the archaeological finds, one mangir of Mehmed II, found by the Bilhorod-Dnistrovskiy archaeological expedition of the Institute of Archaeology of Ukraine during the excavations in the late 1940s-early 1960s, should also be mentioned⁹.

The study of monetary circulation in this region will not be complete if one disregards the coins from private collections, though such finds are considered unreliable sources¹⁰. The following unpublished coins from private collections were reported to have been probably found in the territory of Belgorod: four akçes of Murad I (type with three lines on the reverse), six akçes of Bayezid I (1389-1402), one akçe of Murad II of 834 AH (issued between 1430/31-1444) struck in Serez, one mangir of Murad II struck in Edirne, two akçes of Mehmed II of 855 AH (issued between 1451-1460) struck in Edirne and Serez, one akçe of the same sultan of 886 AH (1481) struck in Novar and one mangir of Mehmed II's first reign (1444-1446) from an undetermined mint.

The finds of early Ottoman coins are also known from the other places of the Carpatho-Danubian area and neighbouring regions (about the influx of the silver akçes since the 1430s in the examined region see below). Two mangirs (one of Bayezid I and the other one of Mehmed Çelebi (1403-1413) previously attributed to Emir Süleyman (1402-1413)) were found during the archaeological excavations in Suceava¹¹. E. Nicolae mentioned the unpublished mangirs of the same two issuers found in Old Orhei (Orheiul Vechi, located near the village Trebujeni, Orhei raion, the Republic of Moldova) and Costeşti (Ialoveni raion, the Republic of Moldova)¹². A. Crivenco and E. Goncharov published two mangirs of Bayezid I, six mangirs of Mehmed Çelebi and one mangir of Emir Süleyman found in the territory of the Republic of Moldova (the exact places are unknown)¹³. Two unpublished mangirs of Mehmed II (struck in Bursa and Amasya) also belong to finds from unknown places in the Republic of Moldova.

⁸ Boguslavskiy, Yanov 2013, p. 40-41 (some coins from that list were reattributed); Boguslavskiy, Yanov 2015, p. 19-21.

⁹ Karashevich, Boldureanu, Dergaciovă 2013, p. 286.

¹⁰ Kotsur 2016, p. 11-14.

¹¹ Nicolae 1996, p. 187, no. 32; Nicolae 2005, p. 126, fn. 7; Moneda 2015, p. 170, 174, pl. LV, nos. 1, 2.

¹² Nicolae 2005, p. 126, fn. 7; Moneda 2015, p. 170-171, 174, pl. LV, nos. 4-6.

¹³ Crivenco, Goncharov 2015, p. 68, 76-77, pl. IX, nos. 97-106.

As for the neighbouring regions, one akçe of Orhan Gazi (1324/26-1359/62) found near the village Chulakivka (Hola Prystan raion, Kherson oblast, Ukraine) was published by V. Pivorovich¹⁴. Also, the unpublished hoard was found near the village Dneprovskoye (Ochakiv raion, Mykolaiv oblast, Ukraine). It contained ca. 432 Moldavian coins of Peter I Mușat (1375-1391) and ca. 265 Oriental coins (the Ottoman akçes of Murad I, Bayezid I and the Juchid dangs of Toqtamish (1380-1395)). Such a hoard is a very extraordinary find for northern Black Sea area.

E. Nicolae published seventeen early Ottoman mangirs from Dobrogea, in most cases from unknown locations: one coin of Bayezid I, one coin of Emir Süleyman, five coins of Murad II and ten coins of Mehmed II¹⁵.

The influx of early Ottoman coins in the Carpatho-Danubian area until the mid-15th century

Before appearing in the Carpatho-Danubian area in the late 14th – early 15th c., the Ottoman coins were preceded by the coins from the Christian (Cilician Armenia, the Empire of Trebizond¹⁶, Latin Empire, Byzantine Empire¹⁷) and Islamic (Seljuq of Rum, Anatolian possessions of Ilkhans, Anatolian beyliks) states of Asia Minor, along with the Mamluk coins from neighbouring Syria¹⁸. The finds of coins from the Balkan region¹⁹, Central Europe and the Mediterranean²⁰ have also been recorded in this region. The majority of these coins are copper. The coins from Asia Minor were present in the Prut-Dniester area²¹ throughout its incorporation into the Golden Horde, i.e. from the 1240s to 1369. However, the majority of these coins date to 1350-1360s, which coincides with the period of flourishing international trade and development of urban centers – Yangi Shehr or Shehr al-Jedid (Old Orhei), Costești and Belgorod (known at that time as Aqchakerman in the Oriental sources and Moncastro in the European sources)²². During 1359-1369, i.e. the period of autonomy of the area later known as Țara de Jos (the Lower Land, south-eastern part of the Principality of Moldavia), the local rulers started issuing the own currency: puls of Costești-Gârlea type with pseudo-Arabic inscriptions in ca. 1359-1363, silver dangs of Yangi Shehr and Shehr al-Jedid in 1362/63-1368/69, copper puls of Shehr al-Jedid in ca. 1365-1367. Some of the «rose type» anonymous puls of Janibek are believed to be of local or Crimean origin²³. The extensive mintage of local copper coinage testifies not only to the autonomous claim of the local rulers, but also to the need for petty coinage on

¹⁴ Pivorovich 2008, p. 122.

¹⁵ Blaskó, Nicolae 1986, p. 298-299, nos. 1-11; Nicolae, Donoiu 1992, p. 299, nos. 1-3; Nicolae 2003, p. 107-111, nos. 1-10.

¹⁶ Moneda 2015, p. 131; Crivenco, Yanov 2015, p. 181-186

¹⁷ Crivenco 2016a, p. 26-29.

¹⁸ Nicolae 2002, p. 145-150; Crivenco, Kazarov 2012, p. 31, 35, no. 48; Dobrolyubskiy, Yanov 2013, p. 158, no. 18; Crivenco, Goncharov 2015, p. 64-87.

¹⁹ Crivenco, Ovcarov 2012, p. 23-26; Crivenco 2014, p. 339-346; Moneda 2015, p. 131.

²⁰ Moneda 2015, p. 131-133; Crivenco 2016b, p. 305-310.

²¹ Unlike the early Ottoman coins, the precedent coins of the other states of Asia Minor did not apparently appear to the west of Prut River.

²² Polevoy 1989, p. 12-13; Crivenco, Goncharov 2015, p. 69.

²³ Nicolae, Bugoi, Constantinescu 2008, p. 385-392.

the market²⁴. The latter promoted the further influx of the non-Juchid copper coins and created conditions for their acceptance in circulation along with the local copper issues. Nevertheless, the participation of these coins in local circulation is still open to question.

According to the inventory of finds, Anatolian coins initially reached the Prut-Dniester area through Belgorod. But their influx from the Balkans through the Lower Danube region is not excluded, though the finds of these coins, with a few exceptions, are almost absent on the left bank of the Danube (in its estuary area)²⁵. During the period of the Golden Horde's domination, Belgorod was an important center of seaborne trade. The Genoese merchants, who appeared in the city in the late 13th c., played a leading role in its commercial activity²⁶. Close trade relations of Belgorod with Asia Minor are proved not only by the numismatic material, but also by the finds of Anatolian pottery of 14 – 15th c. (so-called Milletus ware)²⁷.

The nearest region where finds of coins of Asia Minor are known in considerable amount is Crimea, especially its south-eastern part. Some of the coins of Seljuqid Sultan Ghiyas ad-Din Kaykhusraw III (1265-1282), probably found in Costești, are assumed to have been struck in Crimea²⁸. Thus, Crimea could have been an intermediary on the way of the coins of Asia Minor to the Prut-Dniester area through Belgorod, as close trade relations had been connecting Belgorod with Crimea since the late 13th c. (the first Genoese ship mentioned in the written sources to appear in Belgorod came from Caffa in 1290)²⁹.

In 1369 the activity of Shehr al-Jedid mint ceased, indicating the definitive separation of the area of Țara de Jos from the Golden Horde. During the transition period, the economic situation of this region was in decline, but it was revived when this area was incorporated to the Principality of Moldavia³⁰, probably during the reign of Peter I Mușat (1375-1391)³¹. Local circulation was based on the old Juchid coins, but it was also supplied by the new Juchid silver and copper issues of the late 14th – early 15th c.³² The first Ottoman coins to appear in the Carpatho-Danubian area, as the majority of their finds are copper mangirs, could have probably been accepted along with the Juchid copper puls as a circulating medium, as well as the precedent coins from the other states of Asia Minor. However, they were unlikely to play an active role in local circulation.

Some Ottoman mangirs of Bayezid I and Mehmed Çelebi found in the Carpatho-Danubian area bear countermarks: the *portal* or *schematic edifice* (the earlier

²⁴ Polevoy 1989, p. 14-15.

²⁵ Crivenco, Kazarov 2012, p. 31, 35, no. 48; Dobrolyubskiy, Yanov 2013, p. 158, no. 18; Crivenco, Goncharov 2015, p. 65-66, 69-70.

²⁶ Polevoy 1989, p. 8.

²⁷ Boguslavskiy 2013, p. 785, 790; Crivenco, Goncharov 2015, p. 70.

²⁸ Goncharov 2007, p. 116-119; Goncharov 2009, p. 118-132; Crivenco, Goncharov 2015, p. 66, 69-70; Goncharov, Zaitsev 2016, p. 117.

²⁹ Polevoy 1989, p. 8-9.

³⁰ Moneda 2015, p. 136.

³¹ Boguslavskiy, Dergaciova 2011, p. 83; Boguslavskiy 2013, p. 765.

³² Moneda 2015, p. 136-137.

ones), *Chrismon* or *Chi-Ro* and *rosette* (the later ones). Some of these countermarks were also placed on the Juchid pulis of the late 14th – early 15th c. found in the same region. The *schematic edifice* is the most frequent, but the Juchid pulis were also countermarked by the simple punches, *rose*, *cross*, and *rinseau*. Thus, the Ottoman coins circulated along with the Juchid pulis in the same area, where these countermarks were placed³³. The *portal* is attributed to Caffa; it appears on the Caffa aspers as an emblem of the Republic of Saint George (Genoa). *Chrismon*, or *six-pointed star* was attributed to Feodoro – the medieval Orthodox state in southwestern Crimea, but M. Choref considers that it is rather a sign of some Tatar ruler than a *Chi-Ro* (the first letters of Christ's name in Greek)³⁴. A. Ponomaryov also considers that it cannot be a Christian sign *Chi-Ro* and attributes it as a sign of Beg Pulad placed on the coins in 1386³⁵. However, E. Nicolae supposes some of these countermarks known on the Juchid pulis and Ottoman mangirs to be of Moldavian origin, being placed initially in Costești and then in Belgorod. According to his hypothesis, the local authorities gained profit by placing the countermarks on the old Juchid pulis and thus returning them to circulation as legal tender at a fixed exchange rate higher than their real value. At the same time, some of the Ottoman coins, appeared in the Carpatho-Danubian area as a result of various sorts of ties, were countermarked and put into circulation, owing to their types being resembled the Juchid pulis to which the local population was accustomed. E. Nicolae proposes to date the *schematic edifice* to the period from 1395 to 1410, while the *Chrismon* was placed later. The countermarked copper coins were withdrawn from circulation by means of introducing the Moldavian pul and Asprokaston pul (see below)³⁶. Still, a detailed analysis of the mentioned countermarks is required, including the comparing of the *portal* or *schematic edifice* types found in Crimea with those found in the area of the Principality of Moldavia.

However, the majority of the Ottoman coins found within the territory of the Principality of Moldavia do not bear any countermarks, thence E. Nicolae assumed that, having been withdrawn from circulation in the Ottoman Empire (according to the practice described below), they were exported to this region as a raw material. These coins could have been used for producing or repairing some copper items³⁷.

The mangirs of Murad II found in Belgorod do not bear any countermarks. They were unlikely to participate in local circulation along with the Juchid pulis, the latter having already been withdrawn from circulation towards the end of Alexander I's reign (see below), i.e. the time when most of Murad II's mangirs could have appeared in Belgorod.

Some of the early Ottoman coins, as well as the precedent coins from the other states of Asia Minor, could have also appeared in the Prut-Dniester area through Crimea. The silver akçe and copper mangirs of Murad I, Bayezid I, Emir Süleyman,

³³ Nicolae 2005, p. 126, fn. 7, 8; Moneda 2015, p. 136-137, 142, pl. XXXVI, nos. 6-7, 170-171, 174, pl. LV, nos. 3-6.

³⁴ Choref 2013, p. 373-374.

³⁵ Ponomaryov 2011, p. 75.

³⁶ Nicolae 2005, p. 126; Moneda 2015, p. 136-137, 170-171.

³⁷ Moneda 2015, p. 170.

Mehmed I Çelebi (mangirs struck during the interregnum 1403-1413) and akçes struck after reuniting the Ottoman Empire, 1413-1421), Murad II and Mehmed II are quite well represented among the finds from Crimea, though most of them are unpublished³⁸. Some of these coins bear the Crimean countermarks, indicating their participation in local circulation before the Ottoman conquest of the Crimean Genoese colonies and the Principality of Feodoro, and subordination of the Crimean Khanate as a vassal state in 1475.

According to E. Nicolae, the early Ottoman coins could have come to the Lower Danube area and Moldavia along the route Sinop – Kilia as a result of contacts between the beylik of Jandar and the Principality of Wallachia, in which Moldavia was also involved³⁹. During the power struggles between the sons of Bayezid I, known as the Ottoman Interregnum, Isfendiyar Bey of Jandar and Mircea cel Bătrân of Wallachia supported Musa Çelebi against Emir Süleyman. Probably in 1409, Isfendiyar Bey boarded Musa on a ship at Sinop and he crossed the Black Sea to Wallachia. The alliance between Mircea and Isfendiyar against the Ottomans could have already existed before the battle of Ankara in 1402, during Bayezid I's reign. After the end of the civil war, rebels Şeyh Bedreddin and Mustafa Çelebi also used the route from Sinop to cross to Wallachia⁴⁰.

When did the mangirs of Mehmed II appear in Belgorod?

An attention should be drawn to the increase of Mehmed II's mangirs in comparison with the coins of previous sultans found in Belgorod (Pl. IV). At the same time, while the finds of coins of Bayezid I and Mehmed Çelebi are known even in the capital of the Principality of Moldavia, the area where the coins of Murad II and Mehmed II were found restricts only to Belgorod (except for two mangirs of Mehmed II mentioned above, found in the Republic of Moldova). It should be noted that the conquest of Belgorod by the army of Bayezid II in 1484 is well reflected in the coin finds, as the silver and copper coins of this sultan both predominate over all others Ottoman issuers represented in the examined finds from Belgorod⁴¹ (Pl. IV). At a glance, the appearance of the coins of Mehmed II in Belgorod after its Ottoman conquest, along with the coins of his son Bayezid II that flooded the local market, seems obvious. One should take into account that the archaeological context does not allow to elucidate the time when these coins were lost. The coins discovered by Belgorod-Tyra's expedition are either surface finds, or finds from upper disturbed layers, or other layers disturbed by postdepositional alterations⁴². Consequently, to clarify the time when Mehmed II's coins appeared in Belgorod requires an examination of some peculiarities of the Ottoman coin types and their dating.

The system of the issuing, distribution and circulation of copper coinage in the

³⁸ As regards the published ones – see Goncharov, Zaitsev 2016, p. 116-117.

³⁹ Moneda 2015, p. 171.

⁴⁰ Kastritsis 2007, p. 130-134.

⁴¹ Yanov 2016, p. 92.

⁴² The information on the archaeological context of the coin finds was kindly provided by G. Boguslavskiy.

Ottoman Empire was directed for providing the treasury with some extra income. The state fixed the nominal price for the mangirs much higher than the price for metal, and refused to accept these coins as tax payments. With each subsequent issue of the mangirs, the previous ones are believed to have been declared invalid and collected at reduced prices⁴³. Such a withdrawal of the old copper issues from circulation eliminates a possibility of the influx of Mehmed II's mangirs to Belgorod during the reign of successive Sultan Bayezid II. However, E. Nicolae, examining the finds and types of mangirs, disputed a statement that such withdrawal was regular⁴⁴. Nevertheless, if one admits that Mehmed II's mangirs could have appeared in Belgorod after 1484, the later issues of this sultan should predominate the earlier ones. However, the finds of these later issues, i.e. the types of 875, 878, and 886 AH (according to N. Kabaklarli's catalogue⁴⁵), are still unknown in Belgorod, and only two undated mangirs presented in this article (cat. nos. 32, 33) are supposed to have been struck at the end of Mehmed II's reign.

During Mehmed II's reign, the practice of periodic withdrawals of the old issues from circulation was applied to the silver akçes as well. The new akçe types were each issued with reduced weight. With the old types being prohibited, the population was obligated to bring them to the mints and exchange at par for the new ones, thus providing the treasury with considerable revenue. However, despite the state control, it is doubtful that the old coinage was all returned to the mint⁴⁶. Judging by the composition of the hoards, one can see that the previous Ottoman issues could have circulated along with the current coins⁴⁷. Bayezid II stopped the practice of periodic debasements and prohibition of the old akçe issues⁴⁸.

Mehmed II changed the akçe type, thus carrying out the regular debasement, every 10 years by the Islamic calendar during his second reign, with an exception of the last issue of 886 AH. The akçes of this sultan bear the following dates: 848, 855, 865, 875, 885 and 886 AH (Pl. V). These dates indicate the periods of minting for each type: 848-850 AH (1444-1446, the first reign), 855-865 AH (1451-1460), 865-875 AH (1460-1470), 875-885 AH (1470-1480), 885 AH (1480-1481) and 886 AH (1481) respectively, not a single year⁴⁹. The akçe type of 865 AH was determined by E. Nicolae to be corresponded to the mangir types of 867 AH due to having similar circular legends on both sides⁵⁰. Thus, one can see that the akçe types, though not being identical, correspond to some mangir types. The dates on the mangirs, as well as the dates on the akçes, indicate the certain period of minting. However, unlike the akçes, the periods of minting for the mangirs vary for different mints. In addition, the mangir types could have been replaced more often than the akçe types. The certain sequence of replacement of the types can be determined only for Edirne and Bursa,

⁴³ Kabaklarli 1998, p. 41-45, 50-51; Pamuk 2000, p. 38-39.

⁴⁴ Nicolae 2003, p. 98.

⁴⁵ Kabaklarli 1998, p. 181-182.

⁴⁶ Pamuk 2000, p. 48-50.

⁴⁷ Nicolae 2003, p. 78-84, 87-91, 93-95.

⁴⁸ Pamuk 2000, p. 58.

⁴⁹ Nicolae 2003, p. 35.

⁵⁰ Nicolae 2003, p. 101.

while for the other mints a determination of the periods is hypothetical⁵¹. Thus, the periods of minting for some types of mangirs are following:

1. 848-850 AH (1444-1446), i.e. the first reign of Mehmed II;
2. 855-859 AH (1451-1454/55) for Amasya, or 855-861 AH (1451-1456/57) for Bursa, or 855-865 AH (1451-1460/61) for Tire (for Bursa and Tire these periods have been determined hypothetically), or 857-861 AH (1453-1456/57) for Edirne;
3. 861-865 AH (1456/57-1460/61) for Bursa⁵², or 861-867 AH (1456/57-1462/63) for Edirne;
4. 865-875 AH (1460/61-1470/71) – the beginning of this period is the same for Ayasluk, Bursa and Tire, but for Edirne, Kostantiniyye and Amasya it starts from 867 AH (1462/63). The date of the end of this period is conjectural.
5. 875-886 AH (1470/71-1481).

It is hard to determine the sequence of replacement of the types (if such replacement took place) for the 5th period. Only the mangirs of Kostantiniyye bear the dates of this period – 875, 878 and 886 AH⁵³.

The periods of minting of some undated mangirs can also be presumably defined. The fact is that the new issue of both silver and copper coinage that had to replace the previous ones had to have a design distinctly different from the old types (see for example the sequence of akçe types until 875 AH on the Pl. V). Consequently, those undated mangir types that are similar to the certain dated mangir or akçe types were probably issued at the same period. In this manner, eighteen coins presented in this article (cat. nos. 9-14, 21-25, 27-33) were presumably attributed to the certain periods (see descriptions in the catalogue below) (Pl. V)⁵⁴. As a result, one can see that among twenty-six mangirs of Mehmed II, the period of which could be determined, one was struck in 1444-1446, seventeen – in the 1450s (2nd and 3rd periods), six – in the 1460s and two – in the 1470s. Such unequal proportion attests that these coins appeared in Belgorod before its Ottoman conquest, during Mehmed II's reign and their inflow was considerably reduced or discontinued in the 1470s. Only two mangirs presented in this article (cat. nos. 32, 33), presumably attributed to the end of Mehmed II's reign, could have been an exception and appeared in Belgorod after 1484, along with Bayezid II's coins.

This peculiarity is reflected in the proportion of mints represented among the examined finds of Mehmed II's mangirs. These data can be compared with the finds from Dobrogea (Pl. VI). The point is that Dobrogea was conquered by Bayezid I in 1391, but definitely fell under the control of the Ottoman Empire in 1416-1417, much earlier than Belgorod⁵⁵. The finds from Dobrogea demonstrate that the majority of coins were struck in Edirne (50%) and Kostantiniyye (20%). This can be explained by

⁵¹ Some mints could issue only a few dated types (Ayasluk, Tire), while the others (Egridir, Ankara, Bergama, Bolu, Karahisar, Kastamonu, Konya) issued only undated types – cf. Kabaklarli 1998, p. 145, 151-158, 178-180, 184-189.

⁵² There are mangirs of both 865 and 867 AH of the same type struck in Bursa – cf. Kabaklarli 1998, p. 163-166.

⁵³ Kabaklarli 1998, p. 137-142, 146-147, 149-150, 155, 158-164, 180-182, 184.

⁵⁴ The sequence of types (Pl. V) was determined only for those types presented in this article.

⁵⁵ Atanasov 2009, p. 183-207.

the fact that the Ottoman mints each distributed copper production to a certain region – for Dobrogea it was at first Edirne, then Kostantiniyye. According to E. Nicolae, Kostantiniyye could have replaced Edirne as a mint to distribute the mangirs to Dobrogea during the period from 867 AH (1462/63) to 875 AH (1470/71). Coins of other mints located in Anatolia (Bursa and Tire) were not distributed to Dobrogea, but appeared there as a result of the other contacts⁵⁶. In opposite to Dobrogea, the majority of Mehmed II's coins from Belgorod were minted in Bursa (38%), not in Edirne (17%). Generally, the share of the Anatolian mints (Amasya, Ankara, Bergama, Bolu, Bursa, Karahisar, Tire) for the finds from Belgorod is considerably larger than that from Dobrogea (77% to 20%). Such proportion of mints indicates that Mehmed II's mangirs were not distributed to Belgorod under control of the Ottoman officials, but appeared there as a result of the other contacts, mainly through the seaborne trade, when the city was not incorporated into the Ottoman Empire yet. The circumstances of their influx should be examined in the light of relations between the Ottoman Empire and the Principality of Moldavia.

Fluctuations in the influx of the Ottoman coins and relations between the Ottoman Empire and the Principality of Moldavia

Before capturing it in 1484, the Ottomans had unsuccessfully sieged Belgorod several times – in 1420, 1454, 1475 and 1476⁵⁷. However, the Ottoman coins appeared in Belgorod before 1484 first of all due to the international trade. As mentioned in the introduction, this city was one of the most important transit centers of the Principality of Moldavia. Trade relations with Eastern and Southern countries brought the gold issues of Venetian ducats and their Genoese imitations, as well as the silver coinage. Besides the Ottoman akçes, the latter was represented by the Juchid and Crimean Khanate (Giray) akçes and Genoese Caffa aspers⁵⁸.

The Moldavian merchants had been conducting trade in Constantinople at least since the 1430s, when it was still the Byzantine capital⁵⁹. However, Moldavia's southern seaborne commercial activity became more intensive after 1456, when Prince Peter III Aron (1451-1457, with interruptions) pledged to pay an annual tribute (*haraç*) that amounted to 2000 ducats. In his turn, Mehmed II gave permission for the merchants from Belgorod to conduct trade in Edirne, Bursa and Kostantiniyye and guaranteed their protection⁶⁰.

Meanwhile, the production of Ottoman silver coinage and their influence on the international market increased as a result of growing output of silver mines. From the 1390s to the 1460s the Ottomans captured, lost and recaptured the leading silver-mining centers in Macedonia, Serbia, and Bosnia⁶¹. The Ottoman akçes had high content of precious metal. Together with the strengthening of the Ottoman political

⁵⁶ Nicolae 2003, p. 100-101.

⁵⁷ Boguslavskiy 2013, p. 771-772, 788.

⁵⁸ Moneda 2015, p. 170-173, 188.

⁵⁹ Oberländer-Târnoveanu 1991, p. 165-180.

⁶⁰ Documente 1976, p. 1-3.

⁶¹ Pamuk 2000, p. 37.

and military influence in the Black Sea region, this factor promoted distribution of the akçe to the Principality of Moldavia⁶². Despite the debasements, the fineness of the Ottoman akçe did not change much⁶³. E. Nicolae proved that the influx of the Ottoman akçe to Moldavia was discontinuous and varied in different periods: 1. 1430s-1456; 2. 1456-1470; 3. 1470-1487; 4. 1487 and onwards (this period exceed the chronological bounds of this article). During the first period, the amount of the Ottoman akçe in Moldavian circulation was not numerous. The second period begins with the treaty of 1456 that increased trade relations with the Ottoman Empire and consequently the influx of its currency. The effect of this treaty was preserved after Prince Stephen III the Great (1457-1504) ascended the throne, but was reduced due to worsening relations with the Ottomans, especially after the capture of Kilia fortress by the Moldavian troops in 1465. This period ends when Stephen III started the war with the Ottoman Empire and its ally Wallachia. During the third period, i.e. the war with the Ottomans, trade relations, as well as the influx of the Ottoman akçe, had practically stopped. This discontinuance explains the much smaller amounts of the mangirs struck during the end of Mehmed II's reign in comparison with the previous issues of this sultan among the finds from Belgorod. During the fourth period, i.e. after the truce with the Ottomans, the akçe returned to the Moldavian market (for Belgorod this period started from 1484)⁶⁴.

The distribution of the Ottoman akçe in the Principality of Moldavia reflected in the production of local forgeries and imitations reproducing the original Ottoman akçe types. The forgeries were made of a copper core plated with silver, while the imitations were made of silver, but they had reduced weight and contained less precious metal in comparison with the original issues. The forgeries and imitations both have distorted («barbarized») legend, indicating their local provenance. Their production was earlier believed to be divided into two chronological groups corresponding to the periods of the influx of the Ottoman akçe to Moldavia: before 1470 and after 1487, i.e. these coins are replications of the akçe types of Murad II, Mehmed II (issues of 848, 855 and 865 AH) and Bayezid II. The forgeries and imitations of Mehmed II's akçe issued in 875, 885 and 886 AH are still unknown, with one exception – the imitation of the issue of 875 AH⁶⁵.

In 2001, a group of coins containing the forgery akçe (of Murad II and Bayezid II) together with the original ones was discovered in Old Orhei. The forgeries of Murad II had some features of distorted legend similar to those of Bayezid II, thus giving basis to E. Nicolae to reconsider the theory of two stages of the local forgeries and imitations production. The researcher figured out that the akçe of Murad II and Mehmed II were in fact reproduced at nearly the same time as those of Bayezid II, i.e. during the end of Stephen III's reign and the beginning of Bogdan III's reign (1504-

⁶² Nicolae 2005, p. 126-127.

⁶³ Kabaklarli, Erüreten 2007, p. 128-136.

⁶⁴ As E. Nicolae researched the period from the beginning of second reign of Mehmed II till the end of the reign of Bayezid II (i.e. 1451-1512) in his thorough monograph, his periodization within this framework is the following: 1. 1451-1470; 2. 1470-1487; 3. 1487-1512 – cf. Nicolae 2003, p. 46-47.

⁶⁵ Nicolae 2003, p. 56, 60-61, no. 8.

1517). This production was initiated for economic purposes: for alleviation the financial difficulties and supplying the commercial activities with currency. The imitations were used for large internal and external transactions, particularly with Transylvania, while the forgeries were used only for small transactions on internal market⁶⁶.

Thus one can see that the influx of the Ottoman akçes after 1487 was more intense than before 1470 and Mehmed II's mangirs found in Belgorod had appeared there before the mass production of the forgeries and imitations of the Ottoman akçes began. There are several hoards with Ottoman akçes apparently buried before 1470, found in the area of the Principality of Moldavia, – Roman (Neamț County, România), Victoria (former Cârpiți, Iași County, România), Schinetea (Vaslui County, România), and a hoard of uncertain origin⁶⁷. However, at this time the Ottoman akçe was not yet the main currency entering Moldavia as a result of Oriental trade, as Caffa asprs, Juchid and Crimean Khanate akçes were still in circulation. After the Ottoman capture of the Genoese colonies in Crimea in 1475, the issue of the Caffa asprs ceased, so the Ottoman akçes replaced them. However, the Caffa asprs, as well as the Juchid akçes, remained in circulation in Moldavia and Podolia until the late 15th – early 16th c.⁶⁸ The Crimean Khanate coins continued to enter the Principality of Moldavia, but their finds are not numerous in this region, especially those struck in 17th c.⁶⁹

Nevertheless, while the participation of the silver akçes in international trade is not in doubt, the role of Mehmed II's copper mangirs found in Belgorod remains unclear: whether they were merely the accidental losses or the evidence that such coins could have at least partly participated in local circulation as a small change.

Petty coinage and bullion famine

It should be noted that there were different levels of circulation for the various denominations. The international trade in the 13 – 14th c. did not affect the lowest level of small daily transactions – the sphere of petty coinage circulation⁷⁰. However, the role of petty coinage changed during so-called bullion famines in Western Europe (particularly in the Low Countries and England), when late medieval economy experienced the periodic shortages of precious metals, with attendant problems of severe deflation, especially during two periods – ca. 1375-1415 and ca. 1440-1470⁷¹. As a result of deflation, the purchasing power and thus the demand for petty coinage have increased. During the second phase of bullion famine, petty coinage diverted even to uses normally served by higher-value coins, including hoarding, foreign trade payments and export as a raw material⁷². In these conditions, mints had to increase the issue of petty coins, but in some cases, the foreign coins of the lowest denominations were accepted as well. For instance, there were two incursions of the Venetian soldini

⁶⁶ Nicolae, Răileanu 2002, p. 189-194; Nicolae 2005, p. 129-130; Moneda 2015, p. 182.

⁶⁷ Nicolae 2003, p. 46, 87; Nicolae 2005, p. 127.

⁶⁸ Petov, Dergaciova 2012, p. 190-192; Dergaciova 2015a, p. 20-24.

⁶⁹ Boldureanu 2014, p. 21.

⁷⁰ Munro 1988, p. 404-405; Kuroda 2016, p. 15.

⁷¹ Munro 2012, p. 319.

⁷² Munro 1988, p. 408-409; Spufford 1988, p. 360-362.

to England – in 1400-ca. 1415 and ca. 1501-1521. These coins circulated unofficially as a halfpenny due to the lack of domestic petty coinage⁷³.

However, these features first of all concern the coins containing at least small amounts of silver. Unlike the Ottoman Empire, European countries were not still accustomed to all-copper coinage in the 15th c.⁷⁴ So could the bullion famine have somehow exerted influence on the Ottoman mangirs intended for internal circulation? To answer this question requires an overview of petty coinage circulation on the market of Belgorod, when it was part of the Principality of Moldavia.

Petty coinage on the Moldavian market

The bullion famine was also reflected in the issues of the Principality of Moldavia, strengthened by the absence of its own mines⁷⁵. As mentioned above, Belgorod was probably incorporated into the Principality of Moldavia during the reign of Peter I, whose coins are known among the finds from Belgorod. From the reign of Alexander I and until 1484, Moldavian coinage predominated on the market of Belgorod⁷⁶.

The Moldavian monetary system was based on the groat. In contrast to the Oriental monetary systems, at first Moldavia did not have its own copper coinage, so like the other European countries, Moldavian petty coinage was represented by the billon coins or even silver-plated copper coins (the half groats and half groats with reduced weight)⁷⁷. At the same time, as mentioned above, in the early 15th c. some Juchid copper issues were still in circulation in the south-eastern part of the Moldavian state⁷⁸. An important discovery was made by L. Dergaciova, who proved that the copper issue of Alexander I with the letter *A* on the reverse, struck in 1425-1430 and previously known as half groat, was in fact another denomination. Comparing with the similar cases in neighbouring countries, it was called the Moldavian pul. These coins circulated at forced rate and displaced the old Juchid puls⁷⁹. The Moldavian puls struck in large quantities have been found throughout the principality, as well as outside it, in countries with which Moldavia had close economic relations. So this denomination was used not only in the internal market, but also probably when performing international transactions. Moreover, there are several hoards with these coins reported both within and outside the principality⁸⁰. Thus, one can see that the precious metals shortage could have even caused the use of all-copper coinage in hoarding and international trade, in exceptional case of the Moldavian puls.

The Moldavian puls were unlikely to remain in circulation for a long time after their minting. Most of the recorded hoards with these puls include only this denomination, sometimes being accompanied by some other issues of Alexander I.

⁷³ Daubney 2009, p. 186-194.

⁷⁴ Spufford 1988, p. 362.

⁷⁵ Moneda 2015, p. 134-135.

⁷⁶ Boguslavskiy, Dergaciova 2011, p. 83.

⁷⁷ Dergaciova 2012a, p. 65-69; Dergaciova 2015b, p. 154.

⁷⁸ Moneda 2015, p. 137, 170-171.

⁷⁹ Dergaciova 2015b, p. 155-156.

⁸⁰ Dergaciova 2015b, p. 156.

The hoards from Rădăuți (Iași County, România; found in 1935) and Suceava (Suceava County, România; found in 1969), beside Alexander's issues, included coins of Iliaș (1432-1442, with interruptions)⁸¹, and the hoard from Belgorod (found in 1974) – one coin of Stephen II's first reign (1433-1435) (according to L. Dergaciova the hoard dates to the first year of his reign – 1433)⁸². The latest known hoard with the Moldavian pul is the above-mentioned hoard from Roman (Neamț County, România; found in 1975), buried in the very end of the 1440s⁸³.

Evidence of the withdrawal of the Moldavian pul from circulation can be found in the «Book of accounts» of Giacomo Badoer. According to this source, in 1436-1437, chir Jorgi Foti Vlaco sold to Constantinople the so-called *tornexi vlachesci di rame*, i.e. the Wallachian tornese – small copper or bronze coins. In 1438 they formed a part of the copper sent to Egypt⁸⁴. E. Oberländer-Târnoveanu calculated the weight of the huge amounts of coins sold in transactions mentioned in Badoer's book to amount to 2642.73 kg⁸⁵. The researcher associated chir Jorgi Foti Vlaco with pan Iurghici, who was a governor (*pîrcălab*) of Belgorod in 1443-1447 and a member of the Princely Council of Moldavia⁸⁶. L. Dergaciova considers that the term *tornexi vlachesci* could in fact mean the issues of Iliaș and Stephen II, and perhaps the late issues of Alexander I (including the Moldavian pul). The huge hoard found in Simferopol consisted entirely of Moldavian pul and their imitations could have been either a result of similar transactions of these coins as a raw material to Genoese merchants from Crimea, or the evidence of the other economic contacts⁸⁷. Selling copper coinage as a raw material is unusual for the Principality of Moldavia, which itself had to buy copper from Transylvania and Poland, but the price for copper in Constantinople, at least seventeen times higher than that in Moldavia, created favourable circumstances for such transaction⁸⁸.

Along with the Moldavian pul, there was another exceptional case when all-copper coinage was struck in the Principality of Moldavia – pul bearing a Greek cross between four roundels and a circular legend with the Greek name of Belgorod (*Asprokastron*) on the reverse, and hence called Asprokastron type pul. There are different versions about the dating of this type – either the reign of Alexander I, or the period of political instability during 1432-1457, or the beginning of Stephen III's reign. The latest proposition, submitted by E. Nicolae and accepted by L. Dergaciova, is to date this type toward the end of Alexander's reign and the reign of his first successors, not later than the 1440s⁸⁹. Unlike the Moldavian pul, the area where the Asprokastron pul circulated was not as wide, being restricted (with some rare exceptions) to Belgorod; moreover, these coins are known only among single

⁸¹ Pârvan 2001, p. 357-361, 371-374; Dergaciova 2015b, p. 156.

⁸² Dergaciova 2007, p. 87-93; Dergaciova 2015b, p. 156.

⁸³ Hordilă 1994, p. 401-422; Dergaciova 2015b, p. 156.

⁸⁴ Oberländer-Târnoveanu 1991, p. 174-176, Morrisson 2001, p. 234.

⁸⁵ Oberländer-Târnoveanu 1991, p. 175.

⁸⁶ Oberländer-Târnoveanu 1991, p. 170.

⁸⁷ Dergaciova 2012b, p. 210-212.

⁸⁸ Oberländer-Târnoveanu 1991, p. 176-178.

⁸⁹ Nicolae 2009, p. 217-226; Boguslavskiy, Dergaciova 2011, p. 82; Moneda 2015, p. 149.

finds, not in hoards⁹⁰. At the same time, the authorities of Belgorod put the silver Juchid coins into circulation by placing the Asprokastron type countermark (a Greek cross between four roundels similar to that which appeared on the Asprokastron pul) on them⁹¹.

Having started during the Golden Horde's domination, the tradition of copper coinage circulation in Belgorod was discontinued in the middle of 15th c. to be revived after the Ottoman conquest through the influx of Bayezid II's mangirs. The Moldavian and Asprokastron pul were not proved to remain in circulation after the middle of 15th c. Since this time, the Moldavian petty coinage was represented only by half groats. Political instability in the Principality of Moldavia between the 1430-1450s, caused by the power struggle and external threats, was reflected in monetary production by the issuing of debased coinage and by reducing the number of denominations⁹². Towards the end of his reign, Peter III Aaron undertook a monetary reform, increasing the silver content of coinage. It was continued by Stephen III, who issued groats and half groats with high silver content⁹³.

In spite of circulating at forced rate and thus being a sort of tax imposed on small transactions, copper coinage was required as small change⁹⁴. First of all, their disappearance could have adversely affected the poor people, who mainly used petty coinage. It is worth considering that even the lowest billon denominations had considerable purchasing power⁹⁵. One may suppose that this lack of petty coinage in Belgorod could have been covered by the Ottoman mangirs. However, there is no evidence that Mehmed II's mangirs could have been a substitute for the Moldavian copper coins. The amount of known finds, despite increasing in comparison with the previous issuers, does not allow to draw such a conclusion.

Conclusion

The examined finds of the early Ottoman coins demonstrate that their influx to Belgorod in particular and to the Carpatho-Danubian area in general was not a persistent process. It was determined by the state of internal market influenced by changeable economical, political and military factors.

Between the mid-14th c. and the early 15th c. the local population was thoroughly familiar with the Juchid copper issues, both local and from other regions of the Golden Horde (the copper coinage's circulation was much less developed in the previous period, i.e. in the late 13th – first half of 14th c.). It is possible that the copper coins from Asia Minor, including the Ottoman mangirs, could have been accepted to a lesser extent than the Juchid copper coins in local circulation as small change. Their appearance in the examined area was the result of international trade and probably of certain political relations. As for the silver Ottoman akçes, they were unlikely to

⁹⁰ Nicolae 2009, p. 219; Alekseenko, Dergaciovă, Tsepkov 2014, p. 348, 350; Moneda 2015, p. 149.

⁹¹ Moneda 2015, p. 149, 170.

⁹² Moneda 2015, p. 150.

⁹³ Moneda 2015, p. 154, 176-178.

⁹⁴ Pamuk 2000, p. 39.

⁹⁵ Munro 1988, p. 393.

participate in local circulation until the 1430s.

Despite the noticeable increase of Mehmed II's mangirs found in Belgorod in comparison with the previous issuers, they were not proved to participate in local circulation. The majority of these coins turned out to be struck in the 1450-1460s. By this time, in contrast to the period between the mid-14th to the early 15th c., the tradition of copper coinage circulation in Belgorod no longer existed, so the Ottoman mangirs could not have been accepted along with local petty coinage in small transactions anymore. As for the increase of their amount, it was rather determined by a number of other reasons:

1. The Ottomans obtaining control over the most important ports and trade routes in the Black Sea. As for the period between 1451 and 1470, the capture of Constantinople (1453), Amasra (1459), Sinop and Trebizond (1461) should be mentioned⁹⁶.

2. The trade agreement concluded between Mehmed II and Peter III Aaron in 1456.

3. The increasing amounts of silver akçe, as a result of Mehmed II's policy of interventionism and periodic debasements⁹⁷, created a demand for a corresponding increase in the mintage of copper mangirs.

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CATALOGUE MURAD I (1359/62-1389)

Obv.: the legend within the square cartouche:

مراد بن

اورخان

Rev.: the same as obverse.

1. AE, 1.28 g, 14-14.3 mm. OAM, inv. no. 57996. Pl. I, 1.

⁹⁶ Inalcik 2000, p. 211.

⁹⁷ Pamuk 2000, p. 40.

MURAD II (1421-1444, 1446-1451)

Edirne, ND

Obv.: the legend in a tugra: مراد بن محمد

An arrow above the tugra.

Rev.: خلد ملکه

ضرب ادرنه

Two parallel lines between rows with *knot of bliss* in center.

2. AE, 1.10 g, 13.7-15.3 mm. OAM, inv. no. 58148. Pl. I, 2.

Kabaklarli 1998, p. 107, Type III, 06-Adr-25.

Obv.: the same as no. 2.

Rev.: the same as no. 2, but with an arrow between rows.

3. AE, 2.66 g, 14.8-15.7 mm. OAM, inv. no. 58157. Pl. I, 3.

Kabaklarli 1998, p. 108, Type IV, 06-Adr-34.

Bolu, ND

Obv.: the same as no. 2.

Rev.: ضرب

بولی

Two tangent curves between rows with arrows on both sides.

4. AE, 1.38 g, 14.7 mm, pierced. OAM, inv. no. 58161. Pl. I, 4.

Kabaklarli 1998, p. 116, 06-Bo-01-06.

Edirne or Bolu, ND

Obv.: the same as no. 2.

Rev.: erased.

5. AE, 1.85 g, 14.3 mm. OAM, inv. no. 58144. Pl. I, 5.

Kabaklarli 1998, p. 107, Type III, 06-Adr-25; 116-117, 06-Bo-01-08.

Without mint name

Obv.: the same as no. 2.

Rev.: the ornament with dots.

6. AE, 2.18 g, 14.5-15 mm. OAM, inv. no. 58078. Pl. I, 6.

Kabaklarli 1998, p. 132-133, 06-X-11, 06-X-14.

Obv.: the same as no. 2, but with the letters اد before name محمد.

Rev.: the same as no. 6, but without dots within the ornament.

7. AE, 1.55 g, 13-16 mm. OAM, inv. no. 58149. Pl. I, 7.

Kabaklarli 1998, p. 133, 06-X-12.

MEHMED II (1444-1446, 1451-1481)
1. the first reign, 848-850 AH (1444-1446)
Bursa, 848 AH

Obv.: محمد بن

مراد

Two tangent curves, ۸۴ (84) on the left, ۸ (8) on the right.

Rev.: within the figured cartouche:

خلد ملکه

ضرب برسه

A straight line between rows.

8. AE, 1.02 g, 12.5-14.8 mm. OAM, inv. no. 58079. Pl. I, 8.

Kabaklarli 1998, p. 158-159, 07-Br-04-11.

The second reign, 855-886 AH (1451-1481)
2.1. 855-859 AH (1451-1454/55)

Amasya, ND

Obv.: within the figured cartouche: محمد بن. The legend around the cartouche is divided into three sectors: 1. مراد; 2. عز (نصره); 3. erased.

Rev.: خلد ملکه

ضرب اماسیه

Two intersecting lines between rows.

9. AE, 0.72 g, 11-12 mm. OAM, inv. no. 57998. Pl. I, 9.

10. AE, 0.75 g, 10.5 mm. OAM, inv. no. 58052. Pl. I, 10.

11. AE, 1.17 g, 13-14.2 mm. OAM, inv. no. 58140. Pl. I, 11.

12. AE, 0.65 g, 10.8-11.3 mm. OAM, inv. no. 58153. Pl. I, 12.

Kabaklarli 1998, p. 150, 07-Ams-37-41.

This type was attributed to this period after comparing it with the other mangir type of the same mint bearing the date 855 AH⁹⁸. However, there are some slight differences: the design of the cartouche containing the sultan's name on obverse, the absence of the ornament (*knot of bliss*) on the reverse of the undated type (Pl. V).

⁹⁸ Kabaklarli 1998, p. 146-147, 07-Ams-07-14.

2.2. 855-861 AH (1451-1456/57)

Bursa, ND

Obv.: within a triangle: مُحَمَّد بن. The legend in three sectors: 1. مراد; 2. خان; 3. عز نصره

Rev.: خلد ملکه

ضرب برسه

Two parallel lines between rows.

13. AE, 1.94 g, 14 mm. BDLLM, inv. no. 321. Pl. II, 13.

Kabaklarli 1998, p. 169, 07-Br-76-83.

This type was attributed to this period after comparing it with the akçe type of 855 AH⁹⁹: the sultan's name in the center of the obverse (but the sultan's name is within the circle on the akçe), similar legend in the sectors around the sultan's name (but without the date on the mangir), two parallel lines on the reverse (but without *knots of bliss* on the mangir) (Pl. V).

2.3. 855-865 AH (1451-1460/61)

Tire, ND

Obv.: مراد خان

محمد بن

Three parallel lines between rows with *knots of bliss* on both sides.

Rev.: خلد ملکه

ضرب تیره

Three parallel lines between rows with *knots of bliss* on both sides.

14. AE, 0.90 g, 13-13.5 mm. OAM, inv. no. 58158. Pl. II, 14.

Kabaklarli 1998, p. 189, 07-Tra-57-59.

This type was attributed to this period after comparing it with the akçe of 855 AH¹⁰⁰: parallel lines with *knots of bliss* on the reverse of the akçes and on both sides of the mangir (Pl. V).

⁹⁹ Nicolae 2003, p. 70-71.

¹⁰⁰ Nicolae 2003, p. 70-71.

2.4. 857-861 AH (1453-1456/57)

Edirne, 857 AH

Obv.: سلطان

محمد بن مراد

خان

Rev.: خلد ملکه

ضرب ادرنه

The date ٨٥٧ (857) within the hexagon cartouche between rows.

15. AE, 0.85 g, 11.3-13 mm. OAM, inv. no. 57997. Pl. II, 15.

16. AE, 0.96 g, 12.6 mm. OAM, inv. no. 58154. Pl. II, 16.

Kabaklarli 1998, p. 138-139, Type II, 07-Adr-08-14.

3. 861-865 (867) AH (1456/57-1460/61 (1462/63))

Edirne, 861 AH

Obv.: the legend in a tugra: محمد بن مراد ٨٦١

Rev.: خلد ملکه

ضرب ادرنه

A dotted line between rows.

17. AE, 0.74 g, 12-12.7 mm. OAM, inv. no. 58151. Pl. II, 17.

Kabaklarli 1998, p. 139, Type III, 07-Adr-19-21.

Bursa, 861 AH

Obv.: the legend within three tangent semicircles: 1. محمد بن; 2. مراد; 3. خان. The 3-pointed figure in center.

Rev.: two overlapped curves. The date ٨٦١ (861) within the area of overlap, خلد ملکه

above, ضرب برسه below.

18. AE, 1.30 g, 12.6-13.4 mm. OAM, inv. no. 58162. Pl. II, 18.

Kabaklarli 1998, p. 161, 07-Br-26-28.

Obv.: the same as no. 18, but with a dot in center.

Rev.: the same as no. 18, but the date is within the figured cartouche.

19. AE, 2.11 g, 13.7-15 mm. OAM, inv. no. 58145. Pl. II, 19.
Kabaklarli 1998, p. 160, 07-Br-19-22.

Obv.: the same as no. 18, but with a dot in a circle in center.

Rev.: erased.

20. AE, 1.68 g, 14 mm. OAM, inv. no. 58141. Pl. II, 20.

Bursa, ND

Obv.: the legend is divided by three straight lines into the sectors: 1. مُحَمَّد بن; 2. مراد;

3. خان. The 3-pointed figure in center.

Rev.: خلد ملکه

ضرب برسه

Two tangent curves between rows with a dot in center.

21. AE, 1.40 g, 13 mm. OAM, inv. no. 57999. Pl. II, 21.

22. AE, 1.29 g, 18 mm. OAM, inv. no. 58051. Pl. II, 22.

23. AE, 1.24 g, 15 mm. OAM, inv. no. 58155. Pl. II, 23.

24. AE, 0.93 g, 12.7 mm. OAM, inv. no. 58165. Pl. II, 24.

Kabaklarli 1998, p. 167, 07-Br-62-66.

This type was attributed to this period after comparing it with the previous mangir type of 861 AH: the obverse is divided into three sectors with the same legend:

1. مُحَمَّد بن; 2. مراد; 3. خان, but the design of the sectors differs. Besides, the word خان is written in the same way – the letter *nun* intercepts the letter *elif*. The reverse legends are similar, except for the absence of the date on this type and different lines between rows (Pl. V).

Bergama, ND

Obv.: The 3-pointed figure in center. The legend around: مُحَمَّد بن مراد خان

Rev.: خلد ملکه

ضرب برغما

A double helix line between two rows with a dot in center.

25. AE, 0.92 g, 12-12.5 mm. OAM, inv. no. 58150. Pl. III, 25.

Kabaklarli 1998, p. 156, 07-Brg-01.

This type was attributed to this period after comparing it with the mangir type

of Bursa of 861 AH (cat.no. 20)¹⁰¹: the 3-pointed figure in the center and the same legend, though not enclosed by semicircular lines, on the obverse. The word خان is written in the same way (Pl. V).

4. 865 (867)-875 AH (1460/61 (1462/63)-1470/71)

Bursa, 867 AH

Obv.: the circular legend: مُحَمَّد بن مراد خان عز نصره ٨٦٧. An asterisk in center.

Rev.: the circular legend: خَلْد ملکه ضرب برسه. An asterisk in center.

26. AE, 2.57 g, 15.9 mm. OAM, inv. no. 58164. Pl. III, 26.

Kabaklarli 1998, p. 164, 07-Br-40-45, 07-Br-48.

Karahisar, ND.

Obv.: اد خان

مُحَمَّد بن مر

The upper row is written upside down. A straight line between rows with a circle and a dot in center.

Rev.: the circular legend: خَلْد ملکه ضرب قرحصار. A circle with a dot in center.

27. AE, 1.20 g, 12-13 mm. OAM, inv. no. 58147. Pl. III, 27.

28. AE, 1.15 g, 13 mm. OAM, inv. no. 58160. Pl. III, 28.

Kabaklarli 1998, p. 178, 07-Qrh-01-07.

Obv.: مُحَمَّد بن

مراد خان

A straight line between rows with a circle and a dot in center.

Rev.: The same as nos. 28-29.

29. AE, 1.78 g, 14-20 mm. OAM, inv. no. 58152. Pl. III, 29.

This type is absent in N. Kabaklarli's catalogue.

Ankara, ND

Obv.: the circular legend: مُحَمَّد بن مراد خان عز نصره. An asterisk in center.

Rev.: خَلْد ملکه

¹⁰¹ Kabaklarli: 161, 07-Br-26-28; 162, 07-Br-30.

ضرب انكوريه

Two parallel lines between rows with a dot in center.

30. AE, 2.38 g, 12-13 mm. OAM, inv. no. 58024. Pl. III, 30.

31. AE, 1.72 g, 10.8-13.4 mm. OAM, inv. no. 58142. Pl. III, 31.

Kabaklarli 1998, p. 151, 07-Ang-01-04.

All undated mangir types with the circular legends on both sides (except for the issues of Karahisar and Ankara bearing the circular legend only on one side) can be attributed to this period by analogy with the akçe type of 865 AH and the mangir types of 865 and 867 AH (Pl. V)¹⁰².

5. 875-886 AH (1470/71-1481)

Edirne, ND

Obv.: السلطان محمد

عز نصره

بن مراد خان

Rev.: ضرب ادرنه

خلد ملکه

32. AE, 0.57 g, 11-12.4 mm. OAM, inv. no. 58156. Pl. III, 32.

Kabaklarli 1998, p. 143-144, Type VII, 07-Adr-55-65.

This type was attributed to this period after comparing it with the akçe type of 875 AH¹⁰³: the legends on both sides are written in rows, the other patterns (lines, sectors, figures) are absent; the phrase عز نصره is on the obverse and the phrase ملکه

خلد – on the reverse. However, the date is absent on the mangir type, while the title

السلطان is absent on the akçe type (Pl. V).

Kostantiniyye, ND

Obv.: the ornament.

Rev.: the circular legend: ضرب قسطنطينيه. Three asterisks in center¹⁰⁴.

¹⁰² Nicolae 2003, p. 101.

¹⁰³ Nicolae 2003, p. 71.

¹⁰⁴ There are some differences between the determination of obverse and reverse sides for the Ottoman anonymous ornamental mangirs. According to N. Kabaklarli's catalogue, the most informative side of

33. AE, 1.22 g, 10.7-11 mm. OAM, inv. no. 58146. Pl. III, 33.
Kabaklarli 1998, p. 182, 07-Qos-23.

E. Nicolae attributes this type to Bayezid II's reign, by analogy with the other anonymous type of this sultan¹⁰⁵. However, according to N. Kabaklarli's catalogue, this type rather resembles Mehmed II's mangir, with the same legend on the reverse – ضرب قسطنطينيه and three asterisks in the center (though the disposition of asterisks differs), but with the sultan's name and the date 886 AH on the obverse, instead of the ornament (Pl. V)¹⁰⁶. At the same time, the design of the legend on Bayezid II's anonymous type somewhat differs: the stretched-out circular mint name قسطنطينيه with the word ضرب in the center¹⁰⁷. However, as this anonymous type was presumably struck in 886 AH, i.e. the last year of Mehmed II's reign, its mintage could have continued during the first years of Bayezid II's reign.

6. Undetermined period

Edirne, ND

Obv.: محمد بن

مراد

A dotted line between rows.

Rev.: خلد ملکه

ضرب ادرنه

A dotted line between rows.

34. AE, 1.63 g, 15 mm. OAM, inv. no. 58163. Pl. III, 34.
Kabaklarli 1998, p. 140-141, Type IV, 07-Adr-24-30.

Bolu, ND

Obv.: محمد بن

مراد خان

A curve between rows.

Rev.: خلد ملکه

coin that bears the mint name is considered as obverse, while the side with the ornament is considered as reverse.

¹⁰⁵ Blaskó, Nicolae 1986, p. 301, no. 17, 305; Nicolae 2003, p. 103-104, 112, no. 17.

¹⁰⁶ Kabaklarli 1998, p. 182, 07-Qos-14-18.

¹⁰⁷ Kabaklarli 1998, p. 218, 08-Qos-59.

ضرب بولی

A dotted line between rows.

35. AE, 1.35 g, 12-13 mm. OAM, inv. no. 58159. Pl. III, 35.

Kabaklarli 1998, p. 157, 07-Bo-01-08.

Unknown mint name (presumably, Mehmed II)

Obv.: in the cartouche: مُحَمَّد. Under the cartouche – the name مراد, written upside down.

Rev.: خَلْد (ملکہ ؟)

36. AE, 0.92 g, 12.9-14 mm. OAM, inv. no. 58143. Pl. III, 36.

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List of illustrations / Lista ilustrațiilor

Plates I-III. The early Ottoman mangirs from Belgorod (scale 2:1).

Planșele I-III. Mangări otomani timpurii din Cetatea Albă (scara 2:1).

Plate IV. The finds of the Ottoman mangirs from Belgorod (preliminary results). Coins present in: *Boldureanu, Bacumenco-Pîrnău 2011*; *Karashevich, Boldureanu, Dergaciova 2013*; *Boguslavskiy, Yanov 2013*; *Boguslavskiy, Yanov 2015* were included.

Planșa IV. Descoperiri monetare de mangări otomani din Cetatea Albă (rezultate preliminare). Au fost incluse monede prezente în: *Boldureanu, Bacumenco-Pîrnău 2011*, *Karashevich, Boldureanu, Dergaciova 2013*, *Boguslavskiy, Yanov 2013*, *Boguslavskiy, Yanov 2015*.

Plate V. Related types of Mehmed II. The line drawings of akçes – by S. Srećković (cf. *Srećković 2000, p. 23-26*), the line drawings of mangirs – by N. Kabaklarli (cf. *Kabaklarli 1998, p. 138-189*).

Planșa V. Tipuri similare emise de Mehmed II. Desenele asprilor – de S. Srećković (cf. *Srećković 2000, p. 23-26*), desenele mangărilor de N. Kabaklarli (cf. *Kabaklarli 1998, p. 138-189*).

Plate VI. Proportion of mints for the finds of mangirs from Dobrogea and Belgorod (including 1 coin published in: *Karashevich, Boldureanu, Dergaciova 2013, p. 286*).

Planșa VI. Proporția monetărilor în descoperirile de mangări din Dobrogea și Cetatea Albă (inclusiv o monedă publicată în: *Karashevich, Boldureanu, Dergaciova 2013, p. 286*).



Plate I. The early Ottoman mangirs from Belgorod (scale 2:1)



Plate II. The early Ottoman mangirs from Belgorod (scale 2:1)



Plate III. The early Ottoman mangirs from Belgorod (scale 2:1)

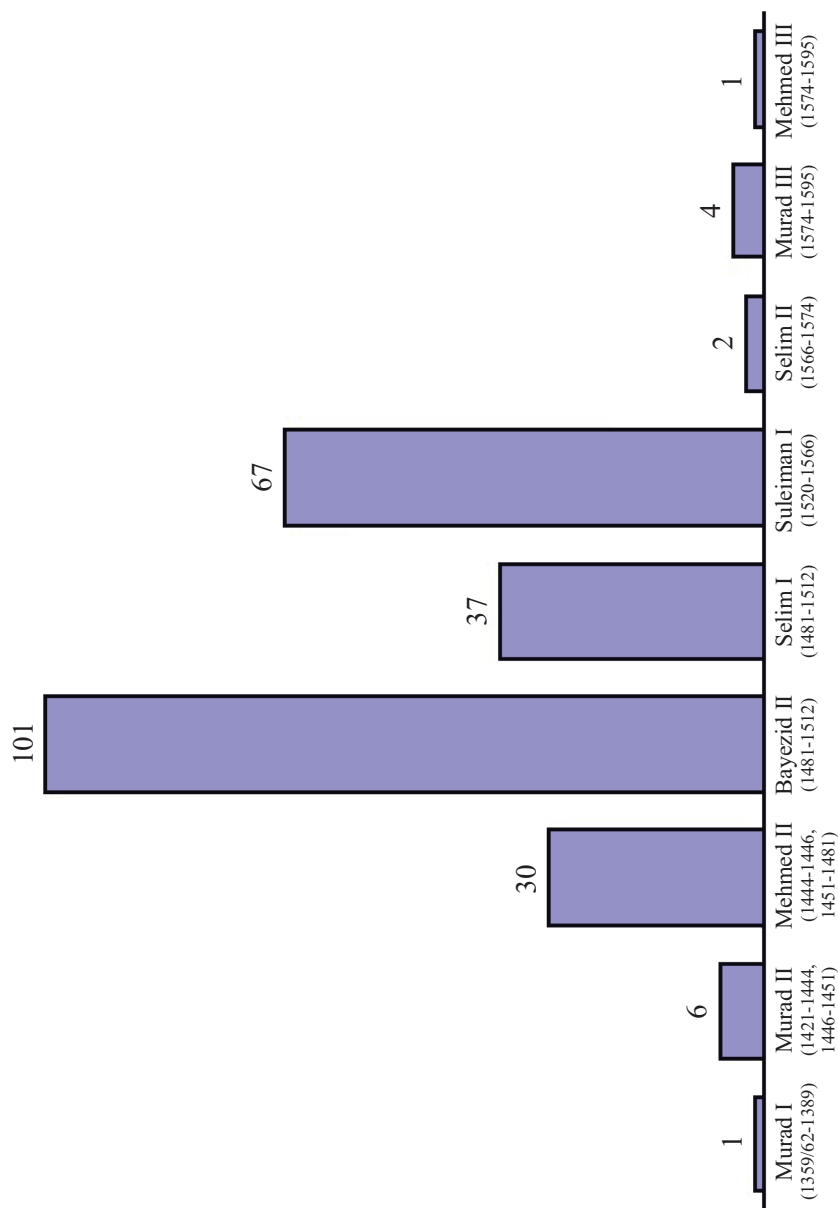
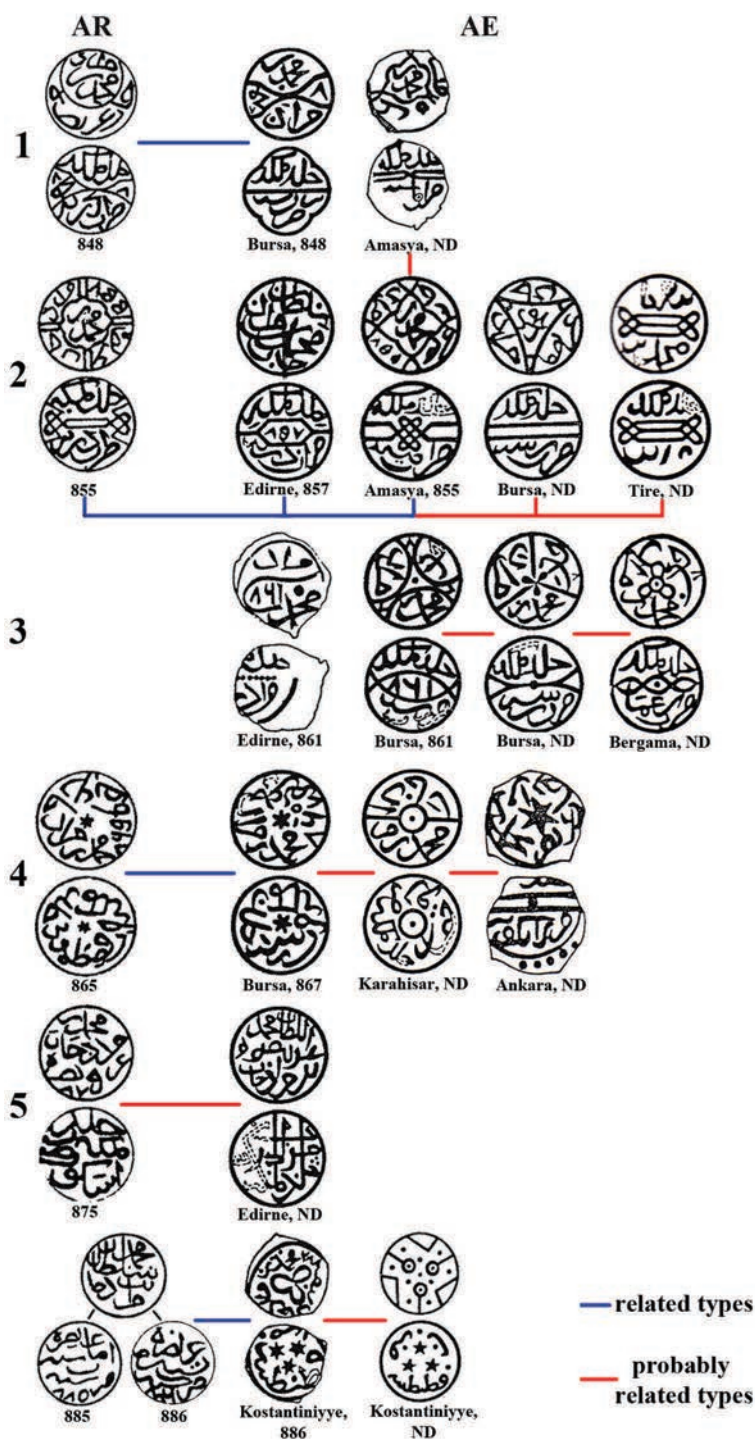


Plate IV. The finds of the Ottoman mangirs from Belgorod (preliminary results)

Coins present in: Boldureanu, Bacumenco-Pîrnău 2011; Karashevich, Boldureanu, Dergaciova 2013; Boguslavskiy, Yanov 2013; Boguslavskiy, Yanov 2015 were included.



The line drawings of akçes – by S. Srećković (cf. Srećković 2000, p. 23-26);
The line drawings of mangirs – by N. Kabaklarli (cf. Kabaklarli 1998, p. 138-189)

Plate V. Related types of Mehmed II.

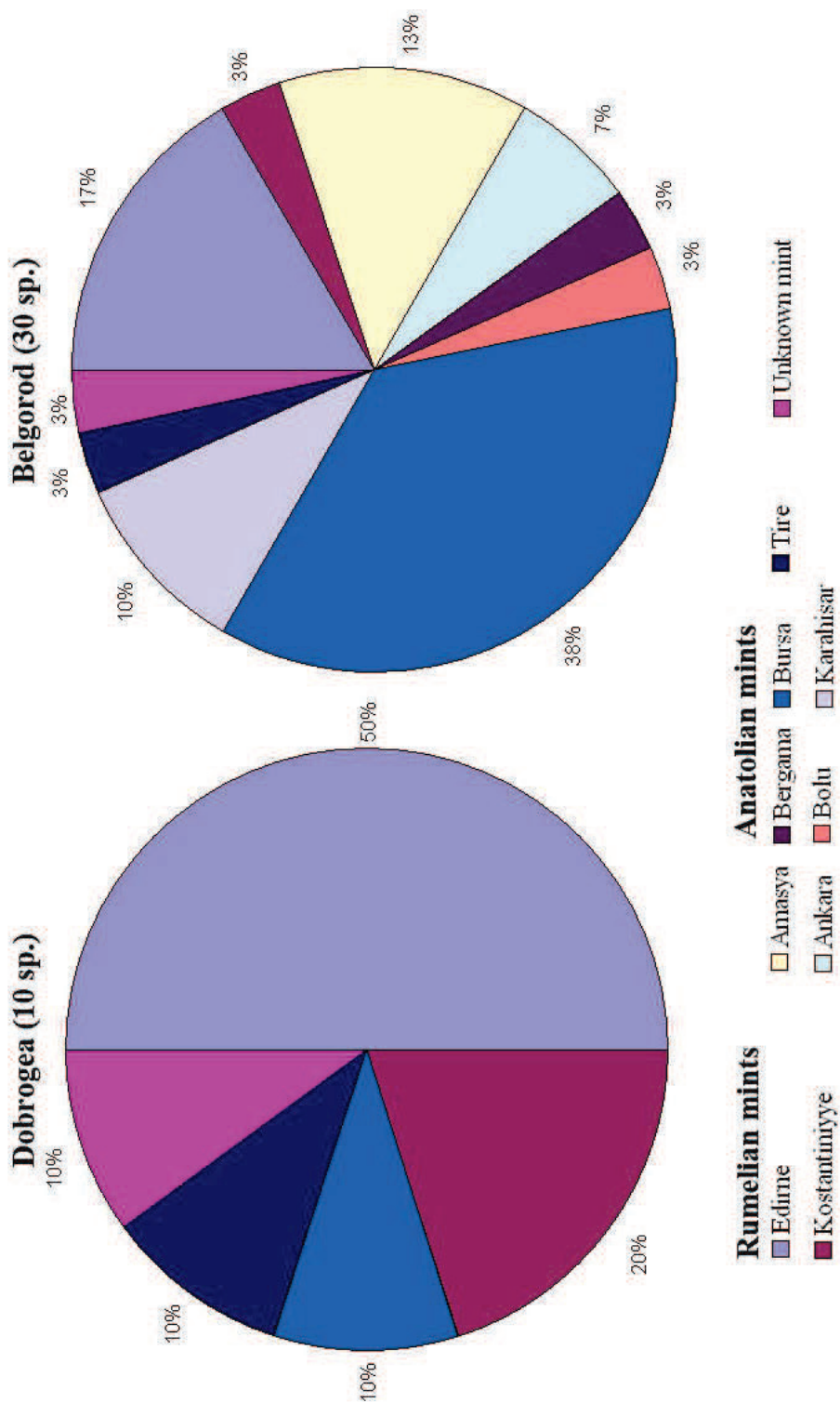


Plate VI. Proportion of mints for the finds of mangirs from Dobrogea and Belgorod (including 1 coin published in: Karashevich, Boldureanu, Dergaciova 2013, p. 286).