

Mária Vargha

**DRESS ACCESSORIES AND JEWELLERY FROM TWELFTH-
AND THIRTEENTH-CENTURY HUNGARY
TYPOCHRONOLOGY AND SOCIAL-ECONOMIC INTERPRETATION
BASED ON FINDS FROM KÁNA VILLAGE**

MA Thesis in Medieval Studies

Central European University

Budapest

May 2013

**DRESS ACCESSORIES AND JEWELLERY FROM TWELFTH-
AND THIRTEENTH-CENTURY HUNGARY**

**TYPOCHRONOLOGY AND SOCIAL-ECONOMIC INTERPRETATION
BASED ON FINDS FROM KÁNA VILLAGE**

by

Mária Vargha

Hungary

Thesis submitted to the Department of Medieval Studies,
Central European University, Budapest, in partial fulfillment of the requirements
of the Master of Arts degree in Medieval Studies.

Accepted in conformance with the standards of the CEU.

Chair, Examination Committee

Thesis Supervisor

Examiner

Examiner

Budapest
May 2013

**DRESS ACCESSORIES AND JEWELLERY FROM TWELFTH-
AND THIRTEENTH-CENTURY HUNGARY**

**TYPOCHRONOLOGY AND SOCIAL-ECONOMIC INTERPRETATION
BASED ON FINDS FROM KÁNA VILLAGE**

by

Mária Vargha

Hungary

Thesis submitted to the Department of Medieval Studies,
Central European University, Budapest, in partial fulfillment of the requirements
of the Master of Arts degree in Medieval Studies.

Accepted in conformance with the standards of the CEU.

External Reader

Budapest
May 2013

**DRESS ACCESSORIES AND JEWELLERY FROM TWELFTH-
AND THIRTEENTH-CENTURY HUNGARY**

**TYPOCHRONOLOGY AND SOCIAL-ECONOMIC INTERPRETATION
BASED ON FINDS FROM KÁNA VILLAGE**

by

Mária Vargha

Hungary

Thesis submitted to the Department of Medieval Studies,
Central European University, Budapest, in partial fulfillment of the requirements
of the Master of Arts degree in Medieval Studies.

Accepted in conformance with the standards of the CEU.

Supervisor

External Supervisor

Budapest
May 2013

I, the undersigned, **Mária Vargha**, candidate for the MA degree in Medieval Studies, declare herewith that the present thesis is exclusively my own work, based on my research and only such external information as properly credited in notes and bibliography. I declare that no unidentified and illegitimate use was made of the work of others, and no part of the thesis infringes on any person's or institution's copyright. I also declare that no part of the thesis has been submitted in this form to any other institution of higher education for an academic degree.

Budapest, __ May 2013

Signature

ACKNOWLEDGEMENTS

Apart from the efforts of myself, many people were instrumental in my completing this thesis. I take this opportunity to express my gratitude to them. First and foremost, I would like to thank to my supervisor, József Laszlovszky for his constant support, enthusiasm, valuable guidance and advice. I would also like to thank CEU Faculty Members of the Medieval Studies Department for helping me in many ways, especially to Katalin Szende for providing me essential literature for my topic, and also for her kind support and interest. I am grateful to Judith Rasson for her assistance with style and orthography. Outside CEU, I also wish to thank György Terei, for involving me in the Research of Kána, and being constantly supportive ever since. I have particularly much to thank to Maxim Mordovin, for his tireless help and for his kind and calming answers to my unceasing concerns. Last, but not least, I wish to thank my friends and family for being patient and supportive while I spent more time with the dead than the living.

TABLE OF CONTENTS

INTRODUCTION.....	1
CHAPTER ONE	2
Problems with the research of Arpadian-age jewellery.....	2
Archaeological research at the medieval village of Kána	8
The chronological framework of the settlement	9
The social status of the village	10
Methodology of the present research	11
Hoards.....	12
Spatial interpretation of hoards	17
Hoards in dating jewellery	20
Churchyard cemeteries	21
Destroyed settlements.....	23
Summary	25
CHAPTER TWO - Typochronology of the Finds.....	27
Lock rings.....	32
Rings.....	43
Brooches.....	52
Circular brooches.....	52
Bird shaped brooches.....	55
Rhombus-shaped brooches	61
Pins	63
Buttons	65
Buckles	68

Mounts.....	79
Pectorals	81
Summary of the chronological reinterpretation	84
CHAPTER THREE – The Socio-Economic Interpretation of Jewellery	90
CONCLUSION	104
BIBLIOGRAPHY	106

LIST OF ILLUSTRATIONS

Picture 1. A typical field cemetery, Majs-Udvari rétek, and a method for analysis: coins. Kiss 1983. 177.

Picture 2. The distribution of hoards connected to the Mongol invasion of Hungary by Tóth 2007, 81.

Picture 3. The hoard of Tyukod-Bagolyvár. Jakab-Balázs 2007. 12.

Picture 4. The hoard of Nyáregyháza-Pusztapótharaszti. Parádi 1975, 123.

Table 1. The phases of the cemetery of Kána.

Table 2. Lock ring types of Kána village.

Table 3. The occurrence of lock rings in graves, hoards and settlement features.

Table 4. Ring types of the period.

Table 5. Occurrence of finger rings in graves, hoards and settlement features.

Table 6. Circular brooches.

Table 7. Bird-shaped brooches.

Table 8. Rhombus-shaped brooches.

Table 9. Pin from Kána.

Table 10. Button types of Kána.

Table 11. Buckles.

Table 12. Round, iron buckles.

Table 13. Belt buckles decorated with flower applications.

Table 14. The hoard of Esztergom-Szentkirály.

Table 15. The occurrence of buckles in graves, hoards and settlement features.

Table 16. Mounts from Kána

Table 17. Pectoral from Kána

Table 18. The comparative chronology of artefacts

Picture 5. Jewellery from the hoard of Pátroha-Butorka dűlő. Jakab-Balázs, 2007, 24.

INTRODUCTION

My research topic is the fashion of jewellery and dress accessories in the twelfth and thirteenth centuries in the Carpathian Basin. I met first with the issues of this topic, when I wrote my previous MA thesis, in which I analysed the churchyard cemetery of Kána village. I realised that both the chronological and social distinction is hardly feasible by traditional methods, and would require a more complex analysis of the finds. Thus, in my present research I will investigate the chronological, social, and economic aspects of these artefacts. The research will be based on finds from diverse settlement features and the churchyard cemetery of Kána village, which existed precisely in the period in question, in the twelfth and thirteenth century, and was excavated and investigated completely. Thus, it offers a unique opportunity to combine data from a churchyard cemetery and from the settlement features of the same villages. I will complete the research with the jewellery that can be found in the hoards of the age of the Mongol invasion, which will provide a stabile chronological point.

First, I will determine what type of jewellery and/or dress accessories can be dated to the twelfth and thirteenth century. I will then distinguish those which can be found in this period, but were no longer being produced, and those which marked contemporary fashion. I will consider the contemporary environment of each artefact because different archaeological contexts and associations may imply different social, economic, or even chronological characteristics of these objects. My aim is to study these issues in a detailed typochronology and a social and economic evaluation of these artefacts. Dress accessories and jewellery are a good base material to study society and economy as their personal nature and relatively high value reveal information about the social/economic situations of their owners.

CHAPTER ONE

Problems with the research of Arpadian-age jewellery

Research into Arpadian-age jewellery has been focused on two main research questions: chronology in general and ethnic interpretation. A good example for that the research of various, but mainly the S-ended lock rings. This was the most common type among the jewellery of the period, thus it is not surprising that research has concentrated mostly on them and argued pro and contra about their chronological, ethnic or social diagnostic utility.

These debates on Arpadian- age jewellery started with the influential work of József Hampel, in which he identified the field cemeteries¹ contain large number of graves, but only few, cheap trinkets as the funeral places of the tenth-eleventh century Slavic population, and lock rings as particularly Slavic jewellery.² This idea was most common at that time as the romantic ideal of the period saw the conquering Hungarians as horse-riding warriors, and thus the research matched their archaeological remains to that idea.³ Although Hampel

¹ These cemeteries in Hungarian and German research are called row cemetery (*soros temető, Reihengräberfeld*) because of the arrangement of the graves. Granville Astill dealt with the naming of such cemeteries in the Anglo-Saxon research, and states that these are cemeteries which were used between the abandonment of cemeteries with extensive grave goods and the start of churchyard burials; he calls them “open ground cemeteries,” “traditional lay cemeteries” or more often “field cemeteries.” Although there are some chronological differences, the process was clearly the same in both areas; Astill states that the formation of the landscape and land use had a strong connection with the change of burial customs, as when a new field system emerged, local parishes were established, and thereafter burials were restricted to the churchyard. The process in Hungary was similar, as churchyard burials started with the stabilisation of settlements near churches. Astill argues that because of the fields were the most antique element of the landscape it could also have created a common identity among the people who cultivated it; it could have been the most appropriate place to bury the deceased. Therefore the most appropriate name for these burial grounds are field cemeteries. For more information on the process, see: Grenville Astill, “Anglo-Saxon Attitudes: How Should Post-AD 700 Burials Be Interpreted?” in *Mortuary Practices and Social Identities in the Middle Ages*, ed. Duncan Sayer and Howard Williams (Exeter: University of Exeter press, 2009), 223-231.

² József Hampel, *Újabb tanulmányok a honfoglalási kor emlékeiről* [New studies on the material culture of the Conquest Period], (Budapest: Akadémiai, 1907): 12-14. An interesting contradiction is that in his previous work, *Altertümer des früher Mittelalters in Ungarn*, published in 1905, he used a different, chronological approach.

³ For a detailed analysis of the historiography of the research, see Péter Langó, *Amit elrejt a föld... A 10. századi magyarság anyagi kultúrájának régészeti kutatása a Kárpát-medencében* [What is hidden by the earth... Archaeological research into the material culture of tenth-century Hungarians in the Carpathian basin], (Budapest: L'Harmattan, 2009). See also Péter Langó, “Archaeological Research on the Conquering Hungarians: A Review,” in: *Research on the Prehistory of the Hungarians: A Review*, ed. Balázs Gusztáv Mende, *Varia Archaeologica Hungarica* 18 (Budapest: Akadémiai kiadó, 2005), 175–340.

himself pointed out some uncertainty in his theory, and his work definitely has some weaknesses (using results of previous research uncritically, ignoring important historical data that contradicted his theory), the ethnic interpretation became ingrained in later research. Lubor Niederle created the concept of the Bijelo Brdo culture,⁴ which became the official name of the group of artefacts connected to these cemeteries. Research on the jewellery from the cemeteries, particularly lock rings as the most common type of finds in this group, were bound with the research into the so-called Bijelo Brdo culture from that time on.

In the following only the most important works of that process will be mentioned, as there is no space here to discuss the Bijelo-Brdo debate in detail.⁵ Later, Jan Eisner, and Nándor Fettich supported Niederle's concept, which spread and became more significant.⁶ Although there were studies with completely different results, such as Kálmán Szabó's contribution about lock rings, which determined their use in a much broader time period (tenth to fourteenth century) and had no ethnic interpretation,⁷ later research ignored them and for two decades neglected the topic. The next important research step on this topic were the two studies of Alán Kralovánszky, who examined the ethnic and chronological interpretation of the S-ended lock ring. He rejected this object as a marker of ethnicity through its entire use, but he did not deny it before the eleventh century.⁸ His results concerning the chronology are also important; using graves dated with coins he was able to establish that the appearance of this type of lock ring appeared in the Carpathian and Czech

⁴ Csanád Bálint, "A magyarság és az ún. Bielo-Brdo kultúra" [Hungarians and the so-called Bjelo -Brdo culture], *Cumania* 4 (1976), 226.

⁵ For a detailed synthetic study of the historiography of the research on the Bijelo Brdo culture, see: Bálint, *A magyarság*, and Attila Kiss, "Zur Frage der Bjelo Brdo Kultur. Bemerkungen zu den ethnischen Verhältnissen des heutigen Slawonien und Syrmien im 10–11. Jahrhundert," *Acta Archaeologica Academiae Scientiarum Hungaricae* 25 (1973).

⁶ Bálint, *A magyarság*, 225–226.

⁷ Kálmán Szabó, *Az alföldi magyar nép művelődéstörténeti emlékei-Kulturgeschichtliche Denkmäler der ungarischen Tiefebene* [The culture historical remains of the Hungarians of the Great Plain] (Kecskemét: Városi Múzeum, 1938) 28–29.

⁸ Alán Kralovánszky, "Adatok az ún. S-végű hajkarika kialakulásának és időrendjének kérdéséhez" [Data on the emergence and spread of the so-called S-ended lock rings], *Archaeologiai Értesítő* 84 (1957): 175–183.

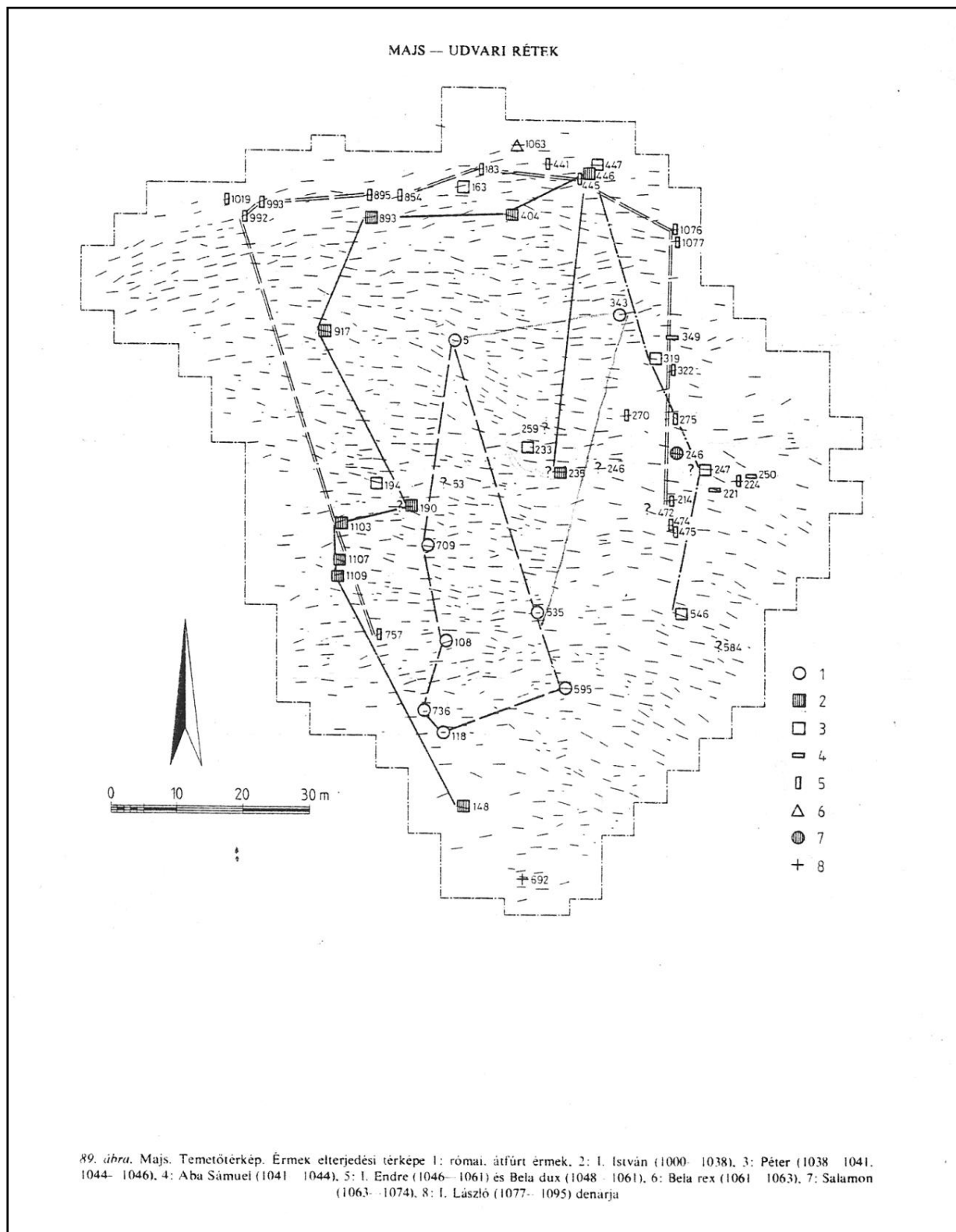
basins in the second half of the tenth century.⁹ Not much later Béla Szőke's study was published on the remains of the Conquest period and early Arpadian-age Hungarians. In this work he dealt with the jewellery and dress accessories of the period. He identified this type of lock ring as the result of a local development and he pointed out the relationship between the late Avar sites where multiple S-ended lock rings were found, and the early Arpadian age sites where S-ended lock rings were found. Thus, he did not consider this as a new phenomenon, but rather as a new subtype of late Avar period jewellery that emerged in the Carpathian basin around 960-970. Accordingly, he interpreted it as the jewellery of commoners who had mixed ethnic background.¹⁰ He also surveyed the concept of the Bijelo Brdo culture. He tried to separate the material culture of the Slavs from the incoming Hungarians. He identified the ninth-century population of the Carpathian basin as Slavs, whose appearance and (material) culture were Avar. He stated that by the end of the ninth century the ethnic component of the area was already complex.¹¹ He compared the social stratification of the Avaro-Slav and Hungarian society, and, using finds from cemeteries, he identified the typical finds of each social layer of the Hungarians. He separated the material culture of the commoners, which he divided in two chronological parts; from the Conquest to the last third of the 960s and 970s, and from that time to the twelfth century, and identified them both as the material culture of the Hungarian commoners.¹² Among foreign researchers, the work of Zdeňek Váňa is outstanding, at least in the contemporary situation, as he based his work on accurate data collection. The problem with his work is the generalisation: Váňa imagined the conquering Hungarians as a group which had a unified material culture.

⁹ Alán Kralovánszky, "Adatok az ún. S-végű hajkarika etnikumjelző szerepéhez" [Data for the ethnic-marker role of the so-called S-ended lock rings] *Archaeologiai Értesítő* 83 (1956): 211-212.

¹⁰ Béla Szőke, *A honfoglaló és kora Árpád-kori magyarság régészeti emlékei* [Archaeological remains of the Conquest period and early Arpadian age Hungarians], (Budapest: Akadémiai, 1962): 86-89.

¹¹ Béla Szőke, "A bijelobrdói kultúráról" [About the Bijelo Brdo culture], *Archeologiai Értesítő* 86 (1959): 34-35.

¹² Szőke, *Ibid.*, 36-44.



Picture 1. A typical field cemetery, Majs-Udvari rétek, and a method for analysis: coins. Kiss 1983. 177.

This led him to identify some artefacts as ethnic indicators of the Hungarians, such as Arabic dirhams or some types of mounts, although they were not characteristic only for Hungarians and certainly not for all Hungarians. He also revised the chronology of the Bijelo Brdo culture and suggested an earlier beginning: the mid-tenth century. Anton Točík's opinion was similar to the Hungarian research – with the exception of the end of the “culture,” which, according to him, disappeared at the beginning of the eleventh century, together with the appearance of the *obolus*. He connected the spread of the “culture” to the mass arrival of Hungarian commoners and stated that the material culture of the Bijelo Brdo culture represents them.¹³

The latest researcher of the concept was Csanád Bálint, who discussed all the debates and theories of Hungarian and Slav researchers. He analysed their problems and re-analysed the various interdisciplinary relations of the material to the Hungarians. He concluded that the so-called Bijelo Brdo culture is the material remains of the Hungarian commoners, with a possible mixing with local Slavic population in the middle of the country, but only to a small extent.¹⁴

Jochen Giesler made a detailed analysis of the jewellery of Bijelo Brdo culture; his contribution influenced the research on the problem mainly from a chronological point of view. He has separated two phases: Bijelo Brdo I, the early phase, which lasted from the middle of the tenth century until the first third of the eleventh century; and Bijelo Brdo II, the later phase, which started in the mid-eleventh century and lasted until the turn of the eleventh century.¹⁵ He stated that the origin of the “culture” cannot be defined yet; he claimed that an ethnic interpretation would be desirable, but not yet possible. He confirmed the result noted

¹³ Bálint, *A magyarság*, 229-230. For more detailed information see Zdeňek Váňa, “Mad’ari a Slovane ve světle archeologických nálezů X-XII století” [Magyers and Slavs in the light of archaeological finds of the tenth to the twelfth century], *Slovenská Archeologia* 2 (1954) and Anton Točík, “Flachgräberfelder aus dem X. und XI. Jahrhundert in der Südslowakei.” *Slovenská Archeologia* 19 (1971).

¹⁴ *Ibid.*, 248-249.

¹⁵ Jochen Giesler, “Untersuchungen zur Chronologie der Bijelo Brdo-Kultur. Ein Beitrag zur Archäologie des 10. und 11. Jahrhunderts im Karpatenbecken,” *Praehistorische Zeitschrift* 56 (1981): 151-152.

above, namely, that in the eleventh century in the area of the Kingdom of Hungary a widespread pattern of interment behaviour created.¹⁶

The debate roughly projected above had a serious impact on the research into Árpadian age jewellery. The heaviest consequence was that researchers (over)concentrated on the material of the early Árpadian age and rather neglected the second half of the period. This led to a misleading research situation; whenever a part of a cemetery was excavated and some artefacts of the so-called Bijelo Brdo culture was recovered, such as an S-ended lock ring, researchers uncritically dated these cemetery fragments to an earlier period (tenth-eleventh century) according to the results of the research on the Bijelo-Brdo culture. The same scheme can be applied to field cemeteries and churchyards, although research on the latter started to develop in the past decades.¹⁷ Although there have been several studies on a particular type of object, such as lyre-shaped buckles,¹⁸ rhombus-shaped buckles,¹⁹ seal rings,²⁰ and lock rings with flaring ends,²¹ no overall analysis has been made of the material of these churchyards which could be compared to those on early Árpadian age jewellery. Besides this state of the research, the cause of this situation is the poorness of churchyard cemeteries and their research situation, namely, that most of them have only been partially excavated, which makes precise dating difficult. This situation has led to dating objects from

¹⁶ Giesler, *Bjelo-Brdo*, 154-155.

¹⁷ On this topic see the works of Ágnes Ritoók, "A magyarországi templom körüli temetők feltárásának újabb eredményei" [New results of excavations of churchyard cemeteries in Hungary], *Folia Archaeologica* 46 (1997) and the most recent: "A templom körüli temetők régészeti kutatása" [Archaeological investigations of churchyard cemeteries], in *A középkor és a kora újkor régészete Magyarországon* [The archaeology of the Middle Ages and the Early Modern Age in Hungary], ed. Elek Benkő and Gyöngyi Kovács, (Budapest: MTA Régészeti Intézet, 2010)

¹⁸ László Révész, "Líra alakú csatok a Kárpát-medencében" [Lyre-shaped buckles in the Carpathian basin] *Hermann Ottó Múzeum Évkönyve* 27 (1989): 513-542; Mária Wolf, "Nielló díszes bronz csat Edelény-Borsodról." [A buckle decorated with niello from Edelény-Borsod], *A Herman Ottó Múzeum Évkönyve* XLIII (2004): 139-161.

¹⁹ Gábor János Ódor, "Anjou-kori öntőforma Majsról (Adatok a 13-15. századi viselettörténethez)" [Angevin period mould from Majs. (Data for the fashion history of the thirteenth to fifteenth century.)] *Communicationes Archaeologicae Hungaricae* (1998): 123-137.

²⁰ Zsuzsa Lovag, "Árpád-kori pecsétgyűrűk I" [Árpadian age seal rings I], *Folia Archaeologica* 31 (1980): 221-237.

²¹ Mihály Kulcsár, "Néhány megjegyzés az Árpád-kori karikaékszerek viseletének kérdéséhez. Az ún. köpös záródású karikák." [Some remarks of the wear of the Árpadian-age lock rings. The so-called lock rings with flaring ends] *Savaria* 22, no. 3 (1996): 249- 275.

churchyard cemeteries from works influenced by the Bijelo Brdo debate, and yielded inadequate dating, especially in the case of lock rings. Although two studies in the 1970s pointed out, by investigating hoards, and not burials, that lock rings are not really suitable for dating because they were in use from the tenth to at least the end of the thirteenth century,²² from time to time researchers use them to support the early dating of various features, although this is no longer a general situation.

All this might suggest that a more precise typochronology of the twelfth and thirteenth century jewellery of commoners would be desirable. However, creating such is not easy, as based only on the poor, mostly partially excavated cemeteries it is not feasible. To solve this problem, more kinds of data should be examined together.

Archaeological research at the medieval village of Kána

The investigation of the material from Kána village is an ideal starting point for this research, as according to the present knowledge it is the largest, or rather the most completely excavated, Árpadian-age village in the Carpathian basin,²³ although there are many partially excavated and published settlements from this period since Hungarian medieval archaeology has focused on the research of Arpadian-age villages from the very beginning.

György Terei directed the excavation of this site, in the XIth district of Budapest, between 2003 and 2005. It was a rescue operation before the construction of a new housing estate. In the framework of this project, the whole settlement was excavated: 200 houses, 4

²² Nándor Parádi, “Pénzekkel keltezett XIII. századi ékszerek. A Nyáregyháza-pusztapótharaszti kincslelet.” [Thirteenth century jewellery dated by coins. The hoard f Nyáregyháza-Pusztapótharaszti], *Folia Archaeologica* 26 (1975): 151-152, see also István Bóna, “Arpadenzeitliche Kirche und Kirchhof im südlichen Stadtgebiet von Dunaújváros” *Alba Regia. Az István Király Múzeum Közleményei* 16 (1978): 125-139.

²³ György Terei, “Előzetes jelentés a Kőérberek-Tóváros-lakópark lelőhelyen folyó Árpád-kori falu feltárásáról – Preliminary report on the excavation of a village from the Arpadian Period on the territory of the Kőérberek-Tóváros residential district,” *Régészeti Kutatások Magyarországon – Archaeological Investigations in Hungary* 2004 (2005): 37-39; see also: György Terei, “Az Árpád-kori Kána falu” [The Arpadian age Kána village] In *A középkor és a kora újkor régészete Magyarországon* [The archaeology of the Middle Ages and the Early Modern Age in Hungary], ed. Elek Benkő and Gyöngyi Kovács (Budapest: Magyar Tudományos Akadémia Régészeti Intézet, 2010), 81.

large storage pits, a large number of different archaeological features, and the church and the churchyard of the village, with nearly 1100 burials. This is an exceptional situation, as no other previously excavated site offered the opportunity for a complete investigation of an entire village, although there were excavations, where a significant part of the settlement, church, and cemetery, in one case even a hoard was excavated but these are not published in details, such as Tiszafüred-Morotvapart²⁴ or Tiszaörvény.²⁵ In case of Kána, the situation is even more fortunate, as not only the village, but also some parts of the nearby abbey of Kána were excavated,²⁶ which provides an opportunity to examine the connection between the abbey and its village.

The chronological framework of the settlement

A coin of Béla II (1131-1141) dates the foundation level of the church to the second third of the twelfth century.²⁷ The foundation of the church possibly happened together with the foundation of the village, as within the area of the churchyard, even in a narrow zone around it, there are no settlement features from the medieval period. Unfortunately, the end of the use of the cemetery (and the settlement) cannot be determined as precisely as the time of the foundation, as coins dated after the Mongol invasion were not recovered and the material culture of the settlement can be roughly dated to the twelfth-thirteenth century, with some sporadic appearance of fourteenth century finds. Another argument for this dating is the lack of the material and coins from the fourteenth century. The latest finds from the cemetery,

²⁴ János Cseh and Béla Kriveczy and József Laszlovszky, “Településnyomok és temetkezések az őskortól a későközépkorig a tiszafüredi Morotvaparton” [Settlement and burials from the Prehistory to the Late Middle Ages at Tiszafüred-Morotvapart], *Múzeumi Levelek* 47-48 (1985): 3-27. and also József Laszlovszky, “Árpád-kori és későközépkori objektumok” [Settlement features from the Arpadian and Late Middle Ages] in: Régészeti ásatások Tiszafüred-Morotvaparton [Archaeological excavation at Tiszafüred-Morotvapart] ed. László tálas and László Madaras, (Szolnok: Damjanich János Múzeum, 1991): 317-384.

²⁵ Béla Horváth, “Előzetes jelentés a z 1965-68. évi tiszaörvényi feltárásokról” [Preliminary report about the excavations at Tiszaörvény between the years 1965 to 1968], *Archaeologiai Értesítő* 97 (1970): 126-133.

²⁶ Katalin H. Gyürky, *A Buda melletti kánai apátság feltárása* [The excavation of Kána abbey near Buda] (Budapest: Akadémiai, 1996).

²⁷ I would like to thank Márton Kálnoky-Gyöngyössi, Péter Schmidt and Tamás Csanádi for the identification of the coins.

such as belts from the latest graves, can be dated roughly to the turn of the thirteenth and fourteenth century. These pieces show continuity after the Mongol invasion, despite the coins, which were minted in an earlier period. Probably the settlement was deserted, together with its church and churchyard, some time in the second half or end of the thirteenth century.²⁸ The cemetery analysis of the churchyard of the village has already been made,²⁹ which is a great advantage in the interpretation and dating of the finds, as it provides a relative and, to some extent, absolute chronology of each phase of the graveyard for the finds from there. It is also important that Kána, with more than one thousand graves and relatively large numbers of finds, is a highly representative sample.

The social status of the village

The fortunate situation -- historical data completed with archaeological data, a completely excavated settlement and cemetery, the latter thoroughly analysed -- makes feasible the social interpretation of the objects excavated here. Some aspects of the history of the settlement are known from written sources. Matching this with landscape analysis, it is clear that the village lay within the boundaries of the property of Kána Abbey. All this led to conclusions about the social status of the village (although not the individuals, as their social status would have been diverse in any village). The settlement had an ecclesiastical landlord: the abbey. Up to a certain point their economic opportunities are known, too, as both historical and archaeological data refer to vine cultivation in the area, which was profitable at that time. However, probably the cause for the desertion of the village was also the expanding

²⁸ Terei, *Kána falu*, 108.

²⁹ The cemetery analysis was the core of my previous MA thesis at Eötvös Loránd University.

viticulture, which, according to charter evidence, was continuous in the area even in the late Middle Ages.³⁰

Methodology of the present research

In the present research I will compare the finds from the cemetery of Kána with finds from diverse settlement features and with jewellery from hoards from the time of the Mongol invasion and collect parallels in contemporary Hungary. Different archaeological contexts may result in different chronological, social or economic evaluations of the same finds, may therefore be expected to lead to new conclusions. In the following, I will discuss the weaknesses and advantages of finds from burials and from hoards. Although clearly groups of objects from a whole country cannot be dated by a single site, still the size, complexity, and large number of excavated graves at Kána are a good starting point for such research. This advantage, supported with data from other archaeological sources, can provide more trustworthy dating than the existing system. The combined investigation of finds from hoards, churchyard cemeteries, and settlements can help make the dating of the objects of the period more accurate, and in some cases such an analysis can clarify the socioeconomic interpretation of the finds. Another possibility is to compare the hoards which contained jewellery with those which contained agricultural tools. This shows the profession of the person who hid the hoard and the value of his tools, as they were just as appreciated as the trinkets and savings of the family.³¹ Another possibility is to investigate the environment of each hoard, which might lead to conclusions about the possible owners. Summarising these problems and possibilities, hoards in themselves are great sources on the economy and society of Arpadian-age rural people. However, the research situation in which they are connected to each other is problematic and this has an impact on the source value of these

³⁰ On this see the charter nr. DL 98067. The charter was issued by the bishop of Veszprém for the abbots of Kána and Telki. It was stated a lease of a piece of land, owned by the abbey let to the burgers of *Pest Maior* for cultivating grapes.

³¹ For example, the hoard of Nyáregyháza-Pusztapótharasztl., see: Parádi, *Pénzekkel kezelt ékszerek*, 119.

finds. The solution for this is the joint investigation of finds from hoards, cemeteries (especially when the grave is dated by a coin), and settlement features.

Hoard

Hoardings are always connected to some kind of crisis, as the cause of the act of hiding indicates some kind of perceived danger which made the owners hide their valuables. On the terminology and interpretation of hoards (on the numismatic context and archaeological context) see the short sub-chapter in Fuchsenhof.³² This could have affected all layers of the society, as different critical situations could have occurred in different places. The latest coins always give a loose dating of the hoard, which in most cases can be connected to some kind of insecure political situation, either local or regional. Most hoards come to light unintentionally, mainly during agricultural work, but some of them come from archaeological excavations. These hoards may contain coins, jewellery, in some cases iron tools, mainly sickles or other tools related to agricultural work, or a mixture. In the Arpadian age, the earliest hoards come from the first half of the eleventh century and they are not numerous. More hoards can be associated with the second half of the eleventh century and the twelfth century.³³ The coin which appears most frequently in the Arpadian age hoards comes from the same period: it was minted by Béla II (1131-1141).³⁴ Within many hoards of the Middle Ages, the Mongol invasion of Hungary (1241-1242) resulted in a specific horizon of hoards, as the crisis affected the whole country and society, which makes these hoards suitable for an analysis of their extent and contents. The hoards which were hidden in earlier periods can mainly be connected to more local incidents. Because of trade and monetary systems, the

³² Stefan Krabath, “Die metallenen Trachtbestandteile und Rohmaterialien aus dem Schatzfund von Fuchsenhof”, in *Der Schatzfund von Fuchsenhof*, ed. Bernhard Prokisch and Thomas Kührtreiber (Linz: Oberösterreichisches Landesmuseum, 2004): 295.

³³ Parádi, *Pénzekkel keltezett ékszerek*, 126.

³⁴ Ernő Saltzer, *A történelmi Magyarország területén fellelt 156 Árpádházi éremkincslelet összefüggő áttekintése* [Synthesis of the 156 Arpadian age coin hoards from medieval Hungary] (Budapest: Szinovszky és Társa, 1996.)

eleventh and twelfth century hoards do not contain Western coins, but rather mintings of Hungarian kings and Byzantine rulers.³⁵

Changes in political relations and the direction of trade together with the lack of silver at the end of the twelfth and in the first half of the thirteenth century caused a change in the money economy which also had an impact on the content of the hoards. At the end of the twelfth century, Hungarian trade was already a stable partner in Western European trade, which required more developed money transaction. This happened together with the development of a more advanced market system and money economy; landlords started demanding their services in money. However, the Hungarian coins could not even satisfy the local needs, as the kings of Hungary minted new coins every year which contained less and less amount of silver. People had to exchange the coins of the previous year for newly minted ones so the king could make an income. Considering this it is not surprising that most of the coins in the hoards of the Mongol invasion are not the coins of Hungarian kings, but are the so-called Friesach *denarius*, which contained a constant amount of silver. Various secular and ecclesiastical leaders minted their own coins, which were similar in quality and style, although their looks were diverse. Because of their similarity they earned the collective name of “Friesacher Pfennig.” The earliest, in the first half of the twelfth century, were minted by the archbishop of Salzburg in Friesach and the prince of Carinthia in St. Veit. However, the mines and mints started to flourish in the first half of the thirteenth century, when Hungarian trade was completely directed to the West. The spread of the Friesach mints shows the same route, along the line of the Danube from the north over the whole area of medieval Hungary. The cause of the fast and extensive spread was that the Hungarian coins were not able to satisfy the market, but good quality money was minted in close proximity. In the thirteenth century more mints emerged in the Holy Roman Empire as nobles started to mint their own

³⁵ István Gedai, “Fremde Münzen im Karpatenbeckes aus den 11-13. Jahrhunderten” *Acta Archaeologica Academiae Scientiarum Hungaricae* 21 (1969): 111. See also Saltzer, *156 Árpádházi éremkincslelet*

coins, such as the princes of Andechs Meran, the bishops of Bamberg in Villach, and the counts of Görz in Lienz.³⁶ The fortunate situation of the mines in the area of Friesach together with the collapse of the mines in Britain and the Harz region made possible a flourishing production of the Friesach coins, as because of the general silver and bullion famine that occurred in the first half of the thirteenth century, only these mines and mints could have produced coins which had stable value.³⁷ The everyday money economy used the less valuable coins, but people kept their savings in the stable “Friesach Pfennigs”.³⁸ According to this situation, Friesach coins appeared in Hungary at the end of the twelfth century, but they were the most popular in the first half of the thirteenth century. Typically, the latest coins in the hoards of the Mongol invasion are the mints of Eberhard II, archbishop of Salzburg (1200-1246), and Bernhard, prince of Carinthia (1202-1256). Hungarian coins are a minority in the hoards. Most of the coins are anonymous *bracteates*, which have been defined by researchers as related to Béla III, but the latest research suggests that this idea might need reconsideration; because they appear in these hoards in relatively large numbers these coins could be related to Béla IV as well.³⁹

By the mid-thirteenth century, money circulation, and especially the use of the silver denarius, played a great role in retail trade, in everyday money circulation, even among the rural population. This, together with the large number of the hoards and their diffused spread, made it possible to provide a social-economic interpretation of the hoards. Even if a great amount of the property of people must have been kept in other forms such as land or animals,

³⁶ Gedai, *Fremde Münzen*, 111-113.

³⁷ Ian Blanchard, *Mining, Metallurgy and Minting in the Middle Ages*. (Stuttgart: Steiner, 2001): 708-710.

³⁸ József Laszlovszky, “Tatárjárás és régészet” [Mongol invasion and archaeology]. *Tatárjárás* [The Mongol invasion], ed. Balázs Nagy (Budapest: Osiris, 2003): 459-460.

³⁹ Csaba Tóth, “A tatárjárás korának pénzzel keltezett kincsleletei” [The hoards of the age of the Mongol invasion, dated by coins], *A tatárjárás* [The Mongol invasion], ed. Ágnes Ritoók and Éva Garam (Budapest: Magyar Nemzeti Múzeum, 2007): 79.

the large number of the hoards and their diverse value and contents make it possible to classify them.⁴⁰

Researchers have dealt with hoards beyond the area of medieval Hungary; this paper cannot review all of the studies, but some of them are methodologically important. One of those is the hoard of Fuchsenhof, which is outstanding because of its size, complexity, and detailed analysis, together with its Hungarian relation: mintings of some thirteenth-century Hungarian kings.

The hoard of Fuchsenhof is one of the largest and most recent finds. It was discovered in 1997 near the town of Freistadt in Upper Austria. The hoard contained around 7000 coins, more than 360 pieces of (whole, fragmented, and semi-finished) jewellery, and diverse raw materials. The number of items of jewellery in this hoard is particularly high, probably because the hoard can be connected to one or more smith's workshop.⁴¹ The date of hiding can be determined by the latest coins, which are mintings of the Hungarian king, Ladislaus IV (1272-1290).⁴² The unusually high number of jewellery items also provided the opportunity for broader research; not only numismatic, but also detailed technical analysis, and an accurate evaluation of the finds was possible. Researchers examined the written sources about precious metals and stones and also about the jewellery itself. They examined not only the value, but the descriptions in literary sources about the beliefs connected to them.⁴³ They also examined the appearance of jewellery in orders for clothes, however, these sources are from a rather later period (second half of the fourteenth and fifteenth century) or

⁴⁰ Laszlovszky, *Tatárjárás és régészet*, 460-461.

⁴¹ Bernhard Prokisch and Thomas Kühtreiber, ed., *Der Schatzfund von Fuchsenhof* (Linz: Oberösterreichisches Landesmuseum, 2004): 11-12.

⁴² Michael Alram, Hubert Emmerig, Bernhard Prokisch, and Heinz Winter, "Der numismatische Anteil des Schatzfundes von Fuchsenhof," in: *Der Schatzfund von Fuchsenhof* ed. Bernhard Prokisch and Thomas Kühtreiber, (Linz: Oberösterreichisches Landesmuseum, 2004): 92.

⁴³ Gertrud Blaschitz and Stefan Krabath, "Schmuck im mittelalterlichen Alltag unter besonderer Berücksichtigung des Schatzfundes von Fuchsenhof," in: *Der Schatzfund von Fuchsenhof* ed. Bernhard Prokisch and Thomas Kühtreiber (Linz: Oberösterreichisches Landesmuseum, 2004): 738-741.

from a different area (France and Spain).⁴⁴ They also investigated prices of jewellery that appeared in written sources. The number of written sources that can be connected with this hoard is much larger than the number that is available to Hungarian researchers, and therefore the results of this investigation are important for this aspect, too. The problem is that most of the sources are from the fourteenth century and from a royal environment. The fourteenth-century calculation books of the counts of Holland also represent an aristocratic environment, but give results that are more exact.⁴⁵ The investigation of the organisation of goldsmiths is also important.

The versatile investigation of the find of Fuchsenhof is exemplary and demonstrates the research possibilities of hoards. However, the use of their results and methods in this study is limited because the hoard of Fuchsenhof is slightly later than the ones to be discussed here, and so are the relevant written sources. Still, the chronological and social conclusions about coins and jewellery can be relevant. The written evidence from the fourteenth and fifteenth century from a noble and/or urban environment is hardly comparable with the hoards from the time of the Mongol invasion, which can be connected mostly to the rural environment.

There are many problems with the interpretation of the hoards. The unintentional/accidental discovery of these finds causes the first problem. In many cases, finds are fragmented and the original size and content is unknown. In even more cases, it is hard to decide if a hoard is fragmented or not, as it was an accidental find and it might have happened that not all the finds reached the museum, or not all of them were found. For this problem there is no perfect solution. However, if the research considers the fragmented quality of hoards which are not presumed complete there will be no false results. There are some positive examples for the reconsideration of old finds, and repeated search of a site,

⁴⁴ Ibid., 751.

⁴⁵ Blaschitz and Krabath, *Fuchsenhof*, 745-746.

may result in the complete recovery of the finds.⁴⁶ This can also affect the research on the spread of the finds. The basis of nearly all problems is that the hoards were hidden in a critical situation. One of most important features of a crisis like the Mongol invasion is that it happens quickly, therefore, there is no time to prepare for it. Another important feature is that because of the critical situation people do not behave in a normal way. That is why these hoards reveal a moment of crisis which does not necessarily represent the contemporary standards. The points of this problem were mentioned above; one cannot know that whoever hid a hoard did not have other property which he could not hide as the crisis came suddenly and there was no possible way to turn other possessions into money. The relatively large number of hoards can compensate for this problem. The situation mentioned above – that a hoard only represents a tiny proportion of the wealth of its owner -- may have been true in individual cases, but it does not heavily influence the overall interpretation of the hoards. The other problem is the difference between social and economic status, the uncertainty of the social-legal status, and the fact that not all individuals in the population of a village were of the same financial and social status.⁴⁷

Spatial interpretation of hoards

Csaba Tóth recently collected the hoards of the age of Mongol invasion. He identified 87 of them, although he admits that this should be considered only the first stage of the research, as there are more, fragmented finds, which are presumably from the same period.⁴⁸ This is, however, likely to augment the state of research (published, or recorded material), as

⁴⁶ Attila Jakab, “Tatárjárás kori kincslelet Tyukod-Bagolyvárról” [Hoard from Tyukod-Bagolyvár from the age of the Mongol invasion], *A Nyíregyházi Jósza András Múzeum évkönyve* 49 (2007): 247-296.

⁴⁷ Laszlovszky, “Social Stratification,” 51-54. The latter problem is most obvious when there are several hoards from one site which have different values. A good example of that is Szank, where the settlement was completely destroyed by the Mongols, see: Tóth, *A tatárjárás kincsleletei*, 86-87.

⁴⁸ Tóth, *A tatárjárás kincsleletei*, 79. First footnote. Some researchers mention a larger number of hoards, for example, according to György V. Székely there are more than one hundred and fifty hoards from the period. However, no other study has a detailed catalog of the hoards. See also: György V. Székely, “Megjegyzések a késő Árpád-kori éremleletek keltezéséhez” [Notes for the dating of late Arpadian age coin finds], *A numizmatika és a társtudományok* [Numismatics and its disciplines], ed. Ádám Nagy (Szeged: Móra Ferenc Múzeum, 1994), 118.

in most cases at least some of the finds reached a museum. Tóth's research reveal that hoards can be found more or less over the whole country, but more can be found on the territory east of the Danube, where the invasion was more destructive. However, there are two areas where an especially high number of hoards concentrated; Northeast Hungary, in the territory of Szabolcs-Szatmár-Bereg and in Hajdú-Bihar County in a smaller area in the middle of the country, between the Tisza and Danube, in today's Pest and Bács-Kiskun counties. This

shows two aspects: the intensity of the invasion and the development of the money economy. The absence of the hoards in the area of Transylvania probably has a different cause: the state of research.⁴⁹

Hoards in dating jewellery

The basic situation of these finds, that people hid them in a time of crisis and they represent that moment, can also be regarded as an advantage. This is incredibly useful in dating the objects of the hoards, as the numismatic research made it possible to date the hiding of each hoard to a 5-10 year interval,⁵⁰ which cannot be said about the jewellery. Naturally, the date of hiding does not define the exact date when the jewellery in the hoards were made (although in some cases, mainly when the objects are in mint condition, it can be assumed), but it definitely shows the period when they were in everyday use, which means that production was still going on.⁵¹ The explanation for this might be that hoards contain coins and jewellery which were collected as treasure. In the case of coins the latest mints gives the date of the hiding, although there may be coins from previous times as well. However, in case of jewellery, in case of crisis they presumably hid what was in use, and thus it represents the fashion of the time when people hid it. The explanation for this is practical: coins could be easily spent if there was a need for it, but the jewellery was less adaptable as it had to be sold first. Because of that, people might not have collected jewellery in the way they did coins. Another feature of hoards supports this idea; even in case of the largest ones, the number of coins is much larger than the number of jewellery items. Hence, hoards probably contained the trinkets that were in current use in the family, which were more fashionable, newer items.

⁴⁹ Tóth, A tatárjárás kincsleletei, 79-80.

⁵⁰ Tóth, A tatárjárás kincsleletei, 79.

⁵¹ Logically, the period of production and the period of everyday use should be about the same because as long as the object is in everyday use, or in fashion, there is a market for it, which requires production.

Churchyard cemeteries

The problems of churchyard cemeteries are particularly important, as finds from both field and churchyard cemeteries are the source, where majority of the material comes from. In the first half of the Arpadian era far more jewellery turned up in graves than in hoards or settlement features. The reason for this is the following: artefacts found in settlements are always rare, as in most cases these are lost pieces (even if they did not want to use it any longer or the artefact was damaged, the raw material was still too valuable to throw it away), and there are not many hoards from this period. In contrast, burials frequently contained some jewellery. Although this situation changed somewhat in the second half of the Arpadian era, in consequence of the impoverishment of (churchyard) cemeteries and the appearance of jewellery in the notable horizon of the hoards of the Mongol invasion. Still, the amount of material from cemeteries is significant, and as research into hoards and cemeteries is rarely connected, the basis for dating the objects in most cases lies with parallels from cemeteries. The greatest problem with dating objects from burials is the lack of analysed and published cemeteries. In the Carpathian Basin there are only eight cemeteries which were excavated completely and have been at least partially dated to the Arpadian period (Ducové, Moravany nad Váhom, Krasno, Főnyed-Gólyásfa, Esztergom-Zsidód, Zalavár-Kápolna, Hajdúdorog-Szállásföldek, Kána).⁵² An even greater problem is that among these cemeteries only Zalavár-Kápolna,⁵³ Ducové⁵⁴ and Kána have been analysed and none of them have been published completely.

⁵² Ágnes Ritoók, "A templom körüli temetők felfedezése" [The discovery of churchyard cemeteries] in *Arhitectura religioasa medievala din Transilvania - Középkori egyházi építészet Erdélyben - Medieval Ecclesiastical Architecture in Transylvania* 4, ed. Péter Levente Szócs and Adrian Andrei Rusu (Satu Mare: Editura Muzeului Sătmărean, 2007), 255.

⁵³ Ágnes Ritoók, "Zalavár-Kápolna: egy temető elemzés lehetőségei és eredményei" [Zalavár-Kápolna: possibilities and results of a cemetery analysis] in: "... a halál árnyékának völgyében járok". *A középkori templom körüli temetők kutatása - A Magyar Nemzeti Múzeumban, 2003. május 13-16. között megtartott konferencia előadásai* ["... I am walking in the valley of the shadow of death." Research into medieval churchyard cemeteries. Presentations of the conference held in the Hungarian National Museum between 13-16th of May], *Opuscula Hungarica* 6 (Budapest: Magyar Nemzeti Múzeum, 2005), 173-183.

The more precise dating of the objects from hoards is a great advantage as the material from cemeteries should be regarded in a different way because objects from graves do not necessarily represent the everyday fashion. In the Arpadian period, this problem has not yet been investigated in detail. The ceremony is always held for people who are grieving and represents their attitude (besides the law and customs concerning burials) towards the dead. Therefore the way they buried the dead, the jewellery or dress accessories in the graves, might represent them or the deceased or the grievers and the dead together. In the case of burials, dress accessories tell about the way they buried the dead: clothed or in a shroud. In the case of a clothed deceased person, the question is whether they buried the dead in his/her own, regular clothes or better-quality clothes, or something completely different. Archaeology usually cannot answer these questions, as in most cases only the dress accessories and jewellery remain. However, the artefacts in the grave present the same problems as the clothes; the jewellery in the grave might not have belonged to the deceased, or even if it did, it might have been an heirloom which was passed from generation to generation. Therefore, clothes, jewellery, and the dress accessories of the deceased should always be regarded as grave-clothes -- which in some cases could have been everyday clothes as well. As this time the objects buried with the deceased did not define his/her rank, jewellery from graves can be considered as re-used objects which might no longer have been in use in everyday life, or at least not by the deceased. This situation is most obvious when a child is buried with a worn, old piece of jewellery or clothing, which must not have been his/her own property. This could have happened with adults as well, but for adults it is quite hard, if not impossible to recognise this. In consequence, the use of some objects can be

⁵⁴ Alexander Ruttkay, "Mittelalterlicher Friedhof in Ducové, Flur Kostolec, Bez. Trnava: Beitrag zum Studium der Beziehungen zwischen den sog. Reihengräberfeldern und Kirchenfriedhöfen vor dem 13. Jahrhundert,," in: *Etnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis zum 11. Jahrhundert*, ed: Dana Bialeková and Jozef Zabožnik (Bratislava: Veda, the Academy of Slovakia, 1996), 391–409.

extended.⁵⁵ The dichotomy in dating could be dissolved by applying a double dating for each object: the period when a particular type of jewellery was most probably made and used, and the latest appearance of the artefact, when the production of the object is not likely anymore, but its usage can be still identified. The period of use can be tracked by finds from cemeteries. The solution for this research situation is to collect information from graves where both coins and jewellery were recovered. The composition of hoards implies that there is a gap in the dating of finds from graves and finds from hoards. By comparing jewellery from hoards and from contemporary cemeteries a slight difference can be seen. This dichotomy will be discussed in detail in the next chapter, but summarising it, the problem is that the most common types of jewellery found in hoards (such as lock rings with flare ends or seal rings) are known from churchyard cemeteries, but they appear in graves rarely.

Destroyed settlements

Another type of archaeological source has preserved the moment of the Mongol invasion: destroyed settlements. Although the untouched evidence of destruction is rare, as people who returned to the settlement cleaned up the ruins and buried the dead, in some cases no one could return.⁵⁶ These completely destroyed settlements preserve the moment of crisis in different ways. Some of the settlement features, houses or pits, show signs of a critical situation, with corpses inside. These rural sites were recently collected by Magdolna Szilágyi⁵⁷ (Hejőkeresztúr-Vizekköze,⁵⁸ Cegléd,⁵⁹ Dunaföldvár-Ló hegy,⁶⁰ Szabolcs-

⁵⁵ Clearly, this could have happened with hoards as well, but until now no hoards connected to the Mongol invasion contained jewellery which can be dated to a significantly earlier period, although many pieces are worn. This shows some contrast to the hoards of the next centuries, many of which show much longer use, in some cases even a hundred years. For more information about the hoards of that period see: Gábor Hatházi, “A déli Kiskunság 14-15. századi kincsleletei és azok lehetséges kun vonatkozásai” [The fourteenth and fifteenth century hoards of the Southern Kiskunság and their possible Cuman relations], in *‘Kun-kép’ A magyarországi kunok hagyatéka* [‘Cuman-picture’ The remains of the Cumans of Hungary], ed. Rosta Szabolcs (Kiskunfélegyháza: Bács-Kiskun Megyei Önkormányzat Múzeumi Szervezete, 2009), 74.

⁵⁶ Laszlovszky, *Tatárjárás és régészet*, 457-48.

⁵⁷ Magdolna Szilágyi, “Perished Árpadian-age village at Dunaföldvár,” *Acta Archaeologica Academiae Scientiarum Hungaricae* 63 (2012):174-175.

⁵⁸ Mária Wolf, “Árpád-kori település Hejőkeresztúr határában” [Arpadian age settlement in the boundaries of Hejőkeresztúr], *A népvándorláskor fiatal kutatói 8. találkozásának előadásai* [The presentations of the 8th

Kisfalud⁶¹). Among these sites complete houses were excavated and published only at Hejőkeresztúr, and by that an entire household is reconstructed. These settlement features are also useful because they represent a moment of the everyday life of these people, just as the bodies in such features (houses, pits), their clothes and accessories represent the same thing, which is missing from both hoards and cemeteries. In exceptional cases, this type of site can be interpreted more like a hoard. At the site of Szank, part of a destroyed house was unearthed where people of the village (not only the inhabitants of the house) sought refuge, but the house burnt around them. Although not much later the ruins were searched, they did not find everything, as the excavated remains make it clear that people hid themselves and their valuable objects together with them in this place. Therefore, the golden headpiece that turned up in that house did not necessarily belong to one of the residents.⁶² In an urban context, the research opportunities are even more extended, as there are written sources about the destruction of the Mongol invasion and the people's behaviour during the attack. Esztergom in Rogerius's *Carmen Miserabile* is such example, in which he describes that the stone castle could defend itself, but the city under it was destroyed. He writes that people hid their valuables (gold, silver), killed their horses, burnt their houses and then ran away. This can be connected with archaeological evidence, as some traces of the Mongol invasion have been unearthed. Besides a hoard of a small amount of money and some jewellery, in the 1950s construction work accidentally uncovered body of a goldsmith with his belongings,

meeting of young researchers of the migration period], ed. Ágota S. Perémi (Veszprém: Veszprém Megyei Múzeumi Igazgatóság, 1999), 169-170.

⁵⁹ Gyöngyi Gulyás, "Egy elpusztult falu Cegléd határában" [A destroyed settlement on the edge of Cegléd], *A tatárjárás* [The Mongol invasion], ed. Ágnes Ritoók and Éva Garam (Budapest: Magyar Nemzeti Múzeum, 2007), 52-53.

⁶⁰ Szilágyi, *Perished village*, 161-164.

⁶¹ István Fodor, "Vorläufige Bericht über die Ausgrabung des Dorfes Szabolcs-Kisfalud am Jahre 1971-73", *Folia Archaeologica* 26 (1975): 176-177.

⁶² Unpublished material. The best summary is: Gábor Wilhelm, "Tatárjáráskori kincslelet Szank határából." [A hoard from the age of the Mongol Invasion from the edge of Szank] http://sirasok.blog.hu/2010/03/26/tatarjaraskori_kincslelet_szank_hatarabol (last accessed: May 2013.)

who tried to hide himself in a grain pit.⁶³ Because of the different context, these remains should be interpreted differently than those described above, on which the present paper will focus.

Summary

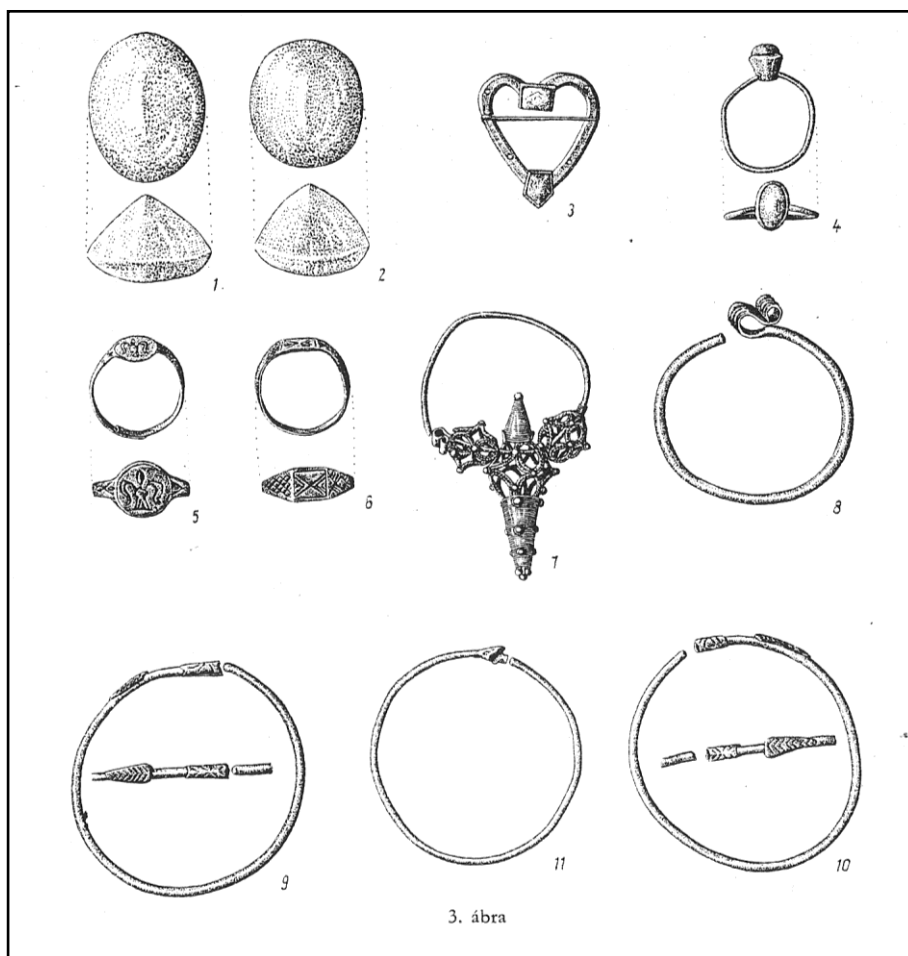
A combined investigation of the finds from hoards, churchyard cemeteries, and settlements can help make the dating of the objects of the period more precise and in some cases augment the social-economic interpretation of the finds. An accurate typochronology has to have different sources as each has different advantages and weaknesses, therefore they highlight different aspects of these objects. A different research possibility occurs with hoards that contain agricultural tools. This clearly implies the profession of the person who hid the hoard, and the value of his tools, as they were just as appreciated as the small items like jewellery and saving of the family.⁶⁴ Another possibility is the investigation of the context of each hoard.⁶⁵ Summarising the problems and possibilities discussed above: hoards in themselves are great sources for the economy and society of Arpadian age rural people. However, the situation they are connected to is crisis, which influences the source value of these finds. To solve this problem, the best solution is the investigation of finds from settlements, which were either lost or thrown away⁶⁶ and therefore represent a different situation of deposition. Those finds, which were probably lost, are the best source for this investigation, as they represent the actual fashion of the period studied.

⁶³ Laszlovszky, *Tatárjárás*, 458-461.

⁶⁴ For example, the hoard of Nyáregyháza-Pusztapótharasz, see: Parádi, *Pénzekkel kezelt ékszerek*, 119.

⁶⁵ For an outstanding example for such an investigation see: Jakab, *Tatárjáráskori kincslelet*, 266-269.

⁶⁶ Considering the relatively greater value of these artefacts and the value of their raw material, except for cases, where the action of conscious deposition cannot be doubted, they should be considered as lost pieces.



Picture 4. The hoard of Nyáregyháza-Pusztapótharasz. Parádi 1975, 123.

CHAPTER TWO - Typochronology of the Finds

In this chapter, I will review the most characteristic types of jewellery and dress accessories found at Kána village. For more precise dating, I will also include types which are not characteristic for the village, but are present in the twenty-three hoards from the time of the Mongol invasion, which contained coins and jewellery.⁶⁷ For comparison, I will concentrate on materials from contemporary churchyard cemeteries as research into eleventh- and twelfth-century field cemeteries would require a completely different methodology, because of the different burial customs.

As the basis of this typochronology is the chronology of the phases of the churchyard cemetery of Kána village, the methodology of the chronological reconstruction of the usage of this cemetery and its results need to be summarised. Altogether one thousand and twenty-nine graves and one thousand and seventy-five individuals were excavated in the cemetery. I divided the graves into eight chronological phases by their superposition and orientation. In those cases, when superposition and orientation were not resulted clear outcomes, I used the elevation of the graves or, when it was possible, their relation to the church as a supplementary data. With this method, I was able to group eight hundred and eighty graves. This was feasible because of a fortunate situation: dividing the graves by superposition gave a pattern about orientation. This made possible to identify graves with various chronological phases, which were not in superposition with particular phases (or in some cases were not in superposition at all).⁶⁸ This uncertainty occurred mostly in case of the first chronological

⁶⁷ Abony, Akasztó-Pusztaszentimre, Bajót, Balmazújváros I., Budapest, Esztergom-Szentkirály, Hajdúszoboszló-Aranyszeg, Jászdózsza-Jászapáti határ dűlő, Karcag, Kecskemét-Nyír, Kisbér, Korpona, Ladánybene-Hornyak-domb, Medgyesegyháza-Bánkút, Nyáregyháza-Pusztapótharasz, Nyírmártonfava-Gut, Pátroha-Butorka dűlő, Pécel, Tápiógyörgye, Tatabánya-Bánhida and Tyukod-Bagolyvár. Collected by Csaba Tóth, *A tatárjárás kincsleletei*, 81-87.

⁶⁸ I am aware of the situation that not all the graves can be dated to a certain period with equal confidence, and I considered this during the evaluation of the finds and the graves. On the other hand, all the graves that are in clear superposition with each other support this pattern of orientation, and there is no data, which contradicts to this. For more, those graves, which could have belonged to more than one phase, or there was only little or fragmented evidence, were not sorted to any of the phases.

phase. It was not possible to attach the remaining one hundred and forty-nine graves to any of the phases mostly because of their fragmented/disturbed condition, and in fewer situations because of their location. This latter mostly occurred in case the graves that were located at the edge of the cemetery, where the orientation could have been influenced (for example by the borderline - wall/ditch of the cemetery) and/or the superpositions were not as frequent as in the inner area. In a few individual occurrences the orientation could not fit into any of the phases. Thus, the relative chronology of the mentioned eight grave-groups of the cemetery relies not on grave goods, but mainly in a more exact method: stratigraphy. This makes possible to investigate the chronology of artefacts by the chronology of the cemetery, without using the traditional dating of the artefacts for dating each phase of the cemetery. This is useful, because by using this dating, the risk of a circular argumentation is avoidable. Also important is the possibility to date the general use of the cemetery not necessarily by grave-goods, as the church and the completely excavated village gives stabile chronology for that also.⁶⁹ Thus, it is possible to use the dating of the graveyard and the finds in its phases as a kind of chronological control to the traditional dating when determining the general typochronology of the artefacts.

The phases of the cemetery also revealed the changes of the churchyard. In the first four phases, the area of the churchyard was more or less the same. The appearance of architectural elements of the graves in the fourth phase indicated that the extension of the church occurred around that time. This was followed by two, rather unusual phases; both of

⁶⁹ A question could be raised whether the cemetery and the village existed in precisely in the same period. The beginning is clear; the church and churchyard were surely founded together with the village as they are not in superposition with any settlement feature, and for more, there is a circle around it without any pits, houses, or any other features. The end of the settlement and the churchyard can be determined less clearly. However, there is no sign either in the village, or in the cemetery of a significant fourteenth century phase, no matter if using traditional dating, or the chronology of the cemetery determined by the method described above. The longer use of the churchyard is also unlikely, as the surrounding villages had their own churches from the beginning of their existence. Although the parish rights for the people of Kána should have remained in the property of the parish of Kána, the cemetery pattern does not show signs of sporadic burials in or after the latest phase of the graveyard. Regarding that the people of Kána were a rural community, probably the change of their parish was not as hard as in case of burgers or nobleman.

them contained only several graves with reversed orientation, which were all located in a small area East from the chancel. The cause of this peculiarity is not clear. It may have correlated with the rebuilding of the Western part of the church, but this does not explain the inverse orientation, which suggests an abnormal situation in the life of the settlement, and by the chronology of the churchyard this occurred around the mid-thirteenth century. It would be tempting to connect it with the Mongol invasion, but as there is no direct evidence for destruction in the village, this cannot be certified. In the remaining two phases, the orientation and spatial pattern of the graves was normal again, but the churchyard was rearranged; its area was constricted.

The determination of the absolute chronology of the cemetery cannot be made by coins, as only eleven pieces were found in the graves. As it was mentioned before, the emergence of the church and churchyard can be dated safely for the second third of the twelfth century, as a coin of Béla II (1131-1141) was discovered in the foundation level of the church.⁷⁰ The end of the cemetery and the village cannot be set that precisely. Coins dated after the Mongol invasion did not turn up. A confident dating would require a more detailed analysis of the finds of the settlement, as it is hard to date precisely the material of the settlement to one half of the thirteenth century. However, (the amount of) certain pottery types (white – in a few cases painted - pottery, Austrian type pots), and some iron finds, such as rowel type spurs imply that the village - in some form – still existed in the second half of the thirteenth century.⁷¹

⁷⁰ The question could be raised if there were graves which can be dated before the foundation of the church, as the orientation of the graves of the first phase are not quite the same as the orientation of the church. However, there was no sign of an earlier church, and the first church was not disturbed any graves, which indicates that if it was not standing already when the first graves were dug, than its place was already clear, or the construction started already (this latter is unlikely, as nothing in the graves implies such situation). For more, only the last phase of the cemetery has similar orientation to the church. Thus, most probably there is no phase of the cemetery, which existed before the foundation of the church.

⁷¹ György Terei and Antónia Horváth, “Az Árpád-kori Kána falu vasleletei II” [The iron finds of the Arpadian age village of Kána], *Budapest Régiségei* 41 (2007): 168.

The analysis of the cemetery shows the same results; if the existence of the settlement is known, the length of each phase can roughly determined by the number of graves and the approximate length of usage of the cemetery.⁷² This determination is inexact mostly because in the estimation of the length of each phase it leaves out of consideration those graves which were not grouped into any phase, and it also presumes a constant death rate, which is not likely to have been.⁷³

Mathematically, the length of each phase can be calculated by the annual death rate (number of individuals of the phases/approximate years of the use of the cemetery, in this case 880/160) multiplied by the number of the individuals of each phase. This gives the following results: The first phase can be dated roughly around 1140 to 1180, the second 1180 to 1200, the third 1200 to 1240, the fourth 1240 to 1260, a fifth and sixth lasted together for maximum six years, therefore the seventh can be dated from around 1260 to 1275 and the eight from 1275 to 1290.

It is very important to note, that these are only approximate datings, and it can have a looseness of two, in some cases probably even three decades. Coins do not contradict to this chronology, but it neither can really support it, as it shows that the use of coins in graves is

⁷² In this case I determined the length of the existence of the settlement (both the village and the cemetery) in one hundred and sixty years. The basis for that was the coin of Bela II (1131-1141) from the foundation level of the church and the material from the settlement. Besides this, there is another possibility for the dating of the settlement: the lack of certain finds. It is hard to date material within the twelfth and thirteenth century, but the material dated to the beginning of the twelfth and to the fourteenth century is distinguishable, and none of them appears. Thus, I assumed that the village existed from the mid-twelfth century until the end of the thirteenth century. As I needed an exact number for calculation, I determined this in one hundred and sixty years, which is obviously only a rough dating.

⁷³ Previous research dealt for a long time with life-expectancy, the mortality rate and generally with the paleodemographic issues of the period. These were based on the anthropological material of cemeteries, and although today some aspects of these works are outdated, their statements are important. Most of all is that graveyards can hardly be analysed only by demographic models. See: Gyula Acsádi and István Nemeskéri, "La Population de la Transdanubie. Nord-Est." *Annales Historico-Naturales Musei Nationalis Hungarici* 50 (1958): 359-392. See also Kinga K. Éry, and Alán Kralovánszky, "Analyse paléosociographique des cimetières des environs de Székesfehérvár. X et XI siècles" *Annales Historico-Naturales Musei Nationalis Hungarici* 52 (1960): 497-522. For the research of the same questions by new methods, concerning social issues also see Lajos Hüse, *A Tiszántúl Honfoglalás- és Árpád-kori népességének szociodemográfiája*. [The sociodemography of the Conquest period and Arpadian age population of the area East from the Tisza River.] PhD dissertation. (Debrecen: University of Debrecen: 2003).
http://ganymedes.lib.unideb.hu:8080/dea/bitstream/2437/78896/3/de_2448.pdf

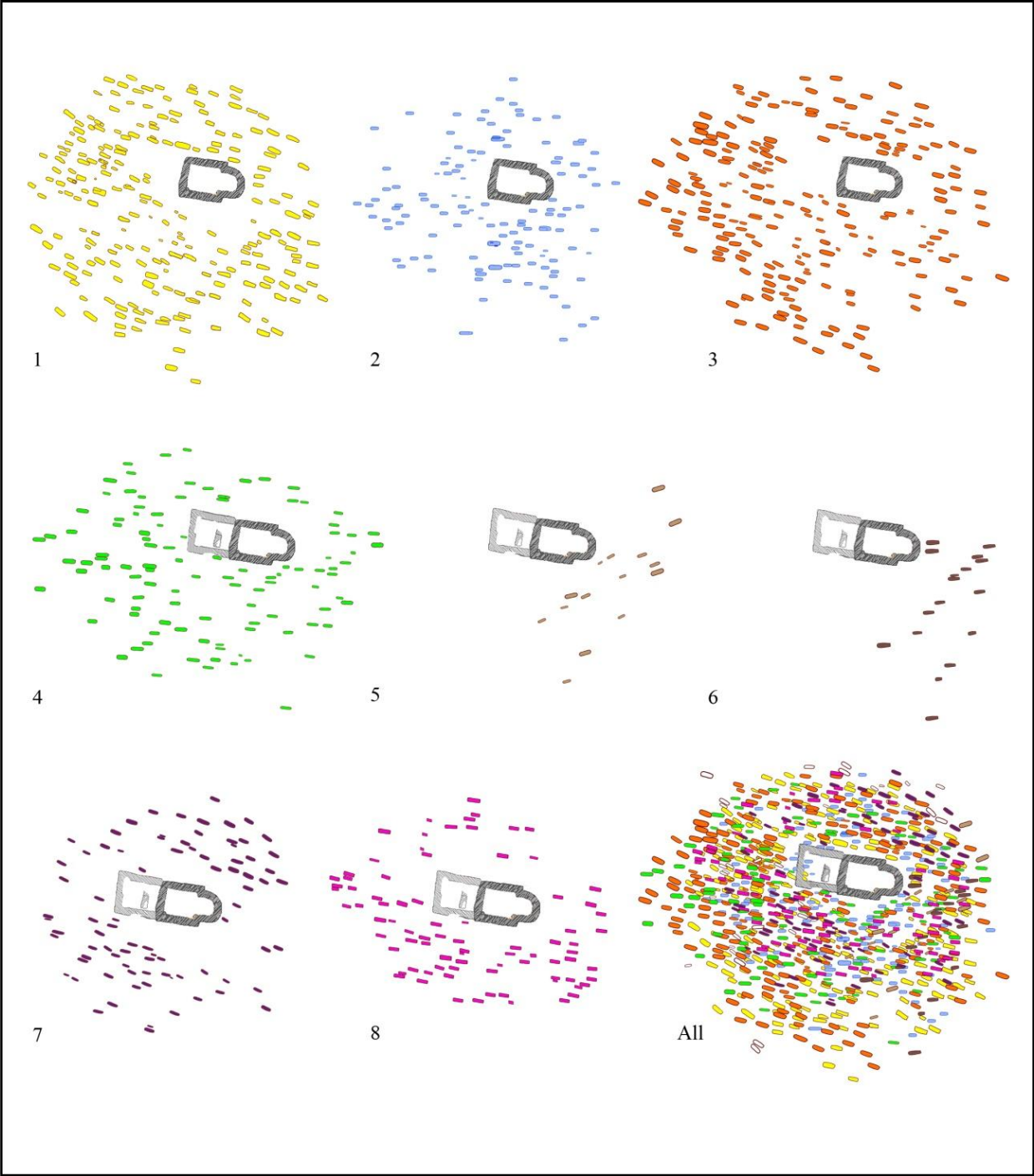


Table 1. The phases of the cemetery of Kána.

much longer, than their use could have been in money circulation. A good example for that the coins of Géza II, the most frequent mint (six out of eleven pieces) among all. It was discovered in graves, which surely belonged to the first phase, but also in ones that are associated with the last phase of the cemetery. This most probably happened because of the long use of such coins (in money circulation). Hoards are good proof for this situation, as in some cases decades can be between the first and last mint.⁷⁴

Lock rings

Lock rings are the most common type of Arpadian-age jewellery; they appear frequently in the graves of both field and churchyard cemeteries. As seen at Kána and many other sites, in most cases these rings seem to have been attached to a strip of textile which was braided into the hair of the deceased.⁷⁵

The low incidence of grave goods in churchyard burials can be documented -- as was described in the previous chapter -- but in nearly every excavation of a churchyard cemetery at least one lock ring represents the jewellery of the period. There are several subtypes of this trinket, distinguished by the end of the ring: simple, open-end lock rings, S-ended lock rings (the S-end may be ribbed or plain) and lock rings with flaring end(s). Another distinctive feature is the shape of the cross-section of the wire; it may be round, diamond-shaped (which in the case of worn pieces can be more of an oval shape), or twisted. The material is mainly copper alloy, but there are numerous silver pieces, and also some examples of lead lock rings.

Kána is an excellent basis for this research as all types of lock rings were found there. Altogether, eighty-four lock rings were unearthed during the excavation. Eight pieces were stray finds, six came from diverse settlement features and the remaining seventy pieces were found in the graves of the cemetery.

⁷⁴ In extreme cases thirteenth century Friesach denarius occurred together with the coin of Ladislaus I. See Tóth, *A tatárjárás kincsleletei*, 81-87.

⁷⁵ This was determined by the usual finding situation of lock rings: a pair near the two sides of the skull or one underneath it. In a few graves of Kána textile strips were oxidized to lock rings.

Out of the eighty-four lock rings, eight have simple open ends. Two of these are large rings made of copper alloy (Tab. 2/1) and one is the so-called pear shaped, small silver ring made of a thick (4mm) wire (Tab. 2/7). Only one lock ring has a flaring end (Tab 2/3). Most of the finds, sixty-seven pieces, have S-ends; two of these originally had multiple, at least one and a half, S-ends (Tab. 2/5). Thirty-four S-ends are simple, flat hammered ones and thirty-three are ribbed.⁷⁶ Eight pieces are damaged, and therefore the ends cannot be examined.

The most common type of cross-section of the wire is round; sixty-three pieces have this kind of wire. The remaining rings fall into two nearly equal groups: eleven pieces have twisted (Tab 2/6) and ten have diamond shaped – or oval – wire. Only two lock rings have unusually thick wire, the above-mentioned silver one, pear-shaped ring, and a copper alloy, ribbed, S-ended lock ring, with a wire that has a diamond shaped, four mm wide cross section which is tapered towards the end (Tab. 2/4).

Fifty-nine lock rings were made of copper alloy and twenty-five of silver, of which fifteen had ribbed S-ends, and only seven had flat S-ends. With the exception of two, medium sized,⁷⁷ twisted-wire S-ended pieces the silver lock rings were all rather small,⁷⁸ probably because of the expensive raw material. Six of the simple open-ended rings were made of copper alloy, and only two were made of silver, including the thick, pear-shaped lock-ring. The only lock-ring with flaring ends was made of copper alloy. Examining the cross-sections gives results that are even more distinct. All the lock-rings with diamond-shaped cross-sections were made of copper alloy, and ten of the eleven twisted-wire lock rings were made of silver, which suggest that the cross section most probably associated with material.⁷⁹

⁷⁶ Although researchers often give details about the number, and sometimes the shape of the ribs of the ends, I will not do this as, it does not give any additional information to understanding the process of the making of the lock rings. First, the flattening tool or pliers with which the smith shaped the ribs was surely capable of producing more than the number of ribs that appear on a single lock ring. Second, the smith may have had more than one tool for that purpose; therefore, the shape is not relevant either.

⁷⁷ They are approximately three centimetres in diameter.

⁷⁸ The average diameter is two centimetres; the average thickness of the wire is one millimetre.

⁷⁹ The reason behind this could be practical: silver is a softer, more pliable material than copper alloys, especially bronze.



Table 2. Lock ring types of Kána village. 1: K/1037, 2: K/337, 3: K/633, 4: K/1977, 5: K/177, 6: K/2966, 7: K/2794, 8: K/2973, 9: K/2612.

Another characteristic of the twisted lock rings is that the S-end was ribbed in six cases and flat in only three cases. Lock rings are often used for dating cemeteries, although István Bóna and Nándor Parádi stated as early as the 1970s that the most frequent type, the S-ended lock ring should not be used for that purpose. They noted that this type was in use from the second half of the tenth century until the turn of the thirteenth century, although Parádi concluded that the larger rings were used in the twelfth and thirteenth centuries by examining hoards from the time of the Mongol invasion.⁸⁰ Other features of lock rings, also regarded as chronological attributes are: twisted wire; thick diamond cross-sections, tapered wire; a pear-shaped form; large, open-ended rings; one and a half S-ends, and a flaring end. In the following I will discuss whether the chronological phases of the cemetery at Kána and the examination of hoards support the earlier research predictions.

Lock rings with twisted wire are regarded as eleventh- and twelfth-century trinkets.⁸¹ This idea is also supported by the hoards, as none of them contains such jewellery, presumably because they were not fashionable at that time any longer.⁸² The grave goods at Kána show that *generally* this statement is true, as most of these lock rings were found in the graves of the first phase of the cemetery, dated roughly to the middle of the twelfth century, and another piece was found in a grave of the third phase, which may still have dated to the end of the twelfth or beginning of the thirteenth century. However, the last piece (made of copper alloy) came from the seventh, last but one, phase of the churchyard, and this indicates that (at least in case of burials) this type of lock ring was still in use in the second half of the thirteenth century. The condition of the object (damaged), however, suggests that it was an heirloom.

⁸⁰Bóna, *Dunaiújváros*, 125-139; Nándor Parádi, *Pénzekkel kezelt ékszerek*, 151-152.

⁸¹ Levente Szabó, "Árpád-kori templom és temető Mezőcsát határában" [An Arpadian-age church and churchyard on the edge of Mezőcsát], *A Herman Ottó Múzeum Évkönyve* 45 (2006): 40.

⁸² On the contrary, both diamond and round cross section are present, see Parádi, *ibid.* 151.

The thick, diamond cross-sectioned, S-ended piece is rather early. The closest parallel is a ring from grave 4 at Visonta-Felsőrét.⁸³ The chronology of this type of lock ring is bounded by similar types of rings, neither of which appear in later graves,⁸⁴ but the piece from Kána was found in a grave of the fourth phase of the churchyard, probably interred in the first third of the thirteenth century. This is a rather late dating, even considering the age (*senilis*) of the deceased woman. Until more parallels are discovered, this piece should be regarded as exceptional and not as a general use of this type in the thirteenth century.

The thick, small, pear-shaped ring also represents an early type, in Giesler's chronology it appears as a typical jewellery of the late-Bjelo-Brdo phase, and thus, it was considered to be dated from the second half of the eleventh century, to the beginning of the twelfth century.⁸⁵ The piece from Kána was found in a quite late grave of the first phase of the cemetery, therefore dated to the second half of the twelfth century, although previous research (which concentrated on the S-end variant of this type of jewellery) regarded it as typical for the eleventh century.⁸⁶ Numerous pieces appear even in the contemporary hoard of Nagyarsány, which was hidden around 1010.⁸⁷ The closest parallel to Kána is a pair of lock rings excavated from grave 378 at Szegvár-Oromdűlő, a tenth- and eleventh-century field cemetery, where these lock rings were found together with the remains of a leather pouch next to the elbow of the deceased.⁸⁸ The find situation at Kána indicates a different use; although the skull was missing, the lock ring was found together with another S-end one around the area of the skull, which implies that in this case it had the usual role: embellishment of the head/hair.

⁸³ László Révész: *Heves megye 10-11. századi temetői*. [The tenth-eleventh century graveyards of Heves county] (Budapest: Akadémiai kiadó, 2008): 367.

⁸⁴ Révész, *Heves*, 402.

⁸⁵ Giesler, *Bjelo-Brdo*, 107-108.

⁸⁶ Sarolta Tettamanti, "A zalavár-községi I. számú XI. századi temető" [The eleventh-century cemetery of Zalavár-Község I], *Archaeologiai Értesítő* 98 (1971), 216-219.

⁸⁷ István Gedai, "XI. századi kincslelet Nagyarsányból" [An eleventh-century hoard from Nagyarsány], *A Janus Pannonius Múzeum Évkönyve* 17-18 (1972-73): 88-89.

⁸⁸ Livia Bende and Gábor Lőrinczy, "A szegvár – oromdűlői 10-11. századi temető" [The tenth- and eleventh-century cemetery of Szegvár-Oromdűlő] *Studia Archaeologica* 3 (1997): 209.

Large-sized, open-ended, copper alloy rings were previously considered as items which went out of use in the eleventh century.⁸⁹ Recent research shows that in certain cases this type was in use in the twelfth century.⁹⁰ In the cemetery of Kána open large sized, open ended, copper alloy lock rings are present in the second, third, fourth, and seventh phases of the cemetery, which means that it was constantly in use until the mid-thirteenth century. Comparing this with the perception of Nándor Parádi – namely, that large-sized lock rings were typical in the later Arpadian age⁹¹ – it is clear that although the presence of this type is undeniable, it cannot be regarded as the major type nor typical size of the period, as all forms and sizes are present, and among them large-sized pieces are a minority.

Lock rings with one and a half S-ends appear as early as the late Avar cemeteries of the ninth century,⁹² and according to the present research, went out of fashion by the end of the tenth century.⁹³ Although the form of the S-end of the lock rings is similar, there is a significant difference between the early and (late) Arpadian age pieces: the way the end was formed. While in the early pieces the wire was simply bent to an S-shaped form, in the later variants it was flattened, and in some cases even ribbed. This later type was found in the churchyard cemetery of Zalavár-Vársziget-Parkoló, in graves 60/96 and 170. Both pieces were made of silver with ribbed S-ends, and the latter has a twisted wire. These pieces are dated to the twelfth century.⁹⁴ One piece recovered from the eleventh-century field cemetery

⁸⁹ Béla Miklós Szőke and László Vándor, *Pusztaszentlászló Árpád-kori temetője*. [The Arpadian age cemetery of Pusztaszentlászló]. (Budapest: Akadémiai, 1987), 53-54. See also Giesler, *Bjeldo-Brdo*, 105-106. Although he was the one who indicated the early dating of such lock rings, but he also noted that large sized lock rings can also be found in hoards from the thirteenth century.

⁹⁰ Révész, *Heves*, 402.

⁹¹ Parádi, *Pénzekkel keltezett ékszerek*, 150.

⁹² Béla Miklós Szőke, “Die Beziehungen zwischen dem oberen Donautal und Westungarn in der ersten Hälfte des 9. Jahrhunderts.” in Falko Daim ed. *Awarenforschungen II. Archaeologia Austriaca Monographien 2*. Vienna: Böhlau (1992): 938-965.

⁹³ The latest graves with the early type are: Rusovce (Slovakia) Grave 40., Halimba Grave 527. See Szőke, *A honfoglaló*, 44.

⁹⁴ I would like to thank Ágnes Ritoók for providing me with unpublished data from her excavation at Zalavár-Parkoló.

of Sellye, is only known from a drawing.⁹⁵ Two pieces were found associated with a coin of Saint Ladislaus (1077-1095) in grave 32 of the early Arpadian age field cemetery at Békés-Povádzug.⁹⁶ Another piece was dated to the eleventh century (by its details) from grave 50 of the field cemetery at Budapest Timur utca. It has a ribbed S-end, the ring is a larger size, the wire is made from silver and particularly thick.⁹⁷ A close parallel is a piece from grave 381 of the churchyard cemetery at Főnyed-Gólyásfa, which has been dated to the twelfth-thirteenth century, and the piece from Kána, which came from a grave of the third phase of the cemetery and therefore is dated around the turn of the twelfth century. Despite the similarity of these three rings, I believe that lock rings with multiple, flattened or ribbed S-ends do not represent a subgroup of this type of jewellery in the Arpadian age and are not significant for dating. The reason for their sporadic appearance is probably the easy technique of the formation; if the artisan hammered a piece of wire a little too long, the best solution was to make another loop on the terminal of the ring. These objects should be considered normal S-ended lock rings, not related to the multiple S-ended lock rings of the ninth and tenth centuries.

The most interesting find of all is probably the lock ring with a flaring end. Only one such piece was found at Kána, in a grave from the second phase of the cemetery, therefore dated roughly to the last third of the twelfth century. Researchers considered these finds either as lock rings or as arm rings until Mihály Kulcsár's recent study of this jewellery. He examined evidence for all the finds and stated that whenever such jewellery was found in the context of a grave it was used as a lock ring. The cause of the misunderstanding was the research situation; for a long time this type of jewellery was only known from hoards,

⁹⁵ Attila Kiss, "A sellyei Árpád-kori temető" [The Arpadian age cemetery at Sellye], *A Janus Pannonius Múzeum Évkönyve* 1967 (1968): 72.

⁹⁶ Ottó Trogmayer, "X-XII. századi Magyar temető Békésen" [X-XIIth century Hungarian cemetery at Békés], *A Móra Ferenc Múzeum Évkönyve 1960-1962* (1962):14.

⁹⁷ Katalin Írásné Melis, "Árpád-kori temetők a pesti határban, 11-13. század" [Arpadian age cemeteries on the outskirts of Pest, 11-13th centuries], *Budapest Régiségei* 31 (1997): 58-59.

therefore the way people wore it was unknown. This interpretation was accepted because of the statement of an influential researcher, József Hampel, who assumed, because of the usual large size, that they were a type of wristlet.⁹⁸ Kulcsár dated the use of these items from the beginning of the twelfth to the first decades of the fourteenth century.⁹⁹ Despite this dating these are rare finds in the cemeteries of the period. There is only one field cemetery, Pusztaszentlászló, where one grave contained such a lock ring. Occurrences in churchyard cemeteries are not numerous; lock rings with flaring ends were recovered from graves in only sixteen cemeteries (Baracs, Bészob, Budapest Belvárosi plébániatemplom, Cegléd, Csengele, Csepreg-Szentkirály, Ducové, Eger, Hódmezővásárhely-Kútvölgy, Kaposvár, Krásno, Nagyecsed, Pusztaszentlászló, Zenta¹⁰⁰ and Kána). This is most striking because this type is the most common find of the hoards of the period, as – unlike other types of trinkets – they occur in nearly all hoards containing jewellery.¹⁰¹ The picture is even more complicated if one compares this situation with the occurrences of S-ended lock rings. This widespread jewellery can be found in nearly every cemetery of the period, which, even if one restricts the research to churchyard cemeteries, is more than one hundred and fifty sites. At the same time, S-ended lock rings are not common finds in hoards; they only appear in those from Nyáregyháza-Pusztapótharaszti,¹⁰² Akasztó-Pusztaszentimre,¹⁰³ Karcag,¹⁰⁴ Tyukod-

⁹⁸ Mihály Kulcsár, “Néhány megjegyzés az Árpád-kori karikaékszerek viseletének kérdéséhez. Az ún. köpűs záródású karikák” [In regard to the wearing of Arpadian age lock rings. The so-called lock rings with flaring ends], *Savaria* 22/3 (1992-1995): 249-250.

⁹⁹ Ibid., 258-259.

¹⁰⁰ Ibid., 270.

¹⁰¹ After them, the most frequent finds are rings, mainly seal rings, see: Parádi, *Pénzekkel kelezett ékszerek*, 148-149. A total of eighteen hoards contained lock rings with flaring ends out of the twenty-six which contained jewellery: Akasztó-Pusztaszentimre, Bajót, Balmazújváros, Budapest-Rákosszentmihály, Geszti, Hajdúszoboszló-Aranyseg, Karcag, Ladánybene-Hornyák domb, Medgyesegyháza Bánkút, Nyáregyháza-Pusztapótharaszti, Nyírmártonfalva-Gut, Oros, Pátroha-Butorka dűlő, Pécel, Tápiógyörgye, Tatabánya-Bánhida, Tiszaórvény and Tyukod-Bagolyvár. See Parádi: Ibid. 128-148 and Tóth, *A tatárjárás kincsleletei*, 81-87.

¹⁰² Parádi, *Pénzekkel kelezett ékszerek*, 124.

¹⁰³ Ibid., 130.

¹⁰⁴ Ibid., 136.

Bagolyvár¹⁰⁵ and Tiszaörvény-Templomdomb.¹⁰⁶ All of them were made of electron, a natural alloy of silver and gold.

Summarising the results of the chronology of lock rings, it is clear, that their dating is a complex issue. Although tendencies can be made on dating, they cannot be used exclusively, in every case.

Possible reasons for this contradiction are either the nature of burials and/or the value of the artefacts. There are some differences in the material of the jewellery comparing the artefacts in graves and in hoards. Not surprisingly, all the hoards contain jewellery which was made of precious metal, mainly silver, and in two cases electron or gold.¹⁰⁷ An exception is the item from Tápiógyörgye, which is gilded bronze.¹⁰⁸ Artefacts from cemeteries show a rather diverse picture, although in most cases there are only one or two lock rings (except Kaposvár and Krásno, where more pieces – sixteen and eight – lock rings were found), and their material is not always indicated in the publications. The examples from Kána are made of copper alloy, the ones from Kaposvár are either lead or silver-plated bronze,¹⁰⁹ the lock rings of Krásno are made of either silver or bronze,¹¹⁰ the pair of lock rings from Cegléd-Madarászhalom,¹¹¹ Szob-Bézsob, and Csengele are also bronze. The piece from Téglás was made of silver alloy.¹¹² The material of the gold-plated silver piece from Hódmezővásárhely and the electron pair from Eger was more precious.¹¹³ Summarising these pieces, it can be

¹⁰⁵ Ibid., 138.

¹⁰⁶ Ibid., 140.

¹⁰⁷ Electron/gold finds: Karcag, Oros. See Parádi, *ibid.*, 134; 138-140.

¹⁰⁸ Tóth, *A tatárjárás kincsleletei*, 87.

¹⁰⁹ Edit Bárdos, “Középkori templom és temető Kaposvár határában” [A medieval church and churchyard cemetery on the outskirts of Kaposvár], *Somogyi Múzeumok Közleményei* 3 (1978): 193; Edit Bárdos, “Középkori templom és temető Kaposvár határában II” [Medieval church and churchyard cemetery on the outskirts of Kaposvár II], *Somogyi Múzeumok Közleményei* 14 (2000): 17.

¹¹⁰ Oldrich Krupica, “Stredoveké Krásno” [Medieval Krásno], *Zápádné Slovensko* 5 (1978): 301-329.

¹¹¹ Judit Topál, “Árpád-kori temető és templom Cegléd-Madarászhalmon” [Arpadian age church and churchyard at Cegléd-madarászhalom], *Studia Comitatus* 1. (1972): 62.

¹¹² Kulcsár, *Kopűs*, 266.

¹¹³ Ibid., 252, footnote 3; 256.

stated that bronze is more common in cemeteries than silver and gold or electron is extremely rare.

The distribution of the material of lock rings with flaring ends therefore is quite similar to that of the others, although no synthesis has been written (yet) about the issue. At Kána, 30% of the lock rings (25 pieces), were silver; all the other artefacts were made of copper alloy. Gold or electron S-ended rings are also rare finds.

Another reason why only the flaring-ended silver lock rings were hidden is the average size of the rings. In the finds from Kána, most of the silver S-ended or open rings were rather small, with a diameter around 2 centimetres; the flaring-ended lock rings are much larger, with an average 4-5 centimetres diameter. This means that their value was also larger. However, this does not explain the rareness of this jewellery in graves.

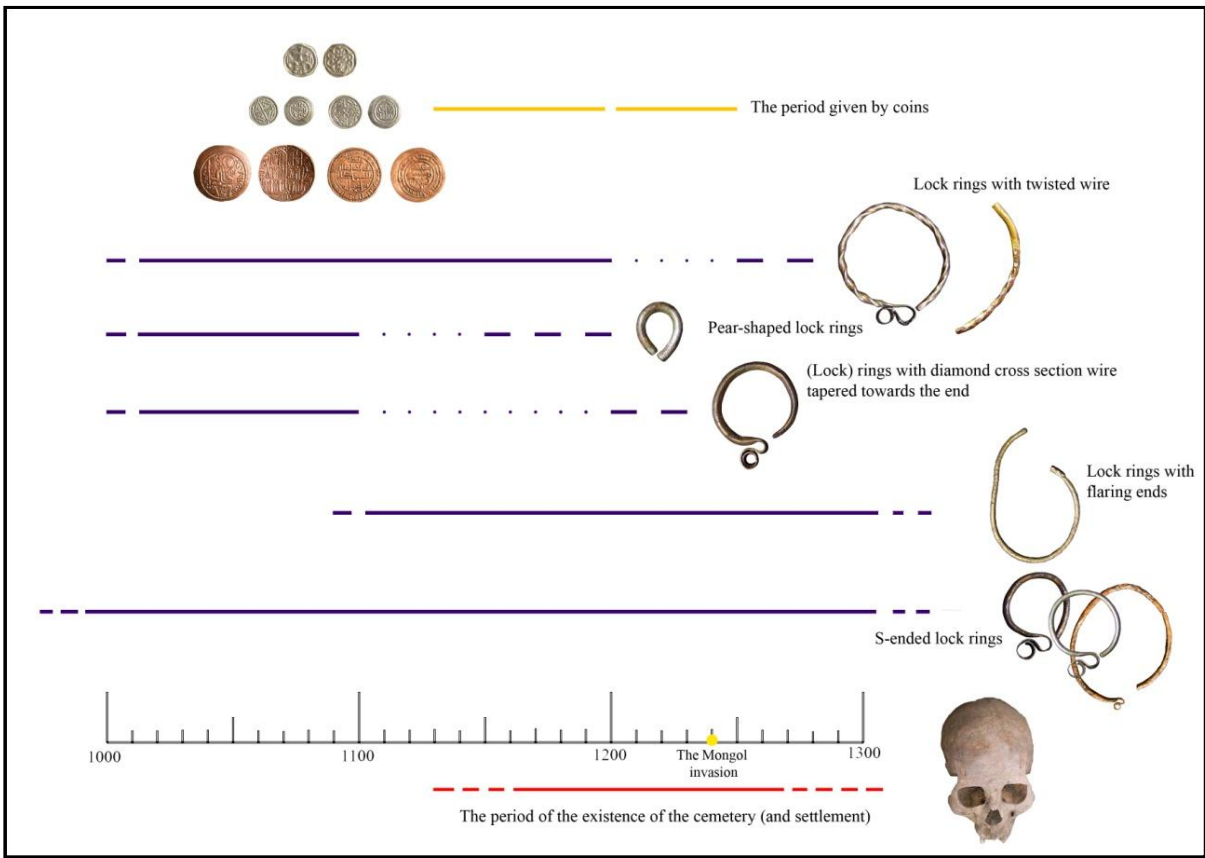


Table 3. The occurrence of lock rings in graves, hoards and settlement features

As described before, it is noticeable in the cemetery of Kána that the deceased often had items which were much older than the burial itself, sometimes by decades, in a few cases maybe even a hundred years. All this shows a pattern, that the artefacts of the graves are a little bit older than the contemporary fashion, either because they used these objects for such a long time or because they buried the less valuable pieces. Hoards, on the contrary, show the contemporary moment when they were hidden, and therefore they do not relate to contemporary fashion in the same way.

There is good evidence for this from two periods and two types of lock rings. I already mentioned the example of the pear-shaped ring, which in the context of Kána was an outdated piece of jewellery, but the eleventh-century hoard of Nagyharsány had twenty-three of them. Therefore, one should expect the lock rings with flaring ends in later graves, from the turn of the thirteenth and into the fourteenth century. The problem with this is that it is hard to date graves without an analysis of the cemetery or associated finds in the same grave, which is rarely published. There are some definite examples, however: in the cemetery of Kaposvár, grave 22 also contained fourteenth century headgear; grave 249 a pair of lock rings was associated with a seal ring with a fleur de lis sign, which (seal rings in general, but the decoration also) often appears in hoards, but rarely in contemporary graves.¹¹⁴ The largest number of flaring-ended lock rings was found in cemeteries, which were in constant use between the thirteenth and fourteenth centuries, exemplified in Kaposvár and Krásno.¹¹⁵ The sporadic appearance of this type of lock ring in later graves can be explained by viewing it as a change in fashion. From the fourteenth century on, not only jewellery, but also the hairdo changed, which is seen in the appearance of hair pins and a new form of headgear: coronets.¹¹⁶ All this meant that they were less likely to use the old lock rings in burials,

¹¹⁴ Bárdos, *Kaposvár*, 205.; 210.

¹¹⁵ Although there is a counter-example at Ducové, where they continued in use, but only two lock rings of this kind were found there.

¹¹⁶ Bárdos, *ibid.*, 194.

therefore they do not appear in graves. Although the change in fashion was not a sudden process, as the earliest types of coronets appears already in the second half of the thirteenth century, and there are lock rings from the beginning of the fourteenth century. However, according to Mihály Kulcsár, no lock rings are associated with coins of Louis the Great (1342-1382).¹¹⁷ Therefore, fashion seems to have changed over a shorter period than that implied by the early lock ring types.

This change can be noticed in one grave of Kána, which according to this tendency – belonged to the last phase of the cemetery. In this grave of a young girl, scraps of some kind of headgear were discovered. The remains were so fragmented, that the original shape or type cannot be determined. As the shreds covered mostly the scruff, the most probable interpretation of the headgear would be a mob-cap. However, the delicate, close-woven textile suggests that the interpretation of this headgear as a coronet cannot be excluded. This piece is a nice proof for the parallel existence of diverse hairstyle or headgear. However, this piece also draws attention to the possibility, that in many graves, where no traces of any kind of headwear appears, mob-caps or coronets made of only textiles or some other organic material could have been put originally, as the small fragments of this piece only remained because of the gold stapling.

Rings

Comparing to lock rings, finger rings were much less represented in the cemetery of Kána, as altogether only eight pieces were found, six from graves¹¹⁸, one from a pit near the church,¹¹⁹ and one from a work-pit in the settlement which can be associated with two external ovens.¹²⁰

¹¹⁷ Kulcsár, *Kopűs*, 259.

¹¹⁸ Grave no. 327 (K/1821), 394 (K/1732), 601 (K/1794), 664 (K/2600), 861 (K/2777) and 947 (K/2778)

¹¹⁹ SE-810 (K/2100)

¹²⁰ SE-7154 (K/1976)

All finds from the cemetery (including the one in the pit near the church) are simple band rings, but different types. Two pieces were made of copper alloy; one was made of semicircular wire (K/1794) and the other was made of a flat piece of copper alloy (2777). Both pieces have open ends; the latter is particularly unusual: one end of the ring is simple, but the other one was shaped -- both sides were narrowed. So far, I have not found any parallel to this piece, probably because it should not be regarded as an independent form, but rather as a piece which for some reason -- for example because of the shape of the metal sheet of which it was formed or because of some later damage – took on this shape. Simple, undecorated, open-ended wire and band rings were used widely from the late Avar period and they were in use until the end of the eleventh century.¹²¹

The remaining five rings were made of silver; three pieces were cast (K/2600, K/1821, K/2100) and two pieces were made of silver plate (K/2778, K/1732) both with narrow open ends, but different decoration and shapes. The first piece is made of a thin silver plate and has no decoration, but the top of the ring is broadened, originally in a rhomboid shape. Similar decorated or undecorated pieces are most common in early Arpadian age cemeteries, such as Homokmégy-Székes,¹²² Biharudvari,¹²³ or many pieces from the cemeteries of Rétköz.¹²⁴ They also appear in graves of churchyards, like Mezőcsát,¹²⁵ Főnyed-Gólyásfa,¹²⁶ or Krásno, the latter of which extends the use of this kind of jewellery to

¹²¹ Szőke – Vándor, *Pusztaszentlászló*, 68. See also Révész, *Heves*, 420.

¹²² Zsolt Gallina and Gabriella Hajdrik, “10-11. századi temetőrészlet Homokmégy-Székesen” [Tenth-eleventh century cemetery fragment from Homokmégy-Székes] *Cumania* 15 (1998): 146, 157.

¹²³ Károly Mesterházy, “A sárrétudvari (Biharudvari) X-XI. századi temetők” [The tenth and eleventh century cemeteries of Sárrétudvari (Biharudvari)], *A Bihari Múzeum Évkönyve* 2 (1978): 33.

¹²⁴ Eszter Istvánovits, “A Rétköz honfoglalás és Árpád-kori emlékanyaga” [The material remains of the Conquest period and Arpadian age Rétköz] (Nyíregyháza: Jósza András Múzeum, 2003): 303.

¹²⁵ Szabó, *Mezőcsát*, 45.

¹²⁶ Csilla M. Aradi, “A főnyed-gólyásfai Árpád-kori temető és település eddigi ásatásának összegzése” [Summary of the excavations at the Árpád-aged cemetery and settlement of Főnyed-Gólyásfa], *Somogyi Múzeumok Közleményei* 13 (1998): 117, 122.

the second half of the thirteenth century.¹²⁷ The piece found in Gilău can be dated similarly, since the excavated fragment of the cemetery was dated to the twelfth-thirteenth century.¹²⁸

The piece from Kána is very worn. It comes from a grave of a twelve-year-old child, but judging from its condition it originally must have belonged to someone else, not to mention that the ring was too large for the child, and therefore they altered the ends of the ring to fit the new owner. The superposition of the graves shows that this grave belonged to the first phase of the cemetery and therefore it can be dated to the second half of the twelfth century, but the condition of the artefact suggests that it was made some considerable time earlier.

The second open-ended silver ring (K/1732) is slightly thicker than the previous one, and it narrows from the middle of the ring. It has a geometric, > < shaped, punched decoration, with a cross within a rhombus in the middle of the ring. Until now, this has no exact parallel, but this ring form – narrowing, open ended -- was widespread, although it was more common in wire or braided rings, there are a few parallel artefacts such as one piece from the tenth-eleventh century field cemetery of Tiszabercel-Újsor.¹²⁹ The decoration is also without a precise analogue, but similar pieces can be found, among others, in the cemeteries of the area of Slovakia. In the churchyard of Krásno, a very similar form was recovered: a band ring with narrowing ends and punched decoration in > forms, all over the surface of the ring.¹³⁰ In the churchyard cemetery of Ducové, Alexander Ruttkay separated chronological phases by coins and he also determined the characteristic jewellery for each time period. According to his work, simple finger rings with narrowing open ends and band finger rings

¹²⁷ Krupica, *Krásno*, 288-289.

¹²⁸ Adriana Isac, Erwin Gáll, and Szilárd Gál, "A 12th century cemetery fragment from Gilău (Cluj county) (Germ.: Jumarkt; Hung.: Gyalu)," *Ephemeris Napocensis* 22 (2012): 303-307.

¹²⁹ Istvánovits, *Rétköz*, 202. Presumably, many pieces which had ends bent over each other had similar narrowing ends, but this is usually not indicated in publications. Giesler considered this type characteristic for the second phase of the Bjelo Brdo culture, and therefore dated it to the second half of the eleventh century, see: Giesler, *Bjelo-Brdo*, 113, and Table 53.

¹³⁰ Krupica, *Krásno*, 301, table XVIII. 17.

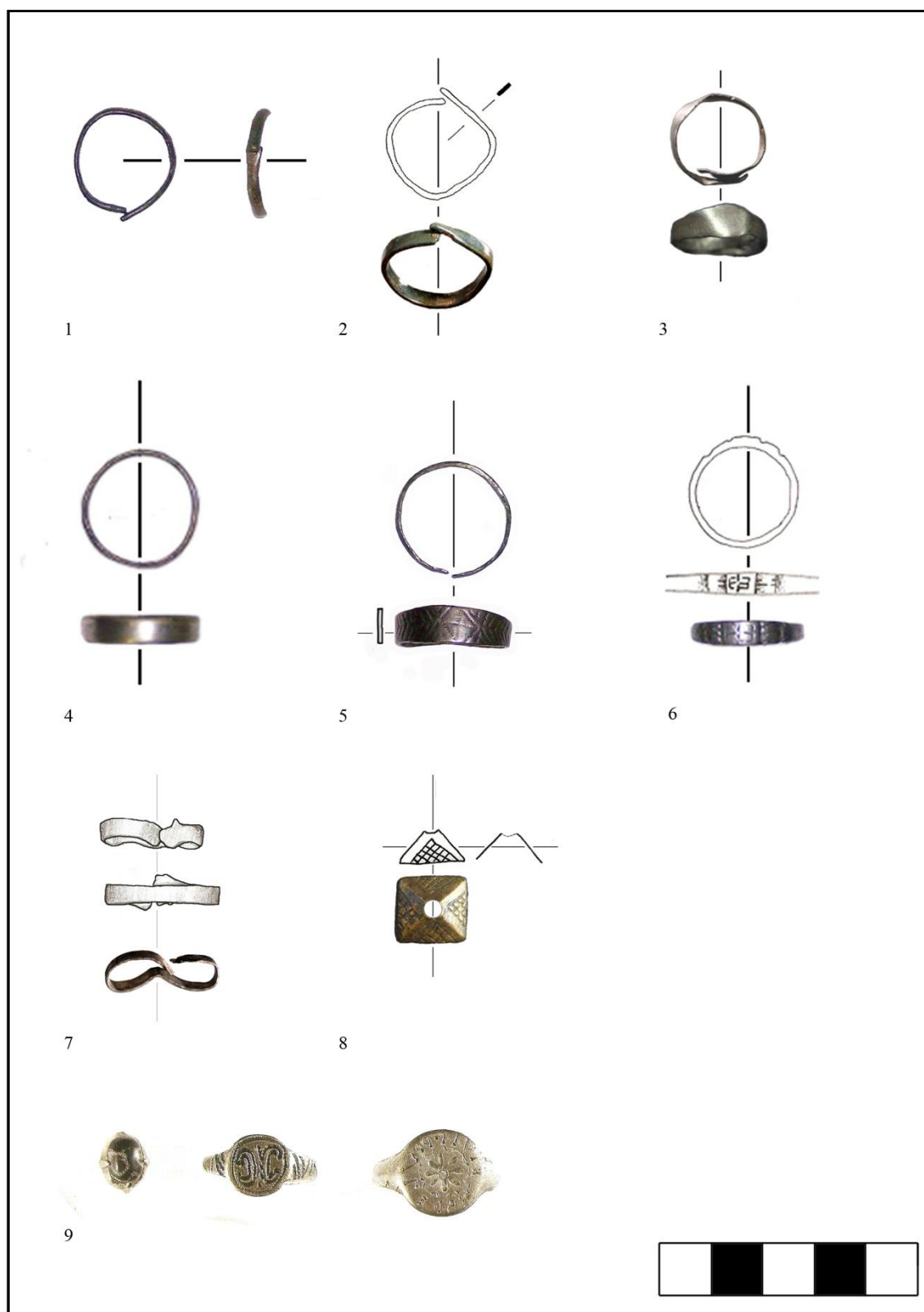


Table 4. Ring types of the period. 1-8: Kána, 1: K/1794, 2: K/1777, 3: K/2778, 4: K/1821, 5: K/1732, 6: K/2600, 7: K/2100, 8: K/1976, 9: Tyukod-Bagolyvár, typical ring types of hoards – seal rings and rings with inset stones, Tóth 2007, 12.

with geometric decoration can be both dated to the first half of the twelfth century, which suggests a similar dating for this piece.¹³¹

Out of the three cast rings, two pieces are simple undecorated band rings (K/2100 and K/1821) and one piece has a very worn but still visible tiered top, with carved decoration on it: a cross in the middle, horizontal lines in the sides, and vertical lines in the joints of the tiers (K/2600). Although both pieces were cast, the two types came from two different time periods. According to Giesler, simple cast band rings were used from the last third of the eleventh century, and therefore he considered them one of the latest artefact types of the Bjelo Brdo culture.¹³² In Ducové, closed finger rings with diverse decorations can be dated to the first half of the twelfth century, and were used continuously afterwards until the second half of the thirteenth century.¹³³ Besides these, there are also examples which suggest a possible earlier dating of this type of ring, as such a piece recovered from the Conquest period cemetery of Dunaújváros-Öreghegy¹³⁴ or another in the tenth-eleventh century cemetery of Nagytőke-Jámborhalom.¹³⁵

Researchers have had diverse opinions about the chronology of tier-topped rings. Gyula Török suggested a dating from the second half of the tenth century to the turn of the eleventh century.¹³⁶ Because of the rareness of these objects, Béla Szőke dated it around the turn of the twelfth century¹³⁷ and Giesler dated it from the beginning of the eleventh century to the mid-eleventh century.¹³⁸ Besides the piece from Kána, there are similar objects from

¹³¹ Ruttkay, *Ducové*, 397, 405.

¹³² Giesler, *Bjelo-Brdo*, 113, and Table 53.

¹³³ Ruttkay, *Ducové*, 405.

¹³⁴ Jolán Horváth, "A Dunaújváros-öreghegyi honfoglalás kori temető" [The Conquest period cemetery from Dunaújváros-Öreghegy] *Alba Regia* 17 (1978): 284.

¹³⁵ Attila Szemán, "X-XI. századi filigrános mellkereszek" [Pectorals with filigree decoration from the tenth and eleventh centuries.] *A Móra Ferenc Múzeum Évkönyve* 1 (1989): 92.

¹³⁶ Gyula Török, *Die Bewohner von Halimba im 10. und 11. Jahrhundert* (Budapest: Akadémiai Kiadó, 1962): 82.

¹³⁷ Szőke, *A honfoglaló*, 98.

¹³⁸ Giesler, *Bjelo-Brdo*, Table 53.

the tenth-eleventh century cemetery of Kiszombor,¹³⁹ Újkígyós – Skoperda Tanya,¹⁴⁰ and most a slightly later cemetery from Csanádpalota.¹⁴¹ All of these finds have punched ring-and-dot decoration. Although the piece from Kána bears a different decoration, and the tiers on the top are not as detached, as in case of the above-mentioned pieces, the intention was similar in shaping the ringtop. The piece from Kána is very worn and in worse condition, therefore the original shape must have been sharper.

The only piece which was not found in the cemetery, but in an external oven complex, is no more than a fragment, a pyramid-shaped ring top made of copper alloy, decorated on the sides with an incised cross-hatch pattern, with a hole on the top where originally a glass insert could have been. The parallels for rings with a pyramid-shaped top are more or less contemporary with this one from the village; one piece was found in the churchyard cemetery of Mezőcsát,¹⁴² and Főnyed-Gólyásfa.¹⁴³ Two more pieces were found in the cemetery of Ducové, one from the part dated to the second half of the twelfth century and another one -- together with a pair of lock rings with flaring ends -- from a part dated to the first half of the thirteenth century.¹⁴⁴ In the churchyard cemetery of Krásno, one piece with a similar incised cross-hatch pattern was found together with the coin of Stephen V (1270-1272),¹⁴⁵ but altogether ten such rings were recovered, dated from the second half of the twelfth to the end

¹³⁹ Béla Kürti, "Kiszombor X-XI. századi lelőhelyeiről" [About the tenth and eleventh century sites of Kiszombor], *Múzeumi Kutatások Csongrád Megyében* 2006 (2007): 105.

¹⁴⁰ Pál Medgyesi, "Az Újkígyós, Skoperda-tanyánál feltárt 10-11. századi temetőrészlet" [Partially excavated tenth and eleventh century cemetery at Újkígyós – Skoperda tanya], *A Békés Megyei Múzeumok Közleményei* 23 (2002): 154.

¹⁴¹ This latter find was bought by the museum at the beginning of the twentieth century, therefore the exact find situation is unknown. The only information is that it was found in a cemetery, where, besides the ring a reliquary cross and a coin of Coloman (1095-1116) were found, but not necessarily together, in the same grave. Later research stated that it was found in a churchyard cemetery, probably in the early part, which can be dated to around the second half of the eleventh century, see: Imre Szatmári, "Bizánci típusú ereklyetartó mellkeresztek Békés és Csongrád megyében" [Byzantine type reliquary crosses from Békés and Csongrád county] *A Móra Ferenc Múzeum Évkönyve: Studia Archaeologica* 1 (1995): 240.

¹⁴² Szabó, *Mezőcsát*, 45.

¹⁴³ M. Aradi, *Főnyed-Gólyásfa*, 117.

¹⁴⁴ Ruttkay, *Ducové*, 400-401 (grave 642, 1823).

¹⁴⁵ Krupica, *Krásno*, 210, 304 (grave 168).

of the fourteenth century.¹⁴⁶ Another piece can be also dated to the thirteenth century, from the hoard of Pátroha - Butorka Dűlő, which was hidden at the time of the Mongol invasion.¹⁴⁷ Although this type was in use from the eleventh to the thirteenth century in Western Europe,¹⁴⁸ its appearance in Hungary is not that early, as these are not present in Early Arpadian age cemeteries, but rather in the graves from the second half of the Arpadian era, and – except for the cemeteries from the area of Slovakia – they are rare types of rings.

Comparing the rings that appear in cemeteries and in hoards, it is clear that two main types of them were present frequently in hoards: seal rings (made from silver) and various rings with inset stones (rarely made of silver, mostly made of electron or gold). These artefacts are common finds in hoards (altogether twelve hoards dating from the age of the Mongol invasion contained some kind of ring or rings¹⁴⁹), but they rarely appear in (contemporary) cemeteries. As was described above, not a single example of this type of ring was unearthed in the graveyard of Kána. A few seal rings were found in the cemetery of Kaposvár, but unfortunately without any other find which could help date them, although one grave contained lock rings with flaring ends, which are also rare finds in graves, as noted above.¹⁵⁰ The most common type of seal ring, that with the sign of the *fleur de lis*, also appears in fourteenth century contexts, such as two graves at Karcag-Orgondaszentmiklós,¹⁵¹ one grave at Szer,¹⁵² and from the area of Kecskemét¹⁵³. These are usually very worn pieces.

In cemeteries from the area of Slovakia, however, seal rings are more common finds. In

¹⁴⁶ Ibid., 291.

¹⁴⁷ For example, Pátroha-Butorka dűlő, see: Attila Jakab, “Pátroha-Butorka dűlő”, in *A tatárjárás* [The Mongol invasion], ed. Ágnes Ritoók and Éva Garam (Budapest: Magyar Nemzeti Múzeum, 2007): 97.

¹⁴⁸ Szabó, *Mezőcsát*, 45.

¹⁴⁹ Akasztó-Pusztaszentimre, Balmazújváros I, Esztergom-Szentkirály, Geszti, Hajdúszoboszló-Aranyszeg, Karcag, Medgyesegyháza-Bánkút, Nyáregyháza-Pusztapótharaszti, Nyírmártonfalva-Gut, Pátroha-Butorka dűlő, Pécel, Tiszaörvény and Tyukod-Bagolyvák, see: Parádi, Ibid. 128-148 and Tóth, *A tatárjárás kincsleletei*, 81-87.

¹⁵⁰ Bárdos, *Kaposvár I*, 209, 210, 216.

¹⁵¹ László Selmeczi, “A karcag-orgondaszentmiklósi kun szállásteremtő régészeti kutatásának néhány tanulsága” [A few remarks about the archaeological research at the Cuman field cemetery of Karcag - Orgondaszentmiklós], (Kiskunfélegyháza: Bács-Kiskun Megyei Önkormányzat Múzeumi Szervezete, 2009)

¹⁵² Ferenc Horváth, “Szer plébániatemploma és a település középkori története” [The parish church of Szer and the medieval history of the settlement], *A Móra Ferenc Múzeum Évkönyve 1974-75* (1975): 354, 356.

¹⁵³ In the case of these pieces, the first contributor on hoards also noticed that they are mostly dated to the fourteenth century, see: Parádi, *Pénzekkel kezelt*, 149-150, Footnote 35.

Ducové, seal rings appear as early as the second half of the twelfth century, and are present continuously afterwards.¹⁵⁴ The cemetery of Krásno was similar.¹⁵⁵ Another contemporary grave points out the differences between the burial customs of different ethnic groups. The grave of the noble Cuman woman of Balotapuszta, who was interred in the mid-thirteenth century, also contained a seal ring among many other artefacts. However, a difference can still be seen in this case, as the ring can be dated to an earlier period, around the end of the twelfth century.¹⁵⁶

Summarising the chronology of the rings, it can be stated that rings, which, according to contemporary hoards, are typical for the thirteenth century rarely appear in contemporary churchyard cemeteries in Hungary. However, the cemeteries of Krásno and Ducové suggest regional differences in this pattern, as the graves of these cemeteries contained many rings in this period. However, the examination of the chronological situation of the graves that contained rings within the cemetery of Kána reveals a different situation. Two pieces (K/2600 and K/2778) surely belonged to a grave from the first phase of the cemetery, therefore (this already very worn) piece was deposited in the mid-twelfth century. Another ring, probably (K/1732) came from the second phase of the cemetery, which dates it to the second half of the twelfth century. Two pieces (K/1794 and K/1821) are surely earlier than the third phase of the cemetery, which means that they were buried in the twelfth century. Only one piece (K/2777) can be associated with a later phase, which can be dated around the mid-thirteenth century, and consists of graves with a somehow reversed orientation (WSW-ENE). This latter piece is the most unique and also maybe the simplest piece made from a copper alloy sheet, probably from a leftover piece. All this suggests that the fashionable types of thirteenth century pieces are missing, because – with the exception of the ring K/2777 – in the

¹⁵⁴ Ruttkay, *Ducové*, 405.

¹⁵⁵ Krupica, *Krásno*, 290-291.

¹⁵⁶ András Pálóczi-Horváth, “A Balota pusztai középkori sírlelet” [The medieval grave from Balota pusztai], *Cumania* 11 (1989): 125.

thirteenth century phases of the cemetery no rings were recovered from the graves at all. On the contrary, the one piece from the settlement with a pyramid-shaped ring top suggests that the use of these rings cannot be denied, but for some reason, these rings were not put into graves – at least not in the thirteenth century.

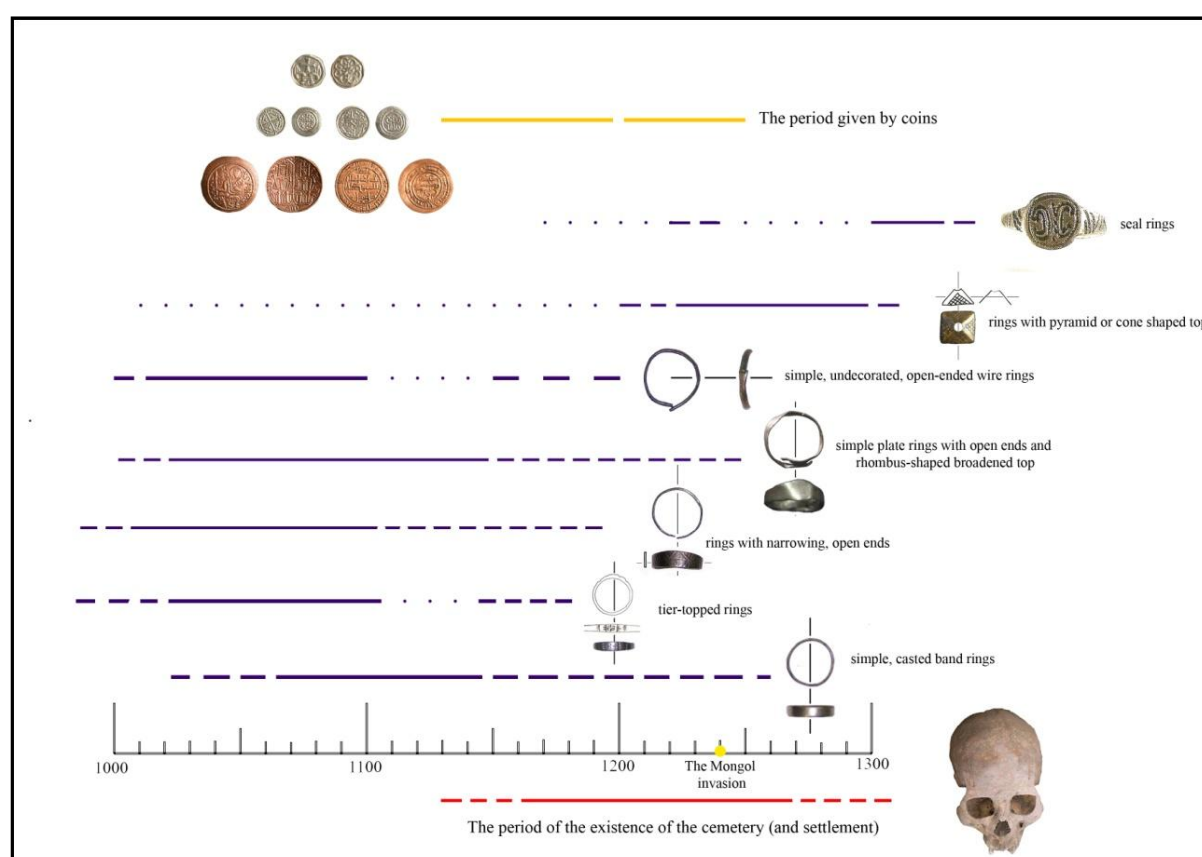


Table 5. Occurrence of finger rings in graves, hoards and settlement features.

Although a twelfth century dating for the rings found in the graves at Kána would not be unacceptable, it has to be noted, that all of the rings are very worn, the silver ones especially are rubbed, in most cases suggesting a use through generations. This suggests that these pieces were heirlooms already in the second half of the twelfth century, and their period of production probably ended already in the eleventh century. This is also supported by two things; first, they do not appear in the hoards from the time of the Mongol invasion, which implies that by then these pieces were not even heirlooms. The second argument for this is their decoration, as jewellery with cross decorations and artefacts in general which can be

connected with the direct expression of Christianity, are more frequent in the period, when it was not widespread yet, which was no longer the situation in the twelfth century.

Brooches

The most recent investigation of brooches in general is connected with research on the treasure of Fuchsenhof, which contained many variations of this jewellery item. Researchers examined the emergence and spread of this artefact in Europe, and, using graves dated with coins, they showed that it appeared as early as the end of the twelfth century but only became widespread in the first half of the thirteenth century.¹⁵⁷ Despite their regular occurrence, a comprehensive analysis of the finds from contemporary Hungary has been made only for the rhombus- and star-shaped brooches;¹⁵⁸ all the other types are published individually.

Of the many variants of brooches only three types are represented at Kána: two circular ring brooches, a rhombus-shaped brooch, and an open-framed bird-shaped brooch. None of them are from graves; three came from different settlement features and one piece was a stray find.

Circular brooches

One of the circular ring brooches¹⁵⁹ from Kána is made of copper alloy, undecorated (K/462, Tab.6/2). It was found with a metal detector in the area of the medieval settlement, but its exact original context is unknown. The other piece (K/14, Tab.6/1) was found in a pit inside a house. It is made of silver alloy, and the front is decorated with three concentric circles which are interrupted by crossing spokes. I could not find an exact parallel for this

¹⁵⁷ Krabath, *Die metallenen Trachtbestandteile*, 250.

¹⁵⁸ On these, see: Ódor, *Majs*, 123-134.

¹⁵⁹ It is important to distinguish these ring brooches from circular buckles. The basic difference is that circular buckles in most cases have a circular cross section, in many cases were made of iron and rarely from more precious metals, and appeared as early as Conquest period contexts. Ring brooches, in contrast, have a flat rectangular cross section and are usually made of copper alloy or silver, the most sophisticated pieces even of gold, although these cannot be associated with rural contexts. The problem is that circular buckles appear in Arpadian age cemeteries and settlements, and when it is not indicated in the publications it is sometimes hard to distinguish them from each other as their shape and size can be similar.

decoration, but given the great variety of the forms and decorations of annular brooches in the thirteenth century examining the analogues of the form is a research opportunity. Circular brooches, however, are not often present in contemporary cemeteries. Only two pieces are from thirteenth-century contexts; a grave in the cathedral of Eger (a fragment only),¹⁶⁰ and the rich Cuman grave of Balota puszta (Tab.6/5).¹⁶¹ Surprisingly, in this case the – otherwise richly equipped -- graves of the cemeteries in the area of Slovakia show a similar situation. Although such ring brooches have been excavated, their appearance is sporadic in contemporary graves; there is one piece from Krásno (Tab.6/3)¹⁶² and another one from Skalka nad Váhom (Tab.6/4)¹⁶³ which can be dated to the thirteenth century, but the pieces excavated in Ducové, (Tab.6/6)¹⁶⁴ and Nitra-Dražovce (Tab.6/7)¹⁶⁵ came from fourteenth-century contexts.

A special subtype of these brooches also has an issue related to ethnicity within the Carpathian basin -- pieces which bear diverse inscriptions. This type of brooch was widespread; their first appearance can be dated to the first half of the thirteenth century.¹⁶⁶ Most of these artefacts are found in the northern part of Europe, in the area of today's Germany, Denmark, Poland, Scandinavia, and the Baltic region. Most pieces bear religious inscriptions, mainly from the angelus, such as AVE MARIA, AVE MARIA GRACIA PLENA, or in abbreviated forms: AVEMA, AVE MARI GRACI. However, beside the

¹⁶⁰ Károly Kozák, "Az egri vár Árpád-kori temetőjének feltárása I" [The excavation of the Arpadian age cemetery of Eger castle], *Az Egri Múzeum Évkönyve* 16-17 (1978-1979): 164.

¹⁶¹ Pálóczi-Horváth, *Balota puszta*, 126.

¹⁶² Krupica, *Krásno*, 272, 329, grave 1574.

¹⁶³ Milan Hanuliak and Tamara Nešporová, "Rekonštrukcia stredovekého osídlenia v Skalke nad Váhom" [Reconstruction of the medieval settlement in Skalka nad Váhom], *Archaeologia Historica* 26 (2001): 335.

¹⁶⁴ Ruttkay, *Ducové*, 405. See also: Alexander Ruttkay, "Prvky gotickej módy v odeve a ozdobách dedinského obyvateľstva na území Slovenska" [Elements of the Gothic fashion in clothes and decoration among the rural population in the area of the Slovakia], *Archaeologia Historica* 14 (1989): 370.

¹⁶⁵ Alexander Ruttkay, "Archeologický výskum kostola sv. Michala v Nitre, časť Dražovce a v jeho okolí-informácia o výsledkoch" [Excavations in Nitra-Dražovce, in St. – Michael's church and its environment], *Archaeologia Historica* 22 (1997): 18.

¹⁶⁶ Krabath, *Fuchsenhof*, 245.

liturgical pieces, there are some with secular inscriptions. In several areas, especially Britain and France, there are more of the worldly than the religious pieces.¹⁶⁷ In Hungary, however,

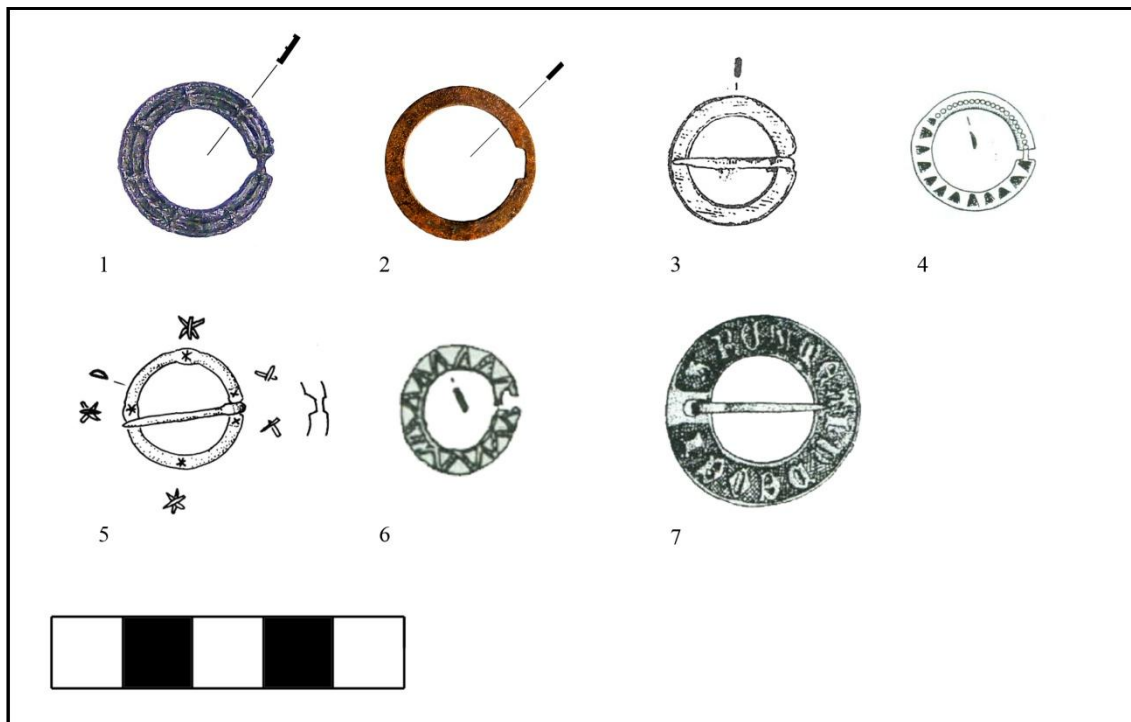


Table 6. Circular brooches. 1-2: Kána, K/ 14 and K/462, 3: Krásno, 4: Skalka nad Váhom, 5: Balota puszta, 6: Ducové, 7, Nitra-Dražovce

they show a somewhat different distribution and use; they only appear in the second half of the fourteenth century and in many cases they were used as buckles and not brooches; they also appear in many cases in Cuman contexts.¹⁶⁸ At Kána such an ethnic conclusion cannot be supported; brooches were found in the settlement, not graves suggesting that it could have been worn on the garments of the living.

¹⁶⁷ Ottó Fogas, “A gótikus feliratos csatok európai elterjedése” [The spread of gothic brooches with inscriptions in Europe], in ‘Kun-kép’ *A magyarországi kunok hagyatéka* [‘Cuman-picture’ The remains of the Cumans of Hungary], ed. Rosta Szabolcs (Kiskunfélegyháza: Bács-Kiskun Megyei Önkormányzat Múzeumi Szervezete, 2009):147-148.

¹⁶⁸ Fogas, *Gótikus csatok*, 156.

Bird shaped brooches

A special group of medieval ring brooches were shaped like birds. Because the presence of such rare pieces can be identified in diverse areas of Europe, their investigation should be made in a broader context. Because of their complex chronological situation this type will be discussed in a more detailed way than the other types. The examination of their function is also important because of their rarity. The main features are similar: a head, tail, D-shaped body, and even the raw material: copper alloy. The main difference is their decoration. Until now, only six such brooches are known: one piece was found in a pit in the Arpadian Age settlement Kána (K/548 Tab.7/1), two other finds are also from excavations, but from urban contexts: Lüneburg (Tab.7/6)¹⁶⁹ and Leicester (Tab.7/5),¹⁷⁰ and both of them are stray finds. The remaining three pieces were all found through metal detection in eastern England at Lympne, (Tab.7/2)¹⁷¹ Aslacton, (Tab.7/4)¹⁷² and Greetwell (Tab.7/3)¹⁷³. Therefore their chronology is not exact; only the piece from Kána can be dated without doubt, and to a shorter period, as it was found in a pit together with twelfth-thirteenth century pottery. All the other finds were dated by more distant parallels, and should rather be dated according to the one from Kána by their decoration. The pieces from England bear similar decoration: punched dots in rows all along the body of the bird and one which depicts the eye. The shape of the tail shows two different forms, one elaborate and one simple. Two pieces, the ones from Lympne and Greetwell, are so similar in both shape and decoration that they may have been made in the same workshop. The decoration of the piece from Kána is different from the ones from England, as it is also punched, but with chevron (< >) forms, not dots, which

¹⁶⁹ Jan Stammer and Ines Wulschläger, "Petschaft und Fürspan. Ein Einblick in die frühe Geschichte der Hansestadt Lüneburg," in *Denkmalpflege in Lüneburg 2010*, ed. Edgar Ring (Lüneburg: Lüneburger Stadtarchäologie, 2010): 7-12. I would like to thank Ines Wulschläger for providing me details about the piece, and Gyöngyvér Bíró for calling my attention to it.

¹⁷⁰ http://www.le.ac.uk/ulas/services/small_finds.html Last accessed: 04. 2013. I would like to thank László Ferenczi for calling my attention to this artefact.

¹⁷¹ <http://finds.org.uk/database/artefacts/record/id/392099> Last accessed: 04. 2013.

¹⁷² <http://finds.org.uk/database/artefacts/record/id/220759> Last accessed: 04. 2013.

¹⁷³ <http://www.ukdfd.co.uk/ukdfddata/showrecords.php?product=32621> Last accessed: 04. 2013.

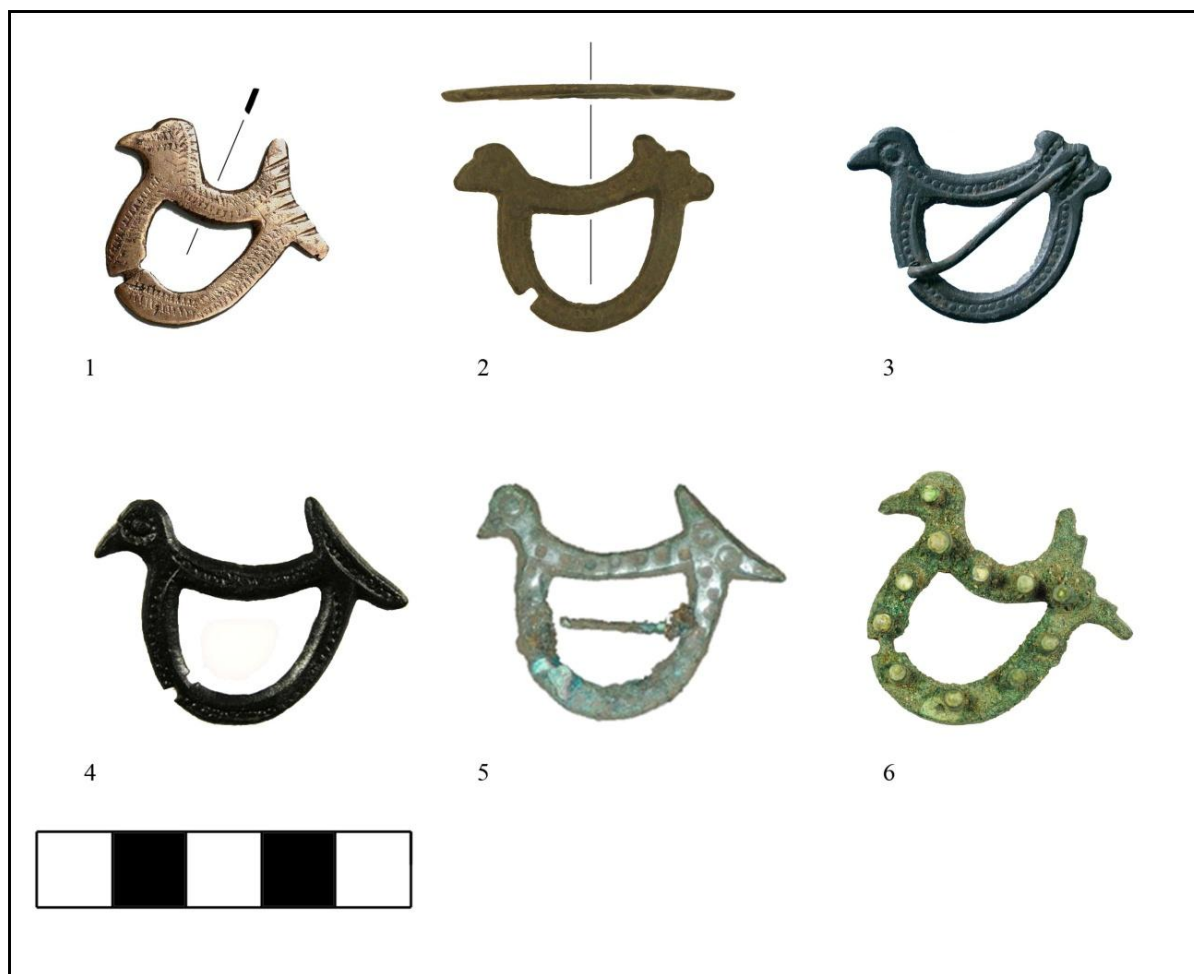


Table 7. Bird-shaped brooches. 1: Kána, 2: Lympe, 3: Greetwell, 4: Aslacton, 5: Leicester, 6: Lüneburg

structure two lines along the body of the bird. Both kinds of decoration can be associated with the thirteenth century, as diverse punched decorations were used at that time. The piece from Lüneburg, however, is a bit different as it has inset glass beads instead of punched decoration. The researcher of that piece stated that this kind of decoration appears mostly on fourteenth century brooches and therefore this piece should have a similar date.¹⁷⁴ The later dates of the brooches given on the English webpages are questionable. Regarding the similarity with the piece from Kána, a thirteenth-, or at most fourteenth-, century dating would be more acceptable.

¹⁷⁴ Stammler-Wullschläger, *Fürspan*, 12. Without questioning the dating of that piece it has to be mentioned, that brooches decorated with inset stones appear already in the hoards of the age of the Mongol invasion, such as Bajót, or Nyáregyháza-Pusztapótharasz. See: Parádi, *Pénzekkel keltezett ékszerek*, 124, 132.

Although the bird shape is quite unusual among the brooches of the period, it was more common in the previous centuries in certain areas. Anne Pedersen collected the bird-shaped brooches of the tenth to twelfth centuries and she states that these artefacts were widespread in Scandinavia, mainly in the area of Denmark.¹⁷⁵ She differentiates three stylistic groups which also had a chronological reference. The first group consists of two styles: Ringerike and Urnes. These are both characteristic for their wriggling appearance. These styles emerged in the late tenth century, and were soon followed by the Urnes style, which emerged in the mid-eleventh century. The second group is distinguished by the naturalistic features on the birds: beaks, feathers, and sometimes even claws. According to Scandinavian finds, this group can be dated to the eleventh and beginning of the twelfth century. The last and latest set of bird brooches are those where the bird is only stylised. These appear in the second half of the eleventh century and still existed in the first half of the twelfth.¹⁷⁶

Although the presence of bird-shaped brooches was most common in the area of Denmark, they appeared elsewhere, too. Their occurrence, however, (both the time of production and the time of use) was not as continuous and long as in the Denmark. In the area of Norway their distribution is restricted to the shorter period from c. 1050 to 1100.¹⁷⁷ A few other examples are known from Sweden, and also from England, mainly dated to the eleventh century.¹⁷⁸ Pedersen examined the possible meaning of bird shaped brooches. She came to the conclusion that after the ninth century bird shaped brooches can be found in Western and Central Europe, and many of them undoubtedly in Christian contexts, in graves in churchyards of many cathedrals in Germany, and furthermore, many of these birds were formed together with a cross. As not all of the birds on these brooches are similar, probably

¹⁷⁵ Anne Pedersen, "Rovfugle eller duer. Fugleformede fibler fra den tidlige middelalder - Birds of prey or doves. Early medieval bird-shaped brooches," *Aarbøger for nordisk oldkyndighed og historie* 1999 (2001): 65.

¹⁷⁶ Pedersen, *Rovfugle*, 62-63.

¹⁷⁷ Ingunn Marit Rastad, "En fremmed fugl: 'Danske' smykker og forbindelser på Østlandet i overgangen mellom vikingtid og middelalder – A strange 'bird': Danish brooches and affiliations in Eastern Norway in the Viking and Medieval Ages" *Viking. Norsk arkeologisk årbok* 75 (2012): 204.

¹⁷⁸ Pedersen, *Rovfugle*, 64.

they depicted different species, which can have different interpretations. In most cases they have been interpreted as eagles, peacocks or doves, of which both the first and last are important Christian symbols. Among these interpretations the weakest is the peacock; although some peacock bones are known from contemporary Scandinavia, they were definitely not widespread, and they were mostly associated with the elite. These brooches were more common objects. Most of them were made of copper alloy, and when it was identifiable, they were not connected to the elite layer of the society. This explanation also weakens the theory that these artefacts should be interpreted as the depictions of falconry and hunting. In contrast, the idea of Christian symbolism is supported by another type of contemporary objects: coins of Danish rulers, where similar birds were depicted on one side of the coin, together with the depiction of *Agnus Dei* on the other side. Although there is no clear evidence for the interpretation of bird brooches, probably they were not only decorative elements of the garment, but also carried symbolic meaning of some kind. Although different interpretations are possible, birds definitely play a role in Christian symbolism. In Scandinavia another case supports this interpretation; the spread of Christianity coincided with the appearance of bird shaped brooches.¹⁷⁹

Although none of the Scandinavian brooches are exact parallels for the bird brooches enumerated above from the following centuries, they are not differing very much from the ones of the naturalistic style. The most important features– the head, beak, tail – are all carefully formed (in similar ways). The only exception is the lack of clawed feet, which indicates that these birds are not likely to be birds of prey. Despite the differences, the continuity of the form in time and sometimes in space indicates a possible continuity in the symbolic meaning of these objects. Although these artefacts were rare, and therefore there is no opportunity to define a clear distribution, it is peculiar that with the exception of the piece

¹⁷⁹ Ibid., 65-66.

from Kána all of them were found in Northwest Europe, where the tradition of such a brooch form was stronger.

Another area, where birds shaped brooches were spread are in present day Russia and Ukraine. However, these brooches have a different shape and meaning than the above mentioned ones, and also they are coming from a different tradition. The tradition of zoomorphic amulets dates back to prehistoric times, depicting diverse creatures, usually those which were the targets of hunts. Of many amulets depicting animals, birds, in the form of duck-shaped pendants or amulets, appeared first around the sixth century in the areas neighbouring Finno-Ugric territories, such as in the area of Oka and Mokai. From these places they spread in later centuries; in the tenth century they were already widespread along the Ladoga River and after that in the area of Novgorod. In the eleventh and twelfth centuries many variations existed, and besides the duck-shaped forms a new, chicken-ish form appeared in the area of Smolensk, Moscow, and Petersburg. Such pendants were in fashion until the fourteenth century.¹⁸⁰ Although this area had close connections with Scandinavia in this period, researchers of Scandinavian finds have argued that the different way of bird brooches/pendants were used implies that the two kinds of jewellery had no connections with each other.¹⁸¹ Although a similar symbolic background of bird shaped jewellery of these two areas is unlikely, the form and the use of bird-shaped jewellery itself could have had an impact on Scandinavian fashion.

For a better understanding of the symbolic and chronological aspects of these artefacts, it is best to examine contemporary brooches. The six bird brooches in question undoubtedly belong to the group of ring or open framed brooches, of which the simplest and most common circular ones emerged at the beginning of the thirteenth century and became

¹⁸⁰ В. А Kolchin and Т. I. Makarova, *Древняя Русь. Быт и культура*. Ред.: Борис Александрович Колчин - Татьяна Ивановна Макарова. [Drevniaia Rus': Byt i kul'tura - Ancient Russia. Way of life and the culture] (Moscow: Nauka, 1997): 156-159.

¹⁸¹ Pedersen, *Rovfugle*, 65.

widespread from the Pyrenees to Transylvania and from Scandinavia to Italy.¹⁸² Besides this basic form, more diverse shapes spread locally as early as the thirteenth century, such as rhomboid, drop-shaped, star-shaped, octagonal, etc. forms, together with more unique pieces, like a heart-shaped brooch¹⁸³ or pieces where the brooch had additional molded decoration. Regarding the dating, the time when these forms appeared, together with evidence from Kána, suggests that these bird-shaped brooches have been in use already in the thirteenth century.

Interpreting the meaning or the agency of these brooches is much more difficult. If one investigates all the brooches of the period, the most apparent group is the pieces which had inscription. As was described above, most pieces bear liturgical inscriptions, but there are also pieces with secular inscriptions.¹⁸⁴ Thus, the inscriptions lead to no direct interpretation, as they make possible both a worldly and religious understanding.

Another research possibility is examining those which illustrate something, such as brooches depicting a handshake, praying hands,¹⁸⁵ or the individual piece which depicts a couple.¹⁸⁶ The interpretation of the praying hands is doubtful, and although it seems obvious, so is a worldly explanation of the couple. The handshake motif is a difficult to understand. Usually they are interpreted as hands of loyalty, which could have been many kind of loyalty. In some cases there is direct evidence: as one piece also carries an inscription OMNIA AMOR VINCIT.¹⁸⁷

Summarising these objects, many variations the open-framed brooches were widespread already in the thirteenth century. Some of them surely can be connected with religious thoughts, and on the contrary, some of them – even the same type of brooches --

¹⁸² Krabath, *Fuchsenhof*, 236.

¹⁸³ Nándor Parádi, *Pénzekkel keltezett ékszerek*, 124.

¹⁸⁴ Fogas, *A gótikus feliratos csatok*, 147-148.

¹⁸⁵ Krabath, *Fuchsenhof*, 245-246.

¹⁸⁶ Imre Szatmári, “A békéscsabai későromán kori arany mellű” [The late Romanesque golden brooch from Békéscsaba], *Archaeologiai Értesítő* 130 (2005): 195.

¹⁸⁷ Krabath, *ibid*, 246.

were associated with worldly love. Bird-shaped brooches amongst these represent a group which can be easily interpreted in both ways, as these pieces can be understood both as doves – a depiction of Holy Ghost -- or lovebirds (doves).

The spread of the bird brooches in earlier centuries may indicate continuity in the symbolic Christian meaning of these artefacts. However, regarding the other themes of the brooches of the thirteenth century, the interpretation of worldly love cannot be excluded. For me, the most apparent explanation is that the original meaning could have had religious roots, but the way that people interpreted it and used them may have differed. Since no information comes from the find situation of these artefacts, the only thing that can be stated is that however people interpreted birds, they seemed to be beloved motifs, as they were used continuously for centuries and, perhaps surprisingly, in a similar way: as brooches.

Rhombus-shaped brooches

The third type of brooch found in Kána is a cast, rhombus-shaped copper alloy brooch (K/958, Tab. 5/1). Recent studies have addressed the appearance and spread of this brooch type, revealing that besides one piece from the cemetery of Mezőcsát-Csicske, (Tab. 5/2)¹⁸⁸ and pieces from the hoards of the Mongol invasion: Esztergom – Szentkirályi földek (Tab. 5/3), Karcag, Soltszentimre and Tiszaörvény-Templomdomb, there is no archaeological find which could be dated to the thirteenth century, despite the testimony of the contemporary visual sources.¹⁸⁹ Thus, in spite of the lack of rhombus-shaped brooches in thirteenth century cemeteries, finds from hoards and settlements prove their use already from mid-thirteenth century.

The somewhat more extended research on the Fuchsenhof hoard revealed another interesting aspect of these brooches: their division. Opposite to the widespread circular brooches, the rhomboid form shows a more concentrated distribution; most of the finds are

¹⁸⁸ Szabó, *Mezőcsát*, 46.

¹⁸⁹ Ódor, *Majs*, 129-130. See also: Krabath, *Fuchsenhof*, 239.

concentrated in the Carpathian basin (especially the western half) and nearby to the west. Most of these pieces -- with the exception of the above mentioned finds -- can be dated to the fourteenth century, including artefacts from the cemeteries from the area of Slovakia cited above.¹⁹⁰

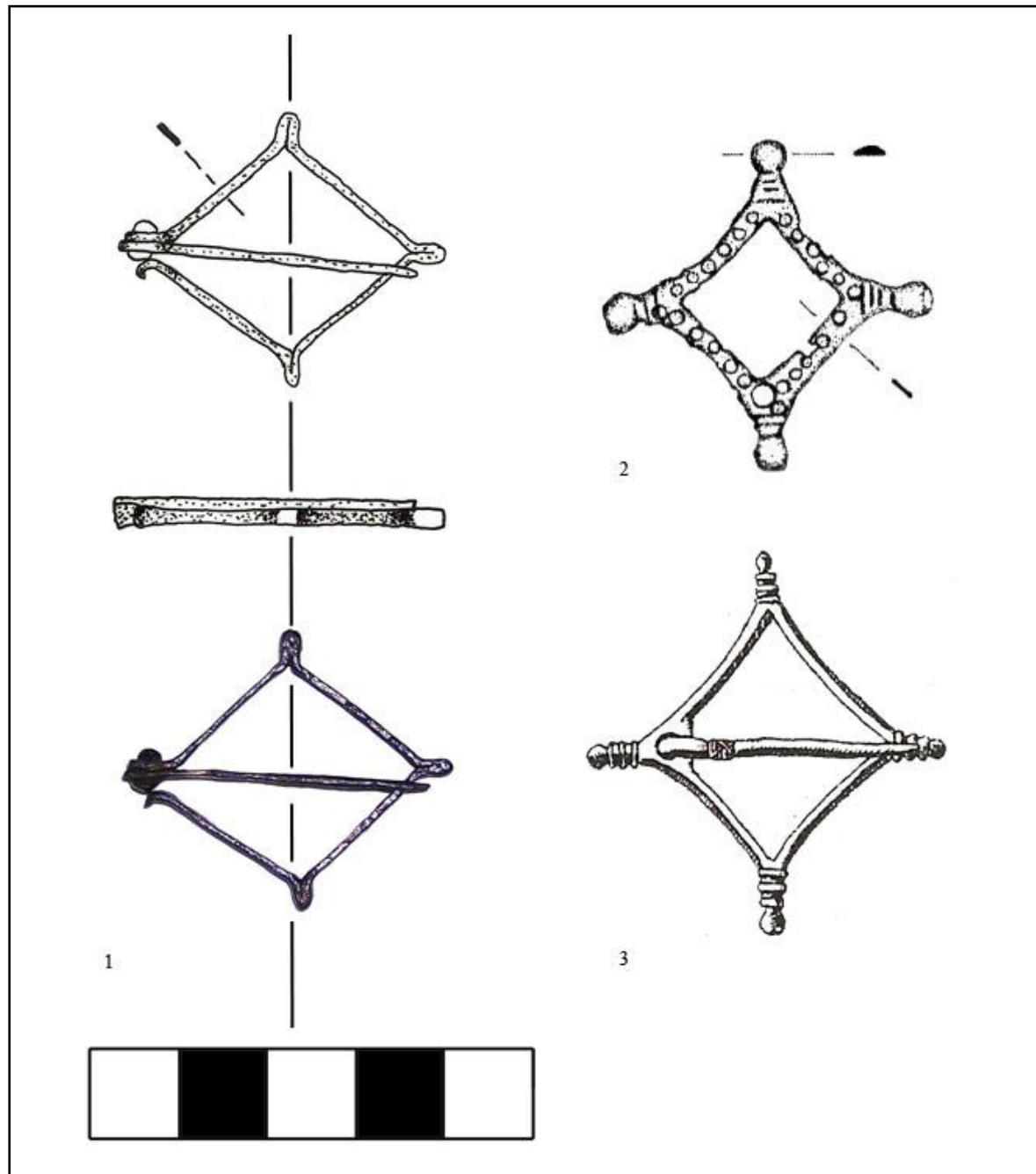
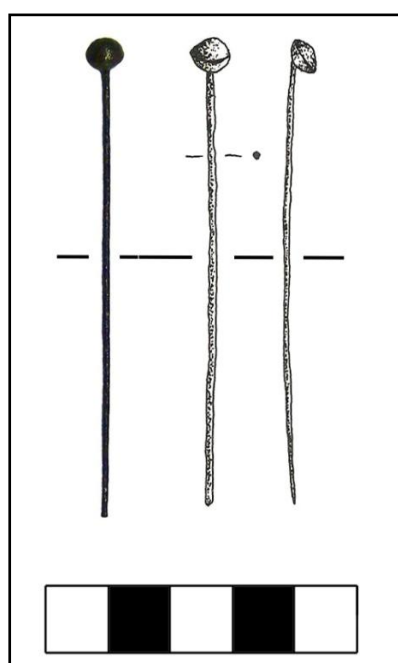


Table 8. Rhombus-shaped brooches. 1: Kána, 2: Mezőcsát, 3: Esztergom-Szentkirály

¹⁹⁰ Kühtreiber, *Fuchsenhof*, 238-239.

The chronologies of all the above described brooch types lead to the same conclusion: the piece that was discovered in the settlement of Kána indicates that the typical thirteenth century jewellery seen in visual representations was present in everyday life, and that (less valuable) pieces were also in use amongst the rural population (who are usually not depicted with such jewellery), but similarly to the fashionable lock rings with flaring ends or finger ring types such as seal rings or the ones with stone/glass inserts, these brooches usually did not end up in contemporary graves, rather only from the fourteenth century.

Pins



To close garments on the upper body, not only brooches, but also pins could have been used. In the cemetery of Kána one whole (K/2095, Tab. 9.) and a fragment (K/2667) of a same type of pin were recovered. Both pieces are made of copper alloy. The whole piece is a long, narrow, pointed pin with a spherical head, which was hollow, soldered from two hemispherical pieces. The fragment is only the lower, hemispherical part of the head. István Bóna, by examining the jewellery discovered in the graveyard at

Table 9. Pin from Kána, K/2667

Dunaújváros, stated already in 1975 by association with diverse other finds these pins are characteristic for the twelfth century, at the latest to the beginning of the thirteenth century.¹⁹¹

The two pieces from Kána support this dating, as the fragmented piece was found in the disturbed grave of a four-year-old child which came from the second phase of the cemetery.

The undamaged pin cannot be dated that precisely, but it was surely earlier than the third

¹⁹¹ Bóna, *Dunaújváros*, 136-137, 140.

phase of the cemetery, as it was in superposition in a grave from that period. No other find contradicts this dating, but these artefacts rarely appear in churchyard cemeteries. The latest researcher to write about these pins, Erwin Gáll, collected the parallels of the piece from Doboka-Vártérség, (Dăbăca-Castle, Romania) and noted that their spread and number are diverse in each cemetery, and also that in most cases they were used as hair pins. Mostly they are made of bronze, except one silver piece from Kispána. They appear frequently in the cemeteries of Transylvania, as besides the one from Doboka-Vártérség, Gáll discovered parallels in Malomfalva-Csittfalva (Moreşti, Romania), Doboka-Boldogasszony (Dăbăca-Church, Romania), Kolozsvár-Főter (Cluj-Main Square, Romania), Marosvásárhely (Tîrgu Mureş, Romania), Gyulafehérvár-Székesegyház (Alba Iulia – Cathedral, Romania) and Kányád (Ulieş Romania).¹⁹² Not many are known from present day Hungary, however; besides Kána only one piece is known from Kispána,¹⁹³ another from Békés¹⁹⁴ and several from Kaposvár.¹⁹⁵ It is particularly interesting that no piece was found in the otherwise relatively rich cemeteries in the area of Slovakia, nor do they appear in hoards. This distribution may affect the dating, because although no data suggest any other dating than the twelfth century, not many of them have solid proof for that dating. As will be discussed later, even coins are not as reliable in the thirteenth century as in the previous and following centuries. Furthermore, pins became popular as headgear accessories from the fourteenth century on, and thus, a continuation of the fashion of hairpins would be more likely than a sudden renewal of the fashion after a century. Nevertheless, without more, precisely datable artefacts, this problem cannot be solved.

¹⁹² Erwin Gáll, *A Doboka – IV. Vártérség templom körüli temetője* [The churchyard cemetery of Doboka-IV. Vártérség] (Cluj-Napoca: Erdélyi Múzeum Egyesület, 2011), 41-42.

¹⁹³ János Győző Szabó, “Gótikus pártáövek a kispánai vár temetőjéből” [Gothic decorated belts from the cemetery of Castle Kispána], *Az Egri Múzeum Évkönyve* 8-9 (1972): 59.

¹⁹⁴ Trogmayer, *Békés*, 13, 22 grave 75.

¹⁹⁵ Bárdos, *Kaposvár I*, 195.

Another way of wearing of such pins is perhaps more interesting; the pieces from Doboka-Vártérség, Kisnána, and both pieces from Kána were discovered in positions which imply that they were used as bosom pins. The remaining pieces were found near the skulls, which suggests that they were used as hair pins. In the cemetery at Doboka-Vártérség the situation is mixed; one pin with a hollow head was found on the chest of a deceased person, whilst another piece with a solid head was clearly used as a hairpin. Both graves are dated to the twelfth century. Probably, as Erwin Gáll has already suggested, the use of simple jewellery is more complex than the usual typologies, as archaeologist often do not count with the free will to use an object in a different way – mostly because it is possible only in rare cases such as in the case of these pins.¹⁹⁶

Buttons

Altogether six buttons were discovered in Kána, all of them outside the cemetery: one piece from a ditch (K/357, Tab. 10/6), another from the work-pit of an external oven (K/2292, Tab. 10/2), and all the remaining are stray finds found by metal detecting the spoil-bank of the settlement features of the village. Of the six pieces, two are thick, slightly domed discoid forms made of lead (K/1170.1 and K/1170.2 Tab. 10/4,5). Another piece has a more pronounced dome, and is made of thin embossed lead sheet (K/357). The remaining three pieces are made of copper alloy; one of has a gilded hemispherical top (K/456, Tab. 10/3), another is spherical and hollowed, as it was brazed of two parts of domed metal sheet (K/458 Tab. 10/1.). The last piece is also made of a slightly domed metal sheet formed in the shape of a rosette (K/2292). It is damaged on one side.

¹⁹⁶ Gáll, *Doboka.*, 41-42.



Table 10. Button types of Kána. 1: K/458, 2: K/2292, 3: K/456, 4: K/1170.1, 5: K/1170.2, 6: K/357

Although buttons (shank-backs) were already present in the Conquest period and early Arpadian age graves, researchers have traditionally explained the appearance of buttons as the remains of the change in fashion in the fourteenth century, when tight-cut garments required them. Thus, it has also been stated that buttons occur only in cemeteries dated from the fourteenth century on.¹⁹⁷ This statement cannot be denied, but two exceptions must be mentioned: the noble grave of Balotapuszta¹⁹⁸ and the Jazygian cemetery of Négyszállás, where many of the graves contained diverse buttons; as they have not been analysed, however, they cannot help make the chronology of buttons more precise. However, the pieces from Kána testify to the presence of buttons in everyday life before the fourteenth century.

¹⁹⁷ László Gerevich, "A csúti középkori sírmező" [The Medieval graveyard of Csút], *Budapest Régiségei* 13 (1943): 139-140. For its impact on the research, see the fifty-year-old later study: Márta Vizi and Zsuzsa Miklós, "Előzetes jelentés a középkori Ete mezőváros területén végzett kutatásokról" [Preliminary report of the investigation in the area of town Ete], *A Wosinszky Mór Múzeum Évkönyve* 21 (1999): 224.

¹⁹⁸ Pálóczi-Horváth, *Balota pusztá*, 126.

Comparative analysis of buttons has been made only for a far distant area: Medieval England. This is a remote region; although the similarities are interesting I do not want to project their results to Hungary. In the research on England, buttons were in fashion from the fourteenth century on, but the latest research shows that plain cast pieces can be dated from the early thirteenth century, and domed, metal sheet ones from the end of the fourteenth century. In this case the different production techniques also meant different raw materials; the earlier type was mostly made of tin, the latter of copper alloy.¹⁹⁹

One other aspect can help in the dating of buttons, the fact that they do not appear in the hoards from the age of the Mongol invasion. This is suspicious, as their variants made of precious metal appear in the hoards of the fourteenth and fifteenth centuries, and written sources of that period tell that buttons were treasured.²⁰⁰ The fact that buttons do not appear in the hoards of the Mongol Invasion, but can be found sporadically in Arpadian age settlements implies that the use of buttons should be dated from an earlier time than the usual fourteenth-century dating, but later than the Mongol invasion. Thus, the appearance of buttons can be dated from the second half of the thirteenth century.

In this case written sources can also help in dating this dress accessory, as the Hungarian naming of button, *gomb*, appears on a thirteenth century gloss on a text by Petrus Comestor in Oxford. The manuscript most probably belonged originally to a monastery in Venice, where many Hungarian students were learning. Thus, as (probably even in the first half of) the thirteenth century in language the word that meant button appeared already, the use of such objects can be assumed.²⁰¹

¹⁹⁹ Geoff Egan and Frances Pritchard, *Dress Accessories 1150-1450*, (London: Museum of London, 2002): 278-280.

²⁰⁰ Hatházi, *Kiskunség kincsleletei*, 81, footnote 66.

²⁰¹ Előd Nemerényi, "Cathedral Libraries in Medieval Hungary" *Library History* 20 (2004): 9-10. See also Ibid., "Medieval Hungarian Glosses in MS. Lyell 70." *Bodleian Library Record* 16 (1999): 503-508.

Buckles

Altogether twelve belt buckles and buckle fragments were discovered in Kána village.²⁰² Out of this, five pieces are *in situ* finds from graves, two other fragments came from the area of the cemetery, two pieces were recovered from pits, one next to the church and the other in the village, and two more are stray finds, also from the area of the village.²⁰³ Most of the pieces represent different buckle types, which will be discussed in details below.

Stray finds from the village cannot be dated precisely, they can only be dated approximately to the twelfth and thirteenth centuries, maybe earlier, but not later. Still, this can help with the dating by increasing the sample size. One piece (K/465, Tab. 11/7) of the stray finds represents a rather rare type. As this piece is fragment, its shape was uncertain until recently, when a parallel model was found during metal-detector research at the castle of Ecseg (Tab. 11/8).²⁰⁴ Although as the latter piece is not restored yet, the similarity of the two is already visible, not only in the size, but even the decoration. Both pieces are made of copper alloy; the most characteristic feature is that the frame and the plate were cast together. The frame has an oval shape, which is grooved on the inner side, and a line cut into the surface runs along the outer part of the frame on the surface. A separate hole was left in the casting for the pin, and at the end of the trapezoid plate is another, rectangular, hole for the strap. Since there are no parallel finds, the dating of these objects can only rely on these two pieces. However, the use at the castle where the unbroken artefact was found can be dated after the Mongol invasion of Hungary.²⁰⁵ Thus, these pieces can probably be dated to the

²⁰² From the area of the settlement there are more buckles, but as they were not definitely belt buckles, I do not deal with them in this study.

²⁰³ Stray finds turned up during the metal detecting of the spoil-banks of diverse settlement features of the Arpadian age village.

²⁰⁴ I would like to thank Maxim Mordovin for providing me with unpublished data from his metal-detecting investigation at Ecseg-Vároldal in April 2013.

²⁰⁵ An earlier date is unlikely as no early Arpadian style artefact has been discovered in the area of the castle. Written sources support this dating, as the first mention in 1314 tells that the king took it from its owner for treason, see: Pál Engel, "Magyarország világi archontológiája 1301-1457 I." [The secular archontology of Hungary 1301-1457 I] (Budapest: História, 1996): 307. Besides the written evidence, the form of the castle and the process of castle building also suggest an earlier date, the second half of the thirteenth century. On the

second half of the thirteenth century, but lacking more, properly dated, parallels, this dating should not be considered definitive. Although the origin of this type is also unclear, the similarity with the trapezoid buckles of the conquest period has to be mentioned. However, this concerns only the shape of the plate and the way the strap joined to the buckle, as in these examples the frame was not cast together with the plate; they were connected by a joint.²⁰⁶

The other stray find (K/1170, Tab. 11/2) and the piece which was found in a pit in the area of the settlement (K/731, Tab. 11/1) represent similar types. Although the first is only a buckle, made of copper alloy, the other one is a complete piece with folded sheets, made of brass (?). Textile fragments oxidised to the buckle frame²⁰⁷ are the evidence that indicates that this type did not necessarily have plates, but could have been used without them. The plates connected to such buckles are easily recognisable from their long narrow shape. Scholars have not yet found a unified terminology for them; in Anglo-Saxon research they appear as oval frames with ornate outside edges;²⁰⁸ Ilse Fingerlin, who has made the most complete synthesis of European belts so far gave the general name of *Profilierte Schnallen*,²⁰⁹ and Hungarian researchers have used diverse terms, most recently *karéjos tagolású csatok*²¹⁰ [lobately articulated buckles]. Of these three, in my opinion, the second is the most appropriate as these buckles have many subtypes, and their most common feature is that their frame is profiled in diverse ways. Ilse Fingerlin divided different subgroups of these buckles, and both pieces from Kána represent the same type, which features a cylindrical metal shell

chronology of castles and the process of castle building in this period, see: Erik Fügedi, *Castle and Society in Medieval Hungary* (Budapest: Akadémiai Kiadó, 1986): 50-62.

²⁰⁶ Károly Mesterházy, "Bizánci és balkáni eredetű tárgyak a 10-11. századi magyar sírleletekben" [Artefacts of Byzantine and Balkan origin in 10-11th century Hungarian graves], *Folia Archaeologica* 41 (1990): 88-92. See also Péter Langó and Attila Türk, "Honfoglaláskori sírok Mindszent-Koszorús dűlőn. Adatok a szíjbefűzős bizánci csatok és a délkelet-európai kapcsolátú egyszerű mellkeresztek tipológiájához.- Landnahmenzeitliche Gräber in Mindszent-Koszorús dűlő. Angaben zur Typologie der trapezförmigen Byzantinischer Schnallen und einfachen Brustkreuze mit Südosteuropäische beziehungen." *A Móra Ferenc Múzeum Évkönyve – Studia Archaeologica* 10 (2004): 377-385.

²⁰⁷ Krupica, *Krásno*, 302, grave 104.

²⁰⁸ Egan-Pritchard, *Dress Accessories*, 76.

²⁰⁹ Ilse Fingerlin, *Gürtel des hohen und späten Mittelalters*. (Berlin: Deutscher Kunstverlag, 1971): 58.

²¹⁰ Gábor Hatházi, *A Kunok régészeti emlékei a Kelet-Dunántúlon*, Opuscula Hungarica 5 (Budapest: Magyar Nemzeti Múzeum, 2004): 107.

attached to the front frame, fixed in place by lateral knobs. According to her work, this type was in use from around the second half of the thirteenth century on. Similar pieces were recovered from graves at Négyszállás,²¹¹ Ducové,²¹² and Krásno²¹³ dated to the end of the thirteenth and into the fourteenth century, and two pieces from Szer, found together with diverse mounts, and were dated to the fourteenth and fifteenth century.²¹⁴ Another one, from Nitra-Dražovce, is dated to a slightly earlier period, the second half of the thirteenth century.²¹⁵ An even earlier a piece came from the hoard of Esztergom-Szentkirályi földek, which was hidden at the time of the Mongol invasion.²¹⁶ Thus, such finds from Kána can be dated to the thirteenth century. On this broad dating the two stray finds from the cemetery cannot help, as these two plate fragments (K/1731 and K/2392, Tab. 11/3,5) were discovered during scraping the surface.

All the other finds were *in situ* in graves, which can provide more precise data. Without doubt, the earliest piece is a lyre-shaped buckle (K/143 Tab. 11/6) which was found in one of the earliest graves of the cemetery. Lyre-shaped buckles are considered characteristic for the Conquest period. László Révész collected the lyre-shaped buckles of the Carpathian basin and concluded that the this type of buckle was in use until the end of the eleventh century, and within this, the subtype to which the piece from Kána belongs is the most common type of lyre-shaped buckle, spread in all areas conquered by Hungarians, and it can be found in the tenth and eleventh century graves of both commoners and noble people.²¹⁷ Outside the Carpathians, Révész extended their use to the twelfth century. He also

²¹¹ László Selmeczi, *A négyszállási I. számú jász temető* [The Jazygian cemetery of Négyszállás I.] (Budapest : Budapesti Történeti Múzeum, 1992): 106, grave 70; 11., grave 238.

²¹² Ruttkay, *Prvky gotickéj*, 363, grave 983/72 and 89/75.

²¹³ Krupica, *Krásno*, 302, grave 104.

²¹⁴ Ferenc Horváth, *Szer*, 353-355.

²¹⁵ Ruttkay, *Nitra-Dražovce*, 18.

²¹⁶ Viktor Récsey, "Római castrum Tokodon és újabb régészeti leletek Esztergom- és Hontmegyében" [Roman castrum in Tokod and new archaeological finds from Esztergom and Hont county], *Archaeologiai Értesítő* 14 (1894): 69-70.

²¹⁷ Révész, *Líra alakú csatok*, 526-527.

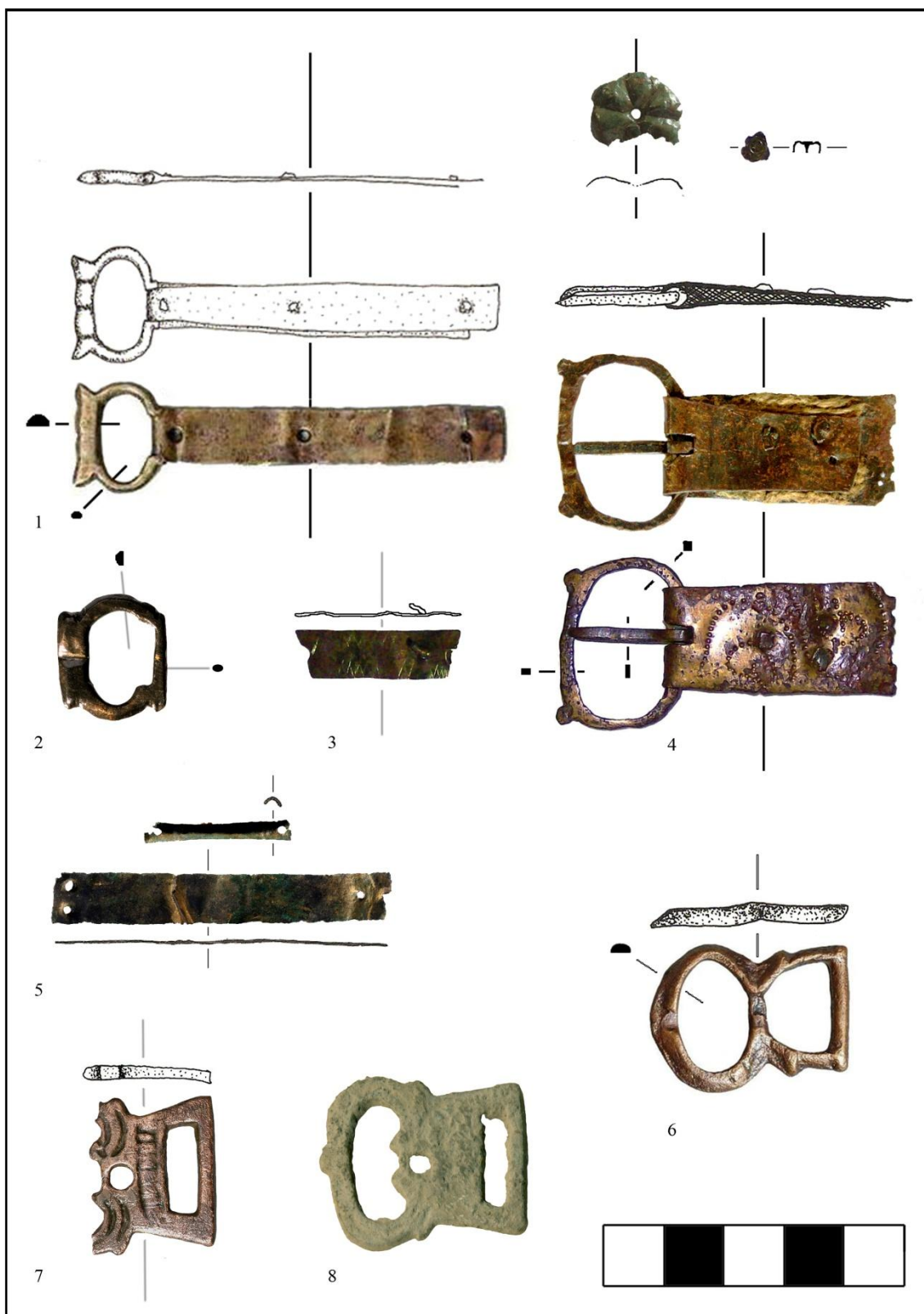


Table 11. Buckles. 1-7 Kána, 1: K/731, 2: K/1170, 3: K/2392, 4: K/2789, 5: K/1731, 6: K/143, 7: K/465, 8: Ecseg-Vároldal

noted that these pieces could not only serve as belt buckles, but also could have been used on harness or horse fittings.²¹⁸ Wolf analysed their origin and spread in detail and concluded that in many cases they can be connected with Pechenegs, and within the Carpathian basin they can be dated from the second half of the eleventh century to the beginning of the twelfth century.²¹⁹ The piece from Kána surely belonged to the first group of lyre-shaped buckles, which are not likely to appear in the mid-twelfth century. This heavily worn piece, however, was recovered from the grave of a four-five year old child, which turned up. This suggests that this piece should be understood as an heirloom, and since there are no other pieces from the Carpathian basin which can be dated to the twelfth century, the general dating of this find type should not be corrected. However, this piece also shows that this object does not necessarily date its context as early as the eleventh century.

All the other pieces from graves represent later types, and accordingly, they came from graves of the last and last-but-one phase of the cemetery, which can be dated to the second half and end of the thirteenth century. Among these the simplest are two similar pieces (K/182 and K/1783, Tab. 12/1,2): round iron belt buckles with rectangular cross-sections. The second piece is fragmented, and found with a coin of András II (1205-1235). Such buckles (sometimes with different cross-section) appear as early as the graves of the Conquest period, such as two pieces from Sárrétudvari-Hízóföld,²²⁰ but they also appear in contemporary, twelfth- and thirteenth-century churchyard cemeteries (or phases of cemeteries) of Szentgyörgy-Kismacs,²²¹ Ducové (Tab.12/3),²²² and Krásno (Tab. 12/4).²²³

²¹⁸ Ibid., 530-537.

²¹⁹ Wolf, *Niellódíszes*, 149-152.

²²⁰ Ibolya M. Nepper, *Hajdú-Bihar megye 10-11. századi sírleletei I* [Tenth and eleventh century grave finds of Hajdú-Bihar county] (Budapest-Debrecen: Déri Múzeum, Magyar Nemzeti Múzeum, Magyar Tudományos Akadémia, 2002): 301, 349, graves 29 and 257.

²²¹ Ibolya M. Nepper and György Módy, "Szentgyörgy (Kismacs) Árpád-kori templomának feltárása – A falu a XIII-XIV. században" [The excavation of the church of Szentgyörgy (Kismacs) – The village in the thirteenth and fourteenth centuries], *A Debreceni Déri Múzeum Évkönyve* 1983-84 (1985): 103.

²²² Ruttkay, *Ducové*, 400, 402 grave 862 and 241. Here the first piece is dated to the second half of the twelfth century and the second piece to the second half of the thirteenth century.

²²³ Krupica, *Krásno*, 308, 320, 323, 325, graves 276, 814, 1140, 1343 and 1417.

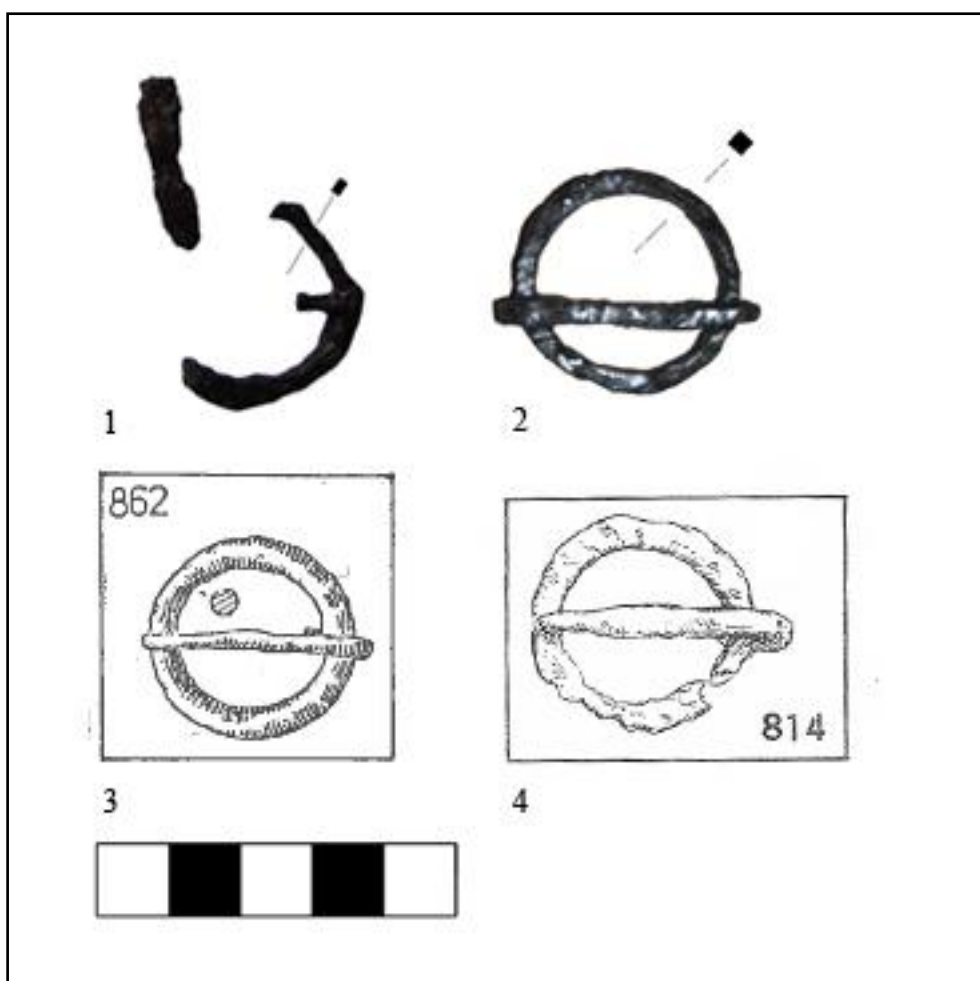


Table 12. Round, iron buckles. 1-2: Kána, K/1783, K/182, 3: Ducové, 4: Krásno

The remaining two in situ pieces both have folded-sheet plates with rough textile fragments within the folded sheets, but the frames of the buckles and their quality differ. One piece (K/94, Tab. 13/1), is of high quality, made of copper alloy. It has a nicely cast, D-shaped buckle frame and a rectangular plain sheet plate, decorated only with one small flower application at the rivet which connected the sheet plates together. D-shaped buckles are usually dated from the fourteenth century on,²²⁴ which may explain why these buckles rarely appear in hoards, and only one was found in hoards connected to the Mongol invasion.²²⁵ In addition, these pieces are not frequent finds in cemeteries, and furthermore, because of the

²²⁴ Krabath, *Fuchsenhof*, 259.

²²⁵ Esztergom-Szentkirályi földek. See: Récsey, *Esztergom*, 69-70. The reason that belt fittings do not appear in hoards is complex; first, as a functional dress accessory, belts, or rather belt buckles, need to belong-lasting, for which silver is not necessarily an appropriate material, at least not for the pin of the buckle. Because of the less valuable material and their functional aspect, these pieces not likely to appear in hoards, as these artefacts were not that valuable, and for a practical reason: people probably wore them, even in times of crisis.

lack of analysed cemeteries, the dating of finds from graves is uncertain. Luckily, the hoard of Fuchsenhof contains – only one – belt buckle of a type similar to this – a D-shaped frame with folded sheet plates -- but made of silver, which is stable, but the first proof for the dating of such buckles to the second half of the thirteenth century.²²⁶ The decoration of the buckle plate with a flower application is rare, and there is only a more distant parallel for it; a belt buckle from Nitra-Dražovce (Tab. 13/2), which has a different, slightly more ornate oval frame, and a somewhat narrower buckle plate. This piece was dated to the second half of the thirteenth century.²²⁷ One similar piece, made of silver with an oval frame with a grooved notch in the middle for the pin, was found in the hoard from Esztergom-Szentkirályi földek (Tab. 14).²²⁸

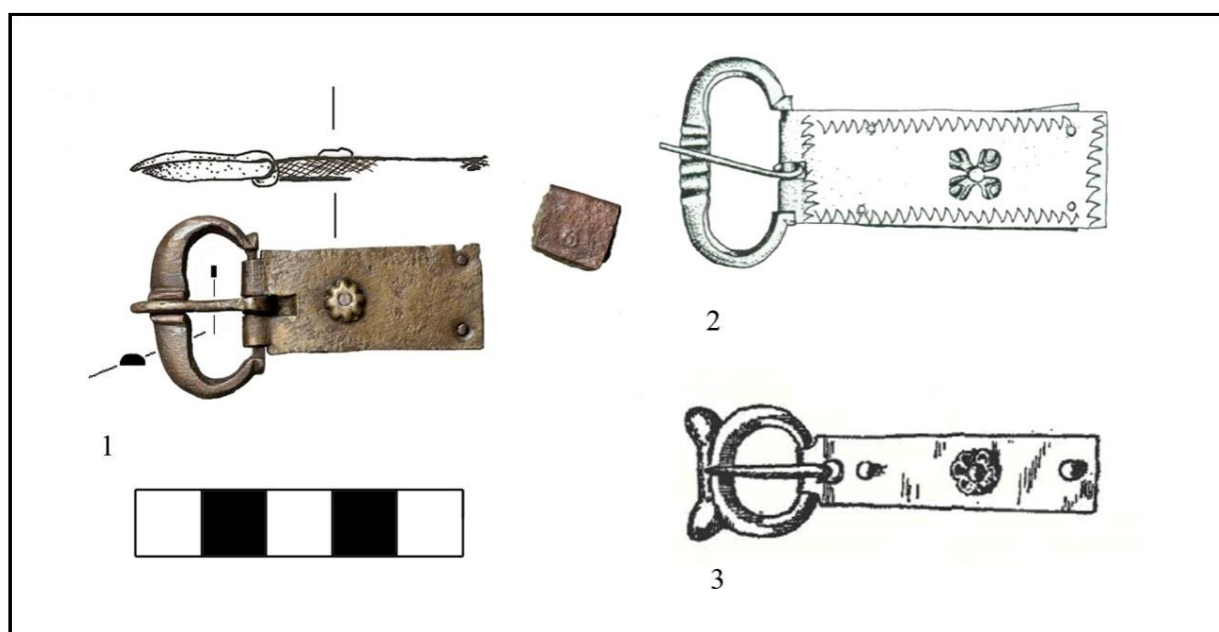


Table 13. Belt buckles decorated with flower applications. 1: Kána, K/94, 2: Nitra-Dražovce, 3: Egisheim

This hoard can be connected to the Mongol invasion and therefore suggests the appearance of such decoration in an even earlier period. Another type of belt buckle from

²²⁶ Krabath, *Fuchsenhof*, 259. See also: Stefan Krabath and Birgit Bühler, “Katalog der nichtmonetären Objekte” in *Der Schatzfund von Fuchsenhof* ed. Bernhard Prokisch and Thomas Kühtreiber (Linz: Oberösterreichisches Landesmuseum, 2004): 540.

²²⁷ Ruttkay, *Nitra-Dražovce*, 18.

²²⁸ Récsey, *Esztergom*, 69-70.

Egisheim (Tab. 13/3) also bears an applied flower decoration in just the same place. This piece is more similar to the one from Dražovce, as it has an oval frame with two significant knobs and a very narrow sheet plate, decorated only with a flower application of the rivet in the middle. This piece was first interpreted as Roman, but diverse visual evidence and some finds from hoards testified that this type of buckle appears rather later, from the second half of the thirteenth to the fourteenth century.²²⁹ Another, fragmented, buckle plate of the same type is known from London, this time with a sexfoil mount application at the middle rivet,²³⁰ which shows that variations in the decoration of the buckle plate was widespread. The last piece from the graveyard (K/2789) also has an oval frame with small knobs on the outer edges, but its workmanship is rather rough, despite the gilding of the surface of this copper alloy artefact. The surface of the folded-sheet plate was decorated with punched dots forming swirling motifs around the rectangular iron rivets. This piece is worn, not only the more vulnerable plate, but also the frame of the buckle. Considering that this piece was found in the grave of a young, fourteen- or fifteen-year-old woman, it is unlikely that this piece originally belonged to her, except if she had worn it since her childhood. This grave dates to the very last phase of the cemetery, and therefore it can be dated around the end of the thirteenth century. Besides the buckle, a copper alloy sexfoil mount and a rivet with a circular collar were also discovered. Not surprisingly, this rough piece has no exact parallel. The dating of the cemetery, however, is in accordance with the dating of the diverse variants of this type of buckle to around the mid-thirteenth century.²³¹ The sexfoil has no certain parallels from the thirteenth century, and in general this type of mount was understood as typical for the fourteenth and fifteenth century,²³² but at Krásno it is dated from the second

²²⁹ Fingerlin, *Gürtel*, 75-77.

²³⁰ Egan-Pritchard, *Dress Accessories*, 113.

²³¹ Fingerlin, *Gürtel*, 77.

²³² Ferenc Horváth, "Csengele középkori temploma" [The medieval church of Csengele], *A Móra Ferenc Múzeum Évkönyve* 66 (1976): 112.

half of the thirteenth to the end of the fourteenth century.²³³ In her collection of data, Ilse Fingerlin dated them from the mid-fourteenth century, and discovered that rosettes are often single mounts of the belt; their mass appearance is rare.²³⁴ Sheet copper alloy mounts, however, appear first in early thirteenth-century deposits in England.²³⁵

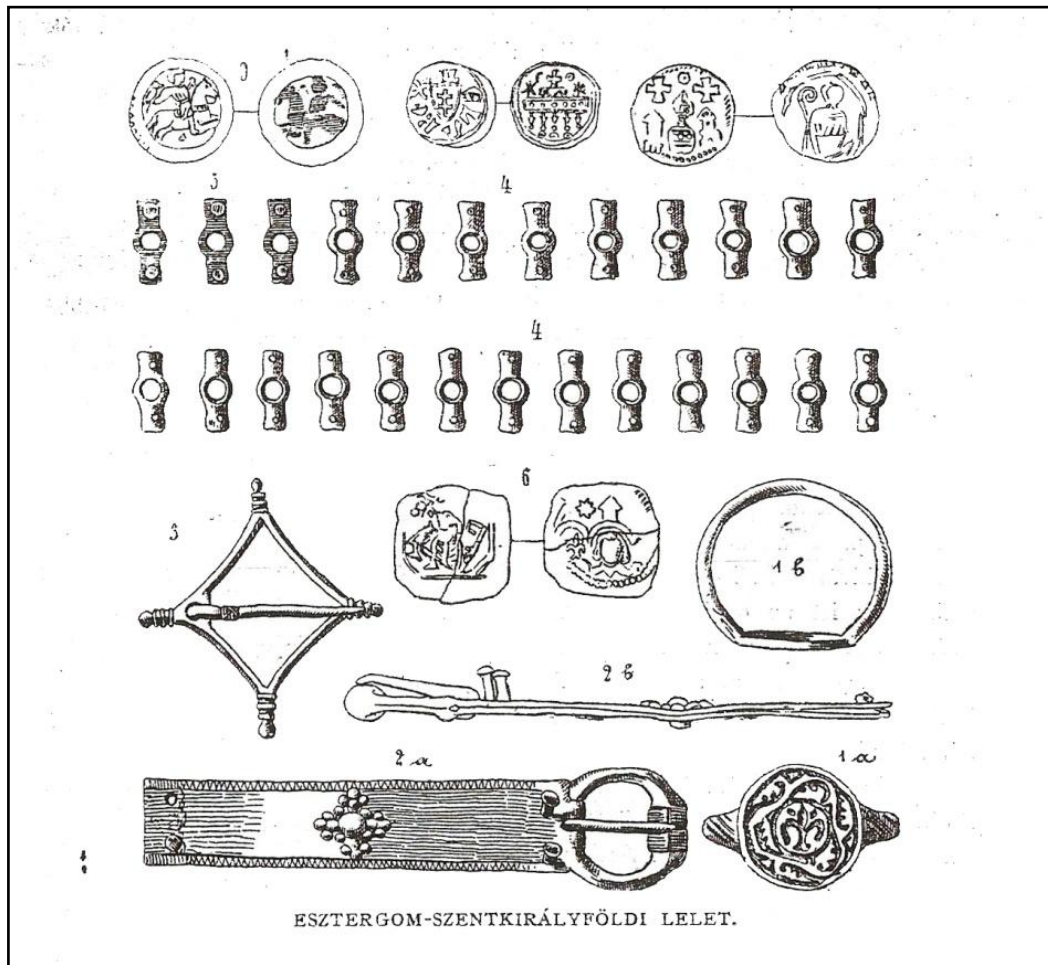


Table 14. The hoard of Esztergom-Szentkirály. Récsey 1894, 69.

This belt from Kána is important for another issue also: the appearance of belts decorated with mounts. Although in this case it is only one mount, this belt can be considered one of the first decorated belts discovered in a grave, which became popular (or rather, which appears in graves more frequently) mostly from the fourteenth century on. The hoard of

²³³ Krupica, *Krásno*, 294.

²³⁴ Fingerlin, *ibid.*, 90.

²³⁵ Egan-Pritchard, *Dress Accessories*, 162.

Fuchsenhof, one of the two hoards of the region which contained a buckle, also included some small vertical mounts (in this case both end were shaped as lilies) and three diversely crafted sexfoils, which were interpreted as belt fittings – support this dating of the end of the thirteenth century for the appearance of decorated belts.²³⁶

However, another find indicates that decorated belts should be dated to an even earlier period. The hoard of Esztergom-Szentkirályi földek contained not only a buckle (and some other jewellery), but also twenty-five small, propeller-shaped mounts made of silver. These pieces were interpreted as links of a necklace,²³⁷ and although András Pálóczi-Horváth²³⁸ corrected this misapprehension as early as 1972, his correction has not become widespread in the literature,²³⁹ and therefore had no impact on the dating of this kind of belt until lately, when Ágnes Ritoók suggested that this find, and also the belt buckle from Kána which was decorated with a rosette application (K/94), were the early types of decorated belts, already in use in the first half of the thirteenth century.²⁴⁰ Although the find from Esztergom clearly supports this idea, it has to be mentioned that such belts are absent from graves of the thirteenth century. The one from Kána is indeed one of the earliest pieces in graves, but this is not the piece which was found together with a mount (K/2789, Tab. 11/4). In addition, as was described before, the first piece cannot be dated earlier than the end of the thirteenth century; nor can the other one, which clearly marked an early appearance of a belt decorated with mounts.

Summarising the chronology of belts, it can be stated that already in the thirteenth century diverse belts, probably also decorated belts, were in fashion and in use, although they do not appear in graves until the fourteenth century. The reasons for this dichotomy can be

²³⁶ Krabath, *Fuchsenhof*, 259-261. See also Krabath and Bühler, *Katalog*, 541-557.

²³⁷ Récsey, *Esztergom*, 69-70.

²³⁸ András-Pálóczi-Horváth, "A felsőszentkirályi kun sírlelet" [The Cuman grave of Felsőszentkirály], *Cumania* 1 (1972): 197.

²³⁹ For example Tóth, *A tatárjárás kincsleletei*, 82-83. In his work it is still called a necklace.

²⁴⁰ Ritoók, *A templom körüli temetők régészeti kutatása*, 475-476.

multiple; first, the value of such a belt should be investigated. The early piece from Esztergom is made of silver and has twenty-five mounts; it is a developed form like those which appear in fourteenth-century graves. It is also important that this piece comes from an urban context, whilst the ones in fourteenth- and fifteenth- century rural cemeteries (and the one from Kána) are usually made of copper alloy. It is remarkable that the one from Kána shows a slightly simpler form than the later ones; thus the question has to be raised whether the first appearance of such belts should be connected to the elite. If so, than how

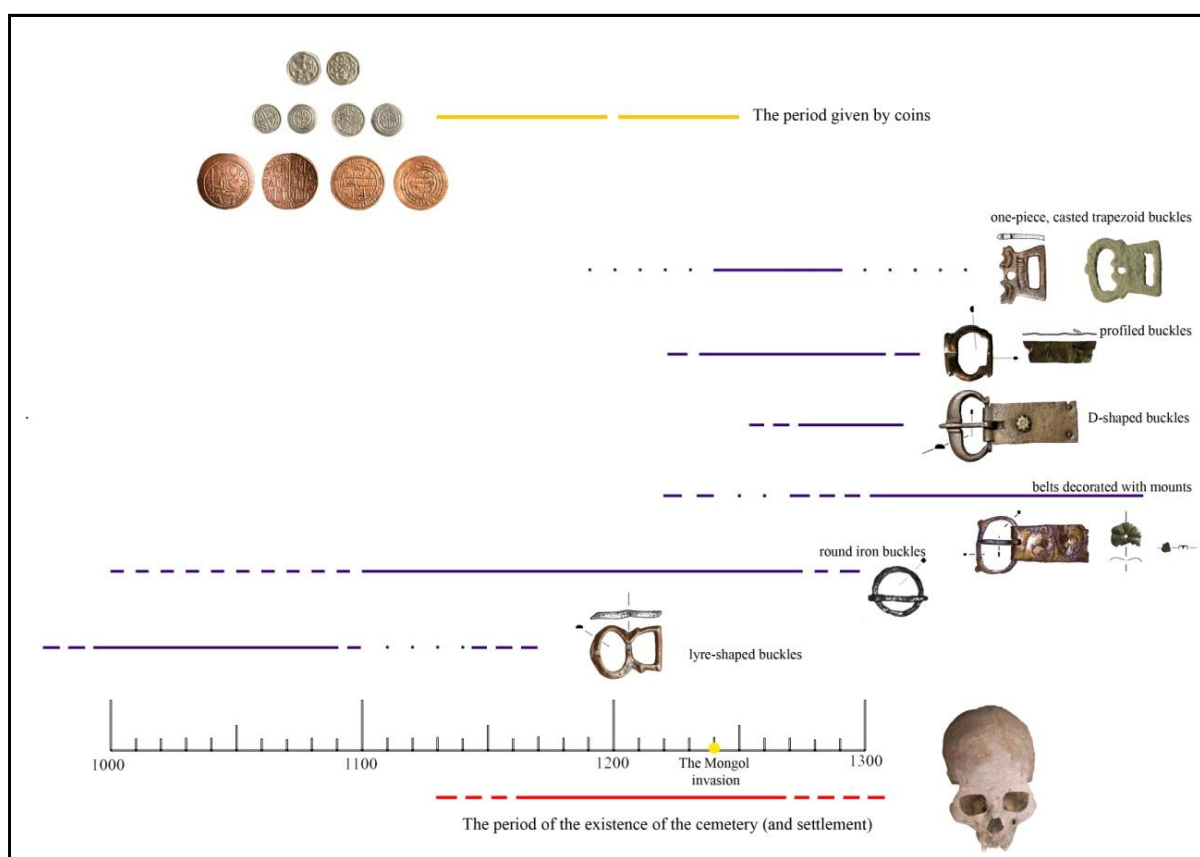


Table 15. The occurrence of buckles in graves, hoards and settlement features

long did it take them to become widespread amongst commoners, in a simpler form? Probably there will be no exact answer for this, but considering this, presumably the widespread use of such belts by commoners did not happen before the second half of the thirteenth century. Besides the value and context, burial customs should also be considered; jewellery could have been interred together with the deceased even if they buried the corpse

in a shroud, but belts surely not. Therefore, the appearance of belts (with or without mounts) in graves from the end of the thirteenth century implies changes in burial customs as well. All this leads to another issue; there is little to be said about twelfth-century belts. Since all the types except the lyre-shaped piece and the iron buckles are dated to the thirteenth century, and besides the lyre-shaped piece there is no belt equipment from the twelfth century graves of Kána, this problem cannot be resolved now.

Mounts

Besides this grave, some more mounts were discovered in the area of the settlement. Because of the context, their original use cannot be identified without doubt, as they could have decorated a belt, some part of the dress, or even some completely different object. However, as there is a possibility that these pieces could have been dress accessories, their investigation cannot be excluded.



Two pieces are without any decoration, made of copper alloy sheet, and had holes for rivets in the corners. One has a rectangular shape; the other was shaped in a shield form (Tab 16/3). The first is without a parallel, thus, it because of its simplicity and context (it was discovered in a shallow pit, without any more precisely datable object), it does not imply any particular point in the question of mounts as dress or belt accessories of the period. The shield-shaped piece is more interesting, although it is a stray find which was discovered

Table 16. Mounts from Kána. 1: K/312, 2: K/467, 3: K/2523

during metal detecting of the soil of diverse settlement features. The earliest, and also the only, parallel is the belt from the Cuman noble's grave of Felsőszentkirály, which should be treated carefully as it clearly represents a different layer of the society. However, the dating of the belt corresponds to the piece from Kána, which is dated to the second half of the thirteenth century.²⁴¹ Besides these, a small rosette mount (Tab. 16/2) was discovered, which has a domed centre and lobes with a hole for the rivet in the middle. This was found also by metal detecting the spoil-bank. This is particularly interesting, as it has an exact parallel on an embossing plate, which was dated to the mid-fourteenth century.²⁴² For the use of such a mount a nice parallel comes from London, a piece of leather with a lobed edge with each lobe decorated by one such mount.²⁴³ Naturally, this does not mean an exclusive way of use, but shows a different possibility. The possibility that the piece from Kána is also from the early fourteenth century cannot be excluded, but considering the dating of the sexfoil of the belt from the cemetery, it is likely that such rosettes can also be dated from a slightly earlier period, the second half or end of the thirteenth century.

The most exciting mount (Tab.16/1) of all was found in the oven of a sunken house. It is a little fragmented, as it was made of a thin, vulnerable copper alloy sheet, but the original shape is still visible. Within the circular mount a quarrel form was shaped in which a figure of a man is sitting in a throne, holding an orb in its right hand and something which is not quite visible, but probably a scepter, in the other.²⁴⁴ Regarding the seals of contemporary kings, probably the scepter has not been depicted entirely, because the lack of space in consequence of the frame. The figure is clearly a depiction of a king, but it is very schematic. The depiction of a king in this form appears on seals frequently, but without the quarrel frame and originally in an inverse direction (therefore the print of the seal is the same as this

²⁴¹ Pálóczi-Horváth, *Felsőszentkirály*, 201.

²⁴² Zsuzsa Lovag, *Mittelalterliche Bronzegegenstände des Ungarischen Nationalmuseums*, (Budapest: Magyar Nemzeti Múzeum, 1999): 102, 238. Cat. no. 280.

²⁴³ Egan-Prithchard, *Dress Accessories*, 192-193.

²⁴⁴ It might be that the mace has not been depicted because the lack of space in consequence of the frame.

mount).²⁴⁵ Thus this piece is not a direct mount of an actual seal, but rather an imitation, invented by the artisan.

Pectorals



Table 17. Pectoral from Kána, K/1725

Pectorals are not usual finds in churchyard cemeteries of the late Arpadian age; the piece which was discovered in Kána is unusual in itself. The small Greek cross was made of antler, and on the front it bears a circle-and-dot decoration, one on each branch, and one

in the middle. The artefact is rather worn. It was discovered in the disturbed grave of a child (Infans I age) on the chest of the child, together with a rubbed piece of bronze which was presumably a Roman coin originally. The grave was surely one of the very first graves in the cemetery, as it was discovered just next to the northern wall of the nave, and without doubt belonged to the first phase of the cemetery. This situation explains the slightly late occurrence of such an artefact. This piece should be interpreted as an heirloom, just as the the rings decorated with crosses, and as was described above, these pieces should be seen as remnants of a fashion, or rather an age, when there was a need for a visualisation of Christianity. Thus, Zsuzsa Lovag, who first did the synthesis of simple pectorals, suggests a dating from the first half of the eleventh century to the end of the century. She also identified one exception from the beginning of the twelfth century.²⁴⁶ The latest synthesis of the chronology of simple, cast or metal sheet, pectoral crosses extended this dating a little, seeing that these artefacts first appeared in graves in the mid-tenth century and the latest pieces can

²⁴⁵ On the depictions of kings on seals see Géza Érszegi ed., “Sigilla Regum – Reges Sigillorum. Királyportrék a Magyar Országos Levéltár pecsétgyűjteményéből.” [Portraits of kings from the seal collection of the Hungarian National Archive] (Budapest: Magyar Képek, 2001)

²⁴⁶ Zsuzsa Lovag, “Bronzene Pektoralkreuze aus der Arpadenzeit”, *Acta Archaeologica Academiae Scientiarum Hungaricae* 32 (1980): 371-372.

be found in burials from the beginning of the twelfth century.²⁴⁷ Considering this, it is not surprising that the closest parallels of this cross are from an earlier period. The form was widespread amongst the pectorals of the tenth to twelfth centuries, but decoration is rather rare. Researchers assumed that such decoration imitates more sophisticated pieces with inset stones, and represent the earliest types of pectorals.²⁴⁸ Péter Langó and Attila Türk examined the southeast relations of pectorals and collected three pieces with such a decoration: Tiszakeszi-Szóda domb, Vatya and Szob-Kiserdő. Of these, only the latter was dated more precisely by a coin to the second half of the tenth century.²⁴⁹ However, neither of the pieces with parallel decoration have similar shapes, and as this decoration was widespread in space and time, it does not necessarily indicate such an early dating, nor southeastern relations. Regarding burial customs, a surprising uniform pattern was observed; in most cases pectorals were discovered in children's graves.²⁵⁰ They also examined the interpretation of the pectorals in graves concerning the possible Christian faith of the deceased. They discovered that some of the graves showed a surely pagan rite, some of them were Christian, and there was one group where both are possible. In the pagan burials, pectorals were probably put as amulets.²⁵¹

Without questioning the results of the research on this topic, one later appearance of such artefacts has to be mentioned: pectorals in the graves of newly-arrived ethnic groups in the thirteenth century. In the Jazygian cemetery of Négyszállás, not only later types of reliquary but simple bronze and iron crosses were discovered in the thirteenth-century graves. The researcher of the cemetery also noted the high percentage of rings decorated with crosses. He assumed that all this shows a society which had just converted to Christianity.²⁵²

²⁴⁷ Langó - Türk, *Mindszent-Koszorús*, 397.

²⁴⁸ Lovag, *ibid.*, 371.

²⁴⁹ Langó-Türk, *Mindszent-Koszorús* 391-392.

²⁵⁰ Langó-Türk, *Mindszent-Koszorús*, 397.

²⁵¹ *Ibid.*, 398-400.

²⁵² Selmeczi, *Négyszállás*, 83, 91.

A similar pattern can be observed in case of Conquest period graves: one simple iron cross was found together with an *ongon* made of a hare astragalagus. This was also used on amulets, of which diverse variations frequently appear in Cuman and Jazygian graves.²⁵³

Although the pectoral from Kána was interred with the deceased in a Christian cemetery, in a period when Christianity was widespread, its condition suggests that it was a product of the previous era, probably the second half of the eleventh century. What is more interesting is the joint use of the Roman coin and the cross, which shows that not only the artefact, but probably some of the ideas also survived; the appearance of Roman coins with pectorals is not unique; it has a parallel from Ikervár, which was dated to the beginning or second half of the eleventh century.²⁵⁴ The pectoral from Kána (if not counting the Cuman and Jazygian pieces) is surely one of the latest appearance of such an artefact in a cemetery. The mid-twelfth century is not strikingly later than the usual appearance of such crosses, but this particular piece is -- like the lyre-shaped buckle -- a remnant of a previous era.²⁵⁵

In connection with the pectoral, one more point should be mentioned. As was discovered, in many cases these crosses were part of a necklace – usually made of beads.²⁵⁶ Thus, the time periods when necklaces – beads and pectorals -- were in fashion should show some similarities. In the cemetery of Kána, only one single, blue glass paste, spherical shaped

²⁵³ Ibid., 29, 87-88.

²⁵⁴ Langó-Türk, *ibid.*, 389.

²⁵⁵ This only concerns to simple pectoral crosses, and not to later types of reliquary, Kievan types. In Bohemia, Kateřina Horníčková proved that in the twelfth and thirteenth centuries, the local production of reliquary pectoral crosses were still going on. Accordingly, the import Hungarian pectorals occur in Bohemia mostly in the tenth and eleventh centuries. See: Kateřina Horníčková, “Between East and West: Bohemian Reliquary Pectoral Crosses as Testimony to Religious and Cultural Exchange” *Rome, Constantinople and Newly-Converted Europe. Archaeological and Historical Evidence. Frühzeit Ostmitteleuropas* Vol 1. ed. M. Salamon, M. Wołoszyn, A. Musin, P. Špechar, M. Hardt, M. P. Kruk, A. Sulikowska-Gąska, 7-11. (Kraków – Leipzig – Rzeszów – Warszawa, 2012)

http://www.academia.edu/2905660/Between_East_and_West_Bohemian_reliquary_pectoral_crosses_as_testimony_to_religious_and_cultural_exchange

²⁵⁶ Ibid., 387. Footnote 136. An interesting piece was found together with beads and shells in grave 60 of Szob-Kiserdő, which was buried most probably not in a Christian way. See Kornél Bakay, “Honfoglalás- és Államalapításkori temetők az Ipoly mentén” [Cemeteries along the Ipoly River from the Conquest period and the age of the foundation of the state] *Studia Comitatus* 6, 132-133. Another piece was found in similar context, together with lunulas in the graveyard of Majs-Udvari rétek. Attila Kiss, *Baranya megye X-XI. századi sírleletei* [The Tenth-Eleventh century grave-goods of Baranya County]. (Budapest: Akadémiai kiadó, 1983): 143-144.

bead was discovered. Although this grave is dated to the fourth phase of the cemetery, it was not an *in situ* find and probably did not belong in the grave of an elderly woman where it was recovered, thus, this only means that it should probably be dated to the twelfth, at most to the beginning of thirteenth century. Such glass paste beads, however, have been dated to the second half of the eleventh century.²⁵⁷ The lack of such artefacts is more interesting; it corresponds well with the occurrence of pectorals. Thus, this only bead should be interpreted similarly to the pectoral.

Summary of the chronological reinterpretation

The dating of cemeteries and jewellery is always a slippery issue. In most cases it is not possible to excavate a cemetery completely and the most suitable finds for dating are dress accessories and jewellery. Therefore one should be cautious of dating the establishment/beginning/end of the church and churchyard based on only two or three pieces found there; a narrow dating of these objects should not be given. It is best to analyse the whole cemetery if possible. In comparison, anyone wishing to deal with the history of fashion should consider that every type of object had a “life.” It was produced when it was fashionable, but it is not always clear whether the period when it was in use overlapped completely with the period when it was fashionable. Not to mention that it could have been stored after it was no longer in use and it may have been deposited only after that. From the entire use-life period, only the first practice and to some extent the second are relevant for the history of fashion. However, these periods are not always easily distinguishable, therefore, one would need sequences of such data to draw (more) precise conclusions.

²⁵⁷ Szőke-Vándor, *Pusztaszentlászló*, 63. On the typochronology of beads see Katalin Szilágyi, “Perlentypen aus dem X-XII. jahrhudert in Ungarn und ihre archäologische Bedeutung“ *Památky Archeologické* 85 (1994): 75-110.

Because of their popularity, and the existence of several types, the chronology of lock rings is the most complicated. Comparative analysis of lock rings shows that in some cases a fifty- or even a hundred-year gap can be noted between the usual dating of a lock ring type and its latest appearance (pear-shaped, twisted-wire, and thick lock ring with diamond cross section and pointed end). Hoards from the age of the Mongol invasion show that lock rings with flaring ends could have been the most fashionable type of lock ring in that period, and although the pieces in such hoards are already worn, their appearance in graves is sporadic and they mostly occur in graves that can be dated around the turn of the thirteenth century. The different types all have different chronologies, but the same tendency can be observed in each case where there has been an attempt for a more precise dating.

The pectoral from Kána also shows the late appearance of an early type of artefact in a later grave. This should be regarded as one of the latest appearances (mid-twelfth century) of such an artefact (originally dating to the tenth-eleventh century) in cemeteries.

Similar to lock rings, a more drastic tendency is visible in the case of rings. Rings, which – according to hoards – were fashionable in the period, hardly appear in contemporary graves. The cemetery at Kána, however, demonstrated the use of early Arpadian age types even in this period. Accepting the analysis of the cemetery, the picture is a little more complex. Early type rings appear in twelfth century graves, and there is no finger ring from the thirteenth century phases of the cemetery, although hoards and finds from settlements clearly show their use as fashionable jewellery.

Pins, which could have the same function as buttons and brooches in some cases, unlike other jewellery items which were fashionable in the middle of the Arpadian era, show a rather stable chronology; in most cases pins are considered to be twelfth-century jewellery. Although no data suggest any other dating than the twelfth century, it might be that the

datings that appear in publications lack solid proof, and were determined only by research traditions, as the continuous use of hairpins implies.

Brooches show similar results to rings, but they are different in one respect: brooches were not fashionable in the first two centuries of the Arpadian age. This typical thirteenth-century jewellery item was present in the everyday life of all social layers as it appears in both settlements and hoards, although it usually appears in graves only from the fourteenth century.

Buttons are clearly similar to brooches. Because of their appearance in settlements and absence from the hoards of the age of the Mongol invasion, buttons should be dated from the second half of the thirteenth century onwards, although they are present in graves only from the fourteenth century.

The chronology of belts should be divided into three parts, according to belt types. The lyre-shaped buckle represents a similar situation to that of rings and the early type of lock rings in the cemetery. Simple iron buckles are hard to date precisely. They appear rarely but continuously in the graves of the Arpadian age. Interestingly, in case of Kána all of them can be dated to the thirteenth century. The third type of belt shows many similarities with brooches and buttons, as diverse variations (even belts decorated with mounts) are typical for the thirteenth century according to hoards and finds from settlements. However, they first appear sporadically in graves at the very end of the thirteenth century, and are typical for fourteenth-century graves.

Besides jewellery, another type of find should be discussed: coins, which are usually the basis of the traditional dating of jewellery. However, coins are not frequent in most of the twelfth- and thirteenth-century cemeteries. The cemetery of Kána is a good example to represent how dangerous can this dating can be. Altogether eleven mintings were discovered in the 1029 graves of the cemetery of Kána. Of the eleven, six pieces were coins of King

Géza II (1141-1161) and the remaining five were coins of the following kings, until András II (1205-1235), plus one Friesach denarius, which suggests that the cemetery was in use from the mid-twelfth century until around the time of the Mongol invasion. However, the dating of several of the finds totally contradicts this, as several artefacts which can be dated precisely (not S-ended lock rings): the pectoral, the lyre-shaped buckle, the bead, the pear-shaped and thick lock ring with diamond cross-section and pointed end and the finger rings should all be dated *before* the period that is given by coins. The buckles from the cemetery, in contrast, should be dated to the early fourteenth century, or at most the turn of the thirteenth century, thus long *after* the period given by the coins. The only artefacts which can be dated by coins are the two pins and the lock rings with twisted wire. Thus, most of the jewellery cannot be dated to the period that is covered by the coins.

Applying the chronology of the cemetery analysis is both clearer and more complicated. First, the appearance of coins should be mentioned, as coins of Géza II (1141-1161) appeared in two graves of the first phase and one from the latest phase of the cemetery. The occurrence of other coins is also mixed; the only logic in the pattern is that they do not contradict the phases of the cemetery analysis (meaning that there is no coin that should be dated later than the phase where it occurs).

The comparative analysis of finds from settlements, hoards, and the chronological phases of the cemetery revealed that this phenomenon was caused by practical reasons. The first is heirlooms, such as the pectoral, the lyre-shaped buckle, and some of the finger rings and lock rings. The second is the incorrect dating of artefacts by only grave-goods to the fourteenth century, when such items already appeared in the first or second half of the thirteenth century: such as brooches, buttons, and buckles. The third issue is the lack of jewellery in thirteenth-century graves.

The explanation of the first problem is clear. The third, however, could have had multiple causes; it is important to note that this concerns not only jewellery, but also coins.²⁵⁸ First, the question of value should be investigated. The silver famine of that period could have caused such results. Most of the pieces that are dated to the thirteenth century but do not appear in graves are made of copper alloy. A second possibility is a change in burial customs, which seems to be more applicable. The first sign of this is the appearance of belts in the latest graves of the cemetery (which assumes that the deceased was buried in clothes and not in a shroud), and this pattern seems to have been widespread in the following century. This would be supported by the position of the skeletons in graves, as in case of Kána, where many showed signs of having been buried in a tight shroud.

Cemeteries from the area of Slovakia show a slightly different picture. The question should be raised whether this difference is because of the state of research or shows local differences in burial customs of the twelfth and thirteenth centuries. The answer is most probably both. Research on churchyard cemeteries and jewellery in Slovakia in this period is the most advanced in the whole Carpathian basin, and they also seem to have more coins in the graves, which makes their dating more stable.²⁵⁹ In contrast, in Transylvania this type of research was neglected until recently,²⁶⁰ and thus data from that area is hardly published.

²⁵⁸ Although the reason for the two could be different, as jewellery items from the second half of the thirteenth century were discovered in the settlement, but no coins from that period.

²⁵⁹ Mostly in consequence of the work of Alexander Ruttkay and in case of jewellery, Milan Hanuliak.

²⁶⁰ Recently, old and new excavations have been published, mostly by Erwin Gáll. Although the area of Transylvania is still not well known, this is the beginning of a tendency to publish churchyard cemeteries from the area.

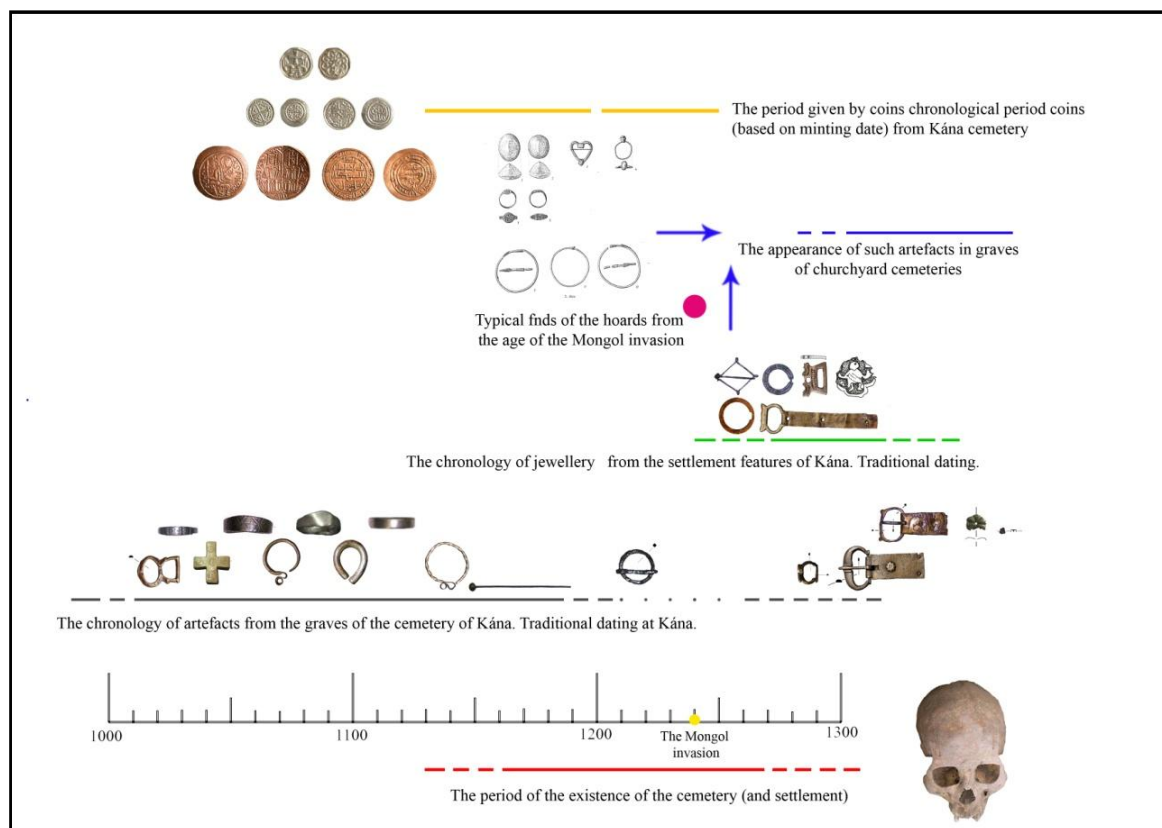


Table 18. The comparative chronology of the artefacts.

CHAPTER THREE – The Socio-Economic Interpretation of Jewellery

The hoards which contained jewellery are special because the connection between economic status and jewellery types can be examined through their presence in the hoards. Furthermore, in some cases it can make the dating of these objects more precise. The first researcher to use these ideas was Nándor Parádi.²⁶¹ By examining the hoard from Nyáregyháza-Pusztapótharaszti he collected the jewellery hoards which were hidden around the time of the Mongol invasion, with or without coins. He also examined the hoards from the thirteenth and fourteenth century which contained both coins and jewellery. By comparing their contents he described the characteristic jewellery of the age of the period with special attention to the pieces hidden at the time of the Mongol invasion. He discovered that the closest parallels of artefacts can be found in the Arpadian age cemeteries of the commoners, but he identified that the brooches that appeared in the hoards indicate some changes in clothing. By examining the material and quality of the jewellery, Parádi investigated the social relations of the hoards. He concluded that most of the jewels in the hoards were made of silver, and in some cases electron; gold or gilded pieces are rare. He stated that the similar content, quality, and material suggest that these hoards represent more or less the same layer of the society. The most common pieces in these hoards are lock rings with flaring ends, followed by finger rings with inset stone or with a carved plate. A smaller number of hoards contained brooches, and even fewer cases S-ended lock rings. As most of the parallels of these objects turned up in churchyards of different villages, and the hoards were often found in or near the area of contemporary villages, Parádi connected these hoards

²⁶¹ Nándor Parádi, “Magyarországi pénzleletes középkori cserépedények” [Medieval clay pots with coin finds from Hungary], *Archaeologiai Értesítő* 90 (1963): 219.

to the rural population, who in many cases owned significant amount of money as well, probably because they participated in commodity production.²⁶²

Károly Mesterházy followed a similar train of thought when he investigated the S-ended lock rings made of gold, but he came to a somewhat different conclusion. He identified twenty-four sites, and stated that since four of them were churchyards of private monasteries (*ecclesia propria*) of the high nobility, the original owners of this type of jewellery should be associated with the upper layer of the society. He also stated that according to these sites all the other finds from hoards or churchyard/field cemeteries of villages cannot be associated with commoners. He argued that the finds of the thirteenth century – all of them from hoards connected to the Mongol invasion – represent a separate group among all the finds. He stated that their owners could not have been commoners, but he agreed with Parádi's statement that as most of them can be associated with a rural environment, their owners must have been inhabitants of these villages. He identified them, and therefore also the owners of the hoards of the Mongol invasion in general, as those free men who appeared in the *Várad Regestrum* without a label of social status, which could be identified only by their judge. He concluded that these were free men who were the owners of only a village or a part of a village, sometimes even only a small piece of land. In individual cases they could have been the leaders of the people of castles or royal domains. They represented a similar economic and social level, lived in a rural environment, and because of their role in commodity production they could have had significant amount of money and some luxury objects, such as the jewellery that occurs in those hoards.²⁶³

Recent research supported the idea that the often worn, maybe inherited, small groups of jewels were the holdings of a family, such as the coins. Individual pieces, however, usually

²⁶²Parádi, *Pénzekkel kezelt ékszerek*, 138-155.

²⁶³Károly Mesterházy, "Köznépi ékszerek nemesfém változatai: arany S-végű hajkarikák" [Precious metal variants of the jewellery of the commoners: gold lock rings with S-ends], *Alba Regia. István Király Múzeum Közleményei* 20 (1983): 144-145.

turned up in larger hoards and were connected to a higher stratum of society. It seems that the jewellery can express a state similar to coins: a highly structured society in the context of economic and financial status, which was still more unified than the complicated legal structure which is shown in written sources. That also means that the financial status and the legal status of a person were not necessarily the same.²⁶⁴

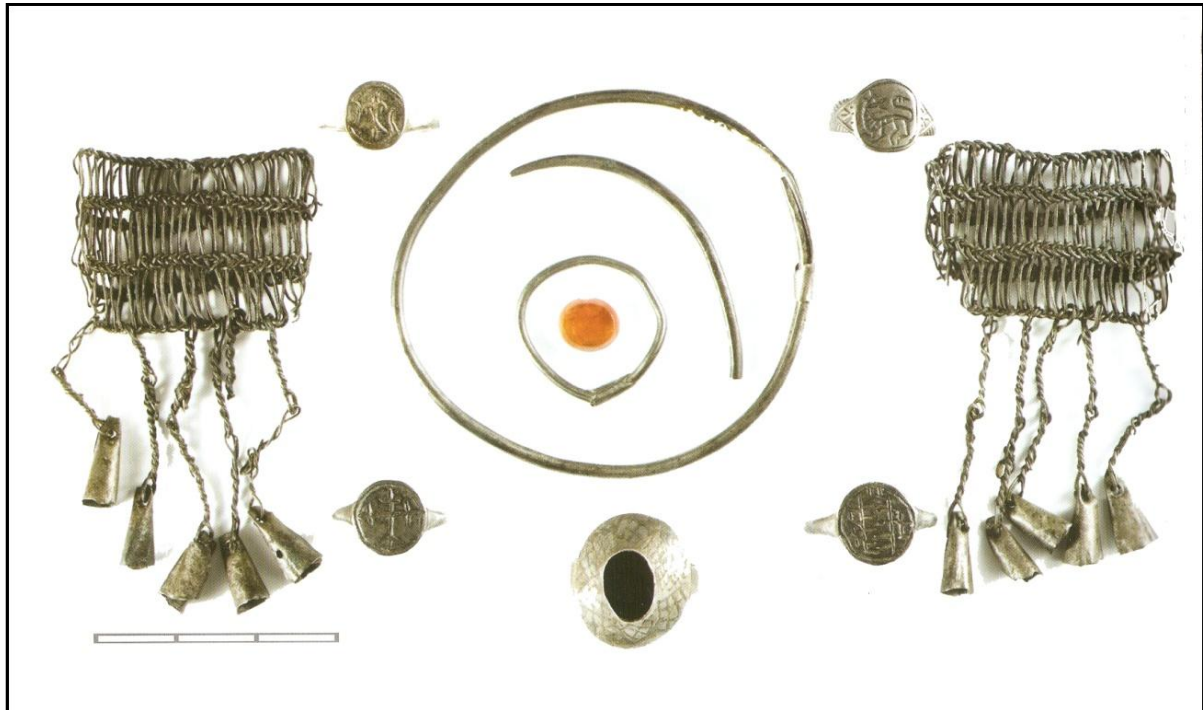
József Laszlovszky has examined the size and value of hoards. He established two main categories: 60-70% of the hoards contained 50-500 coins, and 30-40% contained more than 500 coins. He established several subgroups: in the first group there is a section which contains less than 100 coins, and another which contains 150-400 coins. This also has a subgroup which comprises hoards containing around 250 coins. The second group, hoards with more than 500 coins has four subgroups: hoards with 700-1500, 2000-2500, around 4000 and around 8000 coins.²⁶⁵ Following the work of Bálint Hóman, who was the first researcher to investigate prices in medieval Hungary, Laszlovszky identified the contemporary value of the hoards. He states that the value of most of the hoards (the first group) was one or more draught animals, as the average price of a cattle was around 50 coins. However, the average price of a slave was around 500 coins; 700-1500 coins was the price of a war horse, or in one case, 770 coins was the cost of a site for a mill with house plot and pasture. The value of 2000-2500 coins was a coat of mail. The largest group of hoards included one with 7549 coins, which was worth a house in the city of Veszprém and 32 acres of land belonging to it.²⁶⁶ Csaba Tóth has made the latest overall research on hoards, where he draws nearly the same conclusions; he established four groups: coin hoards with around 8000

²⁶⁴ Laszlovszky, *Tatárjárás és régészet*, 460-461 and Laszlovszky, "Social stratification and Material Culture in 10th-14th century Hungary," *Alltag und materielle Kultur im mittelalterlichen Ungarn*, ed. András Kubinyi and József Laszlovszky (Krems: Niederösterreichischer Landesregierung, 1991) 51-52.

²⁶⁵ József Laszlovszky, "Social Stratification," 49-50.

²⁶⁶ *Ibid.*, 50. Some hoards -- not many -- contained the mintings of Hungarian kings, but because of the yearly debasing the identification of the value of these coins is much more problematic than those which (mainly) contained Friesach *denarius*.

coins, 2-4000 coins, 1-2000 coins, and up to 500 coins.²⁶⁷ Although it is out of the chronological frame of this paper, it is important to mention that the examination of fourteenth-century society has already been made by finds of graves, hoards, and written sources, which in some cases even made possible the examination of the ethnic relations of certain finds.²⁶⁸



Picture 5. Jewellery from the hoard of Pátroha-Butorka dúlő

The rural society of the twelfth and thirteenth centuries went through serious changes which have been investigated in written sources, mainly from legal documents. This research suggests a highly stratified society in legal terms that depended on both on a person's legal status – the extent of their servitude and also their economic opportunities. This was strongly in connection with the landlord, too, as social status and also the economic opportunities could have been different on secular or ecclesiastical estates and in royal domains.²⁶⁹

²⁶⁷ Tóth, *A tatárjárás kincsleletei*, 80.

²⁶⁸ For example see Hatházi, *A Kiskunság kincsleletei*, or *ibid.*, *Sírok, kincsek, rejtélyek : híres középkori régészeti leletek Kiskunhalas környékén - Graves, treasures, mysteries: famous medieval archaeological finds around Kiskunhalas* (Kiskunhalas: Thorma János Múzeum, 2005)

²⁶⁹ On the changes in rural society in the late Arpadian age, see: Ilona Bolla, *A jogilag egységes jobbágyország kialakulása* [The emergence of legally unified serfdom] (Budapest: Akadémiai kiadó, 1983) and Jenő Szűcs,

The largest problem with the historical interpretation of society is that it is hard to connect it with the material remains of the period. József Laszlovszky has investigated the possibilities of using material culture as a basis for studying social stratification. He noted another problem with legal terms besides that they were not used consistently in such sources. He discovered, based on the Legend of Saint Margaret, that legal terms were not even clear to contemporary people, as the members of the same family had different answers for a question about their social status. He suggested using coin hoards of the period to study the social differences in the rural population, as was discussed in detail above. He concluded that by studying the material culture of the rural society of the period, significant differences can be distinguished, but it does not show the highly stratified society that was registered in the written evidence.²⁷⁰

A recent study by Tibor Ákos Rácz investigated social differences in tenth- to fourteenth-century rural society by examining settlement patterns, types and differences in housing. He concluded that although in legal terms the social status of individuals in such an environment was diverse, but the appearance of rural settlements had much the same character as almost all of them made a living from agriculture and animal husbandry before the thirteenth century. Around that time, the growing market economy and commerce resulted in a change in settlement patterns; villages became more concentrated around their churches, and from that time on some divisions appeared in housing also, as some excavation

“Megosztott parasztság – egységesülő jobbágyság. A paraszti társadalom átalakulása a 13. században” [Divided peasantry – unified serfdom. The transformation of the rural society in the thirteenth century], *Századok* 1981.

²⁷⁰ Laszlovszky, *Social Stratification*, 45-54. See also József Laszlovszky, “*Fama Sanctitatis* and the Emergence of St. Margaret’s Cult in the Rural Countryside. The Canonization Process and Social Mobility in Thirteenth-Century Hungary” in *Promoting the Saints. Cults and Their Contexts from Late Antiquity until the Early Modern Period*, ed. Ottó Gecser and József Laszlovszky and Balázs Nagy and Marcell Sebők and Katalin Szende (Budapest: Central European University Press, 2011): 105-107.

revealed houses which were built in a more sophisticated way than the average dwellings in such settlements.²⁷¹ On the contrary, some examples reflect the transition in the society.²⁷²

Thus, the social interpretation of jewellery has its limits; the most that can be achieved is the investigation of the economic opportunities of the contemporary owners, and in fortunate situations an identification with a larger social group to which they could have belonged. Another important aspect has to be mentioned; when examining hoards of the age of the Mongol invasion, one has to bear in mind that these finds can be dated to the middle of the thirteenth century, just to the period of this transformation of society.

There are more possible ways to investigate these questions. The clearest and easiest way would be the comparison of each jewellery type with the amount of money each was discovered with in hoards, and the comparison of this with finds from settlements and burials. The problem is that it is hard to count the amount of money in hoards, as in many cases they contained not only Friesach Pfennigs, but also Hungarian ebracteates. As only Friesach Pfennigs had stable value, it is hard to estimate the overall value of such hoards. A solution could be the examination of the weight of all the money in hoards (thus, the amount of silver), but this is usually not indicated in publications. Nevertheless, this method can be used to investigate these questions, although only up to a limit.

The rarest finds in hoards are brooch-pairs, which because of their structure – no part of this jewellery can be associated with fastening -- were not used as brooches, but only as cloak-ornaments.²⁷³ They have been found in only two cases; in the hoards from Budapest and Tyukod-Bagolyvár. Both pieces are gilded silver, open-work pieces decorated with inset stones. The exact location of the hoard from Budapest is not known, thus, the completeness of the hoard is not certain. Still, nine hundred and thirty one Friesach Pfennigs (and thirty-

²⁷¹ Tibor Ákos Rácz, "Social Differences within 10th – 14th Century Rural Settlement Types in the Central Area of the Hungarian Kingdom," *Ruralia* 9 (2013), in press. I would like to thank Tibor Ákos Rácz for providing me his article before publication.

²⁷² Laszlovszky, *Fama Sanctitatis*, 108-118.

²⁷³ Jakab, *Tatárjárás kori kincslelet*, 260.

five other coins) were found together with it, besides a setting for a stone, a piece of glass paste, and around 140 gr. gilded silver fragments. Because of the circumstances of the find situation of the hoard, the owner cannot be identified. However, the location implies that the person who hid it was probably more than a simple peasant. In the case of Tyukod-Bagolyvár, recent research has shown that the hoard is complete. Besides the fragmented pair of brooches, two electron S-ended lock rings, one silver lock ring with flaring ends, four finger rings (two silver seal rings, a gilded silver ringtop, and a gold ring with an inseted stone), two fragmented silver drop earrings with chains and pendants, and an electron circular ring brooch were found. Together with the jewellery, the hoard contained also three hundred and eighty-four Friesach Pfennigs and nine hundred and ten Hungarian bracteates.²⁷⁴ Attila Jakab examined the environment of the site and he conditionally identified the owner of the hoard as a member of the Gutkeled family, the owner of the nearby monastery of Sárvár.²⁷⁵ Although by the number of coins neither of these hoards can be associated with the wealthiest social group, their location and, in case of Tyukod-Bagolyvár the other jewellery discovered, indicates that whoever hid them, these hoards belonged to the upper layer of society.

The special position of Tyukod-Bagolyvár between these hoards is supported by the occurrence of another rare jewellery type: drop headpieces with chains and pendants.²⁷⁶ In the hoard from Tyukod, two fragments of a pair of silver and one whole gold piece were discovered; all of them are the same type of drop headpiece with chains, in this case interpreted as earrings.²⁷⁷ A similar piece, made of silver, was discovered in the fragmented hoard from Nyírmártonfalva-Gut.²⁷⁸ However, as this hoard is fragmented, and not yet published in detail, it cannot help much in interpreting social relations. The only additional

²⁷⁴ The relatively small percentage of Friesach Pfennigs can probably be explained by the distance of the site from the *Medium Regni*, and thus from the centre of money economy and markets.

²⁷⁵ Ibid., 267.

²⁷⁶ Researchers often call this type of jewellery earrings, but recent research has shown that it could be worn in several ways. On the possible uses, see: Hatházi, *A Kiskunság kincsleletei*, 75-76, footnote 37.

²⁷⁷ Jakab, *Tyukod-Bagolyvár*, 250, 252-253.

²⁷⁸ Ibid., 257-258. Footnote 11.

information is that it also contained rings, a fragment of a lock ring with flaring ends, and one hundred and five Friesach Pfennigs.²⁷⁹ A slightly different headpiece pair was found in the hoard from Pátroha-Butorka dűlő. The rectangular body of the headpiece was braided silver wire, from which chains with cone-shaped pendants dangled. The importance of this hoard is its completeness. Together with the headpiece, three silver and one bronze seal rings, a silver ring with a cone-shaped top, two complete and one fragmented lock ring were found, besides seven thousand and four hundred thirty-nine coins. The number of Friesach Pfennings is unclear, but in this case the weight of the coins is known: 1.9 kg.²⁸⁰ Regarding this quantity of coins, the lack of gold/electron is conspicuous, even more when the jewellery of this hoard and that one from Tyukod-Bagolyvár is compared, as in the latter the gold headpiece was without doubt a highly valuable, sophisticated piece, but the quantity of coins was much less. In the cases of these headpieces another interesting situation has to be mentioned: all of these hoards come from a small area of northeastern Hungary. Researchers seem unable to identify these Byzantine style headpieces as either local products or imported goods.²⁸¹ However, because they have such a limited distribution, comparison with other hoards of the period is difficult.

Two other types of jewellery were made of gold or electron in most cases: S-ended lock rings and finger rings with inset stones. As was described in detail above, Károly Mesterházy showed that electron and gold S-ended lock rings were associated with the upper layer of the society. Such jewellery was found in the hoards from Akasztó-Pusztaszentimre, Karcag, Nyáregyháza-Pusztapótharasz, Tyukod-Bagolyvár²⁸² and Tiszaörvény-Templomdomb.²⁸³ The hoard from Akasztó-Pusztaszentimre was discovered by ploughing.

²⁷⁹ Ibid., 258. See also Tóth, *A tatárjárás kincsleletei*, 85.

²⁸⁰ Attila Jakab, *Pátroha-Butorka dűlő*, 96-97.

²⁸¹ Hatházi, *A Kiskunság kincsleletei*, 75-77.

²⁸² Tóth, *A tatárjárás kincsleletei*, 81-87.

²⁸³ Mária Wolf, "A Tiszaörvényi-lelet" [The find of Tiszaörvény], in: *A tatárjárás* [The Mongol invasion], ed. Ágnes Ritoók and Éva Garam (Budapest: Magyar Nemzeti Múzeum, 2007): 98-99.

Together with the electron S-ended lock ring pair, a pair of silver lock rings with flaring ends, two silver and two electron seal rings, one circular and two rhombus-shaped silver brooches, two hundred forty-seven Friesach Pfennigs, and a few Hungarian bracteates were discovered. Besides jewellery, some iron tools and a ceramic cauldron were also found, but in the opinion of Nándor Parádi, these pieces were found only because the hoard was hidden within the settlement and thus, in consequence of ploughing, they were discovered together, but the cauldron and the iron finds originally did not belong to the hoard.²⁸⁴ The question of the completeness is crucial in the social interpretation of the hoard. Regarding that the pot was also found, I would argue with Parádi's opinion. The discovery of a hoard and beside it two spurs, iron buckles and bands in the same area of a ploughland is not likely, as it would require enormous luck. Not to mention that in this case more, different, pottery types should have been found, which are not mentioned in the official inventory. Thus, in my opinion this hoard should be considered complete. Despite the small number of coins, the quantity and quality of the jewellery such as the electron lock rings, and also some of the iron finds like the spurs indicate that the original owner of this hoard was a person belonging to the military layer of the village, a somewhat upper layer of the society. The hoard from Karcag is also an early, nineteenth century find, thus, its completeness can be questioned. Altogether two hundred and eighty three Friesach Pfennigs, one electron lock ring with an S-end, two electron lock rings with flaring ends, three electron finger rings with inset stones, one circular and one rhombus-shaped silver brooch reached the museum.²⁸⁵ Regarding the amount of jewellery, the hoard is presumably more or less complete. This situation is similar to the previous one: numerous items of quality jewellery (including electron pieces), but only a small number of coins. The hoard from Nyáregyháza-Pusztapótharasz, on the contrary, contained a significant number of coins: nine hundred and seventy seven Friesach Pfennigs and

²⁸⁴ Parádi, *Pénzekkel kelezett ékszerek*, 128-130.

²⁸⁵ Parádi, *Pénzekkel kelezett ékszerek*, 134-136.

seven hundred and seventy nine other coins, mainly Hungarian bracteates. Besides the money, numerous jewellery items were hidden; one electron S-ended lock ring, one electron and two silver lock rings with flaring ends, two silver seal rings, one electron ring with an inset stone, a heart-shaped brooch with an inset stone, a silver earring, and a cut rock crystal.²⁸⁶ Considering that the finding place of the hoard was a considerable distance away from the former village (about 4.5 km), the iron tool hoard, consisting of four sickles, found four metres away from the jewellery and coin hoard,²⁸⁷ was probably hidden by the same person. Thus, the wealthy owner of the hoard from Nyáregyháza-Pusztapótharasz, possessed the most fashionable types of jewellery (such as the heart-shaped brooch), yet was probably made a living from agriculture. A similar situation can be observed in the case of the hoard from Laánybene-Hornyák domb, where a pair of silver lock rings with flaring ends was found in a pot, together with one thousand and one hundred forty nine Friesach Pfennigs and a sickle.²⁸⁸ The owner of Tyukod-Bagolyvár was discussed already. The hoard from Tiszaörvény-Templomdomb is slightly different, as it contained no coins, only jewellery. The hoard was hidden in a bronze plate between the houses of the village, and consisted of one electron S-ended lock ring, two silver lock rings with flaring ends, one silver seal ring, one gilded bronze and one gold finger ring with an inset stone, one silver rhombus-shaped brooch, and an oval rock crystal. Besides the above-mentioned sites, finger rings with inset stones were part of the hoard from Bajót, found in a pot, also comprising two gilded silver pieces, two silver lock rings with flaring ends, one circular gilded silver brooch with frames for stone insets and corals, a circular electron brooch, thirty-four Friesach Pfennigs, and fifty-five other mints,. Despite the small number of coins, the hoard should be considered complete.²⁸⁹

²⁸⁶ Ibid., 123-126.

²⁸⁷ Ibid., 119, 156.

²⁸⁸ Ibid., 136.

²⁸⁹ Parádi, *Pénzekkel kelezett ékszerek*, 129-132.

Simple silver rings and lock rings with flaring ends are the most common finds in hoards, and thus they appear in both the smallest and largest hoards, such as that from Balmazújváros I (two silver lock rings with flaring ends and a silver ring with a pyramid-shaped ringtop along with ninety-seven Friesach Pfennigs in a pot) or Tatabánya-Bánhida (two silver lock rings with flaring ends, approximately two thousand and six hundred Friesach Pfennigs, and one thousand and three hundred other coins), or Gödöllő-Babat (two silver rings with rhombus-shaped ringtops and four thousand sixty coins).²⁹⁰

Summarising the results of the comparison of the amount of coin and jewellery, the following statements can be made. The largest group of hoards (each containing around eight thousand coins) is missing from the group where jewellery is also found, with the exception of the hoard from Pátroha-Butorka dűlő. Interestingly, the hoards which contained the most coins (around four thousand), were found only with a few pieces of jewellery (Gödöllő-Babat, Jászdózsa-Jászapáti határ, Tatabánya-Bánhida). Those which contained a considerable number of high quality items, often gold/electron jewellery, were found either with a negligible number of coins (Akasztó-Pusztaszentimre, Bajót, Karcag,) or together with one to two thousand coins (Budapest, Nyáregyháza-Pusztapótharasz, Tyukod-Bagolyvár). Naturally, small coin hoards with only a few pieces of jewellery are also found, however, in many (but not all!) cases they should be considered as fragmented hoards (Abony, Budapest-Rákosszentmihály, Hajdúszoboszló-Aranyszeg, Nyírmártonfalva-Gut, Pécel, Tápiógyörgye).²⁹¹ Thus, the most important conclusion is that the hoards which contained both coins and jewellery should be investigated separately from those which contained only coins, as in many cases the value of the hoards were given not by the money, but by the jewellery. Regarding their social interpretation, it can be stated that the hoards which contained the most sophisticated jewellery – cloak ornaments – (Budapest and Tyukod-

²⁹⁰ Tóth, *A tatárjárás kincsleletei*, 82-87.

²⁹¹ Tóth, *A tatárjárás kincsleletei*, 81-87.

Bagolyvár) should be associated with an upper layer of the society, not necessarily from the same rural environment with which most of the hoards can be associated. On the contrary, some hoards with jewellery and iron tools (Nyáregyháza-Pusztapótharasz, Ladánybened-Hornyák-domb, and maybe Tiszaörvény-Templomdomb) indicate that rural people, probably making their livings from agriculture and animal husbandry, could have had good taste, and also demanded fashionable jewellery.

However, without doubt there was a wide range of socioeconomic differences between the individuals in even one settlement. Settlements where more than one hoard was discovered are good proof of this. In the same area where the hoard of Nyáregyháza-Pusztapótharasz was hidden, two other complete hoards were also found, consisting of twenty-two and twenty-four coins.²⁹² A similar situation occurred in the destroyed settlement of Szank. In the house where many people sought refuge, diverse jewellery items were found: pieces of iron buckles, a circular bronze brooch, two bronze bracelets, two silver lock rings with flaring ends, and also spurs and a spear. Some finds can be associated with an upper layer of society: a scale for money-changing, a fragment of a gold headpiece similar to the ones from Tyukod-Bagolyvár and Nyírmártonfalva-Gut, a gold ring with an inset stone, and a headpiece, a so-called *párta*, with thirty four gold mounts, two rock crystals and many glass beads.²⁹³ In the same area, two coin hoards were discovered, one consisting of one hundred and thirteen Friesach Pfennigs, and the other, fragmented, consisting of one thousand one hundred and eighty-three coins, of which three hundred and twenty-six were Friesach mintings.²⁹⁴

In general, all this supports the opinion of researchers, namely, that hoards belonged to the uppermost layer of rural society. However, this research on jewellery can make some refinement to this statement. Hoards which either consisted of numerous jewellery items and

²⁹² Ibid., 85.

²⁹³ Wilhelm, *Szank*.

²⁹⁴ Tóth, *A tatárjárás kincsleletei*, 87.

a smaller amount of money, or a few jewellery items with considerable amount of money, or in a few cases both should be associated with the upper social layer. Hoards which contained the most sophisticated, rare types of jewellery (cloak ornaments, diverse – gold -- headpieces), and/or a large number of coins imply an even higher layer, maybe nobility, although certainly not high nobility. Small hoards, and the jewellery in them, suggest a general fashion of silver lock rings (with flaring ends) and finger rings.

Since there are no contemporary written sources about the value of such jewellery, it cannot be estimated precisely. Gold and electron pieces cannot be valued at all, but in the case of silver pieces a rough estimation can be made by comparing the weight of these items with the weight of Friesach pfennigs. This should be investigated because of the regular occurrence of raw silver in hoards, which implies that the jewellery should be also considered by its material. The latest research suggests that because of the different qualities of the coins in determining the value of a hoard, they should be compared with the weight of the mk. (233.3 or 245.5 gr).²⁹⁵ However, in the case of jewellery, this would be too large to count. The weight of Friesach Pfennigs were between about 0.6 and 1.2 gr.²⁹⁶ Thus, in this case I will use an average, 0.8 gr., to estimate the value of the raw material of silver jewellery. Most publications do not give the weight of these pieces, thus, I will use the ones from Tyukod-Bagolyvár to estimate an average. The lock ring with flaring ends represents a general size, it weighs 5.1 gr.,²⁹⁷ the weights of the seal rings are quite different, 2.6 gr. and 7.5 gr.,²⁹⁸ thus, I will estimate the average weight of a seal ring as 5 gr. Counting with an average 5 gr., the value of a pair of lock rings with flaring ends would have been twelve and a half denarius, which was about the price of half a bucket of an ale,²⁹⁹ plus the charge for the fabrication. It would be surprising if this were more than the value of the raw material, thus, even with this

²⁹⁵ Jakab, *Tyukod-Bagolyvár*, 289-290.

²⁹⁶ Jakab, *Tyukod-Bagolyvár*, 290-291.

²⁹⁷ Ibid., 249.

²⁹⁸ Ibid., 250, 252.

²⁹⁹ Laszlovszky, *Social Stratification*, 50.

estimate the values of such trinkets were not high. Considering this, it is not surprising that such pieces appear in all hoards, regardless of their size. This leads to another consideration; since these jewellery items could not have represented great value, determining the social position of burials by such jewellery is not useful.

The question should be raised whether jewellery can help determine the social standing of the deceased, if not, then what can? Among researchers, the statement that the place of the grave in the churchyard reflects the deceased's social position is often made, almost topoi-like. However, without more analysed cemeteries such a pronouncement is more than brave. A counter-argument can be made based on the churchyard at Kána, where the structure of each cemetery phase implies that people were buried in a concentric pattern, except for a few child burials, which were dug into graves of specific, former deceased persons. In the case of Kána, the social position of the deceased can be seen in another aspect: around thirty percent of the graves were framed with (ashlar) stones. The spread of stone-framed graves shows the same pattern, they are not dense in the smaller area of the church. Furthermore, most of the burials which contained jewellery did not have such stone-framed graves. Since the only other example for this burial pattern is from Zalavár, where Christianity had a much longer tradition than in an average Arpadian age village, the tendency, which has been discovered for Arpadian age settlements is that villages concentrated near their churches from around the thirteenth century.³⁰⁰ I do not say that this tendency and only the evidence of Kána shows that the nearness of the church became important in positioning the graves only from around the thirteenth century on, but some phenomena are suggestive, particularly the absence of graves inside churches in the Arpadian period. Thus, the comparative analysis of the development of rural churchyard cemeteries and settlements might lead to interesting social conclusions in the future.

³⁰⁰ Rácz, *Social differences*

CONCLUSION

In this thesis my aim was to determine the jewellery and dress accessory types of the twelfth and thirteenth century and examine their chronology – the time of production and the time of use – and their socioeconomic relations by comparing finds from burials, hoards, and destroyed settlements from the age of the Mongol invasion and stray finds. To avoid the danger of a circular argument I used a control-dating for the artefacts that relied on the chronology of the cemetery at Kána, distinguished by cemetery analysis and the finds of the settlement and also the hoards that can be connected with the Mongol invasion, which provide a stable chronology for the artefacts in them.

The investigation of the chronology of the artefacts revealed not only chronological issues of dating the artefacts of the period, and led to modifying their dating in many cases, but it also exposed two important phenomena in burial customs. Chronologically, the most important issue was the lack of thirteenth-century artefacts in graves, and thus, the disappearance of thirteenth century graveyards. This was caused by both burial customs and the state of research. Concerning burial customs, the appearance of significantly earlier types of jewellery – heirlooms -- in graves, and in accordance with that, the absence of contemporary ones, influenced the chronology. In contrast, because of the lack of analysed cemeteries, many artefacts were dated erroneously to the fourteenth century. The other important issue is the appearance of coins in graves. The research here revealed that coins in the second half of the twelfth and the thirteenth century are not necessarily reliable, as there could have been as much as a hundred years between the actual age of the grave and the one indicated by the coin. All this might have a connection with the silver famine that occurred during this period. The situation seems to have changed at the end of the thirteenth century, when contemporary dress accessories – belts – appear first in graves. This implies a change in burial customs which became widespread in the fourteenth century.

Concerning the socio-economic evaluation of the finds, the present research was able to make the value of such jewellery more precise and together with it the identification of the owners of diverse hoards by investigating the jewellery types, the number of coins, and in certain cases the environment of such finds. This research revealed types which were common in fashion and others which probably belonged to an upper layer of society. This investigation also noted the differences between coin hoards and those which contained coins and jewellery; as in many cases of the latter group the real value was not the number of coins, but the presence of numerous jewellery items.

Future research can and should be made in both areas, as broader research could reveal regional differences in burial customs, and maybe also in chronology. What probably would be even more important is the investigation of the development of churchyard cemeteries and the patterns of burial customs. If any common tendencies can be identified, the findings of this research can be made more precise and the social evaluation and investigation of the development of rural society could gain additional important sources.

BIBLIOGRAPHY

- Acsádi, Gyula, István Nemeskéri. “La Population de la Transdanubie. Nord-Est.” *Annales Historico-Naturales Musei Nationalis Hungarici* 50 (1958): 359-392.
- Alam, Michael, Hubert Emmerig, Bernhard Prokisch, and Heinz Winter. “Der numismatische Anteil des Schatzfundes von Fuchsenhof,” 43-93. In *Der Schatzfund von Fuchsenhof*. Ed. Bernhard Prokisch, Thomas Kühtreiber. Linz: Oberösterreichisches Landesmuseum, 2004.
- Aradi, Csilla. “A főnyed-gólyásfai Árpád-kori temető és település eddigi ásatásának összegzése” [Summary of the Excavations at the Árpád-Aged Cemetery and Settlement of Főnyed-Gólyásfa]. *Somogyi Múzeumok Közleményei* 13 (1998): 113-154.
- Astille, Grenville. “Anglo-Saxon Attitudes: How Should Post-AD 700 Burials Be Interpreted?”. In *Mortuary Practices and Social Identities in the Middle Ages*. Ed. Duncan Sayer, Howard Williams, 222-235. Exeter: University of Exeter Press, 2009.
- Bakay, Kornél. *Honfoglalás- és Államalapításkori temetők az Ipoly mentén* [Cemeteries along the Ipoly River from the Conquest period and the age of the foundation of the state]. *Studia Comitatus* 6. Szentendre: Pest Megyei Múzeumok Igazgatósága, 1978.
- Bálint, Csanád. “A magyarság és az ún. Bielo-Brdo kultúra” [Hungarians and the so-called Bielo Brdo culture]. *Cumania* 4 (1976): 225-254.
- Bárdos, Edith. “Középkori templom és temető Kaposvár határában” [A medieval church and churchyard cemetery on the outskirts of Kaposvár]. *Somogyi Múzeumok Közleményei* 3 (1978): 187-234.
- . “Középkori templom és temető Kaposvár határában II” [Medieval church and churchyard cemetery on the outskirts of Kaposvár II]. *Somogyi Múzeumok Közleményei* 14 (2000): 5-77.
- Bende, Livia, Lőrinczy, Gábor. “A szegvár – oromdülői 10-11. századi temető” [The tenth- and eleventh- century cemetery of Szegvár-Oromdülő]. *Studia Archaeologica* 3 (1997): 201-285.
- Blanchard, Ian. *Mining, Metallurgy and Minting in the Middle Ages*. Stuttgart: Steiner, 2001.
- Blaschitz, Gertrud, and Stefan Krabath. “Schmuck im mittelalterlichen Alltag unter besonderer Berücksichtigung des Schatzfundes von Fuchsenhof.” In *Der Schatzfund von Fuchsenhof*. Ed. Bernhard Prokisch and Thomas Kühtreiber, 735-851. Linz: Oberösterreichisches Landesmuseum, 2004.
- Bolla, Ilona. *A jogilag egységes jobbgyság kialakulása* [The emergence of legally unified serfdom]. Budapest: Akadémiai Kiadó, 1983.

- Bóna, István. "Arpadenzeitliche Kirche und Kirchhof im südlichen Stadtgebiet von Dunaújváros." *Alba Regia. Az István Király Múzeum Közleményei* 16 (1978): 99-157.
- Cseh, János, Béla Kriveczky, József Laszlovszky. "Településnyomok és temetkezések az őskortól a későközépkorig a tiszafüredi Morotvaparton" [Settlement and burials from the Prehistory to the Late Middle Ages at Tiszafüred-Morotvapart]. *Múzeumi Levelek* 47-48 (1985): 3-27.
- Egan, Geoff, Pritchard, Frances. *Dress Accessories 1150-1450*. London: Museum of London, 2002.
- Engel, Pál. *Magyarország világi archontológiája 1301-1457, I.* [The secular archontology of Hungary 1301-1457, vol. 1]. Budapest: História, 1996.
- Érszegi, Géza. *Sigilla Regum – Reges Sigillorum. Királyportrék a Magyar Országos Levéltár pecsétgyűjteményéből* [Portraits of kings from the seal collection of the Hungarian National Archive]. Budapest: Magyar Képek, 2001.
- Éry K., Kinga, and Alán Kralovánszky. "Analyse paléosociographique des cimetières des environs de Székesfehérvár. X et XI siècles." *Annales Historico-Naturales Musei Nationalis Hungarici* 52 (1960): 497-522.
- Fingerlin, Ilse. *Gürtel des hohen und späten Mittelalters*. Berlin: Deutscher Kunstverlag, 1971.
- Fodor, István. "Vorläufige Bericht über die Ausgrabung des Dorfes Szabolcs-Kisfalud am Jahre 1971-73." *Folia Archaeologica* 26 (1975): 171-182.
- Fogas, Ottó. "A gótikus feliratos csatok európai elterjedése" [The spread of gothic brooches with incipations in Europe]. In 'Kun-kép' *A magyarországi kunok hagyatéka* ['Cuman-picture' The remains of the Cumans of Hungary]. Ed. Szabolcs Rosta, 147-174. Kiskunfélegyháza: Bács-Kiskun Megyei Önkormányzat Múzeumi Szervezete, 2009.
- Fügedi, Erik. *Castle and Society in Medieval Hungary*. Budapest: Akadémiai Kiadó, 1986.
- Gáll, Erwin. *A Doboka – IV. Vártérség templom körüli temetője* [The churchyard cemetery of Doboka-IV. Vártérség]. Cluj-Napoca: Erdélyi Múzeum Egyesület, 2011.
- Gallina, Zsolt, Hajdrik, Gabriella. "10-11. századi temetőrészlet Homokmégy-Székesen" [Tenth-eleventh century cemetery fragment from Homokmégy-Székes]. *Cumania* 15 (1998): 133-178.
- Gedai, István. "Fremde Münzen im Karpatenbeckes aus den 11-13. Jahrhunderten." *Acta Archaeologica Academiae Scientiarum Hungaricae* 21 (1969): 105-148.
- _____. "XI. századi kincslelet Nagyharsányból" [An eleventh-century hoard from Nagyharsány]. *A Janus Pannonius Múzeum Évkönyve* 17-18 (1972-1973): 85-90.

- Gerevich, László. "A csúti középkori sírmező" [The medieval graveyard of Csút]. *Budapest Régiségei* 13 (1943): 103-166.
- Giesler, Jochen. "Untersuchungen zur Chronologie der Bijelo Brdo-Kultur. Ein Beitrag zur Archäologie des 10. und 11. Jahrhunderts im Karpatenbecken." *Praehistorische Zeitschrift* 56 (1981): 3-167.
- Gulyás, Gyöngyi. "Egy elpusztult falu Cegléd határában" [A perished settlement in the verge of Cegléd]. In *A tatárjárás* [The Mongol invasion]. Ed. Ágnes Ritoók, Éva Garam, 52-53. Budapest: Magyar Nemzeti Múzeum, 2007.
- H. Gyürki, Katalin. *A Buda melletti kánai apátság feltárása* [The excavation of the abbey of Kána near Buda]. Budapest: Akadémiai Kiadó, 1996.
- Hampel, József. *Újabb tanulmányok a honfoglalási kor emlékeiről* [New studies of the material culture of the Conquest Period]. Budapest: Akadémiai Kiadó, 1907.
- Hanuliak, Milan, Nešporová, Tamara. "Rekonštrukcia stredovekého osídlenia v Skalke nad Váhom" [Reconstruction of the medieval settlement in Skalka nad Váhom]. *Archaeologia Historica* 26 (2001): 324-342.
- Hatházi, Gábor. *A Kunok régészeti emlékei a Kelet-Dunántúlon*. Budapest: Magyar Nemzeti Múzeum, 2004.
- _____. *Sírok, kincsek, rejtélyek : híres középkori régészeti leletek Kiskunhalas környékén* [Graves, Treasures, Mysteries: Famous Medieval Archaeological Finds around Kiskunhalas]. Kiskunhalas: Thorma János Múzeum, 2005.
- _____. "A déli Kiskunság 14-15. századi kincsleletei és azok lehetséges kun vonatkozásai" [The Fourteenth and Fifteenth Century Hoards of the Southern Kiskunság and Their Possible Cuman Relations]. In *'Kun-kép' A magyarországi kunok hagyatéka* ['Cuman-picture' The remains of the Cumans of Hungary]. Ed. Szabolcs Rosta, 67-111. Kiskunfélegyháza: Bács-Kiskun Megyei Önkormányzat Múzeumi Szervezete, 2009.
- Horníčková, Kateřina. "Between East and West: Bohemian Reliquary Pectoral Crosses as Testimony to Religious and Cultural Exchange." In *Rome, Constantinople and Newly-Converted Europe. Archaeological and Historical Evidence. Frühzeit Ostmitteleuropas*, vol. 1. Ed. M. Salamon, M. Wołoszyn, A. Musin, P. Špechar, M. Hardt, M. P. Kruk, and A. Sulikowska-Gąska, 7-11. Cracow: Leipziger Universitätsverlag, Instytut Archeologii i Etnologii Polskiej Akademii Nauk, Instytut Archeologii Uniwersytetu Rzeszowskiego, 2012.
http://www.academia.edu/2905660/Between_East_and_West_Bohemian_reliquary_pectoral_crosses_as_testimony_to_religious_and_cultural_exchange. Accessed March 2013.
- Horváth, Béla. "Előzetes jelentés az 1965-68. évi tisztaörvényi feltárásokról" [Preliminary Report about the Excavations at Tiszaörvény Between the Years 1965 to 1968]. *Archaeologiai Értesítő* 97 (1970): 126-133.

- Horváth, Ferenc. "Szer plébániatemploma és a település középkori története" [The Parish Church of Szer and the Medieval History of the Settlement]. *A Móra Ferenc Múzeum Évkönyve 1974-75* (1975): 343-374.
- _____. "Csengele középkori temploma" [The Medieval Church of Csengele]. *A Móra Ferenc Múzeum Évkönyve* 66 (1976): 91-126.
- Horváth, Jolán. "A Dunáújváros-öreghegyi honfoglalás kori temető" [The Conquest Period Cemetery from Dunáújváros-Öreghegy]. *Alba Regia* 17 (1978): 275-296.
- Hüse, Lajos. "A Tiszántúl Honfoglalás- és Árpád-kori népességének szociodemográfiája" [The Sociodemography of the Conquest Period and Arpadian Age Population of the Area East from the Tisza River], PhD dissertation. Debrecen: University of Debrecen, 2003.
http://ganymedes.lib.unideb.hu:8080/dea/bitstream/2437/78896/3/de_2448.pdf.
 Accessed March 2013.
- Írásné Melis, Katalin. "Árpád-kori temetők a pesti határban, 11-13. század" [Arpadian Age Cemeteries on the Outskirts of Pest, eleventh to thirteenth Centuries]. *Budapest Régiségei* 31 (1997): 41-78.
- Isac, Adriana, Gáll, Erwin, Gál, Szilárd. "A 12th century cemetery fragment from Gilău (Cluj county) (Germ.: Jumarkt; Hung.: Gyalu)." *Ephemeris Napocensis* 22 (2012): 301-311.
- Istvánovits, Eszter. *A Rétköz honfoglalás és Árpád-kori emlékanyaga* [The Material Remains of the Conquest Period and Arpadian Age Rétköz]. Nyíregyháza: Jósa András Múzeum, 2003.
- Jakab, Attila. "Tatárjárás kori kincslelet Tyukod-Bagolyvárról" [Hoard from Tyukod-Bagolyvár from the Age of the Mongol invasion]. *A Nyíregyházi Jósa András Múzeum évkönyve* 49 (2007): 247-296.
- _____. "Pátroha-Butorka dűlő." In *A tatárjárás* [The Mongol Invasion]. Ed. Ágnes Ritoók, Éva Garam, 97-98. Budapest: Magyar Nemzeti Múzeum, 2007.
- Jakab, Attila, Balázs, Attila. *Elrejtett kincsek titkai. Felső-Tisza-vidéki tatárjárás kori régészeti leletek* [The Secrets of Hidden Treasures. Artefacts from the Age of the Mongol Invasion from the Upper Tisza Region]. Nyíregyháza: A Nyíregyházi Jósa András Múzeum, 2007.
- Kiss, Attila. "A sellyei Árpád-kori temető" [The Arpadian Age Cemetery a Sellye]. *A Janus Pannonius Múzeum Évkönyve 1967* (1968): 69-72.
- _____. "Zur Frage der Bjelo Brdo Kultur. Bemerkungen zu den ethnischen Verhältnissen des heutigen Slawonien und Syrmien im 10–11. Jahrhundert." *Acta Archaeologica Academiae Scientiarum Hungaricae* 25 (1973): 327-340.
- _____. *Baranya megye X-XI. századi sírleletei*. [The Tenth-Eleventh Century Grave-Goods of Baranya County]. Budapest: Akadémiai kiadó, 1983.

- Kolchin, B. A., T. I. Makarova, *Древняя Русь. Быт и культура*. Ред.: Борис Александрович Колчин - Татьяна Ивановна Макарова. [Drevniaia Rus': Byt i kul'tura - Ancient Russia. Way of Life and the Culture]. Moscow: Nauka, 1997.
- Kozák, Károly, "Az egri vár Árpád-kori temetőjének feltárása I" [The Excavation of the Arpadian Age Cemetery of Eger Castle]. *Az Egri Múzeum Évkönyve* 16-17 (1978-1979): 157-182.
- Krabath, Stefan. "Die metallenen Trachtbestandteile und Rohmaterialien aus dem Schatzfund von Fuchsenhof." In *Der Schatzfund von Fuchsenhof*. Ed. Bernhard Prokisch, Thomas Kühnreiter, 231-305. Linz: Oberösterreichisches Landesmuseum, 2004.
- Krabath, Stefan, Bühler, Birgit. "Katalog der nichtmonetären Objekte," 133-229. In *Der Schatzfund von Fuchsenhof*. Ed. Bernhard Prokisch, Thomas Kühnreiter. Linz: Oberösterreichisches Landesmuseum, 2004.
- Kralovánszky, Alán. "Adatok az ún. S-végű hajkarika etnikumjelző szerepéhez" [Data for the Ethnic Indicator Role of the So-Called S-Ended Lock Ring]. *Archaeologiai Értesítő* 83 (1956): 206-212.
- _____. "Adatok az ún. S-végű hajkarika kialakulásának és időrendjének kérdéséhez" [Data for the Question of the So-Called S-Ended Lock Ring's Chronology and Emergence]. *Archaeologiai Értesítő* 84 (1957): 175-186.
- Krupica, Oldrich. "Stredoveké Krásno" [Medieval Krásno]. *Zápádné Slovensko* 5 (1978): 169-333.
- Kulcsár, Mihály. "Néhány megjegyzés az Árpád-kori karikaékszerek viseletének kérdéséhez. Az ún. köpús záródású karikák" [Some Remarks on the Wearing of Arpadian Age Lock Rings. The So-Called Lock Rings with Flaring Ends]. *Savaria* 22, no. 3 (1996): 249- 275.
- Kürti, Béla. "Kiszombor X-XI. századi lelőhelyeiről" [About the Tenth and Eleventh Century Sites of Kiszombor]. *Múzeumi Kutatások Csongrád Megyében* 2006 (2007): 103-121.
- Langó, Péter. *Amit elrejt a föld... A 10. századi magyarság anyagi kultúrájának régészeti kutatása a Kárpát-medencében* [What is Hidden by the Earth... Archaeological Research Into the Material Culture of Tenth-Century Hungarians in the Carpathian Basin]. Budapest: L'Harmattan, 2009.
- _____. "Archaeological Research on the Conquering Hungarians: A Review." In *Research on the Prehistory of the Hungarians: A Review*. Ed. Balázs Gusztáv Mende, 175–340. *Varia Archaeologica Hungarica* 18. Budapest: Akadémiai kiadó, 2005.
- Langó, Péter, Türk, Attila. "Honfoglaláskori sírok Mindszent-Koszorús dűlőn. Adatok a szíjbefűzős bizánci csatok és a délkelet-európai kapcsolátú egyszerű mellkeresztek tipológiájához - Landnahmenzeitliche Gräber in Mindszent-Koszorús dűlő. Angäben zur Typologie der trapetförmigen Byzantinischer Schnallen und einfachen Brustkreuze mit Südosteuropäische beziehungen." *A Móra Ferenc Múzeum Évkönyve – Studia Archaeologica* 10 (2004): 365-457.

- Laszlovszky, József. "Social Stratification and Material Culture in 10th-14th century Hungary." In *Alltag und materielle Kultur im mittelalterlichen Ungarn*. Ed. András Kubinyi and József Laszlovszky, 32-67. Krems: Niederösterreichischer Landesregierung, 1991.
- _____. "Árpád-kori és későközépkori objektumok" [Settlement Features from the Arpadian and Late Middle Ages]. In *Régészeti ásatások Tiszafüred-Morotvaparton* [Archaeological Excavations at Tiszafüred-Morotvapart]. Ed. László Tóth, László Madaras, 317-384. Szolnok: Damjanich János Múzeum, 1991.
- _____. "Tatárjárás és régészet" [Mongol Invasion and Archaeology]. In *Tatárjárás* [Mongol Invasion]. Ed. Balázs Nagy, 453-468. Budapest: Osiris, 2003.
- _____. "Fama Sanctitatis and the Emergence of St. Margaret's Cult in the Rural Countryside. The Canonization Process and Social Mobility in Thirteenth-Century Hungary." In *Promoting the Saints. Cults and Their Contexts from Late Antiquity until the Early Modern Period*. Ed. Ottó Gecser, József Laszlovszky, Balázs Nagy, Marcell Sebők, and Katalin Szende, 103-124. Budapest: Central European University Press, 2011.
- Lovag, Zsuzsa. "A magyar viselet a XI-XIII. században" [The Hungarian Costume in the Eleventh to the Thirteenth Centuries]. *Ars Hungarica* 1974, no. 2 (1975): 381-408.
- _____. "Bronzene Pektoralkreuze aus der Arpadenzeit." *Acta Archaeologica Academiae Scientiarum Hungaricae* 32 (1980): 363-372.
- _____. *Mittelalterliche Bronzegegenstände des Ungarischen Nationalmuseums*. Budapest: Magyar Nemzeti Múzeum, 1999.
- Medgyesi, Pál. "Az Újkígyós, Skoperda-tanyánál feltárt 10-11. századi temetőrészlet" [Partially Excavated Tenth and Eleventh Century Cemetery at Újkígyós – Skoperda Tanya]. *A Békés Megyei Múzeumok Közleményei* 23 (2002): 145-217.
- Mesterházy, Károly. "A sárrétudvari (Biharudvari) X-XI. századi temetők" [The Tenth and Eleventh Century Cemeteries of Sárrétudvari (Biharudvari)]. *A Bihari Múzeum Évkönyve* 2 (1978): 29-44.
- _____. "Köznépi ékszerek nemesfém változatai: arany S-végű hajkarikák" [Precious Metal Variants of the Jewellery of the Commoners: Gold Lock Rings With S-Ends]. *Alba Regia. István Király Múzeum Közleményei* 20 (1983): 143-151.
- _____. "Bizánci és balkáni eredetű tárgyak a 10-11. századi magyar sírleletekben" [Artefacts of Byzantine and Balkan Origin in tenth- and eleventh-Century Hungarian Graves]. *Folia Archaeologica* 41 (1990): 87-115.
- M. Nepper, Ibolya. *Hajdú-Bihar megye 10-11. századi sírleletei I* [Tenth and Eleventh Century Grave Finds of Hajdú-Bihar County]. Budapest-Debrecen: Déri Múzeum, Magyar Nemzeti Múzeum, Magyar Tudományos Akadémia, 2002.

- M. Nepper, Ibolya, Módy, György. "Szentgyörgy (Kismacs) Árpád-kori templomának feltárása – A falu a XIII-XIV. században" [The Excavation of the Church of Szentgyörgy (Kismacs) – The Village in the Thirteenth and Fourteenth Centuries]. *A Debreceni Déri Múzeum Évkönyve* 1983-84 (1985): 91-131.
- Nemerkényi, Előd. "Medieval Hungarian Glosses in MS. Lyell 70." *Bodleian Library Record* 16 (1999): 503–508.
- _____. "Cathedral Libraries in Medieval Hungary." *Library History* 20 (2004): 7–17.
- Ódor, János Gábor. "Anjou-kori öntőforma Majsról" [Angevin-Age Mould from Majs]. *Communicationes Archaeologicae Hungaricae* (1998): 123-137.
- Pálóczi-Horváth, András. "A felsőszentkirályi kun sírlelet" [The Cuman Grave of Felsőszentkirály]. *Cumania* 1 (1972): 177-204.
- _____. "A Balota pusztai középkori sírlelet" [The Medieval Grave from Balota Pusztá]. *Cumania* 11 (1989): 95-148.
- Parádi, Nándor. "Magyarországi pénzleletes középkori cserépedények" [Medieval Clay Pots With Coin Finds from Hungary]. *Archaeologiai Értesítő* 90 (1963): 205-251.
- _____. "Pénzekkel keltezett XIII. századi ékszerek. A Nyáregyháza-pusztapótharaszti kincslelet" [Thirteenth Century Jewellery Dated by Coins. The Hoard of Nyáregyháza-Pusztapótharaszti]. *Folia Archaeologica* 26 (1975): 119-158.
- Pedersen, Anne. "Rovfugle eller duer. Fugleformede fibler fra den tidlige middelalder -- Birds of Prey or Doves. Early Medieval Bird-Shaped Brooches." *Aarbøger for nordisk oldkyndighed og historie* 1999 (2001): 19-66.
- Rácz, Tibor Ákos. "Social Differences within 10th – 14th Century Rural Settlement Types in the Central Area of the Hungarian Kingdom." *Ruralia* 9 (2013), in press.
- Rastad, Ingunn Marit. "En fremmed fugl: 'Danske' smykker og forbindelser på Østlandet i overgangen mellom vikingtid og middelalder – A Strange 'Bird': Danish Brooches and Affiliations in Eastern Norway in the Viking and Medieval Ages." *Viking. Norsk arkeologisk årbok* 75 (2012): 181-210.
- Récsey, Viktor. "Római castrum Tokodon és újabb régészeti leletek Esztergom- és Hontmegyében" [Roman Castrum in Tokod and New Archaeological Finds from Esztergom and Hont County]. *Archaeologiai Értesítő* 14 (1894): 67-70.
- Révész, László. "Líra alakú csatok a Kárpát-medencében" [Lyre-Shaped Buckles in the Carpathian Basin]. *Hermann Ottó Múzeum Évkönyve* 27 (1989): 513-542.
- _____. *Heves megye 10-11. századi temetői* [The Tenth-Eleventh Century Graveyards of Heves County]. Budapest: Akadémiai kiadó, 2008.

Ritoók, Ágnes. "A magyarországi templom körüli temetők feltárásának újabb eredményei" [New Results of the Excavations of Churchyard Cemeteries in Hungary]. *Folia Archaeologica* 46 (1997): 165-169.

_____. "Zalavár-Kápolna: egy temető elemzés lehetőségei és eredményei" [Zalavár-Kápolna: Possibilities and Results of a Cemetery Analysis]. In "... a halál árnyékának völgyében járok". *A középkori templom körüli temetők kutatása - A Magyar Nemzeti Múzeumban, 2003. május 13-16. között megtartott konferencia előadásai* ["... I Walk in the Valley of the Shadow of Death". Research on Medieval Churchyard Cemeteries. Presentations of the Conference Held in the Hungarian National Museum between 13-16th of May]. *Opuscula Hungarica* 6. Ed. Ágnes Ritoók, Erika Simonyi, 173-183. Budapest: Magyar Nemzeti Múzeum, 2005.

_____. "A templom körüli temetők felfedezése" [The Discovery of Churchyard Cemeteries]. In *Arhitectura religioasa medievala din Transilvania - Középkori egyházi építészet Erdélyben - Medieval Ecclesiastical Architecture in Transylvania* 4. Ed. Péter Levente Szócs, Adrian Andrei Rusu, 249-271. Satu Mare: Editura Muzeului Sătmărean, 2007.

_____. "A templom körüli temetők régészeti kutatása" [Archaeological Investigations of the Churchyard Cemeteries]. In *A középkor és a kora újkor régészete Magyarországon* [The Archaeology of the Middle Ages and the Early Modern Age in Hungary]. Ed. Elek Benkő, Gyöngyi Kovács, 473-495. Budapest: Magyar Tudományos Akadémia Régészeti Intézet, 2010.

Ruttkay, Alexander. "Prvky gotickej módy v odeve a ozdobách dedinského obyvateľstva na území Slovenska" [Elements of the Gothic Fashion in Clothes and Decoration among the Rural Population in the Area of Slovakia]. *Archaeologia Historica* 14 (1989): 355-378.

_____. "Mittelalterlicher Friedhof in Ducové, Flur Kostolec, Bez. Trnava: Beitrag zum Studium der Beziehungen zwischen den sog. Reihengräberfeldern und Kirchenfriedhöfen vor dem 13. Jahrhundert." In *Etnische und kulturelle Verhältnisse an der mittleren Donau vom 6. bis zum 11. Jahrhundert*. Ed. Dana Bialeková, Jozef Zabožník, 391-409. Bratislava: 1996.

_____. "Archeologický výskum kostola sv. Michala v Nitre, časť Dražovce a v jeho okolí- informácia o výsledkoch" [Excavations in Nitra-Dražovce, in St. – Michael's Church and its Environment]. *Archaeologia Historica* 22 (1997): 9-19.

Saltzer, Ernő. *A történelmi Magyarország területén fellelt 156 Árpádházi éremkincslelet összefüggő áttekintése* [Synthesis of the 156 Arpadian Age Coin Hoards from Medieval Hungary]. Budapest: Szinovszky és Társa, 1996.

Selmeczi, László. *A négyszállási I. számú jáász temető* [The Jazygian Cemetery of Négyszállás I.]. Budapest: Budapesti Történeti Múzeum, 1992.

_____. *A karcag-orgondaszentmiklósi kun szállástemető régészeti kutatásának néhány tanulsága* [A Few Remarks about the Archaeological Research at the Cuman Field

- Cemetery of Karcag - Orgondaszentmiklós]. Kiskunfélegyháza: Bács-Kiskun Megyei Önkormányzat Múzeumi Szervezete, 2009.
- Stammler, Jan, Ines Wullschläger. "Petschaft und Fürspan. Ein Einblick in die frühe Geschichte der Hansestadt Lüneburg," In *Denkmalpflege in Lüneburg 2010*. Ed. Edgar Ring, 7-12. Lüneburg: Lüneburger Stadtarchäologie, 2010.
- Szabó, János Győző. "Gótikus pártaövek a kishánai vár temetőjéből" [Gothic Decorated Belts from the Cemetery of Castle Kishána]. *Az Egri Múzeum Évkönyve* 8-9 (1972): 57-90.
- Szabó, Kálmán. *Kulturgeschichtliche Denkmäler der ungarischen Tiefebene*. Kecskemét: Városi Múzeum, 1938.
- Szabó, Levente. "Árpád-kori templom és temető Mezőcsát határában" [An Arpadian-Age Church and Churchyard on the Edge of Mezőcsát]. *A Herman Ottó Múzeum Évkönyve* 45 (2006): 25-90.
- Szatmári, Imre. "Bizánci típusú ereklyetartó mellkeresztek Békés és Csongrád megyében" [Byzantine Type Reliquary Crosses from Békés and Csongrád County]. *A Móra Ferenc Múzeum Évkönyve: Studia Archaeologica* 1 (1995): 219-264.
- _____. "A békéscsabai későromán kori arany mellű" [The Late Romanesque Golden Brooch from Békéscsaba]. *Archaeologiai Értesítő* 130 (2005): 195-203.
- Szemán, Attila. "X-XI. századi filigrános mellkeresztek" [Pectorals with Filigree Decoration from the Tenth and Eleventh Centuries]. *A Móra Ferenc Múzeum Évkönyve* 1 (1989): 75-94.
- Székely V., György "Megjegyzések a késő Árpád-kori éremleletek keltezéséhez" [Notes for the Dating of the Late Arpadian Age Coin Finds]. In *A numizmatika és a társtudományok* [Numismatics and its Disciplines]. Ed. Ádám Nagy, 115-124. Szeged: Móra Ferenc Múzeum, 1994.
- Szilágyi, Katalin. "Perlentypen aus dem X-XII. Jahrhundert in Ungarn und ihre archäologische Bedeutung." *Památky Archeologické* 85 (1994): 75-110.
- Szilágyi, Magdolna. "Perished Árpadian-age village at Dunaföldvár." *Acta Archaeologica Academiae Scientiarum Hungaricae* 63 (2012): 156-179.
- Szőke, Béla. "A bjelobrdoi kultúráról" [About the Bijelo Brdo culture]. *Archeologiai Értesítő* 86 (1959): 32-47.
- _____. *A honfoglaló és kora Árpád-kori magyarság régészeti emlékei* [Archaeological Remains of the Conquest Period and Early Arpadian-age Hungarians]. Budapest: Akadémiai kiadó, 1962.
- Szőke, Béla Miklós. "Die Beziehungen zwischen dem oberen Donautal und Westungarn in der ersten Hälfte des 9. Jahrhunderts." In *Awarenforschungen II*. *Archaeologia Austriaca Monographien* 2. Ed. Falko Daim, 841-968. Vienna: Böhlau, 1992.

- Szőke, Béla Miklós, Vándor, László. *Pusztaszentlászló Árpád-kori temetője* [The Arpadian Age Cemetery of Pusztaszentlászló]. Budapest: Akadémiai, 1987.
- Szücs, Jenő. “Megosztott parasztság – egységesülő jobbágyság. A paraszti társadalom átalakulása a 13. században” [Divided Peasantry – Unified Serfdom. The Transformation of the Rural Society in the Thirteenth Century]. *Századok* (1981): 3-65, 263-319.
- Terei, György. “Előzetes jelentés a Kőérberék-Tóváros-Lakópark területén folyó Árpád-kori falu feltárásáról.” -- Preliminary Report on the Excavation of a Village from the Árpadian Period on the Territory of the Kőérberék-Tóváros Residential District. In *Régészeti kutatások Magyarországon -- Archaeological Investigation in Hungary* 2004. Ed. Júlia Kisfaludi, 37-72. Budapest: Kulturális Örökségvédelmi Hivatal, Magyar Nemzeti Múzeum, 2005.
- _____. “Az Árpád-kori Kána falu. - Kána, a Village from the Árpadian Era.” In *A középkor és a kora újkor Régészete Magyarországon. Archaeology of the Middle Ages and the Early Modern Period in Hungary*. Ed. Elek Benkő, Gyöngyi Kovács, 81-112. Budapest: Magyar Tudományos Akadémia Régészeti Intézete, 2010.
- Terei, György, Horváth, Antónia. “Az Árpád-kori Kána falu vasleletei II” [The Iron Finds of the Arpadian Age Village of Kána]. *Budapest Régiségei* 41 (2007): 153-192.
- Tettamanti, Sarolta. “A zalavár-községi I. számú XI. századi temető” [The Eleventh-Century Cemetery of Zalavár-Község I]. *Archaeologiai Értesítő* 98 (1971): 216-244.
- Topál, Judit. “Árpád-kori temető és templom Cegléd-Madarászhalmon” [Arpadian Age Church and Churchyard at Cegléd-Madarászhalom]. *Studia Comitatus* 1 (1972): 53-97.
- Tóth, Csaba. “A tatárjárás korának pénzzel keltezett kincsleletei” [The Hoards of the Age of the Mongol Invasion Dated by Coins]. In *A tatárjárás* [The Mongol Invasion]. Ed. Ágnes Ritoók, Éva Garam, 79-90. Budapest: Magyar Nemzeti Múzeum, 2007.
- Török, Gyula. *Die Bewohner von Halimba im 10. und 11. Jahrhundert*. Budapest: Akadémiai Kiadó, 1962.
- Trogmayer, Ottó. “X-XII. századi Magyar temető Békésen” [Tenth to Twelfth Century Hungarian Cemetery at Békés]. *A Móra Ferenc Múzeum Évkönyve 1960-1962* (1962): 9-38.
- Vizi, Márta, Miklós, Zsuzsa. “Előzetes jelentés a középkori Ete mezőváros területén végzett kutatásokról” [Preliminary Report of the Investigations in the Area of Town Ete]. *A Wosinszky Mór Múzeum Évkönyve* 21 (1999): 207-269.
- Wilhelm, Gábor. “Tatárjáráskori kincslelet Szank határából” [A hoard from the age of the Mongol Invasion from the verge of Szank]. http://sirasok.blog.hu/2010/03/26/tatarjaraskori_kincslelet_szank_hatarabol Accessed January 2013.

Wolf, Mária, “Árpád-kori település Hejőkeresztúr határában” [Arpadian age settlement is the verge of Hejőkeresztúr]. In *A népvándorlaskor fiatal kutatói 8. találkozásának előadásai* [The Presentations of the 8th Meeting of Young Researchers of the Migration Period]. Ed. Ágota S. Perémi, 166-178. Veszprém: Veszprém Megyei Múzeumi Igazgatóság, 1999.

_____. “Nielló díszes bronz csat Edelény-Borsodról” [A buckle decorated with niello from Edelény-Borsod]. *A Herman Ottó Múzeum Évkönyve* 43 (2004): 139-161.

_____. “A Tiszaörvényi-lelet” [The find of Tiszaörvény]. In *A tatárjárás* [The Mongol Invasion]. Ed. Ágnes Ritoók and Éva Garam, 98-99. Budapest: Magyar Nemzeti Múzeum, 2007.