Monastic Life, Art, and Technology in the 11th-16th Centuries

Edited by Ileana Burnichioiu

Monastic Life, Art, and Technology in the 11th – 16th Centuries

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BIZERE ABBEY AND THE INTERNATIONAL CONFERENCE "MONASTIC LIFE, ART, AND TECHNOLOGY IN THE 11TH – 16TH CENTURIES" – AN INTRODUCTION

PÁL LŐVEI*

The Benedictine monastery of Bizere dedicated to the Virgin Mary (monasterium de Bisra, 1183; ecclesia Beate Virginis de Byscere, 1321;monasterium Sancte Marie de Bizere ordinis Sancti Benedicti, 1423), located on a former island of the river Mureş/Maros in Arad County, existed already in the 12th century. It certainly seems to have been a significant institution of the medieval Hungarian Kingdom, as in 1235 it was populated by 32 monks. The monastery's most important privilege was represented by its cargo ships for the transport of salt along the river Maros/Mures. The monks were allowed to purchase salt in any mine, which could be found upstream in Transylvania, and transport the salt free of duty three times a year. In later charters similar privileges were referenced, for example for the bishop of Nyitra/Nitra (1183) and for the Benedictine monastery of Pannonhalma (1211). The abbot of Bizere was mentioned at the latest in 1522. The monastery was totally destroyed during the Ottoman period, but its ruins were shown on historic maps, and the site around them was named *Monostoru*.¹ Now it can be found in the outskirts of the village Frumuşeni (Hungarian: Szépfalu) in Romania.

The limited archaeological research and field walks in the 19th and 20th centuries could not lead to the identification of the functions of the

ruined buildings, at the least the site of the totally unknown church could have been localized in 1981. Some architectural fragments, pieces carved of marble and other stones from multicolored pavements, have come from the site to the Arad Museum. In the great survey of Benedictine monasticism in medieval Hungary, the catalogue of an exhibition organized in Pannonhalma in 2001, only a short summary of the former results were published.²

The extensive archaeological research of the building complex started in the same year as the Pannonhalma exhibition. The excavations were led by archaeologist Adrian Andrei Rusu and revealed remains of great significance. The mortar imprint of a medieval ship, used later secondarily as a lime- or mortar-pit, is a unique find in the Carpathian Basin. It clearly demonstrates the shipping practices of the monastery, as mentioned above. In 2003 colored mosaic pavements of geometric, floral, and figural ornaments were discovered in the monastery church. Among their stones, which were of many different colors (reddish, bluish grey, black, white, light blue, vellow, and dark green), both red and green porphyry could be found.³ Prior to the excavation the use of porphyry in the Carpathian Basin during the Middle Ages had not been detected at all. These stones were likely reused in Bizere; the imperial porphyry and marble pieces probably originated in the interior of Transylvania, from the ruins of settlements in what had once been the Roman province of Dacia. Shipping the special material - stones, marbles, and Roman tegulae also used for the floors - would not have given the monks much trouble. With their motifs and

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¹ György Györffy, *Az Árpád-kori Magyarország történeti földrajza*, 3rd ed. [The Historical Geography of Hungary in the Árpád Age] (Budapest: Akadémiai Kiadó, 1987), 173–174; Levente Hervay F., "Bizere," in *Paradisum plantavit. Bencés monostorok a középkori Magyarországon. Benedictine Monasteries in Medieval Hungary.* Exhibition at the Benedictine Archabbey of Pannonhalma 21 March – 11 November 2001, ed. Imre Takács (Pannonhalma: Pannonhalmi Bencés Főapátság, 2001), 484–485.

² Zsuzsa Heitelné Moré, "Monostorok a Maros mentén. Adatok" [Monasteries along the Maros River. Data], in *Paradisum plantavit*, 268.

³ Ileana Burnichioiu and Adrian Andrei Rusu, *Mozaicurile medievale de la Bizere. The Medieval Mosaics from Bizere. Die mittelalterliche Mosaiken von Bizere* (Cluj-Napoca: Mega Publishing House, 2006); Adrian Andrei Rusu and Ileana Burnichioiu, eds., *Mănăstirea Bizere* [Bizere Monastery], vol. I (Cluj-Napoca: Mega Publishing House, 2011); Ileana Burnichioiu and Adrian Andrei Rusu, "Medieval Floor Mosaics at Bizere Monastery. A Brief Survey," *Trans RXX*, no. 2 (2011): 3–13; Ileana Burnichioiu, "The decorative heritage of Bizere monastery. Fragments of *opus sectile*," in this volume: 249–264.

material richness these pavements in Bizere are unique among the Romanesque relics of medieval Hungary, but remains of marble floors are known from other buildings too. In the provostal church of Székesfehérvár, the medieval cathedral of Eger, and a not yet identified building in Kutaspuszta (Székkutas) in the Great Hungarian Plain rhombuses, triangles, semicircular slabs, and medallion-type low reliefs of different colored material refer to the destroyed originals.⁴

The research work at the Bizere site was supported by a grant of the Romanian National Authority for Scientific Research, which made it possible to organize an international conference at Alba Iulia's University "1 Decembrie 1918," together with a special exhibition presenting the finds of the excavations.

The Organizing Committee of the conference was formed by Ileana Burnichioiu (University "1 Decembrie 1918" of Alba Iulia), Peter Hügel (Arad Museum Complex), and Oana Toda (University "1 Decembrie 1918" of Alba Iulia), and their work was assisted by a Scientific Committee consisting of Romanian and Hungarian archaeologists and art historians.

The conference with the title of "Monastic Life, Art, and Technology in 11th – 16th Centuries" took place on October 16th–18th, 2014. The elegant, freshly restored historic buildings of the University of Alba Iulia gave the event an excellent atmosphere. These buildings of the fortified town center can be found in the vicinity of both cathedrals, the Roman excavations' site, and the famous Batthyaneum Library. Guided tours in the medieval Roman Catholic Cathedral and in the Batthyaneum were important and popular parts of the conference program.

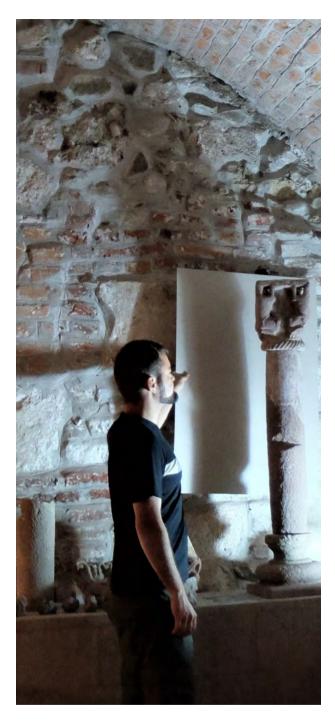
After the opening with the keynote lectures by Eric Fernie and Xavier Barral i Altet more than twenty papers were read in three sections: "Monastic landscape; spatial organization



⁴ For the latest summary about decorative stones in medieval Hungary see: Pál Lővei, "Uralkodói kőanyagok. A király és az elit díszítőkő-használata a középkori Magyarországon" [Stone for Rulers. The Use of Decorative Stone by Kings and Magnates in Medieval Hungary], in *In medio regni Hungariae. Régészeti, művészettörténeti és történeti kutatások "az ország* közepén" / Archaeological, art historical, and historical researches 'in the middle of the kingdom,' eds. Elek Benkő and Krisztina Orosz (Budapest: Magyar Tudományos Akadémia Bölcsészettudományi Kutatóközpont Régészeti Intézet, 2015), 79–109.

of monastic complexes," "Monastic wealth sources," and "Monastery as production centre; usage of art in the monastic milieu; artistic connections." The participants represented several countries of Europe: they came from Great Britain, Catalonia, France, Italy, Croatia, Slovakia, Poland, the Czech Republic, and of course from Romania and Hungary. Not only the leaders and the participants of the Bizere excavations presented their results, but with several lectures the interpretation of their finds has been started on an international level too. This was one of the main goals of the organizers. Other papers were devoted to different topics concerning Benedictine, Cistercian, and Praemonstratensian monasticism in Central, South, and Western Europe. There were lectures dealing with the problems of art, architecture, material culture, the economic life of the Mendicant Orders, and in addition to the Dominicans and Franciscans the Pauline Order, founded in Hungary, was also addressed.

An international conference about monasticism with such a broad perspective had never been organized in the region before. Still, before the political changes around 1990 there was an important conference, dedicated to medieval mendicant architecture organized in Szeged (Hungary) by the scientific department of the former National Office for the Protection of Historic Monuments in Budapest, with some topics and participants from Transylvania, Slovakia, and Croatia.⁵ The series of conferences "Medieval Ecclesiastical Architecture in Transylvania" now number at eight, with several contributions on monastic problems. Based in the County Museum Satu Mare (Romania) their participants were fundamentally from Romania and Hungary; one could meet several of them among the organizers, lecturers, and audience at the Alba Iulia conference too.6



⁵ The volume of the 1988 conference was published only six years later: Andrea Haris, ed., *Koldulórendi építészet a középkori Magyarországon – tanulmányok* [Architecture of the Mendicant Orders in Medieval Hungary], (Budapest: Országos Műemlékvédelmi Hivatal, 1994).

⁶ The papers of the first seven conferences have been published in five volumes: Péter Levente Szőcs et al., eds., *Arhitectura religioasă medievală din Transilvania. Középkori egyházi építészet Erdélyben. Medieval Ecclesiastical Architecture in Transylvania* I-V (Satu Mare: Editura Muzeului Sătmărean, 1999-2012).

PÁL LŐVEI

The exhibition of the Bizere finds took place in the cellars of the "Apor Palace" built in the 15th–18th centuries, and used for the solemn central office of the University. It was a brilliant idea to use the exhibition as a focal point of the conference, giving a lot of chances for the participants to observe and discuss the exhibits. There was a rather spectacular attempt at reconstructing a section of a building unit consisting of dwarf columns with ornamented pedestals and capitals of different types. From the mosaic stones, marble slabs, and *tegulae* moduls found not *in situ* at the site, a great selection of different patterns were reconstructed.

There was a huge glass case full with a rich collection of finds of iron and metal. Huge pieces of greyish Transylvanian rock-salt referred to the economic organization of Bizere abbey.

The organizers had planned for the publication of the conference papers from the very beginning of their work. The result of their efforts is this volume.





THE PROJECT "MONASTIC LIFE, ART AND TECHNOLOGY AT BIZERE MONASTERY" (2013–2016)

ILEANA BURNICHIOIU*

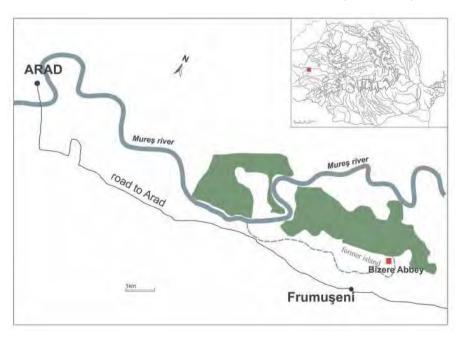
The project entitled "Monastic Life, Art and Technology at Bizere Monastery" benefits from a research grant obtained following a national competition organized by the Romanian National Authority for Scientific Research (UEFISCDI). The research is currently undergoing at the "1 Decembrie 1918" University of Alba Iulia (Department of History, Archaeology and Museology) and its closure is due by the second half of 2016. As stated in the title, the project is envisaging the former Bizere monastery, the archaeological remains of which are located 15 km away from the town of Arad (Arad County, Romania) near the village of Frumuşeni, on a former island of the River Mures.

Bizere merely represents one of a vast series of deserted and completely ruined medieval monasteries of this territory. During the Middle Ages, the Mureş Valley was an important salt route heading from Transylvania towards the West,

North and South through the Kingdom of Hungary. One of the specificities of the region accounts for the high density of monastic sites that appeared along this route. Supposedly, these foundations were of either Latin, or of Greek rite. However, many of them are still controversial in this respect, since their rite or order, hierarchical subordination, mission, and patrons are not mentioned in the written records. Some of these. nominated only accidentally in the edited written sources. are still unidentified in the field. Their

material remains have vanished, some of them starting as early as the thirteenth century. Consequently, gathering information and sources, as well as finding answers to the research questions raised in monastic studies depends very much on the progress of archaeology and the association of its results with those of other disciplines. This also entails the thorough publication of all the archaeological data at hand, jointly analysed with the re-evaluated written evidence.

An expansion of this kind of knowledge and a new interrogation of the sources in an adequate, up-to-date approach of monasteriology is now possible in the case of the disappeared Benedictine monastery from Bizere. This monastery certainly belonged to the Benedictines; it was an abbey and functioned, with numerous disruptions, at least from the twelfth century until the sixteenth. There are some unknowns concerning it, such as the exact moment of its foundation, the provenance of the monks that came to populate it, which were the first buildings erected, the area occupied by the complex etc. Between 1183 and 1522, there are approximately 40 documentary mentions of this monastery. It was probably completely abandoned during the Ottoman invasion of Banat (1520-1530) and



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gradually fell into ruin. During the nineteenth century, scholars began to make first attempts at locating the lost monastery. After a number of prospections and confusions, a first archaeological survey in 1981 (led by Mircea Rusu from the Institute of History in Cluj-Napoca) showed that its place can be located. Excavations on the Bizere site started again in 2001 and, during nine consecutive campaigns, parts of the building foundations that belonged to the monastery were uncovered: significant remains of the rectangular cloister with a refectory and ground floor traces of two Romanesque churches (abbatial church and a chapel), a palace and a water tower were all identified, along with other buildings with yet unknown functions. Within the main church foundation (a three-nave basilica) two decorated surfaces of polychrome pavement mosaics were found *in situ* (measuring 4.50 x 1.50 and 1.60 x 1.50 meters, respectively), together with a few hundred various isolated pieces of floor mosaic. Furthermore, the archaeological excavations brought to light hundreds of sculptures and carved fragments of miscellaneous stones (now hosted by the Arad Museum Complex, Arad County), as well as different categories of artefacts.

This archaeological research was for the most part financed annually by the Arad County Council, which hoped to develop a touristic area at the site of the monastery and in its surroundings and even include it in a durable development project. However, in 2009, due to lack of funding, the research was stopped. The documentation and publication of the rich material unearthed during these nine campaigns was interrupted before the reconstruction of a coherent plan of the monastic complex and determining the functions of all the researched buildings or gathering all the relevant data from the field for an adequate contextualized publication of the artefacts. This is why the archaeological team could only publish concise archaeological reports, a short monograph and an article about the pavement mosaics¹ and a first collective volume of studies strictly limited to some of the architectural components and installations which benefited from complete datasets: the water tower, the funerary chapel, a bread oven and the boat imprint. In the same volume, first hand documents regarding the monastery were presented, together with the first analyses of building materials.²

The preparation of publications before 2011 has clearly shown the need to restart and supplement through new research the data retrieved in 1981 and between 2001-2009. Therefore, a new multidisciplinary project involving a larger team of specialists, according to a new well-defined research plan was developed.

One of the objectives of the new project is to restore a good part of the ground plan of the monastic complex and to establish the relation between the built complex and its placement – a former island of the Mureş River, 15 km away from the town of Arad.

Other major objectives aim to determine the connections between the monastic complex and its medieval namesake village which disappeared during the sixteenth century, as well as to identify the possible remains or traces of annexes that belonged to the monastery and were located on the former territory of its possessions. Documenting the data collected in the field and recording and cataloguing the earlier data and materials stored in the repository of the Arad Museum (retrieved by previous excavations - 1981 and 2001-2009) also constitutes another objective of this project. This would enable straightforward access for future studies and allow other researchers to handle data with ease. For the same purpose, a digital database was created.³

The third objective sets the framework for the analysis and publication of artefacts, which is

¹ Ileana Burnichioiu and Adrian Andrei Rusu, *Mozaicurile medievale de la Bizere. The Medieval Mosaics from Bizere. Die mittelalterliche Mosaiken von Bizere* (Cluj-Napoca: Mega Publishing House, 2006); Ileana Burnichioiu and Adrian Andrei Rusu, "Medieval Floor Mosaics at Bizere Monastery. A Brief Survey," *Trans R XX*, no. 2 (2011): 3–13.

² Adrian Andrei Rusu and Ileana Burnichioiu, eds., *Mănăstirea Bizere* [Bizere Monastery], vol. I (Cluj-Napoca: Mega, 2011).

³ The documentation and compilation of the artefact database started in 2014 and can be referred to as it is listed on the project web page, http://diam.uab.ro/index.php?s=10&p=56 (Bizere Database). The same site is hosting the synthesized annual reports containing a brief outline of activities and publications that represent the project deliverables resulted so far.

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120	cap dragon	bronz	lungime: 4,1 cm, grosime: 0,6 cm: greutate: 8 gr	1	tumare	medievală	fata2015/descoperire 2002	1
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18	bolt, arbaletà	fier	lungime totală: 724 cm; zonă îngustare vărf: 2.2 cm; diametru tub de înmănusare: 1.5 cm.	1	batere la cald	medievală	foto2015/descopertre 2008	
17	boiț atbaletă	fior	lungime totală: 7.4 cm; zonă îngustare vărf: 1.6 cm; diametru tub de immanusare: 1.4 cm.	1	batere la	medievală	fata2015/descopertre 2008	
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114	bolt arbaletă	fier	lungime totală: 7.3 cm; zonă îngustare vărf: 1.2 cm; diametru tub de înmănusare: 1.7 cm.	1	batere la cald	medievală	foto2015/descopertre 2001	
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12	bolt arbaletă	fier	lungime totalà: 6,8 cm, zonà ingustare vàrt: 1,5 cm, dametru tub de inmànusare: 1,6 cm.	1	batere la	medievală	fata2015/descopertre 2006	
11	bolt arbaletà	fier	lungime totală 6.7 cm. cu vârf ascuțit și tub de înmănușare 1.6 cm.	1	batere la	medievală	fata2015/descoperire 2005	
10	bolt arbaletă	fier	lungime totală: 5.8 cm. lungime vărf în trei muchik: 1.3 cm. lățime maximă vărf: 1.2 cm. diametru maxim tab. 1.5 cm.	1	batere la cald	medievală	foto2015/descopertre 2007	
09	vårf sägeatà	fier	lungime totală: 5.1 cm: lungime păstrată vărf efectir: 2.5 cm; lățime maximă vărf: 1.5 cm; diametru maxim tub de înmănușare: 1 cm	1	batere la cald	medievală	fata2015/descoperire 2008	
68	värf sägeatä	fier	lungime totală: 5.6 cm. lungime păstrată vărf efectiv: 3 cm. lățime maximă vărf. 1.9 cm. diametru maxim tab de înmănusare. 1 cm.	1	batere la cald	medievală	fata2015/descopertre 2008	
107	vårf sägeatä	fier	lungime totală: 6.3 cm, lungime păstrată vărf efectiv: 3.5 cm; lățime maximă vărf: 1.8 cm; diametru maxim tub de înmănuşare: 1 cm.	t	batere la cald	medlevală	foto2015/descoperire 2008	
106	värf sägeatä	fier	lungime totală. 5 cm. lungime păstrată vărf efectiv. 2.5 cm. lățime maximă vărf. 1.6 cm. diametru maxim tub de înmănuşare: 0.9 cm.	1	batere la cald	medievală	fata2015/descoperire 2006	
105	värf sägeatä	fier	lungime totalà: 5.4 cm; lungime plistrată vărf efectir: 2.5 cm; diametru orficii 6.3 cm; lungime tub de înmănuşare: 2.9 cm; diametru marim tub de inmănusare: 1.2 cm.	1	batere la cald	medievală	foto2015/descopertre 2005	

essential to comparative studies on different topics (from monastic studies to medieval life). The last objective is the analysis of all the previous sources and investigations, together with the new data acquired through this project, in order to answer the following questions during the next years:

-How old is the establishment of the monastic site? What was the primary planimetric configuration? When was it built and in what form? What was the spatial organization of the complex?

-What the economic were and technological means that facilitated the foundation of the monastery, sustained its existence throughout the centuries and the everyday life of the monastic community inside the convent? What were the artefacts used in everyday life in a monastic environment? How did monastic life function between norm and practice? What relationship did the monastery have with the "outside world", central and local lay authorities, the papal seat, the bishopric from Csanád (Cenad), the provostship of Arad, its villages, with the nobility that possessed land in the monastery's vicinity and others? Can the patrons unaccounted for by written sources - be identified through other means?

-What was the decorative heritage of the monastery's different spaces? What form and what meaning did these have? Can parts of a visual message be reconstructed based on the contents of the mosaics and the sculpted fragments from Bizere? Where did the masters come from? With what means and materials did they work on the island? What was the provenance of the building materials?

The organization of an international in 2013 (Old and new research at Bizere monastery Arad, 16-17th October 2013), along with the international conference Monastic Life, Art and Technology (16-18th October 2014), proceeded by the present volume, listed and debated some of the aimed questions in a wider scientific context and disseminated answers the based on the interpretation of the data acquired by fulfilling the project objectives. The two events were accompanied by temporary exhibitions set up both in Arad and Alba Iulia.



ILEANA BURNICHIOIU



The exhibitions showcased artefacts retrieved during the old archaeological campaigns along with some pieces unearthed when the field research was resumed, in 2014. Nonetheless, part of the archaeological material that also underwent conservation interventions between 2013 and 2015 at the University "1 Decembrie 1918" of Alba Iulia, were integrated in a small permanent exhibition at the Arad Museum Complex that opened in May 2015.

Some project activities already benefited from the implication of the Arad Museum Complex, along with the support offered by colleagues from the Department of Medieval Studies of the Central European University, the Institute for Art History, the Institute for Geological and Geochemical Research of the Hungarian Academy of Sciences, and the Department of Geophysics and Space Science of the Eötvös Loránd University.

A part of the collaboration was designed to produce and disseminate individual results through articles published in journals and papers presented at conferences which are connected to the subjects of the project: monastic studies, Romanesque art, medieval technology, medieval archaeology, landscape archaeology.⁴

This new approach seeks to integrate the topic in the wider European research milieu. In the process, the archaeological sources stored by the local museum will finally become better known and more accessible to researchers worldwide dealing with monasticism, art history and medieval technology.

Through the collected and disseminated data, using different methods and means from various disciplines, the project will offer an essential dataset for a future conservation plan related to aspects pertaining to medieval material culture and for a project essential to the protection of the *in situ* mosaic pavement, followed by a prospective museum development. Moreover, it will underpin the intentions already stated in the years 2003-2009 by the Arad County Council and Arad Museum Complex to devise a conservation project for the Bizere site as part of a regional development plan.

discovered at Bizere between 2001 and 2009 (I)], AUA hist. 17, no. 2 (2013): 223–226; Adrian Andrei Rusu et al., "Frumuşeni, jud. Arad. Mănăstirea Bizere" [Frumuşeni, Arad county. Bizere Monastery], CCA. Campania 2014 (2015): 71– 73; Adrian Andrei Rusu and Oana Toda, "Archaeological Evidence for Historical Navigation the Mureş (Maros) River. Enquiries Based on a Medieval Boat Imprint from Bizere Abbey (Romania)," AAASH65, no. 1 (2014): 139–154; Adrian Andrei Rusu, "Manifestations of Violence in the Benedictine Abbey in Bizere (Frumuşeni, Dép. Arad)," eClassica 2: Violência no mundoantigo e medieval (in print); Adrian Andrei Rusu, "Medieval stili from Romania," Marisia XXXIV-XXXV (2014-2015): 107–116. See also several studies in this volume.

⁴ Ileana Burnichioiu, "Fragments from Bizere monastery (Frumuşeni, Arad county): the lavabo of cloister," *EJST*9, no. 6 (2013): 211–219; Adrian Andrei Rusu, "On a possible abbatial crosier from Bizere Monastery (Frumuşeni, Arad County)," *EJST*9, no. 6 (2013): 221–232; Ileana Burnichioiu, "Lavatorium-ul abației Bizere – de la arheologie la reconstituire" [The lavatorium of Bizere abbey – from archaeology to reconstruction], *AUA hist.* 17, no. 2 (2013): 101–121; Adrian Andrei Rusu, "Religios și non-religios în cultura materială a mănăstirii Bizere (Frumuşeni, jud. Arad) (I)" [Religious and non-religious in material culture of Bizere abbey (Frumuşeni, Arad county) (I)], *AUA hist.* 17, no. 2 (2013): 123–154; Erika Nemes Feketics, Ileana Burnichioiu, "Analize ale fragmentelor de frescă descoperite la Bizere în anii 2001-2009 (I)" [Analysis of the fresco fragments

Monastic Landscape

DAS KLOSTER AUF DER FLUSSINSEL: FERNVERBINDUNGEN UND LOKALE ABGESCHIEDENHEIT IM FALL DER ABTEI BIZERE?

OANA TODA*

Die Klosterlandschaft am Unterlauf des Flusses Mures wurde stark durch das Gelände und besonders durch den Flussverlauf beeinflusst. Dies erklärt die geografische Lage dieser Orte, die ausschließlich in der Nähe des Mures zu finden sind. Bis ins 13. Jahrhundert wurden in diesem Teil des Flusslaufes zahlreiche Klöster gegründet, die ihre Einkünfte aus dem Salzhandel bezogen. Das Recht dazu war ihnen von der Krone zugesprochen worden. Während der Dynastie der Árpáden (1000-1301) erlangten einige der ältesten Klöster (unter anderem die des Benediktinerordens) eine führende Rolle in diesem Bereich.¹ Die Organisation des Salzabbaus und -handels innerhalb des Königreiches wurde den Klöstern und geistlichen Institutionen überlassen, die im Gegenzug hohe Abgaben an die Krone zahlten.²

In diesem Rahmen entfaltete sich das Benediktinerkloster Bizere zwischen dem 12. und 16. Jahrhundert.³ Die Überreste der Gebäude befinden sich heute im Westen Rumäniens, 15 km von der Stadt Arad entfernt, in der Nähe des Dorfes Frumuşeni (dt. Schöndorf) auf einer ehemaligen Flussinsel.

Das Wissen um diesen besonderen hauptsächlich Standort ist durch das Kartenmaterial des 18. und 19. Jahrhunderts erhalten geblieben. Heute ist das Gebiet eine größtenteils trockene Landschaft im Überschwemmungsgebiet des Flusses. Erkenntnisse aus archäologischen Grabungen führten zu dem Schluss, dass der Standort der Abtei während des späten Mittelalters und der frühen Neuzeit wiederholt Überschwemmungen ausgesetzt war. die von den verschiedenen Armen des Flusses und dem allgemeinen Steigen des Wasserstandes herrührten.

Eine Untersuchung der Ortsnamen auf historischen Karten zeigt, dass sich die Bezeichnung Bizere auch nach dem Untergang der Abtei für den Ort gehalten hat. Die älteste Karte für diese Region stammt aus dem 16. Jahrhundert und wurde von Lazarus zusammengetragen. Auf dieser wird die Abtei als südlich des Flusses und östlich von Zeudi angegeben, dem Gut der Familie Pósa. An diesem Ort befanden sich im späten Mittelalter eine Kastellburg und ein Marktplatz.⁴ Mehrere kleine Karten aus der der zweiten Hälfte des 16. bis zum dem Ende des 17. Jahrhundert.verwendeten die Ortsbezeichnung Bizere. Es fehlt jedoch an umfangreicherem Kartenmaterial aus dieser Zeit, um die Abtei zu lokalisieren.⁵

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¹ Zu den Klöstern am Unterlauf des Flusses Mureş siehe z.B: Suzana Móré Heitel, *Începuturile artei medievale în bazinul inferior al Mureşului* [Die Anfänge mittelalterlicher Kunst am Unterlauf des Flusses Mureş] (Timişoara: Excelsior Art, 2010), *passim*; siehe auch Suzana Móré Heitel, "Monostorok a Maros Mentén. Adatok" [Klöster entlang des Flusses Mureş. Daten], in *Paradisum plantavit. Bencés monostorok a középkori Magyarországon. Benedictine Monasteries in Medieval Hungary. Exhibition at the Benedictine Archabbey of Pannonhalma 21 March – 11 November 2001*, Hrsg. Imre Takács (Pannonhalma: Pannonhalmi Bencés Főapátság, 2001): 267-274.

² Für weitere wissenschaftliche Beiträge zur Rolle der Klöster auf diesem Gebiet und ihrer engen Verbindung zur Binnenschiffahrt zwischen Transsilvanien und dem Theiß und Donau Gebiet, siehe: Géza Kovach, "Date cu privire la transportul sării pe Mureș în secolele X-XIII" [Daten zum Salztransport auf dem Fluss Mureș zwischen dem 10. und 13.

Jahrhundert], Ziridava XII (1980): 194-195; Petru Iambor, "Drumuri și vămi ale sării din Transilvania în perioada feudalismului timpuriu" [Salzstraßen und Zollstationen in Transsilvanien während der frühen Feudalzeit], AMN 19 (1982): 75-85; Gheorghe Anghel und Viorica Suciu, "Mărturii ale practicării plutăritului în Transilvania din antichitate, evul mediu și perioada modernă. Rolul orașului Alba Iulia în istoria plutăritului" [Zeugnisse zur transsilvanischen Flößerei während der Antike, des Mittelalters und der Neuzeit. Die Rolle von Alba Iulia in der Geschichte der Flößerei], Apulum 40 (2004): 367-386.

³ Für Details siehe: Adrian A. Rusu und Ileana Burnichioiu, Hgg., *Mănăstirea Bizere* [Das Kloster Bizere], I (Cluj-Napoca: Mega Verlag, 2011).

⁴ Hans Meschendörfer und Otto Mittelstraß, Siebenburgen auf alten Karten: Lazarus - Tannstetter 1528, Johannes Honterus 1532, Wolfgang Lazius 1552/56 (Gundelsheim: Arbeitskreis für Siebenbürgische Landeskunde Heidelberg, 1996), Landkarte Microfiche.

⁵ Wie z.B. die Karte des Giacomo Gastaldi aus dem Jahre 1546 (*La vera descrittione di tutta la Vngheria, Transiluania,*

Erst in der zweiten Hälfte des 18. Jahrhunderts wurden von den Habsburgern mehrere Landvermessungen zu militärischen Zwecken in Auftrag gegeben, welche auch für die Begradigungsarbeiten an Flüssen verwendet wurden. Während dieser Arbeiten wurde die Gewässerstruktur und das Klima des Unterlaufs des Mures massiv beeinflusst und durchlief die größten klimatischen und hydromorphologischen Veränderungen der östlichen ungarischen Tiefebene. Aus diesem Grund wurde die Markierung für ein Kloster auf einer Flussinsel südlich der Ortschaften Cicir und Mândruloc eingetragen, die sich nord-östlich von Frumuseni befinden. Auf einer Karte aus den Jahren 1764-1765 findet man an diesem Ort nur den Begriff Monostor.⁶ Der sogenannte Ideale Plan von der Situation der Marosch bey Monderlak,7 der vermutlich 1776 entstand, bezeichnet den Ort als Ins. Monostor. Erst 1785 wird der Standort der Ruinen korrigiert. Diese werden nun im Nord-Osten von Zeudi, innerhalb einer Flussbiegung wiedergegeben und Rudera Monostor genannt.8 Auf einer Karte von 1786 erscheint für die Abtei die Abkürzung Ins. et Pr. Monostor (Abb. 1).9 Auf dieser Karte wird die Größe der Flussinsel im Vergleich zur Abteianlage besser dargestellt.

Eine Untersuchung des historischen Kartenmaterials ist auch dabei behilflich, die Haupt- und Nebenarme der Mureş zu identifizieren. Dem bereits erwähnten Kartenmaterial zufolge floss der Hauptarm nördlich an der Insel vorbei, während der südliche Lauf nur ein Nebenarm war. Daher verwies die Karte der *Franziszeischen Landesaufnahme* auf ein trockenes Flussbett im Süden,¹⁰ das in der zweiten Hälfte des 19. Jahrhunderts die einstige Insel von drei Seiten her umschloss (Abb. 2). Zu diesem Zeitpunkt war der Name des Ortes bereits in Vergessenheit geraten oder wurde einfach ausgelassen.

Beim Vergleich der historischen Daten mit dem derzeitigen Landschaftsbild ist besonders die Franziszeische Landesaufnahme von großem Nutzen, da sie durch Verortung den Abgleich mit aktuellen Karten ermöglicht. Durch das digitale Zusammenfügen des historischen und aktuellen Flussverlaufes zeigt sich, dass die Abtei Bizere im Vergleich zum umliegenden Überschwemmungsgebiet an einem erhöhten Ort lag. Weiterhin zeigen die Veränderungen der Gewässerstruktur, dass der Mures in den vergangenen Jahrhunderten näher an der Stätte vorbeifloss, als sich aus seinem derzeitigen Lauf schließen lässt. Diese Erkenntnis wird von der königlichen Urkunde aus dem Jahr 1183 unterstützt, die dem Bischofssitz von Nitra die gleichen Salzprivilegien wie Bizere gewährte¹¹ und damit die Rolle der Abtei im Salztransport und der Binnenschifffahrt verdeutlicht.

Valachia..., Venezia, Taf. II, 52 x 35 cm), oder die Karte aus dem Jahre 1686, herausgegeben von Giacomo Cantelli da Vignola (*La Transilvania Divisa su l Esemplare delle Carte Migliori*, 56.2 x 42.0 cm).

⁶ Plan von Maros Flus in wie weit solcher Anno 1764 et von Lippa bis Makko Gemessen woeden, 74 x 35 cm, MOL-Térképtár, Kennung: S 11 Nr. 0301, Zugriff am 21.09.2014, http://mol.arcanum.hu/terkep.

⁷ 43 x 27 cm, MOL-Térképtár, Kennung: S 11 Nr. 1104, Zugriff am 21.09.2014, http://mol.arcanum.hu/terkep (siehe auch: S 11 Nr. 1107). Der gleiche Ortsname erscheint auf einer detaillierteren Karte aus dem darauffolgenden Jahr (*Geometrisch aufgenommener Plan von dem Rinnfal/l/der Marosch und dessen Durch-schnitt, wie auch vor dem Monderlaker Dam neu zulegenden, Sporn,* 45 x 42.5 cm, MOL-Térképtár, Kennung: S 11 Nr. 1111, Zugriff am 12.09.2014, http://mol.arcanum.hu/terkep) wie auch auf der *Josephinischen Landesaufnahme,* 1:28800 (coll. XXIV, sectio XXXII, Zugriff am 10.04.2015, http://mapire.eu/en/map/first survey). Letztere birgt jedoch einige Probleme, da der Mureş nahe der Grenze zwischen Ungarn und dem Banat auf zwei verschiedenen Karten dargestellt wurde und die Klosterinsel

zwischen diesen geteilt wurde. Infolgedessen gibt die nördliche Karte den Nordteil der Insel wieder, während die südliche den Rest der Insel und das Überschwemmungsgebiet in diesem Bereich komplett auslässt. Trotz dieser Schwierigkeiten wurde der kleine Bereich der Insel, der dargestellt wurde, als Teil des ehemaligen Klosterbesitzes betrachtet.

⁸ György Györffy, Az Árpád-kori Magyarország történeti földrajza [Historische Geografie Ungarns in der Arpadenzeit], Bd. I (Budapest: Akadémiai Kiadó, 1966), 173-174.

⁹ *Delineatio Dominii Regio Cameralis Aradiensis*, 73 x 54 cm, MOL-Térképtár, Kennung: S 11 Nr. 1729, Zugriff am 2.10.2014, http://mol.arcanum.hu/terkep.

¹⁰ Ungef. Koord: 21.47817 E, 46.11267 N; Zugriff am 10.04.2015, http://mapire.eu/en/map/secondsurvey.

¹¹ \acute{AUO} , XI, 47-48: "Preterea tres naues saliferas ea libertate, quam habent naues Monasterij de Bisra in emendo et deferendo sale, siue Orodini, siue in Ciggedin seruari placuerit, Nitriensi Ecclesie concessi, et ad preces Episcopi, si potuerit naues habere sufficientes, quod tribus vijs deduci debet, ut una via deducatur, ex Regia liberalitate adieci."

Das Kloster auf der Flussinsel



Abb. 1. Standort der Abtei Bizere auf einer Landkarte aus dem Jahr 1786 (MOL-Térképtár, Kennung: S 11 No 1729).

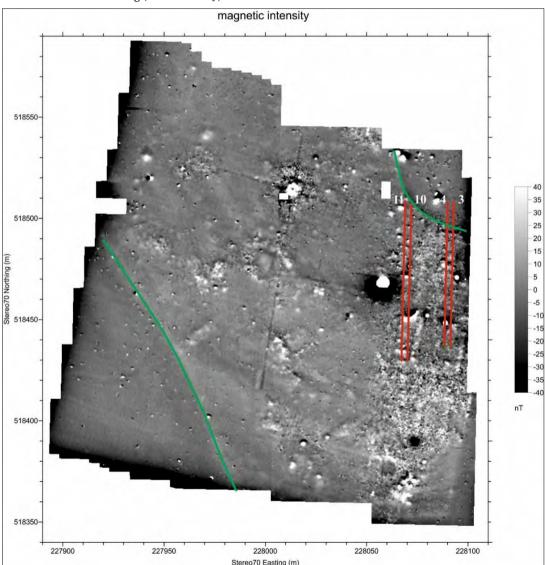


Abb. 2. Ehemaliges Flussbett und alte Nebenarme des Mureş im Umland der Abtei Bizere auf historischen Karten.

Die geografische Umgebung, in der sich die Abtei befand, lässt die Frage aufkommen, ob diese durch den Flusslauf isoliert oder doch mit dem Umland auf der anderen Seite des Flusses gut vernetzt war. Die Nähe zum Fluss selber lässt durchaus auch den Schluss zu, dass Bizere durch seine Lage an der regionalen Hauptverkehrsader der Binnenschifffahrt weitreichende Beziehungen pflegte.

Abb. 3. Magnetogram der archäologischen Stätte Bizere mit geologischen Merkmalen und den Schnitten der Bodenwiederstandsmessung (László Lenkey).

Zusammen mit den historischen Karten wäre die Untersuchung der in mittelalterlichen Urkunden festgehaltenen Grenzen einzelner Besitzungen und Landschaftsmerkmalen in der Region von großer Hilfe. Leider ist dies für Bizere nicht möglich, da die erhaltenen mittelalterlichen Dokumente für die Region die Besitztümer nur lückenhaft und vage beschreiben.¹²



¹² Einige dieser Urkunden beziehen sich auf Besitztümer, die sich in unmittelbarer Nähe der Abtei befanden, oder auf angrenzenden Ländereien, von denen die meisten zum Kapitel von Arad (*Orod*) oder zu den Besitztümern der Adelsfamilie Pósa von Szer gehörten. Zu letzteren gibt es leider keine genauen Abgrenzungen; für eine Übersicht siehe lleana Burnichioiu, "Mănăstirea Bizere în izvoare scrise. Secolele XII-XVI. Privilegii, posesiuni, venituri" [Das Kloster Bizere in schriftlichen Quellen. 12. – 16. Jahrhundert. Privilegien, Besitztümer und Einnahmen], in Rusu und Burnichioiu, *Mănăstirea Bizere*, I, 25-36.



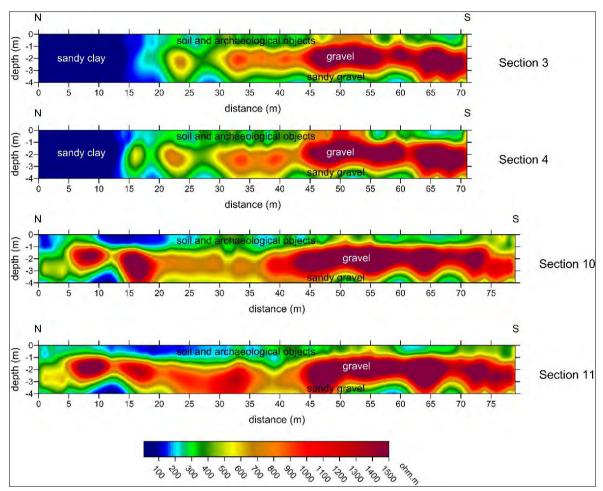


Abb. 4. Schnitte der Bodenwiederstandsmessung aus dem nordwestlichen Bereich Grabungsstätte Bizere (László Lenkey).



Abb 5. Durch Wassererosion verursachte Schäden an der Haupt- und Nordapsis der Basilika von Bizere (Bild: Florin Märginean).

OANA TODA

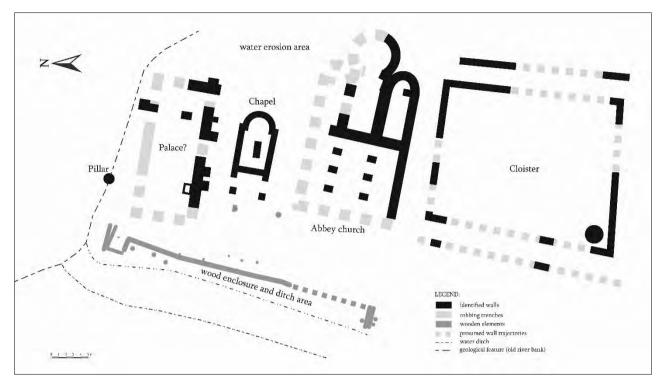


Abb. 6. Umriss der Bauwerke aus dem nordöstlichen Bereich der Abtei Bizere.

Mithilfe Erkenntnisse 11 der aus Grabungen archäologischen können die Informationen aus den schriftlichen Quellen zur Beschaffenheit der Insel und ihrer Veränderung durch den Fluss zumindest teilweise rekonstruiert werden.¹³ Wichtige Informationen wurden auch durch die geophysikalischen Untersuchungen erbracht, die auf dem größten Teil der Fläche des archäologischen Reservats durchgeführt wurden.¹⁴ Durch die geomagnetische und geoelektrische Prospektion konnte der Verlauf des alten Flussufers im Südwesten der Stätte und Spuren einer starken Wassererosion im Nordosten des umschlossenen Geländes identifiziert werden (Abb. 3). Man kann davon ausgehen, dass der Lauf des Flussufers für lange Zeit unverändert blieb. Die Erosion im Nordosten der Abtei war jedoch ein Prozess, der sowohl während der Bewohnung der Stätte als auch in den darauffolgenden

Jahrhunderten stattfand. Im nördlichen Teil der Messabschnitte 3 und 4 ergab die geoelektrische Prospektion, dass der hohe Wiederstand fehlt, der durch die Kiesschicht verursacht wird. Dies ist durch die Existenz eines älteren Flussarms zu erklären, der sich später mit Sand und Schlamm füllte (Abb. 4).

Die zeitliche Eingrenzung des Erosionsprozesses konnte durch Erkenntnisse aus den archäologischen Grabungen erstellt werden. Diese zeigen, dass der westliche Teil der mutmaßlichen Residenz, die Hälfte der Hauptapsis sowie die gesamte Nordapsis der Basilika durch die Wassereinwirkung zerstört wurden (Abb. 5). Der größte Teil des Schadens trat allerdings erst nach der Aufgabe der Abtei auf, also erst Mitte des 16. Jahrhunderts. Der Prozess fand also in der frühen Neuzeit statt und endete noch vor dem 19. Jahrhundert, da der südliche Nebenarm zur Zeit der Franziszeischen Landesaufnahme kein Wasser mehr führte.

¹³ Relevante Daten zu diesem Thema wurde in den Jahren 2001 – 2009 und 2014 schrittweise während der Untersuchung der wichtigsten Bereiche gewonnen. Die historische Geomorphologie und Hydromorphologie der Stätte waren nicht Teil der anfänglichen Forschungsarbeit, was den bruchteilhaften Charakter der Daten erklärt.

¹⁴ Die Untersuchungen wurden durchgeführt von Dr. László Lenkey, Lehrstuhl für Geophysik und Geowissenschaften, Eötvös Loránd Universität, Budapest (*Report on the geophysical measurements at the Bizere monastery in 2013*, Ms.).

Zusätzlich zu dem Schaden, der durch Hochwasser und die Erosion des Flusses während der frühen Neuzeit verursacht wurde, lässt sich anhand der archäologischen Funde im nördlichen Teil der Grabung feststellen, dass diese Prozesse bereits früher periodisch in Erscheinung getreten sind. An der hölzernen Wehrbaute, die sich westlich der vermutlichen Abtresidenz, der Kapelle und der Basilika befand und eine Palisade gewesen zu sein scheint, konnten die Ablagerungen mehrerer Überschwemmungen in den Erdschichten identifiziert werden.

Dieser Holzbau wurde während den Grabungen in den Jahren 2001, 2007-2009 und 2014¹⁵ freigelegt und bestand aus einem Gefüge aus Balken und Pfählen. Dies verlief westlich der Hauptgebäude der Abtei auf einer Länge von nachweisbar 40 m im nördlichen Bereich des Areals (Abb. 6). Sein Fundament bestand aus zwei parallelen Gräben, in die starke hölzerne Pfähle eingerammt wurden, deren unterer Teil in den einzelnen Gruben bis heute gut erhalten sind. Die beiden Gräben verlaufen 1.8 m voneinander entfernt und sind zwischen 0.20 und 0.40 m breit. Der Holzbau wurde auf seiner gesamten Länge in mehrere Abschnitte unterteilt, teils durch eingefügte Querbalken und teils durch eine Unterbrechung der beiden Gräben. Zwischen den beiden Pfahlreihen wurden auch mehrere Pfahlgruben entdeckt, die teilweise einen Durchmesser von 0.50 m aufwiesen und sicher eine statische Rolle hatten.

Westlich der gesamten Palisade verlief ein V-förmiger Graben, der durch eine 0.9 m breite Berme von dieser getrennt war. An der Oberkante wies der Graben eine Breite von 5 m auf, verjüngte sich bis zur Grabensohle auf 0.60 m und hatte eine maximale Tiefe von 1.9 m. Die in der Füllung verzeichneten Sedimente zeigen, dass der Graben wasserführend war. Die östliche Böschung weist das steilste Gefälle auf, ohne jedoch verstärkt gewesen zu sein. Dies deutet darauf hin, dass der gesamte Graben nur kurzzeitig intakt blieb, da er im unteren Bereich Kiesel- und Sandschichten durchschnitt und die fehlende Verstärkung einen baldigen Böschungsbruch zur Folge hatte. Bisher konnte das Westende des Grabens nicht entdeckt werden. Das nördliche Ende geht jedoch in das alte Flussbett über.

Der Pfahlbau und der Graben wurden der Anlage erst spät hinzugefügt. Das Fundament der Palisade durchschneidet zwei Kiesund Schlammschichten, die von früheren Überschwemmungen herrühren. Das Füllmaterial Fundamentgrabens enthielt des auch Tonscherben, die in das 15. und 16. Jahrhundert eingeordnet werden können. Diese Behauptungen zur relativen Chronologie werden auch dadurch unterstützt, dass sich das Fundament des Baues oberhalb der Steinsplitterschicht befindet, die sich während der Steinbearbeitung beim Bau der Hautgebäude, zum Beispiel der Abteikirche, gebildet hat. Während der Aushebung des Palisadenfundaments und des Grabens wurden auch mehrere Gräber gestört. Die hier entdeckten Grabbeigaben konnten in das 12. und 13. Jahrhundert eingeordnet werden. Die Frage, ob die Palisade zum Schutz vor Hochwasser errichtet wurde, kann nur durch weitere Grabungen in diesem Bereich beantwortet werden.

Die Anordnung der Gebäude im nordöstlichen Bereich der Abtei bleibt weiterhin unbekannt, da die geophysikalische Prospektion diesen noch nicht erschlossen hat. Dem bisherigen Forschungsstand nach diente die hölzerne Anlage ähnlichen Zweck wie einem die des dominikanischen Nonnenklosters auf der Margareteninsel in Budapest. Hier wurde in der ersten Hälfte des 16. Jahrhunderts eine ähnliche hölzerne Befestigung errichtet, um eine türkische Belagerung abzuwehren. Der anhand von und bildlichen Quellen archäologischen Grabungen belegte Bau,16 bestehend aus Holzpfosten und Flechtwerk. schützte die Gebäude des Klosters vermutlich auch vor Hochwasser, nachdem diese bereits verlassen waren.

Für Bizere dient der Brunnenturm als Veranschaulichung für die Gefahr, der die Abtei durch den Fluss ausgesetzt war. Ersterer wurde

¹⁵ Diese Arbeit enthält nur eine kurze Beschreibung und einige Bemerkungen zu der vermutlichen Palisade, da der Bau in Zukunft eine eigene eingehende Untersuchung und Forschungsarbeit erfordert.

¹⁶ András Vadas, "Long-Term Perspectives on River Floods. The Dominican Nunnery on Margaret Island (Budapest) and the Danube River," *IANSA* IV, 1 (2013): 79-80, Abb. 3.

errichtet, um das Trinkwasser des zentralen Brunnens ober- und unterirdisch vor dem Hochwasser zu schützen.¹⁷ Der massive Bau, bestehend aus Stein, Backstein und sehr widerstandsfähigem Mörtel, ist bis heute sichtbar.

Die oben aufgeführten Erkenntnisse bezüglich der Veränderungen im Wasserstand des Flusses Mures stimmen mit den Dokumenten aus dem Karpatenbecken überein. die die Veränderungen gegen Ende der mittelalterlichen Klimaanomalie und dem Beginn der kleinen Eiszeit wiedergeben.¹⁸ Für diesen Zeitraum geht einer Urkunde hervor, dass es aus in Transsilvanien und dem Osten des ungarischen Königreiches während des Winters zu erheblichen Überschwemmungen kam. Die betroffenen Regionen wurden jedoch nicht aufgezählt. Die aus dem Jahr 1367 stammende Urkunde vermerkt, dass der Abt des Zisterzienserklosters aus Igris, welches sich am Unterlauf des Mures (heute Landkreis Arad) befand, an seiner Reise zum Kapitel Cluj-Mănăștur in Transsilvanien durch das Hochwasser gehindert wurde. Zweck der Reise war, Dokumente für den Beleg seines Besitzrechtes über zwei Güter im heutigen Landkreis Alba zu erbringen.¹⁹ Obwohl dieses Recht nicht anerkannt wurde, ist die Tatsache, dass der Prozess bis in den Monat Mai vertagt wurde, ein Zeichen für die Anerkennung des Grundes für sein Verspäten. Durch den Herkunftsort und das Reiseziel des lässt sich schlussfolgern, dass Abtes die Überschwemmungen den Südwesten Transsilvaniens und den Osten der großen ungarischen Tiefebene betrafen.²⁰

Das alltägliche Leben auf der Insel der Abtei wurde jedoch nicht ständig vom Fluss beeinträchtigt. Anders wäre die Wahl des Standorts sinnlos gewesen. Daher muss man für den frühen Bestand der Abtei von einer leicht unterschiedlichen Einteilung der vorhandenen Fläche ausgehen, die vor dem Erscheinen saisonbedingter Hochwasser möglich war.

Wie bereits beschrieben, war die Rolle der Abtei Bizere und anderer Klöster in der Binnenschifffahrt auf dem Mures und dem transsilvanischen Salztransport ausschlaggebend für die Gründung und Entfaltung dieser Orte. Urkunden, die diesen Stätten königliche Privilegien zusprachen, sind ein Beweis dafür und lassen vermuten, dass die Abtei weitreichende Beziehungen pflegte. Bezüglich der schweren Langstreckentransporte, die zum Beispiel Baumaterialien betrafen, lassen sich einige Schlüsse ziehen. Der Ort für die Lagerung und Bearbeitung der Steinblöcke, die für den Erbau der Abtei benötigt wurden, war der nordöstliche Bereich der Insel. Hier wurden die stärksten Spuren der Wassererosion verzeichnet und die Schicht aus Sand- und Kalksteinsplittern, die sich während der Bearbeitung der Blöcke bildete, erreicht eine maximale Stärke von 0.40 m. Man kann davon ausgehen, dass die Bearbeitung der Steinblöcke in nächster Nähe der Baustelle stattfand, welche in diesem Fall die Kirche der Abtei war. Der nordöstliche Bereich der Insel war jedoch auch die einzige Anlegestelle für die Schifffahrt flussabwärts. Dieser Umstand unterstützt die Annahme, dass der Bereich für die Lagerung von Kalk- und Sandsteinen verwendet wurde, die aus den Steinbrüchen weiter flussaufwärts stammten und auf dem Wasserweg

¹⁷ Adrian A. Rusu, "Turnul cu fântână" [Der Brunnenturm], in Rusu und Burnichioiu, *Mănăstirea Bizere*, I, 55-56.

¹⁸ Für weitere Details und Abgrenzung zwischen den beiden, siehe: Lajos Rácz, "The price of survival: transformations in environmental conditions and subsistence systems in Hungary in the age of the Ottoman occupation," *HS* 24, 1 (Juni, 2010): 24; András Vadas und Lajos Rácz, "Climatic changes in the Carpathian basin during the Middle Ages: the state of research," *Global Environment* 12 (2013): 210-225; Andrea Kiss, "Floods and long-term water-level changes in medieval Hungary," (PhD diss. Central European University Budapest, 2011), 14, 62-63.

¹⁹ *Ub*, Bd. II (1342-1390), 293-297: "Cuius quidem registri

tenore reviso et continentiis eiusdem plenissime perlectis ipse dominus Alardus abbas retulisset eo modo, quod dictas literas ipsius domini Andreae regis cum aliis literarum munimentis scilicet copiam seu originale ipsius registri iam exhibiti pro eo tunc ad praesens exhibere non valuisset, quia propter inundationem aquarum secum ferre ausus non fuisset timens, ne per huiusmodi accidentiam per ipsum factum dictae ecclesiae suae in destruendis ipsis instrumentis in successu temporum periclitaretur, et ad exhibendum eadem instrumenta ulteriorem terminum sibi per nos adhuc assignari postulasset."

²⁰ Kiss, "Floods and long-term water-level changes," 269-270.

zur Abtei transportiert wurden. Eine Analyse der aus den Baumaterialien entnommenen Gesteinsproben ergab, dass der beim Bau verwendete Sandstein, Quarzit und Basalt aus Zărand und den südlichen Apuseni-Bergen (Drocea-Gebirge) weiter flussaufwärts stammen könnte.²¹

Während den archäologischen Grabungen im Schnitt 85/2008 und 88/2008 wurden die möglichen Reste eines gemauerten Pfeilers am Flussufer nördlich der mutmaßlichen Abtresidenz gefunden (Abb. 7). Dieses Mauerwerk besteht aus Stein, Backstein und Mörtel und gleicht in der Bausubstanz dem nahen Gebäude. Die Nähe der beiden Bauwerke legt nahe, dass die Nutzung des Pfeilers mit dem großen Gebäude in Verbindung stand. Einen Beweis für diese Annahme gibt es jedoch nicht, da die Wassererosion alle Spuren eines möglichen mittelalterlichen Bauhorizontes oder Fußbodens südlich des Pfeilers vernichtet hat. Von dem Pfeiler selbst blieben nur sechs Reihen Mauerwerk erhalten, die eine Höhe von 1.04 m und ein Durchmesser von 1.7 m haben. In den unteren fünf Reihen wurden nur Steine verbaut, während in der obersten Reihe auch Backstein verwendet wurde.



Abb. 7. Der runde Pfeiler im Norden der Abtei (Bild: Csongor Derzsi).

Der Pfeiler steht am Rande des alten Flussufers, in einem von der Wassererosion beschädigten Bereich, der die nordöstliche Ecke der Abtresidenz miteinbezieht.²² Wegen seiner Nähe zum Fluss kann man auch davon ausgehen, dass er als Verankerung für einen hölzernen Landesteg diente.

Nach Norden hin fällt das alte Flussufer in einem Winkel von 40° ab und zeigt (Abb. 8), dass

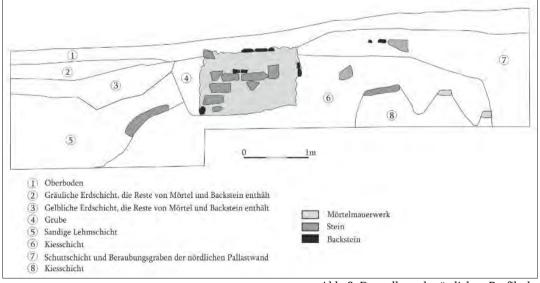


Abb. 8. Darstellung des östlichen Profils des Grabungsschnittes 85 mit Pfeiler und der Schichtabfolge nördlich der mutmaßlichen Residenz.

²² Adrian A. Rusu et al., "Frumuşeni, com. Frumuşeni, jud. Arad. Mănăstirea Bizere" [Frumuşeni, Gemeinde Frumuşeni, Kreis Arad. Das Kloster Bizere], in *CCA. Campania 2008* /*Valahica* XXI-XXII (2009): 112-113.

²¹ Siehe Bernadett Bajnóczi et al., "Archaeometric analysis of mosaic tesserae and a 'red marble' decorative stone from the Bizere monastery (Arad county, Romania)," in diesem Sammelband.



Abb. 9. Uferbefestigung an der östlichen Grenze der Abteiinsel (Bild: Csongor Derzsi).

der Pfeiler auch außerhalb der Hochwasserzeiten in Kontakt mit dem Wasser stand. Dass es sich bei dem leichten Hang um ein Flussufer handelt, zeigt auch die geoelektrische Prospektion, da der elektrische Widerstand in diesem Bereich am niedrigsten ist (Abb. 4). Die einen hohen Widerstand leistenden Kiesschichten und Mauerreste fehlen in diesem hier, da sich das Flussbett irgendwann mit Ablagerungen aus feinem Sand und anderem Schwemmmaterial gefüllt hat.23 Die Nähe zum Fluss und die Steinsplitterschicht am Ufer deuten darauf hin, dass hier von Anfang an ein Bauwerk gestanden haben muss, das mit der Binnenschifffahrt in Verbindung stand und das Entladen der Boote erleichterte.

Ein eigentümlicher Bau, dessen Zweck noch unklar ist,²⁴ schließt die Reihe der bisher identifizierten Gebäude am Flussufer ab. Kurz gesagt, befindet sich das Gebäude flussabwärts des Pfeilers, am östlichen Rand des Areals, in der Nähe des Kreuzganges und hat eine Nord-Süd-Ausrichtung. Der in zwei Bereiche getrennte Bau wurde nur teilweise freigelegt, weshalb bisher nur der südliche Sektor besser untersucht wurde. Dieser hat innen eine Länge von 9.70 m. Die Breite kann auf 4 m geschätzt werden. Seine Mauern bestehen hauptsächlich aus Stein. Auf der

²³ Lenkey, *Report on the geophysical measurements*, MS.

Nordseite der Trennmauer zwischen den beiden Bereichen konnten auch wiederverwendete Quadersteine identifiziert werden.

Das Fundament des Gebäudes wurde auf eine Sand- und Schlammschicht gelegt. Da der gesamte Innenbereich jedoch von Schlammablagerungen bedeckt war, kann man davon ausgehen, dass der Bau während eines Hochwassers überschwemmt wurde. Am nahen Flussufer wurden große, gegen das Ufer gelehnte Steine gefunden, die zur Festigung des Ufers dienten und seiner Erosion durch den Fluss vorbeugen sollten (Abb. 9).

Die gleichmäßige Schlammschicht, die den gesamten Bereich um diese Steine bedeckt und sich unterhalb einer Schuttschicht befindet, zeigt, dass das Flusswasser auf dieser Fläche still stand. Daher könnte es sich bei dem Gebäude vormals um Anlegestelle eine gehandelt haben. Schlammablagerungen und der sich ändernde Wasserpegel führten zur Errichtung eines Kais aus Backstein.²⁵ Dieser stürzte später Richtung Osten ein und wurde nicht wieder errichtet. Später wurde über der Schuttschicht ein Gehweg aus gestampften Backsteinstücken angelegt und der Kai verlor seinen ursprünglichen Zweck.

Anlegestellen in Form von Kais und Piers waren notwendig, damit die Boote und Flöße der Abtei anlegen konnten. Die Urkunden bezüglich der Binnenschifffahrt im Mures-Tal sind sehr ungenau bei den Bezeichnungen für die einzelnen Arten von Schiffen. Die Abtei Bizere besaß jedoch im Jahr 1183 mehrere sogenannte naves, welche mehrfach in den Urkunden des 13. Jahrhunderts erwähnt werden.26 Verbindet man diese Informationen mit anderen Urkunden, so wird klar, dass die Binnenschifffahrt eng mit den Klöstern der Umgebung verbunden war und sich noch vor dem ersten urkundlichen Beleg der Abtei Bizere etabliert hatte. So waren die Transportverpflichtungen der Bewohner von Şeitin (Kreis Arad) im Zusammenhang mit den Salzerträgen des

²⁴ Der Grundriss dieses Baus und seine Rolle im Zusammenhang mit den anderen Klostergebäuden kann nur durch weitere Forschung vervollständigt werden. Dies kann dazu führen, dass dem Gebäude eine andere Rolle zugeschrieben wird, zum Beispiel die einer *latrinae* oder einer Mühle, da sich diese auch in der Nähe des Flusses befinden würden.

²⁵ Es wurde festgestellt, dass Backstein erstmals im 13. Jahrhundert für die Errichtung der Gebäude verwendet wurde. Siehe als Beispiel die Kapelle nördlich der Abteikirche: Ileana Burnichioiu, "Capela funerară" [Die Grabkapelle], in Rusu und Burnichioiu, *Mănăstirea Bizere*, I, 70-71.

²⁶ 1211: *DIR.C. Veacul XIV*, Bd. IV (1341-1350), 152.

Klosters Dömös schon im Jahre 1138 festgelegt²⁷ und die Flößer hatten die Aufgabe, jährlich sechs Salztransporte mit zwei Schiffen durchzuführen.

Darüber hinaus wird der Ort Sâmbăteni, der sich auf der anderen Seite des Hauptarms des Mureş nordöstlich von Bizere befindet, im gleichen Dokument erwähnt wie das Salzlager der Abtei.²⁸ Dadurch erhalten wir einen Einblick in die Verwendung des Salzes, welches die Abtei von der Krone erhielt. Die Beziehung zwischen Sâmbăteni und Bizere wird auch von einer Urkunde aus dem 15. Jahrhundert belegt, die erwähnt, dass ein Teil der Ortschaft der Abtei gehörte.²⁹ Bizere wird weiter in einer Urkunde aus dem 16. Jahrhundert als Zollstelle für die Binnenschifffahrt aufgeführt. Die Abtei zog die Gebühren für die Holztransporte der *iobagi* aus den Ortschaften Şoimoş und Subcetate ein, die über den Fluss liefen.³⁰

Unterscheidung Die zwischen den verschiedenen Arten mittelalterlicher Wasserfahrzeuge auf den transsilvanischen Flüssen stellt sich als schwierige Aufgabe heraus. Dieses Thema wurde seitens der Forschung oft vernachlässigt, da Flöße und Einbäume als relevanter für die mittelalterliche Binnenschifffahrt betrachtet wurden. Die bestehenden Theorien ziehen die in den Urkunden verwendete Terminologie nicht in und werden Mangels Betracht klarer archäologischen Funde von keinen Beweisen

unterstützt.³¹ Das Fehlen klarer Bezeichnungen für die verschiedenen Bootstypen ist insoweit verständlich, als dass diese in Urkunden meist nur unter dem Sammelbegriff *naves* erwähnt werden und ihre verschiedenen Merkmale nicht beschrieben sind. Auch die im 13. und 16. Jahrhundert erwähnten örtlichen Bootsformen lassen sich kaum interpretieren.

Als Beispiele für die verschiedenen Typen kann man kerep und olch angeben, die beide in einem Dokument aus dem Jahr 1248 erwähnt werden,³² wobei jedoch klar zwischen den beiden Arten unterschieden wird. Auch zeugt der Name naviculis (kleineres Boot) von der Unterscheidung, die bei der Größe des Gefährts und auch der anfallenden Zollsteuer gemacht wurden. Dieselbe Überlegung stand hinter einer weiteren Urkunde aus dem 13. Jahrhundert, die eine dreigliedrige Klassifizierung der Schiffstypen durchführte, um die anfallenden Zollgebühren zu regulieren. Dieses Dokument wurde ursprünglich im Namen von König Andreas II. erlassen und bestätigte die Existenz von drei unterschiedlichen Arten von Schiffen. die den Mures befuhren. Die Unterschiede bezogen sich größtenteils auf die Last, die diese Gefährte transportieren konnten,³³ wobei einer der Schiffstypen anhand seiner Form und dem Vorhandensein eines Kiels definiert wurde (*carina* seu nave *magna*).³⁴ Diese

²⁷ DIR.C. Veacurile XI, XII, XIII, Bd. I (1075-1250) (1951), 2-

^{3;} Kovach, "Date cu privire la transportul sării pe Mureș," 195. ²⁸ Ferdinandus Knauz, Hrsg., *Monumenta Ecclesiae Strigoniensis* (Strigonii: Horák, 1874), 94: "In uilla Sahut sunt allatores Salis [...]. Isti per anum sexies redeunt de vltrasiluanus partibus usque ad forum Sumbuth cum duabus Nauibus." ²⁹ Pureichicia: Paricipati a paricipati a 200

²⁹ Burnichioiu, "Privilegii, posesiuni, venituri," **29**.

³⁰ Egon Dörner und Géza Kovách, "Documente ale fondului Brandenburg cu privire la campania lui Gh. Doja în valea Mureșului" [Dokumente aus dem Brandenburgischen Archivfond bezüglich des Feldzuges von Gh. Doja im Mureștal], *Studii* 17, 3 (1964): 502 (1514: "in abbacia Byzere").

³¹ Die ikonografischen Quellen aus der kulturellen und wirtschaftlichen Umgebung des Mureștals enthalten nur eine einzige Abbildung eines Wasserfahrzeugs, die leider wenig über dessen Form aussagt. Die einfache Darstellung eines Bootes mit einem Mast oder einem Kreuz über der Mitte ist auf mehreren Siegeln der städtischen Behörden aus Lipova dargestellt und stammt aus der ersten Hälfte des 16. Jahrhunderts; siehe: Adrian Magina, "Documentele autorităților urbane din Lipova (1455-1548)" [Dokumente der städtischen Behörden aus Lipova (1455-1548)], *Banatica* 23 (2013): 611, 615-616. Dies ist jedoch ein Beweis für die

intensive Beschiffung des Flusses in diesem Zeitraum und die Bedeutung, die der spätmittelalterlichen städtischen Siedlung in dieser Hinsicht zukam.

³² *Ub*, Bd. I, 77: "Concedimus etiamut de navi quae kerep dicitur ultra Morisium secatur solvat fertonem et de navi olch dimidium, de naviculis vero tria pondera, de argento terrae, sed cum statera supra dicta, sicut consueverunt canonici accipere Albenses super aquam."

³³ 1289: *Ub*, Bd. I, 161. Das Dokument wurde von König Andreas erneut bestätigt: "quod quidem eorundem privilegium a rege Andrea cla[rae memoriae avo] nostro datum et concessum videlicet de qualibet carina seu nave magna dimidiam marcam, de mediocri vero vel parva unum fertonem tempore Geanini filii Alardi [in concrematione] ecclesiae beati Mychaelis combustum exstitisset."

³⁴ Während der Römerzeit wurde diese Bezeichnung für den Teil des Bootes verwendet, an dem die Rippen und Planken befestigt waren; siehe Michel Reddé, *Mare nostrum. Les infrastructures, le dispositif et l'histoire de la marine militaire sous l'Empire romain* (Rome: Ecole française de Rome, 1984), 23. Anscheinend gelangte diese Bezeichnung durch die seemännischen Begriffe aus der Levante in die Gebiete Zentraleuropas, während der nordwestliche Teil des

Bezeichnung wurde auch für Schiffe verwendet, die während dem 14. Jahrhundert die Donau zwischen Wien und Budapest befuhren.³⁵ Mitte des 16. Jahrhunderts wurde ein weiterer Schiffstyp erwähnt, der den Fluss Somes im Nordwesten Transsilvaniens befuhr. Diese naves rostratae wurden im Bericht des Georg Werner im Jahr 1552³⁶ als große Boote beschrieben (allgemein als Flöße interpretiert³⁷), die in Dej für den jährlichen Salztransport nach Ungarn gebaut wurden. Die Existenz eines Buges (rostra) d.H. eines schmalen Bauteils an der Vorderseite des Bootes lässt auf eine komplexere Bauart schließen. Dies ist besonders wichtig, da die angegebenen Maße für diese Boote die der großen naves, die in Turda gebaut wurden, übertrafen.38

In einem anderen Bericht über den transsilvanischen Salzabbau wird der Begriff *koczy*³⁹ für die lokalen Kleinboote verwendet, die den Fluss Arieş und den Mittellauf des Mureş befuhren. Dieser Begriff bezieht sich vermutlich auf die relativ kleine Ladekapazität der Boote, die ähnlich groß wie die der Wagen (ung. "kocsi" genannt) waren. Im Bericht werden Sie klar als die Wasserfahrzeuge mit der kleinsten Ladekapazität beschrieben, die für den Salztransport eingesetzt wurden. Die Flößer nutzten sie nur für den Transport von Salz für den Eigenbedarf, da sie nicht für die Beförderung von großen Mengen geeignet waren.

Die archäologische Forschung in Bizere trug zur Vervollständigung der Informationen aus Archivquellen über Boote bei. So wurde während der Grabungen eine große Anzahl an Klammern mit runder Oberfläche geborgen, die zur Befestigung von Planken und der Reparatur von Booten verwendet wurden (Abb. 11).⁴⁰ Der Mittelteil dieser eisernen Artefakte ist oval oder fast kreisrund. Die Enden sind spitz und können gebogen und in das Holz geschlagen werden. Klammern dieser Art wurden europaweit bei entdeckten Booten gefunden,⁴¹ wie z.B. beim Bootswrack aus Solt, das aus der Zeit der osmanischen Herrschaft in Ungarn stammt.⁴²

Zudem wurde in Bizere südlich des Wasserturms der Abdruck eines Bootes im Mörtel gefunden (Abb. 10). Seine Verwendung als Becken für das Anmischen von Mörtel begünstigte den Erhalt seiner Form und Bauweise (12.25 m lang, 1.15-1.20 m breit, 0.48 m äußere Höhe). Obwohl seine Form auf den ersten Blick eine Plankenkonstruktion nahelegt, lässt eine genauere Untersuchung den Schluss zu, dass es sich dabei

Kontinents den Begriff "Keel" von den Wikingern übernahmen; siehe: Patrice Pomey und Eric Reith, *L'archeologie navale* (Paris: Errance Verlag, 2005), 58.

³⁵ 1370: "quod mercatores praedictae civitatis nostrae Zybiniensis a Vyenna in eodem fluvio Danubii usque Budam tam magnas quam parvas naves seu carinas" (*Ub*, Bd. II, 337-339).

³⁶ Maria Holban, Hrsg., *Călători străini în țările române* [Fremde Reisende in den rumänischen Fürstentümern], Bd. II (București: Editura Academiei Române, 1970), 30.

³⁷ Quellen aus der frühen Neuzeit erwähnen, dass die Flöße nur flussabwärts fuhren und in Szeged abgebrochen und als Rohholz verkauft wurden. Da einige der Schiffe jedoch komplexer aufgebaut waren, kann auch ihre Verwendung in der Schifffahrt flussaufwärts möglich gewesen sein. Obwohl der Brauch der Wiederverwertung des Holzes auch im Mittelalter erwähnt wird, geht man davon aus, dass die Wasserfahrzeuge der Abtei Bizere der Schifffahrt flussaufwärts fähig waren. In einer Urkunde aus 1230 wird ein Vorgang erwähnt, bei dem es sich höchstwahrscheinlich um die Schifffahrt in beide Richtungen des Mureş handelt.

³⁸ Die Boote aus Turda wurden vom selben Beamten als 30 Fuß (ungef 15 m) lang und 15 Fuß (ungef. 7.5 m) breit beschrieben. Zsolt Simon zufolge waren diese Wasserfahrzeuge 9.4 m lang und 4.7 m breit; siehe: "Mineritul de sare în Evul Mediu în Transilvania şi Maramureş" [Mittelalterlicher Salzbergbau in

Transsilvanien und der Maramureş], in *Sarea, Timpul și Omul* [Salz, Zeit und Mensch], Hrsg. Valeriu Cavruc und Andreea Chiricescu (Sfântu Gheorghe: Angustia, 2006): 94.

³⁹ Die großen und mittelgroßen Schiffe hatten die gleiche Form. Der einzige Unterschied lag in ihren Dimensionen. Für die rumänische Übersetzung des Berichtes von Hans Dernschwamm aus 1528 über die transsilvanische Salzförderung, siehe: *Cälători străini*, Bd. I, 270.

⁴⁰ In Verwahrung des Landkreismuseums Arad; für eine genauere Funddokumentation siehe auch: *MLAT-DB*, 7-9, 14, 131-135, Zugriff 15.10.2015.

⁴¹ Waldemar Ossowski, "Changes in the medieval river boatand shipbuilding in Poland," *Skyllis* 10, 2 (2010): 130, 133. Hinweise für die Verwendung von Klammern können auch in ikonografischen Quellen gefunden werden, wie zum Beispiel dem *Zechbuch der Salzfertiger und Schiffsleute*, von 1422, in dem die Planken eines Bootes mithilfe dieser Art von Nägeln aneinander befestigt waren.

⁴² János Attila Tóth, "Adatok a kora újkori közép-Dunamedencei hajók régészetéhez" [Daten zur Schiffsarchäologie des mittleren Donaugebietes aus der frühen Neuzeit], in *A középkori és a kora újkor régészete Magyarországon. Archaeology of the Middle Ages and the Early Modern Period in Hungary*, Bd. I, Hrsg. Elek Benkő und Gyöngyi Kovács (Budapest: MTA Régészeti Intézete, 2010): 876-877.

um ein einteiliges Boot handelt, genauer gesagt einen Einbaum.⁴³ Der Kontext, in dem der Einbaum gefunden wurde, lässt vermuten, dass er Mitte des 12. Jahrhunderts zum Mörtelbecken umfunktioniert worden ist. Daher kann man davon ausgehen, dass er frühestens Mitte des 11. Jahrhunderts angefertigt wurde. Einbäume dieser Größe eigneten sich gut für die Beförderung von schweren Waren,⁴⁴ waren jedoch auch für das Umladen und die lokale und Regionale Verteilung von Waren sehr wichtig. Man kann davon ausgehen, dass Bizeres Rolle als Zollstation auch die Weiter- und Umleitung von Salz und anderen Waren beinhaltete.

Ein weiterer Verwendungszweck von Einbäumen war die Fischerei. Die ist besonders für die Abtei anzunehmen, da die Nutzung der natürlichen Nahrungsquellen in nächster Nähe der Flussinsel selbstverständlich ist. Die Fischerei wird von zwei Kategorien archäologischer Funde bestätigt. Diese sind zum einen Fischgräten und Schuppen und zum anderen eiserne Fischerhaken⁴⁵ (Abb. 12).

Es bleibt unklar, ob Boote von der Größe des entdeckten Einbaums für das Fischen verwendet wurden, da sich kleinere Einbäume für diese Tätigkeit wegen ihrer Wendigkeit besser eignen.⁴⁶

Von der Binnenschifffahrt abgesehen, wurden in der Abtei auch Zugtiere für Reisen und Warentransport verwendet. Dies wird durch die Hufeisen und Sporen belegt, die während der Grabungen entdeckt wurden. Die Unterschiede bei den Hufeisen deuten darauf hin, dass sowohl schwere Lasttiere, wie Ochsen, als auch Reitpferde gehalten wurden.



Abb. 10. Mörtelabdruck des Einbaumes (Bild: Florin Mărginean).

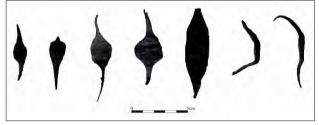


Abb. 11. Funde eiserner Klammern, die für das Befestigen von Planken und der Reparatur von Booten verwendet wurden, aus der Grabung bei Bizere.

⁴³ Für weitere Einzelheiten zu den technischen Eigenschaften des Bootes und ihrer Interpretation, siehe: Adrian A. Rusu und Oana Toda, "Archaeological evidence for historical navigation on the Mureş (Maros) river. Enquiries based on a medieval boat imprint from Bizere abbey (Romania)," *AAASH* 65, 1 (Juni 2014): 139-154.

⁴⁴ Beispiele aus Nordeuropa konnten zwischen 3 und 5 Tonnen Ladung befördern (Ossowski, "Changes," 129-130).

⁴⁵ In Verwahrung des Landkreismuseums Arad unter der Bestandsnummern 17485/a-c. Für eine genauere Fund-dokumentation siehe auch: *MLATB-DB*, 3-6, Zugriff 15.10. 2015.
⁴⁶ Waldemar Ossowski, *Przemiany w szkutnictwie rzecznym w Polsce. Studium archeologiczne* [Veränderungen im mittelalterlichen Boots- und Schiffsbau in Polen. Eine archäologische Studie], (Gdańsk: Centralne Muzeum Morskie, 2010), 193; Jason R. Rogers, "Czech logboats: early inland watercraft from Bohemia and Moravia," *SPFFBU* 60, M16 (2011): 196.

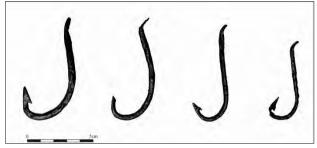


Abb. 12. Große Angelhaken, die bei den Grabungen in Bizere freigelegt wurden.

Einige massive Stücke, die gebogene Enden und hervorstehende Nägel aufweisen, wurden höchstwahrscheinlich für rutschigen, feuchten und gefrorenen Boden verwendet.47 Diese Funde zeigen, dass die höher gelegenen Terrassen südlich der Insel auch zu Fuß durch seichtes Wasser oder eine Furt erreichbar gewesen sein könnten.48 Es ist bekannt, dass sich eine Zollstation in der Nähe des Guts Zeudi befand. Zudem berichtet eine Urkunde aus dem Jahr 1354 von dem gewalttätigen Übergriff der adligen Mitglieder des königlichen Heeres auf den Bootsmann der Familie Pósa, als sie den dortigen Hafen über den Flussweg erreichten. Die Adligen verjagten den Mann, der mit der Überwachung der Tätigkeit am Fährübergang beauftragt war.49 Dies bedeutet, dass die nördlich gelegenen Besitzungen der Abtei (Cicir und Sâmbăteni) auch über den Flussweg erreichbar waren. Die Urkunde ist von großer Bedeutung, da sie beweist, dass der Wasserweg als Transportmittel genutzt wurde. Der Flusshafen der Familie Pósa war von der Abtei aus mit Booten erreichbar und die Fähre wurde von einem Fährmann bedient.

Das Gebiet nahe der Grenze zum Gut der Familie Pósa war von der Abtei aus leichter zu erreichen. Auf der ersten Flussterrasse des Mureş im Südwesten der Abtei wurden bei archäologischen Grabungen in den Jahren 1948⁵⁰ und 1981⁵¹ die Reste eines Dorfes und eines Friedhofs entdeckt, bei denen es sich vermutlich um die Siedlung Bizere handelt. In diesem Bereich hat die Flussterrasse eine leichte Neigung in Richtung des Nebenarms und der Flussinsel. Wenn man den Holzbau, der südlich der Abteikirche, der Kapelle und der mutmaßlichen Residenz verläuft, als Verteidigunsmaßnahme betrachtet, kommt man zu dem Schluss, dass mögliche Angriffe in diesem Bereich erwartet wurden und die Insel daher aus dieser Richtung leicht erreichbar war.

Zusammenfassend kann man sagen, dass alle nachteiligen Umstände und Faktoren, die zur zeitweiligen Isolation der Abtei führen konnten, durch die verschiedenen Baumaßnahmen überwunden wurden. Auch wenn die Insellage Bizere nicht immer zum Vorteil diente, war dies jedoch kein Hindernis für die Abtei beim Erlangen von Ländereien und der Entfaltung von Tätigkeiten auf beiden Seiten des Flusses. Der Standort bot Bizere eine symbolische Vorherrschaft über den Fluss, sei dies auf lokaler oder regionaler Ebene. Dieser pragmatische Aspekt der Auswahl des Standortes konnte in den archäologischen Funden und den schriftlichen Quellen wiedergefunden werden. Diese zeugen von der technischen Entwicklung dieser mittelalterlichen Klosterlandschaft, die sehr gut in das wirtschaftliche und landschaftliche Umfeld der Abtei passt.

⁴⁷ László Gere, *Késő középkori és kora újkori fémleletek az ozorai várkastélyból* [Spätmittelalterliche und frühneuzeitliche Metallfunde aus dem Burgkastell Ozora] (Budapest: Magyar Nemzeti Múzeum, 2003), 30-32.

⁴⁸ Es können keine Vermutungen zu einem künstlichen Flussübergang angestellt werden, da keine Berichte erhalten sind, die eine Brücke oder einen Fährübergang zu der Klosteranlage erwähnen.

⁴⁹ Ligia Boldea, "Structuri domeniale în Banatul medieval de câmpie. Date asupra patrimoniului funciar al unui comite de Caras din perioada angevină" [Mittelalterliche Organisation

der Landgüter aus der Banater Tiefebene. Daten zu den Besitzungen eines Gespan von Caraș zur Zeit der Anjou], *AB* XXI (2013): 246.

⁵⁰ Dorin Popescu, "Cercetările arheologice din R. P. R. din anul 1948. Jud. Arad. Frumuşeni" [Archäologische Forschung in der Rumänischen Volksrepublik im Jahr 1948. Landkreis Arad. Frumuşeni], *Studii* 2, 1 (1949): 91-92.

⁵¹ [Mircea Rusu], "Frumuşeni. Jurnal de şantier, campania 1981" [Frumuşeni. Grabungstagebuch, 1981], in Rusu und Burnichioiu, *Mănăstirea Bizere*, I, 129-131.

RECONSTRUCTING A MONASTIC LANDSCAPE: THE EXAMPLE OF THE CISTERCIAN ABBEY CÂRȚA (KERZ, KERC)

ÜNIGE BENCZE*

The present study discusses an attempt to reconstruct the monastic landscape of the easternmost Cistercian house in Europe which is mentioned most frequently in the written evidence as Kerch.1 In the framework of this research I wish to present the results of recent non-invasive surveys such as geophysical survey and extensive fieldwalking. The abbey of Cârța was founded at the beginning of the thirteenth century as a *filia* of the Cistercian monastery in Igriș (Egres). It was a third generation Cistercian monastery, most probably a royal foundation. The fact that both Igris and Cârța were part of the Pontigny line of the Cistercian network of abbeys and were thus, the only ones founded through this line in the medieval kingdom of Hungary makes them even more unique.

Monastic landscape studies

Monastic studies in Eastern Europe have largely focused on written evidence and architectural remains. Recently, the need for extensive archaeological research of monasteries has increased but interest in a systematic mapping of the earthworks and other remaining traces of human activity in the surrounding landscape cannot be found; there is thus a lack of interdisciplinary work concerning such complex sites. However, English and German research has produced significant results in the so-called monastic landscape studies (already from the 1950s), which arose as a new field of research in Western Europe by the 1970-80s.² Although the two schools have slightly different methodology and conceive the landscape in a distinct manner (landscape and Landschaft), there is still much that can be applied in order to gain a better understanding the of impact monastic communities in the central and eastern part of Europe had on the surrounding environment. In this study, I tried to apply the English methodology for landscape reconstruction,³ which in my experience can provide better results for this region. Primarily non-invasive methods were thus used for detecting regularities or irregularities in the landscape.

It must be highlighted that studying the monastic landscape in this part of Europe entails a number of specific problems not found in Western Europe, such as: lack of written evidence containing traceable details of the landscape such as perambulations, donations, last wills, litigations etc.; scarcity of undisturbed monastic landscapes by modern water control and landscaping; extensive and often carelessly planned building activity on historic sites or in their close vicinity. Many of which are closely connected to the degree of preservation and protection of monastic sites, an issue which would require immediate attention from Romanian scholars and monument protection agencies. Due to the lack of sufficient written data the picture that one can reconstruct is fragmentary so the need to supplement it with additional data from different sources is a must; these include excavations if any, historical maps, fieldwork and survey, aerial photography, geophysical survey, geological analysis of stone materials, pollen analysis etc. In this way the researcher faces complex interdisciplinary research with a holistic approach managing

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¹ Throughout the text I shall use the modern name of the village, where the abbey can be found, although the name Cârța was never used in reference to the abbey and its name was totally different in Latin sources (for example: *Kerk, Kerch, Kerz, Querch, Kyrch, monasterium de Candelis, Kercz, Kertz*). It is apparent, however, that the modern name etymologically derives from the historic forms. The German and Hungarian names will be enlisted as well in parentheses. I shall proceed with the other place names in a similar manner.

² James Bond, *Monastic Landscapes* (Stroud: Tempus, 2004); Tim Pestell, *Landscapes of Monastic Foundation* (Woodbridge: The Boydell Press, 2004); James Bond, "The location and siting of Cistercian houses in Wales and the West," *Archaeologia Cambrensis* 154 (2005): 51-79; Johannes Meier, *Klöster und Landschaft: das kulturräumliche Erbe der Orden* (Münster: Aschendorff Verlag, 2010).

³ See: Michael Aston, *Interpreting the Landscape. Landscape Archaeology and Local History* (London: Routledge, 1997); Tom Williamson, *Shaping Medieval Landscapes. Settlement, Society, Environment* (Macclesfield: Windgather Press, 2004).

different types and often fragmentary data and sources to reconstruct a landscape that had once existed.⁴

Earlier research and site selection

The abbey of Cârta is among the most discussed monasteries in specialized often literature from the territory of Transylvania. Research concerning it goes back to the seventeenth century starting with Péter Pázmány, archbishop of Esztergom, who was among the first interested in dating the foundation of the monastery.⁵ Since then, the abbey has enjoyed extensive historical and art historical research and studies, which mainly concentrate on the analysis and interpretation of written sources and surviving buildings. Thus, the history of the abbey was reconstructed and debated by various scholars. The greatest attention was given to the existing ruins of the abbey church and a stillstanding wall of the eastern wing, which still dominates the research connected to it. However, few have tried to understand the larger environment of the abbey and its impact on the landscape. surrounding Changes to the surroundings made by the monks, such as agricultural buildings, earthworks, draining marshes, water control, agricultural production and the founding of new settlements were not systematically researched in spite of their significant impact. The first author to provide a drawing of the larger environment of the monastery was Walter Horwath.⁶ His drawing detailing the stone wall of the abbey was later taken over by Gustav Treiber7 and Michael Thalgott.⁸ M. Thalgott provided only a short description of a few lines, in which he talked about the water system only in general terms and described the features that can be seen on W. Horwath's sketch⁹. Even though the drawing illustrates an interesting and complex plan of the inner and outer precinct of the abbey as well as other extinct features, none of the authors offered any further details about the actual, up-to-date situation of the terrain. One cannot even know if these features still existed in their time or were just documented without any field examination. One can also find mention of the wall remains surrounding the abbey in Ludwig Reissenberger's work¹⁰ without any additional explanations.

The earliest excavations at the site of the abbey were carried out by architect Heinrich Eder in 1889 and in 1911 by Oskar Fritz-Lászay. Their excavations also consisted of restoration works, clearance of the rubble heap and an elaboration of the ground-plan. Later on, systematic archaeological research continued in 1927¹¹ and then between 1981 and 1985,¹² almost thirty years ago. Recently, archaeological supervision was executed by Petre Beşliu in 2009 and 2011.¹³ The published archaeological reports illustrate that research was restricted exclusively to certain areas of the monastic complex such as the church (the choir, nave and northern transept) and south-eastern corner of the cloister. Since the unearthed materials were never entirely published and interpreted, it is therefore difficult

⁴ Csilla Zatykó, "Integrált kutatások: a tájrégészet" [Integrated research: landscape archaeology], in *Régészeti Kézikönyv* [Archaeological handbook], ed. Róbert Müller (Budapest: Magyar Régész Szövetség, 2011), 388-402.

⁵ See: Alán Baumgartner, *A kerci apátság a középkorban* [The abbey of Kerc in the Middle Ages] (Budapest: Stephaneum, 1915), 22.

⁶ Unfortunately, I was unable to locate W. Horwath's original drawing at present due to the lack of exact references on the part of those who re-used his drawing. To a certain extent, his drawing can be reconstructed and deduced from the ones published by G. Treiber and M. Thalgott.

⁷ Gustav Treiber, *Mittelalterliche Kirchen in Siebenbürgen. Beiträge zur Baugeschichte aufgrund der Raumverhältnisse* (München: Hilfskomitee der Siebenbürger Sachsen, 1971), 123.

⁸ Michael Thalgott, *Die Zisterzienser von Kerz* (München: Selbstverlag Südostdeutsches Kulturwerk, 1990), Abb. 10, 11.
⁹ Thalgott, *Die Zisterzienser*, 50.

¹⁰ Ludwig Reissenberger, *Die Kerzer Abtei* (Hermannstadt: Verein für Siebenbürgische Landeskunde, 1894), 56.

¹¹ Victor Roth, "Raport despre săpăturile făcute la mănăstirea din Cârța săsească [Report about the excavations carried out at Saxon Cârța]," *Anuarul Comisiunii Monumentelor Istorice. Secția pentru Transilvania* (1929): 224-227.

¹² Thomas Nägler and Martin Rill, "Monumentul cistercian de la Cârța, jud. Sibiu [The Cistercian monument from Cârța, county Sibiu]," *Materiale și Cercetări Arheologice* (1983): 489-493.

¹³ Petre Beşliu-Munteanu, "Mănăstirea cisterciană de la Cârța. Cercetări arheologice de salvare (2009 și 2011) [The Cistercian Monastery from Cârța. Archaeological researches from preservation (2009 and 2011)]," *Acta Terrae Fogarasiensis* I (2012): 11-28.

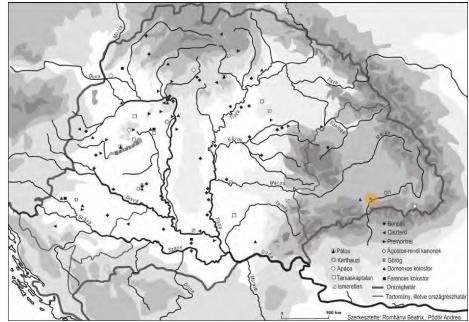
to get a full picture of the excavated areas as a whole, not to mention the data related to material culture which could serve as the main source for reconstructing the daily life of the monastery. The larger environment of the abbey was not researched at all through archaeological excavations, so no data exist about the stone wall, earthworks and mill house (or any other storage buildings) which most probably existed in the vicinity of the abbey.

Founded at the beginning of the thirteenth century, Cârța was a rural monastery located on a marshy flood plain of the Olt River in the Land of Făgăraş, in the southern part of the historic region of Transylvania, today in central Romania (map 1). It should be emphasized here that the monastery lay at a significant distance from its mother house in Egres (approximately 360 km) not to mention Pontigny (around 2000 km). In the time of its foundation no other monasteries were located in the region so this was the only major foundation of a house of a monastic order. The Land of Făgăraș has the densest hydrographic network in the country. Due to high humidity and the massive alluvial

deposits its soil is not that fertile. However, the most fertile part of it is probably the flood plain where the abbey is situated. According to geographers the Făgăraș basin was once covered by extensive oak forests and a mixture of oak, beech and hornbeam as well as pure beech forests.¹⁴ The setting was much very characteristic for the Cistercians if one looks at it from the point of view of the frequently used *topos* of ideal locations "in places removed from the conversation of men".15 The

rural setting contributed to a better preservation of landscape features but also influenced the needs and opportunities of the community. The monastery, with few interruptions (i.e. the Mongol and Turkish invasions) functioned until 1474, when King Matthias Corvinus dissolved the monastery. Despite the general *topos* of avoiding human interaction, Cistercian monasteries could never entirely isolate themselves from major roadways or towns. Cârța lay in the vicinity of a major trade road which connected Transylvania to the south, i.e. to the Balkans and Constantinople. Three important market towns Sibiu, Tălmaciu (Talmesch, Nagytalmács) and Sâmbăta de Sus (Felsőszombatfalva) could also be found in its close proximity. Based on the juxtaposition of the abbey to the trade route and the market towns, the participation of the monks long-distance trade has already in been hypothesized.¹⁶ However, it can be outlined that the Cistercians did not seek solitude and remoteness as was earlier believed.

Map 1. Map of monastic foundations between 1200 and 1241 on the territory of the medieval kingdom of Hungary. (Based on the map published by Beatrix F. Romhányi, 2015).



¹⁴ Antal Lukács, *Țara Făgăraşului în evul mediu (secolele XIII-XVI)* [The Land of Făgăraş in the Middle Ages (13th and 16th centuries)] (Bucureşti: Editura Enciclopedică, 1999), 37.
¹⁵ Bond, "The location and siting," 53.

¹⁶ Beatrix Romhányi, "The role of the Cistercians in medieval Hungary: Political activity or internal organization?" *Annual of Medieval Studies at CEU*(1993-1994): 180-204.

In any case, since written sources are silent about such endeavours. Such assumption could be accepted or rejected only in the light of new and detailed analysis of surviving material culture or extensive archaeological research at the site of the abbey with special emphasis on the economy and farming of the Cistercian community. Traces of which existed and in some parts still exist, as will be shown below.

Preliminaries and the possibilities of a landscape approach

Based on earlier literature, the site of the abbey and cloister was intensely researched; but the wider environment of the abbey, the economic or farming activities and land use of the monks have not enjoyed much attention in the scholarly literature dealing with the history of Cârța. In the light of these considerations, the main focus of my research was to identify and map the wider area used by the Cistercian community and to delimitate, if possible, the inner and outer precinct of the abbey. In earlier literature, I have managed to find scattered information about structures delineating the abbey and the settlement. In a study from 1877, Flóris Rómer briefly mentioned that a brook passed through the territory of the abbey which supplied the water for the abbey's mill and wash house. He also pondered that if he had made more trips to the site he would have liked to search for and survey the abbey mill and the stone wall surrounding the monastery.¹⁷ This is the first mention of these features connected to the larger area of the abbey. Later, L. Reissenberger's work contained a short entry about scattered wall remains around the abbey, with the note that nothing particular could be deduced from them insignificant.¹⁸ since the ruins were too Chronologically, the next one to provide details about a wall surrounding the abbey was W. Horwath,19 who very likely saw the ruins in person. He surveyed the existing remains and prepared a drawing, which was then taken over

by several scholars dealing with Cârța. One finds a wall and a palisade mentioned by Géza Entz,²⁰ then by G. Treiber and lastly M. Thalgott, who both took over W. Horwath's drawing. G. Treiber briefly mentioned that the foundations of the oval stone wall, which surrounded the monastery, were still approachable and connected the monastery to the Olt River through a passageway that had a dock at its end. He also mentioned that the lay settlement was protected by a palisade wall encircled by wild streams and high groundwater.²¹ M. Thalgott likewise described the same situation. As one can see, not many had actually seen the remains of the wall and the palisade. The question quickly emerged whether these really existed or not, and if so, could they still be recognized in the terrain?

As one could see, even though the study of this abbey attracted a great number of researchers and a vast literature has dealt with its art and history including a number of excavations at the site of the abbey,²² the way that the monks used their lands and the available water supply was not researched at all. As it is frequently emphasized, sometimes the complexities of water management and land use can be appreciated even on unexcavated sites. One of the fundamental needs for monasteries, just as well as for towns, was access to water, which was used for a great variety of purposes (cooking, washing, sanitation, transport, driving mills, fishing etc.).

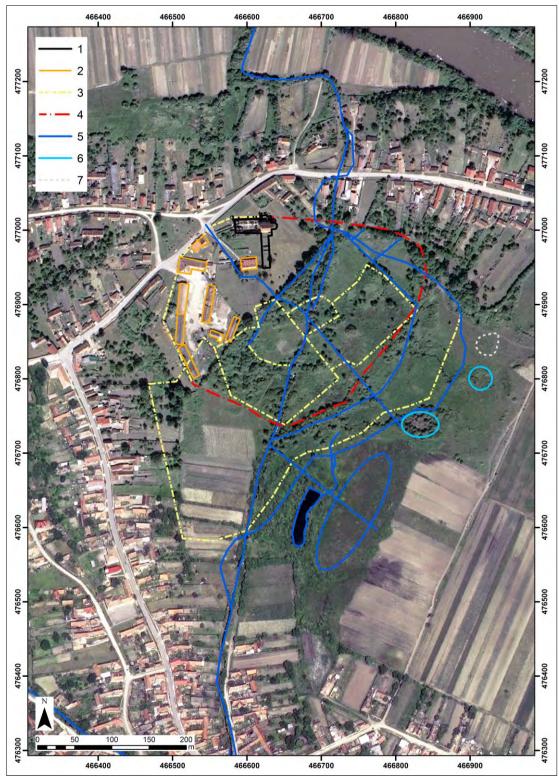
¹⁷ Flóris Rómer, "Kirándulás a kertzi apátsághoz Erdélyben [Trip to the abbey Kerz in Transylvania]," *Archaeológiai Közlemények* XI (1877): 10.

¹⁸ Reissenberger, *Die Kerzer Abtei*, 56.

¹⁹ See footnote 7.

²⁰ Géza Entz, "A kerci (Cîrțai) cisztercita építőműhely" [The Cistercian workshop from Kerc], *ME*12 (1963): 139, note 35.
²¹ Treiber, *Mittelalterliche Kirchen*, 123.

²² Since the detailed discussion of archaeological research is not the topic of the present paper I wish to briefly enlist here, in chronological order the dates of the excavations, followed by the names of the excavation leaders: 1889 -Heinrich Eder; 1911-Oszkár Fritz-Lászay; 1927 - Victor Roth; 1964 - Radu Heitel; 1981-1985 - Martin Rill and Thomas Nägler; 2009, 2011 - Petre Beşliu.



Reconstructing a monastic landscape: the example of the Cistercian abbey Cârța (Kerc, Kerz)

Map 2. General topography of the site of the abbey:1. Outline of the preserved buildings (church and eastern wing);2. Modern buildings;3. Outline of the estate boundaries based on the Second Military Survey;

James Bond listed three principal aspects of monastic water management which can be applied to every monastery: "1. Bringing water to a site where it was required 2. Making use of it for a variety of purposes once it was there 3. Removing water from places where it was not wanted".23 Once water had been brought into the precinct, it had to be distributed to the various elements requiring it. Sometimes the requirements could not all be satisfied from a single water source, so the quality and volume of water were also taken into consideration. Since water was such a necessity, sites adjoining rivers or streams are almost universal. Sites near larger rivers sought a position out of reach of floodwaters if possible.²⁴ The ideal site, just as in the case of towns was at a confluence of rivers where a rapidly-flowing tributary joined a gentler main stream, just as in the case of Cârța (map 2); surrounded by the River Olt (to the north) and the stream Cârțișoara (to the west). The abbev was well supplied with water, a setting which probably required a complex water management system, both to control the flow of water (likely through mills and fishponds) and to reduce the risk of flooding (drainage works). The monastic buildings were situated on a flood plain next to the Cârtișoara stream, from which water could be diverted and used for a variety of purposes. However, as it emerges from earlier research, one of the unidentified and questionable elements at Cârța is the lavatoria, where washing at the beginning of each day and before meals took place and was strictly enforced by monastic regulations.²⁵ The structures erected for this purpose were generally of two main types: either a free-standing fountain house or a long, shallow trough set within a wide arched recess in the wall of one of the claustral buildings.²⁶ For example the second type of lavatorium was much more common in Britain, where some argued that since the water freezes in the colder winters, it could

²³ James Bond, "Water management in the rural monastery,"
 in *The Archaeology of Rural Monasteries*, eds. Roberta Gilchrist and Harold Mytum (Oxford: BAR Series, 1989), 85.
 ²⁴ Bond, "The location and siting," 66.

crack and ruin a free-standing basin. Taking into consideration the colder climate of the Făgăraş Land one might argue that the second type of *lavatorium* was used at Cârța as well, even though existing hypothetical reconstructions the illustrate it with a fountain house.²⁷ However, L. Reissenberger argued that the fountain house was entirely missing because the monks did not need it, since a high-yield brook passed next to the southern cloister wall, which fulfilled the needs of the community.²⁸ Perhaps future archaeological research on the territory of the ruins can shed more light on this question. The other waterrelated installations were the reredorters, which were probably situated in the southern range of buildings at Cârța, just as the lavatorium, since it is likely that this was the direction from which water was brought into the monastic precinct. This would have been the simplest method of removing sewage, aligning the reredorters over a river or stream. The drainage arrangements were normally planned as part of the original monastic layout, but sometimes later modification to the plans involved changes in the pattern of the watercourses. The latrine buildings followed a variety of types and arrangements. The size of the reredorters normally reflected the size of the community which it served, while its precise position and alignment was dictated by the direction from which running water could be drawn as well as the course of the main drain.²⁹ Theoretically, the southern range of building (which today is occupied by the parish house) must have encompassed the reredorters, the wash house, the kitchen, the dining room (refectory) and probably a storage room.

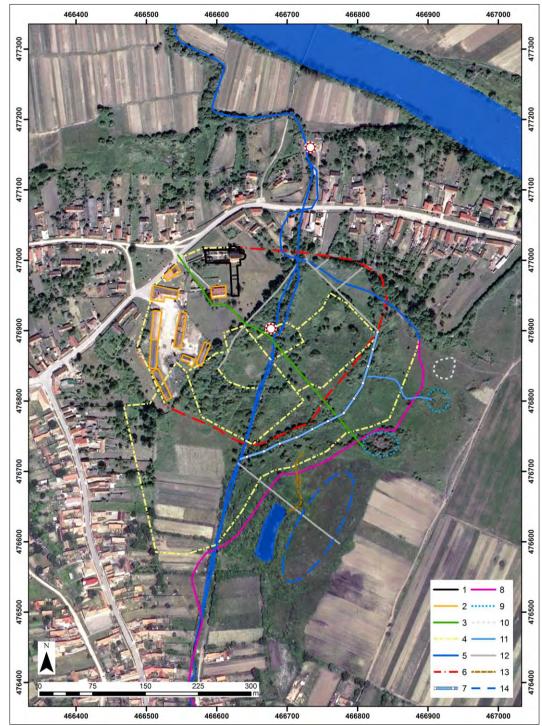
²⁵ Bond, "Water management," 89.

²⁶ Ibid.

²⁷ Michael Thalgott, *Die Zisterzienser von Kerz* (München: Verlag Südostdeutsches Kulturwerk, 1999), Abb. 12. Vladimir Agrigoroaei and Ana Maria Gruia, "Abația cisterciană de la Cârța [The Cistercian abbey from Cârța]," in *12 Monumente din istoria românilor* [12 monuments from the history of Romanians], ed. Valentin Sălăgeanu (Bucureşti – Cluj-Napoca: Grupul Român pentru o istorie alternativă, 2008), 96-105.

²⁸ Reissenberger, *Die Kerzer Abtei*, 56.

²⁹ Bond, "Water management," 93.



Reconstructing a monastic landscape: the example of the Cistercian abbey Cârța (Kerc, Kerz)

Map 3. Hypothetic interpretation of the surveyed landscape features and other collected data: 1. Outline of the preserved buildings (church and eastern wing); 2. Modern buildings; 3. Artificial canal which directed water from one of the springs to the monastic buildings; 4. Outline of the estate boundaries based on the Second Military Survey; 5. Mill leat and waterlogged features; 6. Hypothetic outline of the outer precinct based on field observations; 7. Possible branch of the mill leat; 8. Disappeared eastern branch/watercourse of the mill leat, reconstruction based on the Second Military Survey; 9. Underground springs; 10. Low elevation, small hill; 11. Track of a waterlogged feature; 12. Ditches and canals identified on terrain; 13. Dried-up watercourse; 14. Hypothetic outline of a large fishpond, based on field observations. Red and white circles: mills.

Identification, survey and interpretation of the landscape features

In light of the information presented above, the need to complement the available information with additional fieldwalking and geophysical survey was vital in order to identify the preserved landscape features. It must be highlighted that this monastic landscape was totally destroyed in 2014 and the survey of the entire landscape could not be finished. Therefore, I shall work only with the data that we have from partial preliminary surveys and fieldwork.³⁰ We initiated several fieldwalks in order to study and map the surrounding territory of the abbey³¹ and during this process we identified a number of landscape features, most of them connected to water management as to be expected.

Cârța was most likely planned taking into aforementioned account the drainage arrangements and water management. During a fieldwalk in 2012 to the south-east from the abbey we identified two underground springs; from one of these, a main artificial water canal took the water (in a straight line) to another bigger brook that ran to the south-east from the monastery.³² At the time of this survey, the water from this canal passed through an iron tube cutting through the brook and entered the inner precinct of the monastery from the south-east, under the modern fence which surrounds the abbey today. Then, the brook continued until the southern range of buildings, where it took a turn to the left and ran next to the parish house from where it flowed towards the village centre to the north and continued until the Olt River (map 3). This canal was man-made, in a very straight line and with a V-shaped cut. This immediately raised

a number of questions: was the canal made by the monks or it was a later arrangement? Is it possible to date it accurately? Was its course altered or maybe only partially altered later, following changes in the building arrangement or their function? Since we did not have a chance to take pollen samples nor could we finish the entire survey of the identified features, one can presume that its course was most probably altered when the parish house was built (on the place of the southern range of conventual buildings). Originally, it must have led to the kitchen, refectory and well-house. Presumably, it was used by the Cistercian community as well and not only in the modern period; however there is no exact dating for it. Nevertheless, as no other brook enters the site of the abbey today one could hypothesize that this water channel was most probably used as the main drain and provided the necessary water supply for the abbey. Unfortunately, archaeological research only covered the south-eastern corner and little else of so only scattered tangible this building, information exists about the functionality of the southern range. In an article recently published online, P. Beşliu supplied an image of three probable pipe fragments found during excavations in 1985 in one of the trenches placed around the SE corner of monastic buildings.³³ If correct, these fragments could reinforce the assumption discussed above and allude to the existence of a more sophisticated drainage system used in the abbey which has thus far remained mostly unknown.

A bigger brook passed near the monastic buildings (to the southeast) in a straight line and then joined the Olt River (see map 3). Since a good part of this brook was unusually straight, in comparison to the region's tortuous streams and brooks, the question emerged whether it was artificially formed or not.

³⁰ The 30th of October 2014 was our last fieldwalk to survey the earthworks and channels, where we witnessed that the entire site was already destroyed, excavated and leveled for the building of a new large fishing place. Monument protection service was not aware of this construction.

³¹ The fieldwalks took place in the autumn of 2011, the spring of 2012 and the autumn of 2014. Here, I would like to thank my supervisor, József Laszlovszky, for his expertise and advice. I would also like to thank my colleagues who joined us for these fieldwalks.

 $^{^{\}rm 32}$ For the moment, our interpretation is that most probably this was a millstream.

³³ Petre Beşliu-Munteanu, "Mănăstirea cisterciană de la Cârța. Cercetări arheologice de salvare (2009 și 2011) [The Cistercian monastery from Cârța. Rescue excavations (2009 and 2011)]," *Medievistica*, Jan. 20 (2012), accessed 14, 2015, http://medievistica.ro/pagini/arheologie/cercetarea/carta/img /Fig.%2020%20_eav%20suflare.jpg. See also the printed version: Beşliu-Munteanu, "Mănăstirea cisterciană," 16.

This brook led to a plateau-like elevation which we identified as a mill place, so the brook could have been a mill leat. The hypothesis can be supported by a number of other observations. First, on the same water channel, another mill (on the other side of the road, north of the abbey) can be found at present which is a modern establishment, since in the time of the First Military Survey³⁴ the mill did not exist in that place (fig. 1).

In contrast, the First Military Survey indicated a mill somewhere to the east of the monastic buildings, which largely coincides with the location identified by us. Second, after the "mill plateau" the watercourse breaks into two branches creating a small island, then with a few curves proceeds to the

modern mill and then flows into the Olt. This also alludes to the fact that the part of the channel in front of the mill was artificially created and regulated, while the part after the mill was seemingly not. However, the existence of a mill in the close vicinity of the monastic buildings is obviously suggested by a charter from 1469, which presented a quarrel that broke out because of a broken mill stone and was mentioned that it meant a significant material loss for the abbey.35 Besides this, the land records from 1648³⁶ also described a two wheeled mill built from wood. Due to the notable chronological differences between the two attested mills it can be highlighted that these were probably not the same mill.

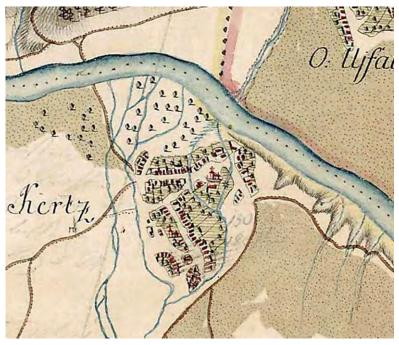


Fig. 1. The representation of the mill on the First Military Survey (Detail from: http://mapire.eu/en/map/ collection/firstsurvey/?zoom=15&lat=45.78863&lon= 24.5706).

Even though the drawings of M. Thalgott (fig. 2) and G. Treiber (fig. 3) illustrate the same brook entering the claustral buildings from a slightly different angle, one cannot fully rely on their precision due to the lack of scale and positioning on a larger map which would offer a identification wider context for and interpretation. Their schematic and generalized descriptions do not provide any details concerning the wider area of the abbey, such as the exact orientation of brooks. their preservation, possible alterations or use, nor the existence of mills. M. Thalgott supplies a reconstruction as well, on which the above mentioned brook (identified as a mill leat) entered the monastic buildings from the east, right next to the cemetery and not from the southeast as we identified on the terrain. However, we did not find traces indicating such a

³⁴ Compiled between 1763 and 1787, can be accessed online: http://mapire.eu/en/map/collection/firstsurvey/?zoom=6&lat =47.89034&lon=14.76556.

³⁵ See the transcription in: *Ub*, vol. VI (1458-1473), 389. In the Hungarian National Archives, available online under: DF 245327.

³⁶ The inventory and land register contains a description of the ruins of the monastery as well as of a mill and fishpond. See in: David Prodan, ed., *Urbariile Țării Făgăraşului* [Land records of the Făgăraş Land], (București: Academia R.S.R., 1970), vol. I (1601-1650), 850.

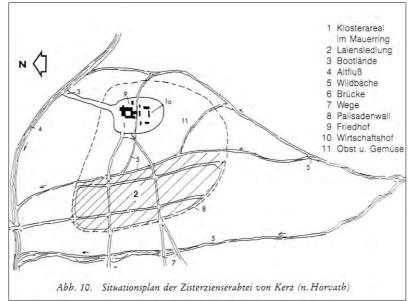


Fig. 2. Situation plan compiled by M. Thalgott (1990).

direction, which of course could have been altered by later landscaping works, about which nothing is known at present.

On the other hand, the Second Military Survey (fig. 4) seems to justify M. Thalgott's reconstruction since the mill leat does not appear on the map nor does the water channel that directed water from the spring; instead the south-

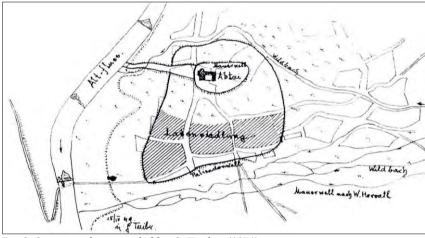


Fig. 3. Situation plan compiled by G. Treiber (1971).

eastern branch of the mill leat is highlighted as a watercourse. This watercourse approached the site of the abbey from the east just before crossing the village road. In that spot a mill could have been positioned as well if we disregard the former site of a possible mill and take into consideration the great fall on the brook. Such a different interpretation of the water management should not be rejected at first glance. Given the scarcity and fragmentary state of the data this interpretation should remain among the possible hypotheses until further evidence can clarify its validity.

Generally, fish would be obtained from a variety of sources, in our case: from lakes and marshlands, rivers, millponds, millstreams and artificial fishponds which lay closeby the abbey buildings, within the main precinct. Fishponds varied greatly in form and size, and started

appearing on monastic sites after the second half of the twelfth century³⁷. In the case of Cârța, historic maps contain no data about such a fishpond and neither do the written sources, so our only chance to examine whether fishponds existed or not was a detailed study of the landscape. Even though additional fieldwalking and sampling would have been necessary, we identified one possible fishpond. An orthophoto

> from 2005 (fig. 5) and the vegetation in this place served as an indicator, a soggy muddy area with dense reed, which could be found only in this part. To clarify the issues of the hypothetical fishpond, pollen sampling would have been the next step but since this partially preserved pond was extended and dug out for a new, modern fishpond we could not the research. finish The millstream had another branch, which could have led to additional fishponds situated on

the southern part of the territory. However, the exact track of the branch of the mill leat is not known today, but the curved brook

³⁷ Bond, "Water management," 100.

towards the east is visible on the Second Military Survey³⁸ (see again fig. 4). This could perhaps signal the remains of the fishponds after they fell out of use. It is not impossible to assume that maybe even more than one fishpond (next to each other or one above the other) would be located in this southern area. The water channel branching out from the mill leat could have been cut in several parts and then dammed in such a manner as to provide sufficient water for several smaller fishponds. Moreover, an inventory and land conscription from 164839 clearly mentioned a new fishpond, located 'under the village', meaning on the lower part of the village. The fishpond was supplied with water from a spring. It can be presumed that this new fishpond was formed on the

place of an older one or at least in an area where the water conditions were favourable for such an establishment. However, it remains an unsolved issue whether there was one large fishpond or several smaller ones, since the original track of the brook and the identified fishpond were all destroyed by the construction site for a new fishery. Besides these one should not forget that most probably also the Olt River was used for fishing. Further evidence on the diet and consumption of fish and its different types could be supplied by the meticulous analysis of animal bones found during excavations.

Monastic houses sited alongside rivers were often located near pre-existing crossingpoints, and their presence would further enhance

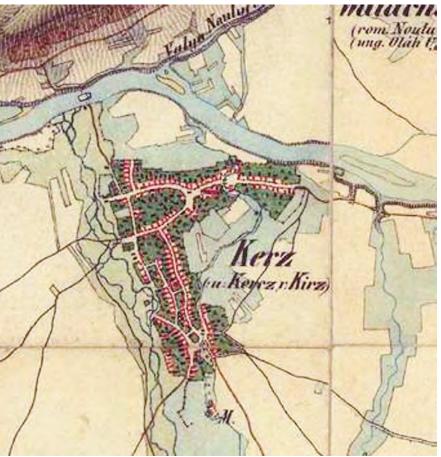


Fig. 4. Estate boundaries on the Second Military Survey (http://mapire.eu/en/map/collection/secondsurvey/? zoom=15&lat= 45.78908&lon=24.56938).

the intersection's importance. Furthermore, the potential for transport by water was clearly itself an advantage on some sites.⁴⁰ W. Horwath's drawing illustrated a crossing-point on the Olt to the north-west from the abbey in the direction of the abbey's villages such as Colun (Kellen, Kolun), Glâmboaca (Hühnerbach, Glimbóka) to the west (Abtsdorf, Szászapátfalva), and Apos Crit Szászkeresztúr), (Deutsch-Kreuz, Cloașterf (Klosdorf, Miklóstelke) and Mesendorf (Meschendorf, Mese) to the north and northeast. M. Thalgott's drawing indicated this crossingpoint with a bridge, while G. Treiber's drawing and the Three Military Surveys illustrate it as a ferry crossing point, just as it is today. W. Horwath's drawing showed a landing stage (which also appears on M. Thalgott's and G.

³⁸ Produced between 1806 and 1869, see online: http://mapire.eu/en/map/collection/secondsurvey/?zoom=5&l at=46.81258 &lon=18.42373

³⁹ See in: Prodan, Urbariile Țării Făgărașului, vol. I, 851.

⁴⁰ Bond, "The location and siting," 59-60.



Fig. 5. Orthophoto with the location of the suspected fishpond with medieval origins.

Treiber's drawings) as well to the north, not far from the abbey, which did not appear on any of the Military Surveys and could neither be clearly identified on terrain. However, indirect indication exists that the Cistercians at Cârta used the Olt for transportation of different construction materials and possibly even merchandise. According to the Bereg agreement, Cârța received 1000 zuan (medieval unit) of salt from Andrew II, in 1233.41 This was most probably transported on the Olt River.42 Unfortunately, no other data exists concerning the monastery's connection to salt transportation or marketing. The transportation of building materials, especially stone, could be another indicator for the use of the Olt River.

A few years ago, a study was published about the stone material used for the building of the abbey. $^{\rm 43}$

The study analysed the sandstones in two parts of the buildings, at the main portal on the western facade and at the geminate window from the chapter hall, which art historians have dated to different construction phases. The authors tried to verify the construction periods and to identify the provenance of raw materials through petroarchaeometric studies. They concluded that both types of sandstones from the abbey and the source area are feldspathic litharenites with carbonate cement and bioclasts.44 In addition, they confirmed that the wall of the chapter hall and the portal were built in two different stages, the latter most probably built after the Mongol destruction. The samples taken from the monastery were compared to samples taken from the presumed source area, Colun a village at a distance of 5 km from Cârța on the other side of the Olt River, where Sarmatian deposits with calcareous sandstones occurred. The samples were found compatible in their mineralogical composition, including the heavy minerals.⁴⁵ The village Colun, which was a monastic possession, was earlier indicated by L. Reissenberger as a

⁴¹ Nándor Knauz, "A fogarasföldi kertzi apátság [The abbey of Kerz from the land of Fogaras]," *Magyar Sion* (1868): 409.

⁴² Knauz, "A fogarasföldi," 409. Beatrix F. Romhányi, "Church and Salt. Monasteries and the Salt in the Medieval Kingdom of Hungary (11th-13th century)," in this volume. The original document is kept in the Hungarian National Archives, available online under: DF 248771.

⁴³ Anamaria Mihăilă and Marcel Benea, "Gresii utilizate ca materii prime la mănăstirea cisterciană Cârța [Sandstones

used as raw materials at Cârța Cistercian monastery]," *Romanian Journal of Materials* 41, no. 4 (2011): 352-361.

⁴⁴ Mihăilă and Benea, "Gresii utilizate," 360.

⁴⁵ Mihăilă and Benea, "Gresii utilizate," 361.

possible source area for the stone material used for the construction of the abbey.⁴⁶

The enclosure of monastic precincts was sometimes achieved in part or in whole by a water-filled ditch or moat instead of (or in addition to) a wall. Moats were particularly favoured on flat clay sites where they could be filled by ground-water seepage. In some cases, moats are found enclosing particular features within the monastery (such as the abbot's lodging or the fishpond) rather than surrounding the whole precinct. Precinct moats may often have been used as fishponds themselves⁴⁷. Based on present-day location and orientation of buildings, landscape features and estate boundaries from the Three Military Surveys (especially the Second), the inner and outer precinct of Cârța abbey can be delimitated fairly accurately.

The farm buildings situated to the southwest of the monastery indicate a curved boundary towards the village, which is traceable even today in the form of a ditch and a fence near the territory of the parish (south, southeast) (fig. 4). This could have enclosed the inner precinct of the monastery. In contrast, the outer precinct can only roughly be appreciated to the south and south-east, close to the underground springs and along the line of the south-eastern branch of the mill leat. During the fieldwalking, faint traces of a second moat continued to the east with a turn to north-east going until the end of the village gardens; this moat was cut by the water canal which took the spring water to the monastic buildings, and disappeared when it reached the mill ditch. Also, the line of trees and vegetation marked its course.

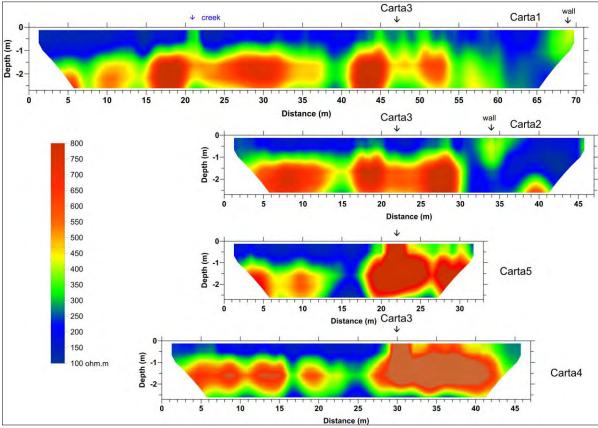


Fig. 6. Electrical resistivity distribution along the sections. For location of the sections see Fig. 8. The subsoil material begins at 1 m depth, and has 600-1200 ohm.m high resistivity. A wall can be seen in section Carta1 at 69 m and in Carta2 at 34 m. A wall is presumed in section Carta4 at 30 and in Carta5 at 22 m.

⁴⁶ Reissenberger, *Die Kerzer Abtei*, 37.

⁴⁷ Bond, "Water management," 99.

Geophysical survey

During March 2013, a small team of specialists from the Department of Geophysics and Space Science of Eötvös Loránd University-Budapest led by László Lenkey, a geophysical survey was carried out on the southern and south-eastern part of the church and cloister.⁴⁸ or disturbed soil can be identified with this method.⁴⁹

The interpretation of the magnetic and electric measurements can be seen on fig. 6 where two walls were identified in the study area detected by both methods (and indicated with continuous green lines).

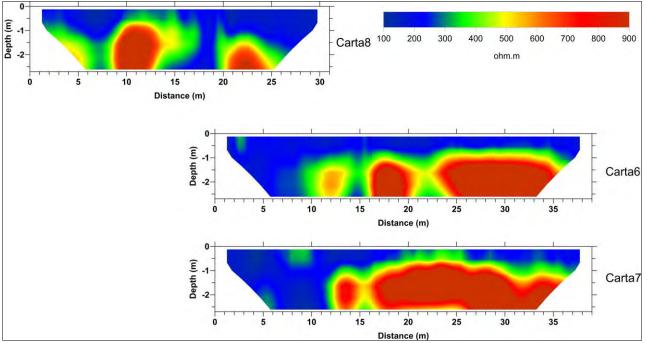


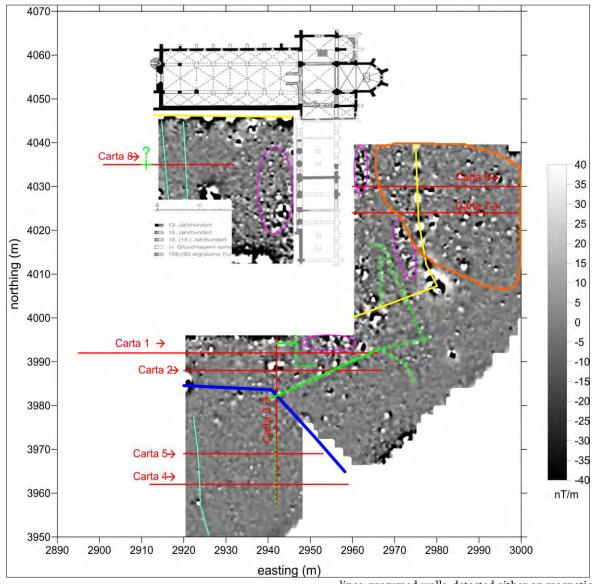
Fig. 7. Electrical resistivity distribution along the sections Carta6-8. For location of the sections see Fig. 8.

The aim was to map the surrounding area of the monastery in order to identify new structures beneath the earth and thus aid further research of the monastery through non-invasive methods. Magnetic survey and geo-electric profiling was made along 8 sections. The geoelectrical profiles reveal the electrical resistivity distribution along vertical sections. They show the vertical resistivity stratigraphy which has a lower resolution than the real stratigraphy of an archeological section. Objects consisting of stone have higher resistivity than the surrounding soil, thus mainly built structures A 20 m long wall runs west, southwest and east, northeast direction, located southsoutheast to the present day south-eastern corner of the monastic complex. It is about 1-2m thick and 1 m deep. According to the magnetic picture, this wall might continue in an east-northeast direction with a little turn, and it may have junctions with other walls coming from south and north. However, these latter wall sections are only suspected in the magnetic picture and not supported by electric measurements; they are illustrated with dashed green lines. Another small piece of wall, indicated by both measurements,

⁴⁸ I wish to thank László Lenkey, Koppány Bulcsú Ötvös, Mihály Pethe and Péter Filipszki for their work in the survey.

⁴⁹ The measurements were taken in Stereo 70 according to the local coordinate system. The magnetic survey was done with an Overhauser magnetometer GSM-19. Both the total magnetic field and its vertical gradient were measured. The measurement density was 8 points/m². Anomalies larger than 7.5 m were filtered by a high pass filter.

was found parallel to the southern wall of the parish house and runs a few meters away from it. A significant amount of debris and demolished material could be identified in the eastern and south-eastern side of the inner courtyard and the outside the monastic buildings. These areas, indicated with purple ellipses, are characterized by a great number of small densely stuffed black and white dipoles probably caused by the mixture of tiles, bricks and stones. The area of the cemetery, outlined in orange, is characterized by separate black and white dipoles caused by iron objects which might be coffin nails or other artefacts. The water channel is highlighted with a blue line, and the yellow lines indicate the cable that had been laid in the ground for the illumination of the building remains just one month before our survey.



lines: presumed walls, detected either on magnetic or on geoelectric results. Purple ellipses: debris, demolished material. Orange line: outline of the cemetery. Light blue lines: trenches. Blue line: brook flowing through the monastic area. Yellow line: electric cable placed in the ground.

Fig. 8. Interpretation of the geophysical measurements: Red lines: location of the geoelectric profiles. The arrow indicates the direction of the sections. Green continuous lines: walls detected both on magnetic and electric results. Green dashed The light blue lines denote possible earlier trenches or maybe even wall remains. The result of the geophysical survey shed new light on the southern and eastern parts of monastic buildings and confirmed that in the future a wider territory needs to be analysed and researched preferably through large surface, open-area excavations, outside the destroyed area.

Conclusions

It can be firmly stated that this Cistercian monastic landscape was unique on the territory of Medieval Transylvania since other orders were rarely involved in landscape and water management of such scale. The abbey was among the largest landowners of this region and its heyday falls to the fourteenth and the beginning of the fifteenth centuries. Unfortunately, a great number of questions could not be answered and new ones were raised but the situation remains irretrievable as all the aforementioned features have been destroyed. Nonetheless, the present study was hopefully able to provide a much more detailed insight into the possibilities of landscape archaeology and the complex issues raised by the involvement of new techniques in retrieving data from the surrounding environment. As one could see, an impressive water system unfolded with the involvement of a variety of sources, which likely had its own development in time in accordance with the evolution and the needs of the monastic community. The importance of the Olt River as an important waterway was highlighted through the transportation of resources such as stone, salt and possibly other kinds of merchandise. Despite the great distances at which the abbey was sited from other Cistercian houses all the presented data confirms that the monastic community from Cârța was part of the large Cistercian trans-European network and thus played an important and active role in the region's life.

SHAPING A MONASTIC LANDSCAPE IN MEDIEVAL SLAVONIA: THE CASE OF THE BENEDICTINE ABBEY OF ST. MARGARET IN BIJELA

ANDREJ JANEŠ*

Geographical location

The remains of the Benedictine Monastery of St. Margaret complex are situated on an elevated oval plateau (\bigvee 230 m asl) above the Brzica stream, 1 km to the south of the village Bijela, 4 km to the northeast of Sirač, and 6 km to the southeast of Daruvar, on the southwestern slopes of the papuk Mountain. The plateau is protected by a deep ditch on all sides except the eastern one, where the ground steeply slopes downward towards the Brzica stream. The location is known by the name *Veliki zid/Great Wall* or *Rimsko groblje/Roman Cemetery*, while the Franciscan Cadastre recorded the name *Gradina Biela.*¹ The site is also mentioned under the name Bijela – *Zidine/Walls* in a 1995 catalogue of medieval Croatian sites.²

The western slopes of the Papuk Mountains and Ravna Gora are formed from schists and igneous rocks, while the hills mainly modeled on tertiary layers represent the main element of the relief.³ The area is predominately covered by sessile oak forests, as well as hornbeam, and to a smaller extent by mountain beech forest.

The monastery of St. Margaret

The area around the remains of the Benedictine monastery is mentioned for the first time in a document from 1234. The land of the church of Grab (*ecclesia de Grab*)⁴ is mentioned

in the description of a boundary line in a document from 1234 concerning the sale of the land beside the small river Pakra (the upper stream of the small river Bijela). The document includes reference to a litigation, which arose due to the charges of Hozuga, the Abbot of Grab (Hozuga abbas de Grab) and his ministerialis Bertol against Ivanka, the son of Abraham of the Sudan kindred. concerning the uniustly confiscated Zelkaroune land.⁵ The document also mentions the patrons of the abbey in Grab, Budur's sons Jakov and Petko, who belonged to the kindred of Ban Tibold, i.e. Tiboldians.6

The Tibold kindred was linked to Somogy County's prefect Grab, who participated in the march of King Ladislaus and the establishment of the Zagreb Diocese.7 It is believed that the loyal helper Grab acquired/received some parishes and districts in the western Papuk area and Ravna Gora, among them the Toplica parish.⁸ The kindred held large estates from Toplica and Stupčanica (around Daruvar) to Svetačje (the Novska area). In 1231 the six sons of Prince Budur shared their estates in Hungary and Slavonia, so that brothers Jakov, Kuzma, and Petka received the parent possession (*predium principale*) Babócsa, the possession Syrionuk with the entire Toplica, and four villages alongside the Drava River, while to the younger brothers Toma, and Tibold belonged the Zenche Budur, possession (Szencse, Svetačje) with the village Welhen on the Drava River and the city of

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¹ Berislav Schejbal, "Medieval topography of the Daruvar area" (M.A. Thesis, CEU Budapest, 1999), 34.

² Tajana Sekelj Ivančan, *Catalogue of Medieval Sites in Continental Croatia* (Oxford: BAR Series, 1995), cat. 470.

³ Ivan Crkvenčić, ed., *Geografija SR Hrvatske 1: središnja Hrvatska* [Geography of SR Croatia 1: Central Croatia] (Zagreb: Školska knjiga, 1974), 53.

⁴ Tadija Smičiklas, ed. *Codex diplomaticus Regni Croatiae, Dalmatiae et Slavoniae, vol. III, diplomata annorum 1201-1235* (Zagreb, 1905), 426; Gjuro Szabo, "Tri benediktinske opatije u županiji požeškoj (sv. Jelena de Podborje, Bijela, Rudin)" [Three Benedictine abbeys in Požega County], *VHAD* 9 (1907), 204; Ivan Ostojić, *Benediktinci u Hrvatskoj* [The Benedictines in Croatia], vol. III (Split: Benediktinski

priorat Tkon, 1965), 55; Stanko Andrić, "Benediktinski samostan sv. Margarete u Bijeli" [The Benedictine Abbey of St. Margaret in Bijela], *Tkalčić* 9 (2005): 13.

⁵ Stanko Andrić, "Benediktinska opatija sv. Margarete u Grabovu i njezin odnos prema benediktinskom samostanu u Bijeli" [The Benedictine Abbey of St. Margaret in Grabovo and its relationship with the Benedictine Monastery in Bijela], *Scrinia slavonica* 5 (2005): 67.

⁶ Vjekoslav Klaić, "Plemići Svetački ili "nobiles se Zampche"" [Nobles Svetački or "nobiles de Zempche"], *Rad JAZU* 199 (1913): 8–9; Andrić, "Benediktinski samostan," 13. Their ancestor Tibold or Teobald is mentioned in the chronicle of Simon of Kéza as *comes Tiboldus de Fanberg/Samberg qui Grauu Tibold est vocatus*. The city from which Tibold came is probably Schaumburg in Lower Austria or Pfannberg in Norther Styria. The first parent possession of this parentage in Hungary is Babócsa on the River Drava. For more on this see: Andrić, "Benediktinska opatija," 72–73.

⁷ Ostojić, *Benediktinci*, 55; Andrić, "Benediktinski samostan," 14–15.

⁸ Klaić, "Plemići Svetački," 6.

*Labod.*⁹ By this division the area of the Bijela Monastery belonged to the older brothers, which was confirmed three years later by their reference in the legal dispute.

The area where the monastery in Bijela would later appear is mentioned in a document from 1250, certifying to Ivanka, the son of Abraham of the Sudan kindred, estates in Požega and Somogy Counties.¹⁰ The area of the future Bijela monastery had common frontiers with the lands of the Abbey of St. Michael in Rudina. The first concrete reference to the existence of Bijela is found in a letter of Pope John XXII from 1332 in which the ecclesiastical location (locus ecclesiasticus) Bijela, subordinated to the Grab Monastery in the Archdiocese of Kalosca¹¹ and Cluj in the Erdély Diocese, of the Order of St. Benedict,¹² were given to the administration of Bishop Paul of Belgrade. In the letter the Bishop complains that a cleric from the Archdiocese of Esztergom named Stephen took possession of these "locations." The Bishop asked from the Pope two "ecclesiastical locations" to cover with their income his expenses as the secretary of King Charles Robert.13

The letter of Pope Benedict XII of 15 October 1337 confirms that Bishop Paul did not take care of his possessions. In this letter the Pope orders the Bishop of Eger to deprive the mentioned Bishop of the Bijela priory (*prioratum de Bela*).¹⁴ In this document of the monastery Bijela is referred to as a priory, while other institutions in the document are referred to as abbeys.¹⁵

А very important document that illuminates the relation of Bijela and the abbey in Grabovo is a charter issued at the assembly of Hungarian Benedictines in 1342, when the order was renewed within five neglected monasteries, among which is mentioned Bijela. The charter informs us that order was restored in the monastery of Bijela or Grabovo (Bela siue Graab) with the financial help from Siegfried, abbot of Hronsky Benadik.¹⁶ This formulation in early Croatian historiography has led to confusion and the identification of Bijela with Grabovo as a single monastery.17

From a document issued on 21 October 1366 at the Provincial Chapter held in the monastery of Monyród one learns that the Benedictine Order was not successfully introduced in Bijela. From the same document we learn that the visitors on the occasion of visiting "certain monasteries" found a scandalous situation in the Grabovo monastery led by the selfproclaimed Abbot Konrad. In the document it is clearly stated that in addition to the monastery he managed the grange of the monastery named Bijela (grangia eiusdem Bela vocata).¹⁸ The Chapter decided to establish Thomas, the son of Nicholas, a monk of the monastery in Szekszárd, as the new abbot. This document best described the relation of the two institutions, i.e. the dependence of Bijela on Grabovo. A document from a lawsuit in 1371, in which Thomas is stated as the abbot of the church in Bijela (frater Thomas abbas ecclesie de Bela),¹⁹ confirmed that the Abbot Thomas took over the management of the abbey.

In the turbulent years of Sigismund's reign the abbey was managed by Abbot Lawrence, well recorded in historical sources from 1394 to 1421. In 1419, Abbot Lawrence demanded from the Pope a copy of the old

⁹ Marija Karbić, "Dioba posjeda i plemićki rod: primjeri iz Slavonije" [Division of estates and noble kind: red examples from Slavonia], *Scrinia slavonica* 10 (2010): 79–80.

¹⁰ Andrić, "Benediktinska opatija," 77.

¹¹ In his detailed research Stanko Andrić found a link between the monastic community in Bijela with the Abbey of St. Margaret in Grab/Grabovo, in today's Syrmia. The remains of that Abbey are located in the village Grabovo on the north side of Fruška gora. Andrić, "Benediktinski samostan," 12.

¹² Ostojić, *Benediktinci*, 53; Andrić, "Benediktinska opatija,"
79; Andrić, "Benediktinski samostan," 11.

¹³ Andrić, "Benediktinska opatija," 79.

¹⁴ Ostojić, *Benediktinci*, 53; Andrić, "Benediktinski samostan," 18.

¹⁵ Andrić, "Benediktinska opatija," 80–81.

¹⁶ Andrić, "Benediktinski samostan," 18–19.

¹⁷ Szabo, "Tri benediktinske opatije," 204; Gjuro Szabo, "Iz prošlosti Daruvara i okolice" [From the history of Daruvar and its surroundings], *Narodna starina* XI (1932): 96; Zorislav Horvat, "Benediktinski samostan u Bijeloj" [The Benedictine monastery in Bijela], *Peristil* 22 (1979): 58.

¹⁸ Andrić, "Benediktinska opatija," 85; Andrić, "Benediktinski samostan," 23.

¹⁹ Andrić, "Benediktinski samostan," 26.

privileges of the Benedictine Order, as well as a copy of the charter by which the monasteries of Bijela and Grabovo received confirmation of all earlier rights and privileges at the general Council of Constance (1414-1418).²⁰ In his letter to the Pope Abbot Lawrence mentions illegally occupied properties, rights, fortresses, estates, tithes, crops, incomes, and revenues of the said monasteries. The Bishop of Zagreb is explicitly mentioned as a violent usurper.

Abbot Lawrence died at the end of 1421, and his efforts to defend the privileges of the monastery remained futile. That same year, on 19 December, King Sigismund asked the Pope to hand over the monastery in Grabovo or in Bijela (monasterium de Garab alias de Bela) to the administration of John Albeni, the Bishop of Zagreb and the King's Archchancellor for five years.²¹ The request highlighted the poor state of the monastery's income due to Turkish raids and other war troubles and stated that buildings and edifices were falling to ruin.22 In a special document, a papal bull, issued on 28 September 1422, Pope Martin V appointed Bishop John Albeni the administrator of the monasteries Grabovo and Bijela.²³ The amount of 150 golden florins is stated as the income of the abbey.

Bishop John Albeni was not commendatory abbot of the Bijela Abbey for only five years; it seems he maintained this position until his death in 1433. Shortly before his death on 14 March 1433 in Pécs, he had his will written, in which, among other things, he left to the monastery in Bijela 100 florins for the stonemason's works.²⁴

As after the death of John Albeni the position of bishop of Zagreb remained vacant for several years, and the administration of Bijela and Grabovo evaded the hands of a new bishop. During that time the diocese was managed by the noble brothers Matko and Petar Talovac. In 1440, Ban Talovac commanded Žigmund Kaštelanović to surrender without delay the fortress and the Bijela Abbey (*castrum ac abbaciam Bela*) to Abbot Nicholas.²⁵ This confirmed that in the first half of the 15th century the abbey was surrounded by walls. In this period the abbey was under the secular tutorship of the Slavonian peer Talovac.

Eustachius, a member of the Roman brotherhood of St. Spirit,²⁶ is first mentioned as an abbot in 1472. In a charter issued from the abbey on 28 August 1476 concerning a dispute between a Zagreb Canon and the Dominicans Eustachius of Paks is mentioned as the Abbot of Bijela, Grabovo, and Babócsa.²⁷ Eustachius appears as the abbot of these three monasteries in a papal bull of Pope Sixtus IV from 27 October 1478, in which it is explained that these three monasteries are "mutually canonically united" (fig. 1).²⁸ Abbot Eustachius is mentioned for the last time in 1481.29 After Abbot Eustachius, in the last two decades of the 15th century, monastic life faded away in the monastery and it passed into the hands of laity. Thus it is indirectly learned, from other charters that in 1485 Bijela came into the hands of Ban of Jajce.³⁰ From tax lists for 1494 and 1495 and a document from 1500 it is evident that King Vladislaus II made the abbey and the related manorial estate available to the Banate of Jajce, but kept it in his own possession.³¹

²⁰ Andrija Lukinović, *Povijesni spomenici Zagrebačke biskupije* [Historical monuments of the Diocese of Zagreb], vol. V (1395-1420) (Zagreb: Kršćanska sadašnjost, 1992), 574–575; Andrić, "Benediktinski samostan," 38.

 ²¹ Ostojić, *Benediktinci*, 53; Horvat, "Benediktinski samostan," 59; Andrić, "Benediktinski samostan," 40.
 ²² Lukinović, *Povijesni*, vol. VI (1421-1440), 46; Andrić,

²² Lukinović, *Povijesni*, vol. VI (1421-1440), 46; Andrić, "Benediktinski samostan," 40.

²³ Lukinović, *Povijesni*, vol. VI (1421-1440), 75–76.

²⁴ Ostojić, *Benediktinci*, 53; Horvat, "Benediktinski samostan," 59; Andrić, "Benediktinski samostan," 43.

²⁵ Andrić, "Benediktinski samostan," 44–45.

²⁶ Ibid., 109.

²⁷ Ibid., 58.

²⁸ Szabo, "Tri benediktinske opatije," 204; Ostojić, *Benediktinci*, 53; Horvat, "Benediktinski samostan," 59.

²⁹ Andrić, "Benediktinski samostan," 62.

³⁰ Josip Bösendorfer, *Crtice iz slavonske povijesti* [Notes from Slavonian history], (Osijek: Tiskom knjigo Pfeiffer, 1910), 86; Andrić, "Benediktinski samostan," 63.

³¹ Josip Adamček and Ivan Kampuš, *Popisi i obračuni poreza u Hrvatskoj u XV. I XVI. stoljeću* [Lists and tax calculations in Croatia in the 15th and 16th centuries], (Zagreb: Institute for Croatian History, Zagreb University, 1976), 4; Andrić, "Benediktinski samostan," 69.

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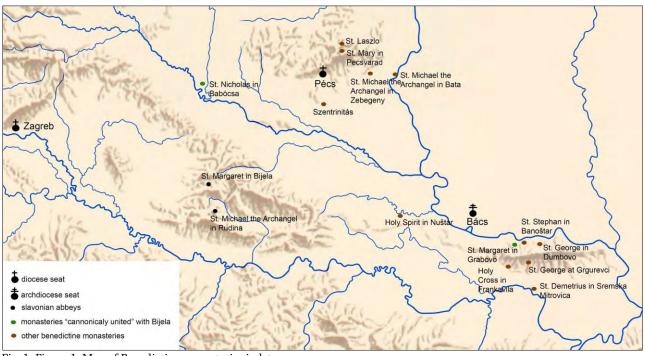


Fig. 1. Figure 1. Map of Benedictine monasteries in late medieval Slavonia and southern Hungary (edited by A. Janeš).

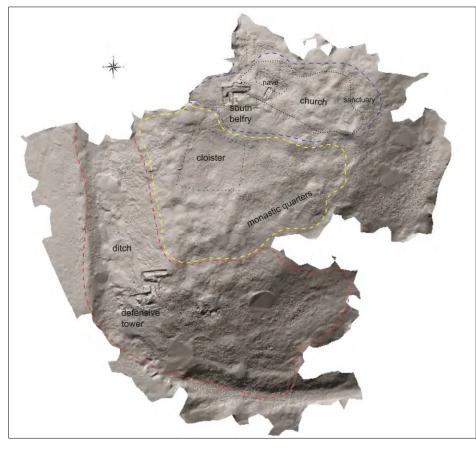


Fig. 2. DEM of the site of the Benedictine monastery of St. Margaret (made by Vektra d.o.o, edited by A. Janeš).



Fig. 3. Aerial photo of the site (photo by LupercalMT j.d.o.o.).

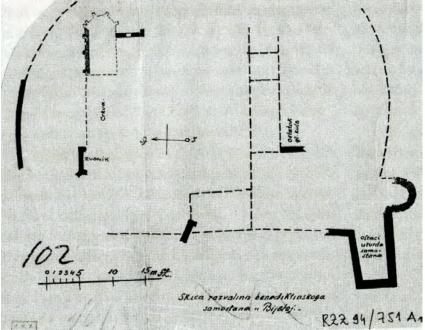


Fig. 4. Ground plan of the abbey by G. Szabo from the beginning of 20th century.

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Fig. 5. 3D model of the entrance (model by M. Vuković).

The management of the abbey by the Bans of Jajce ended in 1513 when King Vladislaus II decided to give it back to the Benedictines. A handover was then arranged between the Bans of Jajce and Matthew from Tolna, Archabbot of St. Martin in Pannonhalma. Abbot Matthew, in a charter of 3 May 1513 issued in the Abbey itself, announced the return of the monks after about thirty-five years. An agreed upon compensation for the Bans of Jajce amounted to 4,000 florins.³² The actual handover of the patronage over Bijela occurred only on 18 January 1516, when King Vladislaus II issued a royal charter, which handed the abbey over to the Pannonhalma Archabbot Matthew.³³

Two abbots of Bijela, Petar the Croat (1517) and Blaž (1522), are mentioned until the Ottoman conquest of the area. From 1500 on, the sources mention Bijela together with Oporovac Castle, about which the abbots led disputes with local nobleman George Korlatović.³⁴ In 1529, we learn that the abbot of Bijela joined the party of John Zapolya in a civil war with Ferdinand of Habsburg, and afterwards signs of monastic life in Bijela again faded away.³⁵ After that the complex of the monastery was used as a fortress to defend the borders from the Ottomans. In the spring of 1543 the Ottomans conquered the castles Stupčanica, Dobra Kuća, Sirač, and Bijela Stijena. Bijela is not mentioned, but as all the surrounding castles fell, as well as the entire area of the western hills of Papuk Mountains and Ravna Gora, it can be said with certainty that Bijela was among them.36

³² Szabo, "Tri benediktinske opatije," 205; Ostojić, *Benediktinci*, 54; Horvat, "Benediktinski samostan," 59; Andrić, "Benediktinski samostan," 74–75.

³³ Szabo, "Tri benediktinske opatije," 205; Andrić,"Benediktinski samostan," 78.

³⁴ Andrić, "Benediktinski samostan," 89, 92–93.

³⁵ Ibid., 98–99.

³⁶ Ibid., 103.

Shaping a monastic landscape in medieval Slavonia

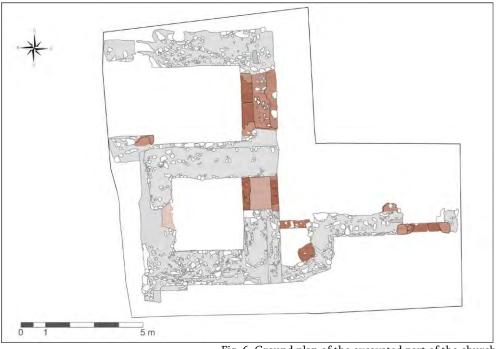
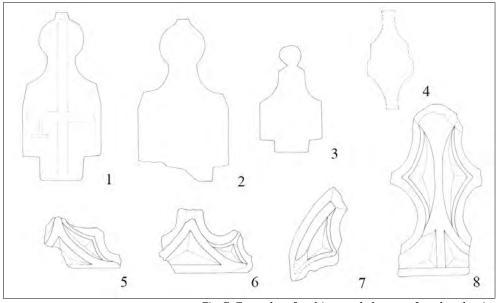


Fig. 6. Ground plan of the excavated part of the church (drawing V. Gligora).



The layout of the monastery complex

On DTM³⁷ made in 2012 it can be seen that the northern part of the plateau is the highest point and therefore it is recognized as the position of the monastery church, which was built on the highest part of the hill, and it thus had a dominant position in space.

Fig. 7. Examples of architectural elements found at the site: 1-3 vault ribs, 4 glazing bar, 5-8 tracery (drawings A. Bendeković).

The morphology of the terrain shows two ridges in the northwest-southeast direction, which can be assumed to belong to the walls of the church's nave. The situation is more complex to the east, but a large number of elevations may indicate the remains of the fallen architecture of the

³⁷ DTM – *Digital Terrain Model*.

triumphal arch and the sanctuary of the church. South and east of the church there is a lower area for 2-5 meters. This area is characterized by a valley with its southwestern part bounded by the two ridges closing the right angle. The eastern part is also bounded by ridges, but of a much more irregular layout. Surrounding ridges enclose the valley of the approximate size of 9 x 9 m. The height difference of the marginal ridges and the central part of the valley is 1-1.5 m. The almost square shape of the valley leads to the assumption that the monastery cloister was located here. The southern and eastern edges, due to a great variety of relief, should be observed as a part of a monastery complex that surrounded the cloister on these sides (figs. 2, 3).

Analysis of the drawings made by G. Szabo while visiting the site at the beginning of the 20th century (fig. 4) and the digital model of the relief confirms the assumption that the monastery church was located on the northern part of the hill. So far the surface of the entrance area to the monastery church has been examined. The entrance to the church was between two massive bell-towers. The south bell-tower, a square room of 2.9 x 2.9 m with an entrance on the east side, has been completely examined. East of the bell-tower was a room of a smaller size (1.38 x 1.56 m), in which were found the remains of the spiral stone staircase to access the upper floors of the south bell-tower.

The church had an entrance area located between the two bell-towers. To the west it is limited by massive door-jambs of which the south one remains preserved. The remains of the grooves for construction, which supported the church door and the cross-bar to further secure the door, were also preserved. The entrance area is 3.61 m long and 3.26 m wide. On the east side of the entrance area was the portal and staircase descending into the space of the church's nave (fig. 5). In this passage in the walls were discovered grooves for cross-bars of the structure, which supported the doors and cross-bar to additionally secure the door.

While visiting the remains of the monastery at the beginning of the 20th century, G. Szabo recorded the length of the nave of the

church as 14 m and the width as 7 m, and the sanctuary as 10.5 m long and 6.20 m wide. According to the Szabo's drawing, the sanctuary was polygonal and strengthened by buttresses. Archaeological excavations uncovered a part of the south wall of the church with a passage through which one entered the presumed northern corridor of the cloister. A large amount of found fragments of vault ribs indicates that it was a vaulted room, which reinforces the assumption concerning the cloister corridor. Inside the church, next to the passage into the cloister corridor, the remains of a half-column, a vertical part of a pilaster, was found. By its discovery it was determined that the church was divided into bays and the length of the first bay, 4.34 m, was obtained (fig. 6).

The most significant finds so far are the fragments of stone architectural elements. One hundred seventy-nine fragments in the Gothic style have been found. Most of the found fragments of vault ribs belong to the pear-shaped rib type. This type of rib is formed of one sidelong part and over a segmented niche, which turns into a pear shape (fig. 7.1-3).³⁸ Pear-shape profiles are common in the early 15th century.³⁹

The closest analogy to the specimens of Bijela is found in the rib vault of the chapter house of the Franciscan monastery in Šarengrad, which was built around 1420.⁴⁰ Four fragments of a door-jamb have a profile of a connected torus and concave groove; an analogy can be seen in the door-jamb of the Chapel of St. Trinity in Brinje from the early 15th century.⁴¹ Tracery fragments (fig. 7.5-8) are analogues to the finds from the Huet Square in the Transylvanian city of Sibiu, on the site of the former parish church and are considered parts of the rosette. They are dated to

³⁸ Dijana Vukičević-Samaržija, *Sakralna gotička arhitektura u Slavoniji* [Religious Gothic architecture in Slavonia] (Zagreb: Centar za povijesne znanosti, Odjel za povijest umjetnosti, 1986), 55.

³⁹ Zorislav Horvat, *Katalog gotičkih profilacija* [Catalogue of Gothic mouldings] (Zagreb: Društvo povjesničara umjetnosti Hrvatske, 1992), 80.

⁴⁰ Vukičević-Samaržija, *Sakralna gotička arhitektura*, sl. 51e; Horvat, *Katalog*, sl. 83m.

⁴¹ Horvat, *Katalog*, sl. 143d.

a broader period, from the 14th to the second half of the 15th century. $^{\rm 42}$

For now it can be concluded that the monastery church on its west side was defined by two massive bell-towers of which the northern one was visible on drawings and prints from the second half of the 19th century. Between them was located the entrance to the church, which had two doors. This layout has been defined as "westwerk"⁴³ by Lj. Karaman, while Z. Horvat has defined it as "westbau."44 Matroneums are known from other church buildings from the early 15th century, such as chapels in the Sokolac Castle in Brinje and the church on Ptujska Gora in Slovenia. From the area of the Hungarian Kingdom examples of matroneums are known from the parish church in Košice and Cathedral in Bratislava with an identical scheme of the west front.⁴⁵ The parish church of Pomaz on the Klissza Hill has a very similar west front between the two bell-towers.⁴⁶ Slovakian and Hungarian examples date from the 14th to the early 15th centuries. G. Szabo mentions dimensions of a nave and sanctuary similar to the church from the nearby Pauline Monastery of St. Anna de dobra *Kwcha*, which was established in 1412.47

As additional confirmation of the 15thcentury construction of the found remains, a sample of charcoal from the lowest layer explored within the southern bell-tower, above the sterile layer, has been dated by radiocarbon analysis to the middle of the 15th century.⁴⁸

Known historical data on the takeover of the administration of the abbey by the Zagreb

Bishop John Albeni locate the construction of the found remains of the church to the second quarter of the 15th century. The letter of King Sigismund to Pope Martin V in 1421 mentions the poor condition of the monastery. Likewise, in his will of 1433, the Bishop leaves to the monastery 100 florins for masonry works. Analysis of the found architectural elements, radiocarbon analysis, analogies with other similar sacral objects in the territory of the Hungarian Kingdom, as well as written sources confirm that so far the found architecture belongs to renovation works on the monastery carried out during the second quarter of the 15th century.

Stratigraphy within the southern belltower, its staircase, and around the south wall of the church established that this part of the church was destroyed in the late 16th century. The architectural remains are covered by a layer with finds from everyday life, particularly kitchen pottery and stove tiles. The fragments of the kitchen pottery typologically belong to the second half of the 16th century. Radiocarbon analysis of the samples of charcoal from the layers of debris within the southern bell-tower, rich with stone architectural elements, confirm the demolition of this part of the church in the period of the late 16th century and the first half of the 17th century.⁴⁹ In this layer was found a stonefired missile, while from the shallower layers of the southern bell-tower samples of iron rifle bullets were recovered. All this indicates that before the Ottoman conquest the fortified abbey was used for military purposes and was perhaps partially destroyed in the Ottoman conquest of the eastern edge of medieval Slavonia.

Landscape and topography of the monastery estate

The monastery estate had two functions: from it the monks received supplies necessary for life, but it was also a source of income for the monastery's economy.⁵⁰ The estate of the Bijela

⁴² Daniela Marcu Istrate, *Sibiu. Piața Huet. Monografie arheologică. I* [Sibiu. Huet Square. Archaeological monograph] (Alba Iulia: ALTIP, 2007), 118, 218, Pl. 62.

⁴³ Ljubo Karaman, "O umjetnosti srednjeg vijeka u Hrvatskoj i Slavoniji II" [On medieval art in Croatia and Slavonia II], *Historijski zbornik* III, 1-4 (1950): 125.

⁴⁴ Horvat, "Benediktinski samostan," 61.

⁴⁵ Ibid., 61.

 ⁴⁶ Gábor Virágos, *The Social Archaeology of Residential Sites. Hungarian noble residences and their social context from the thirteenth to the sixteenth century: an Outline for Methodology* (Oxford: BAR Series, 2006), 33–34, fig. 31.
 ⁴⁷ Szabo, "Iz prošlosti Daruvara," 96-97.

⁴⁸ The analysis was carried out in CEntro di DAtazione e Diagnostica, University of Salento (sample LTL14644A), 95.4% 1400AD-1530AD, 68.2 % 1415AD-1475AD.

⁴⁹ Samples (LTL 14642A i LTL14643A) are dated by radiocarbon analysis with 95.4% probability 1470AD-1670AD i.e. 1480AD-1690AD, 68.2% probability 1510AD-1600AD i.e. 1520AD-1590AD.

⁵⁰ Stephan Moorhouse, "Monastic estates: their composition and development," in *The Archaeology of Rural Monasteries*,

Abbey was a part of the Svetačje Archdeaconry, at the eastern edge of the Zagreb Diocese.⁵¹ Administratively, the estate was in Križevci County and was one of the largest, covering an area of 125 km².⁵²

The immediate surroundings of the Abbey From the earliest times gardens were an integral part of the complex of the monastery. They were used to grow vegetables for the needs of the monastery's kitchen, but herb gardens and gardens used as decoration for the monastery's surroundings are also known. From the archives of English monasteries are known plants planted in gardens: onion, garlic, leeks, saffron, hazelnuts, grapes, plums, pears, beans, and peas.53 Aerial photographs of a gentle slope south-west of the monastery show trails in the ground in the form of lines arranged in a regular structure, in the form of a grate.⁵⁴ The traces are visible in the form of dark lines that intersect at right angles. The dark lines would correspond to the beds of a former monastery's garden. At the most visible part the length of the arable particle (direction NW-SE) is 8 to 8.5 m, the width (direction SW-NE) is 6 m. The traces are visible at the surface of the present cadastral particle of about 2500 m² (fig. 8).

Consuming fish was conditioned by religious rules prohibiting monks from eating meat and meat products. Continuous demand for fish led to the construction of a complex for fish farming in the vicinity of the monastery complex.⁵⁵ On the topographic map is recorded

⁵⁵ Moorhouse, "Monastic estates," 64.

the toponym *Ribnjak (Fish Pond)*, located north of the monastery and west of the Stančevac stream. In the Franciscans' cadastre of 1862 the toponym *Ribnjak* is recorded south of the monastery. The position is between the flow of the Stančevac Stream in the west and Brzica in the east, which makes this position ideal for the construction of the pond. Considering the historical development of this region this toponym may be linked with high probability to the economy of the monastery.

On the eastern slopes of the elevation on which the monastery is built, which steeply descend towards the bed of the Brzica Stream, the terrain examination showed traces of the exploitation of stone. Without a more detailed analysis of the stone it can only be assumed that it was the position of the quarry in which the stone was extracted for the purpose of the construction of the monastery in Bijela (fig. 10).

Parishes and settlements

In the area of this large estate two parishes historically have been recorded. The first one is the parish in Bijela, which on the list of parishes of the Zagreb Diocese in 1334 was mentioned as the Church of the Blessed Virgin Mary (*beate virginis de Bela*).⁵⁶

Parish priests and the parish in Bijela are mentioned several times thereafter: the parish priest Dionysus in 1378,⁵⁷ the parish in 1466,⁵⁸ the parish priest Gregory in 1499,⁵⁹ and in 1501 and 1507 the parish priest Fabian with two chaplains.⁶⁰

eds. Roberta Gilchrist and Harold Mytum, (Oxford, BAR Series, 1989), 32.

⁵¹ Andrić, "Benediktinski samostan," 9.

⁵² Pál Engel, Magyarország középkor végén. Digitális térkép és adatbázis a középkori Magyar Királyság településeiről. Hungary in the Late Middle Ages. Digital vector map and attaching database about the settlements and landowners of medieval Hungary, PC CD-ROM (Budapest: MTA Történettudományi Intézet, 2001).

⁵³ James Bond, "Production and Consumption of Food and Drink in the Medieval Monastery," in *Monastic Archaeology. Papers on the Study of Medieval Monasteries*, eds. Graham Keevill et al. (Oxford, Oxbow Books, 2001), 65.

⁵⁴ Photographs made by LupercalMT j.d.o.o. are analyzed, as well as photos taken from the web site of the Ministry of Agriculture (www.arkod.hr, accessed on 11.04.2015).

⁵⁶ Franjo Rački, "Popis župa Zagrebačke biskupije 1334. i 1501. godine" [List of parishes of the Zagreb Diocese of 1334 and 1501], *Starine JAZU*IV (1872): 206; Josip Buturac, "Popis župa Zagrebačke biskupije 1334. i 1501. godine" [List of parishes of the Zagreb Diocese of 1334 and 1501], *Starine* 59 (1984): 57.

⁵⁷ Kamilo Dočkal, "Srednjovjekovna naselja oko Dobre Kuće" [Medieval settlement around Dobra Kuća], *Starine JAZU* 48 (1958): 89; Schejbal, *Medieval topography*, 36.

⁵⁸ Buturac, "Popis župa," 57.

⁵⁹ Andrić, "Benediktinski samostan," 72.

⁶⁰ Rački, "Popis župa," 206; Buturac, "Popis župa," 57; Andrić, "Benediktinski samostan," 72.

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Shaping a monastic landscape in medieval Slavonia

Fig. 8. Features of the priory/abbey and the location of the monastic garden (photo by LupercalMT j.d.o.o., edited by A. Janeš).



Fig. 9. Remains of a presumed medieval watermill by the priory/abbey site. (photo by V. Gligora).

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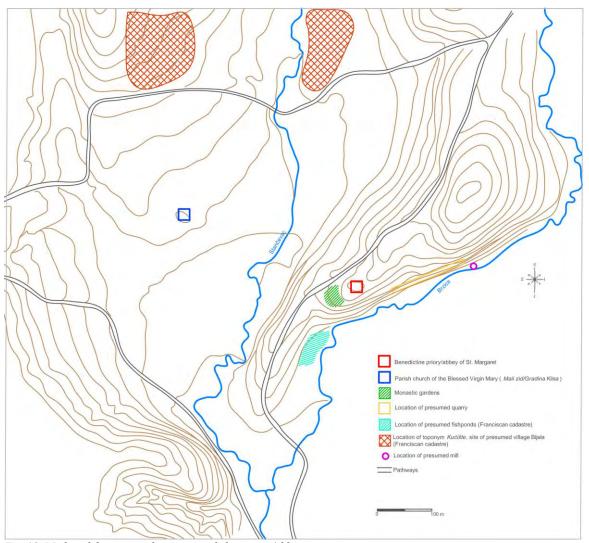


Fig. 10. Medieval features and sites around the priory/abbey site (drawing by A. Janeš).

The existence of this parish church means that Bijela at this time was a large and important settlement.⁶¹ The position of the medieval settlement may be indicated by the toponym *Kućište*,⁶² north of present houses, in the western part of the village Bijela, and is recorded in the Franciscan cadastre in 1862. At the end of the 15th century, in a list of taxes, the village in Bijela is mentioned as a market town (*oppidum Bela*).⁶³

The position of the parish church dedicated to the Blessed Virgin Mary is supposed to be located at the position of the *Mali zid/Small Wall* in the valley of the Stančevac stream on the square plateau, at the hill 205. In the Franciscan cadastre in 1862 this position has been marked with a sign of the ruin named *Gradina Klisa /Klisa Hill-fort.* The toponym of *Klisa* suggests the possibility of the existence of the medieval sacral architecture. With the expansion of Ottoman power over Southeast Europe the toponyms *Kilisa*

⁶¹ Andrić, "Benediktinski samostan," 10.

⁶² The toponym *Kućište* in its basic meaning is "the place where the house was." For more on this see: Stanko Andrić, "Imenica vas u staroj slavonskoj toponimiji" [The noun vas in old toponymy in Slavonia], *Croatica* XXXVII/57 (2013): 92.

⁶³ Andrić, "Benediktinski samostan," 64.

or *Klisa*⁶⁴ (alluding to the Turkish term for church) appear in this region, meaning the former church.⁶⁵ Evidence for this sacred structure can be found on the Josephine military map where on this point are drawn ruins marked as *Alte Kirche* (fig. 10).⁶⁶

The second parish in the area of the abbey estate is mentioned in 1501 as a capella sancti Petri de monte Wsathecz, which G. Szabo believes is the parish of Pogano-Szentpeter.⁶⁷ The parish priest Stephen is also mentioned in the document from 1501. According to Szabo's explanation it is the Magyarized version of Ušathegy that he recognizes in the hill Za-ušjak.⁶⁸ This settlement is today identified with the position of Crkvište,69 situated on the vast plateau between the Peter and Pogani hills, to the north of the remains of the monastery. This settlement is mentioned in five documents from the archive of the nearby Pauline Monastery of St. Ann of Dobra Kuća, in documents from 1469, 1483, 1498, and in two documents from 1509.70 In the Josephine military map near the same plateau is written the name Stari Glamochay, which would indicate the name of the settlement at the position Crkvište. The toponym Glamačine was introduced on topographic maps east of Crkvište. This settlement has not yet been mentioned in

Two more toponyms *Selište*⁷² are recorded near the hamlet of Gornji Borci, where a medieval site has recently been recorded⁷³ and west of the present Pakra Monastery. The same toponym was recorded in the Josephine military map east of the Grižina stream. In the position *Gradina/Hill-fort*, in the village Donji Borci, medieval structures have been observed.⁷⁴

Data from the Registry of royal revenues was used to try to reconstruct the estate. In the part for the Kingdom of Slavonia for 1494 the taxes of the royal fortress Bijela are stated, in which are included the estates of the local clergy ("Bona pertinentiarum castri Bela Regie Maiestatis unacum bonis plebanorum et altaristarum") in the amount of 223 florins.75 In the Kingdom of Slavonia the tax was half a florin per a smoke, i.e. household, in 1494, the possession of the fortress Bijela counted 446 households, i.e. tax units. According to A. Kubiny, the average number of persons per a smoke was 6.2.76 Thus, in 1494 the Bijela estate counted 2,765 inhabitants.

In the Kingdom of Slavonia's registry of royal revenues for 1495 His Royal Majesty's goods Bijela and Trnava (*Bona Regie Maiestatis Bela*, *Ternawa*) are mentioned as owing together 266.5 florins.⁷⁷ In the tax list for the same year Bijela is

⁶⁴ The toponym *Kilisa* or *Klisa* comes from the Turkish word for church, *kilisâ*, which is derived from the Latin word *ecclesia*.

⁶⁵ Željko Tomičić, "Suhopolje-Kliškovac: Od toponima do arheološke spoznaje" [Suhopolje-Kliškovac: From a toponym to archaeological comprehension], *Starohrvatska prosvjeta* III/36 (2009): 230–231.

⁶⁶ Ivana Horbec and Ivana Jukić, *Hrvatska na tajnim zemljovidima 18. i 19. stoljeća, sv. 6: Požeška županija* [Croatia on secret military maps of the 18th and 19th centuries. Vol. 6: Požega County], (Zagreb: Hrvatski institut za povijest, 2002), sekcija 13.

⁶⁷ Rački, "Popis župa," 206; Bösendorfer, *Crtice*, 264; Gjuro Szabo, "Prilozi za povijesnu topografiju požeške županije," *VHAD* 11 (1911): 46.

⁶⁸ Szabo, "Prilozi za povijesnu topografiju," 46.

⁶⁹ The toponym *Crkvište* appears in 4.3% of medieval sites in continental Croatia. For more on this see: Tajana Sekelj Ivančan, "Učestalost toponima kod srednjovjekovnih arheoloških nalazišta sjeverne Hrvatske" [An analysis of Toponyms at Medieval sites in Northern Croatia], *Prilozi Instituta za arheologiju* 9 (1992): 154.

⁷⁰ Dočkal, "Srednjovjekovna naselja," 142–143.

the published sources. The position *Kamenica*⁷¹ is another possible position of the medieval parish.

⁷¹ Recorded on the Croatian topographic map 1:5000.

⁷² The toponym *Selište* appears in 13.9% of medieval sites in northern Croatia. For more on this see: Sekelj Ivančan, "Učestalost toponima," 154. The toponym derives from the noun *selo*, village, with the suffix *–ište* or *–išće* added to the noun stem. It often occurs as a toponym meaning a place "where once a village was." Recorded on the Croatian topographic map 1:25000.

⁷³ Goran Jakovljević, "Nevjerojatno otkriće u šumariji Sirač" [Unbelievable discovery in the Sirač forestry office], *Hrvatske šume* (2012): 4–6.

⁷⁴ For this information I am thankful to the forester of the Sirač Forestry Dario Šimunić. The toponyom is recorded on the Croatian topographic map 1:25000.

⁷⁵ Adamček and Kampuš, *Popisi i obračuni*, 4.

⁷⁶ Stanko Andrić, "Podgorje Papuka i Krndije u srednjem vijeku: prilozi za lokalnu povijest (prvi dio)" [The surroundings of Papuk and Krndija in the Middle Ages: contributions to local history (part I)], *Scrinia slavonica* 8 (2008): 91.

⁷⁷ Adamček and Kampuš, *Popisi i obračuni*, 5.

described as a royal estate, which with the affiliations, free-born men, and praediales ("Bela domini regis cum partinenciis cum liberis et predialibus") had 362 smokes.78 Here are also mentioned 19 smaller possessory lots described as "ad Belam," kept by different owners and located in 15 different villages and hamlets. A smaller plot was located in a provincia castelli Opporowc. The biggest estates were found in Szentgyörgy with 20 smokes and Dragalin with 18 smokes. The priest estate in Bujanovci counted eight smokes. The names of other settlements inlcuded Vahtarjovci, Pesjedolci, Brdekovci, Luka, Jakupovci, Lešćanci, Palinovci, Bara, Doljan, Beketinci, Parušovci, and Ivanovci. With the royal estate the goods of Bijela counted in total 469 smokes, i.e. 2,907 inhabitants. The settlement at Szentgyörgy may be linked to the parish sancti Georgii de Putnich from 1334. J. Buturac locates it in present Čaglić in which in the 18th century was a church of St. George. In 1501, in the list of priests, the same parish is mentioned as sancti Georgii in Abbacia.79 In the name Doljan we recognize the present village Doljani, south of which is recorded the toponym Selište, at the Josephine military map as Staro selo/Old village. Dragalin may be connected to the parish sancti Thome de Dragalnia from the list of parishes in 1334, which J. Buturac locates in Jazavica, east of Novska.⁸⁰

In the list of 1513 goods of the abbey in Bijela are mentioned that count 272 smokes (1,686 inhabitants) from which are expected 163 florins and 20 denari of tax.⁸¹ The list of 1517 mentions that the abbot of Bijela is the owner of the Bujevac estate with 15 smokes, Dragalina with 19 smokes, Oporovac with 35 smokes, and Jelja with 30 smokes. The Bijela marketplace counted 12 smokes or 74 inhabitants, its province 80 (496 inhabitants), while the abbot held only one smoke. If summed up, the abbey in Bijela counted 191 smokes, i.e. 1,184 inhabitants. To this list may be added the *Grysnyak* estate held by Blaž Banić, which had two smokes.

Since 1500, the sources mention Oporovac Castle, which was for a long time the cause of disputes between the abbots of Bijela and Bans of Jajce. The exact location is unknown, but the supposed position is *Turska kula/Njanjavac* in the north-eastern part of the property where remains of the possible fortification are visible.⁸²

Mills

Mills represented an important and safe source of income for medieval monastic houses. The most common were the mills for wheat, which sometimes were built several kilometers from the parent house.⁸³ The management of water resources on the property was an important element of mills' exploitation. The importance of mills in the monastic economy is evident, for example, in 11th century the Benedictines in England possessed about 2,000 mills.⁸⁴

S. Andrić links the *Grysnyak* estate with the Brižnjak estate mentioned in 1507. In 1518, Abbot Peter had a dispute with John Kaštelanović about the estranged corn in the mill of the Abbot's *jobagion*. The mill was on the Brižnjak stream.⁸⁵ It is interesting that the mill is mentioned on the same stream (Grižina/*Grisna*), in the area of the village Sirač, in the Chamber list of Lesser Wallachia in 1702.⁸⁶

In the census and list of settlements in 1698 three mills are mentioned: one on the Pakra River and two on the small rivers Brzica and Stančevac.⁸⁷ In the census of 1702 four smaller mills on the Brzica stream are identified near the village Bijela.⁸⁸

⁷⁸ Adamček and Kampuš, *Popisi i obračuni*, 11; Andrić, "Benediktinski samostan," 68.

⁷⁹ Buturac, "Popis župa," 52.

⁸⁰ Ibid., 53.

⁸¹ Adamček and Kampuš, *Popisi i obračuni*, 73; Andrić, "Benediktinski samostan," 76.

⁸² Schejbal, *Medieval topography*, 60.

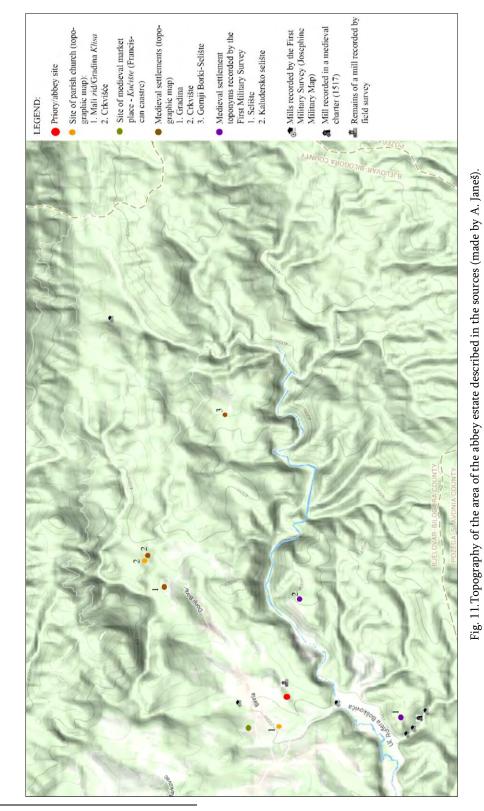
⁸³ Moorhouse, "Monastic estates," 52.

⁸⁴ Adam Lucas, "The Role of Monasteries in the Development of Medieval Milling," in *Wind and Water in the Middle Ages*, ed. Steven A. Walton (Tempe: Arizona Center for Medieval and Renaissance Studies, 2006), 94.

⁸⁵ Andrić, "Benediktinski samostan," 82.

⁸⁶ Tade Smičiklas, *Dvijestogodišnjica oslobodjenja Slavonije. Drugi dio: spomenici u Slavoniji u XVII. vijeku* [200th Anniversary of the libaration of Slavonia. Part II: 17th century monuments in Slavonia], (Zagreb: Djela JAZU, knjiga 11, 1891), 254.

⁸⁷ Ive Mažuran, *Popis naselja i stanovništva u Slavoniji 1698. godine* [Conscription of settlements and inhabitants in



Shaping a monastic landscape in medieval Slavonia

Slavonia in 1698] (Osijek: Zavod za znanstveni rad JAZU, 1988), 471.

⁸⁸ Smičiklas, *Dvijestogodišnjisca oslobodijenja*, 248.

In the Josephine military map seven mills were drawn, one on the Stančevac stream, another at the point where Stančevac joins Pakra/Bijela, four on the Grižina stream, and one faraway in the hills on the Mlinski stream.89 About a hundred meters east of the monastery, at the Brzica stream, the remains of a mill were identified by a field survey (fig. 9). Also identified were the remains of the channel by which the water was directed from the stream towards the mill. This mill was not recorded in sources or on maps, but archaeological research in England has shown that not all the mills on the estates were recorded in sources.⁹⁰ The concentration of mills in the 18th century is visible in the area of the former monastery estate. It is to be assumed that some of these mills have medieval roots. It is interesting that mills were not even mentioned in the tahrir defter of Pakrac Sandjak of 1565.91 Maybe it was due to the discontinuity in using mills, but the mentioning of mills in other *nahias* leads one to think that the mills in the area of the then property of the Bijela Abbey were not taxed (fig. 11).

Conclusion

According to the historical sources the establishment of the religious community in Bijela was more complex than in other monasteries in the region of Slavonia. The community of monks on the western slopes of Papuk was the westernmost Benedictine institution within the basin of the rivers Sava, Drava, and Danube. According to S. Andrić, a branch of the Abbey of St. Margaret in Grabovo was established for the management of large monastic possessions in the western Papuk.92 It should be emphasized, however, that in the first half of the 14th century Bijela was mentioned as a priory. The history of the Cluniac reform of the Benedictine Order shows that the religious houses founded by the reform movement bore the title of

⁸⁹ Horbec and Jukić, *Hrvatska na tajnim zemljovidima*, sekcija 13.

priory. Priories were directly subordinate to the abbey, either as donated to it or established by it.93 A priory was organized identically to any monastery, with the difference that it was not led by the abbot/prior elected by the members of the monastery.94 Benedictines reformed by the Cluniac reform came to Hungary at the end of the 11th century at the invitation of King Ladislaus from the Provencal reformed monastery St. Gilles du Gard.95 The Bijela Priory was surrounded by hereditary possessions of the nobles Tibold/ Svetački and they can with certainty be considered the first patrons of Bijela. Although the priory was first mentioned relatively late, based on the example of priories in Western Europe and the development of Benedictine monasteries in Hungary, it can be assumed that the Bijela Priory was established in the first half of the 13th century. Large in size and rich in natural resources, it was the property that helped raise the priory to the rank of abbey by the end of the 14th century. The great interest in it by the magnates of the kingdom shows that the Bijela Abbey was prosperous, and thus King Sigismund gave it to the administration of the Zagreb Bishop John Albeni. The bell-tower of the church, displaying stone architectural elements of the early 15th century, indicates the building of a new abbey church with the financial support of Bishop Albeni. Albeni's will, in which he leaves money for masonry works in Bijela, further supports this assertion. In 1390, the income of the property amounted to 300 florins, while in 1422 the income amounted to only 150 florins. In 1462, the common incomes of Bijela and the Abbey in Szek approached up to 3,000 florins. The royal patronage over the abbey at the end of the 15th century, providing income to finance the Banate of Jajce, and the lists of taxes showing population density all indicate that the abbey property was rich.

⁹⁰ Lucas, "The Role of Monasteries," 105–106.

⁹¹ Tahrir defter – list of tax incomes in the Ottoman empire. Selcuk Ural, "Pakrački sandžak u drugoj polovici 16. stoljeća" [The Pakrac sandjak in the second half of 16th century], *Scrinia slavonica* 11 (2011): 61.

⁹² Andrić, "Benediktinski samostan," 87.

⁹³ Marcel Pacaut, *Monaci e religiosi nel Medioevo* (Bologna: Societa editrice il Mulino, 1989), 115.

⁹⁴ Pacaut, *Monaci e religiosi*, 116.

⁹⁵ Željko Tomičić, "Novije arheološke spoznaje o Rudini" [New archaeological insights on Rudina], *Radovi zavoda za znanstveni i umjetnički rad* 2 (2013): 34.

Spatial Organization of Monastic Complexes

MONASTIC BUILDINGS: QUESTIONS OF PRACTICALITY AND PRESENTATION, FROM AN ANGLO-FRENCH PERSPECTIVE

ERIC FERNIE^{*}



Fig. 1. Norman Foster, Sainsbury Centre for Visual Arts, Norwich (Norfolk), 1974-78 (University of East Anglia).

Figure 1 may not look like the sort of image you would expect at the beginning of a paper on medieval monastic buildings, but I hope it will none the less illustrate the central element of what I want to say. The building is the Sainsbury Centre for Visual Arts at the University of East Anglia in Norwich, England, designed by Norman Foster in the 1970s. Foster's stated aim was to find out what users needed and to provide it for them. This was, in a word, rubbish: he designed what he wanted to and functions had to fit in as best they could. For example, there were only two sets of rooms in the art history department where windows were possible, namely the lavatories and the photographic darkrooms, the lecture theatre was open-plan and the rainwater control notorious. Yet thank goodness he did, as the result is, for many people, one of the most spectacular and visually exciting buildings of the twentieth century. I would prefer that any day to having all the electrical sockets in the right place, etc., etc., that is, the primacy of presentation over practicality in a building where money is available for the purpose.

My reason for mentioning the Sainsbury Centre is because I think this primacy is shared by many and even most structures of any pretension in all ages, including medieval churches and monastic buildings: buildings which make other patrons bright-eyed with admiration or green with envy. A comparison between the plans of the second and third churches at Cluny helps make the point (fig. 2a-b). The most obvious contrast is in the size. This appears to be open to a practical explanation, namely the increase in the number of monks, from about fifty in the late tenth century to about 300 in the early twelfth, similar to the increase in size. But while that might explain the floor area it says nothing about the height and the volume (fig. 2c). The cubic metres of space soaring above the heads of the monks are to do with the status of Cluny as one of the most powerful organisations in the Latin Church. The design of Cluny III therefore has a great deal in common with that of the Sainsbury Centre.

This then is the axis I want to use in thinking about monastic buildings, an axis between practicality and presentation.

Claustral buildings

It is almost inevitable that a discussion of claustral buildings should begin with the St. Gall Plan, as, given its date in the first half of the ninth century, it is the earliest instance of the claustral layout which was to become the norm (fig. 3a). The source of the Plan is a puzzle, and by source I mean, not all those elements ranging from Lorsch to Syria and beyond, but rather the model of the object itself, the sheet and how its contents are arranged. This consists of a central square dominated by the church and cloister, and two long flanking rectangles. Horn refers to the Roman castrum, such as that at Passau of around 100 AD (fig. 3b).¹

gratitude to John McNeill for his help with many aspects of the paper, to Béla Zsolt Szakacs for his advice on the history of Hungarian architecture, in this context and in others, to Jackie Hall for providing the image of Fountains Abbey and permission to use it, and to Roland Harris for the dimensions of the refectory at Norwich Cathedral. I have been unable to trace the origin of the Wartburg illustration in figure 16.

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¹ Walter Horn and Ernest Born, *The Plan of St. Gall*, vol. I (Berkeley: University of California Press, 1979), 114–117. On claustral buildings see also Wolfgang Braunfels, *Monasteries of Western Europe: The Architecture of the Orders* (London: Thames and Hudson, 1972). I would like to record my

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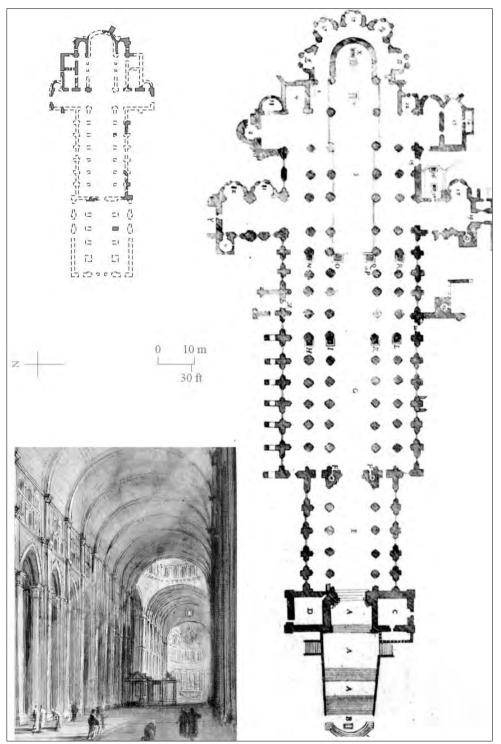
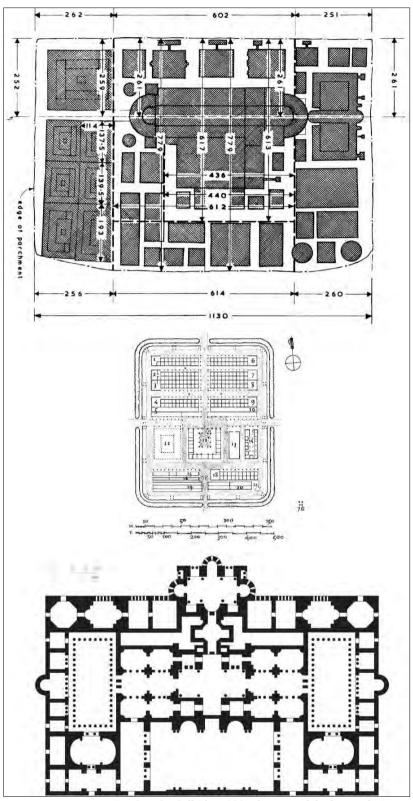


Fig. 2. a. Cluny (Saône-et-Loire), second church, c. 955-980: plan; b. Cluny, third church, 1088-c. 1120: plan (Giffart, 1713); c. Cluny, third church: nave (Lallemand, 1773-80).



Monastic buildings: Questions of practicality and presentation

Fig. 3. a. St. Gall Plan, 820s: diagram of the layout; b. Passau (Lower Bavaria), Roman castrum, 100 AD: plan (Schönberger, 1962, in Horn and Born, vol. 1, fig. 71B); c. Rome, Baths of Diocletian, c. 298-306: plan.

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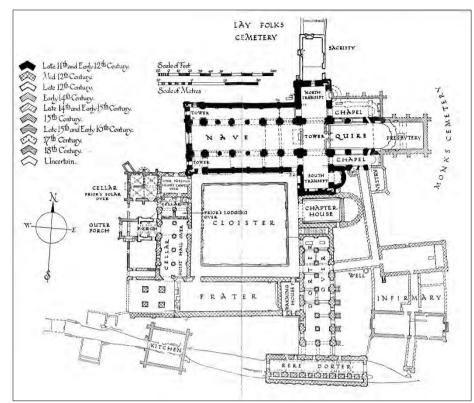


Fig. 4. Castle Acre (Norfolk), monastery, c. 1100: plan (Ministry of Public Building and Works, 1952).

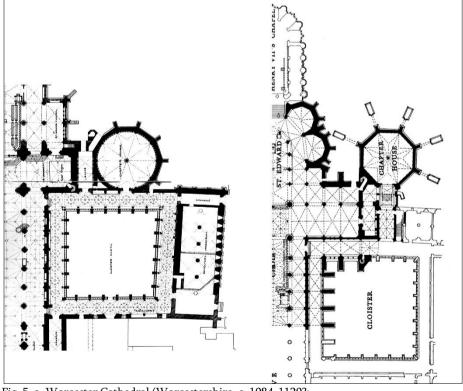


Fig. 5. a. Worcester Cathedral (Worcestershire, c. 1084-1120?: plan (Harold Brakspear, 1892); b. London, Westminster Abbey, as rebuilt from 1245: plan (RCHME, 1924).

He notes the disadvantage of the two roads meeting at the centre, which are perfect in practical terms for an army camp, but the antithesis of what a monastery needs. Despite that he thinks this is the best model available. I would like to suggest that the Baths of Diocletian offer a better parallel (fig. 3c). They have the same central block, which contains the great hall of the frigidarium in a similar position to the church, and the central area is flanked by two long rectangular sections. The over-riding reason for making such a choice is likely to be the ideal of *romanitas*, and on a more monumental level than would be the case with a castrum.

Moving on to the individual buildings, I shall begin with the chapter house and proceed clockwise round the cloister.

Chapter house

It is very odd, at least looked at anachronistically, that the St. Gall Plan uses the north walk of the cloister for chapter meetings and does not have a building dedicated to the purpose, given the degree to which it became a standard feature. It is true that monasteries held meetings in cloister walks throughout the Middle Ages, where there was normally a chapter house available, but what makes its absence from the Plan really odd is the status which the chapter house acquired, a status equivalent to that of the main sanctuary in the church. The links between chapter house and sanctuary can on occasion be physically explicit, as at the early twelfth-century priory at Castle Acre (fig. 4), where the chapter house is virtually identical in size and shape to that of the eastern arm of the church. Equally obvious as an expression of the status of the chapter house is the attention paid to the façade, as with the magnificent ensemble of around 1170 which once existed at La Daurade in Toulouse. One question these façades raise is the reason for their openness. This has been explained as a means of allowing

novices and servants to hear what is going on when they are summoned to attend but cannot enter the room. Heidrun Stein-Kecks, however, notes that such people were often not allowed even into the east walk, and suggests two other reasons for the openings, namely to increase the light levels in the building, and to dignify the entrance.²

There is one form of chapter house which is a particularly English variant, namely the circular or polygonal type, as exemplified by Worcester Cathedral, possibly the first, in building from 1084, with others following such as that of the thirteenth century at Westminster Abbey (fig. 5a-b).³ Before discussing explanations for the type I would like to make two related but parenthetical comments about England. The first is that the chapter house at Worcester Cathedral is not for canons, it is for monks, as Worcester is an example of that peculiarly English institution the monastic cathedral, a bizarre combination. The second concerns the character of English buildings after the Norman conquest, buildings such as Worcester Cathedral. They are certainly English because they are located in England, but they are not, except in some details, culturally English, they are French: in the depiction of the battle of Hastings on the Bayeux Tapestry the Normans are identified, not as Normanni, but as Franci. After 1066, for at least the next 100 years, England was in many respects, and certainly in its architecture, a French country.

Whatever the reason for the adoption of the circular and polygonal forms, it must have been powerful to succeed in the face of the other formula, the one paralleling the chapter house with the sanctuary of the church. Was it because the shape was good for meetings? Categorically not. Chapter meetings were not debates: as Neil Stratford puts it, they were as formal as the choral liturgy.⁴ A better parallel is offered by tombs, because chapter houses were places of burial.⁵ Churches of the Virgin may also be relevant as

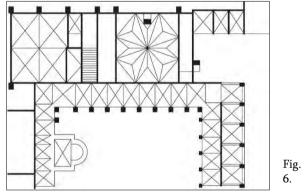
Heidrun Stein-Kecks, Der Kapitelsaal in der mittelalterlichen Klosterbaukunst: Studien *z11* den Bildprogrammen (Munich and Berlin: Deutsche Kunstverlag, 2004), 75-76 ('... während des Kapiteloffiziums die Kloster pforten verschlossen wurden und niemand den Ostflügel betreten durfte'), and 82-83 (on the provision of light); John McNeill, "The Continental Context," JBAA 159 (2006) (volume entitled The Medieval Cloister in England and Wales), 1-47.

³ William Stephen Gardner, "The Role of Central Planning in English Romanesque Chapter House Design" (PhD diss., Princeton University, 1976); Neil Stratford, "Notes on the Norman chapterhouse at Worcester," in *Medieval Art and Architecture at Worcester Cathedral*, British Archaeological Association Conference Transactions ed. Glenys Popper (Leeds: W. S. Maney and Son, 1978), 51–70. ⁴ Stratford, "Norman chapterhouse," 54.

⁵ Gardner, "Central Planning," 188–197.

they were often circular, and the Virgin was very popular in England in the early twelfth century, as manifested in, for example, the destroyed cycle of wall paintings in the Worcester chapter house, and one might also note the prominent representation of the Virgin on chapter house entrances, as at La Daurade.⁶

I would not question the relevance of either of these considerations, but I would like to press in addition the cause of presentation, of visual impact, and to do so via an interesting misreading. Many scholars in Britain say that there are no centralised chapter houses on the continent. They appear to be correct in terms of circular and polygonal forms, but they are wrong to claim this, because there are dozens if not hundreds of centralised chapter houses, square ones, that is. I must be clear: I am not accusing my colleagues of ignorance; far from it, as many of them know the continental material a great deal better than I do. It is rather to do with the different character of the form: squares fit in, they are amenable, sociable, whereas circles and polygons do not: they demand



Eberbach (Baden-Württemberg), monastery, c. 1150-86: plan (after Braunfels, 1972, fig. 63).

their own space and are, at least in the case of the polygons, all elbows.⁷ And that I think is the main reason for the adoption of these two forms – forms which bear no relationship to the sanctuary of the church, but which rather stand out in their own right.

Square chapter houses are especially common in Cistercian houses, as at Clairvaux and Eberbach, and at Eberbach the vault ribs even form an octagon, though that may be more evident in plan than in reality (fig. 6).⁸ An instance also appears in Villard de Honnecourt's sketchbook or portfolio (folio 41) (fig. 7). The interpretation of what Villard says about the drawing is controversial:

1) Villard: "Par chu met om on capitel d'uit colonbes a one sole"

2) Hahnloser: "Auf diese weise fasst man einen Kapitelsaal von acht Saülen auf einer einzigen zusammen"

3) Wilson: "By this means one sets a chapter house of eight columns on to only one"

4) Barnes: "By this means one puts a capital from eight columns into one alone."9

The chief point of disagreement is the meaning of the word *capitel*, which Hahnloser translates as 'chapter house' and Barnes as 'capital'. Both meanings are possible in medieval French, but I think the context favours the reading proposed by Hahnloser and Wilson. It is not clear how eight columns can have one capital, as follows from Barnes's 'one puts a capital from eight columns...', whereas changing the design of a chapter house from one with eight columns to one with one makes sense. I therefore think that Wilson's English translation is more accurate than Barnes's.

Transactions 30, eds. Ute Engel and Alexandra Gajewski (Leeds: W. S. Maney and Son, 2007), 33–52.

⁹ Hans Hahnloser, *Villard de Honnecourt: Kritische Gesamtausgabe* (Graz: Akademische Druck- und Verlagsanstalt, 1972), 122-123; Christopher Wilson, "The stellar vaults of Glasgow Cathedral's inner crypt and Villard de Honnecourt's chapter-house plan: a conundrum revisited," in *Medieval Art and Architecture in the Diocese of Glasgow*, British Archaeological Association Conference Transactions 23, ed. Richard Fawcett (Leeds: W. S. Maney and Son, 1998), 55–76; Carl F. Barnes, Jr., *The Portfolio of Villard de Honnecourt* (Farnham and Burlington: Ashgate, 2009), 146–147.

⁶ Gardner, "Central Planning," 203–221.

⁷ I should not say that there were *no* examples on the continent, because there is always the possibility of exceptions, such as the chapter house of the late fifteenth century at Budaszentlőrinc (Dora Wiebenson and József Sisa, eds., *The Architecture of Historic Hungary* (Cambridge Mass. and London: MIT Press, 1998), 55–56.

⁸ Alexandra Gajewski, "The abbey church of Eberbach and the idea of a 'Bernardine' Cistercian architecture," in *Mainz and the Middle Rhine Valley: Medieval Art, Architecture and Archaeology*, British Archaeological Association Conference

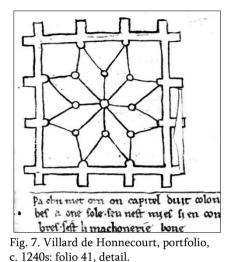




Fig. 8. Fountains (Yorkshire), monastery, after 1147: chapter house façade and entrance to parlour (Jackie Hall).

Parlour

The ornate character of chapter house entrances contrasts with the normally plainer forms of other openings in the east wall, those to the passage or slype through the east range, to the bookroom, and to the day stairs, where a lack of decoration might be expected. A fourth entrance, however, that to the parlour, can be very richly decorated indeed. At Fountains, for example, the arch to the parlour may be smaller than the chapter house arches, which is fitting as the room is smaller, but the form of the arch mouldings is in no way less rich (fig. 8).¹⁰ The reason for this must be to do with the prior, as he controlled entry to the parlour and it was where he worked, and the position of the prior could be a delicate if not tendentious one, as chapter 65 of the Rule makes clear:

'It often happens that by the appointment of a Provost [*Praepositi*], great scandals arise in Monasteries; because some, so appointed, being puffed up with the malignant spirit of pride, and esteeming themselves to be second Abbots, take upon themselves to tyrannize over others, to foster scandals, and to promote dissensions in the Community; and especially in those places where

¹⁰ Jackie Hall, "Architecture and meaning in Cistercian eastern ranges," *JBAA* 159 (2006): 208–21. There is a highly decorated room of the thirteenth century at Saint-Jean-des-Vignes in Soissons, which, though it is off the south walk, has been proposed as a parlour. Sheila Bonde and Clark Maines, "Elite spaces in monasteries of the reform movement and an abbot's parlour at Augustinian Saint-Jean-des-Vignes, Soissons the Provost is instituted by the same Bishops and Abbots as the Abbot himself. How foolish this custom is, may easily be perceived; for a handle for pride is given to the Provost from the very beginning of his appointment, because his thoughts suggest to him that he is now released from the power of his Abbot, since he is instituted by the very persons by whom the Abbot himself is instituted.^{'11}

And that is at the *start* of the chapter, the first thing mentioned. In administrative terms he is the most powerful person in the monastery, so the decoration at places such as Fountains and Saint-Jean-des-Vignes could be either a gesture on the part of the abbot to the sensibilities of the prior, or a statement of the prior's view of his own importance.

Dormitory

The dormitory forms a neat contrast to the chapter house, as it is one of the most straightforwardly functional buildings on the claustral square, its two main functions being keeping the rain out and providing enough space for the beds, so that 'If it be possible, let them all sleep in one place', as advised by chapter 22 of the *Rule.*¹² Despite this, there are of course many

(France)," in *Religion and Belief in Medieval Europe*, Conference Transactions 4 (Bruges: Zellik, 1997), 43–53.

¹¹ *The Rule of Our Most Holy Father, St. Benedict, Patriarch of Monks*, ed. and trans. anon. (London: Washbourne), 1875, 273–275 (ch. 65).

¹² Rule, 1875, 119 (ch. 22).

dormitories with decoration, as at Mont-Saint-Michel and Le Thoronet. It conventionally stands on an undercroft, usually with a row of columns on the centre line supporting two rows of vaults.

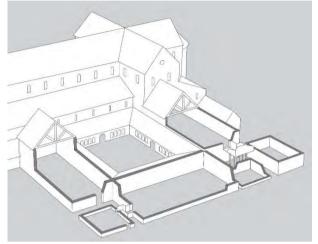


Fig. 9. St. Gall Plan, isometric reconstruction (after Horn and Born, 1979, vol. 1, fig. 192).

Reredorter

The reredorter is even more exclusively practical in its function than the dormitory. The block on the St. Gall Plan has nine units for seventy-seven monks, a number which might reduce the likelihood of queuing. Yet it is not long before the provision expands, since at Cluny II, according to the Farfa Consuetudinary, the latrine block measured 70 feet or approximately 23 metres, half the length of the church.¹³ And as for Canterbury Cathedral, the *necessarium* is huge, 52.4 m long and very prominent, with fifty-three privies for the 137 monks.¹⁴ Even that is not the largest, as St. Augustine's, also in Canterbury, is the record holder, or at least the longest I know of, at 58.5 metres. What is the function of such large numbers of privies and the resulting overall size? Although it draws attention to the structure that cannot be its purpose, as the euphemisms such as necessarium and third dormitory make clear. Where the rule mentions the *necessarium* it is to

be used at will (chapter 8: 'after a short interval during which they may go forth (*exeant*) for the necessities of nature'), but Angilbert at Saint-Riquier already in the late eighth century ordered that, after a particular point in the services, 'the third part of each choir should go out of the church and fulfil their corporeal necessities.'¹⁵ That therefore seems to be the best explanation for these giants, to permit groups of monks to go at the same time, introducing a ritual element into even these proceedings.

Refectory

A monastic dining hall is a practical open space, but, unlike the dormitory, one which also has a need for magnificence, because of its association with the Last Supper and the readings which accompanied the meals. The refectory on the St. Gall Plan is imposing in length and breadth, filling the whole south side of the cloister (fig. 3). Despite this, Horn reconstructs it as being no taller than the undercroft beneath the dormitory in the east range (fig. 9).¹⁶ I think this is very unlikely, given the traditions of dining halls that the users and designers would have known, in the form of the northern timber halls of the period. In the great majority of cases the central vessels of wooden halls of the prehistoric era and the first millennium AD were taller than they were broad, with a representative ratio of breadth to height of c.10:13, excluding the roof space (fig. 10a), whereas the refectory as reconstructed by Horn is twice as broad as it is tall, at 10:5 (fig.10b). In addition, while the St. Gall refectory must have had a flat ceiling, the roofs of most halls were open to the ridge beam, adding considerably to the sense of height and hence its expectation.¹⁷ I think therefore that the St. Gall refectory would have been intended to be a space in which the height at least approached the size of the width, like later monastic examples, such as that of Norwich Cathedral of c. 1100 (figs. 10c, 11).

¹³ Charles McClendon, *The Imperial Abbey of Farfa: Architectural Currents of the early Middle Ages* (New Haven and London: Yale University Press, 1987), 3–5; 100–102.

¹⁴ The *necessarium* features prominently in the drawing of c. 1160 of the waterworks at Canterbury Cathedral; see Peter Fergusson, *Canterbury Cathedral Priory in the Age of Becket* (New Haven and London: Yale University Press, 2011), ch. 3.

 ¹⁵ *Rule*, 1875, 77 (ch. 8); Horn and Born, *St. Gall*, vol. I, 262.
 ¹⁶ Horn and Born, *St. Gall*, vol. I, 263–271.

^о попі ана Богіі, *St. Gali*, vol. 1, 205–271.

¹⁷ Horn and Born, *St. Gall*, vol. II, 23–75. The lack of a ceiling in such halls is surmised from the absence of signs of ceilings in the excavated remains, and because of the need to allow smoke to escape through louvers near the ridge.

The evidence of the vestry also supports a taller and more imposing space for the refectory. In Horn's reconstruction, with the refectory as an undercroft, the space above would have been a imposing room. This reverses large, the importance of the two spaces. The titulus in the east range says subtus calefactoria dom' supra dormitorium, warming room below, dormitory above. That is, the more important room is represented on the Plan and the less important one is only referred to. The titulus in the south range says Infra refectorium supra vestiarium and the Plan shows the refectory, making the vestry the subsidiary space. This assessment of the subsidiary status of the vestry is given further support by the inclusion of a vestry above the sacristy flanking the sanctuary of the church. As that one would obviously be the repository for the liturgical garments in use, the vestry over the refectory would probably have been more like a store-room, for garments of more categories than the liturgical.¹⁸ It would therefore have been appropriately housed in a low space, or even in the loft.

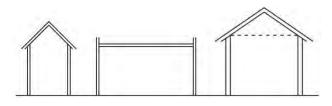


Fig. 10. a. Representative cross-section of timber halls, first millennium BC to 11th century AD; b. Cross-section of Horn's reconstruction of the refectory on the St. Gall Plan, as in fig. 9 above; c. Cross section of the refectory of Norwich Cathedral priory, c. 1100.



Fig. 11. Norwich Cathedral, 1096-c. 1140: north wall of the refectory (University of East Anglia).

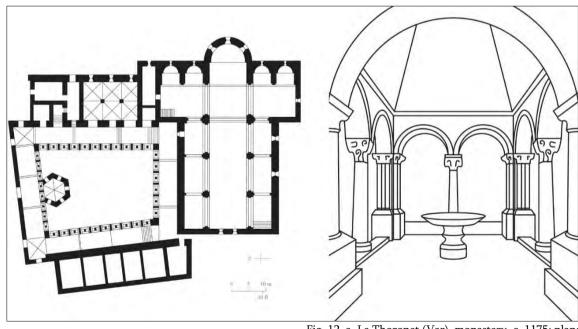


Fig. 12. a. Le Thoronet (Var), monastery, c. 1175: plan; b. Fossanova (Lazio), monastery 13th century: lavatorium (after Braunfels, *Monasteries*, fig. 108).

¹⁸ Horn and Born, *St. Gall*, vol. I, 281-84; tituli: vol. III, 37 and 39.

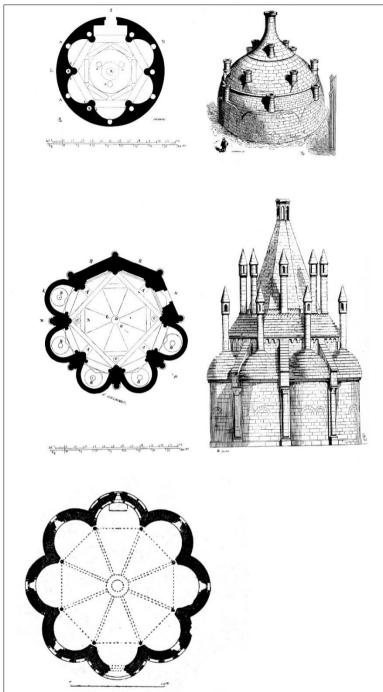


Fig. 13. a. Marmoutier (Indre-et-Loire), monastery, c. 1150, kitchen: plan and view (Violet-le-Duc, 1858 in Horn and Born, vol. 1, fig. 222); b. Fontevraud (Maine-et-Loire), monastery, c. 1150, kitchen: plan and view (Violet-le-Duc, 1858 in Horn and Born, vol. 1, fig. 223); c. Saint-Michel-d'Entraigues (Charente), church, 1137: plan (Lasteyrie, 1929, fig. 279).

Lavatorium

Most instances of lavatoria are basically practical, being troughs let into the wall near the entrance to the refectory, but in other cases they are made into a separate building, such as that at Le Thoronet, which, though plain, takes the form of a hexagon, an unusual enough shape to make it stand out (fig. 12a).¹⁹ The thirteenth-century structure at Fossanova is something else (fig. 12b). If I were an architectural historian or an anthropologist from another solar system, who knew something about human culture, I swear it would not occur to me that this was a building in a monastery. It feels, rather, like the sort of place where celebrities in a high-end restaurant might enjoy their aperitifs before being shown to their table. Washing is fundamental to ideas of morality, a point made in chapter 49 of the Rule, which mentions that during Lent monks washed away shortcomings, and this building is an indication of how far presentation can go in the service of moral ideals.

Kitchen

The standard monastic kitchen appears to be a straightforwardly practical building, as on the St. Gall Plan and at Castle Acre (fig. 4). They are however sometimes more complex in form, as in the structure of around 1150 at Marmoutier in the Loire valley, which is circular with a series of lobe-like spaces on the interior (fig. 13a). Here the lobes make sense in providing stations different processes, for but at Fontevraud they are also expressed on

the exterior, producing an extraordinary piece of presentational architecture (fig. 13b), especially as the centralised plan and lobes are reminiscent of a centralised church such as Saint-Michel-Entraigues, 1137 (fig. 13c).

¹⁹ It has to be acknowledged that some of the troughs, such as that of c. 1370 at Gloucester Cathedral, are little short of magnificent (Braunfels, *Monasteries*, fig. 122).



Monastic buildings: Questions of practicality and presentation

Fig. 14. Saint-Riquier (Somme), monastery: engraving of 1612.

In the case of refectories underlining their status is appropriate, given the symbolically important function of the space, but similar treatment of a kitchen is a mystery. A line in chapter 31 of the *Rule* looks as if it might offer a justification, as it says that the cellarer should 'look upon all the vessels and goods of the Monastery as if they were the sacred vessels of the Altar'.²⁰ This fits with monks wanting to make the whole monastery a sacred place, but that inference would be wrong, as the context indicates: 'Let there be chosen out of the Community as Cellarer of the Monastery a man who is wise, ripe in manners, sober; not a great eater, not haughty, nor hasty, nor insulting; not slow, nor wasteful, but fearing God and acting as a father to the whole Brotherhood. Let him look upon all the vessels and goods of the Monastery as if they were the sacred vessels of the Altar. Let him neglect nothing.²¹ This is not calling for the kitchen implements to be treated as sacred, it is just saying that the cellarer must pay attention. Further, in chapter 32, 'Of the iron tools, or goods of the monastery', there is nothing about them being sacred.²² How one should put it: Benedict was not Durandus?

West range

The west range was initially the cellarer's range, for storage, as on the St. Gall Plan, but it later became, or was combined with, a lay brothers' range, both purposes being straightforward. Use as a guest range can however make more complex demands.

Cloister

The function of a cloister is clear, namely to provide covered walks between the buildings forming the claustral square, but large numbers are made into something as beautiful as the church or the chapter house, replete with capitals and reliefs, as at Moissac. The explanation for this appears to be iconographic extrapolation over the years, in two ways in particular. The first is the identification, reported by Honorius Augustodunensis, of the cloister with the portico of Solomon, adopted because, as recorded in Acts chapter 4, it was at the entrance to the Temple that the apostles agreed to live the vita communis.²³ The second is from a bull of Honorius III of 1225, in which he parallels the four ranges with the four cardinal virtues, as follows. He identifies the east range with justice (appropriate given the punishment meted out in the chapter house), the south (or north) range with moderation (I think he might have allowed himself a footnote here, saying that the moderation applied to the food and not to the building in which it was consumed), the west range with fortitude (facing the temptations of the world), and the north (or south), namely the church, with wisdom.24

The Saint-Riquier engraving is worth examining in the context of the cloister (fig. 14). This object is little short of miraculous – a work of 1612 copying a drawing of the late eleventh century, yet which, according to the excavated evidence, somehow represents the buildings as they were in the late eighth century. The enclosure has been called a cloister and its odd shape explained as due to it preceding the codification into the square form exemplified by the St. Gall Plan.²⁵ Alternatively, it could have that shape because it is not a cloister. I agree with the second

²⁰ Rule, 1875, 145 (ch. 31).

²¹ *Rule*, 1875, 143–145 (ch. 31). Unlike the 1875 edition's 'not a great eater' for the words *non multum edax* (literally 'not very gluttonous'), a translation of 2014 has 'frugal', which is inaccurate and which obscures Benedict's down-to-earth good sense (*The Holy Rule of St. Benedict: Regula Sanctissimi Patris Benedicti, in English and Latin* (no place) (Veritatis Splendor Publications, 2014), ch. 31, 65).

²² *Rule*, 1875, 148–149 (ch. 32).

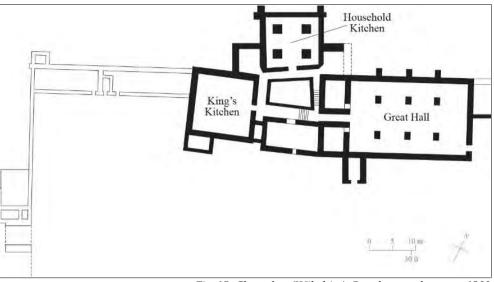
²³ Braunfels, *Monasteries*, 65; Wayne Dynes, "The Medieval cloister as Portico of Solomon," *Gesta* 12 (1973): 61–69; McNeill, 'continental context'.

²⁴ Ernő Marosi, "Benedictine building activity in the 13th century," in *Paradisum plantavit. Bencés monostorok a középkori Magyarországon. Benedictine Monasteries in*

Medieval Hungary. Exhibition at the Benedictine Archabbey of Pannonhalma 21 March – 11 November 2001, ed. Imre Takács (Pannonhalma: Pannonhalmi Bencés Főapátság, 2001), 651– 658.

²⁵ Wilhelm Effmann, *Centula: St. Riquier* (Münster: Aschendorff, 1912), 89, fig. 13: the caption reads 'Lageplan der Kirchen mit dem Kreuzgange', and the space on plan is labelled 'claustrum'; Braunfels, *Monasteries*, 32–33, calls the arrangement at Saint-Riquier a cloister, though the captions to figures 23 and 24 refer to it as a processional path; Horn and Born, *St. Gall*, vol. I, 250, 'Angilbert's church and cloister'; David Parsons, "The pre-Romanesque church of St-Riquier: The documentary evidence," *JBAA* 130 (1977): 21–51, 41, refers to 'the claustral area'.

proposal, for four reasons. First, the columns stand on the ground, not on a stylobate or low wall, so the walk is not clearly defined and resembles that of an atrium. Second, the walks do not back onto buildings, again as with an atrium rather than a cloister. Third, the site is the wrong size: it is huge, 250 metres northsouth, as opposed to



the 100 feet or c. 30 metres of the cloister on the St. Gall Plan. And finally (in my view the strongest point of all), it contains the wrong kinds of people, such as a couple of farm labourers with implements over their shoulders wandering across what would be the garth. Its purpose was rather to provide covered walkways between three separate churches.

Summing up function and design in claustral buildings

The building most defined by practicality is the reredorter, most examples of which have little if any decoration, and where imposing size is the result of a social policy. The dormitory is also a practical space, but as its purpose is more socially acceptable than that of the reredorter it warrants some decoration. Cellars are as practical a space as one can get, and simple kitchens and lavatoria belong similarly at the practical end of the axis. The buildings at the presentational end include the refectory, the fancy lavatoria and kitchens, the parlour, the cloister, and the chapter house.

Secular equivalents

Finally, since many of the claustral buildings provide for everyday needs, one might expect them to parallel secular buildings meeting the same purposes. The refectory, kitchen, cloister and parlour are the most straightforwardly secular building types.

Fig. 15. Clarendon (Wiltshire), Royal manor house, c. 1200, kitchen: plan.

Dining halls in castles and manor houses are very like refectories, except for the occasional built-in pulpit in the latter. The ordinary type of monastic kitchen can be indistinguishable from its secular equivalent (figs. 4, 15), while cloisters are common in palaces.²⁶

The part of the late twelfth-century magnate's residence on the Wartburg near Eisenach illustrated in figure 16, is a passage rather than the walk of a cloister, but it is difficult to see how it differs from one, in its elements, its function and the way in which it is presented. The parlour is simply a room for meeting and working in, and hence is like its secular equivalents except in sometimes having an especially lavish entrance. The reredorter has secular equivalents, but they are on such a restricted scale that the monastic examples warrant their own classification.

The buildings without secular equivalents are the chapter house, which has nothing in common with municipal meeting rooms and is more akin to a chapel, the dormitory, which contrasts with the secular world of private chambers and otherwise opportunistic arrangements, and the lavatorium, which is not, as far as I know, found in association with secular dining halls.

²⁶ Jeremy Ashbee, "Cloisters in English Palaces in the twelfth and thirteenth centuries," *JBAA* 159 (2006): 71–90.

Conclusion

To conclude, while the buildings discussed in this paper are for the most part distant from the main interests of the conference, I hope none the less that they might prove useful in providing types for comparison, for indicating variety of usage, and for assessing how monastic buildings in the Latin Church were (and are) seen and understood.

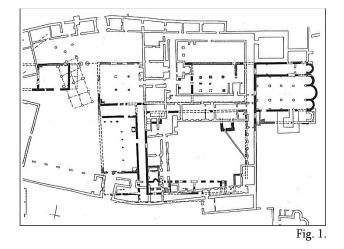


Fig. 16. Wartburg, near Eisenach (Thuringia), landgrave's dwelling, late 12th century: walkway.

THE EARLY PHASE OF CLOISTER ARCHITECTURE IN EAST CENTRAL EUROPE

BÉLA ZSOLT SZAKÁCS*

The cloister is probably the most emblematic part of a medieval monastery. Despite this constant role, recent research has revealed that the existence of a cloister is not self-evident, but should be understood within the given historical frameworks. Research related to this problem seems to emerge in waves: the first period was the ground-braking inspired by cloister symposium of the Metropolitan Museum of Art in 1972,¹ followed by the conference in Cuxa in 1975.² Another period was around the year 2000, starting with the Tübingen conference of 1999³ and continuing with the conference of the British Archaeological Association of 2004.⁴ In the meantime, the problem of the Benedictine cloisters in Hungary was discussed by Ernő Marosi in the exhibition catalogue Paradisum plantavit in 20015 (following the observations of Imre Takács in 1994⁶) and an overview on the Cistercian cloisters was compiled by Róbert Szerencsés, a student of the Pázmány Péter Catholic University in 2005.7 The early monastic architecture of the Czech Kingdom was investigated extensively by Petr Sommer during the last years;8 however, a systematic overview of the East Central European material is still missing.



The origin of the architectural idea of the cloister is much debated in the above mentioned literature, however, for our purpose it is enough to state that it emerges in its fully developed form as early as the Sankt Gallen Plan around 820.⁹ Werner Jacobsen enumerated a number of German monasteries which may had a cloister from the Carolingian period; among others, the abbeys of Lorsch, Müstair (fig. 1), Reichenau-Mittelzell, and Herrenchiemsee can be mentioned, noting that the archaeological situation is complex in each case.¹⁰ Following the overview of John McNeill, the earliest surviving cloisters date from the 11th century (such as the Simeonstift in Trier, the monastery of Saint-Guilhem-le-Désert, and the

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¹ The proceedings were published in *Gesta* 12 (1973).

² Les Cahiers de Saint-Michel de Cuxa 7 (1976).

³ Peter K. Klein, ed., *Der mittelalterliche Kreuzgang. Architektur, Funktion und Programm* (Regensburg: Schnell & Steiner, 2004).

⁴ John McNeill and Martin Henig, eds., *The Medieval Cloister in England and Wales* [Special issue *JBAA* 159, no. 1] (2006).

⁵ Ernő Marosi, "Benedictine Building Activity in the Thirteenth Century," in *Paradisum plantavit. Benećes monostorok a középkori Magyarországon. Benedictine Monasteries in Medieval Hungary*, ed. Imre Takács (Pannonhalma: Pannonhalmi Bencés Főapátság, 2001), 651-658.

⁶ Imre Takács, "Werkstätten der Gotik im 13. und 14. Jahrhundert," in *Pannonia Regia. Művészet a Dunántúlon* 1000-1541. Kunst und Architektur in Pannonien 1000-1541,

eds. Árpád Mikó and Imre Takács (Budapest: Magyar Nemzeti Galéria, 1994), 548-549.

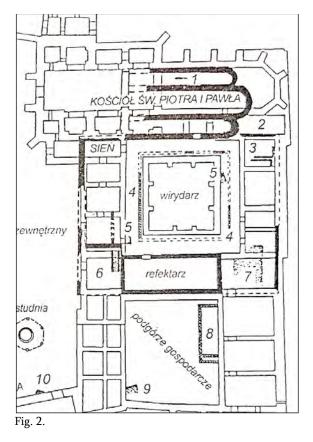
⁷ Róbert Szerencsés, "A Ciszterci Rend kerengőépítkezései az első alapítások idejéből" [Cloisters of the Cistercien Order in Hungary from the time of the foundation period], in *A Ciszterci Rend Magyarországon és Közép-Európában* [The Cistercian Order in Central Europe], ed. Barnabás Guitman (Piliscsaba: Pázmány Péter Katolikus Egyetem Bölcsészettudományi Kar, 2009), 162-171.

⁸ E.g. Petr Sommer, "Die gegenwartige tschechische kirchliche Archäologie," in *Kirchenarchäologie heute*, ed. Niklot Krohn (Darmstadt: Wissenschaftliche Buchgesellschaft, 2010), 544-560.

⁹ Walter Horn, "On the Origins of the Medieval Cloister," *Gesta* 12 (1973): 13; Werner Jacobsen, *Der Klosterplan von St. Gallen und die karolingische Architektur* (Berlin: Deutscher Verlag für Kunstwissenschaft, 1991).

¹⁰ Werner Jacobsen, "Die Anfänge des Abendländischen Kreuzgangs," in Klein, *Der mittelalterliche Kreuzgang*, 37-56.

north walk of Saint-Philibert at Tournus).¹¹ Sources testify that Abbot Odilo replaced a wooden cloister at Cluny with one in stone before 1049. By the 12th century cloisters were built everywhere in Western Europe. However, the situation seems to differ in East Central Europe.



Among the earliest Polish monasteries the best preserved can be found in Tyniec (fig. 2) near to Cracow. The church is usually dated to the second half or last quarter of the 11th century. Excavations also revealed elements of an early monastery: there were wings on the west, south, and most probably on the east of a central

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courtyard, which is the present-day cloister. This is dated nowadays to the early 12th century and a group of stone carvings, consisting of twin capitals, columns, and bases are connected to this part of the building. This would suggest an early dating for the cloister. However, the capitals themselves are not necessarily so early (they might be dated even later than the middle of the 12th century) and they can be connected to other parts of the building (windows, galleries) with equal probability. Recent archaeological research revealed that between the refectory and the church wooden structures were erected. The east and west wings were built after the middle of the 13th century.¹²

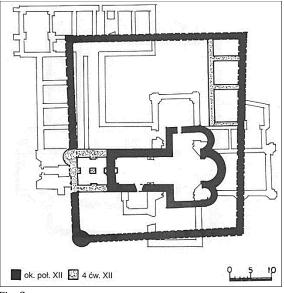


Fig. 3.

Other Benedictine monasteries in Poland do not support an early dating, either. At Mogilno, probably founded in the mid-11th century, the monastery was rebuilt in the first half of the 13th century, replacing the wooden monastic buildings with brick construction.¹³ At Lubiń (fig. 3) the

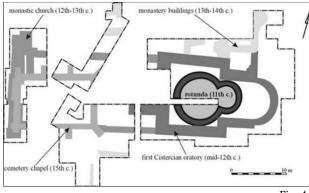
Poland (Leiden and Boston: Brill, 2008), 357; Monika Kamińska, "Aktualny stan badań i nowe koncepcje interpretacyjne romańskiego Tyńca" [Current state of research and new concepts of interpretation of the Romanesque Tyniec], in *Kraków romanski* [The Romanesque Cracow], ed. Marta Bochenek (Kraków: Towarzystwo Miłosników Historii i Zabytków Krakowa, 2014), 137-168.

¹³ Jadwiga Chudziakowa, *Romański kościól benedyktynów w Mogilnie* [The Romanesque church of the Benedictines in Mogilno] (Warszawa: Ośrodek Dokumentacji Zabytków, 1984); Buko, *Archaeology*, 362.

¹¹ John McNeill, "The Continental Context," *JBAA* 159 (2006): 1-47. See also John McNeill, "The Romanesque Cloister in England," *JBAA* 168 (2015): 34-76.

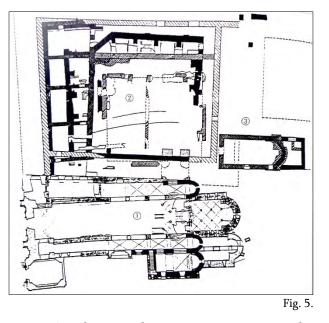
¹² Emil Zaitz, "Badanie archeologiczne w opactwie OO. Benedyktynów w Tyńcu" [Archaeological survey in the Benedictine abbey of Tyniec], in *Osadnictwo i architektura ziem polskich w dobie zjazdu gnieźnieńskiego* [Settlements and architecture of the Polish lands in the era of the Congress of Gniezno], eds. Andrzej Buko and Zygmunt Świechowski (Warszawa: Instytut Archeologii i Etnologii PAN, 2000), 305-330; Andrzej Buko, *The Archaeology of Early Medieval*

church is dated to the middle of the 12th century together with a perimeter wall; the western part of the church and a monastic wing on the eastern side of the courtyard dates from the last quarter of the same century; a western wing was added later and a northern wing dates from the late 13th century.¹⁴ The first firmly datable cloister on Polish grounds was built by the Cistercians: the abbey at Wachock, founded in 1179, already possessed a cloister.¹⁵ In the cases of the other early Cistercian foundations we do not have such clear evidence; the abbey of Łekno (founded ca. 1153) (fig. 4) had an atypical oratory at the beginning and the monastic buildings only date from the 13-14th century.¹⁶ Thus, although our knowledge on the Romanesque monastic buildings is verv fragmentary in Poland, it seems that no cloister can be dated before the late 12th century there.





We have more evidence from the Czech Kingdom. The earliest monastic foundation was a Benedictine nunnery dedicated to St. George (fig. 5) on the castle hill of Prague in 973. However, it seems that the cloister cannot be dated before the 13th century.¹⁷



Another early monastery was the foundation of St. Adalbert at Břevnov in 993. The eastern part of the church, which is the only preserved element of the Romanesque building, is probably from the middle of the 11th century. The monastic complex was added to the northern side of which the west and north wings together with remains of a lavabo were discovered. All these are dated to the 11th century, however, neither the archaeological nor the architectural analysis of these small remains allow a precise dating.¹⁸

The monastery of Ostrov u Davle was founded by Boleslav II in 999. The monks used originally wooden buildings, which were replaced by stone constructions after the fire of 1137. The north and west wings of the monastery together with the cloister walks date from the Romanesque period; they can be contemporaneous with the western parts of the abbey church (nave around 1180, towers ca. 1225).¹⁹ Wooden structures were

¹⁴ Buko, Archaeology, 364-365.

¹⁵ Zygmunt Świechowski, *Architektura romańska w Polsce* [Romanesque architecture in Poland] (Warszawa: DiG, 2000), 273-278.

¹⁶ Buko, Archaeology, 372-373.

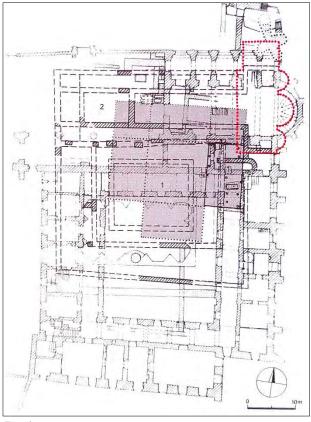
¹⁷ Tomás Durdik and Petr Chotěbor, "Stavební vývoj kláštera sv. Jiří na Pražském hradě ve středověku" [The building history of the monastery of St George on the Prague Hill in the Middle Ages], *Archaeologia Historica* 16 (1994): 369-377; Jan Frolík, "Die Prager Burg bis zum 12. Jahrhundert im Licht der Archäologie," *Berichte und Beiträge des Geisteswissenschaftiche Zentrums Geschichte und Kultur Ostmitteleuropas*

⁽Leipzig: GWZO, 2003), 75-76; Petr Sommer, "Die St. Veits-Kirche und das Frauenstift St. Georg auf der Prager Burg zu Beginn des böhmischen Staates und Christentums," in *Der Magdeburger Dom im europäischen Kontext*, eds. Wolfgang Schenkluhn and Andreas Waschbüsch (Regensburg: Schnell & Steiner, 2012), 89.

¹⁸ Zdeněk Dragoun and Petr Sommer, "Die mittelalterliche Gestalt des Klosters Břevnov," in *Tausend Jahre Benediktiner-Kloster in Břevnov*, ed. Pavel Preiss (Praha: Benediktinský Klášter Břevnov, 1993), 33.

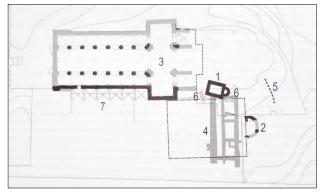
¹⁹ Miroslav Richter et al., "Bazilika s první jižní kaplí Ostrovského kláštera" [The Basilica with the first south chapel

the first buildings also at Sázava (fig. 6) founded in 1032 on the site of the hermitage of St. Prokop. The early monastic buildings were reconstructed by Petr Sommer as three wooden wings of a courtyard. The Romanesque church built of stone





was consecrated in 1095, however, this date may refer to the chancel only. The rest of the basilica dates from the time of Abbot Sylvester (1134-61). Sommer dated the Romanesque cloister to the same period, which was replaced later by a Gothic construction.²⁰ A classical representative of the Hirsau reform was built in Kladruby (fig. 7) from the mid-12th century (consecrated in 1233). From the early monastery only the eastern wing was discovered while traces of the north cloister walk are still visible.²¹ A Benedictine nunnery was founded by Queen Judith in the mid-12th century in Teplice. The building of the church was finished around 1200, the monastery some 30 years later, however, the full cloister can be dated not before 1400.²² All in all, the Czech research tends to date some of the earliest cloisters to the 11th or 12th century, however, none of them can be dated with certainty before the late 12th century.





Unfortunately, we know very little on the architecture of the earliest Cistercian foundations in Bohemia (Sedlec 1142, Plasy 1144, Hradiste 1145);²³ in Osek, where the monks settled in 1197, a large cloister was created between the early 13th and the mid-14th century.²⁴ On the other hand, Premonstratensians should also be taken into consideration. The church of Strahov in Prague was consecrated in 1182 and the monastic buildings south of it, together with a cloister, are

of the monastery of Ostrov] *Umění* 38 (1990): 185-195; *1000 let kláštera na Ostrově, Sborník příspěvků k jeho hmotné kultuře v raném a vrcholném středověku* [1000 years of the monastery of Ostrov. Proceedings on its material culture in the Early and High Middle Ages], eds. Vladimír Brych and Dana Stehlíková (Praha: Národní muzeum, 2003).

²⁰ Petr Sommer, "Sazava und böhmische Klöster der 11. Jahrhunderts," in *Der heilige Prokop, Böhmen und Mitteleuropa*, ed. Petr Sommer (Praha: Filosofia, 2005), 157-171.

²¹ Karel Nováček, *Kladrubský klášter 1115-1421* [The monastery of Kladruby, 1115-1421] (Plzeň: Scriptorium, 2010).

²² Antonín Hejna, "Bazilika v Teplicích" [The Basilica of Teplice], Umění 8 (1960): 217-230; Michal B. Soukup, "K počátkům kláštera v Teplicích" [On the origin of the monastery of Teplice], in Vladislav II, eds. Michal Mašek, Petr Sommer, and Josef Žemlička (Praha: Nakladatelství Lidové Noviny, 2009), 83-90.

²³ Jiří Kuthan, *Die mittelalterliche Baukunst der Zisterzienser in Böhmen und in Mähren* (Berlin: Deutscher Kunstverlag, 1982).

²⁴ Mario Feuerbach, *Das Zisterzienserkloster Ossegg* (Mainz: Bernardus, 2009).

regarded as contemporaneous, although its details are unknown. $^{\rm 25}$

Turning to the monuments of the Hungarian Kingdom, first we have to admit that although the abbey churches of the earliest Benedictine foundations are much debated, their monastic buildings are practically unknown. Everything we know about the 11th-century monasteries suggests that there was a separate building in the neighborhood of the church, usually on the south or south-east side. A good example of this is the recently excavated monastery of St. Andrew at Visegrád (fig. 8). The earliest building of the monks was a wooden house south of the church. Since this was an Orthodox monastery, it was identified as a refectory (*trapeza*). In the 12th century another wooden building was added at the western side. A typical cloister was not created before the 14th century when the entire monastery was rebuilt by the Benedictines.²⁶ Not far from Visegrád, on an island at Esztergom a Benedictine nunnery was already in use in the late 11th century. According to the archaeologist Zsuzsa Lovag, the earliest building was erected parallel to the church at the south. It was renewed in the 12th century. Another wing closed the courtyard from the west.²⁷ No sign of a classical cloister was ever discovered. Pécsvárad (fig. 9) is one of the earliest Benedictine foundations in Hungary. The chronology and identification of the first churches is debated, however, it seems that by 1100 a large building for the monks was built separately on the south side. The cloister was built much later to which we shall return.28

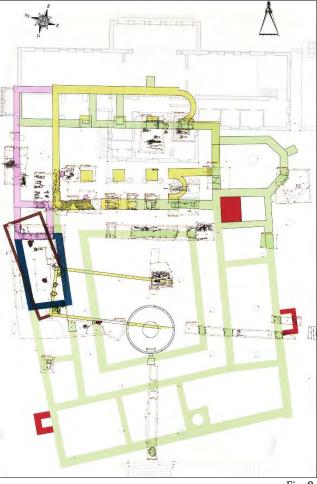


Fig. 8.

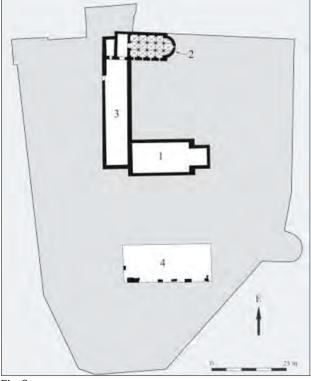
Another possibility is to situate the monastic building to the south-east. This is the situation in the case of the collegiate of Dömös, which was founded by Prince Álmos around 1107-08. However, since a royal court was standing here

²⁵ Anežka Merhautová and Petr Sommer, "Strahovský klášter. Jeho založení a románská bazilika" [The monastery of Strahov. Its origin and Romaneque basilica], *Umění* 47 (1999): 154-168; Anežka Merhautová and Petr Sommer, "Strahovský klášter: stavební dějiny baziliky od roku 1182 do doby opata Lohelia" [The monastery of Strahov: the building history of the basilica from 1182 until Abbot Lohelia], *Umění* 48 (2000): 302-314.

²⁶ Gergely Buzás and Bernadette Eszes "XI. századi görög monostor Visegrádon" [11th-century Greek monastery at Visegrád], in Arhitectura religioasă medievală din Transilvania. Középkori egyházi építészet Erdélyben. Ecclesiatical Architecture in Medieval Transylvania, IV, eds. Péter Levente Szőcs and Adrian Andrei Rusu (Satu Mare: Editura Muzeului Sătmărean, 2007), 49-94.

²⁷ Zsuzsa Lovag, *Az Esztergom-Prímás szigeti apácakolostor feltárása* [The excavations of the Nunnery of Esztergom-Prímás Island] (Budapest: Magyar Nemzeti Múzeum, 2014); Zsuzsa Lovag, "The Benedictine Nunnery of Esztergom-Island," in *Paradisum plantavit*, 679-681.

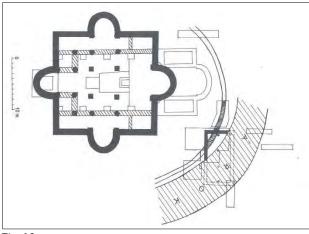
²⁸ Balázs Bodó, "A pécsváradi bencés monostor építéstörténete az újabb kutatások tükrében" [The building history of the Benedictine monastery of Pécsvárad in the light of new researches], in *A középkor és a kora újkor régészete Magyarországon* [Archaeology of the Middle Ages and the Early Modern Period in Hungary], eds. Elek Benkő and Gyöngyi Kovács (Budapest: MTA Régészeti Intézete, 2010), 349-386.



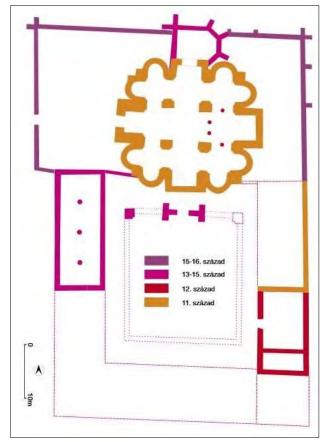


originally, the archaeological situation is more complex.²⁹

Somewhat earlier is the Benedictine abbey at Feldebrő (fig. 10), consecrated to the Holy Cross. Here a large, probably two-story building was erected contemporaneously with the church. This building was demolished before the end of the 12th century.³⁰ The abbey church of Szekszárd (fig. 11) founded by King Béla I in 1061, is comparable by size and arrangement to that of Feldebrő. Recent research on the cellars of the modern palace surrounding it revealed that the earliest monastic building was situated south-east of the church. It was enlarged in the 12th century towards the south. A western wing can be dated to the 13th century, however, it is questionable if a cloister was ever constructed.³¹









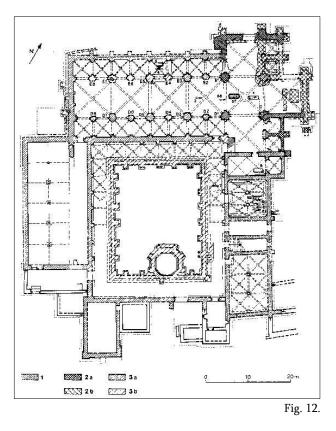
³¹ Gergely Buzás, "A szekszárdi apátság és vármegyeháza pincéje a középkorban és a koraújkorban" [The cellar of the County Hall and the abbey of Szekszárd in the Middle Ages and the Early Modern Period], *Archaeologia – Altum Castrum Online* 2013, accessed 20 March, 2015, htttp://archeologia.hu/ content/archeologia/190/buzas-szekszardi-pince.pdf.

²⁹ László Gerevich, "The royal court (curia), the provost's residence and the village at Dömös," *AAASH*35 (1983): 385-409.
³⁰ Edit Szentesi, Ferenc Dávid, and Béla Zsolt Szakács, "Feldebrői templom" [The church of Feldebrő], in *Magyar Művelődéstörténeti Lexikon* [Lexicon of Hungarian culture history], vol. III, ed. Péter Kőszeghy (Budapest: Balassi, 2005), 47-51.

The same chancel arrangement returns in the abbey church of Pásztó. The origin of this monastery is obscure. It certainly had connections to the Benedictine Abbey of Pannonhalma and existed before 1138; Sándor Tóth dated the foundation to the late 11th century. In 1191 it was donated to the Cistercian order. The monastic buildings were situated on the south side of the church, but the building complex is irregular, even chaotic. An isolated early building can be found at the south-east while further wings are situated on the west and the north, attached to the church. Although their relative and absolute chronology is uncertain, it is clear that a cloister was never constructed.³²

The Cistercians are usually regarded as representatives of regularly planned monasteries, which included a cloister as a central organizing element. This might be generally true, however, as we have seen above, their early monasteries did not necessarily follow this scheme. The first Cistercian abbey was founded in Hungary at Cikádor, today Bátaszék, in 1142 by King Géza II. Remains were excavated by Ilona Valter in 1994-96 and in 2000. While the results of the first campaign were published immediately, a detailed final report is still missing; so far only reconstructions have been published. This is why there are significant differences between the published excavation plan and the reconstruction. According to the archaeologist, the church was quite small and it had a cloister on the south. However, so far no clear archaeological signs have been published related to this supposed cloister.³³

The flourishing period of the Cistercian Order started under King Béla III (1172-96) in Hungary. He founded five monasteries, among which the most important was the Abbey of Pilis (fig. 12).



The remains were excavated by László Gerevich between 1967 and 1982. Some of the fragments were connected to the cloister, which was the last phase of the building activity, dated to ca. 1200-1220. While the existence and the dating of the cloister can be accepted, details of the reconstruction made by Endre Egyed have been questioned.34 Another significant foundation of Béla III was the Abbey of Zirc. The excavations were led by Tibor Hümpfner, a Cistercian monk, who published his results fifty years later.³⁵ If we compare his excavation plan to his reconstruction, many details of the latter seem to be unfounded. More recent studies of Bernát Bérczi corrected some of these details. Looking at the ground plan, details of the cloister itself are almost totally

³² Ilona Valter, "Das Zisterzienserkloster Pásztó," *ACi* 38 (1982): 129-138; Sándor Tóth, "Benedictine Churches in the Eleventh and Twelfth Centuries," in *Paradisum plantavit*, 645.
³³ Ilona Valter, "Die Ausgrabungen in der ehemaligen Zisterzienserabtei Cikádor," *ACi* 52 (1996): 251-264; Ilona Valter, A cikádori, más néven (báta)széki ciszterci apátság története [The history of the abbey of Cikádor alias (Báta)szék] (Budapest: METEM, 2015).

³⁴ László Gerevich, "Ergebnisse der Ausgrabungen in der Zisterzienzerabtei Pilis," *AAASH* 37 (1985): 111-152; Imre Takács, "A pilisi Ciszterci apátság" [The Cistercian Abbey of Pilis], in *Pannonia Regia*, 236-238.

³⁵ Tibor Hümpfner, "A zirci apátsági templom ásatása (1912-13)" [The excavation of the Cistercian Abbey church of Zirc, 1912-13], *VMMK*2 (1964): 119-139.

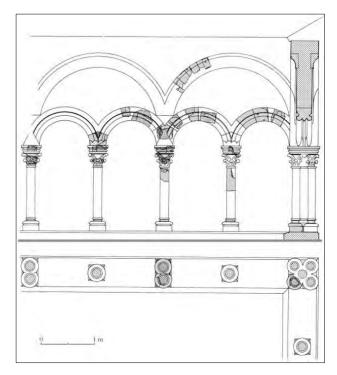
missing.³⁶ What is more, the eastern wing and walk was excavated by Gergely Buzás in 2011. It turned out that there was no stone cloister built before the 15th century; two coins (parvus) of King Sigismund were found in the mortar of the cloister wall.37 If this impressive monastery was lacking a cloister for a long time, we must ask if the case of the much smaller abbey of Szentgotthárd, founded in 1184, was really different. Many details of the reconstructed ground plan cannot be verified in the excavation plan, e.g. not a single piece of fundament was found from the supposed cloister. The only sign is the corner of the south entrance and the western wall of the south transept, where remains of a former vaulting were indicated during the restoration.38



Fig. 13.

On the other hand, cloister architecture was flourishing among the Benedictines in the early 13th century indeed. At Pannonhalma, two phases of the cloister can be differentiated: an earlier and a later, which is dated to 1486. The earlier, which had approximately the same size as the later but was situated more to the west, can be

dated with the help of surviving stone carvings (fig. 13) to ca. 1220-30.³⁹ At the same time, a large cloister was created north of the abbey church at Somogyvár. With the help of related stone carvings, a corner has been restored *in situ* (fig. 14), which was corrected by Tibor Koppány in 2001.⁴⁰ Fig. 14.



Very similar in measurements and style was the cloister of Pécsvárad. Here, on the site of the former monastic building, the south wing of the complex was erected and between it and the church a cloister was built. With the help of the architectural fragments, the openings were recently reconstructed.⁴¹ The workshops of Somogyvár and Pécsvárad were probably identical or strongly related, however, there were other

³⁶ Bernát Bérczi, "A középkori zirci apátság romjai és rekonstrukciója" [The ruins and reconstruction of the medieval Abbey of Zirc], in *A Ciszterci Rend*, 172-190.

³⁷ Gergely Buzás, "Jelentés a zirci középkori ciszterci apátságban folytatott 2011. évi feltárásról" [Report on the excavation carried out on the medieval Cistercian Abbey of Zirc in 2011], *Archaeologia – Altum Castrum Online* 2012, accessed March 20, 2015, http://archeologia.hu/content/ archeologia/43/buzas-a-zirci-apatsag.pdf.

³⁸ Ilona Valter, "Die archäologische Erschliessung des ungarischen Zisterzienzerklosters Szentgotthárd," *Analecta Cisterciensia* 38 (1982): 139-152; cf. Béla Zsolt Szakács,

[&]quot;Megjegyzések korai ciszterci templomaink szentélyformáihoz" [Notes on the arrangement of sanctuaries in early Hungarian Cistercian churches], in *A Ciszterci Rend*, 155-158. ³⁹ *Mons Sacer 996-1996. Pannonhalma 1000 éve* [The first Thousand years of Pannonhalma], vol. I, ed. Imre Takács (Pannonhalma: Pannonhalmi Bencés Főapátság, 1996), 301-302 (Imre Takács).

⁴⁰ Szilárd Papp and Tibor Koppány, "Somogyvár," in *Paradisum plantavit*, 353-357; Imre Takács, in *Paradisum plantavit*, 448-449.

⁴¹ Bodó, "A pécsváradi," 367-371.

cloisters under construction in the same period. The Abbey of Tihany is basically Baroque in its present form, however, it still preserves an 11th-century crypt under the presbytery. South of the church there was a cloister even before the Baroque rebuilding, as the drawing of Giulio Turco attests. Based on some stone carvings, Sándor Tóth supposed that the cloister was erected between 1220 and 1240.⁴² At the same time the Abbey of

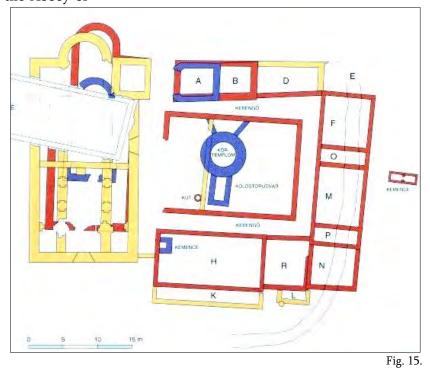
Zalavár was also renewed. Here the characteristic carvings are missing, but fragments of a fountain date from 1220-40, which may indicate a cloister building of which the north walk seems to be represented in the drawing of Giulio Turco.43 Thus, the ancient royal Benedictine abbeys of Transdanubia were extremely active in cloister building in the first third of the 13th century. The explanation of Imre Takács, referring to the reforms of the Fourth Lateran Council seems to be acceptable;⁴⁴ this theory was further elaborated by Ernő Marosi quoting the charter of Pope Honorius III issued in 1225, urging the Benedictines Hungarian to introduce reforms.45

This kind of activity was

not limited to the western half of the country. The monastery of Szer in the Hungarian Great Plain (Alföld) has a complicated building history. The most splendid period of the monastery was the early 13th century when the abbey church was expanded and a cloister was erected south of it. According to Ernő

⁴⁴ See note 6.

Marosi and Imre Takács, the jamb statues of the early 13th century can be connected to this part of the monastic complex.⁴⁶ Even more complicated is the situation at Csoltmonostor (fig. 15). According to the archaeologist Irén Juhász, the cloister was built together with the second church and only additions were added in the time of the third church.



Since the second church of Csoltmonostor can be dated to the 12th century (probably early 12th century), this would suggest that the cloister was 100 years older than all the above mentioned monuments. However, below one of the rooms of the monastery some red marble stone carvings were found in a ditch. Since red marble was not in

⁴² Sándor Tóth, "Tihany," in *Paradisum plantavit*, 677-678; see also Sylvia K. Palágyi and Sándor Tóth, *A római és középkori kőtár katalógusa, Tihanyi Múzeum* [Catalogue of the Roman and medieval lapidary, Museum of Tihany] (Veszprém: Veszprém Megyei Múzeumok Igazgatósága, 1976), nos. 34-40 (Sándor Tóth).

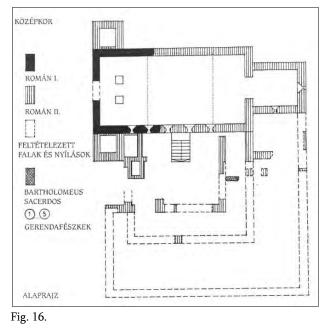
⁴³ Ágnes Ritoók, "Zalavár," in *Paradisum plantavit*, 676; Sándor Tóth, "A keszthelyi Balatoni Múzeum középkori kőtára" [The medieval lapidary of the Balaton Museum of Keszthely], *Zalai Múzeum* 2 (1990): 147-187.

⁴⁵ Marosi, "Benedictine Building Activity," 655-656.

⁴⁶ Ernő Marosi, "Szermonostor gótikus kerengőjének szobrai" [The sculptures of the Gothic cloister of Szermonostor], in *A középkori Dél-Alföld és Szer* [The south part of the Hungarian Plain and Szer in the Middle Ages], ed. Tibor Kollár (Szeged: Csongrád Megyei Levéltár, 2000), 107-122; Melinda Tóth and Imre Takács, "Szermonostor," in *Paradisum plantavit*, 697-700. Cf. Katalin Vályi, "Szer monostora és települése az elmúlt 27 év kutatásai alapján" [The monastery and settlement of Szer as reflected by the researches of the last 27 years], in *A középkor és a kora újkor régészete*, 387-400.

use in Hungary before the late 12th century,⁴⁷ the cloister seems to be related to the third church, erected around 1200, and consequently contemporaneous with the buildings of Szer and other Benedictine abbeys.⁴⁸

The chronology is even more difficult in the cases of some northern Hungarian monasteries. The abbey of Boldva was first investigated in 1927 by the archivist Dániel Nyiry and Ilona Valter after 1976. According to her short reports, the church can be dated with the help of ceramics to the end of the 12th century. The monastery, built north of the church, was dated similarly (although without a detailed argumentation). According to the published material, the cloister had a somewhat irregular form with quite spacious rooms around it.⁴⁹



⁴⁷ Pál Lővei, "A tömött vörös mészkő – "vörös márvány" – a középkori magyarországi művészetben" [The dense red limestone "red marble" in the art of medieval Hungary], *Ars Hungarica* 20, no. 2 (1992), 3-28.

There are more problems with the chronology of the Benedictine Abbey of Széplak (today Košice-Krásna). The monastery church was consecrated in 1143. According to the excavations of Belo Polla, the monastic buildings were situated north of the church. The south room in the east wing was a later addition to the church and the second room was even later; on the other hand, the north-western corner of the church seems to be from the same period as the west wing; thus the chronology is obscure. Unfortunately no stone carvings help in dating, which consequently can be mid-12th century or later.⁵⁰

Another problematic example from northern Hungary is the abbey of Tereske (fig. 16). Here the church survived, but the remains of the monastery were revealed during the excavations of Károly Kozák between 1962 and 1974. Unfortunately, he never published his results, however, the parish priest Frigyes Pálos and more recently Hella Mag discussed them. If the remains really indicate a cloister, it was relatively small (around a courtyard of 7 to 7 m) with practically unknown wings. These parts were dated to between the middle of the 12th century and the early 13th century.51

In the case of the Benedictine Abbey of Kána, where the church is similar to that of Tereske, the situation of the monastery is just the opposite: we know the wings but not the cloister. The archaeologist Katalin Gyürky dated the east wing to the second half of the 12th century and the rest to the 13th century. Although stone carvings do not help in the dating of these buildings, the

⁴⁸ Irén Juhász, "A Csolt nemzetség monostora" [The monastery of the Csolt Kindred], in *A középkori Dél-Alföld és Szer*, 281-304. Cf. Melinda Tóth, "Csolt monostora" [The monastery of Csolt], *Henszlmann Lapok* 4 (1994): 6-10 and Tóth, "Benedictine Churches," 644-645.

⁴⁹ Ilona Valter, "A boldvai református templom (volt bencés apátság)" [The Calvinist church (previously Benedictine Abbey) of Boldva], in *Myskovszky Viktor és a mai műemlékvédelem Közép-Európában* [Viktor Myskovszky and the protection of monuments in Central Europe], ed. Alexander Balega (Bratislava: Pamiatkový ústav and Budapest:

Országos Műemlékvédelmi Hivatal, 1999), 162-169 and 245. Cf. Tóth, "Benedictine Churches," 650.

⁵⁰ Belo Polla, *Košice-Krásna. K stredovekým dejinám Krásnej nad Hornádom* [Košice-Krásna. To the medieval history of Krásna nad Hornádom] (Košice: Východoslovenské vydavateľstvo, 1986); cf. Tóth, "Benedictine Churches," 645 and note 92 on page 263.

⁵¹ Frigyes Pálos, *A tereskei templom* [The church of Tereske] (Aszód: Osváth Gedeon Emlékére Létrehozott Múzeumi Alapítvány, 2000); Hella Mag, "Tereske temploma az Árpád-korban" [The church of Tereske in the Árpád Age], in *A múltnak kútja* [The fountain of the past], ed. Tibor Ákos Rácz (Szentendre: Ferenczy Múzeum, 2014), 203-214 and 412-414; see also *Paradisum plantavit*, 520 (Levente F. Hervay), with a third ground plan.

relative chronology fits well to the above described scheme: the early monastic building was a more-orless separate wing on the south-east (as in Dömös, Feldebrő, Szekszárd, and also in Csoltmonostor), which was later developed into a full quadrum. However, here the cloister walks were finally not built – or at least no sign of them was identified. All in all, despite the many uncertainties, it seems that in the case of the smaller abbeys of Hungary а cloister from the late 12th cannot century be excluded.

This is not without consequences for the evaluation of the situation at Bizere (see p. 97, fig. 2, in this volume).⁵² Here the south wing, a three-aisled hall, seems to be the first monastic building, which

was originally not connected to the church directly. The coins of King Stephen II (1116-32) and Béla II (1132-42), found under the early pavement of the hall, can help in dating. The arrangement is similar to Visegrád, Esztergomsziget, and Pécsvárad where the first, isolated building was situated to the south. Later the hall of Bizere was rebuilt and connected to the cloister. This happened evidently after the middle of the 12th century. A more precise dating must be based on the related findings, however, taking into consideration the above mentioned examples and the Czech monasteries, we cannot exclude that it

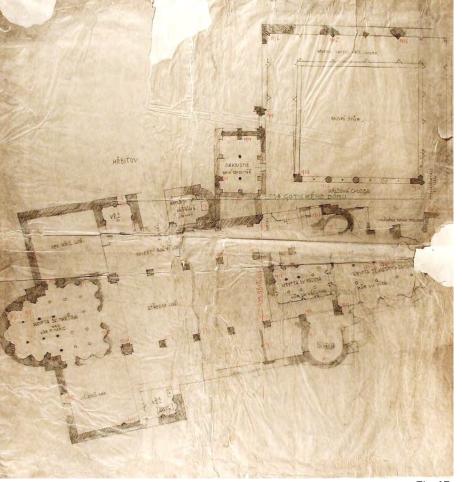


Fig. 17.

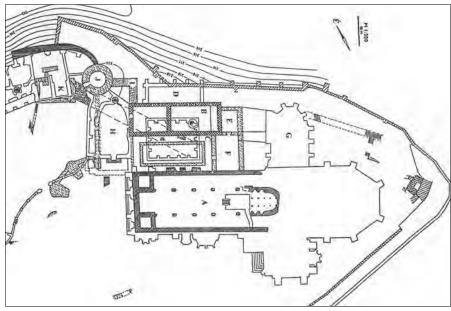
preceded the big cloister building campaign of the Transdanubian royal monasteries.

At this point we must recall that cloisters were built not exclusively by monks. As early as the Carolingian period there were cloisters attached to cathedrals too. At Metz Bishop Chrodegang introduced a special rule for his cannons in the middle of the 8th century.⁵³ Although there are signs that cloisters were erected facilitating the common life of the cannons from this period onwards, these were not as

⁵² Basic publications so far include: Ileana Burnichioiu and Adrian Andrei Rusu, *Mozaicurile medievale de la Bizere. The medieval mosaics from Bizere* (Cluj-Napoca: Mega Publishing House, 2006); *Mănăstirea Bizere*, I, eds. Adrian Andrei Rusu and Ileana Burnichioiu (Cluj-Napoca: Mega Publishing House, 2011); Ileana Burnichioiu, "Fragments from the abbey of

Bizere: the lavabo in the cloister," *EJST* 9 (2013): 221-232; Adrian Andrei Rusu, "Spatial organization and monastic life in Bizere abbey," in this volume: 92-112.

⁵³ Yves Esquieu, "La place du cloître dans l'organisation du quartier cathédrale," in Klein, *Der mittelalterliche Kreuzgang*, 81.





consequent and widespread as the monastic cloisters. In the south of France, for example, cathedral monasteries were built usually in the 12th century and in the north usually in the 13th, if they were built at all, since in certain cases, such as at Chartres, it was neglected.⁵⁴ In the East Central European region the cathedrals of the Czech Kingdom were usually furnished with a cloister. In Prague (fig. 17) following the consecration of St. Vitus II in 1097, a certain "monastery of the church of Prague" was mentioned before 1100. This is usually associated with the area north of the Romanesque church, excavated in 1927-28. We do not know how it looked in the 11^{th} and 12^{th} centuries, since the details discovered by Kamil Hilbert are probably not earlier than the 13th

century.⁵⁵ We can better date the Romanesque phase of the Olomouc cathedral monastery (fig. 18). Here the church was consecrated in 1131 and the bishopric palace was built north of it soon after. It is usually attributed to Bishop Zdík (†1150) which can be accepted on the basis of the stone carvings. Excavation of the 1970s revealed that between the palace and the cathedral there was a cloister with an elongated ground plan.56 From Hungary we

have scarce traces of cathedral

monasteries. According to István Horváth, there was a monastery on the south side of the cathedral of Esztergom, however, there is no sign of a cloister.57 Recent research paid attention to the cathedral monastery in Pécs. Here, according to the newest periodization of Gergely Buzás, it can be dated to the late 14th century, however, no archaeological investigations were carried out here, thus it (or a predecessor of it) could be earlier.⁵⁸ A systematic overview of possible cathedral monasteries in Hungary is still wanting. On the other hand, it is unquestionable that the collegiate church of Székesfehérvár (fig. 19) had a cloister on the south side and it cannot be later than the 12th century.⁵⁹ In fact, it is probable that it was built in connection to the organization of the collegiate chapter itself, which is usually dated to

⁵⁴ Ibid., 82.

⁵⁵ Jana Maříková-Kubková and Iva Herichová, eds., *Castrum Pragense. Archeologický Atlas Pražského hradu. Díl I. Katedrála sv. Víta – Vikářská ulice* [Archaeological atlas of the Prague Castle. Part I. St Vitus' Cathedral - Vikářská ulice] (Praha: Archeologický ústav AV ČR, 2009), 71-72.

⁵⁶ Vít Dohnal, "Olomoucký hrad a jeho archeologické poznávání. The Olomouc Castle and its Archaeological Research," in *Arcidiecézní muzeum na Olomouckém hradě*, [Archbishoprical Museum on the Hill of Olomouc], ed. Ondřej Jakubec (Olomouc: Muzeum Umění, 2010), 17-26.

⁵⁷ István Torma, ed., *Komárom megye régészeti topográfiája. Esztergom és a dorogi járás* [The archaeological topography of the County of Komárom. Esztergom and the district of Dorog] (Budapest: Akadémiai, 1979), 108-110; István Horváth, "Az esztergomi királyi és érseki székhely az Árpádok korában"

[[]The royal and archbishoprical seat at Esztergom in the age of the Árpáds], in *Lux Pannoniae: Esztergom*, ed. István Horváth (Esztergom: Balassa Bálint Múzeum, 2001), 15-36.

⁵⁸ Gergely Buzás, "Az egyházmegye építészeti emlékei" [Architectural monuments of the diocese], in *A pécsi egyházmegye története. I. A középkor évszázadai* [The history of the diocese of Pécs, vol. I. The centuries of the Middle Ages], eds. Tamás Fedeles, Gábor Sarbak, and József Sümegi (Pécs: Fény, 2009), 656-657.

⁵⁹ Piroska Biczó, "Archäologische Beobachtungen zur Baugeschichte der Stiftskirche Unserer Lieben Frau zu Székesfehérvár," *AHA* 42 (2001): 283-295; Piroska Biczó, "A székesfehérvári királyi bazilika régészeti ásatásainak újabb eredményei" [Recent findings of the excavations at the royal basilica of Székesfehérvár], in *A középkor és a kora újkor régészete*, 315-332.

the late 11th century. There was hardly any better known ecclesiastical institution in medieval Hungary than the collegiate of the Holy Virgin in Székesfehérvár where almost all the Hungarian kings were crowned and many of them were buried, starting with the first king of the country, Saint Stephen. I suppose that cathedral monasteries might have played an important role introducing the cloister in East Central Europe and they could have served as a prototype for the early Benedictine monasteries too.

Let me summarize some of the observations of this brief overview.

1. Opposed to Western Europe, where cloisters were built from the Carolingian period and in the 11-12th centuries were common, monasteries in East Central Europe were usually lacking the cloister before the late 12th century.

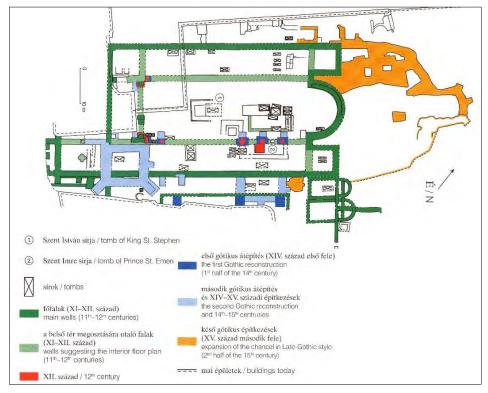
2. Among the first abbeys built with a cloister were Cistercian structures, however, not as regularly as previously supposed and many of the early Cistercian foundations had no cloister for a period. Thus, they had probably less impact on other monastic buildings than suspected.

3. An important wave of cloister building was the activity of the royal Benedictine abbeys in Transdanubia between 1210 and 1240.

Probably this can be connected to reform movements, although the papal letter of 1225 seems to be too late to be the major inspiration source. In other orders (e.g. Premonstratensians) and other territories, such as Bohemia and northern Hungary, cloisters from a somewhat earlier period cannot be excluded. Bizere might have been one of these early examples.

4. The earliest datable cloisters in Bohemia and Hungary were attached to cathedrals and collegiate churches, which might have served as prototypes for monastic cloisters as well. This is just the opposite of the practice of Western Europe, where cathedral monasteries were built less regularly and often later than was usual among the monastic orders. This phenomenon may shed some light on the difference of the roles monastic and secular churches played in East Central Europe. We should remember that bishops, members of the royal court, were always incomparably more important figures than any of the abbots and the size of monastic churches was usually much below the Western standard. It would not be surprising then, if the secular church played a leading role in cloister architecture too.

Fig. 19.



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SPATIAL ORGANIZATION AND MONASTIC LIFE IN BIZERE ABBEY

ADRIAN ANDREI RUSU*

Introduction

Over a decade of archaeological investigations carried out at the presumed Bizere abbey has unveiled the rich remains of a complex site, which until now has not been sufficiently known and researched.1 The present study is another small contribution to the reconstruction of its history. In this respect, the documentation and analysis of the spatial organization is crucial for understanding the characteristics of the abbey. This enterprise is predominately based on the archaeological data, since preserved written evidence is scarce. The documents demonstrate that there was a Benedictine presence in the area of the lower Mures River at the end of the 12th century,² however, archaeological research at Bizere has yielded proof of an even earlier dating.

As elsewhere, the monastic presence in the lower Mureş area was highly conditioned by the existence of a watercourse. The flourishing life of the monasteries, only suggested by the archival sources, can be far better understood through the archaeological evidence. The unearthed art and architecture of the Bizere site indicate that the site's first chronological sequence is definitely the most notable one. From the 14th century on, the resources, and partly the technology, of the abbey were far inferior to the products of other ecclesiastic and lay complexes in the region. It seems that this was in accordance with the largely anonymous statute of the monastery, as portrayed by the written evidence until its demise in the 16th century.

Regarding the abbey's earliest period, the Benedictines' choice of this particular location must have originated from a former experience of the initial monastic group with a similar type of environment.³

Leaving aside the frequently addressed topic of Transylvanian salt (an important income generator for Bizere and other ecclesiastical institutions),⁴ one can notice that this monastic ensemble was highly adapted to the river environment. In addition to the food resources provided by the environment, the nearby geological deposits were probably used starting with the early building phases of the abbey. This was the case for the stone quarried upstream, relatively close to the banks of the Mures.⁵ The use and origins of other materials recovered during excavation can be hypothesized, such as Roman spolia being reused as medieval construction material and the use of metals originating from sources located in the south-western part of the Apuseni Mountains. These suggestions, however, still await systematic analysis.6

The Mureş River was a communication and transportation channel (for salt, stone, and wood, as well as other materials), an inexhaustible source of food supply, and a continuous

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¹ For the previous scientific publications on the identification of the ruins with the monastery recorded in medieval documents as *Bisra/Bizere*, see: Adrian A. Rusu and George P. Hurezan, *Biserici medievale din județul Arad* [Medieval churches from Arad County] (Arad: Complexul Muzeal Arad, 2000), 70; Adrian A. Rusu, "Benedictinii de pe *Insula Mănăstirii*" [The Benedictines on the Monastery Island], in *Mănăstirea Bizere* [Bizere monastery], eds. Adrian A. Rusu and Ileana Burnichioiu, I (Cluj-Napoca: Mega Publishing House, 2011), 13–24; Ileana Burnichioiu, "Ruinele de la Bizere. Cercetări vechi și noi" [The ruins of Bizere Monastery: Old and new research], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 37–44.

² Rusu, "Benedictinii," 13; Ileana Burnichioiu, "Cronologia abației Bizere. Bizere abbey: A chronology," in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 124–125.

³ Oana Toda, "Das Kloster auf der Flussinsel: Fernverbindungen und lokale Abgeschiedenheit im Fall der Abtei Bizere?" in this volume: 17–30, figs. 1–2.

⁴ For the main bibliography on the subject, see: Adrian A. Rusu and Oana Toda, "Archaeological evidence for historical navigation on the Mureş River. Enquiries based on a medieval boat imprint from Bizere abbey (Romania)," *AAASH* 65 (2014): 139–154.

⁵ Corina Ionescu and Ioan I. Bucur, "Analiza unor roci sedimentare" [The analysis of some sedimentary rocks], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 103–105; Toda, "Das Kloster auf der Flussinsel," 25; Bernadett Bajnóczi et al., "Archaeometric analysis of mosaic tesserae and a 'red marble' decorative stone from the Bizere monastery (Arad County, Romania)," in this volume: 271–284.

⁶ See also: Adrian A. Rusu, "Religios și non-religios în cultura materială a abației Bizere (Frumușeni, jud. Arad). Obiecte din bronz (I)" [Religious and non-religious aspects in the material culture of the Bizere abbey (Frumușeni, Arad county)], *AUA hist.* 17, 2 (2013): 147–148.

technological challenge for efficient water management and use (as evidenced by the water tower, the fountain in the cloister, the bath, the drainage system, the possible docks, the river bank reinforcement, and the presumed metal workshop, etc.).

We know very little about the human resources of the abbey, namely, the monastic community itself. The data gaps also extend to the communities living on the properties of the Bizere monastery. We do know, however, that the nearby village, also named "Bizere," had close connections with the Benedictine foundation until the abbey's final dissolution and outlasted its decay. The abbey's estate gradually fell into the hands of the noble families of nearby territories who built *castella*-type residences on their lands (Frumuşeni and Zăbrani, in Arad County) during the 15th and the 16th centuries.⁷

The disparity between the two main phases in the life of the abbey is quite obvious. After the middle of the 13th century, the gradually transitioned from an monastery impressive late Romanesque achievement into a decaying site with almost no special features as far as the material culture is concerned. Any building decorations that stylistically could belong to the time period between the 1440s and the beginning of the 16th century are completely absent. The explanation for this can be linked to the armed attack led by the bishop of Cenad on the Bizere monastery around 1235.8 Regarding the final phase, either Ottoman raids or local military conflicts (or both) apparently brought an end to the agony of the monastery before the middle of the 16th century.

The main architectural components – an overview

The main built structures of the abbey (figs. 1–3) evolved gradually from the 12th to 13th centuries. For most of the structures, only

the plans could be recorded, as the elevations were almost completely destroyed. The state of preservation of the remains is very poor and large areas of the stratigraphy were destroyed. Therefore, any attempt at reconstruction can only be based on the foundation relics of stone and brick and the robber trenches of the former walls.

Various objects, as well as fragmentary building materials and decorations (such as mosaics, sculptures, and frescoes), have been discovered generally without archaeological context. Therefore, the identification, correlation, and dating of the component spaces along with their functions and decorations is very difficult.



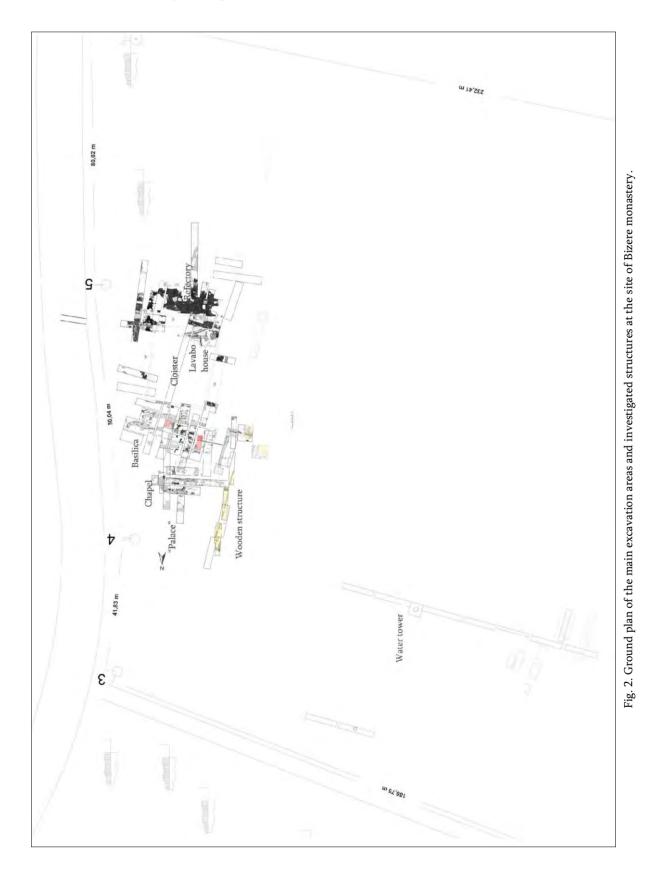
Fig. 1. View of the main church remains (Photo by Florin Mărginean).

The main church

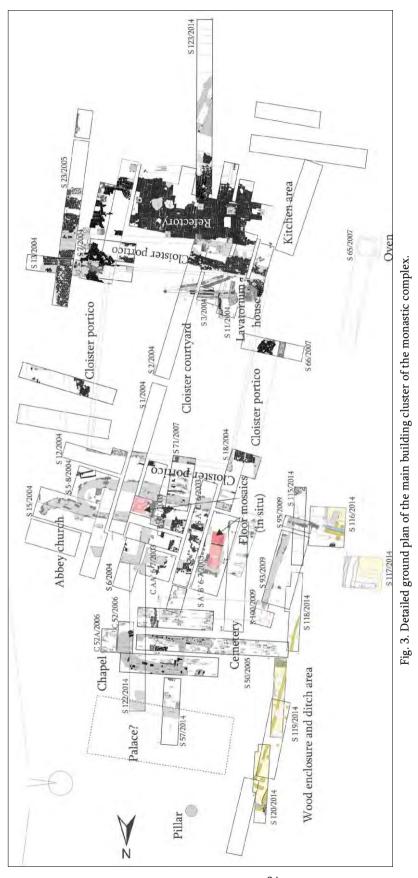
In the northeastern part of the island excavations revealed a basilica with two *in situ* pavement mosaics. This was the main church of the abbey. It was investigated in many sections, revealing that the degradation of its structural elements was rather high. The southern part of the basilica is better preserved, containing remnants of continuous foundations, and in the western half the imprints of three pairs of pillars could be recognized. Fortunately, a few sandstones were preserved in the 1.20 m wide elevation, in the area where the sanctuary was joined with the southern apse. Almost half of the main apse was similarly preserved in elevation (figs. 1, 3).

⁷ On this topic see: Adrian A. Rusu and George P. Hurezan, *Cetăți medievale din județul Arad* [Medieval castles in Arad County] (Arad: Museum Publishing House, 1999), 67, 98; Ileana Burnichioiu, "Privilegii, posesiuni, venituri" [Privileges, possessions, incomes], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 25–33.

⁸ See the episode recorded by the papal documents in Burnichioiu, "Cronologia," 124–125.



Spatial organization and monastic life in Bizere abbey



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In the early stages of research, the basilica was estimated to have measured 13.50 m wide and approximately 25.50 m long. The choir, flanked by two lateral spaces (two chapels with semi-circular apses), occupied more than half of this length. Subsequently, seven meters west from the westernmost mosaic floor, a 1.00 m thick stone wall delimitating another room was discovered (the archaeological trenches 93, 95, and 100/2009) (fig. 3). This wall contains similar sandstone ashlars as found in the main apse of the basilica. However, this structure could not be connected with certainty to the abbey's main church, as the stratigraphy was significantly disturbed by successive burials and robber trenches.

The location of the main entrance is uncertain, as is whether the four portal fragments (fig. 4) discovered in the northern part of the site can be associated with it. It can only be assumed that some pieces with arcades, found in different contexts (fig. 5), and a sandstone block with a small pyramidal console, belonged to the basilica (fig. 6).



Fig. 4. a-b. Presumed portal fragments.



Fig. 5. Sculptural elements with arcades.



Fig. 6. Sandstone block with console.



Fig. 7. The refectory of the monastery (Photo by Florin Mărginean).

The refectory area

A refectory was found parallel to the basilica, over twenty meters to the south (fig. 7). In this case, a three-aisled building was transformed into two-aisled а space approximately 7.60 m wide, probably having two levels. Obvious traces of a stairway with a base stone were revealed from the reconstruction phase on the northern side of the refectory (fig. 8). The space had been divided by rectangular pillars in stone and brick (ca. 70 x 70 cm), which were covered with white-washed plaster (samples are still preserved on the lower parts). Both the total length of the refectory and whether the number of the stone pillar pairs was five or six are uncertain.

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Fig. 8. Building phases of the refectory and the southern side of the cloister portico (Ileana Burnichioiu).

On the eastern and southern sides of the refectory traces of several different rooms and built spaces discovered were through archaeological surveys (figs. 3, 9) and resistivity measurements,9 but their functions cannot be established yet. Models offered by the typical organization of monasteries in the West, as well as some isolated stones discovered in secondary contexts with particular shapes and burning traces (fig. 10), suggest that a warming room could have existed somewhere close to the refectory. On the western side of the refectory, the hypothesis of a kitchen is supported by the presence of burnt and ash layers (fig. 3). A storing place resembling a granary once stood in the southwestern part of the refectory and the lower part of a bread oven made of brick was discovered about ten meters west of the presumed kitchen.¹⁰



Fig. 9. Traces of built structures south of the refectory.



Fig. 10. Components of a heating installation/system (*hypocaustum*).

The original pavement of the refectory was a simple arrangement made with bricks (figs. 7, 8/1). Important chronological references, representing the first construction phase of the refectory, were discovered underneath the pavement, namely, two coins, one issued by King

⁹ See Toda, "Das Kloster auf der Flussinsel," fig. 3.

¹⁰ Adrian A. Rusu, "Cuptorul de pâine" [The bread oven], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 95–99.

Stephen II of Hungary (1116–1131), the other by King Bela II of Hungary (1131–1141). Therefore, we can assume that the early phase of the refectory began in the first half of the 12th century.

The cloister

The remodeling of the refectory occurred at the same time as the building of the rectangular cloister. Thus, the latter is part of a later construction phase of the abbey. We do not know exactly what structures already existed on the eastern and western sides of the monastery, but it is certain that a rectangular portico was introduced between the pre-existent basilica and the narrowed refectory (fig. 3). The portico was between 3.00 and 3.20 m wide, a similar size to the original northern nave of the refectory.

Contemporary with the portico, a *lavatorium* was constructed in the south-west corner of the newly created courtyard. The lavabo with two superimposed basins was enclosed by a house with a rectangular plan. The water-supply channels began in the eastern part of the site, where the Mureş River branch was located. They reached the lavabo and a supposed garden in the cloister courtyard, and continued further to the west, towards the kitchen area (fig. 3).¹¹

The eastern part of the cloister has at least two stages of building, but the ruins have been extremely damaged by floods, burials, or possibly late robbing activity. Therefore, we can only suppose that the eastern side of the monastery was either connected to a sacristy of the church in the first phase of construction,¹² or that the monastery also included a chapter house or even a chapel. Some fragmentary sandstone walls pertaining to two phases of construction could belong to structures with the aforementioned functions (fig. 11). A large quantity of fresco fragments was recovered from the eastern side of the monastery.¹³



Fig. 11. Fragments of the built structures from the northeastern corner of the cloister; S 22/2005.

Understanding the spatial distribution of the western side of the cloister is difficult, because there were other rooms with fragmentary stone foundations next to the portico (fig. 3).

All sides of the portico had 80 cm thick stone foundations; the southern, western, and eastern sides preserved important parts of pavement in *opus spicatum*, set higher than the pavement of the refectory (figs. 3, 7).¹⁴ Additionally, a large number of fragmentary small columns, arcades, and decorated imposts and capitals–which could correlate with walls about 60 cm thick–can be associated with the portico. Most of these carved stones display Romanesque features, but there are also three fragmentary crochet type capitals, with sharp leaves or crochets, indicating a possible early Gothic decoration.¹⁵

> *The (presumed) palace* Further away, in the northeastern part of

¹¹ Ileana Burnichioiu, "Fragments from Bizere monastery (Frumuşeni, Arad County): the lavabo of cloister," *EJST* 9 (2013): 221–232; Ileana Burnichioiu, "Lavatorium-ul abației Bizere – de la arheologie la reconstituire" [The lavabo of Bizere abbey – from archaeology to reconstruction], *AUA hist.* 17, no. 2 (2013): 101–122.

¹² A sacristy was mentioned in 1236 in a letter that describes an attack by the armed men of the bishop of Cenad on the monastery and the robbery of five expensive vessels and three letters of privilege (Burnichioiu, "Cronologia," 124– 125).

¹³ This is the most important area where a large number of fresco fragments were spread about. Lab analyses proved that ultramarine was used in the fresco (Erika Nemes Feketics and Ileana Burnichioiu, "Analize ale fragmentelor de frescă descoperite la Bizere în anii 2001-2009 (I)" [Analysis of the fresco fragments discovered at Bizere between 2001 and 2009 (I)], *AUA hist.* 17, no. 2 (2013): 223–226.

¹⁴ Burnichioiu, "Fragments from Bizere," fig. 6.

¹⁵ See also Ernő Marosi, "Some remarks on a fragmentary capital from the monastery of Bizere," in this volume: 229–238.

the complex, a rectangular ground plan of a building measuring approximately $20.00 \ge 8.00$ m with a 1.20 m thick foundation was found in 2001 (fig. 3). The walls were dismantled to the foundation level and the stratigraphy inside the presumed palace was also drastically disturbed, preserving only a few vague clues concerning a space divided by two pillars. In the western half of the southern side of the building the foundations of two joined pillars made by bricks indicate an entrance.



Fig. 12. Traces of the wall foundations and the base of a stove from the presumed palace.



Fig. 13. Yellowish layer resulting from stone processing (Photo by Ileana Burnichioiu).

Traces of a stove were discovered inside, nearby; it was made mainly from pot-shaped stove tiles on a base of bricks and functioned during the 15th and 16th centuries (fig. 12). The determination of the building is uncertain, although we are tempted to believe that it was the palace of an abbot or patron, possibly built on two levels. It was probably built after the basilica, as its foundations cut a 10 to 40 cm yellow layer of sandstone processing, which spreads throughout a large area to the north, west, and southwest of the basilica, including the area of the chapel and cloister (fig. 13).

The chapel

About four meters away from the socalled "palace," the remnants of a small, Romanesque single-nave chapel with semicircular apse were discovered in 2006 (fig. 3). The chapel was built with low quality materials (river stones, bricks, and poor mortar) on top of burials in the cemetery; grave number 111 (probably dating to the 12th century) is located almost directly in the middle of the structure. The chapel is a later building compared to the "palace," the basilica, and the cloister. Two pairs of pillar bases were identified in front of the chapel. They probably were parts of a later portico, which seems to have been related to another pair of bases found in front of the "palace."

The cemetery

An important part of the monastic graveyard developed in the small area flanked by the "palace" and the chapel, as well as inside the chapel and the basilica. Graves were unearthed also along the northern side of the portico, in the southeastern part of the basilica, and in a large area located in front of the chapel and the basilica (fig. 3).

The wood enclosure

Apparently, the northern part of the island had to be defended. On the western side of the cemetery a wooden structure consisting of a network of beams and posts protected by a ditch was set in a late period, approximately dated to the 15th to 16th centuries.¹⁶ It is possible that the role the wooden enclosure served was accomplished first by the 1 m thick stone wall, which was discovered in front of the basilica (fig. 3).

The water tower

The river represented an essential resource but also a constant danger for the life of the abbey founded on the island. One of the markers of the permanent necessity to protect the water quality was the presence of a water tower in the center of the former island, at a

¹⁶ Toda, "Das Kloster auf der Flussinsel," 23, fig. 6.

considerable distance from the river branch and the cloister, towards the northwest (fig. 2). This was basically a massive structure on top of a central well. Even now, it stands as a block of compact masonry built out of brick and highly resistant mortar, which mainly prevented the flood waters from contaminating the drinking water inside the well.¹⁷

From all the information provided so far by the archeological evidence and written documents, it can be noted that the abbey's major building and decorating activities had their peak mainly from the 12th century to the beginning of the 13th century. A wide variety of raw materials was brought to the island for the construction of the abbey. Sandstone was used in the largest quantity and the remains of building and carving activities are clearly visible in a yellow layer of varied thickness (fig. 13), which spreads throughout a very large surface between the Mureş branch and trench number 117 (fig. 3). The basilica, the refectory, the cloister, the fountain inside the tower, and the so-called palace, all had been built from the same sandstone.

There is no High or Late Gothic-style decoration, a fact most probably influenced by the major conflict and crisis experienced by the abbey between 1235 and 1236 as well as afterwards. From the middle of 13th century, the monks created new spaces, pavements, and graves using poor quality brick sand spolia (both stones and bricks) from the older buildings. Despite being well shaped, many of the new bricks were improperly dried and, consequently, became porous and suffered deformations during the baking process. These were the bricks used to build the chapel, as well as another structure located in the southeastern part of the cloister (fig. 14) and along north-south-oriented building located west of the cloister (fig. 15).

On a different note, one must emphasize the fact that the site is actually a repository for high quality mortars, possibly obtained from white marble during the 12th century and the first years of the 13th century.



Fig. 14. Brick masonry of the structure located southeast of the cloister.



Fig. 15. Wall foundation of the large building west of the cloister.

A lime chest excavated at Bizere represents another unique feature. It was actually a decommissioned logboat, which was pulled

¹⁷ Adrian A. Rusu, "Turnul cu fântână" [The water tower], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 55–56.

ashore next to the building site and was ascribed a new function as a container for preparing masonry binder.¹⁸ At times, materials other than lime and sand were added to the mortars prepared at Bizere, such as brick dust. These various mixtures were also employed for pavements, regardless of their type (ranging from basic brick tile components to more elaborate mosaics). Nonetheless, large quantities of mortar were used for the foundations-molded in wickerworkdocumented at the southern wall of the chapel.¹⁹

Altogether, the variety of raw and building materials discovered at the Bizere site is impressive. One such material was lead, which was used for fastening the ashlars used in some of the masonry walls, as well as in the abbey's stained glass windows. Iron was also found, in the form of a large number of locking system components-appliqués, bracers, hinges, grates, etc.-originating from the structures of doors, windows, and even furniture.²⁰ Their quantity and quality allude to the richness of the abbey, the abbey's commercial relations, and even the special skills necessary for their manufacture. However, none of these can be directly connected to a precise location of the presumed metal workshop. Despite this fact, there is some evidence for metal work activities on the monastery island, but the workshop area still awaits delimitation and archaeological investigation.

Apart from the stone and brick buildings, one cannot make assertions about the remaining structures on the island. Several archaeological trenches revealed the existence of wooden buildings in the western and southwestern part of the abbey church and cloister. Their functions are still uncertain and require further research.

The utilitarian and economic spaces

The monastic ensemble also comprised a different category of built spaces, for which the functions can be determined by analogy. Obviously, Bizere, like every monastery, displays its own particularities regarding some of the utilities meant for everyday-life activities. Hence, the classical ground plan was altered and adapted through the implementation of the smaller monastic annexes. As a result, the research of the monastic site had to take on the difficult mission of identifying these structures.

As a general pattern, wherever they founded an abbey, the Benedictine Order was preoccupied with the practical implementation of "St. Benedict's Rule" and its adaptation to the conditions offered by the natural environment. Besides the structures destined for the compulsory activities of a monastic site (the cryptic consuetudines), the document made reference to the functional spaces, that is, spaces that had no religious purpose, including dormitories (for monks and laics), the abbot's kitchen, bath, infirmary, house. latrine. workshops, etc. These were not precisely defined in terms of architectural planning (carpentry and tailoring, latrines, mill, smithy, etc.). In other words, they could be adapted according to each abbey's needs. In these spaces, the members of the monastic community were each assigned ad opus suum, including the easier tasks of the so-called delicatis.21 The monastic orders always had to maintain the balance between their contemplative and practical activities.²²

Within this topic, the exchange of technology and practical knowledge across the Benedictine world has been the least researched.²³

¹⁸ Rusu and Toda, "Archaeological evidence for historical navigation," 139–154.

 ¹⁹ Ileana Burnichioiu, "Capela funerară" [The funerary chapel], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 64.
 ²⁰ See the online database: *MLATB-DB*, passim.

²¹ Michel Aubrun, "Le travail manuel dans les monastères et les communautés religieuses au XII^e siècle; l'example de Limousin," in *La vie quotidienne des moines et chanoines réguliers au Moyen Age et temps modernes, Actes du premier colloque international du laboratoire de recherches sur l'histoire des congrégations et ordres religieux (L.A.R.H.C.O.R.), (Wrocław-Książ, du 30 novembre au 4 décembre 1994)*, ed. Marek Derwich (Wrocław: Éditions de la Maison des sciences de l'homme á Paris, 1995), 174.

²² For the Carthusians, see: Michal Slivka, "Vita contemplativa ako protiklad k vita activa (kartuzie hornonemeckej provincie)" [A contemplative life in contrast to an active life. The Carthusians in the Province of Hornonemecká], *Archaeologia Historica* 15 (1990): 151–173.
²³ An interesting idea on monastic mobility was revealed by the study of diptychs; see: Wojciech Mruk, "The death-rolls and the monks - their bearers in the medieval Europe (some introductory remarks)," in *La vie quotidienne des moines et chanoines réguliers au Moyen Age et Temps modernes*, II, ed. Marek Derwich (Wrocław: 1995), 573–579.

Every monastic community had a central group of working monks. Only some of the monks would be permanently stationed in a single abbey, while others could be extremely mobile if they had a high degree of specialization. As a consequence of these practices, the monasteries benefited from the work of masters in specific technological or artistic fields. Their skills were most likely only needed until the completion of the main monastic dependencies and furnishings. In the case of Bizere Abbey, this was definitely the situation for the authors of the mosaic floor surfaces and sculptural pieces.

The most frequent labora entailed a few hours of daily physical work, without any hierarchy or prohibition, but mostly related to agriculture. The historiography on this subject is exclusively based on Western and Central European evidence. The eastern analogies are still vague. Moreover, in this region the situation was due quite different, to the delaved Christianization and an implicit setback in the acquisition and implementation of Mediterranean or Western living norms and patterns. Drawing some conclusions is even more complicated as, in the aforementioned regions, the most advances of the 12th century were recorded in the field of monastic economy.²⁴ The dissemination of technological knowhow associated with the monasteries was also intense.25 It was around this time that Western and Central-European lay society gradually fell under the influence of monastic achievements.²⁶ Even within the monasteries several distinctions were recorded in the implementation of the vita communis for the main monastic community and the fluctuating groups of associated tenant peasants or pilgrims. The exact boundaries between these three

categories are unclear. The archival sources clearly mention lay elements, with a nonreligious dress code, involved with monastic life and certain activities pertaining to it.²⁷ All the above-mentioned groups had particular rules of conduct and specific representation codes. But it was their material expression that intermingled to such an extent that an objective identification of its archaeological traces is hardly possible.

Concerning the manifestation of its monastic life through the material culture, Bizere abbey does not reveal anything groundbreaking. The recorded details are mere guidelines for further research, which will hopefully be aimed at the regional milieu of the site. There is still little data available for comparison and the geophysical survey of the Bizere site also pinpointed several other structures that could be future targets of investigation.²⁸

One can, however, look into some of the already known but less imposing features. In the sector located west of the main complex, several fireplace furnishings have been identified. They consist mainly of platforms enclosed by bricks, sometimes with edgings. Their presence suggests the existence of a still unidentified group of early dwellings, as the structures largely match the known types of the 12th and 13th centuries.²⁹ They could have been used either by the monastic community during an earlier phase, or by the auxiliary personnel, separated from the main cloister buildings due to the lack of space or to the monastic rules. The presumed constructions they could have served must have been quite simple, since flood waters apparently wiped the area clean.

Water management

The construction of water-related installations was a normal consequence of the site's positioning and of the environmental factors it implied. Since the location was an island, the functioning of the monastery depended on transportation, water supply, and fishing, but also was recurrently under threat by changes in the water level.

²⁴ James Ambrose Raftis, *The Estates of Ramsey Abbey. A study of economic growth and organization* (Toronto: Pontifical Institute of Mediaeval Studies, 1957), 468.

²⁵ Pascal Ladner, "Die Rolle der abendländischer Order und Klöster im Mittelalter bei der Verbreitung der Technik," *Ferrum* 70 (1998): 4–10.

²⁶ Harry Kühnel, "Beiträge der Orden zur materiellen Kultur des Mittelalters und weltliche Einflüss auf die klösterliche Sachkultur," in *Klösterliche Sachkultur des Spätmittelalters. Internationaler Kongress Krems an der Donau, 18. bis 21. September 1978*, ed. Harry Kühnel (Wien: VÖAW, 1980), 10.

²⁷ Ibid., 25-27.

²⁸ Toda, "Das Kloster auf der Flussinsel," 20, fig. 3.

²⁹ See, for example: Volker Vogel, *Schleswig im Mittelalter. Archäologie einer Stadt* (Neumünster: Wachholtz, 1989).

The benefits of water were known and made use of at the monastic site. One must assume that the access to more effective water transportation was one of the main factors that influenced the patrimony and activities of the abbey. A number of watercrafts owned by the abbey, including the already mentioned imprint of a logboat, were associated with possible naval constructions. The latter are only suspected due to the existence of metal sintels,³⁰ normally used for boats all around medieval Europe.³¹ It can be assumed also that an abbey smithy was put to good use when it came down to building plank boats.

The presence of boats implied the existence of mooring areas. One such space can be argued for in the northeastern part of the site, where a circular masonry pillar (1.70 m in diameter) located on the riverbank was uncovered.³² The other feature (a more complex construction), found on the riverside and east of the cloister, is prone to further debate and research, as it could either be a dock, latrine, or even watermill.

The monastic water-management solutions from Bizere are of high technological quality. This is evidenced by the use of lead pipes in the water supply system of the cloister lavabo (fig. 3)³³ and by the sophisticated filters of the water-tower, used for securing fresh drinking water and protected from flood contamination.³⁴ Furthermore, a rectangular structure built out of ashlar masonry, south-east of the cloister, was probably related to the river bank and the water.

The small finds

The small artifacts have been very useful in establishing the functional meanings of the different structures found at Bizere. Finds of religious significance are actually outnumbered by the artifacts with lay and practical, everyday use. In addition to their advanced fragmentation, one major problem for the archaeological research at Bizere is represented by both modern and contemporary interference, with robbing trenches and pits ravaging the medieval contexts and thus the association of meaningful small finds to the functional spaces. This was the case of a boat sintel retrieved from the eastern side of the cloister and a crossbow arrowhead discovered inside the basilica.



Fig. 16. Iron finds indicating the use of animal hauling (horse-/oxshoes and spurs).

The presence of ox- and horseshoes (fig. 16)³⁵ at the site clearly proves that draft animals were accessing the island.³⁶ They either crossed a ford or were brought to the site by watercraft. The presence and use of horses are further proved by the discovery of spurs,³⁷ mouthpieces, hoops,

³⁰ Toda, "Das Kloster auf der Flussinsel," 29, fig. 10.

³¹ See, for example: Detlev Ellmers, "Bodenfunde und andere Zeugnisse zur frühen Schiffahrt der Hansestadt Lübeck: Teil 2: Beuteile und Ausrüstungsgegenstände von Wasserfahrzeugen aus den Grabungen Alfstrasse 38 und an der Untertrave/Kailmauer," *Lübecker Schriften zur Archäologie und Kunstgeschichte* 18 (1992): 7–22.

³² For details, see: Toda, "Das Kloster auf der Flussinsel," 25, figs. 7–8.

³³ Burnichioiu, "Lavatorium-ul abației Bizere," 101–122.

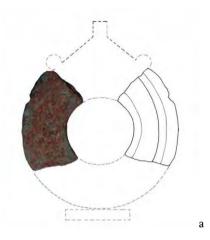
³⁴ Rusu, "Turnul cu fântână," 49–59.

³⁵ *MLATB-DB*, 73–74, accessed August 17, 2015.

³⁶ Toda, "Das Kloster auf der Flussinsel," 29.

³⁷ *MLATB-DB*, 20, accessed August 17, 2015.

and belt-dividers. Most of the discovered horseshoes are the winter type–fitted with claws–thus, suggesting that the river was crossed when frozen. While the recovery of a currycomb³⁸ during excavation is an insufficient argument for the existence of stables–just as iron fasteners are not necessarily wagon or cart components–when considered together they clearly suggest the presence of wheeled vehicles and draft animals.





The following question that arises is connected to the sector of the island where these stables could have been erected, given the presumably limited space. This is not the only case in which a certain utility building and activity is accounted for by small finds. Two other examples concern some specific ceramic finds that led to certain questions of interpretation.

The first example is a group of circular ceramic chips found on-site, often produced by

recycling pot shards. Six such fragments have been discovered at Bizere over the years (fig. 17).

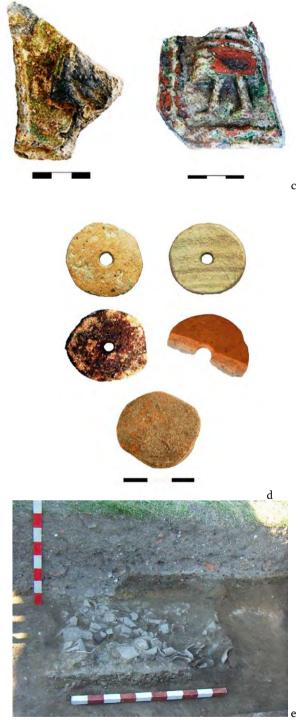


Fig. 17. Various ceramic finds.

Looking at the historical literature as precedent, five of them could immediately be deemed to be spindle whorls, while only one, lacking any

³⁸ *MLATB-DB*, 17, accessed August 17, 2015.

perforation, could be called a token. However, identifying them as such would automatically mean that the monastic community in Bizere was practicing weaving, which would be an improper and assumptive interpretation. Analyzing this even further, one must say that there are great gaps between the retrieved artifacts and the identified uses. For this type alone, one can suggest no less than fifteen plausible different uses. The most evident ones would be as game tokens, toy components, or clothing accessories.³⁹ Listing all these activities still leaves open a question regarding the monastic spaces in which they were used.

The second example is a fragment of a ceramic vessel of a less common shape. Based on the iconography and the few archaeological analogies, it was identified as a flask (fig. 17/a). According to the literature, this could be a pilgrim attribute, but other contexts of more common use can also be taken into consideration as this shape has not been thoroughly analyzed for the present geographical region.

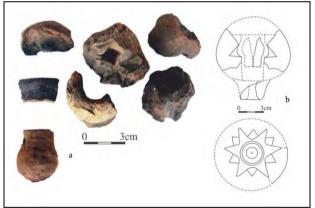


Fig. 18. Fragments of a mace mold made of daub.

The functional ambiguities of the small finds are plenty and very often their presence in a monastic environment requires additional explanations. For instance, a pair of scissors might have been used in the scriptorium for cutting parchment, for tailoring, for personal hygiene, or for fleecing. A small hoe⁴⁰ also raises more than one possibility of interpretation. Besides gardening, it could have also been a carving tool. An antler tip can also be related to gardening, or merely production waste. Small chisels and files can have multiple uses, including the more demanding ones related to mechanics or to fine metal working.

Some of the small finds indicate certain activities and automatically allow one to reconstruct a wider range of tools, instruments, implements, etc., required for completing those actions. Although its location in the site is unknown, the presence here of a smithy workshop and its corresponding activities is indicated by the presence of metal ingots, iron bloom, anvils (fig. 27),⁴¹ and the abundance of certain products that exceed the necessities of the monastery. Their large number in congruence with a religious site has led to the assumption that they were intended for trade. The remains of a daub mace mold (fig. 18)⁴² also sustain this idea, while also pointing towards a special category of metal-working skills. The operation only requires the use of a roofed workshop and a furnace. Given the mold, one begins to wonder if some of the bronze finds could be considered local products or even copies of other European products. Moreover, the orientation towards weapon production comes across as totally opposed to the direct needs and special activities of a monastery, but it cannot be dismissed in the case of Bizere.

There are several elements that still have not been understood or sufficiently researched at Bizere. However, they are important indicators of a more complex everyday life as they were obviously left aside by the written evidence. Such was the presence of members of the lay community buried on the sacred grounds of the abbey. They are mainly represented by female, infant, and young child graves, often displaying specific funerary inventory, or some traces of it.

On a different note, one must emphasize the fact that there are a series of built structures with so far undetermined functions. These were

³⁹ For a comprehensive discussion on the topic, see: Adrian A. Rusu, "Jetoanele medievale din ceramică: utilizări cu multiple dubii de interpretare" [Medieval ceramic jeton: A use with multiple doubts of interpretation], *AB* XXIV (2016): forthcoming.

⁴⁰ *MLATB-DB*, 68, accessed August 17, 2015.

⁴¹ MLATB-DB, 69-70, accessed August 17, 2015.

⁴² Rusu, "Religios și non-religios," 135–145.

either severely affected by the robbing trenches and pits or built out of degradable material.

The kitchen function was already assigned to a built structure south-west of the refectory, but it is still missing direct archaeological evidence, when it comes to small finds and inner furnishings. One is aware only of the presence of a bread oven located near-by, probably able to produce one- or two-days' rations in a single use.⁴³ Furthermore, one of the unearthed water channels was oriented towards this particular building. It appears to be older than the water supply system employed for the lavabo. Moreover, a large amount of ash appears to indicate the presence of stoves and/or ovens in that particular area. The vast majority of the ceramic ware also supports this supposition, as they are predominantly common types of cooking ware (fig. 17/b), not serving or high-quality pottery. Despite this general uniformity, some kitchen and tableware ceramics display special features. The abbey kitchen definitely needed ceramic ware suited for a large community. The large vessels are represented by two discoveries, one bronze piece (fig. 19/a) probably used for the preparation of food,44 and one ceramic pot for food storage.

When it comes to glass production, the on-site evidence suggests that this could have actually been an activity at Bizere. Vitreous fragments and waste are probably residual evidence of such an activity, rather than the result of powerful fires. The glass artifacts employed until the dissolution of the monastic complex are of mixed utility and quality (fig. 20). Therefore, they had diverse origins and different raw materials were used.

There is only one small technological step from the excavated vitreous evidence to the production of pottery glaze, used for both the tableware and the stove tiles. The second category⁴⁵ is represented at Bizere by fragments displaying patterns that were not the result of mold-based production, but unique pieces, covered with glaze.

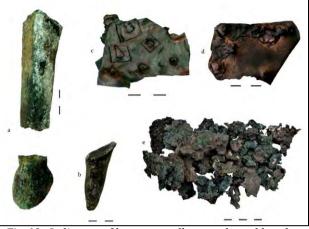


Fig. 19. Indicators of bronze metallurgy: a–b. cauldron legs; c–d. patched vessel walls, e. waste material.

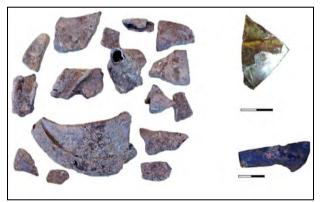


Fig. 20. Glass finds: a. bottle fragments; b. painted glass vessel; c. probably stained glass component.

Unexpectedly, the liturgical inventory of the abbey is poorly reflected by the archaeological evidence. This seems to contradict the remains of the artistic decorations of the complex. However, some of the small finds point to the rich material culture of the monastery during its heyday. It is to those times that a fragment of an abbatial crosier can be dated. The piece shares a striking resemblance to other European examples produced around 1200,⁴⁶ and it is impossible for one to establish its production region.

 ⁴³ Adrian A. Rusu, "Cuptorul de pâine" [The bread oven], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 95–100, pl. 35, 36/a.
 ⁴⁴ Discussed in: Rusu, "Religios şi non-religios," 128–135.

⁴⁵ A knowledge gap on this topic exists due to the general lack of data related to the interior heating systems used during the 12th through 14th centuries. It appears that the above-mentioned stove tiles have a later dating. These were

replaced at the beginning of the 16th century by more elaborate stoves, with corner tiles adorned with torsades and pot tiles with rectangular openings.

⁴⁶ Rusu, "Religios și non-religios," 123–128, 149–151 (*MLATB-DB*, 235, accessed August 17, 2015).

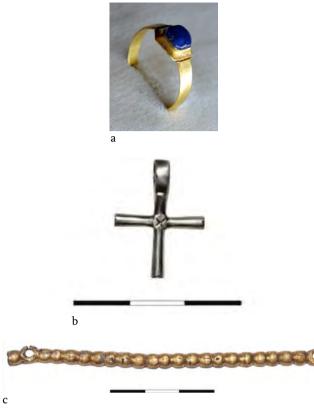


Fig. 21. Gold and silver finds: a. ring with sapphire mount; b. book cover or box ornament; c. pectoral cross.

Other finds, two made out of gold (a ring with a sapphire mount and a stripe with beadylike decoration) and a third one out of silver (a pectoral cross) (fig. 21), are also proof of the wide distribution of artistic knowledge and fashion, and of the contacts the abbey had with other Western- and Central-European Christian networks as well. However, based on the archaeological evidence alone, one cannot make a final distinction between the local productions and the imported goods, even though the latter is more likely.

While reflecting on the possible uses of some small finds, one must emphasize that a bronze spoon that was discovered at Bizere is not necessarily Eucharistic (fig. 22).⁴⁷ As previously shown in the case of the mace mold, there is already evidence for technological activities characteristic to lay complexes.

The gradual decay of the abbey is also reflected by the patching of the metallic ware.

During the 12th and 13th centuries this was done with coins, but it can be presumed that the abbey's decay and the stringent need for this solution led to negligent and repeated patching (fig. 18/c, d). Despite the repair work and the changes in the level of luxury, the use of this particular type of ware was representative of a community found on a different technological and economic level than the surrounding villages.

The discovered book bindings (fig. 23/a– b) were continuously used, including some large pieces produced and imported from German areas between the 15th and the beginning of the 16th centuries.⁴⁸ This comes as no surprise, as the abbey library was a necessary furnishing. An iron *stilus* (fig. 23/c)⁴⁹ along with some bone and bronze fragments, which might have belonged to some instruments and small tools, are common finds for monastic sites.

For other archaeological sites, the presence of small pottery, also identified at Bizere, has mostly been connected to their possible use as toys. However, in this type of site, extra caution is needed as their function could even be that of an inkwell. A small bronze tube also has an ambiguous interpretation: it could have been part of a brush, or the reinforced end of a cord or lace. Razors, also discovered at the site, had a wide variety of uses including hair cutting and shaving, as well as working with parchments.

A large number of artifacts relating to lighting instruments from the medieval period were discovered at Bizere, including: fragments of glass, iron and ceramic candlesticks, as well as fragments belonging to ordinary ceramic lamps. Small washers and shafts could have been part of multiple candlesticks or chandeliers.

It is tempting to consider that music was practiced inside of the abbey due to the discovery of a flute fragment (fig. 24/a). Furthermore,

⁴⁷ MLATB-DB, 161, accessed August 17, 2015.

⁴⁸ Already analyzed in: Zsuzsanna Kopeczny, "Ferecături de cărți medievale în descoperirile arheologice din Transilvania" [Medieval book furnishings from archaeological excavations in Transylvania], *Arheologia Medievală* VI (2008): 152, 161.

⁴⁹ MLATB-DB, 80, accessed August 17, 2015; recently published in: Adrian A. Rusu, "Medieval *stili* from Romania," *Marisia* XXXIV–XXXV (2014–2015): 107–115.

several fragments of jaw harps account for a strong presence of the lay community.⁵⁰

Everything that was discovered at Bizere suggests a distancing of the local community from pottery production activities but does not deny the extensive use of a large variety of ceramic types. Aside from the common brick material (of doubtful quality), one can see a particular batch of stove tiles that had manual decorations and glaze (fig. 17/c). Unfortunately, the artifacts are fragmentary and the important parts of their motifs (including figural ones) are lost.

An impressive quantity of clay cauldron fragments was discovered. This ceramic type is characteristic of a huge area, ranging from the territories north of the Black Sea, to those of Central Europe. It was probably the most notable type amid the incredibly common pots of the late Árpádian period. Some isolated finds suggest the presence of imported ceramics⁵¹ among the huge quantity of common pottery of local production. This was the case of the early glazed pottery, of Byzantine origin, followed by Central European products with later dating.

The archaeozoological remains indicate the presence of hunting prey (deer, wild boar). There appears to be no difference in the quantity of these remains compared to those found at noble residencies or castles. Fishing hooks⁵² are also part of the site inventory. The large dimensions of the preserved hooks show their usefulness in catching large fish and automatically allow one to assume that other fishing implements must have been used.

On the other hand, the small amount of river oyster shells found in archaeological context is quite unexpected.



Fig. 22. Bronze Eucharistic spoon or cutlery object.



Fig. 23. Finds connected to the activity of the *scriptorium*: a.-b. book bindings; c. iron *stilus*.

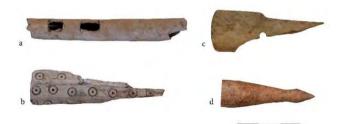


Fig. 24. Bone and antler finds: a. flute; b–c. handles; c. chess piece.

For the clergy, hunting represented a forbidden activity. However, the discovery of numerous weapons and cutting tools such as crossbows and bow arrowheads (fig. 25/a-b, d-e), battle knives and common knives (fig. 26), scabbard chapes, knife/dagger scabbard frames (fig. 25/c)⁵³ and harness items, along with proof of casting bronze star-shaped mace heads (fig. 18), contradict the norms in the case of Bizere abbey.

⁵⁰ *MLATB-DB*, 18, accessed August 17, 2015.

⁵¹ A fragment of Loštice type ceramic was published by Ünige Bencze in: "Importuri de vase ceramice centraleuropene în Transilvania. Secolele XIV și XVI" [Central European import ceramics in Transylvania. Fourteenth and sixteenth centuries], *Buletinul Cercurilor Științifice Studențești* 13 (2007): 90.

⁵² Toda, "Das Kloster auf der Flussinsel," 30, fig. 12; *MLATB-DB*, 3–6, 125–126, accessed August 17, 2015.

⁵³ MLATB-DB, 25, 27, accessed September 4, 2015. For these types of discoveries in the nearby territories, see also: Adrian A. Rusu, "On the medieval battle knives from Transylvania," MAQ 51 (2005): 7–25.

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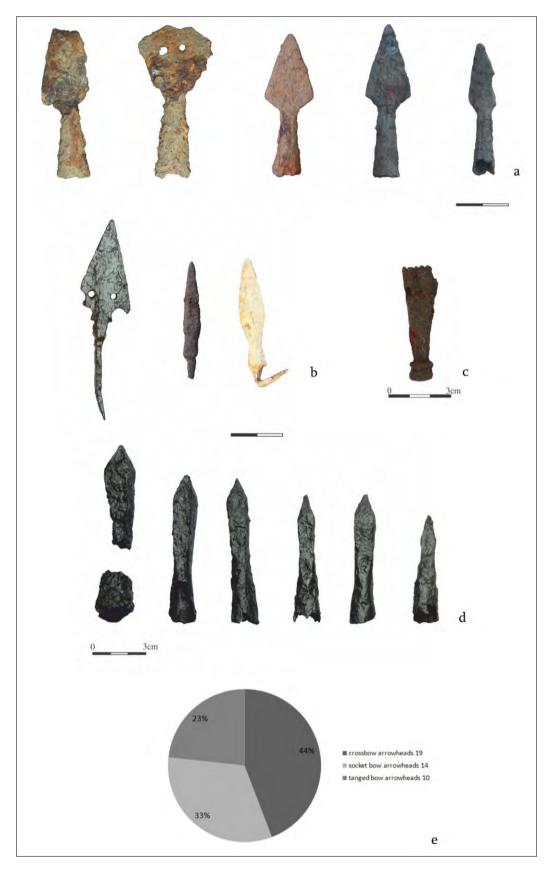


Fig. 25. Weapon finds: crossbows and arrowheads (a-b, de); scabbard frame (c).

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Spatial organization and monastic life in Bizere abbey



The presence of weapons gives way to several questions in connection to the community that used them, especially since the "Rule" imposed restrictions on the Benedictine monks. Despite this, based on the written evidence and the large number of finds, it seems that the monastic group at Bizere actually made use of weapons.

By allowing monks to possess knives, St. Benedict was merely complying with an elementary need of those times. Yet, a strictly military function of these artifacts cannot be overruled. One already knows that across the Christian world monasteries sometimes hired military effectives to guard their possessions and maintain order among pilgrims. However, the findings at Bizere allow further assessments. The production of arrow heads and mace heads is impossible without the knowhow of their use and technical features.

Fig. 26. Iron cutlery finds: knives.

A crossbow loading component was also discovered,⁵⁴ while the presence of a bullet proves the use of fire arms.⁵⁵ Even if these were only employed for hunting or defense purposes, their existence accounts for violent acts in the close vicinity of a monastic site.⁵⁶

In the southern part of the courtyard, the sewage of the lavabo was directed towards a garden area (*viridarium*). Agriculture was also practiced at Bizere, as the archaeological excavations uncovered a small hoe,⁵⁷ a fragmentary sickle (fig. 27/a-b),⁵⁸ and dibbles.

 ⁵⁴ *MLATB-DB*, 110–118, 127-128, accessed September 4, 2015.
 ⁵⁵ *MLATB-DB*, 23, accessed August 17, 2015.

⁵⁶ Adrian A. Rusu, "Motivations de la violence dans l'abbaye bénédictine de Bizere (Frumuşeni, Département Arad)," (Paper presentation at the International Conference "Violence in the Ancient and Medieval World," Centro de Estudos Clássicos / Centro de História, Faculdade de Letras, Cidade Universitária, Lisboa, Portugal, 17–19 February 2014). ⁵⁷ *MLATB-DB*, 68, 77, accessed August 23, 2015.

⁵⁸ *MLATB-DB*, 70, accessed August 17, 2015.

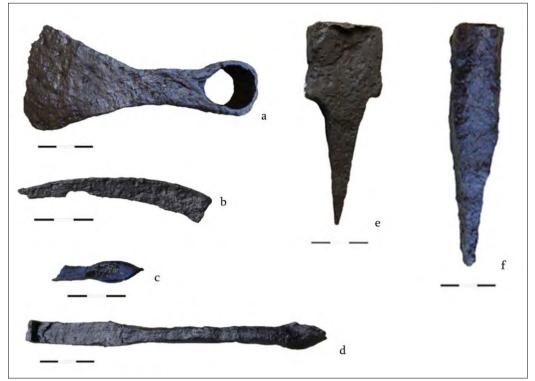


Fig. 27. Iron tools: a. hoe; b. fragmentary sickle; c–d. augers; e–f. anvils.

Some of the garden products could have been intended for the abbey pharmacy, for the existence of an infirmary was required by the "Rule."

While an infirmary space is yet to be identified, the research on the monastic cemetery has yielded evidence of healed skull trepanation (fig. 28), bone fracture healing, and a large variety of afflictions. Around 40 skeletons (from an estimated 280 total) were studied from the abbey graveyard; some of them show the effects of poor nutrition and hygiene, as well as trauma caused by lifting weights, especially in the case of adults.⁵⁹ Only a few small finds can be related to the hygiene of everyday life: a possible scalpel, several razors,⁶⁰ an antler comb, and scissors.

Pieces of clothing were produced on-site by using some of the small finds (e.g., scissors, iron needle, needle case, bodkin, and awl). The iron boot heels, also discovered at the Bizere site,⁶¹ were used for simple shoes only present at the end of the Middle Ages, and were not representative for the monastic milieu, quite the opposite.

Bone- and antler-working left behind waste and defective products, such as several animal horns with cutting marks⁶² and an iceskate. The latter was definitely useful during the cold season, given the proximity of the water. Among the simple finished products that could have been produced on the island is an antler chess piece (fig. 24/d).

It appears that the monastic schedule was not so strict and busy as to leave no room for leisure activities and games. Hence, the humanized image of the monastery only becomes

⁵⁹ Luminița Andreica, "Meeting a medieval community of Bizere Monastery: lifestyle, occupation and nutritional status," (Paper presented at International Symposium: *Homines, Funera, Astra:* Time and Cause of Death from Prehistory to Middle Ages, "1 Decembrie 1918" University of Alba Iulia – "Alexandru Ioan Cuza" University of Iași, Alba Iulia, Romania, 21–23 September, 2014).

⁶⁰ *MLATB-DB*, 50–51, 140, accessed August 17, 2015.

⁶¹ MLATB-DB, 71-72, accessed August 23, 2015.

⁶² For more on some of the bone and antler waste pieces from Bizere, see: Adrian A. Rusu and Florin Mărginean, "Prelucrarea osului și cornului în Transilvania medievală (început de abordare tematică)" [Bone and antler processing in medieval Transylvania (Beginning of a thematic approach)], *Arheologia Medievală* 5 (2005): 140–141.

more profound through these specific artifacts. The small find presumed to be a chess piece is probably one of the most advanced material manifestations of game pieces.⁶³ The ceramic tokens and plausible game pieces were already mentioned, but one can further mention the discovery of ceramic or quartzite marbles, similar to those found all around Europe.⁶⁴ These artifacts were uncovered mostly in



Fig. 28. Healed skull trepanation and healing fracture.

the spaces that have been interpreted or suspected to belong to pilgrims or novices. In addition to playing games, one can easily imagine some monks practicing fishing, hunting, shooting, riding, navigation, reading, music, and many other worldly activities.⁶⁵

The analyzed elements clearly show that this environment also required activities and products specifically for the lay milieu. Moreover, it would be wrong to assume that this site was dominated by liturgical and agricultural activities. On the contrary, based on the material aspects discovered, one can conclude that the abbey's inventory was not very different from that of a market town or castle.⁶⁶

Final considerations

All of the archaeological remains of the buildings, including two sacred spaces and the cloister, the small finds, and several written documents speak indirectly about the life of the monastery of Bizere. The monastery existed—with its ups and downs—from the 12th century to the beginning of the 16th century, during which time there were intensive phases of construction and decoration followed by a major crisis in the fourth decade of the 13th century. The sources speak very little about religious and spiritual life, but rather focus on its materiality and major events: the abbey's construction, expansion of spaces and their decorations, and profane daily occupations.

It is yet premature for the building chronology of the abbey to be established, but there certainly was activity on the island since the first half of the 12th century. Most of the various coins discovered during the archaeological campaigns came from disturbed stratigraphy, but we can assume that they belonged to the graves of the cemetery. The earliest coins were minted during the 12th century by the Hungarian kings Stephen II (1116-1131), Béla II (1131-1141), Béla III (1172-1196), Ladislaus IV (1277-1290), and Andrew III (1290-1301).

The most important and enduring early buildings were the three-aisled refectory (its first phase can be dated to before the middle of the 12th century) and the basilica. The project of the rectangular cloister could be later, probably by the end of the same century. Even so, in the current state of knowledge it seems that the cloister of the Bizere abbey could represent one of

⁶³ This conclusion was made in comparison to data from: Povilas Blaževičius, *Seniausieji lietuvos šachmatai* [The oldest examples of chess in Lithuania], *Lietuvos Archeologjia* 34 (2009): 90–91. The game pieces from the above article were dated to the 15th and 16th centuries.

⁶⁴ Sándor Petényi, "Games and toys in medieval and early modern Hungary," *MAQ* 28 (1994): 108–109. According to this synthesis, similar artifacts do not occur in monastic sites.
⁶⁵ These practices have already been recorded at other sites: Kornél Bakay, *Somogyvár. Szent Egyed-monostor. A somogyvári bencés apátság és védműveinek régészeti feltárása 1972–2009* [Somogyvár. Szent Egyed Monastery] (Budapest: Műemlékek Nemzeti Gondnoksága, 2011).

⁶⁶ For a relevant comparison with the discoveries from Zvolen, Slovakia, see: Ján Beljak et al., *Pustý hrad na Zvolen. Dolný hrad 2009-2014 [Pustý Hrad* in Zvolen. The Lower Castle, 2009-2014] (Archeofact: Zvolen, 2014), passim.

the earliest cloisters within the medieval Kingdom of Hungary.⁶⁷

In addition to the particular building phases of Bizere, this site also recorded special dynamics in the production and acquisition of goods. Until the middle of the 13th century, the abbey had an ample estate system. We only know that among these estates were included several possessions and land plots, but no clear data was preserved regarding their population. The number and size of the properties properly corresponded with the late Romanesque constructions of the site.

What can be obtained archaeologically is rather ambiguous and hard to interpret from a chronological point of view. For example, an impressive number of bow and crossbow arrowheads can be dated to the 14th and 15th centuries. Unfortunately, many other discoveries do not have even this narrow of a dating.

In addition to what has been said on the weaponry from the Bizere site, one must emphasize the fact that mace molding is a highly advanced activity requiring highly developed skills.68 Furthermore, its associations with other weapons favors but one conclusion: the abbey needed to face violent episodes, to use instruments of violence, and maybe create them.⁶⁹ The written sources have preserved information about the virulent conflicts between the abbey and the territorial ecclesiastical authority, i.e., the bishopric of Cenad. In the beginning of the 13th century the conflict with this latter institution led to several attacks on the abbey, ending with injury and loss of life, deprivation of letters of privilege, and temporary depopulation while investigations were conducted by the Papal Curia. Military conflicts also took place around the abbey in the beginning of the 16th century, in the context of peasant uprisings.

After the powerful beginnings of the abbey, still impossible to retrace in its finest details, import products arrived at Bizere with higher frequency–a situation comparable to that

of lay residential sites. Among the imported goods were many cutlery finds originating from German territories (knives⁷⁰ and forks⁷¹), Lostiče-type pottery, and, of course, glassware (ranging from beakers to bottles). The result is quite inconsistent with the general image of an impoverished monastery, displaying modest architectural achievements but a rich display of small finds.

Since the topic of this paper reflects the various components of monastic life, a discussion on the aspects of pilgrimage should be considered. As previously stated (in the case of the flask), the proof of these activities can be circumstantial at best, though some buildings could be hypothetically interpreted as being associated with pilgrimage. However, a relevant avenue of future study concerns one particular item of funerary inventory, the small pectoral cross. It shares its best analogies in Byzantine Syria,72 but stands as a rather singular example that cannot produce general conclusions on the medieval pilgrimage phenomenon.

The most solid deduction in connection to the Bizere monastery would be that, despite being a religious foundation, the abbey provided considerable technological substance for a segment of the contemporary society at the eastern border of the Catholic world. At its foundation, it probably stood as some unusual but evolved outpost, and declined as a Benedictine manifestation, adapted to that particular region. What was archaeologically uncovered in Bizere was most likely not unique, but offers evidence of the religious and cultural phenomena that manifested in the area.

⁶⁷ This subject is explored in this volume in the paper by Béla Zsolt Szakács, "The early phase of cloister architecture in Central Europe," in this volume: 77–89.

⁶⁸ See: Rusu, ["]Religios și non-religios," 135–148, 153.

⁶⁹ Rusu, "Motivations de la violence."

⁷⁰ *MLATB-DB*, 48, 52–57, accessed August 17, 2015.

⁷¹ MLATB-DB, 1, accessed August 17, 2015.

⁷² Christoph Stiegemann, ed., Byzanz. Das Licht aus dem Osten. Kult und Altag im Byzantinische Reich vom 4. bis 15. Jahrhundert. Katalog der Ausstellung im Erzlischöflichen Diözesanmuseum Paderborn 2001 (Mainz: Verlag von Zabern, 2001), 303–304, cat. no. IV/27 (artifact originating from Palestine, 5th to 7th centuries).

COMPARATIVE GROUND-PLAN ANALYSIS OF PAULINE MONASTERIES IN LATE MEDIEVAL SLAVONIA

TAJANA PLEŠE*

The second half of the 13th century in the territory of *Regnum Hungariae* was defined by a turbulent political and economic situation. It was also a time of the simultaneous emergence of incoherent groups of hermits, contrary to the well organized Dominicans and Franciscans.¹ Within a very short period of time those scattered groups of hermits were consolidated and formalized, thus forming two new, strong hermit orders: the Paulines and Augustinians. The Order of St. Paul the First Hermit (Ordo sancti Pauli primi Eremitae) was founded through the unity of two hermit communities from Patacs and Pilis into a single coherent community around 1250 under the leadership of Provincial Eusebius. The order gained its legitimacy by the decree of Pope John XXII in 1319, and soon afterwards started to expand throughout present European soil.² Expansion of the newly constituted order into late medieval Slavonian territory started with the arrival of recently gathered hermits in Dubica. This was a crucial moment for the order, as it had to obtain additional property in the attempt to secure its legality. Through many benefits from the Crown and numerous bequests from powerful noble dynasties and politically influential individuals, the order grew rapidly. By the

beginning of the 15th century, the Pauline monks had founded ten monasteries in Slavonia alone.

Knowledge on late medieval Slavonian Pauline monasteries was scarce up until the end of the 20th century because of their transformation during the 17th and 18th centuries in Baroque style, or change of purpose from sacral to profane or military, or due to their complete disintegration. To amend this lack of information, Croatian Conservation Institute began with a large-scale archaeological excavations project on Slavonian Pauline monasteries founded prior to the Battle of Mohács. Eight monasteries (Moslavina Mountain, Remete, Zlat, Streza, Šenkovec, Lepoglava, Kamensko, and Donja Vrijeska) have been ascertained and (partially) excavated, while two are still only known on the basis of archival data (Dubica and Bakva).

The objective of this paper is an overview of the characteristics of Slavonian Pauline monasteries spatial organization, deduced in compliance with the results achieved thus far through archaeological excavations.

The first expansion of the order beyond the borders of the parent monastery in Patacs was, according to Pauline chroniclers, caused by the religious-political situation in present day north Bosnian territory. When Pope Gregory IX requested help from Bartholomew, bishop of Pécs in suppression of the "Bosnian Church" (Crkva bosanska), he sent to the southernmost parts of his bishopric, apart from Dominicans and Templar Knights, the newly gathered hermits.³

Monaški redovi [Les ordres monastiques] (Novi Sad: Književna zajednica, 1988), 8, 17-19; Franzen, *Pregled povijesti crkve*, 87-88; Franjo Šanjek, *Kršćanstvo na hrvatskom prostoru: pregled religiozne povijesti Hrvata (7.-20. st.)* [Christianity on Croatian soil: compendium of religious history of Croats (7th - 20th c.)] (Zagreb: Kršćanska sadašnjost, 1996), 224-228; Beatrix Fülöpp Romhányi, "Die Pauliner im mittelalterlichen Ungarn," in *Beiträge zur Geschichte des Paulinerordens (Ordensstudien XIV)*, Berliner Historische Studien 32, ed. Kaspar Elm (Berlin: Duncker & Humblot, 2000), 143-156.

³ Tade Smičiklas, *Poviest Hrvatska. Dio prvi - od najstarijih vremena do godine 1526* [Croatian history. Part one - from earliest times until 1526] (Zagreb: Naklada Matice hrvatske, 1882), 541-548; Ferdo Šišić, *Pregled povijesti hrvatskog naroda* [Concise history of the Croatian people] (Zagreb: Matica hrvatska, 1962), 244; Nada Klaić, *Povijest Hrvata u ranom srednjem vijeku* [History of Croats in the Early Middle Ages] (Zagreb: Školska knjiga, 1971), 461-463; Jaroslav Šidak,

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¹ Franjo Šanjek, *Crkva i kršćanstvo u Hrvata (srednji vijek)* [The Church and Christianity among Croats: The Middle Ages] (Zagreb: Kršćanska sadašnjost, 1993), 468-506; August Franzen, *Pregled povijesti crkve* [Concise history of the Church] (Zagreb: Kršćanska sadašnjost, 1996), 175-176; William Hinnebusch, *Dominikanci: kratka povijest Reda* [The Dominicans] (Zagreb: Hrvatska dominikanska provincija, 1997), 7-58.

² Andreas Eggerer, Fragmen panis corvi proto - eremitici seu Reliqiae annalium eremi-coenobiticorum Ordinis Fratrum Eremitarum s. Pauli primi Eremitae (Viennae, 1663), 6-12, 18-43, 65-118; Franciscus Orosz, Synopsis annalium coenobiticorum Fratrum Eremitarum Ordinis s. Puli primi Eremitae (Sopronii, 1747), A2-B4a, 30-49, 360-401; s. Stanislaw Świdziński, "Die Augustinusregel im Pauliner-Orden," Augustiniana 18 (1968): 29-38; Jacques Dubois,

Bosanska Dubica, Monastery of the Blessed Virgin Mary

According to Pauline chroniclers, the first monastery in the territory of late medieval Slavonia was the one dedicated to the Blessed Virgin Mary in Dubica,⁴ founded on appointment of Coloman, Duke of Slavonia.⁵ The exact date of the foundation is still unclear; according to Pauline chroniclers, the monastery was founded in 1244, but modern historiography strongly disagrees suggesting that the foundation should be dated closer to the end of the 13th century.

Due to the strongly expressed discord with local authorities and inhabitants Dubica monks were not very popular, which resulted in a very small number of estates.⁶ Nevertheless, Dubica monastery's existence continued up until the raids of Ottoman troops between 1435 and 1450 when monks left the monastery.⁷ Although Paulines returned to Dubica around 1460, they left outright in 1465.⁸ Except for the historical events of Dubica monastery, no other information is known regarding its location (it is only supposed that it stood on Alibašić Hill)⁹ or organization.

Further development of the order was defined in compliance with radical reforms of King Béla IV. According to Pauline chroniclers, Béla IV was very supportive towards the young, "domestic" order. King Béla IV encouraged the efforts of the order's expansion by numerous endowments and subsidies, and soon many noble families also engaged in its bestowal. Furthermore, the order was guite eager to expand (and to gain estates accordingly) due to their aspiration of legitimacy, which was caused by the conclusion of Paul, Bishop of Veszprém from 1263, on their insufficient assets. As a result, during a short period of time many Pauline monasteries were founded and quickly undertook a significant role as autonomous units in recovery of the stumbled economy.10

Studije o "Crkvi bosanskoj" i bogumilstvu [Studies on the "Bosnian Church" and bogomils] (Zagreb: Sveučilišna naklada Liber, 1975), 13-108; Nada Klaić, Srednjovjekovna Bosna. Politički položaj bosanskih vladara do Tvrtkove krunidbe (1377.g.) [Medieval Bosnia. Political position of Bosnian rulers up to the coronation of Tvrtko (1377)] (Zagreb: Grafički zavod Hrvatske, 1989), 243-265; Šanjek, Crkva i kršćanstvo, 317-322, 392-393; Tomislav Raukar, Hrvatsko srednjovjekovlje: prostor, ljudi, ideje [Croatian Middle Ages: space, people, ideas] (Zagreb: Školska knjiga i Zavod za hrvatsku povijest Filozofskog fakulteta u Zagrebu, 1997), 302; Neven Budak and Tomislav Raukar, Hrvatska povijest srednjeg vijeka [Croatian history of the Middle Ages] (Zagreb: Školska knjiga, 2006), 198, 271; Ivan Mužić, Vjera Crkve bosanske [Religion of the Bosnian Church] (Split: Muzej hrvatskih arheoloških spomenika, 2008), 7-27.

⁴ Archives of Dubica monastery (*Acta Monast. Dubicense*) encompass the period from 1244 (i.e. 1270) to 1461 (i.e. 1465). Presently they are kept in the Hungarian National Archives in Budapest.

⁵ Orosz, Synopsis annalium, 390; Ioannes Kristolovec, Descriptio Monasteriorum s. Pauli primi Eremitae in Illyrio fundatorum, tam per Turcas ab antiquo destructorum quam in praesena existentium cum suis memorabilibus per Rssmum Patrem Fr. Joannem Kristolovecz Proto-eremitici Ordinis s. Pauli Generalem conciccata additis ad calcem notis historicis P. Fr. Nicolai Benger 1738, (Mon. Dubicense) (s.a.), 105a-106a; Tomo Kovachevich, Monasteriorum in Croatia (I. Dubicense) (s.a.); Nicolaus Benger, Chronotaxis monasteriorum Ordinis FF: Eremitarum s. Pauli primi Eremitae in provinciis Istriae et Croatiae (s.a.), 28-30; Ivan Krstitelj Tkalčić, "Pavlinski samostan u Dubici" [The Pauline monastery in Dubica], VHAD1 (1895): 189-192; Ivan Krstitelj Tkalčić, "O stanju više

nastave u Hrvatskoj prije a osobito za Pavlinah" [On the state of higher education in Croatia before and particulary in the time of the Paulines], *Rad Jugoslavenske akademije za znanost i umjetnost* 23 (1888): 78-104 (85); Vjekoslav Klaić, *Povijest Hrvata od najstarijih vremena do svršetka 19. stoljeća* [The history of Croats from the earliest times until the end of the 19th century] (Zagreb: Knjižara Lavoslava Hartmana, 1904), 246-250; Gjuro Szabo, "Spomenici kotara Ivanec" [Monuments of the Ivanec district], *VHAD* 16 (1919): 22-96 (22-23).

⁶ For the list of benefactors of Dubica monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], LK 8 (1930): 65-69; Kamilo Dočkal, Samostan Blažene Djevice Marije u Dubici 1244 [Monastery of the Blessed Virgin Mary in Dubica 1244] (MS) (Zagreb, 1952); Pleše, "Pregled pavlinskih Tajana samostana kasnosrednjovjekovne Slavonije" [Archaeological context of the Pauline monasteries in the late medieval Slavonia], Cris: časopis Povijesnog društva Križevci 12 (2010): 202-220 (203). 7 Dočkal, Samostan Blažene Djevice Marije u Dubici 1244, 88-89

⁸ Kristolovec, *Descriptio (Mon. Dubicense)*, 106a; Eggerer, *Fragmen panis*, 184; Tkalčić, "Pavlinski samostan u Dubici," 200-202; Dočkal, *Samostan Blažene Djevice Marije u Dubici 1244*, 88-90, 95-96.

⁹ Dočkal, *Samostan Blažene Djevice Marije u Dubici 1244*, 97-98.

¹⁰ Smičiklas, *Poviest Hrvatska*, 345-351, 539-540; Tkalčić, "Pavlinski samostan u Dubici," 85; Szabo, "Spomenici kotara Ivanec," 22; Josip Buturac, "Poviesni priegled redovničtva u Hrvatskoj" [Historical compendium of monasticism in

During the latter half of the 13th century two monasteries were founded in late medieval Slavonia - on Moslavina Mountain and in Remete.

Moslavina Mountain, Monastery of the Blessed Virgin Mary

Monastery of the Blessed Virgin Mary on Moslavina Mountain¹¹ (near Garić Castle) was founded during the latter half of the 13th century by the endowment of *magister* Tiburcius.¹² During the next few centuries this monastery gained significant political influence because of its strong economical background.¹³ According to their archives, the Paulines also managed to gain many privileges and assured that the monastery maintained the status of *locus credibilis*.

It may be assumed that the Paulines abandoned Moslavina Mountain Monastery never to return again due to the pending peril of Ottoman incursions between 1520 and 1544.¹⁴ It cannot be ascertained who (if anyone) became the new owner of the Moslavina Mountain Monastery's estates or whether the monastery was used for some other purpose. Consequently, the monastery was left to dilapidate in thick vegetation.

The first Pauline monastery in present day Croatia was built on a small, rectangular plateau, defined by two mountain streams. Respecting the geo-morphology of the terrain, the monastery was built on three terraces. Since the monastery is situated in the very heart of the mountain, in a gorge that is quite difficult to reach by modern roads, after its abandonment not a single stone was removed.

Systematic archaeological excavations of this monastery began in 2009.¹⁵ During the following six years a large part of the monastic church was explored (the whole nave and a part of the chancel), followed subsequently by the conservation-restoration works.

The monastic church is situated on the highest terrace, i. e. in the north-easternpart of the monastery.¹⁶ Regarding the found architectural mouldings, the monastic church was built in Late Romanesque style and rebuilt later in Late Gothic style.¹⁷ Its ground-plan also resembles the latter:

Croatia], *Croatia sacra* 20-21 (1943): 131-152 (138-140); Klaić, *Povijest Hrvata u razvijenom srednjem vijeku*, 319-329; Budak and Raukar, *Hrvatska povijest*, 175-176, 183.

¹¹ Archives of Moslavina Mountain Monastery (*Acta Monast. de Garig*) encompass the period from 1257 to 1520 (i.e. 1745). All 548 documents are kept in the Hungarian National Archives in Budapest.

¹² According to Pauline chroniclers, the monastery on Moslavina Mountain was founded in 1295. However, due to recent historical research of archival data it can be supposed that this monastery was founded during the mid 13th century. Eggerer, Fragmen panis, 90; Benger, Chronotaxis monasteriorum, 20-21; Kristolovec, Descriptio (Mon. in Garić), 127; Kovachevich, Monasteriorum in Croatia (IV de Montibus Garics); Orosz, Synopsis annalium, 388; Tkalčić, "O stanju više nastave," 85; Szabo, "Spomenici kotara Ivanec," 23; Lelja Dobronić, "Augustinci u srednjovjekovnoj Slavoniji i Hrvatskoj" [The Augustinians in late medieval Slavonia and Croatia] Croatica Christiana Periodica 20 (1987): 1-25 (9-12); Lelja Dobronić, "Svetište Majke Božje Garićke i plemići iz Paližne" [The Shrine of the Mother of God of Garić and the noblemen of Paližna], Kaj 31 (1998): 69-77 (69-72); Silvija Pisk, Pavlinski samostan Blažene Djevice Marije na Gariću (Moslavačka gora) i njegova uloga u regionalnoj povijesti [The Pauline monastery of the Blessed Virgin Mary in Garić (Moslavina Mountain) and its role in regional history] (PhD diss., Faculty of Humanities and Social Sciences in Zagreb, 2011).

¹³ For the list of benefactors of Moslavina Mountain Monastery and its estates, see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az

Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK* 9 (1931): 284-315 (284-315); 10 (1932): 92-123, 256-286; 11 (1933): 58-92; 12 (1934): 111-154; 13 (1935): 233-265; Kamilo Dočkal, *Samostan Blažene Djevice Marije u Gariću* [Monastery of the Blessed Virgin Mary in Garić] (MS) (Zagreb, 1955); Tajana Pleše, "Monasterium B. V. Mariae sub monte seu Promontori Garigh, alias Garich," *Radovi Zavoda za znanstvenoistraživački i umjetnički rad u Bjelovaru* 4 (2011): 101-118 (105-108).

¹⁴ Gjuro Szabo, *Srednjovječni gradovi u Hrvatskoj i Slavoniji* [Medieval castles in Croatia and Slavonia] (Zagreb: Naklada Matice hrvatska, 1920; Zagreb: Golden Marketing, 2006), 106.

¹⁵ Excavations and conservation-restoration works are led by Tajana Pleše (Department for Archaeology, Division for Archaeological Heritage, Croatian Conservation Institute (CCI). ¹⁶ Situating the monastic church in this part of the monastery was not a very common solution (e.g. St. Jacob in Patacs). In this case, its position may be correlated to the fact that this highest terrace was the dominant one. Tamás Guzsik, *A pálos rend építészete a középkori Magyarországon* [Architecture of the Pauline Order in Medieval Hungary] (Budapest: Mikes Kiadó, 2003), 29-34.

¹⁷ Although it is not (yet) possible to determine the exact year of the reconstruction, it can be assumed that it was undertaken in the mid 15th century. The assumption is made according to the keystone with a round upper surface found in the nave of the monastic church. Unlike other keystones, decorated with faunal and/or floral motifs, this one has a heart-shaped *quadrifolium* in the middle and a barely legible, circular

the longitudinality of the object (exter. dim.: 32.25 x 12.3 m) was emphasised by the rectangular, single nave (inter. dim.: 16.5 x 8.6 m) and a slightly smaller chancel enclosed by a polygonal apse (inter. dim.: ca. 12.65 x 6.5 m). The main entrance, situated on the western facade, was richly decorated in Late Gothic style and was almost completely preserved *in situ*. On the northern part of the western facade a base of one larger altar was also situated. In the interior of the nave four bases of the altars were found: two smaller ones in the middle of the nave, and two larger ones in line with both northern and southern part of the triumphal arch. It was also confirmed that its floor (made of clay tiles) was completely intact. Therefore, further excavations will provide numerous scientific fields with abundance of new data, deriving from the fact that all human osteological material (most probably) remained undisturbed. Due to a large number of vault ribs found in the interior of the nave and the part of the chancel, it can be deduced that the monastic church was vaulted (at least during this latter building phase). Therefore, it is quite interesting that no counterforts were found alongside of the free façades. Unfortunately, little can be said on the account of light apertures of the church.

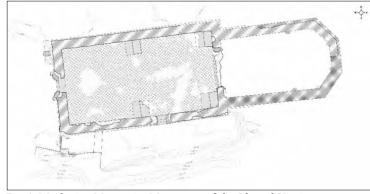


Fig. 1. Moslavina Mountain, Monastery of the Blessed Virgin Mary. Ground-plan of the monastic church and the northern part of the complex.

Except for the several parts of the rosette (found in front of the western façade), no other parts of the windows were found, either inside or outside of the nave. However, the answer to this problem may lay in the fact that all architectural mouldings were made of calcarenite, a very porous material that crumbles very easily.¹⁸ Therefore, it may be assumed that, considering geo-morphology of the surrounding terrain of the plateau, the windows were situated on the higher portions of the southern wall. Until further excavations little can be said on the chancel apart from the fact that it was vaulted and that architectural mouldings (especially rib supports in the corners of the polygonal apse) were richly designed (fig. 1).

Monastic space on the two lower terraces is still largely unexplored. Therefore, only preliminary conclusions can be made. In front of the church a rather large irregular courtyard was placed, defined in its shape exclusively by the morphology of the terrain of this highest terrace. A small portal (also decorated in Late Gothic style, but with much simpler architectural mouldings than the ones of the main entrance to the church) situated next to the south-western corner of the church connected the courtyard with a narrow corridor leading to the cloister. The church was

also connected with the cloister through a portal (with quite simple architectural mouldings) placed in the middle of the southern wall. Since the cloister was built on a lower terrace, the connection was made with three stone steps (average height 20 cm). Because of the fact that (northern) part of the cloister and a corridor are both built on this lower terrace, a question remains as how the connection between the irregular courtyard and smaller portal (leading to a corridor) was made (fig. 1).

Excavations and subsequent conservationrestoration works will continue and soon it will be

inscription on the rim. If the interpretation of the inscription is correct (*A. B. V. M. / Conventus*), we can correlate the term "conventus" with archival documents. Since in all documents prior to the mid 15^{th} century monastery was referred to as "monasterium," and only after that time where both terms were used, it can therefore be assumed that the monastic church was rebuilt in the mid 15^{th} century. This hypothesis

can be confirmed with the late Gothic style moulding of the vault ribs found in the nave and four rib vertexes on the sides of the keystone.

¹⁸ The non-existence of some architectural mouldings does not mean that they did not exist, but it may also mean that it crumbled into an amorphous piece of stone.

possible to know more about the first Pauline monastery in the present day Croatia.

Remete, Monastery of the Blessed Virgin Mary

During the last quarter of 13th century a second Pauline monastery in present day Croatia was founded - the monastery of the Blessed Virgin Mary in Remete¹⁹, situated in a valley on the southern foothills of Medvednica Mountain (near Zagreb). The question of the exact date of the foundation of Remete - whether the monastery was founded in 1247 by Abbot Isquirinus or several decades later - is still a briskly debated topic among historians.²⁰ The strength of the monastery grew rapidly due to both numerous endowments from the local nobility and privileges.²¹ Therefore, already in 1390 Remete monastery was promoted to the status of vicariate.²²

The Pauline monastery in Remete was devastated for the first time in 1394 in a great fire, and again not a century later in 1484 during the raids of the Ottoman troops. The latter damage was repaired by the order of King Matthias Corvinus in 1485. Allegedly, a defensive wall was built, but there are no archival documents (or actual findings) that would prove this hypothesis.²³ The monastery in Remete was attacked two more times by the Ottoman troops: in 1557 and 1591.²⁴ Despite these attacks, Pauline monks have never abandoned their monastery in Remete.

Remete monastery was restored several times during the 17th and 18th century. The present day appearance of the church is the result of renovations after the disastrous earthquake of 1880, while the monastic complex assumed its final appearance during the conservation-restoration works completed at the end of the 20th century.²⁵

Before the beginning of archaeological excavations, it was supposed that the present day church is the same one (albeit substantially reconstructed) built in 1319 due to the generosity of the King Charles Robert.²⁶ Knowledge on the Remete monastic church drastically changed after three seasons of archaeological excavations (2007-2009) on the plateau along the southern façade of the present day parish Church of the Assumption

¹⁹ Archives of Remete monastery (*Acta Conv. de Remethe*) encompass the period from 1288 to 1786. All preserved documents are kept in the Hungarian National Archives in Budapest.

²⁰ The first (preserved) document in which the Remete monastery was mentioned is the deed from 1288 when nobleman Miroslav Hrčukov donated several estates to the heremitarum domus Beate Virginis prope Zagrabiam represented by Prior Firminus. Eggerer, Fragmen panis, 84; Unknown author, Mater amabilis Maria Miraculosa Virgo Remetensis. In hoc exiguo libello clare proponitur cum sua origine et nonnullis miraculis per quendem Patrem Fratrem Ordinis s. Pauli primi Eremitae professum Monasterii Remetensis in tertium annum inhabitatorem anno Matris Virginis 1665, I.6, IV.1; Kristolovec, Descriptio (Origo Monasterii Remethensis), 106a-107a; Orosz, Synopsis annalium, 388; Smičiklas, Poviest Hrvatska, 539-540; Tkalčić, "O stanju više nastave," 85; Janko Barlè, Remete, povijesni podaci o samostanu, župi i crkvi [Remete, historical facts on the monastery, parish, and church] (Zagreb: Tisak i naklada Marka Mileusnića, 1914), 7; Szabo, "Spomenici kotara Ivanec," 22-23; Šišić, Pregled povijesti, 245; Kamilo Dočkal, Samostan Blažene Djevice Marije u Remetama [Monastery of the Blessed] Virgin Mary in Remete] (MS) (Zagreb, 1953), 5-7, 14-16, 644; Ante Sekulić, Remete [Remete] (Zagreb: Kršćanska sadašnjost, 1986), 25.

²¹ For the list of benefactors of Remete monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval

monasteries in national archives], *LK* 5 (1927): 136-209; Dočkal, *Samostan Blažene Djevice Marije u Remetama*; Pleše, "Pregled pavlinskih samostana," 205.

²² Barlè, *Remete*, 10; Dočkal, *Samostan Blažene Djevice Marije u Remetama*, 96; Sekulić, *Remete*, 26-32, 40-44.

²³ Unknown author, *Mater amabilis* VII.1-2; Kristolovec, *Descriptio (Origo Monasterii Remethensis)*, 108a; Eggerer, *Fragmen panis*, 297; Barlè, *Remete*, 13; Dočkal, *Samostan Blažene Djevice Marije u Remetama*, 98-99, 195-199, 208-209, 647-648; Sekulić, *Remete*, 39, 46.

²⁴ Eggerer, *Fragmen panis*, 313; Kristolovec, *Descriptio (Origo Monasterii Remethensis)*, 108a-109; Barlè, *Remete*, 25, 28; Dočkal, *Samostan Blažene Djevice Marije u Remetama*, 108, 208-209, 305, 339-341; Sekulić, *Remete*, 47-50.

²⁵ The late medieval construction phase of Remete monastery was reconstructed in Baroque style during the latter half of the 17th century. The second reconstruction was done from 1721 to 1747. After the dissolution of the order in 1786, major adaptations to the monastic complex were commissioned by Bishops M. Vrhovec, A. Alagović and J. Haulik. Eggerer, *Fragmen panis*, 349, 361; Unknown author, *Mater amabilis* III.5; Kristolovec, *Descriptio (Origo Monasterii Remethensis)*, 108-109; Barlè, *Remete*, 33, 43, 48, 56; Dočkal, *Samostan Blažene Djevice Marije u Remetama*, 649-680, 692-697; Sekulić, *Remete*, 62-71, 89, 108-109.

²⁶ Kristolovec, *Descriptio (Origo Monasterii Remethensis)*, 106; Klaić, *Povijest Hrvata*, 69-71; Barlè, *Remete*, 8; Dočkal, *Samostan Blažene Djevice Marije u Remetama*, 21-22; Sekulić, *Remete*, 25.

of the Blessed Virgin Mary, when two older churches were discovered.²⁷

Both earlier churches, parallel with the existing one, have sustained considerable damage caused by extensive geo-tectonic disorders in the upper layers of the soil.²⁸ The reconstructions of their ground-plans were made through spatial rotation and translation of the data acquired with 3D laser scanning and with comparative analyses of the dimensions of other Pauline late medieval monastic churches.

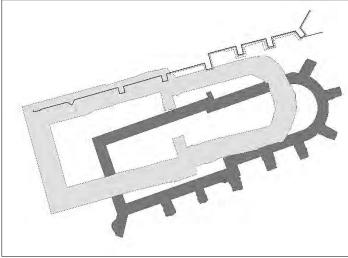


Fig. 2. Remete, Monastery of the Blessed Virgin Mary. Ideal ground-plan reconstructions of the first two monastic churches (oldest one: dark gray; younger one: light gray).

According to ideal reconstruction made from a 3D model, the first church (exter. dim.: ca. 30.4×10.8) had a rectangular, single nave (inter. dim.: ca. 13.75 x 8 m) and equally long chancel (inter. dim.: ca. 13.8 x 6.1 m) enclosed by a semicircular apse. On all free façades the church was reinforced with massive, rectangular counterforts. Therefore, it can be assumed either that the whole church was vaulted or that the builders must have been aware of the active landslide. This church, torn down by the activation of the Remete landslide, can be (with great caution) defined as the oldest one and dated to the period from the foundation of the monastery in the last decades of the 13th century to the time of King Charles Robert's reign (1301-1342) (fig. 2).

The new church had to be built promptly and builders must have been aware of the static problems caused by active landslide. Hence they tried to constructively secure the new church by building massive foundations (2.4 to 2.8 m) and to support them the builders used the older ones as unique counterforts. This second church (exter.

dim.: ca. 34.4 x 14.35 m) also had a rectangular, single nave (inter. dim.: ca. 14.8 x 8.6 m), and a slightly shorter and narrower chancel (inter. dim.: ca. 13.75 x 7 m). It should be mentioned that, at least in the zone of the foundations, the apse was formed as a semi-circle on the outside, and as a polygon on the inside. This church, also torn down by the movements of the active landslide, can carefully be dated to the period of King Charles Robert's reign. Furthermore it can be assumed that it was torn down no later than 1400 (fig. 2).

Only the third attempt of the Paulines to build a monastic church that will last was a success. Although builders used the

northern wall of the second church as a unique counterfort, it can be assumed that the main cause of its stability lay in the position that was not on the main axis of the landslide. This third church was presumably built at the beginning of the 15th century and it still stands firmly (albeit changed during several interventions) on its original place.

Due to the above mentioned, numerous transformations, nothing can be said about the first ground-plan of the late medieval monastery except for two short segments of foundations adjacent to the north-eastern angle of the chancel of the second church.

Pope John XXII confirmed the order in 1319 on the initiative of King Charles Robert,²⁹

²⁷ Research was led by Boris Mašić (Zagreb City Museum) and Tajana Pleše (CCI). Boris Mašić and Tajana Pleše, "O skupnom nalazu zlatnog novca uz crkvu Blažene Djevice Marije u Remetama" [On the group find of gold coins next to the church of the Blessed Virgin Mary in Remete] *Opuscula Archaeologica* 33 (2009): 207-219; Boris Mašić and Tajana Pleše, "On unstable foundations. The excavations of the

monastery of the Pauline Order in Remete, Croatia," *Minerva* 21 (2010): 50-53.

²⁸ Deviations caused by centuries of active landslide are visible as large fissures as wide as 150 cm, as well as numerous smaller tensile cracks in the foundation structures.

²⁹ Eggerer, *Fragmen panis*, 113; Kovachevich, *Monasteriorum in Croatia (V de Bakva)*; Orosz, *Synopsis annalium*, 347-349;

who continued with his benevolent policy of the Crown towards the order. During his reign, two more monasteries in late medieval Slavonia were founded: in Bakva and on the Mountain of St. Peter.

Bakva, Monastery of St. Benedict

The Monastery of St. Benedict in Bakva³⁰ (near Špišić Bukovica) was founded by the endowment of nobleman Salamon in 1301³¹ on the northernmost slopes of Bilogora Mountain. During its existence, the monastery in Bakva gained several privileges and status of *locus credibilis*, as well as a large number of estates due to the endowments of local nobility.³² The monastery was raided by Ottoman troops between 1491 and 1494, and it was subsequently renovated with assets of local nobility.33 However, the Paulines abandoned the renovated monastery and fled to safer Lepoglava between 1531 (during the retreat of Ottoman troops from Szigetvár) and 1552 (when Ottoman troops seized the nearby Virovitica).34 Bakva Monastery was last mentioned in 1696, when the General of the Order John Kristolovec started a process of restitution of lost Pauline estates on the territory between the rivers of Sava and Drava.35

Since the return to Bakva failed, the monastery was gradually forgotten.³⁶ Albeit the fact that it had a significant role in the wider Virovitica area, Bakva monastery completely disappeared from the cultural landscape. Not even its name remained preserved in the local toponimy. So far all the reambulation efforts in search for the monastery of St. Benedict in Bakva have failed.

Mountain of St. Peter (Zlat), Monastery of St. Peter

The Monastery of St. Peter³⁷ on Mountain of St. Peter (Zlat, Petrovac, *Patur Gozdia*)³⁸ was founded in 1303/1304 by Father Gerdas (Grdoš).³⁹ According to Pauline chroniclers, Zlat monastery was raided already in 1393/1394 by paramilitary (maybe Ottoman) troops from Bosnian territory.⁴⁰ The monastery was devastated once more by the Ottoman troops in the middle of the 15th century (1445 or 1448), and monks fled to the safer location of Kamensko. After that raid, consolidated Paulines from Zlat and Kamensko sent a request to Pope Nicolas V in 1451 for the permanent and legal merge of their estates. Pope Nicolas V permitted the requested merge and Paulines returned to Zlat in the last decades of the 15th century. However,

Smičiklas, *Poviest Hrvatska.* 374-397; Klaić, *Povijest Hrvata u razvijenom srednjem vijeku*, 504-509, 514-521; Budak and Raukar, *Hrvatska povijest*, 186-190.

³⁰ Archives of Bakva monastery (*Acta Monast. de Bakva*) encompass the period from 1301 to 1531. All 50 preserved documents are kept in the Hungarian National Archive in Budapest.

³¹ Eggerer, *Fragmen panis*, 97; Kamilo Dočkal, *Povijest pavlinskog samostana sv. Benedikta u Bakvi* [History of the Pauline monastery of St. Benedict in Bakva] (MS) (Zagreb, 1952), 7-8.

³² For the list of benefactors of Bakva monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK* 3 (1925): 100-120; Dočkal, *Povijest pavlinskog samostana*; Pleše, "Pregled pavlinskih samostana," 207.

³³ Eggerer, *Fragmen panis*, 97; Orosz, *Synopsis annalium*, 388; Dočkal, *Povijest pavlinskog samostana*, 53.

³⁴ Josip Bösendorfer, *Crtice iz slavonske povijesti* [Sketches from Slavonian History] (Osijek, 1910; Vinkovci, 1994), 320; Szabo, *Srednjovječni gradovi*, 129-130; Dočkal, *Povijest pavlinskog samostana*, 9-10.

³⁵ Emperor Leopold allowed the Paulines to return to Bakva in 1679. However, General E. Caprara had a plan to transform the abandoned monastery into a military guardhouse. He

stopped the food supplies to the Paulines so they had to abandon the monastery. Kristolovec, *Descriptio (Mon. de Bakva aut Bukva)*, 128; Dočkal, *Povijest pavlinskog samostana*, 76-77.

³⁶ Eggerer, *Fragmen panis*, 185; Kristolovec, *Descriptio (Mon. de Bakva aut Bukva)*, 128; Kovachevich, *Monasteriorum in Croatia (V de Bakva)*; Orosz, *Synopsis annalium*, 388; Tkalčić, "O stanju više nastave," 86; Szabo, "Spomenici kotara Ivanec," 23.

³⁷ Archives of Zlat monastery (*Acta Monast. de Szlat*) encompass the period from 1278 to 1523. All preserved documents are kept in the Hungarian National Archives in Budapest.

³⁸ A long-term continuity of this geo-strategically vital point was confirmed through Bronze Age (assumed prehistoric settlement) and Roman (assumed military outpost) archaeological findings.

³⁹ Benger, *Chronotaxis monasteriorum*, 39-41; Kovachevich, *Monasteriorum in Croatia (II S. Petri de Zlata Gora)*; Kristolovec, *Descriptio (Mon. de S. Petri in Monte Slat)*, 123-124; Orosz, *Synopsis annalium*, 388-389; Szabo, "Spomenici kotara Ivanec," 23; Kamilo Dočkal, *Samostan sv. Petra na Zlatu* [Monastery of St. Peter on Zlat] (MS) (Zagreb, 1953), 4; Ante Sekulić, "Pavlinski samostani u karlovačkom kraju" [Pauline monasteries in the Karlovac area], *Tkalčić* 11 (2007): 79-101 (81-84).

⁴⁰ Eggerer, *Fragmen panis*, 178; Kristolovec, *Descriptio (Mon. de S. Petri in Monte Slat)*, 124.

they permanently abandoned the Zlat monastery again by the middle of the 16th century due to the increasing peril of Ottoman troops and sought refuge once more in Kamensko monastery.⁴¹

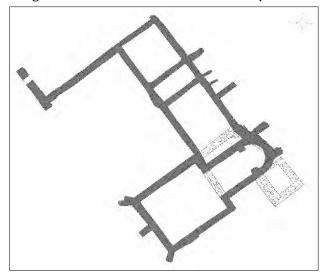


Fig. 3. Mountain of St. Peter (Zlat), Monastery of St. Peter. Ground-plan of the monastery (dark gray).

During this rather short period Zlat monks had to acquire, unlike their fraternal monasteries, most of their possessions on their own.⁴² They also did not manage to obtain privileges or a status of *locus credibilis*.

The abandoned Pauline monastery on Zlat had subsequently obtained a military function. It may be concluded that after the arrival of the frontier troops, one of the largest chardaks (watchtowers) in the wider area was constructed on the nave of the monastic church.⁴³ However, Petrovac (the name used from that time onwards for the abandoned monastery) was abandoned in 1583, and already in 1584 it fell under Ottoman authority. The former Zlat monastery obtained once more a defensive role after the movement of the demarcation line to the Una in 1654, and it maintained this function until the Treaty of Sistova in 1791.44 Around the same time the population of former soldiers (mainly of Eastern Orthodox faith) from the border zones into the wider area of Petrovac had begun.⁴⁵ Therefore, at the beginning of the 19th century, the Orthodox Temple of the Descent of the Holy Spirit was erected on the foundations of the church chancel with a rectangular bell-tower along the eastern section of the southern façade.

The Monastery of St. Peter on Zlat is, for now, the only entirely researched (1987-1988, 2006-2007) Pauline monastery in the territory of present day Croatia⁴⁶ (fig. 3).

gradovi," 65-66; Milan Kruhek, *Krajiške utvrde i obrana hrvatskog kraljevstva tijekom 16. stoljeća* [Grenzer forts and the defence system of the Croatian Kingdom during the 16th century] (Zagreb: Hrvatski institut za povijest, 1995), 36, 127, 180, 192, 221, 225, 247, 253, 257, 283-284, 325; Franz de Paula Julius Fras, *Topografija Karlovačke vojne krajine - Mjestopis iz 1835. godine* [Topography of Karlovac Military Border -Description from 1835] (Gospić: Biblioteka "Ličke župe," 1988), 226; Neven Budak, *Hrvatska i Slavonija u ranom novom vijeku* [Croatia and Slavonia in the Early Modern Age] (Zagreb: Leykam International, 2007), 61.

⁴⁶ Archaeological excavations in 1987 and 1988 were led by Milan Kruhek (Croatian History Museum), and those in 2006 and 2007 by Tajana Pleše (CCI). Milan Kruhek, "Povijesnotopografski pregled pavlinskih samostana u Hrvatskoj" [Historical and topographical overview of Pauline monasteries in Croatia], in *Kultura pavlina u Hrvatskoj 1244-1786*, eds. Đ. Cvitanović et al., (Zagreb: Globus, 1989), 67-93; Zorislav Horvat, "Srednjovjekovna arhitektura pavlinskih samostana u Hrvatskoj" [Medieval architecture of Pauline monasteries in Croatia], in *Kultura pavlina u Hrvatskoj 1244-1786*, eds. Đ. Cvitanović et al. (Zagreb: Globus, 1989), 95-109 (65-66); Milan Kruhek, "Samostan sv. Petra na Slatskoj, danas Petrovoj gori - povijest i arheološka istraživanja" [Monastery of St.

⁴¹ Radoslav Lopašić, *Oko Kupe i Korane* [Around the Kupa and the Korana] (Zagreb: Naklada Matice hrvatske, 1895), 224-226; Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK* 6 (1928): 194-203 (198-200); Dočkal, *Samostan sv. Petra*, 9-13, 23; Zorislav Horvat and Milan Kruhek, "Stari gradovi i utvrđenja u obrani Karlovca u XVI i XVII stoljeću" [Castles and forts of Karlovac defence line in 16th and 17th century], in *Karlovac 1579-1979*, eds. Tomislav Majetić et al. (Karlovac Historijski arhiv u Karlovcu, 1979), 59-79 (65).

⁴² For the short list of benefactors of Zlat monastery and its estates see: Mályusz, "A szlavoniai és horvátországi," 194-203; Dočkal, *Samostan sv. Petra*; Pleše, "Pregled pavlinskih samostana," 207.

⁴³ The appearance of the former Zlat monastery church was recorded in its new, military function in two depictions: on the ground-plan of military engineer J. F. Hollstein (1717) and in the sketch by the territorial supervisory engineer M. A. Weiss (1729). Milan Kruhek, *Petrova gora; povijesno turistički vodič* [Mountain of St. Peter: historical and touristic Guide] (Karlovac: Hrvatske šume, 2005), 21-23.

⁴⁴ Lopašić, *Oko Kupe*, 227-228; Šišić, *Pregled povijesti* 494-495; *Samostan sv. Petra*, 22-23; Horvat and Kruhek, "Stari

⁴⁵ Fras, *Topografija*, 226.

The Zlat Monastery characteristics differ significantly from the other Pauline monasteries in late medieval Slavonia: from the unusual choice of building site full of natural disadvantages to the odd layout. The unusual and asymmetric layout (which was primarily dictated by the geomorphological determinants of the terrain disposition) of the monastery (surface area ca. 420 m^2) – with the monastic church and only a single monastery wing – was suited for the needs (and financial possibilities) of a small monastic community.

The monastic church (exter. dim.: 17.5 x 8.3 m) enclosed the southern part of the monastery. Its longitudinal aspect is emphasized by the roughly equal dimensions of the rectangular, single nave (inter. dim.: 8.15 x 6.65 m) and the sanctuary enclosed by a semi-circular apse (inter. dim: 7.5 x 3.4 m). The western facade was reinforced with rectangular counterforts due to static reasons caused by the sharp downward gradient of the terrain. The eastern façade was also reinforced with counterforts. The main entrance to the church was therefore built on the western part of the southern façade. Since none of the vault architectural mouldings were found, it can be assumed that the monastic church was not vaulted; rather it had a simple, wooden coffered ceiling. Furthermore, the floor was most likely made of wooden slats.

The sole monastery wing was directly connected to the church. The capitulary hall/refectory (inter. dim.: 8.4 x 4.9 m) was immediately adjacent to the sanctuary, which was separated from the kitchen (inter. dim.: 5.5×4.9 m) by a corridor. This corridor (inter. dim.: 4.9×2.2 m) connected these two rooms with the courtyard (inter. dim.: 11.2×15.4 m) and the outdoor area. The eastern door was also the only communication found between the monastery complex and the outside area. It may be assumed

that there was one more door (a utility entrance?) on the (presumed) wooden, massive fence, which enclosed the monastery on the western side. Thus, it can be assumed that the eastern door could have been the main monastery gate.⁴⁷ It may be assumed that the sole wing had an upper floor (made of wood?) in which the dormitory was situated. However, due to the presumably small number of monks,⁴⁸ it may also be assumed that the kitchen was also used as dormitory.

Instead of the customary rectangular (or square) cloister with a well, the space enclosed by the northern wall of the church's nave, the western façade of the monastery wing and the simple wall to the north enclosed a simple, rectangular, non-covered courtyard. No wall on the western side was found, so it may be assumed that this area was enclosed by a wooden fence. The monastery also had no well because it was built on bedrock. Due to the simplicity of the solution to the entire monastery it may be assumed that the courtyard had an economic role. Since no architectural structures were discovered inside the courtyard during the excavations, it is reasonable to assume that there were no stone-built partitions in this area. By the same token, it may be concluded that most of the courtyard was not covered. The courtyard was certainly not paved; instead, embossed bedrock was used.

Several of the above mentioned renovations of the Zlat monastery are visible only through architectural interventions (i.e. the reinforcement of the all structures with smaller counterforts along the eastern façade, which were necessary not only to restore the collapsed portions of the monastery, but also because of the poor quality of the original construction).

According to a review of the available comparative ground-plans (particularly those of the earliest Pauline monasteries), not a single architectural solution was found that would

Peter on Slatska, present day Mountain of St. Peter - history and archaeological excavations], *Lepoglavski zbornik* (1998): 113-132; Tajana Pleše, "Monasterium de S. Petri in monte Zlat," *Opuscula archaeologica* 35 (2011): 319-350.

⁴⁷ Given the already mentioned characteristics of the entire complex, a larger and more notable entrance gate need not be expected. In compliance therewith, the road leading to the monastery should also be considered, as in compliance with

the position of the door it passed along the eastern side. It is important to note that the manner in which access to the other late medieval Pauline monasteries was resolved is still not known.

⁴⁸ Beatrix Fülöpp Romhányi, "Life in the Pauline Monasteries of Late Medieval Hungary," *Periodica Polytechnica -Architecture* 43, no. 2 (2012): 53-56.

correspond to the one of Zlat. The most similar ground-plan solution to the Zlat monastery is the Pauline Monastery of the Holy Spirit in Pilisszentlélek.⁴⁹ The similarity of these two monasteries does not lie in the likeness of their ground-plans, but in the fact that they both were founded around the same time (i.e. during the time immediately following the establishment of the order), which resulted in the need to accommodate architectural solutions to their financial abilities.

Upon the completion of conservationrestoration works in 2015, this valuable monument of Croatia's cultural heritage should assume its educational role in engendering the best possible understanding of the historical and art-historical cultural landscape of that era.

The order continued to flourish under the reign of King Louis I (1342-1382), and two new monasteries were established in Slavonian territory: in Streza and in Šenkovec. However, these were also the times when political problems involving the Ottomans had begun.⁵⁰

Streza, Monastery of All Saints

The Pauline Monastery of All Saints in Streza⁵¹ (near Bjelovar) was founded in 1374 by the endowment of magister John Bisen, castellan of Bijela Stijena.⁵² In less than two centuries, due to numerous endowments and privileges, the monastery in Streza expanded its estates, having thus become one of the most prosperous Pauline monasteries of that period in Slavonia.⁵³ Economic and legal organisation of the Streza monastery is well known due to the two (preserved) Urbaria from 1432 and 1477.54 Under the pressure of increasing peril of Ottoman intrusion, the Paulines decided to abandon Streza Monastery, and relocate to the safety of Lepoglava. The abandoned monastery was taken over by grenzers from Varaždin Generalate, who maintained it as a defensive position at least until 1540.55 Subsequently Streza Monastery became the main source of construction material for inhabitants of near-by settlements which led to its long-term systematic deterioration. After the majority of the building material was carried away, the whole area

⁴⁹ Zoltán Bencze, "Das Kloster St. Lorenz bei Buda (Budaszentlörinc) und andere ungarische Paulinerklöster Archäologische Untersuchengen," in *Beiträge zur Geschichte des Paulinerordens (Ordensstudien XIV)*, Berliner Historische Studien 32, ed. Kaspar Elm (Berlin: Duncker & Humblot, 2000), 157-190 (183-185); Guzsik, *A pálos rend*, 58-59.

⁵⁰ Eggerer, *Fragmen panis*, 132, 272, 349; Orosz, *Synopsis annalium*, 349-351; Smičiklas, *Poviest Hrvatska*, 398-430; Klaić, *Povijest Hrvata u razvijenom srednjem vijeku*, 509-513, 523-543; Halil Inalcik, *Osmansko carstvo: Klasično doba 1300.-1600* [Ottoman Empire: The Classical Period 1300-1600] (Zagreb: Srednja Europa, 2002), 10-16; Neven Budak, "Povijesni okvir" [Historical framework], in *Hrvatska renesansa*, eds. Miljenko Jurković and Alain Erlande Brandenburg (Zagreb: Galerija Klovićevi dvori, 2004), 23-45 (23); Budak and Raukar, *Hrvatska povijest*, 190-195, 274.

⁵¹ Archives of Streza monastery (*Acta Monast. de Ztreza*) encompass the period from 1366 to 1547. All 203 preserved documents are kept in the Hungarian National Archives in Budapest.

⁵² Eggerer, Fragmen panis, 155; Orosz, Synopsis annalium, 388; Benger, Chronotaxis, 39-40; Kovachevich, Monasteriorum in Croatia (III. De Sztreza); Kristolovec, Descriptio (Mon. Streza olim dictum O.O. Sanctorum), 126; Tkalčić, "O stanju više nastave," 9; Szabo, "Spomenici kotara Ivanec," 24; Kamilo Dočkal, "Srednjovjekovna naselja oko Streze: prilog našoj srednjovjekovnoj topografiji" [Medieval settlements around Streza: Contribution to our medieval topography], Starine 46 (1956): 145-202; Josip Buturac, "Popis župa zagrebačke biskupije 1334. i 1501. godine" [List of

parishes in the Zagreb Diocese from 1334 and 1501], *Starine* 59 (1984): 43-108 (78); Horvat, "Srednjovjekovna arhitektura," 100; Stjepan Kožul, *Sakralna umjetnost bjelovarskog kraja* [Sacral art of Bjelovar Region] (Zagreb: Prometej, 1999), 14, 36, 42, 55, 59-60, 63, 88.

⁵³ For the list of benefactors of Streza monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK* 6 (1928): 87-203 (87-177); Kamilo Dočkal, *Samostan Svih svetih u Strezi 1375* [Monastery of All Saints in Streza 1375] (MS) (Zagreb, 1952); Pleše, "Pregled pavlinskih samostana," 209.

⁵⁴ Ivan Krstitelj Tkalčić, "Urbar bivšeg pavlinskog samostana u Strezi" [The *urbarium* of the former Pauline monastery in Streza], *Vjesnik kraljevskog hrvatskog-slavonskodalmatinskog zemaljskog arkiva* 5 (1903): 201-219; Mályusz, "A szlavoniai és horvátországi," 122-124; Dočkal, *Samostan Svih svetih*, 72-77, 170-198; Josip Adamček, "Pavlini i njihovi feudalni posjedi" [Paulines and their feudal estates], in *Kultura pavlina u Hrvatskoj 1244-1786*, eds. D. Cvitanović et al. (Zagreb: Globus, 1989), 41-65 (44-45); Mira Kolar Dimitrijević, "Urbar pavlinskog samostana u Strezi iz 1477. godine" [The *urbarium* of Pauline monastery in Streza from 1477], *Podravina* II, no. 3 (2003): 103-123.

⁵⁵ Kristolovec, *Descriptio (Mon. Streza olim dictum O.O. Sanctorum*), 127; Tkalčić, "O stanju više nastave," 86; Tkalčić, "Urbar bivšeg pavlinskog samostana," 202; Dočkal, *Samostan Svih svetih*, 250; Kruhek, "Povijesno-topografski pregled," 83.

of the Streza monastery was used as a cultivated field. Finally, the former Streza monastery was completely overgrown in shrubbery.

Archaeological excavations of Streza Monastery began in 2006.⁵⁶ The Monastery of All Saints (ca. 3500 m²) was built on a rectangular plateau defined by two streams and two artificially made canals. During seven seasons of excavations

(2006-2012), a monastic church and southern part of the complex were studied. The monastic church (completely explored) was situated in the south-eastern part of the monastery. Its longitudinal axis was emphasized (exter. dim.: 32.9 x 9.25 m) with the dimensions almost even of а rectangular, single nave (inter. dim.: 15.6 x 7.3 m) and chancel enclosed by polygonal apse (inter. dim.: 14.1 x 6.9 m). All free facades of the church were reinforced by massive, rectangular counterforts. Due the found to architectural mouldings it can be concluded that the church was vaulted. Since the majority of the monastic church was preserved only in the lowest

parts of the foundations (due to the above mentioned reason), almost nothing can be said on the arrangements of the apertures (besides the position of the main entrance on the western façade). The interior of the church was almost entirely devastated. Hence, only one base of the altar was found: the one in the southern part of the third bay of the nave (fig. 4).

Apart from the monastic church, only the southern part of the complex has been explored thus far: the south-eastern part of the cloister (ca. 45 m^2), southern part of the eastern corridor (1.8 x

at least 7 m), unusually positioned rectangular room adjacent to the eastern part of the northern nave wall (exter. dim.: 6×8 m), and an large vacant space (where usually stands a chapel or a sacristy) enclosed by the mentioned room, northern chancel wall, and a southern part of the eastern outer monastery wall (at least ca. 106 m²) (fig. 4).

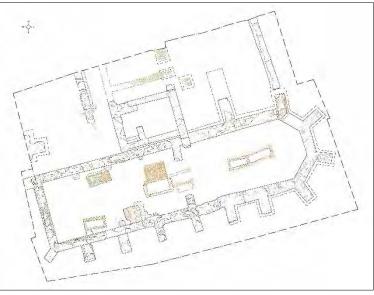


Fig. 4. Streza, Monastery of All Saints. Ground-plan of the monastic church and the southern part of the complex.

Excavations of the Streza monastery will continue, in due time it will be possible to comprehend a lot more on the question of its architectural organization.

Šenkovec, Monastery of the Blessed Virgin Mary and All Saints

The Monastery of Blessed Virgin Mary and All Saints⁵⁷ in Šenkovec (near Čakovec) was founded in 1376 due to the endowment of Duke of Transylvania Stephen II Lacković and *magister* Stephen.⁵⁸ Paulines from Šenkovec managed to

⁵⁶ Archaeological excavations are led by Tajana Pleše (CCI). Tajana Pleše and Krešimir Karlo, "*Monasterium Omnium Sanctorum de Ztreza Ordinis S. Pauli Primi Eremitae*," *Opuscula Archaeologica* 33 (2009): 183-205; Tajana Pleše, "Streška *bulla plumbea* pape Bonifacija IX" [*Bulla plumbea* of Pope Boniface IX from Streza], *Prilozi Instituta za arheologiju u Zagrebu* 29 (2012): 125-134; Vlasta Vyroubal et al., "Rezultati antropološke analize osteološkog materijala pronađenog u crkvi pavlinskog samostana Svih svetih u Strezi" [Results of the anthropological analyses of osteological material found in the church of the Pauline monastery of All

Saints in Streza], *Prilozi Instituta za arheologiju u Zagrebu* (in press).

⁵⁷ Archives of Šenkovec monastery (*Acta Conv. Chaktornyensis*) encompass the period from 1376 to 1786. All preserved documents are kept in the Hungarian National Archives in Budapest.

⁵⁸ Eggerer, Fragmen panis, 155-156; Benger, Chronotaxis, 21-24; Kovachevich, Monasteriorum in Croatia (Csaktornense); Kristolovec, Descriptio (Mon. Čaktornjense S. Helena), 109a; Josip Bedeković, Natale Solum magni ecclesiae doctoris Sancti Hieronymi in ruderibus Stridonis occultatum (Neostadii,

expand their initial estate and strengthen their economical influence during the first two centuries with many endowments and privileges.⁵⁹

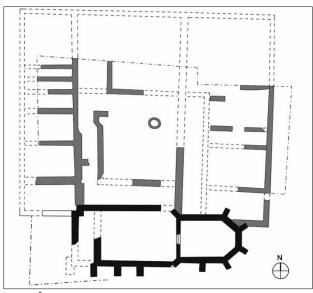


Fig. 5. Šenkovec, Monastery of the Blessed Virgin Mary and All Saints. Ground-plan of the late medieval monastic church (black) and Baroque complex (gray).

⁵⁹ For the list of benefactors of Šenkovec monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK* 3 (1925): 100-186 (124-131); Dočkal, *Povijest pavlinskog samostana sv. Jelene u Čakovcu*; Pleše, "Pregled pavlinskih samostana," 210.

⁶⁰ The late medieval monastery was significantly remodelled in 1676. However, already in 1738 it was burnt down by a great fire. The renovation in Baroque style quickly followed, only to be destroyed again by an earthquake in 1738. The last renovation (also in Baroque style) lasted from 1747 till 1750. After the dissolution of the order in 1786, all the estates of the Šenkovec monks were transferred to the Knežević family from 1802 until 1856; the former monastery was reused as their residence, and the monastic church was torn down except for the chancel, which was remodelled into a family chapel (the Chapel of St. Helen). The former monastery and its estate was owned between 1856 and 1923 by Count Feštetić who used it exclusively for economic purposes. The only remaining part of the former monastery (i.e. south-western part) was devastated by the earthquake in 1880. Count Feštetić sold the The original Šenkovec monastery was significantly remodelled during the 17th and 18th centuries and it remained in use until the dissolution of the order in 1786.⁶⁰

The first archaeological excavations of the monastic church and chapel of St. Anthony (also known as the mausoleum of Zrinski Counts) were carried out in 1924.⁶¹ Systematic archaeological research of the whole monastery was conducted in 1989, 1990-1999, and in 2002.⁶²

The original layout of the late medieval monastery can only be roughly assumed due to the numerous construction interventions. The problem is that the systematic archaeological excavations never went deeper than the lowest segments of the 18th century construction phase. Thereafter, the ground-plan of the monastery can only be assumed according to comparative examples. Šenkovec Monastery was defined in the south-eastern part by the church (exter. dim.: ca. 25-28 x 7-9 m), built as an elongated building with a rectangular, single nave (inter. dim.: ca. 13-15 x 7-8.5 m) and chancel enclosed by a polygonal apse (inter. dim.: ca. 8.5-9.5 x 6 m).⁶³ The chancel was

estate in 1923 to the wood industry, who donated it to the "Fraternity of the Croatian Dragon." Nicolaus Benger, Annalium erem-coenobiticorum Ordinis s. Pauli primi Eremitae (volumen secundum, duos in libros partitum, quibus ab anno Christi 1663 usque ad annum 1727 ejusdam Proto-Eremitici Ord. Progressus) (Posonii, 1743), 298; Bedeković, Natale Solum, 272, 276, 278; Kristolovec, Descriptio (Mon. Čaktornjense S. Helena), 111; Tkalčić, "O stanju više nastave," 92; Laszowski, "Zrinski mauzolej," 248-256; Dočkal, Povijest pavlinskog samostana sv. Jelene u Čakovcu, 96-98, 121-122, 197.

⁶¹ Benger, *Annalium eremi*, 53-54; Bedeković, *Natale Solum*, 225, 274-275; Laszowski, "Zrinski mauzolej," 246-247, 257-259; Dočkal, *Povijest pavlinskog samostana sv. Jelene u Čakovcu*, 47-48, 56-57, 68-71.

⁶² Archaeological excavations were led by Josip Vidović (Museum of Medimurje Čakovec). Those excavations encompassed the majority of the monastery, except for the northern wing, presently located on private property. Josip Vidović, "Sveta Jelena, Šenkovec 1990-1996" [St. Helen, Šenkovec, 1990-1996], in *Népek a Mura mentén* [Peoples along the Mura River], ed. Simon H. Katalin (Zalaegerszeg: Vándor László, 1998), 61-78; Josip Vidović and Branka Kovačić, *Sveta Jelena u Šenkovcu - lokalitet pavlinskog samostana u Šenkovcu* [St. Helen in Šekovec - Pauline monastery in Šenkovec] (MS) (Čakovec, 2004).

⁶³ It should be stressed here that no proper architectural documentation was made during all of the previous

^{1752), 271;} Tkalčić, "O stanju više nastave," 86; Szabo, "Spomenici kotara Ivanec," 23; Emilij Laszowski, "Zrinski mauzolej u sv. Jeleni kod Čakovca" [Mausoleum of the Zrinski family in St. Helen near Čakovce], *Hrvatsko kolo* 9 (1928): 244-259 (244); Kamilo Dočkal, *Povijest pavlinskog samostana sv. Jelene u Čakovcu* [History of the Pauline monastery of St. Helen in Čakovce] (MS) (Zagreb, 1951), 1-7.

preserved in its better part due to its remodelling into the Knežević family private chapel.64 The monastic church, reinforced on all free facades with massive, rectangular counterforts, was vaulted and paved with rectangular tavelae.65 According to comparative examples, it can be assumed that the rest of the monastery was arranged around the cloister.⁶⁶ To supplement our knowledge on the late medieval construction phase of the monastery, audit archaeological excavations of the presumed cloister and southern part of the eastern wing were conducted in 2011 and 2012.⁶⁷ Unfortunately, the results of the audit only showed that almost all building material was removed. Therefore, the proportions of the cloister and monastic wings will (until the continuation of the audit) remain unknown (fig. 5).

The first indications of inherited political instability began during the reign of King Sigismund (1387-1437), presaging the grim sequence of events that would characterize the following centuries. Despite this situation, Sigismund's reign was conducive to the order, as it could continue its growth unhindered.⁶⁸ At the very beginning of the 15th century, the last three monasteries were founded in the territory of the late medieval Slavonia prior to 1526: in Lepoglava, Kamensko, and Donja Vrijeska.

Lepoglava, Monastery of the Blessed Virgin Mary

The Monastery of the Blessed Virgin Mary in Lepoglava⁶⁹ was founded in 1400 by the endowment of Herman II, Count of Celje and *banus* of Slavonia, Croatia, and Dalmatia.⁷⁰ Lepoglava Monastery was destroyed for the first time in 1479 or 1481 by Ottoman troops. Only a decade later the reconstruction of the monastery was finished due to the patronage of Duke John Corvinus.⁷¹ The late medieval monastery was completely disintegrated during the construction of the new, grand in size, building built in the second half of the 17th century.⁷²

During the period from the foundation until the end of the 16th century Paulines worked diligently on economically strengthening the Lepoglava monastery. By 1576, when the monastery became the see of the Generalat, they managed to acquire many privileges and several,

archaeological excavations. Therefore, all mentioned dimensions derive from sketches and textual descriptions.

⁶⁴ It is not possible to deduce the exact position of the original western façade, i.e. whether its present position remained on the original one.

⁶⁵ Vidović, "Sveta Jelena," 66; Vidović and Kovačić, *Sveta Jelena*, 42-46.

⁶⁶ Guzsik, *A pálos rend*, 135; Vidović and Kovačić, *Sveta Jelena*, 7, 12-13, 26-32, 53-77.

⁶⁷ Tajana Pleše, "Izvještaj o provedenim revizijskim arheološkim istraživanjima pavlinskog samostana Blažene Djevice Marije i Svih svetih u Šenkovcu tijekom 2011. i 2012. godine" [Report on the audit archaeological excavations of the Pauline monastery of the Blessed Virgin Mary and All Saints in Šenkovec in 2011 and 2012] (MS) (Zagreb, 2012-2013).

⁶⁸ Smičiklas, *Poviest Hrvatska*, 433-499; Klaić, *Povijest Hrvata u razvijenom srednjem vijeku*, 654-661; Inalcik, *Osmansko carstvo*, 18-20; Budak, "Povijesni okvir," 23-24; Budak and Raukar, *Hrvatska povijest*, 200-201, 275; Raukar, *Hrvatsko srednjovjekovlje*, 389-391.

⁶⁹ Archives of Lepoglava monastery (*Acta Monast. de Lepoglava*) encompass the period from 1443 to 1786. All of the 2856 preserved documents are kept in the Hungarian National Archives in Budapest.

⁷⁰ Kovachevich, *Monasteriorum in Croatia (III Lepoglavense)*; Tkalčić, "O stanju više nastave," 86; Szabo, "Spomenici kotara Ivanec," 24-32.

⁷¹ According to Pauline chroniclers, the monastery was fortified with walls and towers. Eggerer, *Fragmen panis*, 250;

Kristolovec, *Liber memorabilium parochiae Lepoglavensis ab Anno 1401 usque 1789*, 27-28; Vjekoslav Klaić, "Osnutak manastira Lepoglava i povijest njegova u XV stoljeću" [Foundation of the Lepoglava monastery and its history in the 15th century], *Vjesnik kraljevskog hrvatskog-slavonskodalmatinskog zemaljskog arkiva* 10 (1908): 161-165; Kamilo Dočkal, *Povijest pavlinskog samostana Blažene Djevice Marije u Lepoglavi* [History of the Pauline monastery of the Blessed Virgin Mary in Lepoglava] (MS) (Zagreb, 1953), 41-48, 156-58.

⁷² Lepoglava monastery was devastated once again during the Ottoman attack in the 4th decade of 17th century. The construction of a new, grand monastery in Baroque style began in 1650. After the dissolution of the order, Lepoglava monastery became a jail for Ottoman prisoners, then a military hospital, and finally an infamous penitentiary (which was housed there until 2000). The heaviest devastation of the former Lepoglava monastery happened in 1945 when a huge amount of ammunition exploded. Among other damages, the greatest one was done by air strike, which caused detriment to the static stability. Conservation-restoration works began in 1946 and they are still ongoing. Kamilo Dočkal, Povijest pavlinskog samostana Blažene Djevice Marije u Lepoglavi, 155-163, 196-202; Zorislav Horvat, "Gotička arhitektura pavlinskog samostana u Lepoglavi" [Gothic architecture of the Pauline monastery in Lepoglava], Kaj - Graditeljsko nasljeđe 5 (1982): 3-35 (3).

very abundant, endowments (especially those from the powerful Counts of Celje and John Corvinus).⁷³

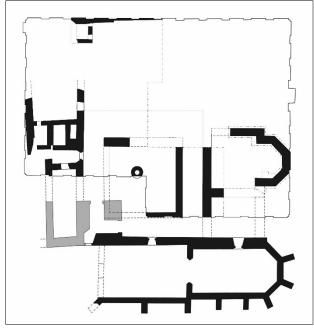


Fig. 6. Lepoglava, Monastery of the Blessed Virgin Mary. Ground-plan of the late medieval monastery.

Archaeological excavations of the late medieval constructional phase of the Lepoglava monastery were conducted in 1972-1974,⁷⁴ 1991-1993,⁷⁵ and in 2003-2004.⁷⁶ Despite all the excavations, a significant part of the late medieval monastery remained unexplored (the northeastern part of the Baroque cloister and ground levels of the western, northern, and southern wings). It should also be mentioned that the construction of the new monastery built in the 17th century used both building material and foundations of the previous building, while encompassing the rest with a large, irregular courtyard (ca. 40×30 m). More damage on the late medieval monastery was done during the 19th and 20th century with setting of numerous infrastructures and building interventions. Therefore, much valuable information was irreversibly destroyed, without which it is not possible to correctly interpret the *corpus* of the late medieval Lepoglava monastery.

The monastery was organised around a rectangular cloister. All three (the northern one was not possible to confirm) brick-paved hallways (it was only possible to confirm its width of 3.4 m) led to a square, stone-paved courtyard (10.8 x 10.8 m) with an off-centered well. Adjacent to the cloister stood (at least) three wings. Unfortunately, the western one was almost completely devastated, the southern and northern ones were not possible to excavate, and the eastern one was only partially explored. In the southern part of eastern wing a small building (exter. dim.: ca. 14 x 10 m) with a rectangular, single nave (inter. dim.: ca. 7.5 x 8 m) and a chancel enclosed by a polygonal apse (inter. dim.: ca. 4.2 x 5.5 m) was partially explored. Thanks to Pauline chroniclers, it was possible to determine this building as the Chapel of the Holy Spirit, built in 1426 (and torn during the construction of the new monastery in the second half of the 17th century).77 The Church of the Assumption of the Virgin Mary defined the southeastern part of the monastery. The monastic church, erected by the endowment of banus

⁷³ For the list of benefactors of Lepoglava monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK* 3 (1925): 100-186 (131-186); Kamilo Dočkal, *Povijest pavlinskog samostana Blažene Djevice Marije u Lepoglavi*; Pleše, "Pregled pavlinskih samostana," 211.

⁷⁴ Archaeological excavations of a smaller scale (accessible parts of the church and Baroque courtyard) were conducted by SUPRPMO (Státní ústav pro rekonstrukce památkových měst a objektů v Praze, Československo). Pavel Blecha et al., *"Arheologija I"*[Archaeology I] (MS) (Prague 1973). It should be mentioned that the second volume with all graphic documentation is lost.

⁷⁵ Small-scale archaeological research of the ground-level of the southern wing of the former monastery was led by Zdenko

Balog. Zdenko Balog, "Geneza izgradnje lepoglavskog samostana i crkve Svete Marije - reinterpretacija pavlinskih izvora" [Genesis of the construction of Lepoglava monastery and the church of St. Mary - reinterpretation of Pauline chronicles], *Lepoglavski zbornik* (1993): 173-185; Zdenko Balog, "Arheološka istraživanja u Lepoglavi 1990/1991 (1993)" [Archaeological excavations in Lepoglava 1990-1991], *Lepoglavski zbornik* (1996): 21-46.

⁷⁶ Rescue archaeological excavations in the Baroque courtyard were led by Tajana Pleše (CCI). Tajana Pleše, "Arheološka istraživanja pavlinskog samostana u Lepoglavi" [Archaeological excavations of the Pauline monastery in Lepoglava], *VAMZ* 38 (2005): 63-91.

⁷⁷ Kristolovec, *Liber memorabilium*, 22-23, 45; Szabo, "Spomenici kotara Ivanec," 30-31; Dočkal, *Povijest pavlinskog samostana Blažene Djevice Marije u Lepoglavi*, 19, 164.

Herman II, Count of Celje and consecrated in 1415, was an elongated building (exter. dim.: ca. 29.5 x 10.5 m), with a rectangular, single nave (inter. dim.: ca. 13.5 x 8 m) and slightly narrower chancel enclosed by a polygonal apse (inter. dim.: ca. 13.5 x 7 m).⁷⁸ On all free façades the church was reinforced with massive, rectangular counterforts. Little can be said on the disposition of the apertures because of the annexed Baroque chapels, except that the chancel was illuminated from the biforas located between the counterforts of the polygonal apse. Furthermore, little can be said on the interior of the church except that there was only one altar (dedicated to the Assumption of the Virgin Mary) up until 1501, when two more were dedicated: one to the St. Paul the First Heremit and the one to the Holy Cross.⁷⁹ (fig. 6).

Although Lepoglava Monastery was one of the most important Pauline monasteries in the historical and cultural landscape of late medieval Slavonia, it was never completely researched. We can only hope that a possibility to continue with the excavations will emerge, and that the Lepoglava monastery will get the attention it deserves.

Kamensko, Monastery of Our Lady of the Snow

The Monastery of Our Lady of the Snow in Kamensko⁸⁰ (near Karlovac) was founded in 1404 by the endowment of Catherine of Krk, Countess of Ptuj and Metlika.⁸¹ Kamensko Monastery was devastated during the attack of Ottoman troops between 1480 and 1484, and again between 1570 and 1576. After the second Ottoman raid, General of the Order Stephen Trnavljanin entrusted the Kamensko monastery and its estates⁸² to General John Auersperg to keep it from harm. However, after only three years the monastery was disintegrated for building material, needed for the construction of Karlovac fortification.⁸³

Archaeological excavations of the Kamensko Monastery were conducted in 1997, 1999-2002, 2005, and 2006.⁸⁴ The area of research was largely determined by the last construction phase of the monastery (i.e. it was possible to research the interior and partly the exterior of the monastic church, cloister, and smaller portions of the monastic wings).

Since the late medieval monastery was thoroughly deconstructed in 1579 and because the later monastery was built during the mid 18th

 $^{^{78}}$ It should be mentioned that the dimensions of the church are only assumed, because it was not possible to confirm the position of the western façade due to the elongation of the church towards the west during its reconstruction in $17^{\rm th}$ century.

⁷⁹ Eggerrer, *Fragmen panis*, 250; Kristolovec, *Liber memorabilium*, 30-31; Dočkal, *Povijest pavlinskog samostana Blažene Djevice Marije u Lepoglavi*, 58, 156.

⁸⁰ Archives of Kamensko monastery (*Acta Monast. de Kamenzko*) encompass the period from 1261 to 1770. All preserved documents are kept in the Hungarian National Archives in Budapest.

⁸¹ Eggerer, Fragmen panis, 181; Kristolovec, Descriptio (Monasterium in Kamensko), 122a; Kovachevich, Monasteriorum in Croatia (IV de Kamenska); Orosz, Synopsis annalium, 389; Tkalčić, "O stanju više nastave," 86; Szabo, "Spomenici kotara Ivanec," 24; Kruhek, "Povijesnotopografski pregled," 74; Horvat, "Srednjovjekovna arhitektura," 98; Sekulić, "Pavlinski samostani," 84-89.

⁸² For the list of benefactors of Kamensko monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK*8 (1930): 65-111 (70-87); Dočkal, *Samostan Majke Božje Snježne u Kamenskom* [Monastery of Our Lady of the Snow in Kamensko] (MS) (Zagreb, 1953); Pleše, "Pregled pavlinskih samostana," 213.

⁸³ After the Ottoman raid in 1576, the Paulines fled to the safety of Remete monastery. Renovation of the Kamensko monastery in Baroque style lasted from 1749 until 1767. After the dissolution of the order, the former Kamensko monastery became the parish church of St. Jacob. Benger, *Annalium eremi*, 396; Kristolovec, *Descriptio (Monasterium in Kamensko)*, 123a; Lopašić, *Oko Kupe*, 138-140; Kamilo Dočkal, *Samostan Majke Božje Snježne u Kamenskom*, 69, 100-106, 123-124. The second renovation of the almost completely devastated Kamensko monastery lasted from 1966 until 1974, but it was destroyed once again during the Croatian War of Independence (1991-1995). The third renovation of the Kamensko monastery lasted from 1996 until 2007, and today it holds the seat of the Croatian Province of the O.S.P.P.E.

⁸⁴ Archaeological excavations from 1997 to 2000 were led by Domagoj Perkić (Ministry of Culture of Republic of Croatia), and in 2005 and 2006 Ana Azinović Bebek (CCI). Domagoj Perkić, *Arheološka istraživanja i iskopavanja crkve Blažene Djevice Marije Snježne i pavlinskog samostana u Kamenskom* [Archaeological excavations of the Church of the Our Lady of the Snow] (MS) (Karlovac, 2005); Ana Azinović Bebek, "Kamensko - pavlinski samostan" [Kamensko - Pauline monastery], *HAG* 2 (2006), 183-184; Ana Azinović Bebek, "Kamensko - pavlinski samostan" [Kamensko - Pauline monastery], *Hrvatski arheološki godišnjak* 3 (2007), 211-212.

century, which used the majority of its foundations, very little information on this construction phase was found. Therefore, the original late medieval layout can only be assumed.

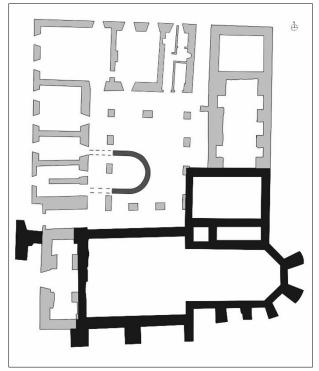


Fig. 7. Kamensko, Monastery of Our Lady of the Snow. Ground-plan of the late medieval monastic church and southern part of the eastern wing (black).

The monastery was formed around a cloister. Its size could not be affirmed, or if it was rectangular or squared. However, it may be assumed that late medieval courtyard was not larger than the later, Baroque one (ca. 9.5 x 7.8 m). It may be assumed that the late medieval monastery had at least two wings, but only the eastern one was partially confirmed (inter. dim. of the southern one: 5.3 x 1.5 m; inter. dim.: of the northern one: 7.8 x 4.7 m).⁸⁵ The monastic church (exter. dim.: ca. 23.5 x 11 m), built in compliance with other Pauline churches, had a rectangular, single nave⁸⁶ (inter. dim.: 11.5 x 9 m) and a slightly shorter and narrower chancel enclosed by a polygonal apse (inter. dim.: 10.6 x 6 m). On all free facades the church was reinforced with rectangular counterforts (removed in 1579 and never rebuilt again) (fig. 7).

Dobra Kuća, Monastery of St. Anna

The last Pauline monastery established in the territory of late medieval Slavonia prior to the Battle of Mohács was the one of St. Anna in Dobra Kuća⁸⁷ (near Daruvar), founded in 1412 by the endowment of Count Benedict.⁸⁸ Dobra Kuća Monastery was devastated during the Ottoman occupation of Slavonia between 1537 and 1542.⁸⁹ Despite its short existence, monks of Dobra Kuća Monastery managed to gain several privileges and the status of *locus credibilis*, as well as many estates.⁹⁰

Nothing much can be said on the youngest Pauline monastery in late medieval Slavonia. It may only be assumed that Dobra Kuća Monastery was also organised around a cloister and that the church was situated in its south-eastern part. The

the only remaining part of the monastery, was poorly maintained and was used as a stable. Only in 1861, on the initiative of I. Kukuljević Sakcinski, renovation of the church started in Historicist style. The former Dobra Kuća monastery is today owned by the Slavonian Diocese of the Serbian Orthodox Church. Benger, *Chronotaxis*, 28; Tkalčić, "O stanju više nastave," 86; Szabo, "Spomenici kotara Ivanec," 24; Dočkal, *Samostan sv. Ane*, 53-54; Dragan Damjanović, "Historicističke obnove crkve sv. Ane u Donjoj Vrijeski" [Historicist renovations of the Church of St. Anna in Donja Vrijeska], *Scrinia Slavonica* 9 (2009): 125-160.

⁹⁰ For the list of benefactors of Dobra Kuća monastery and its estates see: Elemér Mályusz, "A szlavoniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [Charters from slavonian and croatian pauline medieval monasteries in national archives], *LK* 7 (1929): 278-311; Dočkal, *Samostan sv. Ane*; Pleše, "Pregled pavlinskih samostana," 214.

⁸⁵ Perkić, Arheološka istraživanja, 28-29.

⁸⁶ It should be mentioned here that a significant bias form the east-western axis of the nave was noted. It can be assumed that this deviation was a result of adaptation to the geomorphology of the terrain.

⁸⁷ Archives of Dobra Kuća monastery (*Acta Monast. de Dobra Kucha*) encompass the period from 1275 (i.e. 1412) to 1510. All 48 preserved documents are kept in the Hungarian National Archives in Budapest.

⁸⁸ Eggerer, Fragmen panis, 184; Orosz, Synopsis annalium, 389; Kovachevich, Monasteriorum in Croatia (VI de Dobrakutya); Kristolovec, Descriptio (Monasterium in Dobra Kuća), 127a; Szabo, Srednjovječni gradovi, 110-111; Kamilo Dočkal, Samostan sv. Ane u Dobroj Kući [Monastery of St. Anna in Dobra Kuća] (MS) (Zagreb, 1953), 1-3.

⁸⁹ Eastern Orthodox monks from Pakra took over the abandoned monastery in 1736, only to leave it in 1777. However, former the Pauline monastery became a property of the Eastern Orthodox rectory in Bastaji. The former church,

monastic church was built in compliance to the stylistic characteristics of the order: its longitudinality was emphasized with even dimensions of the rectangular, single nave and chancel (interior dimensions ca. $9.8 \times 4.5 \text{ m}$) enclosed by a polygonal apse. The church was reinforced by rectangular counterforts on all free façades (fig. 8).

Since the archaeological excavations of the Dobra Kuća Monastery have only just begun,⁹¹ it will take some time to expand our knowledge on this last Pauline monastery founded in late medieval Slavonia prior to the Battle of Mohács.

The fall of Constantinople in 1453 dramatically altered the political situation, so the territory of present day Croatia became the frontline in the defence of both the Kingdom and the wider European sphere. Despite the growing political instability during the time of King Sigismund's heirs, Pauline monasteries in Slavonia continued to flourish.⁹² However, because of the pending peril of Ottoman attacks, Paulines directed the expansion of the order towards Primorje and Istria with the help of powerful Frankopan Counts.

The "Good King" Matthias Corvinus continued the Crown's benevolent policy towards the favoured "domestic" Order.⁹³ Even though the Paulines considerably expanded their possessions during his reign, almost all Slavonian monasteries endured attacks and devastations from Ottoman troops. Since these were generally rapid, transitory attacks by smaller Ottoman detachments, the monasteries were very quickly renovated thanks to their powerful patrons and royal interventions.

Around the time of the Battle of Mohács,94 the Paulines began to abandon their estates in endangered territories and moved to safer (and fortified?) monasteries in Remete, Šenkovec, and Lepoglava. The abandoned monasteries in Dubica, Moslavina Mountain, Bakva, Zlat, Streza, Kamensko, and Donja Vrijeska were destroyed by the mid 16th century. Despite the efforts of John Kristolovec, the General of the Order, to restore lost Pauline estates in the territory between the rivers of Sava and Drava, the Paulines never returned to any of them (except for Kamensko).

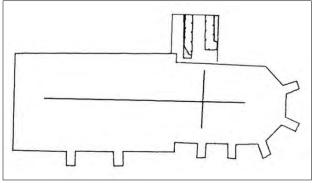


Fig. 8. Dobra Kuća, Monastery of St. Anna. Schematic ground-plan of the late medieval monastic church.

According to the thus far acquired results of the archaeological excavations, several conclusions on Slavonian late medieval Pauline monasteries can be derived. Except for Zlat, all other Slavonian monasteries were founded on endowed estates. In general, they were dedicated to the Blessed Virgin Mary (Dubica, Moslavina Mountain, Remete, Lepoglava, and Kamensko; in Šenkovec together with All Saints). Monasteries were built at some distance from the cities, most often in valleys (again, except for Zlat).

⁹¹ Archaeological excavations were led by Goran Jakovljević (Bjelovar City Museum).

⁹² Smičiklas, *Poviest Hrvatska*, 586-615; Inalcik, *Osmansko carstvo*, 27-31; Budak and Raukar, *Hrvatska povijest srednjeg vijeka*, 276-277.

⁹³ Eggerer, Fragmen panis, 237-239, 246, 319; Orosz, Synopsis annalium, 339-347; Smičiklas, Poviest Hrvatska, 615-668; Raukar, Hrvatska povijest, 384-389; Ivan Jurković, "Turska opasnost i hrvatski velikaši - knez Bernardin Frankapan i njegovo doba" [Ottoman menace and Croatian magnates count Bernardin Frankapan and his age], Zbornik Odsjeka za povijesne znanosti Zavoda za povijesne i društvene znanosti

*HAZU*17 (2000): 61-83 (64-70); Borislav Grgin, *Počeci rasapa: Kralj Matijaš Korvin i srednjovjekovna Hrvatska* [The beginning of the decline: King Mathias Corvinus and late medieval Croatia] (Zagreb: Ibis grafika, 2001), 5-12; Inalcik, *Osmansko carstvo*, 27-31, 34-38; Budak, "Povijesni okvir," 25-28; Budak and Raukar, *Hrvatska povijest*, 278-281; Budak, *Hrvatska i Slavonija*, 14-15.

⁹⁴ Smičiklas, *Poviest Hrvatska*, 668-724; Jurković, "Turska opasnost," 71-75; Inalcik, *Osmansko carstvo*, 39-42; Budak, "Povijesni okvir," 28-34; Budak and Raukar, *Hrvatska povijest*, 279-282, 290-295; Budak, *Hrvatska i Slavonija*, 15-17.

The choice of secluded locations with natural protection (e.g. mountain tops or plateaus surrounded by streams and/or rivers) provided Paulines with the desired safety (Moslavina Mountain, Zlat, and Streza).

However, built defence systems were sometimes required (Remete and Lepoglava; maybe Šenkovec and Kamensko).

When establishing the layout of their late medieval monasteries in Slavonia, the Paulines geo-morphological carefully considered constraints and possibilities, and they took great care to accommodate architectural solutions to financial abilities of particular community. With the exception of the Zlat Monastery, all other monasteries, regardless of the date of their establishment, were raised in line with an even scheme: the wings were arranged around a rectangular or square cloister, while the church was situated in the south-eastern part of the monastery (except for Moslavina Mountain). Unfortunately, thus far no other conclusions can be derived.

All monastic churches of Slavonian Pauline monasteries were constructed as buildings with an emphasised longitudinal axis (excluding the biggest church in Moslavina Mountain Monastery and the smallest one at Zlat, the average exterior dimensions of the Pauline Slavonian monastery church were 28-30 x 9-11 m), achieved through roughly equal spatial ratios between a rectangular, single nave (average interior dimensions: 13-15 x 7-9 m) and a chancel enclosed by a polygonal apse (average dimensions: 12-13 x 6-7 m). Due to massive, rectangular counterforts on all free facades it can be concluded that all monastic churches were vaulted (except for the one in Zlat Monastery). Besides their constructive function, architectural mouldings (especially vault ribs) had a decorative function, since on many of them layers of paint (red, blue) were found. For now, it is not possible to ascertain the system of light apertures. Furthermore, only by future excavations of monastic churches will it be possible to say more on the question of their interior organisation.

In compliance with the results achieved thus far through archaeological excavations only several conclusions on Pauline Slavonian architecture were possible to deduce. Also, many new questions arose. However, archaeological excavations and multidisciplinary research will continue and in the foreseeable future it will be possible to know more on the characteristic of spatial organisation of the Pauline monasteries in Late Medieval Slavonia.

ARCHITECTURAL DESIGN AND THE CULT OF HOLY RELICS IN SAINT-VANNE ABBEY (VERDUN, FRANCE)

VALÉRIE SERDON-PROVOST*

The excavations in Verdun aim to study Saint-Vanne, an emblematic suburban monastery of the city, as well as the corresponding abbatial borough; both will be considered over a long period of time and within the context of regional architecture.

The implementation of this fieldwork seeks to improve how much we know about the evolution of the abbey church – including possible antecedent religious buildings – as well as conventual buildings, the monastic enceinte and the cemetery, the abbey district and its relationship with the *castrum.*¹

Located several hundred meters to the west of the *castrum* on a hilltop at the crossroads of major routes and rivers during Antiquity and the Middle Ages, this architectural complex occupies a prominent place in the urban landscape. This has been the case from the first community of canons to its transformation into a Benedictine abbey in 952 (by bishop Berangar of Verdun), ² to its integration within a major modern citadel during the second half of the sixteenth century.³

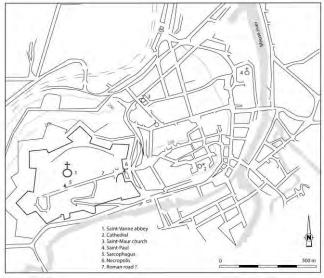


Fig. 1. Verdun: location of Saint-Vanne abbey.

The key location of Verdun – at the intersection of the Meuse River and the Roman road leading from Reims to Metz – which gives access to the region of the Rhineland – helps in understanding the spiritual and material influence of the abbey. This abbey grew in importance as a centre of the Lotharingian monastic reform in the eleventh century, a phenomenon which resulted in the growing self-confidence and independence of the abbey. ⁴ Placed under the protection of powerful and richly endowed individuals, the abbey exercised its full authority on its surroundings and their inhabitants during this period.⁵

ed., *La Meuse*, Carte Archéologique de la Gaule (Paris: Académie des Inscriptions et Belles-Lettres, 2001).

⁴ Frank G. Hirschmann, Verdun im hohen Mittelalter: eine lothringische Kathedralstadt und ihr Umland im Spiegel der geistlichen Institutionen (Trier: THF Verl. Trierer Historische Forschungen, 1996); Michel Parisse, La Lorraine monastique (Nancy: Presses Universitaires de Nancy, 1981).

⁵ Alain Dierkens, *Abbayes et chapitres entre Sambre et Meuse* (*VII^e-XI^e siècles*) (Sigmaringen: J. Thorbecke, 1985); Dom Hubert Dauphin, *Le Bienheureux Richard Abbé de Saint-Vanne de Verdun † 1046*, Bibliothèque de la Revue d'Histoire Ecclésiastique 24 (Louvain-Paris: Desclée de Brouwer, 1946); Michèle Gaillard, "Site et topographie des monastères en "Lorraine" du VII^e au IX^e siècle," in *Actes des XXVI^e Journées d'Archéologie Mérovingienne, L'Austrasie, Sociétés, économies, territoires, christianisation Nancy, 22-25 Sept. 2005*, eds. Jacques Guillaume and Édith Peytremann (Nancy: Presses Universitaires de Nancy, 2008), 197-204.

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¹ Alain Girardot, ed., *Histoire de Verdun* (Toulouse: Privat, 1982).

² Bertaire, *Gesta episcoporum Virdunensium = Monumenta Germaniae Historica. Scriptores*, IV, ed. Georg Heinrich Waitz (Hanover: 1886), 45; Anne Wagner, *Gorze au XI^e siècle: contribution à l'histoire du monachisme bénédictin dans l'Empire* (Nancy: Artem, 1996), 32; Jean-Pol Évrard, "Actes des Princes Lorrains, 2^e série: Princes ecclésiastiques, III. Les évêques de Verdun, des origines à 1107" (PhD diss. Nancy II University, 1977), 37-45.

³ Felix Liénard, Archéologie de la Meuse, description des voies anciennes et des monuments aux époques celtiques et galloromaines, I-II (Verdun: Ch. Laurent, 1884); Franck Gama, Verdun, Documents d'évaluation du patrimoine archéologique des villes de France, Centre National d'Archéologie Urbaine (Paris: AFAN, 1997); Franck Mourot,

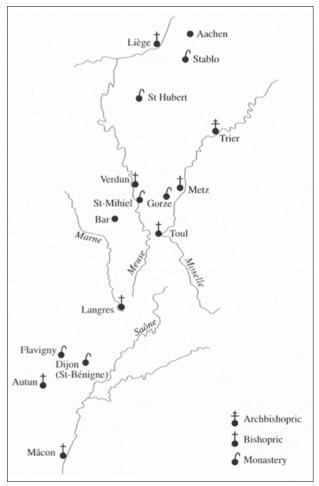


Fig. 2. Reform and the Investiture contest in the late eleventh century (Patrick Healy, *The chronicle of Hugh of Flavigny* (Aldershot: Ashgate, 2006.

Sources

Historiographical tradition credits a former occupation on the site. A suburban church – a Merovingian foundation originally dedicated to Saint Peter and Saint Paul – and a *xenodochium* are attested there in the will of the deacon *Adalgisus*, dated to 634.⁶ According to Berthar – the canon who wrote a history of Verdun in the beginning of tenth century – *Sanctinus* (Saintin), the first bishop of Verdun, was buried inside. The tradition of a funeral basilica dedicated to the apostles Peter and Paul comes from Hugh of Flavigny's Chronicle from the end of the eleventh century. The site would have received episcopal graves up to the eighth century. In particular, Madalveus promoted the cult of Saint Vanne, the eighth bishop of Verdun, who died in 528-529; this cult developed so emphatically after his burial that his name was substituted for the ancient patrons of the church. This development was stimulated by miracles which would have taken place at his grave.⁷

Studies on this building and its dependences focused mostly on the aristocratic graves from the period of the establishment of the clerks' first community until the monks' departure after the Revolution. The church constitutes a very early and extremely favourable point of urban aggregation; this is partially understandable by its reputation and its role in the reform under Richard's abbacy,8 receiving the graves of the post-Carolingian regional elites such as the family of Ardennes.9 This abbot preserved the autonomy of the monastery, restored abbey buildings, consolidated its temporal possessions and promoted the cult of relics. The Investiture Conflict broke out during this brilliant development. The abbey showed a renewed vitality after this troubled period and it exercised some influence during the thirteenth and fourteenth centuries, in spite of an eventful history. Independent from Cluny and Cîteaux, this abbey still wielded a considerable influence in the East and North of France. After a system of commendatory abbots in the fifteenth century

⁶ Nancy Gauthier, *Évangélisation des pays de la Moselle. La province romaine de première Belgique entre Antiquité et Moyen Âge (III^e-VII^e siècle)* (Paris: De Boccard, 1980), 415.

⁷ Bertaire, *Gesta*, IV, 39-45; Hugues de Flavigny, *Chronicon*, in *Monumenta Germaniae Historica. Scriptores*, VIII, ed. Georg Heinrich Pertz (Hanover: 1848), 288-339.

⁸ Steven Vanderputten, "Identité collective et mémoire des réformes "richardiennes" dans l'historiographie bénédictine en Basse-Lotharingie et au nord-est de la France (XI^e-XII^e siècles)," *Le Moyen Âge* CXVII (2011): 259-289.

⁹ Michel Margue, ed., Sépulture, mort et représentation du pouvoir au Moyen Âge, Actes des 11^e journées lotharingiennes, 26-29 septembre 2000, 2006 (Luxembourg: Publications de la section historique de l'Institut Royal du Grand-Duché de Luxembourg, 2006); Jean-Pol Évrard, "Les comtes de Verdun au X^e et XI^e siècles," in La maison d'Ardenne X^{e-}XI^e siècles. Actes des Journées Lotharingiennes, 24 - 26 oct. 1980 (Luxembourg: Publications de la section historique de l'Institut Royal du Grand-Duché de Luxembourg: Publications de la section historique de l'Institut Royal du Grand-Duché de Luxembourg, 1981), 153-182; Gaillard, "Site et topographie des monastères en "Lorraine."

Architectural design and the cult of Holy Relics in Saint-Vanne abbey



Fig. 3. Israël Sylvestre, 1669, engraving, Bibliothèque Municipale de Verdun. Notre-Dame cathedral (on the right) and Saint-Vanne abbey (on the left).



Fig. 4. Aerial photography of the excavation (August 2012, Jean-Marie Perraux).

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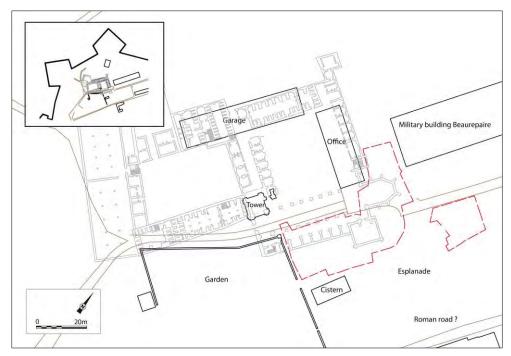


Fig. 5. The abbey complex with excavation area (source: engraving, 1820, Vincennes archives, France; topography: Cédric Moulis).



Fig. 6. "Tour Saint-Vanne", last Romanesque remains of the former abbey church (July 2011, Valérie Serdon).

and some religious conflicts, the abbey fell into decline once again. Fervour returned in 1604 with the foundation of the Benedictine congregation of Saint-Vanne and Saint-Hydulphe on the initiative of Dom Didier de la Cour, prior and reformer of the Order of Saint Benedict after the Council of Trent.¹⁰ The conventual activity was terminated in 1792 and the abbey was dismantled in nineteenth century.¹¹

Unexplored iconographical documenttation (old drawings, engravings, and pictures of the nineteenth century) has been confronted with some new archaeological data, collected in this originally extramural district, in order to characterize possible discontinuities in the occupation and to understand the very complex phenomenon of spatial organization here.

This survey takes into account the constraints as well as the opportunities offered by the site; occupied by the French Army for centuries, the area was returned to the civil authorities in 2009, making it only possible then to undertake this research in the former urbanized space enclosed by the building of the modern citadel. This military base, even if it is underground, was not totally spared from damage and was thus exempted from city planning and not subjected to preventive archaeological projects. It is thus well adapted to scientific issues, the and diachronic multidisciplinary research. Moreover, the regional setting allows a training project for students in archaeology to be organized.

Local scholars have made essential observations *in situ*, which have been published in the second half of the nineteenth century. It was thus established that, in the citadel area, the first archaeological remains date from the beginning of our era under study. In particular, Gallo-Roman architectural elements were found reused in the foundations of the former abbey church at the time of its destruction by the army around 1830.¹²

Moreover the theory of a pre-Roman installation on the site, as in the *castrum* area, is not out of question. On the other hand, the historiographical tradition regarding the site depends on a set of reading akin to hagiography. It is thus necessary to consider this data based upon tradition cautiously; one cannot accept the monks' literature at face value, with their strong bias in favour of the abbey and their attempts to trace back the origin of foundation as far as possible, as well as their glorification of certain characters.¹³

Another historiographical bias specific to Verdun comes from the weight of the recent military past – particularly sensitive in the citadel – which eclipsed entire stretches of its history for a while.

The objectives and results of the excavation

The results of the two first seasons of excavations are promising; the main objective was a greater understanding the layout of the site.¹⁴ The function of spaces (e.g. the place of worship and burial ground) will be especially considered in relation to the local cult of holy relics. A comparison with other monasteries of the greater Mosan area (in present-day Belgium) is essential, especially when it comes to their architectural and stylistic character.

This research aims to evaluate the archaeological potential in this zone of the abbey complex. Determining the earliest human settlements and the overall chronology will be the foremost task. Of special interest are the various phases of development as well as the architectural plans and building projects related to the edifice, its links with lay districts, parochial churches and burial grounds – and a potential Roman road. The results will be confronted with other well studied models in the Meuse valley and present-day Belgium. The church building known today from various documents (architectural sketches as well

¹⁰ Gérard Michaux, "Une fondation tridentine : la congrégation bénédictine de Saint-Vanne," *RHEF*75, no. 194 (1989), 145-146.

¹¹ Jean Ernest Godefroy, *Les bénédictins de Saint-Vanne et la Révolution* (Paris: E. Champion, 1918); Nicolas Roussel, *Histoire ecclésiastique et civile de Verdun avec le pouillé, la carte du diocèse et le plan de la ville, par un chanoine de la même ville*, II (Paris: P.-G. Simon, 1745), 58.

¹² Liénard, Archéologie de la Meuse, II, 17.

¹³ Hugues de Flavigny, *Chronicon*, VIII.

¹⁴ Many people have contributed to the excavations: Laurent Vermard (INRAP), Arnaud Lefebvre (INRAP), Samuel Provost (Lorraine University) and Jacques Guillaume (CNRS): Valérie Serdon et al., *Rapport de la fouille programmée, site de l'abbaye Saint-Vanne, la citadelle haute (Verdun, Meuse)* (Metz: SRA, 2012, 2013 and 2014).

as surveys) cannot be earlier than the second half of the fifteenth century. It is a Gothic building, a *halle*-church with a Romanesque portal and towers, whose north tower in the west front remains the only one still preserved in elevation today. The overall measurements of the church are about 56 m long by 24 m wide.

Four objectives were clearly laid out for the first campaigns of excavations:

- to determine the exact area occupied by the last stage of the abbey church destroyed by the Military Engineering in 1830;

- to evaluate the state of preservation of the architectural substructures;

- to date the different building stages of the discovered buildings (pictorial evidence shows both Romanesque and Gothic architectural elements);

- to confirm, as previous fortuitous discoveries suggest, that the abbey became integrated into a larger area occupied by laymen, and to study its relationship with previous constructions as well as the position and orientation of associated graves.

Two trenches were opened, the first to find the foundations of the South lateral wall of the Gothic church and the second to clarify the location of the presumed east end of the abbey church. The surface of cleaning represented approximately 1500 m^2 .

Field excavations, during 2012-2013 confirmed an early medieval occupation in a zone close to the post-eleventh century abbey church. The excavation revealed a rather important cluster of Merovingian graves which are the most remarkable aspect of the discoveries; the artefacts are exceptionally crafted and well-dated (to the end of fifth/beginning of the sixth century), retrieved from some "aristocratic graves" excavated from the bedrock and which had thankfully been left mostly intact. ¹⁵ The destruction caused by contemporary activities explains that the superior occupation levels have been removed in this sector and possible surface

markings on these graves are not observable anymore. The chronology and organization of these burials and their relationship with a possible primary church was clarified in 2013, as well as its links with a site of a presumed contemporary cult. A grave carved into the bedrock of particular importance was excavated; although it was partially plundered, it still contained a gold signet ring and a fragment of a gold and garnet clasp from a Merovingian purse. The beginning of a *hypogeum* structure was revealed next to the built grave and with the same orientation. Partially excavated in July 2013, this is an oriented east-west building with a rectangular shape, approximately eight meters wide, semi-buried, dug into the rock substrate, with two column bases and walls originally covered with paintings. Its secondary use (most probably as an ossuary) still needs to be securely dated.16

The changing place of burials will be studied as well, in particular the transition from *ad sanctos* burials near holy relics to the parochial cemetery of Saint-Remy, which is expected to be very close though at present it has not been located. Furthermore, the typology of the graves, in particular some stone sarcophagi, has been the object of study in regards to techniques and materials.

Regarding the main abbey church, the foundations of the nave and the south wall of the building have totally disappeared; they were still standing at the beginning of the nineteenth century, according to the documentation. The church was used as a quarry in a thorough fashion and all its building material was carried away.

¹⁵ Jacques Guillaume, "Étude préliminaire du mobilier mérovingien," in *Rapport de la fouille programmée, site de l'abbaye Saint-Vanne, la citadelle haute (Verdun, Meuse)* (Metz: SRA, 2012), 51-64.

¹⁶ Isabelle Mangeot, "Site de Verdun `Abbaye Saint-Vanne` (55 Meuse). Étude préliminaire du bâtiment excavé de la zone
1.3: bâti, série ostéologique et matériel," I-II (MA thesis, Lorraine University, 2014).

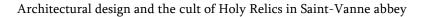




Fig. 7. Structure 1020 with column bases and ossuary (August 2013, Samuel Provost).

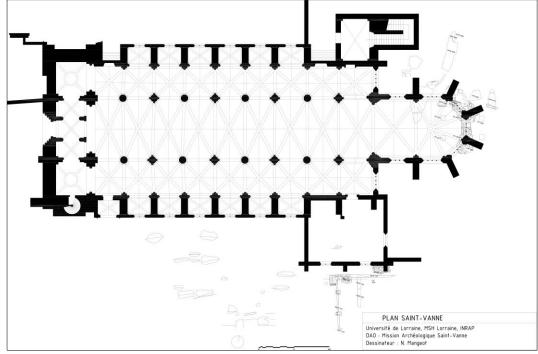


Fig. 8. The former Gothic abbey church with new archaeological discoveries (September 2014, Nicolas Mangeot).

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Fig. 9. Oldest phase with several occupation levels and bases of pillars (August 2013, Valérie Serdon).



Fig 10. Second phase composed of a thick wall built from heavy quarry stones with a lot of reused Romanesque architectural elements (July 2013, Valérie Serdon).



Fig. 11. Third observed level of occupation: semi-circular foundation wall, belonging to the Gothic style chevet of the abbey church (August 2013, Valérie Serdon).



Fig. 12. Architectural element dated to the thirteenth century (September 2013, Valérie Serdon).

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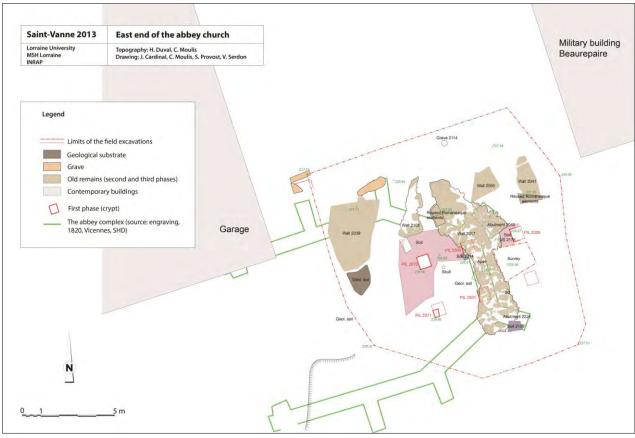


Fig. 13. Zone of the crypt complex at the end of the excavation (August 2013).



Fig. 14. Fosses, Belgium: the abbey with outer crypt (Patrice Bertrand).

Architectural design and the cult of Holy Relics in Saint-Vanne abbey

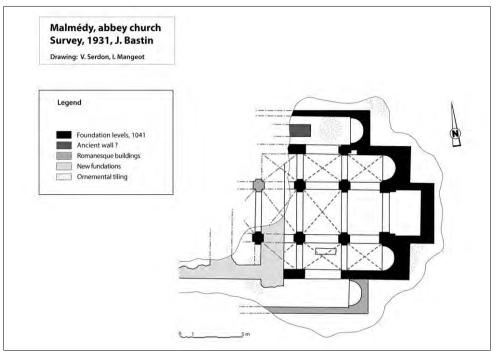


Fig. 15. The abbey crypt of Malmédy, Belgium (Valérie Serdon, Isabelle Mangeot).



Fig. 16. The abbey crypt of Saint Maurus (Verdun) (July 2013, Samuel Provost).

The area where the east end of the abbey church was located has been carefully examined to understand the various construction stages of the building. During the first campaign, a test excavation was opened at what was presumed to be the chevet. But this sector was revealed to be particularly disturbed by the digging of a trench during the First World War and the layout of numerous contemporary water drains.

Nonetheless, we were able to determine that the oldest phase is marked by the presence of several occupation levels, one of which is contemporary with several bases of pillars. The first observed level corresponds to lime mortar deposits on the geological soil which goes up along the base of pillars and the north side wall made of limestone. It is covered with several levels of lime mortar and beaten earth floors which are marked with pebbles.

Underneath these various floor levels, we have observed the presence of oblong cavities, corresponding most probably to some plundered graves. One of them contains a perfectly preserved skull which will allow for radiocarbon dating; this will clarify the stratigraphic observations which for the time present can only lead to a relative chronology. As of now, the stratigraphy and the building techniques of the pillars explicitly link the remains to the Romanesque style (i.e. the eleventh century).

The second phase discovered at this place is composed of a thick wall (2,7 m wide), oriented east-west, and built from heavy quarry stones with some hard lime mortar joints. This is a foundation wall built with many reused architectural elements (such as Romanesque bases and fanlights), and which cut through levels of the previous phase in the ground. No floor associated with this foundation has been observed. A burial cuts through the filling of this wall's foundation trench. There again, radiocarbon dating on this skeleton will allow a more refined chronological approach to this phase. The third observable level of occupation appears as a semi-circular wall which leans on the wall of the previous phase. It is also a foundation wall, belonging to the Gothic style chevet of the abbey church, but its construction is less careful. In the middle of the apse, the base of the wall is supported by a discharging arch which was needed due to the existence of an important fault in the geologic substratum there. The rest of the foundation wall goes down less deeply, though it cuts two pillars of the Romanesque phase which were found during the dismantling of this foundation. This masonry contains a lot of re-used architectural elements; most of them are attributable to the thirteenth century.

The function of these vestiges (foundation, elevation and floor), their construction mode (thickness, mortar and shape), organization and location in comparison with ground plans and earlier statements allows us to identify them as abbey church remains. These observations, as well as the position of the remains in respect to the historical topography, suggest their position within the building and allow us to determine two spaces of different functions which can be divided into three important phases. The first phase, whose construction is partially cut in the calcareous substratum, can be interpreted as a crypt; the remains of five pillars were discovered, and a sixth was inferred.

For the third phase, the only levels that can be observed are foundation levels located above the substrate as well as the previous phases' backfill. Its shape and its situation suggest localization in the choir of the last abbey church, which would not include a crypt.

The hypothesis of the excavated remains indicates three building phases. The first dates to the Romanesque style building most likely begun under the abbacy of Richard (abbot 1004-1046) while the second phase dates to the Gothic style building, established by abbot Etienne Bourgeois (died 1452); this chronology needs to be proved.¹⁷ Radiocarbon dating from the graves should give us an improved chronology of these three phases. Beyond these stratigraphical indications, this

abbé de Saint-Vannes de Verdun (1417-1452) (Nancy: Sidot frères, 1892).

¹⁷ Roussel, *Histoire ecclésiastique et civile de Verdun;* Madeleine Buvignier-Cloüet, *Notice sur Étienne Bourgeois,*

research leans heavily on the systematic inventory of various categories of architectural remains (sculpted and unworked stones, or architectural elements like small columns).

The goal would thus be to localize the Romanesque building chevet. Two architectural solutions should then be considered: 1) the crypt, partially excavated into the substratum, was located under a raised choir; or the crypt was an exterior structure, like a few other examples from the Mosan region (Gembloux, Saint-Lawrence of Liège) and one should then look for the Romanesque chevet westward.¹⁸ These questions at present remain unsolved.

The study of sculpture elements and architectural choices are important to understand external influences, in particular under the abbacy of powerful clerics who were looking for experienced and qualified teams. The disseminated evidence in written sources is not enough to deduce some possible stylistic distinctive features, which could connect this building with the architecture of the Rhineland or Mosan area. The first stage of this work, consists of collecting useful samples in art history in this confluence region; this will lead to a comparison with other religious buildings, either excavated or not, in the former area of the ecclesiastical province of Trier.¹⁹

Through contact with France and the Empire, emblematic monuments have often been initiated by individuals who also worked on the Meuse banks and around the Mosan axis: Poppon, Richard of Saint-Vanne, the monks of Saint Hubert and important local families, primarily, the Ardennes-Verdun.²⁰

Among them, the dominant person is Richard, to whom we attribute the reform of many churches such as Waulsort, Saint-Hubert, Stavelot and Malmédy; at the same time, Saint-Peter of Châlons and Saint-Lawrence of Liège, were both dedicated in 1034.²¹ This gives an idea of the extent of his activity and "international" personality. Indeed, some of these churches were furnished with external crypts: at Susteren (near Maastricht), at Saint Barthelemy of Liège and Fosses, which may be the best-preserved but also the latest (end of the eleventh century). A similar setup can be found in Saint-Memmie Monastery (in Châlons) or the oriental complex constructed in the eleventh century in Saint-Hubert.

Among the churches built in Verdun in the first half of the eleventh century, none seem to have this type of crypt.

But Verdun has lost its collegiate churches and other abbey buildings, with the exception of the abbey crypt of Saint Maurus (founded by Heimo before 1011) and the remains of Saint-Vanne Abbey.²²

Rebuilt from 1004 at the initiative of Richard of Saint-Vanne and the family of Ardennes, the Saint-Vanne abbey played a leading role. Until recently, we knew only a few things about it.

The oldest remains were the western north tower, dated from the twelfth century, which has similarities with the transept and the east choir of the Verdun Cathedral from the twelfth century, as well as some remains from the Gothic cloister.²³ The crypt remains have now been identified on the basis of written evidence. Were the two western towers the complete implementation of Abbot Conon (after 1142-1178) or were they inherited form the original architectural choices made by

¹⁸ Luc-Francis Genicot, *Les églises mosanes du XF* siècle. Livre *I : architecture et société* (Louvain: Presses universitaires de Louvain, 1972).

¹⁹ Xavier Barral I Altet, *Belgique romane et Grand-duché de Luxembourg* (Paris: Zodiaque, 1989).

²⁰ Dauphin, Le Bienheureux Richard; Dierkens, Abbayes et chapitres entre Sambre et Meuse, 270; Patrice Bertrand, "Architecture autour de l'an mil autour de la Meuse," in L'Ardenne. des frontières en l'an Mil, ed. Cédric Moulis, (Nancy: Presses Universitaires de Nancy, 2015), 190.

²¹ Hugues de Flavigny, *Chronicon*, VIII; Bertrand, "Architecture autour de l'an mil," 185.

²² Rollins Guild, François Héber-Suffrin, and Anne Wagner, "Saint-Maur dans l'organisation ecclésiale de Verdun, un monastère de femmes et son pèlerinage," in *Espace ecclésial et liturgie au Moyen Âge*, ed. Anne Baud (Lyon: Maison de l'Orient et de la Méditerranée-Jean Pouilloux, 2010), 347-368; Bertrand, "Architecture autour de l'an mil," 192.

²³ Hans-Günther Marschall, *Lorraine romane*, trad. fr. Gosbert Schecher (Paris: Zodiaque, 1984); Michaël George, *La cathédrale de Verdun des origines à nos jours : étude historique et sociale d'un édifice à l'architecture millénaire* (Nancy: Presses Universitaires de Nancy, 2013).

Count Frederic at the beginning of the eleventh century?

The description by Hugh of Flavigny of the works ordered for Saint Vanne by Richard from 1004 gives an idea of the quality of these productions, in particular, a very rich (by its material and its iconography) *pulpitum*; it also shows how these works are financed, most often by the imperial intervention, notably the contemporaneous Holy Roman Emperor Henry II.²⁴

²⁴ Bertrand, "Architecture autour de l'an," 237.

Artistic Patronage and Sources of Monastic Wealth

CHURCH AND SALT. MONASTERIES AND SALT TRADE IN THE MEDIEVAL KINGDOM OF HUNGARY (11TH–13TH CENTURIES)

BEATRIX F. ROMHÁNYI^{*}

According to the wide-spread opinion the exploitation and the trade of salt coming from the Transylvanian mines was from the earliest times royal privilege in the Hungarian Kingdom. This seems to be supported by the incident between King Saint Stephen and the lord of the Maros/Mureş Region, Ajtony since the latter one - allegedly - broke the law by hindering the transport of the royal salt and imposing tolls on it on the river.¹ The story is known only from the Legend of Saint Gerhard and this fact is already a hint for the researcher to be very careful: the final version of the text was compiled in the fourteenth century, the earliest parts being from the twelfth century, but it also contains some elements dating back to the eleventh. The question is "only" whether this very section can be dated to this very early layer or not.

Another commonly shared consensus is about the oath of Bereg, namely about the royal donation of salt to a number of church institutions, mainly along the Mureş/Maros River.² This privilege is usually referred to as if the different bishops, collegial chapters and abbeys had received the salt so that they could sell it on their own. But is this really the sense of the text? Or even was it a long-lasting system in Hungary? The number of complementary sources is rather limited, however, it is worth analysing them in a common framework in order the understand the presumed system and to decide – if it is possible – what the intent of the 1233 charter was and whether the privilege compiled by the legate Jacopo Pecorari and sealed by King Andrew II survived in the next decades.

As far as the charters are concerned, we have about a dozen of them before the year of the oath of Bereg. Three of them are dated to the eleventh century. According to the foundation charter of the Benedictine abbey of Pécsvárad (1015) the founder, King Saint Stephen gave large privileges on salt to the monastery, including mining, transport and trading, without quantity restriction. ³ Alas, the charter is interpolated, compiled in the thirteenth century according to the model of the privileges of the Pannonhalma abbey and this part is certainly false.

Another eleventh-century donation is connected to the abbey of Bakonybél (also Benedictine) which - allegedly - in 1086 or in 1092 received a certain number of salt transporting boats on the Mures/Maros from King Saint Ladislaus. However, this charter was later, in the first half of the twelfth century completed, and the paragraph in question belongs to this later part.⁴ Certainly, the salt transporting servants and the boats were also referred to in the 1130s when the property of the abbey, after having been occupied by a certain Opus (comes udvarnicorum of the King), was restored.5 Comes Opus did not act as a private person: as a royal official he probably had to control the royal incomes and to revise whether some parts of it went illegally to foreign hands. Taking this into consideration we may suppose that in the first decades of the twelfth century it was not a common thing that abbeys took part in the salt trade and received income out of it.

The third charter mentioning the donation of salt income dates from 1075: the foundation charter of the Hronský Benadík/ Garamszentbenedek abbey. According to the text,

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¹ Emericus Madzsar, ed., "Legenda s. Gerhardi maior," in *Scriptores rerum Hungaricarum*, vol. II, ed. Emericus Szentpétery (Budapest: Nap Kiadó, 1999 [Reprint]), 489-490. "...usurpabat sibi potestatem, super sales regis descendentes in Morosio, constituens in portibus eiusdem fluminis usque ad Ticiam tributaries et custodies conclusitque omnia sub tributo."

² Ferdinandus Knauz, ed., *Monumenta Ecclesiae Strigoniensis* vol. I (Strigonii [Esztergom], 1874), 448.

 $^{^{3}}$ †1015: *DHA*, I, 63-80 (with the detailed critical evaluation of the text). The formulation ("...et salicidio ab omni inquietudine liberimo, quod nec tributariorum cupiditas, nec possit potentum violentia perturbare.") is very odd and it has no parallel in the medieval Hungarian charters. It is also suspicious that neither the site of the salt mine, nor the quantity are indicated, furthermore there is no reference to the transportation.

⁴*1086: *DHA*, I, 247-249, 255. "Item dedi XXIIII mansiones cum salifodio et cum tribus navibus, ut ipsimet lapides salis efodiant fossatosque III vicibus per annum sine omni tributo."

⁵ 1131: *PRT*, VIII, 247.

King Géza II gave the abbey the toll paid near Turda/Torda/Thorenburg after the salt (transport?).⁶ In this case it is clear that the monks were not directly involved in the salt business, they just received a certain income, in money or in nature. Furthermore, according to the opinion of Boglárka Weisz, based on two thirteenth century charters, the abbey acquired the toll as late as after 1209.⁷

Thus, we have three charters from the first century of the Hungarian Kingdom that mention different types of salt donations to three Benedictine abbeys different in Western Hungary. There is not too much to speak about the alleged donation to the Pécsvárad abbey since its formulation is very vague, and the charter itself has been proven to be false. However, the donations of King Géza I to Garamszentbendek and of Saint Ladislaus to Bakonybél are more difficult. Although large parts of the charters can be dated to the late eleventh century, the sections containing the privilege on salt transport do not belong to the original text issued in 1075 and in 1086, respectively. Nevertheless, the privilege of Bakonybél abbey did exist before 1131, as it is supported by the charter of King Béla II. In this case the question is: who gave the salt boats to the abbey? For the time of King Ladislaus it seems to be a little bit early. However, the description of the donation is detailed, similar to the donation given by King Béla II for the Collegial of Dömös which would support its authenticity. In any case, the privileges of Bakonybél and of Dömös suggest that something new began around 1100. Was it the donation of privileges in salt transport or was it the salt transport itself?

In fact, the first really reliable charter is certainly the just mentioned donation of King Béla II from 1138.⁸ The Collegial itself was founded by the King's father, Prince Álmos thirty years earlier. The description of the salt transport is very accurate: the two boats of Dömös go and return six times a year on the River Mureş/Maros, they transport 24000 pieces of salt from Transylvania (let us not define yet what this means) till a place called *forum Sumbuth* (Szombathely, today Sâmbăteni/Szabadhely). This settlement, situated near Bizere on the right bank of the river, does not appear again in any of the known charters connected to the salt trade.

The next charter was issued for the Chapter of Óbuda in 1148 by King Géza II, containing among others the toll of the boats carrying wine and salt on the Danube.9 In 1157 the archbishop of Esztergom received the salt tolls of Nána and Kakat (two villages north from the city, today Nána and Šturovo in Slovakia).¹⁰ Similarly, the abbey of Meszes¹¹ received a tolllike income in 1165 from King Stephen III: one cube of salt went to the abbey from each salt carrying cart that crossed the Meses/Meszes Pass.¹² Despite the differences there is something similar in these two charters: the churches received only the income, without participating in the business directly – just like in the case of the Garamszentbenedek abbey.

From the 1180s on, the charters multiplied and their content changed, as well. The first document of this series is the privilege given to the Nitra/Nyitra Bishopric in 1183. According to this text, the bishopric received three boats with the same rights which were

⁶ 1075: *DHA*, I, 206-218. "Ultra et syluam ad castrum, quod vocatur Turda, dedi tributum salinarum, in loco, qui dicitur Hungarice Aranyas, Latine autem aureus; scilicet medietatem regiae partis."

⁷ Boglárka Weisz, "A királyketteje és az ispán harmada. Vámok és vámszedés Magyarországon a középkor első felében [Customs and customs duties in Hungary in the first part of the Middle Ages], (Budapest: MTA BTK, 2013), 55-56.
⁸ 1138: CDH, II, 104. "In villa Sachtu sunt allatores salis, quorum nomina haec sunt:... Isti per annum sexies redeunt de Ultrasilvanis partibus, usque ad forum Suburh cum duabus

navibus. In Ultrasilvanis partibus sunt mansiones, qui sal dare debent, scilicet viginti quatuor millia salis."

⁹ Weisz, A királyketteje, 307.

¹⁰ Weisz, A királyketteje, 212-213 and 275.

¹¹ The abbey was built on the territory of the antique Porolissum. Its ruins are in the confines of the village Nyirsid/Mirşid.

¹² 1165: MNL OL DL 76136 – Emericus Nagy et al., eds., *A zichi és vásonkeői gróf Zichy-család idősb ágának okmánytára. Codex diplomaticus domus senioris comitum Zichy de Zich et Vasonkeo*, vol. I (Pestini, 1871), 2. "...quicunque deferentes sal per portam Meches transirent, de singulis curribus de ... salinorum ad regiam partem pertinentium unum lapidem salis predicto monasterio darent. Si vero contigerit, quod aliquando pro salibus predictis denarios in partem regis acceperint, de singulis curribus unius lapidis pretium de parte regis predicto monasterio semper solvatur."

given earlier the abbey of Bizere and the Collegial of Arad.¹³ Beside the fact that the formulation refers to the earlier privileges of two other ecclesiastic institutions the charters of which did not survive, it also gives the bishop the permission to have more boats and thus to transport the given amount at once instead of in three portions. This means that – unlike in later periods – there was a single type of boat used on the river. It is also worth mentioning that the town of Szeged occurs for the first time in this privilege, as an alternative harbour for unload the boats.

Less than ten years later, in 1192 the abbey of Pannonhalma received a privilege to have three boats on the Mureş/Maros and to transport the salt to the abbey itself.¹⁴ This time it is not referred to how many times the boats went and returned. The privilege was repeated by King Andrew II in 1211, with the same formulation as the privilege of Nyitra in 1183.¹⁵ A number of further privileges given by King Béla III and/or King Emeric are referred to by King Andrew II (see below) but the original charters did not survive.

In the thirteenth century some more churches received different salt privileges. Such donations were given before 1204 the Collegial of Buda, ¹⁶ before 1196 the Cistercian abbey of Heiligenkreuz in Lower Austria, ¹⁷ in 1217 the Chapter of Zagreb,¹⁸ in 1222 the Teutonic Order¹⁹ and in 1225 the Cistercian abbey of Borsmonostor (later Klostermarienberg).²⁰ In the same period, in 1217 another Benedictine abbey (Szigetmonostor) received an income connected to the salt, namely 60 marks from the salt sold in Bratislava/Pozsony/Preßburg, in compensation for the half of the Pest toll taken by the King.²¹ In

The same privilege was repeated in 1217: Weis, *Heiligenkreuz*, I, 54. "Istud etiam non est pretereundum silentio, quod propter anime nostre remedium donationem de tribus milibus zuanorum, quos nostrorum antecessorum, patris atque fratris regum inclyte memorie, diligens pietas dicto monasterio contulerat, iterato auctoritatis nostre privilegio confirmamus, ita videlicet, ut extra rationem et fisci nostri compotum a salinariis preter quorumlibet exactionem tributorum auxilio Suprunensis comitis annuatim in Suprun ad festum sancti regis iure perpetuo libere persolvantur." Confirmed in 1233 with the price regulation of the Bereg treaty in AUO, I, 184 (1233): "…pro singulis centum zuanis unam marcam…"

²⁰ 1225: ÁÚO, I, 428.

¹³ 1183: \dot{AUO} , XI, 48. "Preterea *tres naves saliferas* ea libertate, quam habent naves monasterii de *Bisra* in emendo et deferendo sale, sive *Orodini*, sive in *Ciggedin* servari placuerit, *Nitriensi* Ecclesie concessi, et ad preces episcopi, si potuerit naves habere sufficientes, quod *tribus viis* deduci debet, ut *una via* deducatur, ex regia liberalitate adieci."

¹⁴ 1192: \acute{AUO} , VI, 183. "...tres naves saliferas liberas contulimus, ea videlicet libertate privilegiatas, ut ab ipso salifodine loco usque ad iam dictum Montem Pannonie, tam per aquam, quam per terram *nemo de salibus* in illis tribus navibus delatis *tributum exigere*, vel aliqua alia dampnifica exactione *audeat* eas attemptare, vel infestare." The privilege was repeated in 1211 (\acute{AUO} , VI, 348-349).

¹⁵ 1211: *ÁÚO*, VI, 349. "…nos de nostra devotione eidem monasterio expressiorem concedimus libertatem, videlicet: ut predicte naves Sancti Martini per omnia *eam libertatem habeant, quam Bistryensis* et *Orodiensis ecclesiarum naves utantur.*"

¹⁶ 1212: *CDH*, III/1, 123. By this charter King Andrew II restored the possessions of the Buda Collegial given by his brother King Emeric before 1204, among them the salary: "et tyminios etiam salium, quos idem Hemericus rex eidem

ecclesiae pro remedio animae suae concessit, sub eadem libertate, quae in eiusedem regis authentice est expressa."

¹⁷ 1208: Johann Nepomuk Weis, ed., *Urkunden des Cistercienser-Stiftes Heiligenkreuz im Wiener Walde*, vol. I, Fontes rerum Austriacarum 2. XI (Wien, 1856), 39. "Preterea eidem cenobio tria milia salium qui regales dicuntur, sicut a recolende memorie predecessoribus nostris, patre videlicet ac fratre regibus, concessa fuerunt ab antiquo in Suprun in festo sancti regis a salinariis sub pena duli de proprio sine omni contradictione persolvenda ... confirmamus."

¹⁸ 1217: \acute{AUO} , XI, 148-149. "Zagrabiensis dioecesis monasterium... dotavimus: quatenus salinarii super Marisii fluvium constituti de salibus aquaticis, eiusdem ecclesie canonicis et non episcopo, valens quinquaginta marcas de salibus in loco qui vocatur Zegedin, annuatim ante festum Sancti Regis Stephani persolvere teneantur, ac iam dictis canonicis usque Zagrabiam absque omni tributo deportandis, et cum omnimoda libertate, si eis expedierit vendicioni exponendis."

In fact, the salary of Heiligenkreuz received from the Hungarian King is earlier than the earliest similar donation given by an Austrian archduke (1219). Cf. Weis, *Heiligenkreuz*, I, 55.

¹⁹ 1222: *Ub*, I, 19. The authenticity of the charter is discussed: *DHA*, I, 248-250.

 $^{^{21}}$ 1217: MNL OL DL 83 – \dot{AUO} , XI, 150. "Cum itaque frater noster Emericus rex inclite memorie medietatem tributi de Pesth monasterio Tyburcii comitis de Insula iure perpetuo contulisset, et nos postmodum idem tributum ad magnam insulam nostris deputassemus usibus, in eiusdem restauracionem plenariam LX marcas de salibus terrestribus annuatim in Posonio persolvendas memorato monastario in perpetuum assignauimus." The text refers to the earlier

1232 we learn that the abbey of Bakonybél received sometime after 1217 30 marks of silver from King Andrew II, and the sum had to be paid from the income of the salt by the officials of the King at Sălacea/Szalacs on Pentecost.²² And last but not least there is the oath of Bereg itself, issued in August 1233 and including 29 institutions by name and an unknown number of further churches which are addressed in general. This charter tried to summarise the whole system of royal salt privileges that began to develop from the first half of the twelfth century. In fact, there is a whole series of charters connected to the Bereg oath, issued on 1st October 1233. Among the privileged institutions we find the abbeys of Pannonhalma, Tihany, Pornó, Szentgotthárd and Heiligenkreuz,²³ and there is even a false charter of the Cistercian abbey of Klostermarienberg.24

Thus, we have two types of privileges how different ecclesiastical institutions participated in the marketing of salt. The first group - Garamszentbenedek/Hronský Benadík. Esztergom, Meses/Meszes and Szigetmonostor, but also Zagreb and the second privilege of Bakonybél and Pilis – enjoyed the incomes through the tolls or received a certain sum in money or eventually in salt from the chambers of Sălacea/Szalacs or Szeged. If the donation was given in salt, it could be sold by the privileged institutions as it was the case of the Zagreb Chapter. The other group including all the institutions mentioned by name in the oath of Bereg, as well as the Teutonic Order before 1225, Bakonybél, Heiligenkreuz, (Ó)buda, Kloster-marienberg and Tihany – had either boats for the salt transport and barns for

the storage or only barns where they could keep the salt under seals of the royal officials (*salinarii*) and the local prelate till the dates given in the charters (27th August and 6th December). From our point of view, it is this latter group that should be investigated more accurately.

In order to understand what the charters are speaking about, we have to ascertain a few things. First of all, the privileges reflect a coherent system, as far as the measures are concerned. Even if there were some uncertainties in the measures when they appeared physically, theoretically they were fixed, and there is no reason to think that any confusion would have been tolerated by the king or the royal officials. As a consequence, we have to regard at the oath of Bereg and the charters connected to it as a contract that concerned more than thirty ecclesiastical institutions in a common system, with fixed measures and fixed, coherent prices. Therefore, even if there is some hesitation among historians whether the amounts of salt given in the list can be identified and converted on modern measure units, I would argue for the solid interpretation of the source with the restriction that in fact the conversion to modern measures has its problems.

First of all, we have to understand the character of the charter. Usually, the treaty was regarded as a simple charter of donation according to which the different churches were given a certain amount of salt that they were allowed to freight toll-free in the country to their barns and to sell without restrictions. But if we have a more accurate look at the text (see the Appendix) we have to reject this simplifying assumption. The treaty is much more a freight and store concession and the right of free selling is restricted to the case when the king would not pay in time. We may think that there could be some difficulties in this respect – King Andrew II often had financial problems - but the original conception was certainly that the churches receive their money at the fixed dates. Thus, the sums given in the text are not salt prices, but the compensation of the shipping and storage costs. This means also that we do not know the actual value of the salt – which was certainly higher than the sums paid for the churches - but we

donation of King Emeric. According to a later note on the rear of the charter 40 marks had to be given for the nuns of the Margaret Island (the monastery was founded in 1252 by King Béla IV).

²² 1232: MNL OL DF 292176 – ÁÚO, I, 292.

²³ Details of the charters see below in footnotes 23-28.

²⁴ According to the false charter of 1233, attributed to King Andrew II, the Abbey of Klostermarienberg should receive thousand zuans of salt from the Sopron salt depot. See Weis, *Heiligenkreuz*, I, 295: "Per presens scriptum omnibus nunc et in posterum facimus manifestum, quod olim affectu misericordie provocati mille zuanos salium magnorum, que in curribus deferuntur ad confinia Theotonie, pro remedio anime nostre successorumque nostrorum et regni nostri salute monasterio vestro in Suprun contulimus in perpetuum annuatim."

know its quantity. Although we do not know how much salt was transported on the Maros/Mureş, nor the percentage it represented in the total production, but we have at least a minimum of salt cut in the mines.²⁵

The charters issued in 1233 after the Bereg treaty, most of them on the 1st October, need to be analysed more in details. The privileges of the abbeys of Pannonhalma, ²⁶

Tihany, ²⁷ Pornó, ²⁸ Szentgotthárd, ²⁹ Heiligenkreuz³⁰ and Pilis³¹ may seem to be, at a first look, simple caution for those institutions which were not mentioned by name in the charter of Bereg. But why do we find then among them the abbeys of Pilis, Pornó and Szentgotthárd which are also named in the Bereg list? In order to give the answer we have to analyse the measures and the exact meaning of the measure units mentioned in the text.

The measures

When speaking about measures in the Middle Ages we face a number of serious problems. Since there was no unified system of measures till modern times, the same name may refer to very different actual quantities. Furthermore, the exact meaning of these words

³⁰ 1233: ÁÚO, I, 184 and 302.

³¹ 1236: Augustinus Theiner, ed., *Vetera Monumenta historica Hungariam sacram illustrantia*, I (Romae, 1859), 143. Pope Gregory IX refers to the earlier donation of King Andreas II: "Abbati et conventui monasterii de Peleis in Hungaria Cisterciensis ordinis Vesprimiensis Dioecesis. Sacrosancta Romana Ecclesia etc. specialiter autem annuum redditum 100 marcarum, quem dotis causa clarae memoriae Andreas rex Hungariae percipiendum in salibus suis de Solachi monasterio vestro tempore dedicationis ipsius pia liberalitate concessit, sicut illum iuste ac pacifice possidetis et in confectis super hoc ipsius regis litteris plenius dicitur contineri, authoritate apostolica confirmamus."

²⁵ We also have to take into consideration that the production was determined by several factors. On the one hand, the quantity was certainly limited by the technical conditions (production and transport). On the other, we must not forget the needs of the market. For sure, it was possible to store the salt for years if it was necessary, but the main purpose was to sell it. Thus, there was no reason to increase the production if there was no need for the product on the market. To have an idea of the quantity we are speaking about here, let us quote the salt production of the Transvlvanian mines in 1530s. In the early modern period the five salt chambers administered the production of more than 1600000 pieces of salt (sales curruales) per year. This quantity equalled more than 400000 zuan which is just for times the quantity recorded in the Bereg charter. According to written evidence, the production of the mines increased from the fourteenth century on. Cf. István Draskóczy, Erdély sótermelése az 1530-as években [The Salt Production of Transylvania in the 1530s], in Tanulmányok Szapolyai Jánosról és a kora újkori Erdélyről [Studies on the age of János Szapolyai and Early Modern Transylvania], eds. József Bessenyei et al., (Miskolc: Miskolci Egyetem BTT, 2004), 31-96; István Draskóczy, A kősó bányászat átalakulása Erdélyben az Árpád-korban [The transformation of salt mining in Transylvania in the Arpadian Age], in Arcana tabularii. Tanulmányok Solymosi László tiszteletére [Arcana Tabularii. Studies in honour of Solymosi László], vol. II, eds. Attila Bárány et al. (Budapest-Debrecen, 2014), 825-835.

²⁶ 1233: MNL OL DL 206929 - ÁÚO, VI, 520-521. "...de predictis salibus ad usum vestrum teneatis tantum, quantum prelatus vester in anima sua dixerit salinariis nostris. Ceteri vero, vel pars ipsorum, cum vobis fuerint persoluti, libere et absque ulla contradictione et tributo in domo vestra, sub sigillo salinariorum nostrorum et prelati vestri, qui pro tempore fuerit, deponantur, depositique serventur usque ad octavas Sancti Stephani Regis. Et tunc ab illo die usque ad Nativitatem Beate Virginis Marie faciemus vobis solvi argentum pro salibus, quos tunc apud vos habetis, pro quolibet timino salium aquaticorum octo marcas. Et, si in illo termino nos aut salinarii nostri sales ipsos non emeremus, et vobis et ecclesie vestre argentum secundum estimationem predictam non solveremus, extunc omni tempore omnes illos sales libere in proprium usum ecclesie vestre percipiatis, et uendatis iuxta vestre arbitrium voluntatis... Idem dicimus de secundo termino,.."

The confirmation of the privilege given by King Béla III (1233): \dot{AUO} , XI, 258-259. "...dominus Bela pater noster

misericordie provocatus affectu, tres naves saliferas liberas contulit ad sustentationem fratrum ibidem Deo servientium, ea videlicet libertate privilegiatas, ut ab ipso salisfodine loco usque ad iam dictum montem Pannonie, tam per aquam quam per terram nemo de salibus in illis tribus nauibus delatis tributum exigere, vei aliqua alia campnifica exactione audeat eos impedire."

²⁷ 1233: PBFL Tihany 1233 – *PRT*, X, 519. The text tells clearly that the salt comes from the chamber of Szalacs/Sălacea ("mille zuanos contulimus vestro monasterio in perpetuum possidendos, statuentes, ut salinarii de *Zoloch* predictum numerum zuanorum annuatim in festo Sancti Regis in Albensi castro, quod est in medio Ungarie, remota contradiccione, monasterio vestro plenarie solvere teneantur)."

²⁸ 1233: MNL OL DL 99838 – \dot{AUO} , VI, 517-518. "Ecclesie vestre contulerimus mille zuanos, in Woswar a salinariis annuatim circa festum Sancti Joannis Baptiste (24th June) in prima via sine omni contradiccione, diminucione et dilacione persoluendos jure perpetuo."

²⁹ 1233: MOL DL 99839 – RA, I/1, 161-162. The Abbey is mentioned in the oath of Bereg, too, but in this charter its rights and incomes are described more in details. The problem is discussed further down.

changed from time to time and from region to region. However, even if the metric equivalent cannot always be precisely identified, the proportions between the different units can be established. For old measures used in medieval and early modern Hungary the work of István Bogdán is commonly referred to.³² According to him

1 sal navalis = 5.5 or 10 Viennese pounds = 3.06 or 5.56 kilogram;

1 lapis (kősó, stone of salt) = 37.80 kilogram;

1 sal currualis = 17 Viennese pounds = 9.52 kilogram;

1 tyminum (tömény) = 10000 pieces (without giving the weight);

1 tulkó = a large plate of salt that cannot be measured, only used in the mines.

In the sources of the Arpadian age we find two further expressions. One of them is the zuan which can be identified with the *kősó* in Bogdán's list. The zuan as measure unit needs not to be one single piece of salt, although we have a source suggesting that there were such large pieces as well.³³ Another measure seems to be the boat (navis). It appears as soon as the beginning of the twelfth century and does not simply mean the vehicle used for the transport, but also the boatload as measure. Since - unlike the modern times - the charters do not speak about different sizes of boats (e.g. the bishop of Nitra/Nyitra was allowed to have more boats and not bigger ones) we may assume that there was a certain type of standard boat used on the Mures/Maros in the twelfth and the first half of the thirteenth century for the salt transport. Fortunately enough, we have some idea what sort of vehicle this could be, since the imprint of a log-boat has been found at the excavations of Bizere abbey.34 This boat was 12.15 m long and 1.15-1.20 m wide vehicle made

³² http://mnl.gov.hu/index.php?akt_menu=1036 (21.11.2014).
³³ 1208: Weis, *Heiligenkreuz*, I, 39. "Preterea eidem cenobio tria milia salium qui regales dicuntur." In 1217 the formulation of the same privilege is different: "donationem de tribus milibus zuanorum" (Weis, *Heiligenkreuz*, I, 54).
³⁴ Advian Andrai Purgu and Conp. Toda. "Archaeological context of the same privilege is a statement of the same privilege is different." In 1217 the formulation of the same privilege is different. "donationem de tribus milibus zuanorum" (Weis, *Heiligenkreuz*, I, 54).

of oak. Parallels of the type were found in the River Drava and near the River Szamos/Someş.³⁵ Since the maximum capacity of such a boat can be calculated, we may get closer to our basic question concerning the measures.

After having collected the sources, let us see whether the data can be really fitted into a coherent system. The starting point can be the "salaries" of the Dömös Collegial and of the Cistercian abbey of Szentgotthárd. The Collegial received in 1138 24000 cubes and two boats shipping them six times a year. Thus, a log-boat could freight 2000 cubes. The capacity of a logboat was around 6.3 tonnes, thus the cube weighed around 3.15 kg - not surprisingly this corresponds with the weight of the late medieval sal navalis, called in the charter of 1233 sal aquaticus. The weight of the zuan probably did not change and it was around 38 kilogram (37.8 according to István Bogdán) in that time, as well. On this basis, 1 zuan equalled 12 pieces of the sal aquaticus.

According to the Bereg charter there was also a larger size carried on the boats, the sal aquaticus maior. This type appears in connection with the Collegial of Arad, the Cistercian abbey of Igris/Egres and the Knights Hospitaller. It is just the Collegial of Arad that helps us to define the weight. The price of this type of salt is given for 10000 pieces, but in fact, the Collegial received only 2000 of them, i.e. it should get 5 marks per year. On the other hand, the church of Gyelid (north-western part of Arad) - just a few kilometres from the Arad Collegial - received 500 zuans of salt for which it should get 4.8 marks per year. It is unlikely that the amount of salt was very different, if the prices are so close to each other. The difference between the two may be the consequence of the more difficult handling of the larger pieces. Thus 1 zuan equalled 4 pieces of

³⁴ Adrian Andrei Rusu and Oana Toda, "Archaeological Evidence for Historical Navigation on the Mureş (Maros) River. Enquiries Based on a Medieval Boat Imprint from Bizere Abbey (Romania)," *AAASH*65 (2014): 139-154.

³⁵ János Attila Tóth, "Adatok a kora újkori Közép-Dunamedencei hajók régészetéhez" [Data on the Archaeology of Early Modern Age Ships in the Middle Danube Basin Region), in *A középkor és a kora újkor régészete Magyarországon. Archaeology of the Middle Ages and the Early Modern Period in Hungary*, vol. II, eds. Elek Benkő and Gyöngyi Kovács (Budapest, 2010), 871-884; János Attila Tóth, "La Drava (Hongrie), un fleuve inconnu," *Dossiers d'Archéologie* 331, no. 1 (2009): 46-49.

the *sal aquaticus maior* (around 9.45 kilograms), i.e. it weighed three times as much as the normal *sal aquaticus*.

The price of the *sal aquaticus maior* is given twice in the charter, and it is slightly higher for the Cistercian abbey of Egres/Igriş than for the Collegial of Arad (26 and 25 marks, respectively). The salary of the Knights Hospitaller is calculated on a completely different basis. In the first two cases, the reason of the difference may be the different distance (Egres/Igriş is more than 50 kilometres further from the Transylvanian harbours than Arad), or an additional task fulfilled by the Egres abbey.³⁶ However, I cannot give any explanation for the different calculation in the third case.

After these three items, the measure unit changes. The charter gives all the following amounts of salt in zuan, although it is not always written explicitly. It means also that the amounts were converted to zuan, the salt was actually shipped in cubes of the normal size (*sal aquaticus*).

In the list of the privileged institutions we find only these two types, but there is a further expression in connection with the land transport: the *sal terrestris*. It is certainly not by chance if it does not appear in the detailed list. The text speaks in general about the shipping costs and not the price of the salt itself, and this is not different in the case of the *sal terrestris* either ("Pro salibus vero terrestribus dabimus unam marcam pro centum zuanis, si sales suos debeant habere in confiniis, excepto monasterio S. Gothardi, cui pro octoginta zuanis dabimus unam marcam"). The sum is a bit higher than in the case of the normal river transport and it equalled exactly the price promised for the Arad Collegial. However, the charter of King Andrew II issued on 1st October 1233 tells us how the abbey received the salt. The King refers to the donation of his father, King Béla III who gave the Cistercians of Szentgotthárd 20000 pieces of salt ("viginti milia salium magnorum qui in curribus ad confinia Teutonie deferuntur"). 37 Apparently, the case is very simple: the two charters refer to one and the same amount of salt. However, if this would be true, the sal magnus should be 4,725 kilogram – a new measure unit that did not occur earlier and which should have disappeared in the next decades. The other possibility to solve the contradiction is if we suppose that the two charters speak of two different things. This option would be supported by the fact that the charter of 1st October repeated only the price and the mode of calculation from the Bereg oath, while the amount of the salt is given in a different way - not in zuan, but in pieces of sal magnus. If we accept this possibility it means that the abbey of Szentgotthárd stored salt from two different sources: 2500 zuan from the quantity carried on the Maros/Mureş and 20000 pieces of sal magnus from the other direction. carried on the land road to Szalacs/Sălacea and then further to other places of the country. In this case the sal magnus equalled the sal aquaticus maior, the later sal currualis.

1 zuan (sal regalis) = 4 sal magnus = 4 sal aquaticus maior = 12 sal aquaticus

Thus, the 20000 pieces numbered 5000 zuan, and with this Szentgotthárd became one of the largest salt depots storing 7500 zuan (283500 kilograms) a year – the same amount was administered by the abbey of Igriş/Egres. The whole quantity meant 86.5 marks of income per year the major part of which covered doubtlessly the shipping costs.

This case summons us that the oath of Bereg is mainly about the salt transport on the Mureş/Maros River, but there was another and probably even older route to export salt from

³⁶ Although neither this, nor other written evidence gives any hint to that the Abbey of Igriş/Egres head some additional task. However, there is something that should be investigated: opposite to Igriş/Egres there is the village Şeitin/Sajtény the name of which refers to the salt. North of it a canal system could be identified towards the medieval settlement of Pereg (today Kaszaper). Based on C14 data it can be dated to the twelfth-thirteenth centuries. Thus, there is the possibility that these canals played some role in the shipping of salt and Igriş/Egres – as the closest monastery to this transport route – may have control or maintain it. Since the archaeological investigation of the territory just started, this is only a hypothesis. I am grateful to my colleague Zoltán Rózsa (Szántó Kovács Museum, Orosháza) who shared his preliminary results with me.

³⁷ 1233: MNL OL DL 99839 – *RA* I/1: 161-162. The false charter of the Klostermarienberg Abbey followed this formulation (cf. footnote 21).

Transylvania through the Meseş/Meszes Pass to Sălacea/Szalacs, and certain churches participated in that business, too. Therefore the expressions *sal aquaticus* and *sal terrestris* do not cover the later denominations *sal navalis* and *sal currualis*, although the sizes did not change – at least there is no sign of it. *Sal terrestris* meant the salt carried on land from northern Transylvania, *sal aquaticus* meant the salt shipped down on the Mureş/Maros River. The question is whether the two routes were always alternatives of each other?

Despite the legend of Saint Gerhard speaking about the conflict between King Saint Stephen and Ajtony because of the salt transport on the river, there is no real evidence for the existence of this route before the twelfth century. As a matter of fact, it is not only the lack of written evidence, but the lack of the institutional background. There are hardly central settlements in the region that existed as such before 1100. The city of Cenad/Csanád was certainly one of them, but the early existence of Arad and Szeged is already doubtful. In Arad the Collegial was founded in the first half of the twelfth century, probably by King Béla II (1131-1141), and the earliest church of Szeged was also built in the twelfth century – at least according to the archaeological evidence. The chain of monasteries, whose participation in the salt transport is documented from the second half of the twelfth century, also emerged - according to the archaeological data – after 1100. Another hint is that the oath of Bereg contains a detailed regulation of the river transport, while the land transport appears only in the context of the price regulation - i.e. the land transport was older and its system was well known and settled. The relative novelty of the river transport can be supported by a false charter, too, according to which the Pannonhalma abbey received three boats on the Mures/Maros in 1137. In fact, the document was written around 1228, but it is probably not by chance that the falsifier dated it into the 1130s - in this respect, he was more skilled than the scriptor of the Pécsvárad abbey who dated his compilation to the beginning of the eleventh century.

Coming back to the question concerning the charters issued in 1233 after the oath of Bereg

we have to say that several monasteries were not or not only involved in the salt business along the Mureş/Maros. The Cistercian abbey of Szentgotthárd had privileges for both directions, while the abbey of Tihany seems to have been involved only in the trade of the land route.

The total quantity distributed in the charter of Bereg was 89000 zuan, i.e. approximately 3364 tonnes, and if we add the quantities known from other charters, the amount reaches 105700 zuan, i.e. nearly 4000 tonnes. Supposing that the quantity carried on the two shipping routes was more or less equal, the total production was at least 190000 zuan (~7200 tonnes). To have an idea of the importance of the Transylvanian salt: the yearly production of Lüneburg, the major centre of Nordic salt industry, was estimated around 1200 to 5200 tonnes.38

It is also worth looking at the proportions of the different orders and other church institutions. The bishops and the collegial chapters received around 40 per cent of the total quantity, the Benedictines and the Cistercians around 25 percent each (the Benedictines had a little bit more) and the remaining 10 per cent was shipped and stored by the Knights Hospitaller. Compared to the income register of King Béla III³⁹ the shipping and storage costs were at least 7 per cent of the income out of the salt (this is the part we know of). If we add the sum of the other known salaries and the estimated value of salt received by the Meszes abbey (around 500 zuan), the total amount of silver promised for the churches were at least 1355 marks – a large sum, but still not more than 1 per cent of the royal income in King Béla III's time.

However, the treaty of Bereg was very advantageous for the church, but extremely disadvantageous for the King. On the one hand,

³⁸ Harald Witthöft, "Struktur und Kapazität der Lüneburger Saline seit dem 12. Jahrhundert," *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* 63 (1976): 1-117, here: 104-106. The production of Lüneburg went up to 15000 tonnes till the end of the thirteenth century.

³⁹ János Barta junior and Gábor Barta, "III. Béla király jövedelmei (Megjegyzések középkori uralkodóink bevételeiről)" [The incomes of King Béla III. Annotations on the incomes of medieval Hungarian rulers], *Századok* 127 (1993): 413-449, here: 443-444.

the different ecclesiastic institutions gained the right to carry the salt from the mines to the depots and to store it till the prefixed dates, they received a fix sum in good silver for that from the King – eventually in foreign currency –, and in addition to this they also attained the right to use a not limited part of the salt for their own purposes and to sell the salt freely if the King was late in paying. On the other hand, the King had to pay a considerable sum each year in cash, he never knew how big the part used by the churches was and he risked losing all the salt if he kept the privileged institutions out of their money. Still, it has to be emphasised that the ecclesiastic institutions did not receive the mines and they did not receive the salt as property. The Bereg treaty was a concession to freight and store the salt from Transvlvania to the official depots where it was kept under the seal of the royal official (salinarius) and that of the local prelate. The prices were not paid for the salt itself, but they covered the expenses of the churches.

Finally, we should answer the question: where is the place of Bizere in this system. Based on the written evidence, it played a crucial role among the monasteries along the Mureş/Maros River. In 1183, its privilege served as model for another privilege, the amount of salt received in 1233 (4000 zuan) was among the highest along the river: only the Cistercian abbey of Igriş/Egres and the Benedictine abbey of Bulci/Bulcs received more, while the abbey of Rohonca⁴⁰ received the same amount. All the other monasteries got less. The archaeological remains, the high quality of the architectural and decorative fragments are in harmony with this eminent role. It is an additional gift that the imprint of the boat found at the remains helped us to detect – at least partly – how the system of the salt trade on the Mureş/Maros was organised before the Mongol invasion.

To sum up: what can be said about the Árpádian-age salt trade and the charter of 1233 in particular? First of all one has to emphasize that the legal framework of the salt trade seems to be fairly different from what we know from the late fourteenth century. In the earliest times, approximately till the end of the eleventh century the production of the Transylvanian salt mines was carried on the northern land route on carts. In this early phase the mines were already property of the king and the trade with the salt belonged to his domanial incomes (in legal terms it was not yet droit de régale in that period).⁴¹ The river transport began to develop at the beginning of the twelfth century, or may be just before 1100. Church institutions, especially monasteries were rather early involved in the salt transport; the first detailed description of its model that we know is the privilege of the Dömös Collegial. The break-through happened in the last third of the twelfth century when the number of privileged multiplied institutions considerably: manv charters issued by King Andrew II mention that the donation he confirmed was originally given by his father and/or his brother. There are some traces of an essay to reorganise the salt trade around 1217: around this year and a few years later we have the confirmation of earlier donations suggesting that they were infirmed before. The oath of Bereg was planned to be the final treaty between the King and the Church concerning the rights of the ecclesiastic institutions in the salt trade, involving most of the diocesan bishops with certain collegial chapters, Benedictine and Cistercian monasteries and the Knights Hospitaller. However, it did not survive the death of Andrew. Instead of confirming Andrew's regulation (there are no transcriptions

⁴⁰ In this context it is worth mentioning that the Abbey of Rohonca is the only important monastery the remains of which are still not identified, while there is a ruined monastery a few kilometres from its supposed site which was identified as Ajtonymonostora. Cf. Zsuzsa Heitelné Móré, "Monostorok a Maros mentén. Adatok" [Monasteries along the Mureş River. Data], in *Paradisum plantavit. Bencés monostorok a középkori Magyarországon. Benedictine Monasteries in Medieval Hungary*, ed. Imre Takács (Pannonhalma: Pannonhalmi Bencés Főapátság, 2001), 267-274, here: 267. However, this latter one is the only monastery along the Mureş/Maros that allegedly existed in the time of the Bereg treaty, but did not receive any concession on the salt. In my view it would be worth reconsidering these identifications. In fact, it is not mentioned by this name before the fourteenth century.

⁴¹ About the question in a broader context see Oszkár Paulinyi, "A sóregále kialakulása Magyarországon" [The emergence of the droit de régale on the salt in Hungary], *Századok* 58 (1924): 627-647.

of the charter after 1234) his son and successor, King Béla IV withdrew the concessions shortly after his accession to the throne, although he continued to support the monasteries from the salt incomes.⁴²

We also learned that the measure units were the same in this period as in the late Middle Ages, but the denominations were different. This changed probably because of the opening of the Someş/Szamos route in the late thirteenth, early fourteenth century. From this time on, there was no reason to differentiate between *sal terrestris* and *sal aquaticus* as two different freight routes.

After all, the whole process is part of the formation of the salt regale which – similarly to other regions of Europe – probably appeared in the twelfth century, and went through a considerable transformation before it gained its late medieval form. In this development the church played a significant role in building up and running the younger river route for about a century.

⁴² Without enumerating these charters let us refer to his donation for the Cistercian Abbey of Pétervárad – founded by him – according to which the Abbey was paid the value of 50000 pieces of salt in Szeged. The infirming of the earlier privileges is reflected also in the series of false charters produced by the Cistercian Abbey of Borsmonostor.

Type of Amount			
Name	Type of		
i (dilite	institution	in the charter	in zuan
Bakonybél	Abbey (B)	3 boats/4x	2000
Bakonybél	Abbey (B)	30 marks	
Borsmonostor	Abbey (C)	200 zuan	200
Buda (Óbuda)	Collegial	tyminii salium	*2000
Dömös	Collegial	24000 in 2 boats/6x	2000
Heiligenkreuz	Abbey (C)	3000 zuan	3000
Nyitra	Bishop	3 boats/3x	1500
Pilis	Abbey (C)	100 marks	
Pannonhalma	Abbey (B)	3 boats/2x	1000
Szentgotthárd	Abbey (C)	20000 sales magni in curru	5000
Szigetmonostor	Abbey (B)	60 marks	
Tihany	Abbey (B)	1000 zuan	1000
Zagreb	Chapter	50 marks	
Sum			16700

Table 1. Salt donations of churches before 1233.

*The quantity received in 1233.

Table 2. Salt donations of churches in the 1233 Bereg charter.

Name	Type of institution	Amount in zuan
Arad	Collegial	500
Bács	Chapter	10000
Bizere	Abbey (B)	4000
Bulcs	Abbey (B)	5000
Csanád Bishop	Bishop	5000
Egres	Abbey (C)	7500
Eperjes	Abbey (B)	3000
Ercsi	Abbey (C)	1000
Esztergom Archbishop	Bishop	2000
Gyelid	Collegial?	500
Gyulafehérvár	Bishop	2000
Hodosmonostor	Abbey (B)	1000
Izsó	Abbey (B)	1000
Kalocsa Archbishop	Bishop	10000
Kenéz	Abbey (B)	2000
Kerc	Abbey (C)	1000
Knights Hospitaller	Knights	10000
Óbuda ⁴³	Collegial	2000
Pilis	Abbey (C)	2000
Pornó	Abbey (C)	1000
Rohonca	Abbey (B)	4000

⁴³ The Collegial received a donation of salt already before 1204 from King Emeric. The evidence for this is the charter of King Andrew II (see above) which does not tell the exact quantity, but speaks only about *tyminios salium*. The original charter probably contained a donation similar to those of Dömös or of Szentgotthárd in which the quantity was given in *sales navales* and in *sales curruales*, respectively. The 2000 zuan given in 1233 correspond with 24000 *sales navales*.

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Székesfehérvár	Collegial	2000
Szekszárd	Abbey (B)	1000
Szentgotthárd	Abbey (C)	2500
Szer	Abbey (B)	1000
Szőreg	Abbey (B)	1000
Titel	Collegial	3000
Várad	Bishop	2000
Zirc	Abbey (C)	2000
Sum		89000

Table 3: Total amounts per types of institutions in 1233 Bereg treaty.

Туре	Zuan	%	Mark	%
Benedictines	23000	25.8	220.8	25.0
Cistercians	17000	19.1	169.2	19.1
Knights	10000	11.2	120.0	13.6
Hospitaller				
Bishops	31000	34.8	297.6	33.6
Collegials	8000	9.0	77.0	8.7
Sum	89000		884.6	

Table 4. Total amounts per types of institutions (with institutions not mentioned by name in the Bereg charter).

Туре	Zuan	%
Benedictines	27900	25.6
Cistercians	28200	25.8
Knights Hospitaller	10000	9.2
Bishops	32500	29.8
Collegials	10500	9.6
Sum	109100	

Table 5. False and interpolated charters.

Year	Institution	Falsification date	Transcription
1015†	Pécsvárad	13 th century	*1158; *1228; 1274; 1323;
			1379; 1399; 1403
1086*	Bakonybél	13 th century	
1137†	Pannonhalma	around 1228	1262; 1351; 1382; 1383;
			14 th -century register
1224†	Borsmonostor	mid-13 th century	
1230†	Borsmonostor	mid-13 th century	1291; 1317; 1327
1233†	Borsmonostor	mid-13 th century	
1230-1235†	Borsmonostor	mid-13 th century	1469
1236†	Borsmonostor	mid-13 th century	

Church and salt. Monasteries and salt in the medieval Kingdom of Hungary

APPENDIX

Detail of the oath of Bereg 1233, 20th August, in the Bereg Forest Esztergom érs. vil. lt. Lad. V nn. 2 & 3, (MOL DF 248771). Edition: CD Fejér III/2, 320–323

Item volumus et concedimus, quod ecclesie libere portent sales suos ad ecclesias ipsas, et ibi sub sigillo salinariorum, et prelati illius eccleie, in qua sales deponuntur, qui pro tempore fuerint, deponantur, depositique serventur usque ad octavas S. Stephani Regis (27^{h} August), et tunc ab illo die usque ad nativitatem B. V. Marie (8^{th} September) solvatur eis argentum pro salibus, quos tunc ecclesie habuerint penes se, secundum estimationem inferius adnotatam. Et si in illo tempore ipsi salinarii ipsos sales non emerent, et ecclesiis argentum, secundum dictam aestimationem, non solverent; ex tunc omni tempore sales illos in proprium usum ecclesiae percipientes, vendant iuxta sue arbitrium voluntatis, et omne lucrum, quod deberemus nos, vel alius rex, qui pro tempore fuerit, vel ipsi salinarii, inde percipere, totaliter cedat in usus ecclesiarum. Nec a salinariis ipsis, vel nobis, vel aliis personis, aliquatenus molestentur, quin possint, quidquid placet eis, facere semper de salibus, ex quo in dicto termino non fuerit eis pecunia persoluta. Item dicimus de secundo termino, ut a festo S. Nicolai (6^{th} December) usque ad festum Beati Thome Apostoli (21^{th} December) pro salibus, quos apud se habebunt ecclesie sub sigillo salinariorum, solvatur eis argentum secundum aestimationem adnotatam. Quod si factum non fuerit, idem fiat, quod in casu superiore de salibus dictum est.

Argentum vero, quod praedictis ecclesiis persolvetur, erit in bonis Frisaticis, vel in argento, cuius decima pars comburetur. Precia vero salium sunt haec:

quod pro quolibet timino salium aquaticorum, persoluentur ecclesiis octo marce, excepta domo hospitalis Hierosolymitani, et ecclesiis Colocensi, et Bachiensi, quibus pro quolibet tymino dabimus decem marcas, si dictae ecclesie Colocensis et Baachiensis debeant deferre sales suos in Zegedyn, vel ultra, alioquin octo marcas habebunt. Pro maioribus vero salibus aquaticis, debemus abbacie de Egrus XXVI marcas pro quolibet timino, et ecclesie Orodiensi XXV similiter pro quolibet timino. Pro salibus vero terrestribus dabimus unam marcam pro centum zuanis,⁴⁴ si sales suos debeant habere in confiniis, excepto monasterio S. Gothardi, cui pro octoginta zuanis dabimus unam marcam. Nos vero, et quicunque fuerit rex pro tempore, debemus mittere sales ad confinia, secundum tenorem privilegiorum ecclesiarum, et deponi debent in domibus privilegiatorum, ubi stabunt sub sigillis salinariorum usque ad predictos terminos. Et eodem modo omnia serventur a nobis et ab ipsis, sicut dictum est in terminis supra dictis.

Ecclesiae vero retinebunt de salibus suis ad usus suos hoc modo:

abbacia de Egrus tres timinos;

praepositus Orodiensis cum capitulo suo duo millia lapidum;

Hospitale Hierosolymitanum cum omnibus domibus suis de Hungaria IV timinos de talibus salibus, quales habet monasterium de Egrus:

monasterium S. Gotthardi duo millia et 500 zuanos;

ecclesia Varadiensis 2000;

ecclesia de Pernoch 1000 zuanos;

ecclesia de Zeer 1000 zuanos;

ecclesia Colocensis unum timinum;

ecclesia Bachiensis unum timinum;

ecclesia Albensis Transiluana 2000 zuanorum;

ecclesia de Bulch 5000;

ecclesia de Epuryes 3000;

⁴⁴ There will be a long-lasting tradition giving the price of the salt for 100 pieces. In 1397 King Sigismund issued his regulation on the prices of the salt (MNL OL DL 8861) according to which 100 pieces had to be sold for 3 florins in Buda. Cf. Gusztáv Wenzel, Magyarország bányászatának története [History of mining in Hungary], (Budapest: MTA Könyvkiadó Hivatala, 1880), 438. In 1511, in a contract between the exchequer Gabriel Perényi and Ambrosius Sárkány de Ákosháza we learn the actual value of the sal currualis. 4 florins for 100 pieces which is higher than the price of the salt fixed by King Sigismund in the early fifteenth century. The amount given by the exchequer is considerable: 25000 pieces of salt weighing altogether 236250 kilograms (more than 110 loads). Cf. István Tringli, ed., A Perényi család levéltára 1222-1526 [Archives of the Perényi family 1222-1526] (Budapest: MTA Történettudományi Intézet), 2008, n. 761 (11.09.1511).

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ecclesia de Bistria 4000; ecclesia de Zadust 1000; ecclesia de Ysou 1000; ecclesia de Roncha 4000; ecclesia de Kenaz 2000; ecclesia S. Philippi 1000; ecclesia de Geleth 500: ecclesia de Saxsvar 1000; ecclesia Cenadiensis 5000: ecclesia Titulensis 3000; ecclesia de Chod 1000 zuanos; ecclesia Strigoniensis 2000 zuanorum; ecclesia Albensis totidem: ecclesia Budensis 2000; ecclesia de Bokan 2000 zuanorum; ecclesia de Pelis totidem;

ecclesia de Kercz 1000 zuanos.

Aliae vero ecclesiae, quarum nomina non exprimuntur, recipient ad usum suum, secundum quod praelati earum in animas suas dixerint.

Item volumus et consentimus, quod sales in salisfodinis non vendantur carius, quam antiquitus vendi consueverint ecclesiis, quae consueverunt emere sales. Pro reditibus vero ecclesiarum, qui hactenus subtracti sunt in salibus, exceptis decimis, persolvemus 10000 marcarum per quinque annos continuos; qui anni incipiunt computari a proximo Pascha resurrectionis Dominicae; et solutionem faciemus hoc modo:

in primo anno in nativitate B. Virginis solvemus 1000 marcas; in festivitate S. Thome Apostoli 1000 marcas alias; et sic postea quolibet anno continue faciemus, quousque dictam pecuniam decem millia marcarum persolvamus, et totam istam pecuniam persolvemus in dictis terminis; episcopo Cenadiensi, abbati S.Martini de Pannonia, abbati Egriensi (*recte* Egrusiensi), vel eorum procuratoribus, habentibus a dominis suis procuratorias super hoc litteras speciales; vel duobus ex praedictis, vel procuratoribus eorum. Et solvemus eam in domo Fratrum Predicatorum de Pest in presentia Capituli, vel maioris partis, distribuendam et ordinandam secundum voluntatem dicti legati de consilio Strigoniensis, et Colocensis Archiepiscoporum. Et nihilo minus, si praedictam pecuniam decem millia marcarum non solverimus, in singulis terminis, sicut superius est expressum, volumus et consentimus, quod ecclesie, quibus sales sunt subtracti, non obstante ista compositione, libere et integre sint in eodem statu et iure, in quo erant ante compositionem istam.

MONASTERIES UNDER PRIVATE PATRONAGE WITHIN THE SOCIAL AND ECONOMIC TOPOGRAPHY: CENTERS, RESIDENCES, AND ESTATES. SEVERAL CASE STUDIES OF MEDIEVAL HUNGARY^{*}

PÉTER LEVENTE SZŐCS**

While monasteries were eminently institutions of faith, they also had economic functions and through their artistic-architectural design they contributed directly to the social display of the patron kindreds. The set of economic and social relations between patrons and their monasteries can be examined through several methods; among them the topographical analysis seems to add an important contribution. For several regions of the medieval Kingdom of Hungary the starting point is offered by the historical geographies written by György Györffy¹ on the Árpádian era, and by Dezső Csánki covering the rule of the Hunyadis during the fifteenth century.² Furthermore, for certain geographical regions a number of topographical studies on ecclesiastical institutions are available.3 These topographical studies are partly based on general historical geographies,

using predominantly written sources, and they combine these results with archaeological data as well.

historical-geographical In contexts. ecclesiastical institutions _ churches and monasteries alike - were always considered as integral parts of the settlement network, and as such, the subject of topographical reconstructions. More recent archaeological field surveys have brought in completely new datasets, partly relying on a more extensive survey of different types of archival sources, and contributed effectively to a better understanding of the chronological development and the spatial structure and hierarchy of the historic settlement network.⁴

The most important result of these works was a more accurate localization and identification of medieval settlements and monastic sites. While the topographic maps published by Györffy can be seen as the first attempt to reconstruct the spatial relations of monasteries to settlements, roads, and major geographical features, the site maps created by archaeological topographical surveys have highlighted many more details on these relations (e.g., the topographical position of monasteries within the settlement boundaries or traces of settlements in their vicinity).⁵ Results obtained

^{*} This paper is part of my PhD thesis: *Private monasteries of medieval Hungary (eleventh to fourteenth centuries): A case study of the Akos kindred and its monasteries*, defended at Central European University, Budapest, in 2014.

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¹ György Györffy, Az Árpád-kori Magyarország történeti földrajza [Historical geography of Hungary in the Árpádian Age], I³-IV (Budapest: Akadémiai Kiadó, 1987-1998); see also volumes on counties Szabolcs and Szatmár compiled by Péter Németh, A középkori Szabolcs megye települései [Settlements of medieval Szabolcs county] (Nyíregyháza: Ethnica, 1997); and Németh, A középkori Szatmár megye települései a XV. század elejéig [Settlements of medieval Szatmár county until the middle of the fifteenth century] (Nyíregyháza: Jósa András Múzeum, 2008). Furthermore, information on the early evolution of topography and settlements in historical Torna county can be added to these works: Sebestyén Sárközy, A történeti Torna megye településtopográfiája a kezdetektől a 18. század elejéig [The topography of settlements in historical Torna county, from the beginning until the eighteenth century] (Perkupa: Galyasági település szövetség, 2006).

² Dezső Csánki, *Magyarország történelmi földrajza a Hunyadiak korában* [Historical geography of Hungary in the Hunyadis' Age], I-V (Budapest: Magyar Tudományos Akadémia, 1890-1913).

³ For the southern part of the Great Plain see László Koszta, "Dél-Magyarország egyház topográfiája a középkorban" Ecclesiastical topography of Southern Hungary during the Middle Ages], in A középkori Dél-Alföld és Szer, eds. Tibor Kollár et al. (Szeged-Budapest: Open Art, 2000), 41-80. Studies on ecclesiastical topography of several counties: Edit Tari, Pest megye középkori templomai [Medieval churches of Pest county] (Szentendre: Pest Megyei Múzeumok Igazgatósága, 2000); Imre Szatmári, Békés megye középkori templomai [Medieval churches of Békés county] (Békéscsaba: Békés MMI, 2005); András K. Németh, *Tolna megye* középkori templomai [Medieval churches of Tolna county] (Pécs: Publikon, 2011); Csilla Aradi, "Somogy megye Árpádkori, és középkori egyházszervezetének létrejötte és megszilárdulása" [Formation and consolidation of the medieval ecclesiastic organization of Somogy county], (PhD diss., ELTE-BTK Budapest, 2007).

⁴ *MRT*, I-XI (Budapest: Akadémiai Kiadó, 1966-2012): four districts of Veszprém county, one of Komárom, three of Békés, and three of Pest.

⁵ Apart from the county maps accompanying the work of Györffy (*Az Árpád-kori*, I-IV) there are several maps on medieval historical-geography of bigger areas than a whole county. They are useful tools for a more detailed topographic analysis: map of roads and central places (András Kubinyi, *Városfejlődés és vásárhálózat a középkori Alföldön és az Alföld szélén* [Urban development and market network in the

through field surveys, thus, opened up new ways of interpreting the selection pattern of particular settlement sites different bv monastic communities as seen against different factors such as the natural, environmental conditions and their changes (access to and management of water and woodland resources),6 and the problem of settlement development (the dynamic changes of historic settlement pattern through migration, concentration of population, desertion of settlements, changing road networks, the historic land-use pattern, and the administrative organization of secular and ecclesiastical estates).

Although environmental conditions are definitely important for the establishment and development of monasteries, in the perspective of monastic patronage, it seems more instructive to discuss the position of monasteries not merely through a spatial distribution but within the context of social, economic, and ecclesiastic topography. Within the ecclesiastical topography the relation of monasteries with parishes, deaneries, and their integration into the hierarchical network of the diocese might reveal their liturgical and pastoral functions. As it was mentioned, the analysis of social and economic topography contributes to the assessment of the secular role of monasteries. In this sense, the topographical survey of domains/estates and residences might be the most significant. Due to the number and quality of sources it seems plausible to narrow the spatial framework of the analysis, down to the micro-regional level and case studies, in order to get relevant results.

The selection of the studied region was made considering the most relevant source on the early ecclesiastic topography: the papal tithe registers dating from between 1332 and 1337.7 In this sense, three neighboring counties, all situated in the northeastern part of the Great Hungarian Plain – Szabolcs, Szatmár, and Bihar – have been selected. It is important to note that – with regard to the size of the three selected counties and general character of the landscape here – the data will be more representative of what can be also observed in the central part of the kingdom than in marginal, mountainous, and heavily forested regions close to the borders. The three counties represent three different bishoprics (Szabolcs Co. belonged to the Diocese of Eger, Bihar Co. to the

ecclesiastica Hungariae ineunte saeculo XIV. etabulis rationes collectorum pontificorum a. 1281-1375 referentibus eruta, digesta, illustrata. Magyarország egyházi földleírása a XIV. század elején a pápai tizedjegyzékek alapján feltüntetve, I-II (Budapest, 1891-1892). The issues of source criticism and problems in the use of the registers as a topographical source were discussed again by György Györffy in his Årpádian Age historical geography (Györffy, Az Árpád-kori, I-IV) and in his special study of the problem: György Györffy, "A pápai tized lajstromok demográfiai értékelésének kérdéséhez" [Problems of the demographic interpretation of the papal tithe registers], -Társadalom Mályusz Elemér emlékkönyv. in és művelődéstörténeti tanulmányok [Elemér Mályusz memorial volume. Social and cultural history studies], eds. Éva H. Balázs, Erik Fügedi, and Ferenc Maksay (Budapest: Akadémiai Kiadó, 1984): 141-157. More recently, studies focusing on the diocese of Transylvania have been published: Géza Hegyi, "Egyházigazgatási határok a középkori Erdélyben (I. közlemény)" [Ecclesiastical administration in medieval Transylvania. 1st part], *EM* 72 (2010): 1-32; Géza Hegyi, "A pápai tizedjegyzék tévesen azonosított székelyföldi helynevei" [Erroneous identification of the toponyms of Szekler-land mentioned in the papal tithe list], in Tanulmányok a székelység középkori és fejedelemségkori történelméből, eds. András Sófalvi and Zsolt Visy (Énlaka – Székelyudvarhely: Pro Énlaka Alapítvány – Haáz Rezső Múzeum, 2012), 97-113.

Great-Plain and its margins during the Middle Ages], Dél-Alföldi évszázadok 14 (Szeged: Csongrád Megyei Levéltár 14, 2000), a map of the region between the Körös-Tisza-Maros Rivers (László Blazovich, *Városok az Alföldön a 14-16. században* [Towns in the Hungarian Great Plain from the fourteenth to the sixteenth century], Dél-Alföldi évszázadok 17 (Szeged: Csongrád Megyei Levéltár, 1996), the map of the medieval Archdiocese of Kalocsa and Bács by Gábor Thoroczkay, and the maps of Transylvania accompanying the publication of charter excerpts: *CDTrans*, 1-3 (Budapest: MOL, 1997-2008).

⁶ For a case study on the region enclosed by the Maros, Körös, and Tisza Rivers in the Hungarian Great Plain see: Gábor Csüllög, "11-14. századi monostorhelyek a Körös-Maros vidéken és a Közép-Tisza mentén" [Monastic sites in the region of Körös-Maros and along the Middle Tisza, from the eleventh to the fourteenth century], in *Az Alföld történeti földrajza*, ed. Sándor Frisnyák (Nyíregyháza: MTA Szabolcs-Szatmár-Bereg Megyei Tudományos Testület –Nyíregyházi Főiskola Földrajz Tanszéke, 2000), 397-406.

⁷ The earliest critical publication: *MonVatHung*, series I, tom. 1, ed. Vilmos Fraknói (Budapest: MTA, METEM, 1887, 2000). For the historical context see the introduction by László Fejérpataky. The extensive data of the tithe registers were used in almost all compilations of local history and the topographical or historical-geographical studies. The earliest systematic adaptation of the papal tithe lists for historical geography was made by Tivadar Ortvay, *Geographia*

Diocese of Várad, and Szatmár Co. to Transylvania), therefore, the quality and the quantity of data are slightly different from county to county: the data presented by the papal tithe register seems to be the most complete in case of Bihar Co. (Dioecese of Várad), while it is somewhat less representative for the other two counties. For the county of Bihar, though, there is an earlier set of written sources on ecclesiastical topography, the list of tithes paid to the Bishop of Várad, recorded between 1291 and 1294.⁸

The map of the medieval kingdom of Hungary prepared by Pál Engel was used as a reference to identify the settlements mentioned in the papal tithe registers (and also for Bihar settlements mentioned in the bishops' tithe register: fig. 1).⁹ Attached to the map Engel created a complex electronic database, on the basis of which it was possible to reconstruct estate boundaries, i.e., to identify basic territorial units of economic and jurisdictional administration, and their owners.

According to this set of sources, 29 monasteries were founded in Bihar. Apart from the collegiate chapters and monasteries founded in connection with the see of the bishopric of Várad (altogether seven), there were two important royal foundations: the Premonstratensian provostry of Váradelőhegy (the promontory of Várad dedicated to St. Stephen, the Protomartyr), and the Abbey of Szent Jobb (Sâniob). These two were prestigious, as Váradelőhegy was the head of the Premonstratensian houses in Hungary, while the Abbey of Szent Jobb was home to a relic of King St. Steven (his right hand), and beside Várad it also became a center for the cult of the holy kings. Apart from two sites with unknown patron, the remaining 19 monasteries were founded and patronized by noble kindreds, all of which were smaller establishments.¹⁰ Five private monasteries are known in Szatmár County - apart from the Franciscan and Dominican friaries in the privileged royal towns of Szatmár and Németi (fig 3).¹¹ In Szabolcs county there are ten identified monastic sites altogether that were all private foundations. Some of the monasteries in these three counties are known only from the archeological-architectural record (Herpály), while others only from toponyms or a few written sources, which were not relevant even for their locations (i.e., the cases of Andosmonostora, Nánásmonostora, and Szalócmonostor). Historical evidence is more abundant for the remaining ones, so their historical evolution and social-economical context can be reconstructed in greater detail. Altogether the number of private monasteries founded in the three selected counties represents roughly 14 to 15% of the total number of private monasteries of Hungary, in this sense, the observations formulated here might also be representative for other areas.

Analyzing the topographic relation of the private monasteries (founded before 1300 in the study area) with the estates of patrons, it became clear at the first sight that they were in almost every case surrounded by the estates of the patrons' kindreds.¹² In the area surrounding the provostry of Pályi (see fig. 2), there was a rather large estate owned by the Ákos kindred, the founders and patrons of the monastery, comprising 13 settlements stretching along the Berettyó River.¹³ In the course of the fourteenth

⁸ Published by Emil Jakubovich, "A váradi püspökség XIII. századi tizedjegyzéke" [The tithe register of the Diocese of Várad dating from the thirteenth century], *Magyar Nyelv* 22 no. 5-6 (1926): 220-223; 22, no. 7-8 (1926): 298-302; 22, no. 9-10 (1926): 357-362. The source was used by Györffy, *Az Árpád-kori*, I, 583-589, and referred to in Györffy, "A pápai tized."

⁹ Pál Engel, *Magyarország középkor végén. Digitális térkép és adatbázis a középkori Magyar Királyság településeiről. Hungary in the Late Middle Ages. Digital vector map and attaching database about the settlements and landowners of medieval Hungary*, PC CD-ROM (Budapest: MTA Történettudományi Intézet, 2001). Although the map provides information on the late medieval situation, it is

useful for the earlier stages, too, with the adaptation of the changes that occurred.

¹⁰ Györffy, Az Árpád-kori, I: "Bihar megye," passim.

¹¹ Kaplony, Sárvár, Csaholy, Cégény cf. Németh, *A középkori Szatmár megye*.

¹² Data provided by the map of Pál Engel (*Magyarország középkor végén*) was completed with sources on proprietorship and other relevant data provided by the relevant county topographies (Györffy, *Az Árpád-kori*, I: "Biharmegye"; for Szabolcs: Németh, *A középkori Szabolcs megye*; and for Szatmár: Németh, *A középkori Szatmár megye*).

¹³ Zsigmond Jakó, *Bihar megye a török pusztítás előtt* [Bihar county before the Ottoman destructions], Település és

century further settlements were established and the domain was divided among three families descended from the kindred. The site of the monastery was located near Nyírpályi (later Monostorospályi), which was one of the earliest settlements of the domain.14 The abbey of Gáborján was founded by the Gyovad kindred, who owned a small estate comprising three settlements around the monastery.¹⁵ The abbey of Egyed (Egyedmonostor) situated around Diószeg and Székelyhíd and comprising around a dozen settlements, was part of the huge domain of the patron kindred, the Gutkeleds.¹⁶ The westernmost example is the case of Herpály. There is no written evidence on this monastery, only the church ruin found within the confines of the medieval settlement. Its ground plan-arrangement suggests the existence of a monastery here.¹⁷ The monastery was located in the valley of the Berettyó River and was part of a domain comprising five settlements (fig. 2).¹⁸

In Szatmár county, the abbey of Kaplony was surrounded by the extensive domain of the Kaplony kindred; the abbey of Csaholy was part of the domain of the Káta kindred, and the monastery of Sárvár was part of the domain of Ecsed, owned by the Gutkeled kindred (fig. 3).¹⁹ In Szabolcs Co., the case of Adonymonostor should be mentioned; it was surrounded by estates owned by families who were descendants of the patron kindred, the Gutkeleds (fig. 4).²⁰

Although the topographical structure of land ownership often remains unclear due to lack of data, these examples suggest that monastic sites usually had a prominent topographic position on the patrons' estates. The sizes of the estates of kindreds or families are important because they might also indicate the status of the particular monastic site. It was often the case that abbeys were situated at the center of lands inherited by families descended from the patron kindred, which shows that monasteries were more likely to be situated in those parts of the estates that were in the context of the Hungarian system of inheritance - regarded as more ancient, perhaps among the earliest acquisitions of a family. This can be demonstrated clearly in the case of Pályi, where the Ákos kindred originally owned a large domain along the valley of the Berettyó River, which was later divided through inheritance among the branches of the Bebek, Ernye, and Pocsaji families (all of them descendant the Ákos kindred) (fig. 2).²¹ The monastery of Adony was surrounded by estates owned by the descendants of the Gutkeled kindred (fig. 4), i.e., the settlement of Szakoly was owned by the Szakolyi family, the villages of Aba, Kis-, and Nagygút were owned by the Gúti family, and Encsencs and Lugos were owned by the Báthori family.²² It is in this context that the names of these monasteries sometimes deliberately evoke the link with the founding kindred. The abbey of Kaplony is a similar illustrative example situated within the study area, but there are dozens with this name pattern around the kingdom. Among them, the case of Ákosmonostor is also worth mentioning; there were two monasteries with the same name - one in Pest county and the other in Közép-Szolnok county – and both were associated with the Ákos kindred. In conclusion, the evidence surveyed thus far suggests that monastic sites were typically located at the heart of a kindred's domain, near the residences of the founders. Unfortunately, there are few documentary sources, and none of them from the studied area.

²² Engel, Magyarország középkor végén.

népiségtörténeti értekezések 52 (Budapest: Sylvester nyomda, 1940), 317-318; Györffy, *Az Árpád-kori*, I, 650-651.

¹⁴ See the map provided by Györffy, *Az Árpád-kori*, I, 581.
¹⁵ Szentpéterszeg, Keresztszeg / Keresztúr, and Gáborján:

Györffy, *Az Árpád-kori*, I, 618-619, 581 (map).

¹⁶ Györffy, *Az Árpád-kori*, I, 614-615, 581 (map).

¹⁷ György Módy and Károly Kozák, "A herpályi templomromnál végzett régészeti kutatás és helyreállítás (1972-1975)" [The archaeological research and rehabilitation of the church ruin of Herpály], *Bihari Múzeum Évkönyve* 1

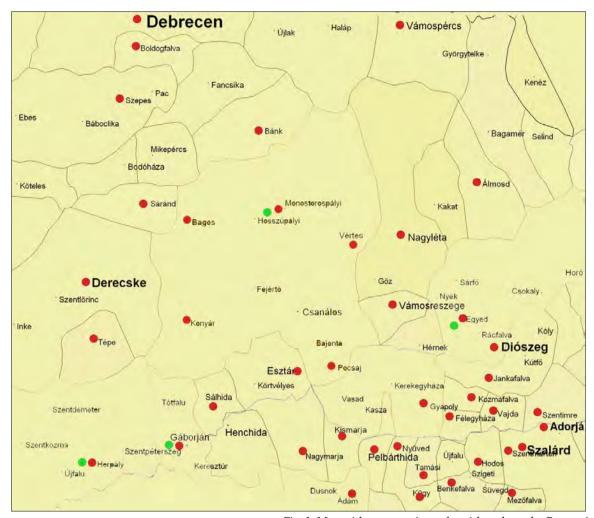
^{(1976): 49-103;} Károly Kozák, "A herpályi apátsági templomrom építéstörténete" [The architectural history of the abbey church of Herpály], in *Berettyóújfalu története*, ed. György Varga (Berettyóújfalu, 1981), 121-139.

¹⁸ Györffy, *Az Árpád-kori*, I, 625, 581 (map).

¹⁹ Németh, A középkori Szatmár megye, passim.

²⁰ Németh, A középkori Szabolcs megye, 18-19.

²¹ Györffy, *Az Árpád-kori*, I, passim and Jakó, *Bihar megye*, passim.



Monasteries under private patronage within the social and economic topography

Erik Fügedi mentions the examples of the Benedictine Abbey of Szerencs and the Cistercian Abbey of Ábrahám.²³ In the case of Szerencs, there was a conflict between two branches (the Izsépi and Monoki families) of the patron's kin (the Bogát-Radvány family) over the property rights of the monastery. Fortunately, the details of the long lawsuit have come down to us and all the earlier charters documenting subsequent stages of the conflict were recorded in the final decision of the palatine's court in 1400.²⁴

The conflict began in 1380 when members of the Monoki family did not acknowledge the patronage rights of the other branch, denying even the bonds of kinship. The oldest document the parties were able to present concerning their rights of patronage dated back to 1252.

²³ Erik Fügedi, "Sepelierunt corpus eius in proprio monasterio: A nemzetségi monostor" [Sepelierunt corpus eius in proprio monasterio: The kindred monasteries], Századok 125, no. 3 (1991): 33-66, 48-49.

²⁴ Fügedi ("Sepelierunt corpus eius," 48, note 101, and 49, note 102) cites the charter containing the final verdict issued 21 February, 1400 (MNL OL DL 376), published in regesta in Zsigmond-kori oklevéltár [Cartulary of King Sigismund's

Fig. 1. Map with monasteries and parishes along the Berettyó River, Bihar county. Source: Engel, *Magyarország középkor végén* (red dots: parishes mentioned in the papal tithe-list; green dots: monasteries).

Age], II, eds. Elemér Mályusz et al. (Budapest: Akadémiai Kiadó, 1951), 98. The other original copy of the verdict is at DL 71908, while a copy made in 1710 is at DL 107345. Moreover, several acts were transcribed by the judge-royal at an intermediate stage of the lawsuit, in 1387: DL 71896. These four documents, in slightly different variants, keep the integral text or the abstract of 17 charters issued between 1252 and 1400.

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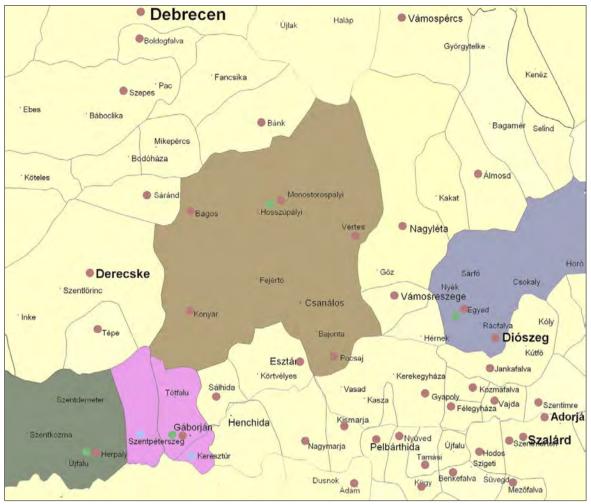
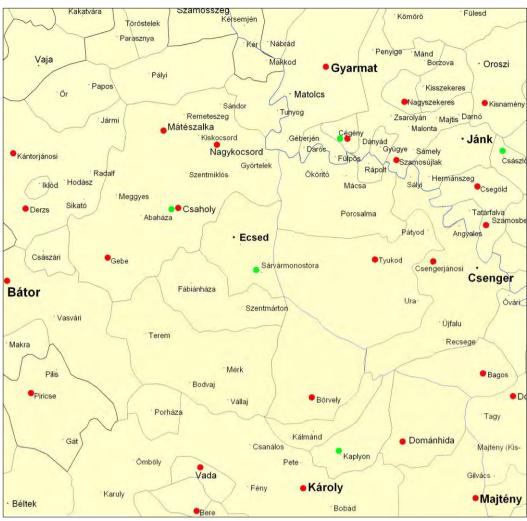


Fig. 2. Map with estates of the kindreds along the Berettyó River, Bihar county. Source: Engel, *Magyarország középkor végén* (red dots: parishes mentioned in the papal tithe-list; green dots: monasteries).

Such documents - apart from recording disputes - illustrate that patrons were directly involved in the administration of monastic estates and that they were able to use the economic resources of the monasteries for their own benefit and purposes - sometimes they could even expropriate their lands. Patrons were also in a position to appoint or dismiss the abbots whenever they thought it appropriate to do so. It is worth noting that parties did not question or contest the correctness of the jurisdictional statuses of their opponents, but merely claimed that there should be a clear division of such rights. In the aforementioned case, the abbot himself and the community monastic were not involved personally or collectively in the lawsuit.

The supreme court of the palatine, however, influenced by the diocesan bishop, pointed out the abusive nature of such practices, and ordered that the rights of the monastic community should be observed. A decision was made to divide the rights of patronage between the two branches according to the proportion of 1/3 to 2/3, while the palatine also emphasized the principle to avoid potential abuses in the future. Also, the properties of the monastery should not be alienated, should be preserved for the use of the abbey only, and should be administered by the abbot without any patron interfering. The rights of the patrons should be limited to honorary functions acknowledged by the church – the most important one was the right to be buried within the monastic enclosure.

Fig. 3. Map with the monasteries and parishes in Bihar county. Source: Engel, *Magyarország középkor végén* (red dots: parishes mentioned in the papal tithe-list; green dots: monasteries).



Monasteries under private patronage within the social and economic topography

It was explicitly forbidden to seize any part of the income of the monastic estate or to reside in the monastery. All in all, the patrons of Szerencs were not deprived of their rights due to their abusive practices in the past, which might imply that these were possibly not considered grave. In fact, other examples (e.g., that of Ják or Zselicszentjakab) suggest that such disputes between patrons and monastic communities over jurisdictional issues were fairly common, as patrons often tried to administer monastic estates themselves, used their incomes for themselves, or partially or totally expropriated monastic possessions for themselves.²⁵

The above-mentioned case of Ábrahámmonostor (near Dombóvár, Tolna county), illustrates that patrons could also – probably quite often – reside at monastic sites. Ábrahám was one of the few private Cistercian monasteries. Ábrahám was founded in 1263 by Moys, master of the queen's treasury, and his brother, Alexander.²⁶

²⁵ Elemer Mályusz, *Egyházi társadalom a középkori Magyarországon* [Ecclesiastical society in medieval Hungary] (Budapest: Akadémiai Kiadó, 1971), passim.

²⁶ On the foundation: Az Árpád-házi királyok okleveleinek kritikai jegyzéke [Critical list of the Árpádian Kings' Charters], I-II, ed. Imre Szentpéter (Budapest: Magyar Tudományos Akadémia), 1923-1987, no. 1357; on the career of Moys, see Attila Zsoldos, Magyarország világi archontológiája. 1000-1301 [Secular archontology of Hungary: from

¹⁰⁰⁰ to 1301] (Budapest: História – MTA TTI 2011), 338, note 612. The founder made additional endowments to the monastery, *Az Árpád-kori nádorok és helyetteseik okleveleinek kritikai jegyzéke. Regesta palatinorum et vices gerentium tempore regum stirpis Arpadianae criticodiplomatica* [Critical register of the Charters of the Árpád Era palatines and their deputies], MOL Kiadványai II. Forráskiadványok 51, ed. Tibor Szőcs (Budapest: MOL, 2012), no. 161. See also Levente F. Hervay, *Repertorium historicum*

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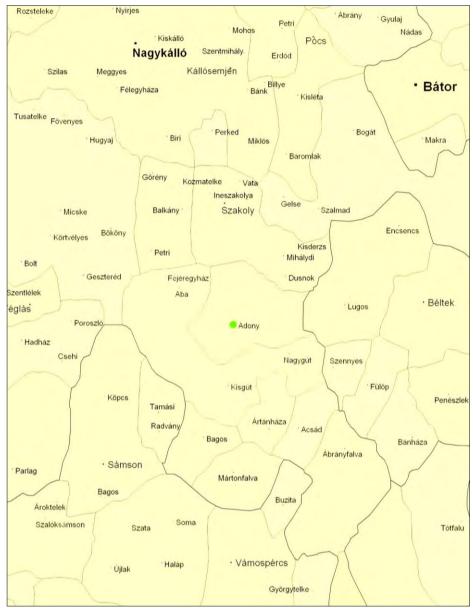


Fig. 4. Map with the monastery of (Nyír-)Adony, and the surrounding estates in Szabolcs county. Source: Engel, Magyarország középkor végén.

A century later, the patronage right was held by the members of the Dárói (or Daróczi) and Majos families.²⁷ In 1343, one of the patrons, Nicholas, son of Stephan of the Dárói family, decided to have

The topographic connection between ²⁸ Fügedi, "Sepelierunt corpus eius," 49, note 103. ²⁹ Cited by Németh, A középkori Szatmár megye, 44-45: DL 76766; published in Codex diplomaticus domus senioris comitum Zichy de Zich et Vasonkeö. A zichi és vásonkeői gróf Zichy-család idősb ágának okmánytára, I-II, eds. Imre

nobles of Tolna county, asking whether anyone would oppose it. The act of declaration and the absence of opposition were put down in a charter by the palatine, who was also present at the meeting. A representative of the other patron family, Michael, son of Majos, was also present, and allegedly had no objection. A similar case was recorded in the case of Császló, which shows that such residential practices were rather usual. The patrons of Császló - members of the Surányi family of the Káta kindred - were summoned to court at their monastery in 1345.29 According to customary law, parties should be summoned to court at their residential sites, so it seems probable

his residence built near the

monastery ("circa dictum

monasterium descendere

et curiam, domos et alia

announced his intention at

the congregation of the

construere-

he

so

edificia

niterentur"),28

that several members of the Surányi family had their residences in Császló near the monastery.

monasteries and residences of patrons is also evidenced for the Árpádian Age in a number of earthwork fortification sites. Some of them were mentioned in the secondary literature as "small

Ordinis Cisterciensis in Hungaria (Rome: Editio Cisterciensis, 1984), 47-52.

²⁷ Hervay, Repertorium; Középkori magyar genealógia [Medieval Hungarian genealogy], Electronic database released on CD: Magyar középkori adattár [Medieval Hungarian database], ed. Pál Engel (Budapest: Arcanum, 2001, s. v. Majos rokonsága, 1st table.

Nagy et al. (Pest: Magyar Történelmi Társulat, 1872), II, 150.

castles" ("kisvár" in Hungarian), several of them appear to have been residences of noble kindreds.³⁰ Péter Németh pointed out that several monasteries in Szabolcs and Szatmár counties were associated with such fortified sites. This is the case with the Abbey of Beszterec, which was built on the highest part of an earlier earthwork castle that had been abandoned shortly before the monastery was built.³¹ At Sárvár (Szatmár Co.), the abbev was built next to the earthwork castle on an island in marshland of Ecsed.³² the Similarly, Adonymonostora was situated near the earthwork castle of Belső-Gút - notably, the place name is closely similar to the name of the Gutkeled kindred.33 Archaeological discoveries at Sárvár and Adonymonostora suggest that these monasteries functioned contemporaneously with the fortifications nearby.

A similar example, though somewhat larger, is Bény (Kisbény / Bina, Slovakia), where an earthwork castle was built on the Garam River at the end of the ninth century and was in use, researchers assume, as the early residence of the

³¹ Péter Németh, "Szabolcs és Szatmár megyék Árpád-kori földvárai és monostorai, 1. közlemény" [Earth fortifications and monasteries from the Árpádian Age in Szabolcs and Szatmár counties, 1st proceeding], *MFME* 6 (1966-1967): 127-134, 128 (note 7), and 132; Németh, "Szabolcs és Szatmár megyék Árpád-kori földvárai és monostorai, 2. közlemény" [Earth fortifications and monasteries from the Árpádian Age in Szabolcs and Szatmár counties, 2nd proceeding], *A Jósa András Múzeum Évkönyve* 10 (1968): 134-167, 93 and 94; and Németh, *A középkori Szabolcs megye*, 40-41. Hont-Pázmány kindred until the middle of the twelfth century.³⁴ A Benedictine abbey was built during the first decades of the twelfth century, just 500 meters away from the castle. In 1217, it was taken over by the Premonstratensians and a new monastery was built inside the former castle building.³⁵ The abbey of Ákosmonostora (Pest Co.) was also built on the site of a former earthwork castle that had been abandoned shortly before.³⁶ The abbey of Kács, of which the Örsúr kindred were patrons, was built in the vicinity of the earthwork castle at Sály-Lator, which belonged to the same kindred.³⁷ The provostry of the Holv Cross at Bodrog-Bő was built at Bő, where there was also an earthwork castle of the Bő kindred.38 The Benedictine Abbey of Hahót, dedicated to St. Margaret, was founded by the Buzád-Hahót kindred, built just a few kilometers away from the residence of the kindred at Buzád-Sárkánysziget, a site that was localized by archaeological

³⁰ These types of castles, usually of small dimensions and built of earth and wood, were regarded as fortifications with "no history" due to the lack of written sources referring to them. They were analyzed, though, with archaeological methods and several interpretations were proposed in order to establish their chronology and function. The overview of the research and analysis of several cases from the later period: Gábor Virágos, *The Social Archaeology of Residential Sites*. *Hungarian noble residences and their context from the thirteenth to the sixteenth century: an outline for methodology*, BAR International Series 1583, Achaeolingua – Central European Series 3 (Oxford: Archaeopress, 2006).

³² Németh, "Szabolcs és Szatmár. 1. közlemény," 128 (note 4), and 132; for the archaeological research see Kálmán Magyar, "Nagyecsed-Sárvár nemzetségi központ kutatása (1975-77)," [Investigation of the Nagyecsed-Sárvár centre of kindred], *CommArhHung* IV (1984): 146-186; Sándor Tóth, "Sárvármonostor," in *Paradisum Plantavit. Benedictine Monasteries in Medieval Hungary*, ed. Imre Takács (Pannonhalma: Archabbey of Pannonhalma, 2001), 368-370; for a more recent analysis of the archaeological research,

focused on the stone fragments see Krisztina Havasi, "Sárvármonostor XI. századi kőfaragványainak katalógusa elé" [Introduction to the catalogue of the eleventh century stone carvings of Sárvármonostor], in *Középkori egyházi építészet Szatmárban* [Medieval ecclesiastical architecture of Szatmár], eds. Tibor Kollár et al. (Nyíregyháza: Szabolcs-Szatmár-Bereg Megyei Önkormányzat, 2011), 27-59.

³³ Németh, "Szabolcs és Szatmár. 1. közlemény," 128 (note 3), and 132; "Szabolcs és Szatmár. 2. közlemény," 98-100.

³⁴ Alois Habovstiak, "Frühmittelalterliche Wallanlage und romanische Bauten in Bíňa," in *VIIe congrès international des sciences préhistoriques et proto-historiques, Tchécoslovaquie, 1966. Excursion en Slovaquie* (Nitra: Vydavatel'stvo Slovenskej akadémie vied, 1966), 5-13.

³⁵ Sándor Tóth, *A Hont-Pázmány nemzetség premontrei monostorai* [The Premonstratensian monasteries of the Hont-Pázmány kindred] (Kecskemét: BT-Press, 2008), 54-88.

³⁶ Györffy, Az Árpád-kori, IV, 508; MRT, 11, XIII/3. Pest Megye Régészeti Topográfiája. Az Aszódi és Gödöllői Járás [Archaeological topography of Pest county. Districts of Aszód and Gödöllő], s. v. Galgahéviz, site no. 8/2, 176-183.

³⁷ Judit Gádor, "A Sály-Latori nemzetségfői központ kutatása," in Középkori régészetünk újabb eredményei és időszerű feladatai [New results and tasks of our medieval archaeology], eds. István Fodor and László Selmeczi (Budapest: MNM, 1985), 115-122.

³⁸ Kálmán Magyar, "A Bodrog-alsó-bűi nemzetségi központ régészeti kutatása (1979-1999)" [Archaeological research of the kindred center at Bodrog–Alsó-bű], *Somogyi Múzeumok Közleményei* 14 (2000): 115-161.

excavations.³⁹ The kindred was the patron of another monastery, too – the provostry of St. Martin – situated on the opposite side of the valley, near Alsórajk.⁴⁰

A recent comprehensive study on the settlement development of county seats considered the presence of monasteries in or near the earthen-castles as an important factor for their centrality and later development.⁴¹ A considerable number of these monasteries were under royal patronage, but there were private foundations as well. like Pélmonostor Baranyavár, at Bodrogmonostor at Bodrog, Ellésmonostor at Csongrád, and Koppány-monostor at Komárom. Although these sites apparently belong to the above-described group of monasteries, which were situated in or around fortified residential sites, the topographic relation between monastic complexes and earthworks is not always clear due to the limitations of archaeological interpretation or other circumstances. It seems probable that such sites were not necessarily chosen by the monasteries, but by the founders. However, in certain cases monasteries outlived residential sites that went out of use in later times.

It can be concluded as a result of the topographic analysis and case studies that the site of private monasteries had a more or less central character within the topography of the patron's estate. The examination of Engel's map of estates and the lists of papal and bishops' tithes show that the monasteries were surrounded by the estates of the patrons in almost all cases. Where the estates were of bigger extent, the central character of the monastic site can be observed even on a microregional level. The cases studied suggest that the patrons were directly involved in the administration of monastic estates, and they were able to use the economic resources of the monasteries not only for the Abbey, but also for their own benefit and purposes. Sometimes, the patrons even managed to secularize the monastic estates. In this sense, the topographic relation of monasteries with the patron's estates and residences had a dual character: besides the evident advantages offered by this central position, private monasteries were more vulnerable towards the patrons, being under their permanent and direct control.

³⁹ László Vándor, "Archäologische Forschungen in den mittelalterlichen weltlichen und kirchlichen Zentren des Hahót-Buzád-Geschlechts," *Antaeus* 23 (1996): 183-217.

⁴⁰ Vándor, "Archäologische Forschungen," 190-191. Béla Miklós Szőke, "Die Prämonstratenserpropstei von Alsórajk-Kastélydomb," *Antaeus* 23 (1996): 251-306.

⁴¹ Katalin Szende, "Von der Gespanschaftsburg zur Stadt: warum, wie – oder warum nicht? Ein Möglicher weg der

Stadtentwicklung im Mittelalterlichen Ungarn," in *Stadtgründung und Stadtwerdung. Beiträge von Archäologie und Stadtgeschichtsforschung*, Beiträge zur Geschichte der Städte Mitteleuropas, XXII, ed. Ferdinand Opll (Linz: Österreichischen Arbeitskreises für Stadtgeschichtsforschung, 2011), 375-405, 386, fig. 3 (map of monastic establishments in or near the countyseat).

A TURN TO *FRATRES MINORES*: THE FRANCISCANS IN 13TH-CENTURY LESSER POLAND AND THE DUKE BOLESLAUS THE CHASTE PATRONAGE

PIOTR PAJOR*

The second and third quarters of the 13th century was a time of rapid expansion of the mendicant orders in Central Europe. The Franciscans and the Dominicans - along with their female branches quickly arrived to the most important towns in Bohemia, Hungary, and Poland. What was extraordinary in these lands is the fact that the mendicants, friars as well as nuns, from the very beginning had the rulers' patronage. This phenomenon is clearly visible in Hungary where King Béla IV founded a Dominican convent in Buda for his daughter Margaret and was himself buried in a Franciscan church in Esztergom.¹ In Prague King Venceslaus I and his sister Agnes established a double monastery for both the Poor Clares and the Friars Minor, where Agnes spent the rest of her life and which also became their mausoleum.² Thus, in both of the most powerful kingdoms in Central Europe in the mid-13th century the mendicant orders and especially the Franciscans gained special relations with the ruling dynasties. On the other hand, those relations were not always long-lasting, e.g. the grandson of Venceslaus I, Vencelsaus II, did not follow this tradition and founded a Cistercian

monastery in Zbraslav as his burial place.³

In Poland the situation was far more complex. At the time the former kingdom did not actually exist, as it had been divided into several duchies ruled by the members of the Piast dynasty. The position of the Cracow duchy in this regard was very particular – a fact crucial for this paper. In 1138 the realm was divided between the sons of Duke Boleslaus the Wrymouth. Each of them had received their own duchy, which was to be hereditary, but Cracow was excluded from this arrangement. Instead, the city, along with its land, was to be an additional possession of the oldest member of the dynasty alive at the time, who was also to be a *princeps*, having superior power over the other Piasts.⁴ In the 13th century this system had no longer been in use; however, Cracow was still considered a key to rule over the whole of Poland and the aim of a constant civil war. On the other hand, the youngest son of Boleslaus the Wrymounth, Kazimirus II the Just, convinced the clergy and the nobility to accept his hereditary rule in the Lesser Poland duchies of Cracow and Sandomierz.

The Franciscan friary in Cracow

The Franciscan friars arrived in Poland in the year 1236 and settled in Wroclaw, the capital city of Silesia, and Cracow. In previous studies their arrival from Prague was considered to be resulting from the initiative of Henry the Bearded, duke of Silesia, who also ruled Cracow as a warden of juvenile Duke Boleslaus the Chaste.⁵

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¹ See Bela Zsolt Szakács, "Early Mendicant Architecture in Medieval Hungary," *Cescontexto. Debates* 6 (2014): 23-34, especially 24.

² Helena Soukupová, *Anežský klášter v Praze* [The Agnes' monastery in Prague] (Praha: Vyšehrad, 2011).

³ Klára Benešovská, "*Aula Regia* près de Prague et *Mons Regalis* près de Paris," in *Les Cisterciens dans le royaume médiéval de Bohême. Actes du colloque de Kutna Hora, 9-13 juin 1992*, Cîteaux: Commentarii Cisterciense 47 (Brecht: Cîteaux VZW, 1996), 231-243; Klára Benešovská, "Architecture at the Crossroads: Three examples from Bohemia circa 1300," in *The Year 1300 and the creation of a New European Architecture*, eds. Alexandra Gajewski and Zoë Opačić (Turnhout: Brepols, 2008), 156-158.

⁴ See Norman Davies, *God's Playground: A History of Poland. I. The Origins to 1795* (Oxford: Oxford University Press, 2005), 19-52.

⁵ E.g. Gerard Labuda, "Kto był fundatorem-założycielem klasztoru franciszkanów w Krakowie?" [Who was the

Founder of Franciscan friary in Cracow?], in Franciszkanie w Polsce średniowiecznej, cz. 1. [The Franciscans in medieval Poland. I], ed. Jerzy Kłoczowski (Kraków, 1983), 369-381; Jerzy Wyrozumski, Kraków do schyłku wieków średnich [Cracow until the end of the Middle Ages] (Kraków: Wydawnictwo Literackie 1991), 124-126. The person considered to be the executor of Henry's will was voivode Teodor. Recent excavations under the western wing of the cloister proved that the monastery had been erected on the same site as an older stone building. This structure could be Teodor's manor donated to the Franciscans, but it could also be an episcopal property. See Marcin Szyma, "Relikty kamiennej budowli pod zachodnim skrzydłem klasztoru Franciszkanów w Krakowie" [Remains of the stone building beneath the western wing of the Franciscan cloister in Cracow], in Lapides viventes. Zaginiony Kraków wieków średnich. Księga dedykowana prof. Klementynie Żurowskiej [Lapides viventes. Lost Crakow Ages. Book dedicated to prof. Klementyna Żurowski, eds. Jerzy Gadomski et al. (Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego, 2005), 149-157.

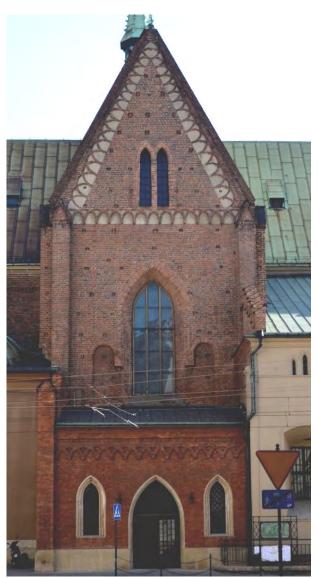


Fig. 1. Cracow, Franciscan church, facade of the north transept. Photo by author.

As it was demonstrated by Adam Zwiercan, the friars' appearance was more likely a result of the apostolic mission lead by Saxon provincial Giovanni of Pian del Carpini.⁶ Thus Boleslaus, who was then eleven years old, had nothing to do with the Franciscans' arrival in his domain. Nevertheless, in the following years the friars played a significant role in the process of consolidating Boleslaus' authority.

It is uncertain when the Franciscan church in Cracow was constructed. It is usually dated to around the mid-century. Some scholars, e.g. Zwiercan, proposed that the entire structure had been completed before 1249, when the Polish-Bohemian province chapter took place in Cracow.⁷ This argument is not very convincing if one considers the fact that the previous chapter in Poland took place in 1245 in Sandomierz, only two years after establishing the convent,⁸ and it is certain that the friars did not erect any durable buildings. On the other hand, some details (especially choir traceries) suggest that work had not been completed until the third quarter of the 13th century. However, Waldemar Niewalda and Halina Rojkowska suggested that the aforementioned traceries were added in another phase, perhaps in the process of arranging the artistic setting of Boleslaus' burial.9 Other elements, especially ceramic arcade friezes, seem to be connected with the horizon shortly before the middle of the 13th century (fig. 1).¹⁰

⁷Zwiercan, "Pierwotny kościół."

⁹ Waldemar Niewalda and Halina Rojkowska, "Średniowieczny

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kościół franciszkanów w świetle ostatnich badań" [Medieval Franciscan church in light of the latest research], in *Mendykanci w średniowiecznym Krakowie* [Mendicants of medieval Crakow], eds. Krzysztof Ożóg and Tomasz Gałuszka (Kraków: Espirit, 2008), 289.

¹⁰ Such a kind of frieze was common in early brick architecture in Lesser Poland (e.g. Cistercian church in Mogiła, Premonstratensian church in Cracow, Dominican church in Sandomierz), Silesia (e.g. St. Giles church in Wrocław, parish church in Środa Śląska-Probostwo) and Central Poland (e.g. Strońsk). The Dominicans usually used a more elaborate version of the frieze with pearl ornament on the arcades and reversed fleurs-de-lis in the lower part (see Marcin Szyma, "Fryzy z motywem lilii w kościołach dominikańskich w Polsce" [Friezes with fleurs-de-lis motif in the Dominican churches in Poland], *Kronika Miasta Poznania* 72 (2004): 3, 95-108.

⁶ Antoni Zwiercan, "Pierwotny kościół Franciszkanów w Krakowie" [The Original Franciscan Church in Cracow], *Nasza przeszłość* 60 (1983): 77; Antoni Zwiercan, "Nowe spojrzenie na początki franciszkanów w Polsce" [A new look at the Franciscans' beginning in Poland], *Nasza przeszłość* 63 (1985): 5-51; Antoni Zwiercan, "Franciszkanie w Krakowie" [Franciscans in Cracow], *W nurcie franciszkańskim* 1 (1987): 19-23; similar opinion in Zdzisław Gogola, "Rys historyczny bazyliki Franciszkanów w Krakowie" [Historic outline of the Franciscan Basilica in Cracow], in *Studia z dziejów kościoła Franciszkanów w Krakowie* [*Studies in the history of the Franciscan church in Krakow*] (Kraków: Wydawnictwo Unum, 2006), 27.

⁸ "Rocznik Małopolski" [The Annals of Lesser Poland], in *MPH*, II, 168.

Decoration of the sacristy, stylistically different and usually considered to be the oldest part of the complex, has been compared with the Poor Clares monastery in Prague.¹¹ Thus it seems certain that the church was constructed during the independent reign of Boleslaus the Chaste, between 1279. 1243 and This conclusion also harmonizes with the convent tradition considering Boleslaus as the founder and patron; moreover, the duke, after his death, was buried right in the Franciscans' choir.12

Reconstruction of the original church is even more controversial. During the last 150 years scholars proposed various visions of the church, which was extended several times, especially at the end of

the 13th century and during the 15th century. Since the first 19th-century study by Józef Kremer the form of the original church had been considered to be based on a Greek cross plan, with chancel, nave, and transepts each composed of a single square bay, with another crossing bay in the center (figs. 2-3).¹³

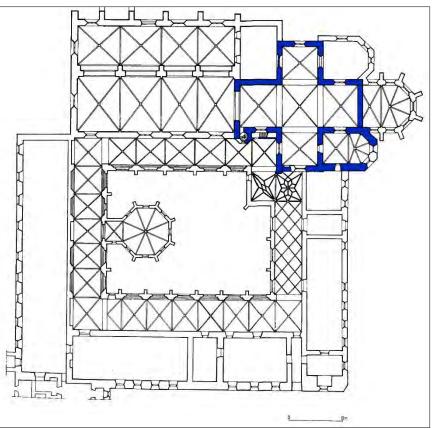


Fig. 2. Cracow, Franciscan monastery; after Architektura gotycka w Polsce, vol. 2 (Warszawa: PAN 1995), fig. 208; the oldest part of the church marked blue.

According to some researchers this form was extended with the long nave with one asymmetrical aisle around the end of the 13th century.¹⁴ A new polygonal apse was added to the chancel in the 15th century, however, the cross

¹¹ Tomasz Węcławowicz, *Cocto latere nobilitavit: O ceglanych murach kościołów średniowiecznego Krakowa* [On the brick walls of medieval churches in Cracow] (Kraków: Krakowskie Towarzystwo Edukacyjne, 2013), 97.

¹² Boleslaus' grave was never discovered. The oldest source speaking about his burial is the so-called *Dzierzwa's Chronicle*, probably written by a Franciscan friar from Cracow monastery in the early 14th century. According to its text Boleslaus was buried "in choro fratrum Minorum ante maius altare." *Kronika Dzierzwy* [Chronicle of Dzierzwa], ed. Krzysztof Pawłowski (Kraków: Polska Akademia Umiejętności, 2013), 82; see also Wojciech Drelicharz, "Mittelalterliche Krakauer Annalistik," *Quaestiones Medii Aevi Novae* 8 (2003): 231-288.

¹³ Józef Kremer, *Podróż do Włoch* [The Journey to Italy], II

⁽Wilno: Józef Zawadzki, 1859), 72-73, note without number. ¹⁴ Marcin Szyma supposed that the extension of the church had been carried out during the Bohemian King Venceslaus II's reign in Lesser Poland. In this way the church had been prepared to be used by another convent, by the Poor Clares, whom Venceslaus had been going to move from Zawichost (see below in this paper). Szyma considered this action as an attempt to legitimize Venceslaus' authority in Cracow by taking care of Boleslaus' mausoleum. Marcin Szyma, "Kościół Franciszkanów w Krakowie na przełomie XIII i XIV wieku" [Franciscan church in Cracow circa 1300], in *Artifex Doctus: Studia ofiarowane profesorowi Jerzemu Gadomskiemu w siedemdziesiątą rocznicę urodzin* [Studies in honor of Professor Jerzy on the Occasion of his Seventieth Birthday], I (Kraków: Polska Akademia Umiejętności, 2007), 253-260.



Fig. 3. Cracow, Franciscan church, facade of the north transept. Photo by author.

¹⁵ Tomasz Węcławowicz and Andrzej Włodarek, "Krakowski kościół oo. Franciszkanów w wieku XIII" [Franciscan church in Cracow in the 13th century], Sprawozdania z Posiedzeń Komisji Naukowych Krakowskiego Oddziału PAN 33, no. 2 (1989): 329-331; Tomasz Węcławowicz and Andrzej Włodarek, "Kościół św. Franciszka i klasztor oo. Franciszkanów" [Church of St. Francis and the Franciscan monastery], in Architektura gotycka w Polsce [Polish Gothic architecture], eds. Teresa Mroczko and Marian Arszyński (Warszawa: DiG, 1995), 129-130; Tomasz Węcławowicz and Andrzej Włodarek, "Architektura krakowskiego kościoła Franciszkanów w wieku XIII. Problemy i hipotezy badawcze, proponowane rekonstrukcje" [The architecture of the Franciscan Church in Cracow in the 13th century: Problems and research hypothesis, proposed reconstructions], in Studia z dziejów kościoła Franciszkanów w Krakowie, 45-80; Wecławowicz, Cocto latere, 93-108; similar opinions were presented by Paweł Pencakowski, "Średniowieczna

shape of the oldest part is still discernible. Nevertheless, some scholars presented different visions - especially Tomasz Wecławowicz and Andrzej Włodarek, who proved that the long nave is an original element. In their opinion, at first the church was composed of a single, three bays long choir and a long nave with an aisle. In the second phase, related to the arranging of Boleslaus' mausoleum, side annexes of transepts were added in the middle of the choir.¹⁵ Either way, after recent architectural research carried out by Niewalda and Rojkowska, it is virtually incontestable that the whole eastern section of the church, which forms the shape of a Greek cross, was the oldest part, and the longitudinal nave was added somewhat later.¹⁶ Nevertheless, the question whether this newer part of the church had been planned from the beginning remains open. If not, the original Franciscan church in Cracow was in fact the only mendicant church based on a central plan.

This unique form caused many troubles for scholars. It was present in several central Gothic churches – for example the medieval church in Prejmer (Tartlau, Transylvania), Our Lady church in Trier, and the parish church in Bolków (Bolkenhain), but its interpretation is different for every case.¹⁷ Szczęsny Skibiński recognized that the church had been designed from the beginning as a ducal mausoleum and the Greek cross plan expressed its memorial character. He observed patterns suggesting such a solution in late Antique and early Christian burial and memorial

architektura kościoła oo. Franciszkanów w Krakowie" [The medieval architecture of the Franciscan church in Cracow], *RK* 56 (1990): 41-63; Stanisław Pasiciel, "Kościół franciszkański w Krakowie w XIII wieku" [The Franciscan church in Cracow in the 13th century], *RK* 68 (2002): 5-52. ¹⁶ Niewalda and Rojkowska, "Średniowieczny kościół

franciszkanów," 277-283.

¹⁷ The plan of Our Lady church in Trier in particular has been interpreted in different ways, see: Wolfgang Schenkluhn and Peter van Stipelen, "Architektur als Zitat. Die Trierer Liebfrauenkirche in Marburg," in *700 Jahre Elisabethkirche in Marburg 1283-1983: Die Elisabethkirche: Architektur in der Geschichte* (Marburg: Elwers, 1983), 19-54; Mark C. Schurr, "The Liebfrauenkirche in Trier: Form and Meaning in Early Gothic Architecture in the Holy Roman Empire," in *Architecture, Liturgy and Identity. Liber Amicorum Paul Crossley*, eds. Zoe Opačić and Achim Timmermann (Turnhout: Brepols, 2011), 111-122.

architecture, including the famous Galia Placidia's Mausoleum in Ravenna and the sanctuary of Saint Simeon Stilites in Kalaat Semaan.¹⁸ Contrary to this thesis, Andrzej Grzybkowski demonstrated that cruciform plans were popular in Franciscan architecture in Italy, e.g. Friars Minor churches in Asisi, Pavia, and Viterbo. In Grzybkowski's opinion the organization of those churches' eastern sections explains the form applied in Cracow well enough, despite the lack of a long nave.¹⁹ On the other hand, a seemingly necessary question arises: what was so special about the convent in Cracow that it received a unique central form? This issue becomes even more apparent when one considers that all the other earliest mendicant churches in Poland, the Franciscan as well as the Dominican ones (the Friars Minor in Wrocław, Zawichost, Nowy Korczyn, and Kalisz, the Dominicans in Kraków, Wrocław, Sandomierz, Sieradz, and Poznań), received completely different, quickly unified plans with a long choir and a separate spacious nave.²⁰ None of them has a transept. Moreover, the church in Cracow in its Greek cross shape would be the smallest of them. Thus, it is highly probable that from the very beginning the church had been designed to be composed of both, the cross-shaped eastern part and the long nave, but the second part was erected after a hiatus, perhaps connected with Boleslaus' death. In any case, the Cracow friary should be considered a typical royal monastery founded by the ruler as a place of his eternal rest.

In Lesser Poland such a foundation was a new idea. Boleslaus' predecessors did not take similar actions. His father and grandfather, Leszek the White and Kazimirus the Just, both were buried in the Cracow Cathedral.²¹ Kazimirus had supported the foundation of the Cistercian monasteries in Sulejów and Koprzywnica, but later none of them played any significant role for him.²² It is more striking when one compares Lesser Poland with Silesia and its great series of ducal Cistercian monasteries in Lubiąż (Leubus), Trzebnica (Trebnitz), and Henryków (Heinrichau),23 or East Pomerania where Duke Sambor I founded a monastery in Oliwa.24 In this context Boleslaus' foundation is even more significant - and the Cracow church was only the beginning of his Franciscan foundations.

The Friars Minor and the Poor Clares double monastery in Zawichost

Other of Boleslaus' foundations for the Franciscans were not researched as intensively, however, at least one of them seems to be equally important. In 1245 Boleslaus' sister Salomea became the first woman in Poland to join the Poor Clares order. Salomea was not only the duke's sister, but also Coloman of Lodomeria's widow, former queen of Halych and the duchess of Slavonia, over 30 years of age at the time. Sometime after Coloman's death, during the Mongol invasion in 1241, she took her veil at the

¹⁸ Szczęsny Skibiński, *Pierwotny kościół Franciszkanów w Krakowie* [The original Franciscan church in Cracow] (Poznań: Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza, 1977).

¹⁹ Andrzej Grzybkowski, "Centralne gotyckie jednonawowe kościoły krzyżowe w Polsce" [The Central Gothic single-nave cross-shaped churches in Poland], in *Między formą a* znaczeniem. Studia z ikonografii architektury i rzeźby gotyckiej [Between form and meaning. Studies of iconography and architecture of Gothic sculpture], ed. Andrzej Grzybkowski [Warszawa: DiG, 1997], 23-24.

²⁰See Andrzej Grzybkowski, "Early mendicant architecture in Central-Eastern Europe. The present state of research," *Arte Medievale* 1 (1983): 135-156; Andrzej Grzybkowski, "Das Problem der Langchöre in Bettelordens-Kirchen im östlichen Mitteleuropa des 13. Jahrhunderts," *Architectura: Zeitschrift für Geschichte der Baukunst* 13 (1983): 152-168.

 $^{^{\}rm 21}$ The only source speaking about Kazimirus the Just's burial in the cathedral is the mid-15th century chronicle by Jan

Długosz (*Ioannis Dlugosii Annales seu Cronicae incliti Regni Poloniae*, VI (Warszawa: PWN, 1981), 156). The exact location of the grave is unknown; it was probably destroyed in the 14th century, when the new cathedral was constructed. Kazimierz Jasiński, *Rodowód pierwszych Piastów* [Genealogy of the first Piasts] (Warszawa-Wrocław: PTPN, 1992), 265) considered Długosz's version as highly probable.

²² Józef Dobosz, *Działalność fundacyjna Kazimierza Sprawiedliwego* [Kazimirus the Just's patronage] (Poznań: Instytut Historii, 1995).

²³ Ewa Łużyniecka, Architektura klasztorów cysterskich. Filie lubiąskie i inne cenobia śląskie [The architecture of Cistercian monasteries. Daughter houses of Lubiąż and other Silesian cenobia] (Wrocław: Wydawnictwo Politechniki Wrocławskiej, 2002), passim.

²⁴ Dariusz A. Dekański and Leszek Wetesko, "Oliwa," in *Monasticon Cisterciense Poloniae*, II, eds. Andrzej Wyrwa et al. (Poznań: Wydawnictwo Poznańskie, 1999), 268-269.

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Fig. 4. Zawichost, former Franciscan and Clarisian church, east wall of the choir and cloister wing. Photo by author.

Franciscan chapter in Sandomierz.²⁵ After this event Salomea and Boleslaus founded a monastery in the town of Zawichost located in north-eastern Lesser Poland, close to the border with Ruthenia and Lithuania. The convent was first mentioned 1254,26 but scholars usually agree that it was founded just after Salomea's accession. In 1255 Boleslaus founded a hospital next to the cloister and endowed it generously.²⁷ The nuns stayed in Zawichost only until 1257, when their convent was moved to Prądnik Valley.²⁸ Their cloister was taken over by the friars who moved from Sandomierz, although some sources suggest that a group of friars had been present in Zawichost already before that date. However, before 1257 a male monastery was only mentioned once.

In 1255 Boleslaus issued a document in Zawichost and its list of witnesses includes Adalbertus, *frater ordinis minorum domus de Zawichost.*²⁹ Adalbertus, Salomea's private confessor, was mentioned many times as her companion. Jan Długosz, mid-15th century historian, thought that both monasteries had been created at the same time, but the deserted Clarisian one was destroyed in the early 15th c. along with the hospital.³⁰

The preserved structural elements in Zawichost include a church with a long ribvaulted chancel with three bays and a single nave with a flat ceiling, as well as some remains of a single cloister wing within the walls of a later building (figs. 4-6). This wing is connected with the church on the level of the eastern bay of the choir.

²⁵ See note 8.

²⁶ *KDM*, II, no. 444.

²⁷ *KDM*, I, no. 446.

²⁸ *KDM*, I, no. 57.

 ²⁹ Kodeks Dyplomatyczny Katedry Krakowskiej [The Diplomatic Codex of Cracow Cathedral] (Kraków: Akademia Umiejętności, 1874), no. 43.
 ³⁰ See note 35.

¹⁷⁶

Józef Jamroz, who researched the cloister and the church during the reconstruction after World War II damages, discovered the remains of a cloister with a passage to the church and, what is a crucial fact in this context, a longitudinal room situated next to the choir, on its northern side. This room, 6 meters long and 3 wide, had two doors - one leading to the cloister's passage and another to the next chamber in the row, identified as the chapter house. On the opposite side there was no door to the choir, however, both spaces were connected by a grilled window. On the southern side of the choir was a parallel chamber, which functioned as the sacristy, which had no direct passage to the cloister on the north. Jamroz also discovered the remains of a massive choir screen separating the nave from the choir (fig. 7)³¹.

Many premises suggest that Boleslaus and Salomea consistently were going to found two cloisters in Zawichost – for both the Poor Clares and the Friars Minor.



Fig. 5. Zawichost, former Franciscan and Clarisian church, interior of the choir. Photo by author.

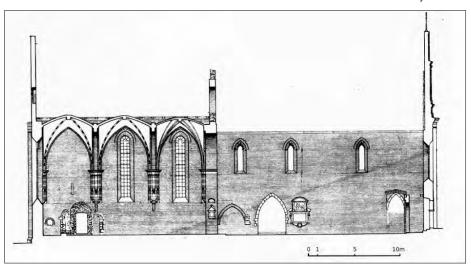


Fig. 6. Zawichost, former Franciscan and Clarisian church, longitudinal section after Jamroz, "Kościół pofranciszkanski," 216, fig. 98.

Historii Sztuki i Kultury 10 (1948): 185-230.

³¹ Józef Jamroz, "Kościół pofranciszkański w Zawichoście" [The former Franciscan church in Zawichost], *Biuletyn*

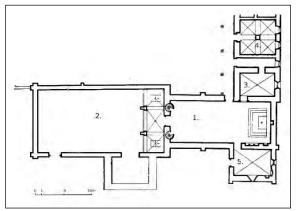


Fig. 7. Zawichost, former Franciscan and Clarisian church, reconstruction of the original ground plan after Jamroz, "Kościół pofranciszkański," 217, fig. 99; 1. Friars' choir; 2. Nave; 3. Nuns' oratory; 4. Nuns' chapter house; 5. sacristy.

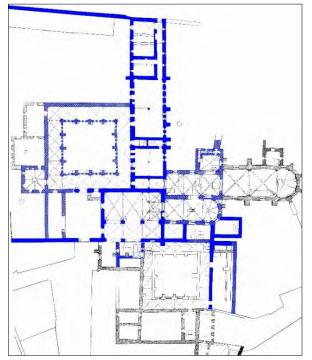


Fig. 8. Prague, Franciscan and Clarisian monastery, ground plan after. Soukupová, *Anežský klášter*, 24, fig. 2; structures erected before 1245 marked blue.

A papal bull containing information about taking over a recently completed monastery by the friars was issued in April 1257 - one month after Boleslaus' charter about the translation of the nuns' convent to Prądnik Valley.32 The founders must have requested the pope's approval much earlier – it is clear if one considers that the papal acceptance of the nuns' transfer was sent in 1260, so the whole process took three years.³³ And, as it was already stated, friars' domus de Zawichost were mentioned just in 1255; both original monasteries were also known to Długosz. Jamroz, referring to the results of his research, suggested that the nuns and the friars were to use the same church. He explained that the nave was intended for secular people, the long choir for the friars, and the aforementioned room with the window opened to the choir interior was the nuns' oratory.

Jamroz believed that the primary male cloister was situated on the southern side of the church and connected with the sacristy.³⁴ It was demolished, along with the hospital building, in the early 15th century. Długosz claimed that the separate nuns' church had also been destroyed at that time.³⁵ In his narration this church was dedicated to Saint Elisabeth, but such *patrocinium* is unknown in older sources; its own charters call the nunnery "monastery of Saint Damien order"³⁶, keeping quiet about the church.

Also important is that this theory explains the church's plan with a spacious, long choir, typical for male mendicant churches in Central Europe, e.g. the oldest group of Dominican churches in Poland (Poznań, Sieradz, Wrocław). Moreover, the church in Zawichost was constructed on almost the same plan as another friars' church founded by Boleslaus in Nowy Korczyn, which took place a short time later.³⁷

³⁷ Józef Frazik, "Kościół i klasztor Franciszkanów w Nowym Korczynie" [The Franciscan church and monastery in Nowy Korczyn], in *Symbolae Historiae Artium: Studia z historii sztuki Lechowi Kalinowskiemu dedykowane* [*Symbolae Historiae Artium:* Studies of the history of art dedicated to Lech Kalinowski] (Warszawa: PWN, 1986), 235-256; Paweł Pencakowski, "Sanktuaria minoryckie w Zawichoście i Nowym Korczynie. Dwie fundacje związane z księciem Bolesławem Wstydliwym i jego rodziną" [Friars Minor's sanctuaries in Zawichost and Nowy Korczyn: Two foundations connected with Boleslaus the Chaste and his family], *Kwartalnik Architektury i Urbanistyki* 37 (1992):

³² *Bullarium Poloniae*, I (Rzym and Lublin: École française de Rome 1982), no. 641b.

³³ KDM, I, no. 54.

³⁴ Jamroz, "Kościół pofranciszkański," 222.

³⁵ Długosz claimed that the nuns' church and monastery, which had been earlier damaged by Mongolians and Lithuanians, were eventually demolished in 1412 by voivode (palatinus) Michał of Czyżów, who took the stone to build his castle. Joannis Dlugosz, *Opera Omnia*, IX, *Liber Beneficiorum Dioecesis Cracoviensis*, ed. Alexander Przezdziecki, III (Cracoviae: Typographia Kirchmajeriana, 1864), 309-310.
³⁶ E. g. *KDM*, II, no. 446.



A turn to *fratres minores*. The Franciscans in 13th century Lesser Poland

Fig. 9. Zawichost, former Franciscan and Clarisian church, the shaft in the choir. Photo by author.

According to this theory the church must have been mostly completed in 1257, only 12 years after establishing the convent.³⁸

century], II (Warszawa: PWN, 1971), 787-788. Such interpretation was accepted also by authors who did not believe in the existence of a double monastery or did not voice this question, e.g. Andrzej Grzybkowski, *Gotycka architektura murowana w Polsce* [Stone Gothic Architecture in Poland] (Warszawa: Wydawnictwo Uniwersytetu

^{133-143.}

³⁸ Maria Pietrusińska, "Zawichost: Kościół i klasztor Klarysek i Franciszkanów" [Zawichost: Church and Convent of the Poor Clares and Franciscans], in *Sztuka polska przedromańska i romańska do chyłku XIII wieku* [Polish art: Pre-Romanesque and Romanesque art until the end of the 13th

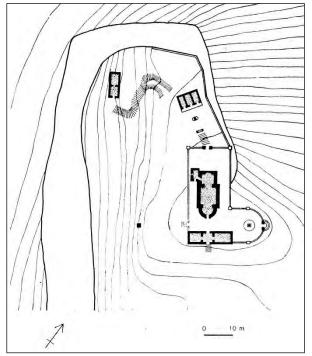


Fig. 10. Grodzisko near Skała, contemporary ground plan after Adam Miłobędzki, *Architektura Polska XVII wieku* (Warszawa: PWN 1980), 417, fig. 167.

In 1258 Boleslaus and Salomea's mother, Duchess Grzymisława, was buried in the Zawichost church,³⁹ but it is impossible to determine whether or not this is a sign of wider dynastic necropolis conception.

Jamroz's interpretation seems convincing. On the other hand, he states that Boleslaus and Salomea founded a double Franciscan monastery, which was an absolutely singular act, especially in the middle of the 13th century. However, since that time, no one noticed that such manner of foundation had a very clear precedent, even though this monastery became one of the most important royal cloisters in Europe.

Before 1231 Agnes of Prague and King Wenceslaus I, children of the Bohemian King Premysl Ottokar I, established a house of Poor Clares in Prague, the first one in Central Europe. The first nuns came from Italy, but shortly after (in 1234) some girls of noble families and Agnes herself joined the order as well. At first there had only been a female cloister connected with the hospital, but after 1237 a male cloister was added. In its final form, completed circa 1245, the whole complex consisted of a church with one asymmetrical aisle and a long choir.⁴⁰ The female cloister was situated on its northern side, with the nuns' oratory on the tribune inside the nave and an additional Virgin Mary chapel constructed along the presbytery, connected with Agnes' private oratory (fig. 8).41 The friars' cloister had been located on the southern side of the church. In this layout especially the location of Agnes' oratory is striking. As it was demonstrated by Caroline Bruzelius, in the first period of the order's history and particularly before the translation of the Assisi convent from San Damiano Church to Santa Chiara, there was no one pattern of the nuns' oratory position.⁴² Many of the first convents were

Warszawskiego, 2014), 38, 39. On the other hand, Pencakowski ("Sanktuaria minoryckie," 121-127) thought that Długosz was right about the existence of two separate churches, including the Clarisian one, destroyed in the 15th century. In his interpretation the preserved church was always used by friars only and had been raised in two phases; originally the whole church had only consisted of the present nave and the long choir was added after 1257 on the occasion of the funeral. This premise was based on the alleged stylistic difference between simple, vault-less, plain nave and the rich, vaulted choir, but he noted that both parts of the church are bounded and built with the same bricks. However, such a 'difference' was typical and common for mendicant churches, where the choir was a space for the friars, and secular people could only enter the nave. Cf. Wolfgang Schenkluhn, Architektur der Bettelorden: Die Baukunst der Dominikaner und Franziskaner in Europa (Darmstadt: Primus Verlag, 2000), passim. Moreover, during the 13th century both the Franciscans (in the general chapter in 1260) and the Dominicans formulated a number of rules about the

appearance of churches, including a ban on vaulting the church, except for the presbytery; see Richard A. Sundt, ""Mediocres domos et humiles habeant fratres nostri": Dominican Legislation on Architecture and Architectural Decoration in the 13th Century," *Journal of the Society of Architectural Historians* 46 (1987): 394-407.

³⁹ "Rocznik Małopolski," 169.

⁴⁰ Soukupová, *Anežský klášter*, passim.

⁴¹ The functional plan of the extended monastery was reconstructed this way by Helena Soukupová, who discarded the older theory, which considered the Virgin Mary chapel as the nuns' oratory. However, it was indicated by Carola Jäggi, *Frauenklöster im Spätmittelalter. Die Kirchen der Klarissen und Dominikanerinnen im 13. und 14. Jahrhundert* (Petersberg: Michael Imhof Verlag, 2006), 202-203) that Soukupová's interpretation is doubtful.

⁴² Caroline Bruzelius, "Hearing is Believing: Clarissan Architecture, ca. 1213-1340," *Gesta* 31, no. 2 (1992): 83-91; Caroline Bruzelius, "Nuns in Space: Strict Enclosure and the Architecture of the Clarisses in the Thirteenth Century," in

located in preexisting buildings and their functional plans had to be adapted to their layouts. Moreover, even later the communication between convents was limited and there were no widely followed patterns. In this way, if Jamroz's reconstruction is correct, on a basic level the monastery in Zawichost was more than similar to the Prague one, with a big church with a long choir in the center, nuns' cloister on the northern side, and friars' cloister on the southern side. In both complexes a hospital, endowed in place of the nunnery, was an important part.⁴³

The uncommon location of the oratory on the north side of the choir is also analogous, although in Prague it was an exclusive space for Agnes, not for all the nuns. Such placement of the oratory seems to have been useful for the Clares; a window situated close to the altar made the liturgy audible for them. But most importantly, in both cases, the Prague and the Zawichost foundations, the personal context was the same – in both examples a ruler founded a double Franciscan monastery for his sister who joined the Poor Clares.

The Prague convent quickly became a true royal monastery. It was founded as a royal mausoleum, but during the following decades its significance increased even more. The monastery became a kind of a symbol of the Premyslid dynasty. As it was demonstrated by Helena Soukupova, the successors of Venceslaus I, Premysl Ottokar and Venceslaus II. II. consistently founded double Franciscan monasteries in those towns where they gained direct rule. It seems that the double monasteries in Cheb, Znojmo, and Opava were treated as symbols of the Premyslids' domination because of their similarity to the royal monastery in the capital city.⁴⁴ This political aspect, however, cannot be the key to understanding the meaning of Zawichost

Theoretically it could be a monastery. manifestation of a political alliance with the Premyslids, but such an alliance did not exist. Boleslaus was maintaining close relations with Hungary and the Arpads which had been established by his father. They dominated his politics, but also had a more personal level. He married the daughter of King Béla IV – Kunegund. Even before this marriage Salomea had been Coloman's wife. In this context it is surprising that they chose the Bohemian, and not Hungarian, pattern. It should be mentioned at this point that the extension of the Prague monastery was completed in 1245. In the same year Salomea received her veil during the chapter of Bohemian-Polish province in Sandomierz, and the person who gave her the nun's habit was the Provincial Superior Remundus.⁴⁵ Boleslaus and Bishop Prandota of Cracow were present and some delegation of Bohemian friars must have been there too. Even if the concept of the Prague monastery was not translated this way, it was probably well known to Boleslaus as a significant foundation by his Bohemian rival; it was clearer because of the parallel relation between both rulers and their sisters as well as a suitable frame for piety of highborn women.

What should be stressed is the fact that the Zawichost monastery's similarity to the Prague monastery is limited only to the plan and function. It is enough to treat Zawichost as an 'iconographic copy' as it was defined by Richard Krautheimer.⁴⁶ On the other hand, this does not indicate any strictly artistic connections. Contrary, heavy, multiplied composite shafts with massive frontal half-columns with bell capitals covered by huge impost blocks, as well as a vault supported by prominent transverse arches and a mixed wall boundary with bricks and stone (figs. 5, 9) have not much in common with the far more Gothic

Clare of Assisi: A Medieval and Modern Woman, ed. Ingrid Petersen (New York: Franciscan Institute, 1996), 53-73.

⁴³ It was noticed early that the hospital's income was in fact being collected by the convent, which at that period was not allowed to possess its own property. See on this especially Janina Stoksik, "Powstanie i późniejszy rozwój uposażenia klasztoru Klarysek w Krakowie w XIII I XIV wieku" [Establishing and later development of the Clarissian convent in Cracow's funding], *RK* 35 (1961): 94. Jamroz, "Kościół

pofranciszkański,") noted that this solution was similar to the Prague one.

⁴⁴ Helena Soukupová-Benáková, "Premylovské mauzoleum v klástere blahoslavené Anezky na Frantisku," *Umění* 24 (1976): 193; Jäggi, *Frauenklöster im Spätmittelalter*, 110-111.
⁴⁵ See note 8.

⁴⁶ Richard Krautheimer, "Introduction to an "Iconography of Mediaeval Architecture," *Journal of the Warburg and Courtauld Institutes* 5 (1942): 1-33.

forms of the Prague monastery. The style of the Zawichost church was compared locally with the Cistercian church in Mogiła near Cracow and in a wider context with the Cistercian monastery in Maulbronn, which generally seems accurate.⁴⁷

It should be mentioned that Zawichost was not the only double Franciscan monastery in the 13th-century Poland. Another one was created in Gniezno. A friary was established in 1259 by Duke Boleslaus the Pius, perhaps as his burial place. Shortly after 1280 this monastery was expanded with a nunnery founded by Boleslaus' nephew and successor, Przemysł II.48 Personal and dynastic connections seem to be decisive again. The most important inhabitant of the new convent was Duchess Yolenda, who was Boleslaus the Pius' widow and sister of Kunegund, Boleslaus the Chaste's wife. The disposition of the monastery, with the friary north-east of the church, nunnery in front of its western façade, and nuns' oratory in a room along the nave was different; Stanisław Pasiciel suggested the disposition of the double monastery in Znojmo as its pattern.49

Lapis Sanctae Mariae – a new convent in Prądnik Valley

Regardless of its origin, the female convent in Zawichost did not survive. Twelve years after the foundation of the monastery and only two after the creation of its hospital, in 1257, Boleslaus moved the nuns to a new location on the top of a high rock in the valley of Pradnik, about 30 kilometers from Cracow. According to both the translation document and younger Clarissian tradition the reason for this action was the danger of Lithuanian and Mongolian attacks on Zawichost. Although, if that was the case, it is hard to understand why Boleslaus and Salomea did not translate the convent to Cracow or Sandomierz, which were the capitals of his duchies. The chosen location was a secluded place, situated near a significant route from Cracow to Silesia on the bottom of the valley, but far away from any town. Moreover, the convent was situated on a small platform on the peak of a rock, just on the verge of a high cliff, where there was simply no space for a complex that would be in any way comparable to the one in Zawichost (fig 10). Privileges, which Boleslaus granted to the convent, were also unusual. The nuns received permission to build a castle and locate a town.

In the translation act the new location is described as *locus tuciores*, which translates to 'safe' or 'well defensive' place. This care for the nuns' safety, however, does not explain such an extraordinary location outside any town. The answer is probably connected with the name of this place, and the monastery itself. The translation act informs that the new place was popularly called *Scala*, which literally means 'the Rock.'⁵⁰ This name was adapted by the monastery, called *Lapis Sanctae Mariae* – Rock of Saint Mary. The name was used in all the convent's documents

⁴⁷ Scholars who suggested that churches in Mogiła and Zawichost were constructed by the same workshop are Pencakowski ("Sanktuaria minoryckie," 130) and Krystyna Białoskórska, "Le caractère et les idées du décor sculpté architectonique des monastères cisterciens polonais du XIIIe siècle et sa position en regard des traditions et de la spiritualité de l'ordre," in *La vie quotidienne des moines et chanoines réguliers au Moyen Age et Temps modernes: Actes du Premier Colloque International du L.A.E.H.C.O.R., Wrocław-Książ 30 novembre-4 décembre 1994, I-II (Wrocław: Institut d'Histoire de l'Université de Wrocław, 1995), 615-649. Massive, multiplied hanging shafts, very similar to the ones in Zawichost, are present in the mid-13th century choir of the parish church in Sławków, but different details point towards an inspiration rather than a direct workshop connection.*

⁴⁸ See Stanisław Pasiciel, *Zespół klasztorny franciszkanów i klarysek w Gnieźnie* [Franciscan and Poor Clares monastery complex in Gniezno] (Gniezno: Muzeum Początków Państwa Polskiego, 2005), 16-63.

⁴⁹ Pasiciel, Zespół klasztorny, 100.

⁵⁰ See note 28; "Hinc est, quod nos Bolezlaus (...) monasterium dicti ordinis per nos olim in Zawichost fundatum et congruis dotatum prouentibus, de conensu Venerabilis patri domini Prandote Cracouiensis episcopi, et baronum terre nostre propter crebros insultus gentilium in locum tuciorem, qui Scala wlgariter dicitur, duximus transferendum (...) et ceterarum guerrarum emergentes molestias in dicto loco castrum forte edificare valeat (...)." The original diploma of the act is still possessed by the monastery (since the 14th century in Cracow) and dated to 2 March 1257. Probably in the early 14th century this date had been forged to 1262 (in Latin numerals MCCLVII "V" was altered to "X"), which was discovered by Bolesław Ulanowski, O założeniu klasztoru św. Andrzeja w Krakowie i jego najdawniejszych przywilejach [On establishing the St. Andrew's Monastery in Cracow and its earliest privileges] (Kraków: Akademia Umiejętności, 1885), 29-30. Earlier the document was published in KDM with the false date.

and on its seal. Also the town, the location of which the nuns were entitled and which was finally located in 1267, received the name Skała⁵¹.

The monastery's name is probably the key to understanding this action. We know several sources which reference Skała castle being raised circa 1228 by Henry the Bearded, the duke of Silesia. Moreover, in 1235 Konrad of Masovia, during the war of Cracow, kidnapped and imprisoned the juvenile Boleslaus and his mother. Henry rescued them and gave them safe shelter in the castle Skała,⁵² where they spent four years while remaining legislatively active; we know of a document signed by Boleslaus, written up *in Skala*.⁵³ Thus it seems that the convent's name being the same as the castle's was not a coincidence.

The exact location of castle Skała is unclear. It is not even certain how many castles Henry constructed in the valley. Some scholars suppose that the castles of Skała and Przeginia, which are known from several sources, are the same place, but others consider them to be two

different structures. It should be also stressed that the castles of Przeginia and Skała were never listed together.54 In fact it is unclear what "Przeginia" meant in this case. It could refer to the name of a village, which it contemporary is, but Janusz Kurtyka suggested that until 15th century it had been used as the name of a whole forest complex north-west of Cracow.55 Therefore the possible locations of castle Skała are both a place called Grodzisko, where the convent from Zawichost was moved to, as well as an archaeological site in the village Sułoszowa, situated a few kilometers farther, where remains of an early castle are located. Another possible (but less probable) location is castle Pieskowa Skała situated near Sułoszowa⁵⁶ (fig. 11).

Numerous scholars proposed different interpretations. In newer literature two main theories were formulated by Mieczysław Rokosz, who suggested that Henry the Bearded raised two castles – Skała on Grodzisko and Przeginia in Sułoszowa,⁵⁷ and Stanisław Kołodziejczak, who

the 16th century) was identified with *castrum Scala* in early research, however at that time the site of Sułoszowa, located c. 300 meters from Pieskowa Skała, was not known yet. Pieskowa Skała was mentioned for first time in 1315 as *Peskenstein*. It seems probable that the castle had functioned in Sułoszowa until the beginning of the 14th century and then was moved to Pieskowa Skała. Stanisław Kołodziejski, (Średniowieczne budowle obronne na terenie Jury Ojcowskiej w świetle wyników nowszych badań [Medieval defensive structures in the area of the Ojców Jurassic System] (Ojców: OPN, 2006), 31-32) thought that that this source relates to Sułoszowa too and the castle of Pieskowa Skała was erected in the mid-14th century during the reign of Kazimir the Great.

⁵⁷ Mieczysław Rokosz, "Grodzisko skalskie nad Prądnikiem albo tzw. Pustelnia błogosławionej Salomei w XIII wieku" [Grodzisko of Skała by the River Prądnik or So Called Blessed Salomea's Hermitage in the 13th century], *Prądnik. Prace i Materiały Muzeum im. Prof. Władysława Szafera* 10 (1995): 19-43. Rokosz treated as proof for the preexistence of the castle a phrase from the translation act saying that nuns are allowed to *castrum edificare* (see quotation in note 49). In the scholar's opinion it should be translated as "to reconstruct the castle" and means that the castle had existed earlier, because otherwise there would be nothing to reconstruct. However, such a translation was criticized by other scholars, who rightly claimed that word "edificare" means "to construct" or "to raise" only and does not suggest existence of any older structures.

⁵¹ See location act *KDM*, I, no. 75.

⁵² See Benedykt Zientara, *Heinrich der Bärtige und seine Zeit: Politik und Gesellschaft im mittelalterlichen Schlesien* (München: Oldenbourg Wissenschaftsverlag, 2011).

⁵³ *KDM*, II, no. 412.

⁵⁴ Some narrative sources, from Lesser Poland the Annals of Cracow Chapter ("Rocznik kapituły krakowskiej," in MPH, Series Nova, V, Najdawniejsze roczniki krakowskie i kalendarz, ed. Zofia Kozłowska-Budkowa (Warszawa: PWN, 1978), 75) and The Krasińskis' Annals ("Rocznik Krasińskich," in MPH, III, 132) and from Silesia the Compiled Silesian Annals ("Rocznik śląski kompilowany," in MPH, III, 3, 677), mention castle Przeginia and places in its neighborhood during a battle between the armies of Henry the Bearded and Konrad of Masovia, which took place in 1228. Other Silesian sources ("Kronika polska" [The Chronicle of Poland], in MPH, III, 592; "Kronika książąt polskich" [The Chronicle of Polish Dukes], in MPH, III, 485-486) place the same event close to castle Scala. Jan Długosz, in his mid-15th century chronicle, connected both versions and wrote about Henry the Bearded's castle situated on the rock called Skała in Przegninia ("...rupis, que dictur Skala, in Przegina..."); Ioannis Dlugossi Annales seu cronicae incliti Regni Poloniae, Liber quintus. Liber sextus, eds. Zofia Budkowa et al. (Varsaviae: PWN 1973), 280-281.

⁵⁵ Janusz Kurtyka, *Tęczyńscy: Studium z dziejów polskiej elity możnowładczej w średniowieczu* [The Tęczyńskis: a study in the history of the Polish high noble elite in the Middle Ages], (Kraków: Secesja, 1997), 118.

⁵⁶ Pieskowa Skała (at present retaining the form given to it in

PIOTR PAJOR

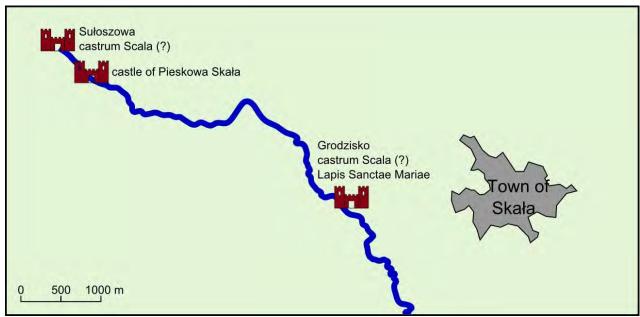
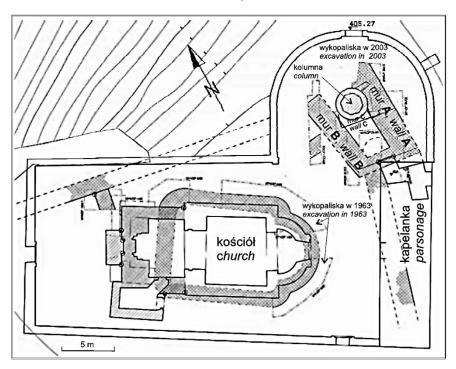


Fig. 11. Deployment of the castles in Prądnik near Skała. Drawing by Piotr Knapik.



Fig. 12. A church in Grodzisko, contemporary view. Photo by author.

Fig. 13. Medieval structures discovered in Grodzisko during the excavations after Domogalla and Mościcki, "Application," 415, fig. 7.



thought that there only was one castle in Sułoszowa and in Grodzisko there was no settlement before the Poor Clares' arrival.⁵⁸

On the other hand, the latest excavations at Grodzisko revealed remnants of a massive stone building and a wall surrounding the whole plateau, however, there are no cause to recognize them as Henry's former castle or structures raised by nuns.⁵⁹ The question of the church is more problematic. Presently in Grodzisko there are a small church, a priest's house, and some chapels constructed in the late 17th century as Salomea`s

sanctuary (figs. 10 and 12). Fifty years ago archaeologists excavated parts of the foundations beneath the church which were dated to the 13th century.⁶⁰

The problem is that those foundations make an outline of a small, single-nave church with a shallow apse; the whole structure was only 9 meters long and 7 wide (fig. 13).⁶¹ It is simply unbelievable that this structure could be the convent church; it had no separated spaces for nuns, priests, and secular men, and it is known from several sources that a small group of friars was still present in the convent⁶² and that it was a destination of pilgrimages.⁶³

⁵⁸ Stanisław Kołodziejski, *Castrum Skala – zamek księcia śląskiego Henryka Brodatego pod Krakowem* [Castrum Skala – Silesian Duke Henry the Bearded's castle near Cracow], in *Kultura średniowiecznego Śląska i Czech* [Medieval culture in Silesia and Czech Republic], II. *Zamek*, ed. Krzysztof Wachowski (Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego, 1996), 101-111.

⁵⁹ Witold Domogalla, "Historia i przeobrażenia przestrzenne grodu, zamku i klasztoru ss. Klarysek pod Skałą" [History and development of the early keep, castle, and Clarissian convent near Cracow] (PhD diss., Politechnika Krakowska Kraków, 2005).

⁶⁰ The excavations were led by architects Wiktor Zin and Władysław Grabski, who dated the original church to the 11th century (sic!); Władysław Grabski and Wiktor Zin, "Badania nad wczesnośredniowiecznym zespołem w

Grodzisku k. Skały" [The research into the early medieval complex in Grodzisko near Skała], *Sprawozdania z posiedzeń komisji naukowych PAN Oddział Kraków* 13 (1969): 334-336. Archeologist Andrzej Żaki, who consulted those works, placed the church generally in the 13th century; Andrzej Żaki, *Archeologia Małopolski wczesnośredniowiecznej* [Archaeology of early medieval Lesser Poland] (Kraków 1974), 407-408.

⁶¹ Witold Domogalla and Włodzimierz Mościcki, "Application of geophysical resistivity methods to recognition of anthropogenic morphology – a case history of the Blessed Salomea castle in Grodzisko near Skała (Małopolska province, South Poland)," *Geologia* 32 (2006), 415.

⁶² They were mentioned in several documents, e.g. Salomea's Last Will, set down in 1268 (*KDM*, I, no. 76).

 $^{^{\}rm 63}$ In 1267 a papal legate gave an indulgence to pilgrims

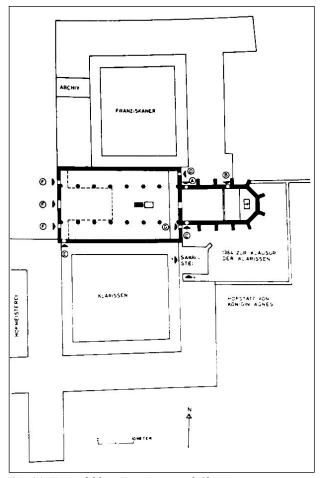


Fig. 14. Königsfelden, Franciscan and Clarisian monastery, reconstitution after Kurmann-Schwarz, "... ein vrowen chloster," 153, fig. 1.

Thus the excavated church foundations seem to be the remnant of a castle chapel, and this could be treated as evidence for its existence at this location.

Another and perhaps more probable possibility is that results of the excavations were misinterpreted, and what was recognized as a medieval wall is simply the foundation of a baroque church. On the other hand, the plateau of Grodzisko rock is so small that it is hard to imagine a bigger convent church in any other part of it.

Nevertheless, some scholars agreed that Boleslaus moved the monastery to this place,

because he had known and remembered this neighborhood and its defensive properties.⁶⁴ But it is still not a full explanation of such a decision. So far no one has tried to view Skała as a kind of a votive foundation, but in my opinion this thesis deserves consideration. Boleslaus wrote nothing about his motives in the translation act, but described this place as safe and easily defended. Another significant fact is its name, the same as the name of the castle which was, for a time, a safe place for Boleslaus himself. The duke's desire to commemorate such a crucial episode from his life explain the unusual localization. would Furthermore, this foundation cannot be regarded as successful. Since Salomea's death in 1268 the convent had many troubles. Around 1290 it was robbed and ruined by unknown soldiers and never rebuilt. The convent was eventually translated to Cracow circa 1316, where it remains to this day.

The question of a possible pattern for Skała is still open, however, it seems that there was simply no similar solution within the Franciscan movement at that time. At this point the Königsfelden monastery near Brugg in Switzerland should be mentioned. This double Franciscan monastery was founded in 1309 by Elisabeth of Carinthia at the place where her husband, German King Albert I, was murdered (fig. 14).65 This case is quite different than Skała, but it can be viewed as a similar Franciscan foundation in an unusual place, outside of any town, having an extraordinary, strictly votive character.

Conclusion

Boleslaus the Chaste's patronage of the Friars Minor and the Poor Clares is a part of the great phenomenon of gaining a very significant role in Central European monarchies by the Franciscans in the earliest period of their history.

Nevertheless, the three foundations analyzed in this paper seem to be unique in the context of the whole region. In particular the cruciform shape of the original Franciscan church in Cracow, which eventually became Boleslaus

visiting the convent; KDM, I, no. 73.

⁶⁴ Kołodziejski, "Castrum Skala."

⁶⁵ Brigitte Kurmann-Schwarz, ""… ein vrowen chloster sande Chlaren orden und ein chloster der minneren Bru(e)der orden…": Die beiden Konvente in Königsfelden und ihre

gemeinsame Nutzung der Kirche," in *Glas, Malerei, Forschung: Internationale Studien zu Ehren von Rüdiger Becksmann* (Berlin: Deutscher Verlag für Kunstwissenschaft, 2004), 151-163.

and Salomea's mausoleum, and the Clarissian hermitage in Prądnik Valley, have no direct analogies in monastic architecture of the 13th century. The double monastery in Zawichost has a very close prototype in Prague, but it seems to be a very early transfer of a Bohemian idea, which at that time was virtually unknown in other regions.

Perhaps the reasons why those foundations outside Cracow did not survive came down to specific features and difficult conditions the danger of raids in Zawichost and isolation and lack of water in Lapis Sanctae Mariae. In Cracow the idea of close relations between the Franciscans and the court survived longer. The successor of Boleslaus, Duke Leszek the Black, had not been a very active patron and mostly supported the Dominicans, whose church he chose as his burial place.66 At the same time Boleslaus' widow, St. Kunegund of Hungary, founded a new Clarissian nunnery in the town of Stary Sacz (along with a separate Franciscan monastery) and joined it herself.67 After Boleslaus' death the throne of Cracow became the goal of a civil war between the Piasts again, but the dark horse of this conflict was Bohemian King Venceslaus II. After his and his son Vencelsaus III's death Cracow was taken over by Duke Wladislaus the Short. Some actions taken by Wladislaus should be treated as an attempt at continuing Boleslaus the Chaste's patronage. At the beginning of his rule Wladislaus buried his two young, departed sons in a Franciscan church. The Friars Minor also played a significant role in his court. It seems that a number of historiographical works concentrated on Cracow and legitimizing Wladislaus' authority had been ordered by the court and prepared right in the Franciscan monastery.68 Wladislaus also transferred the Poor Clares to Cracow and gave them St. Andrew Church.⁶⁹ This action concluded the experimental character of Salomea's convent, at first as a part of a double monastery and as a hermitage after the first translation; since that time the nuns have possessed their own church located near the Franciscan monastery, which is the most common solution. It was also the end of a Franciscan episode in the main stream of the Piasts' patronage.⁷⁰ In 1320 Wladislaus was crowned in Cracow Cathedral as the king of Poland. Since then the cathedral had also been the place of royal burials during the following 400 years, becoming the only truly significant royal church.

⁶⁶ Perhaps Leszek founded a new portal and stained glass for the Dominican church in Cracow, see Lech Kalinowski, "Die ältesten Glasgemälde der Dominikanerkirche in Krakau," in *Bau- und Bildkunst im Spiegel internationaler Forschung. Festschrift zum 80. Geburtstag von Prof. Dr. Edgar Lehmann Präsident des CVMA Nationalkomitees in der DDR* (Berlin: VEB Verlag für Bauwesen, 1989), 114-124.

⁶⁷ See Paul Crossley, *Gothic Architecture in the Reign of Kasimir the Great. Church Architecture in Lesser Poland 1320-1380* (Kraków: Państwowe Zbiory Sztuki na Wawelu 1985), 88.

⁶⁸ Especially *Dzieżwa's Chronicle* (Kronika Dzieżwy, ed.

Krzysztof Pawłowski (Kraków: PAU, 2013) and the lost *Annales Polonorum Deperditi*; see Drelicharz, "Mittelalterliche Krakauer Annalistik."

⁶⁹ It is unsure when exactly the Poor Clares took over the church, but they already possessed it in 1318 (*KDM*, I, no. 157).

⁷⁰ The hypothesis by Crossley (*Gothic Architecture*, 88-89), which proposes that the convent church in Stary Sącz was erected after 1320 by the workshop of Cracow cathedral on the initiative of Wladislaus the Short or his wife Hedwig, is tempting, but there is no good justification for it in the sources.

PAULINE MONASTERIES IN MEDIEVAL CROATIA: SOURCES OF MONASTIC WEALTH. THE CASE OF THE BLESSED VIRGIN MARY ON GARIĆ HILL IN SLAVONIA

SILVIJA PISK *

The Pauline Order was officially recognized in the year 1308, even though the Pauline hermits urged Pope Urban as early as the mid-13th century to acknowledge the order and give them permission to adopt the Rule of St. Augustine. This did not happen because Paul, the bishop of Veszprém, found – after visiting the hermits – that their accommodation did not comply with the Pope's main rule. Namely, in his opinion, the hermits did

² On December 13, 1308 Cardinal Gentilis granted the approval of the religious community and bestowed the rule of Saint Augustine. Since then, the eremites were officially called *fratres sancti Pauli primi eremite*. On December 16, 1328 Pope John XXII solemnly affirmed the rule of St. Augustine to the Paulines, and his successors continued to do the same, granting various privileges. *Mon VatHung*, series I, I-VI, eds. Asztrik Varszegi et al. (Budapest: Szent István Társulat, 1887-91), 2:180-182.

not have sufficient funds for the up-keep of the buildings.¹ It was not until 1308 that Cardinal Gentilis de Montafiore decided that the criterion had been met and gave the Paulines permission to adopt the Rule of St. Augustine.² After the initial period of poverty and humble eremite abodes, the Pauline monasteries in the Hungarian kingdom during the Middle Ages became rich and influential.

This is a process that can be well observed in cases of several Pauline monasteries in Slavonia, especially throughout the 545 preserved documents from the Pauline monastery of The Blessed Virgin Mary on Garić Hill.³ The initial idea of this paper was to present all ten Pauline

Jahrhunderts," in Beiträge zur Geschichte des Paulinerordens, ed. Kaspar Elm (Berlin: Duncker und Humblot, 2000), 11-22; József Török, "Die Paulinerliturgie in Ungarn," in Beiträge zur Geschichte, 125-134; Beatrix Fülöpp-Romhányi, "Die Pauliner im mittelalterlichen Ungarn," in Beiträge zur Geschichte, 143-156; Zoltán Bencze, "Das Kloster St. Lorenz bei Buda (Budaszentlörinc) und andere ungarische Archäologische Untersuchungen," Paulinerklöster. in Beiträge zur Geschichte, 157-190; Gábor Sarbak, "Die Anfänge die des Paulinerordens und Entwicklung der Ordensgesetzgebung," Studia Claromontana 27 (2009): 15-26; Marek Chmielewski, "Duchowość paulinow w świetle najstarszych traktatów ascetycznych," [Pauline spirituality in the light of the oldest treaties of ascetic], Studia Claromontana 27 (2009): 71-102; Veronika Kucharská et al., "Pavlinski samostan Blažene Djevice Marije na Gariću (Moslavačka gora) i njegova uloga u regionalnoj povijesti" [Pauline monastery of Blessed Virgin Mary at Garić (Moslavačka gora) and its role in regional history] (PhD diss., Filozofski fakultet Zagreb, 2011), 16-23; Silvija Pisk, "Mittelalterliche Paulinerklöster im Gebiet des heutigen Kroatien (mittelalterliches Slawonien) und der Slowakei," in Slovakia and Croatia, Historical Parallels and Connections (until 1780), eds. Veronika Kucharská et al. (Bratislava: Department of Slovak History, Faculty of Philosophy, Comenius University, 2013), 428-430.

³ Documents from Garić monastery are kept at the HR-HDA-647; Cf. Rajka Bućin and Miljenko Pandžić, "Izvori za povijest Moslavine u fondovima i zbirkama HDA" [Sources for the history of Moslavina in the Croatian State Archives' funds and collections], *Zbornik Moslavine* 9/10 (2006/2007): 17-37. Most documents from Garić monastery were published in *CD*, I-XVIII; Elemér Mályusz, "A szlavóniai és horvátországi középkori pálos kolostorok oklevelei az Országos Levéltárban" [The charters of the medieval Pauline Monasteries of Slavonia and Croatia in the Hungarian National Archives], *LK* 9, 3-4 (1931): 284-315; 10, 1-2 (1932): 92-123; 10, 3-4 (1932): 256-286; 11, 1-2 (1933): 58-92; 12 (1934): 111-154; 13, 1-4 (1935): 233-265; *MHEZ*, 5-7. About Lukinović's criterion for selecting the documents see: *MHEZ*, 5, ii and iii.

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¹ Gregorius Gyöngyösi, *Vitae fratrum eremitarum Ordinis sancti Pauli Primi Eremitae*, ed. Ferenc Levente Hervay (Budapest: Akadémiai Kiadó, 1988), 10, 43-45. There is also a theory that the monasteries did have enough funds to support themselves, but that this was merely used as an excuse by Bishop Paul in order to keep the Pauline eremites under the bishop's ruling. Cf. László Holler, "A new interpretation on the formation-process of the Pauline order. Some remarks on a charter of Paul, bishop of Veszprem from 1263," in *Der Paulinerorden: Geschichte, Geist, Kultur*, ed. Gábor Sarbak (Budapest: Szent István Társulat, 2010), 94-101.

About the formation and acknowledgment of the Pauline Order, see also: Tamás Guzsik, "Kritische Fragen zur frühen Paulinerarchitektur in Ungarn," in Der Orden der Pauliner OSPE: seine Geschichte, seine Aufgaben, seine Stellung, Symposion auf Burg Schlaining vom 16. bis 19. September 1982, eds. Julius Dirnbeck and Wolfgang Meyer (Eisenstadt: Burgenländische Landesmuseum, 1984), 133-154; József Török, "History of the St. Paul Order (A critical study)," Folia Theologica 7 (1996): 179-184; Stanislaw Świdziński, "Einführung in das Thema des Symposiums über die Spiritualität des Paulinermönchtums," in Beiträge zur Spiritualität des Paulinermönchtums, ed. Stanislaw Świdziński (Friedrichshafen: Amt für Geschichte und Kultur des Bodenseekreises, 1999), 11-19; Stanislaw Świdziński, "Organisation und Verfassung des Paulinerordens," in Beiträge zur Spiritualität des Paulinermönchtums, 216-224; Kaspar Elm, "Eremiten und Eremitenorden des 13.

monasteries located in Slavonia,⁴ but that kind of research would be exceptionally vast and timeconsuming. In Croatia, despite a large number of medieval documents, historians conduct very few research studies on the medieval Pauline Order, unlike the case in Hungary. Aside from the Garić monastery, not one of the Slavonian Pauline monasteries has a fitting, contemporary historic monograph, which would be based on a detailed analysis of documents, relevant available literature, and which would include, ideally, definite results of archeological research. This is the reason for focusing on the Garić monastery.

The Garić monastery lays on a square plateau surrounded by water, in a hidden swale near Debelo brdo on Moslavina hill. However, in the vicinity, already in the mid-13th century, there were castles and villages by the names Garić, Moslavina, Gračenica, and Bršljanovac, and as years passed, the number of settlements increased. The monastery also had good road links to all the neighboring villages, and since roads leading to Slavonia, Hungary, Čazma, and Zagreb passed through the area, a Pauline monk could easily set out to any destination he wanted.⁵

The documents mention, as early as 1257, a boundary line with the hermits on Moslavina Hill.⁶ According to the records, the monastic church of The Blessed Virgin Mary was first mentioned in 1273.⁷ In the early 15th century the monastery gained the ranking of a vicarage, and during the course of the century came to share

jurisdiction – along with the monastery in Remete – over the Slavonian Pauline monasteries. The Pauline monastery on Moslavina Hill was active until, at the latest, the 1540s, when the monks moved the archives and most probably left the monastery due to the Ottoman threat. Even though there had been attempts to renew it, this never took place, and because of its good geographical position it remained intact until archeological research started in 2009.⁸

Soon after they were first mentioned in the records, the Paulines from Garić monastery started with the acquisition of estates. It should be emphasized here that during the course of the three centuries while the monastery was active, the Paulines acquired property by either inheriting it or receiving it as a donation, and since the early 15th century also by purchasing or leasing it out.

The first possession they acquired was in close vicinity to the monastery, and in the coming centuries their land spread from the Moslavina hill tops to Lonjsko polje (nowadays a nature park). The records say that at one period of time they also owned a fairly distant estate near the Chapel of The Holy Trinity in the province of Dubrava.⁹ The first recorded donation to the monastery dates from 1273,¹⁰ and the last one to the Garić monastery was carried out on May 28, 1505 by a woman named Jelena and her family. Namely,

⁴ I.e. The Blessed Virgin Mary in Dubica, The Blessed Virgin Mary on Moslavina Mountain, The Blessed Virgin Mary in Remete, St. Benedict in Bakva, St. Peter on Zlat, All Saints in Streza, St. Helen in Šenkovec, The Blessed Virgin Mary in Lepoglava, The Blessed Virgin Mary in Kamensko, and St. Anne in Dobra Kuća. For more details regarding Paulines monasteries in Slavonia, see Milan Kruhek, "Povijesnotopografski pregled pavlinskih samostana" [Historical and topographical overview of Pauline' monasteries], in Kultura pavlina u Hrvatskoj, 1244-1786 [The culture of the Pauline order in Croatia], eds. Đurđica Cvitanović et al. (Zagreb: Globus. Muzej za umjetnost i obrt, 1989), 67-94; Pisk, "Mittelalterliche Paulinerklöster," 431-434; Pisk, "Pavlinski samostan," 29-36; Tajana Pleše, "Arheološki kontekst srednjovjekovnih pavlinskih samostana u sjeverozapadnoj Hrvatskoj" [Archaeological context of late medieval Pauline monasteries in North-western Croatia] (PhD diss., Filozofski fakultet Zagreb, 2010); Pleše, "Medieval Monastic Architecture of the Pauline Order in Continental Croatia," Studia Claromontana 27 (2009): 601-618; Pleše, "Medieval

Pauline Monasteries in North-western Croatia," in *Der Paulinerorden: Geschichte, Geist, Kultur,* ed. Gábor Sarbak (Budapest: Szent István Társulat, 2010), 439-458.

⁵ For more details regarding the Garić monastery see: Pisk, "Pavlinski samostan."

⁶ *CD*, 5, 54: "...inde rivulus idem ducit superius versus orientem ad heremitas."

⁷ CD, 6, 55, 56.

⁸ Cf. Pisk, "Pavlinski samostan," 176-179. For more details regarding the archeological excavations in Garić monastery, see: Pleše, "Arheološki kontekst"; Pleše, "Mikleuška (Bela Crkva), Pavlinski samostan Blažene Djevice Marije – izvještaj o provedenim konzervatorsko-restauratorskim građevinskim radovima u 2013. godini" [Mikleuska (White Church), the Holy Virgin Mary Pauline monastery - a report on the conservation and restoration construction work in 2013] (MS, Archive of the Croatian Conservation Institute), 9-31.

⁹ *CD*, 17, 5.

¹⁰ *CD*, 6, 55, 56.

they had donated to the monastery their parts of the estate Beketinec.¹¹

The Pauline estates included primarily vineyards, plough land, meadows, woods, mills, and fishermen's jetties on the river Lonja. Still, it should be emphasized that the majority of the land that Garić monastery acquired were in fact vineyards. Even the first registered donation to the monastic church in 1273 included vinevards. This document states that a man named Ladislav, in order to save his soul, donated two vineyards "fratribus sancti Augustini de Gresenche apud ecclesiam beate virginis."12 Further donations also very often included vineyards, both cultivated and uncultivated. However, Pauline monks had evidently planted new vineyards on the hills of Moslavina.¹³ The bull that Pope Boniface IX issued in 1404 confirms this.¹⁴

The Paulines from the Garić monastery turned to Pope Boniface IX concerning the issue of paying tithes to the Zagreb diocese.¹⁵ It is deductible from the papal bull (1404) that some parts of the land donated to the Garić monastery were in fact often uncultivated and overgrown, so the Paulines cleared it and planted new vines. A large number of new vineyards was created this way, and the peasants, who did all this work, were obligated to pay the monastery the tithe. For 12

¹⁶ Kamilo Dočkal, "Samostan Blažene Djevice Marije u Gariću" [Monastery of The Blessed Virgin Mary on Garić hill] (MS in the Zagreb Archdiocese Archive), 61, 62; Mályusz, "A szlavóniai," 10, 1-2 (1932), doc. 56; *MHEZ* 5, 215, 216; HR-HDA-647, fasc. 3. 12; Mályusz, "A szlavóniai," 10, 1-2 (1932), doc. 59. years it went on like this, until the Bishop of Zagreb demanded that the tithe be given to his diocese. Thus the Paulines turned to the pope and asked that he allow them to keep the levy to themselves, since they were poor. The pope took every aspect of this into consideration, as well as the fact that "the monks continuously serve Our Lord," and he granted the Paulines the right to claim one-ninth and one-tenth (the tithe), i.e. he denied the Bishop of Zagreb the right to collect the tithe, and he also specified the sanctions for those who would not comply.¹⁶ During the ecumenical council held in Constance in 1417, Pope Martin V issued a new bull, at the request of King Sigismund, confirming the privileges that the Garić Paulines had received in the bull of Pope Boniface IX in 1404.17

Other records also confirm that winegrowing was amongst their primary sources of income.¹⁸ There are some documents from which is evident that there were disputes over unpaid fees for the wine.¹⁹ Also, they had traded wine for real estate, i.e. people paid them for wine by giving their estate as a deposit. Unfortunately, there is no preserved urbarium for the Moslavina monastery, whereas there is one in Streza, fully preserved. It is almost certain that the Pauline peasants had similar duties in both monasteries.²⁰ In the

¹¹ See e.g. HR-HDA-647, fasc. 8, 2; Mályusz, "A szlavóniai," 13, 1-4 (1935), doc. 467.

¹² *CD*, 6, 55-56. During the 13th century, the Paulines are sometimes called the brothers of St. Augustine.

¹³ Even today the Moslavina region is most famous for its wines and wine-growing.

¹⁴ Pope Boniface IX (2 November 1389 – 1 October 1404). For more details regarding Pope Boniface IX see: Bruno Steimer and Michael G. Parker, eds., *Dictionary of Popes and the Papacy* (New York: The Crossroad Publishing Company, 2001), 16, 17.

¹⁵ Church tithe (lat. *decima*) is a one-tenth part of something, paid as a contribution to Catholic priests to support them. According to canon law of the Catholic Church, tithing rests upon the Divine Law (*iuris divini*). Cf. Antun Dabinović, *Hrvatska državna i pravna povijest* [Croatian state and legal history] (Zagreb: Matica hrvatska, 1940), 384, 385, 436, 437; Mihajlo Lanović, *Privatno pravo Tripartita* [Tripartite personal law] (Zagreb, 1929), 264-268.

¹⁷ Mályusz, "A szlavóniai," doc. 163, 10 (1932), 3-4; *MHEZ* 5, 535-537; Pope Martin V (1417-1431). For more details regarding Pope Martin V, see: Steimer and Parker, *Dictionary of Popes and the Papacy*, 97, 98.

¹⁸ According to Fülöpp-Romhànyi, large Pauline monasteries would normally specialize in one of the three largest revenue sources (milling, wheat, or viticulture). Beatrix Fülöpp-Romhànyi, "Die Wirtschaftstätigkeit der ungarischen Pauliner im Spätmittelalter (15.-16. Jahrhundert)," in *Der Paulinerorden: Geschichte, Geist, Kultur*, ed. Gábor Sarbak (Budapest: Szent István Társulat, 2010), 181.

¹⁹ E.g. it was established that before Christmas 1429 Peter and Gaspar's Kastelan peasants drank a substantial amount of monastic wine and paid only for a part of it – with fake money. HR-HDA-647, fasc. 5, 49; Mályusz, "A szlavóniai," doc. 230, 11 (1933), 1-2. See also: HR-HDA-647, fasc. 5, 44 and HR-HDA-647, fasc. 5, 64. For more details regarding the Kastelan family, see Pavao Maček and Ivan Jurković, *Rodoslov plemića i baruna Kaštelanovića od Svetog Duha* [Genealogy of the nobles and barons Castellan de Sancto Spiritu] (Slavonski Brod: Hrvatski institut za povijest, Podružnica Slavonski Brod, 2009).

²⁰ Urbarium of Streza from 1477 is kept in the Archives of HAZU (Croatian Academy of Science and Arts) under the name *Registrum super privilegiarum omnium possessionus*

Urbarium from Streza monastery (which had fewer vineyards in its possession) from 1477, there is an entire chapter (and a large number of provisions) dedicated to vineyards and wine. The provisions regulated the levies in general, but also mention a number of practicalities. The serfs had to give a part of the yield (gornica, a sort of tax paid in wine), which usually meant every ninth bucket of wine must. The Urbarium from Streza also included some advice regarding the harvesting of grapes, which probably is not specific just for Streza. That is to say, a prior had to issue a permit so the harvesting could begin, and first on the schedule were monastery vineyards - while the peasants were sober. It was not relevant for the grapes to be fully ripe. Also, it was suggested that on the third day after the harvest monks take the must from the peasants, so they would not mix it with water and thus ruin the wine.²¹

Apart from vineyards, the monastery made profits from the mills too. According to available sources, the Garić monastery had in its possession at least five mills on the rivers Gračenica and Kutinica.²² In the year 1332 a man by the name Ivan (son of Nikola and grandson of Ugrin) donated to the monastery his part of the estate which included vineyards, forests, waters, meadows, plough land, and one water mill on the river Gračenica in the Gračenica area, near the brook called Stupna.²³ In the year 1391 John Chupor de Monozlo donated to the Pauline monastery in Moslavina a part of his estate Puklenc, which consisted of plough land, meadows, and vineyards, and also one mill.²⁴ In the document dated April 25, 1408, the former ban of Slavonia, Paul de Pechi, donated to the Altar of St. Paul the Apostle (which the ban himself had ordered to be made in the monastic church on the Garić Hill) a part of his land between the river Gračenica and the monastery estate, as well as a mill. With this endowment he wanted to redeem the soul of his sister, Margaret, widow of Nikola de Pukur.25 By an endowment that was drawn up in castro nostro Broschanoch (Bršljanovac) on December 12, 1438, John de Prata from Bršljanovac donated to the Garić monastery two peasant tenements in the village Bršljanovac and two deserted mills on the brook Kutinica (Cothennicha).26

Whether the monks renewed the deserted mills on Kutinica is not known, since we know nothing on the subject except the facts stated in the above-mentioned endowments and in the court records. So for example, the investigative files from 1463 reveal that one of the Pauline mills is called *Kamethnicz.* Namely, the document says that a Pauline miller from the mill Kamethincz was almost murdered, but a crowd that had gathered around saved him.²⁷ We cannot be certain if the mill Kamethincz is in fact one of the five mills mentioned in the documents. It is also impossible to determine the exact turnover from the milling business, but it was clearly profitable, since among

claustri fratrum heremitarum de Streza. It was originally published by Tkalčić, then Josip Adamček, although fairly subjectively, wrote about it in his essay Kultura pavlina u *Hrvatskoj* [The culture of the Pauline order in Croatia], while Mira Kolar Dimitrijević wrote a detailed and impartial analysis. This is the oldest urbarium from the northern part of continental Croatia, but also the only urbarium from which it is evident that the Paulines had run the estate in a secular manner. Hence, the prior acted as a landlord. The Urbarium consists of two parts; the urbarium and a list of estates, and the urbarium itself has six parts: on the earnings of the estates in general; on the villages and peasant tenements directly under monastic rule; on gornica (one-ninth part of wine yield); on forests belonging to the monastery and the earnings from trading wood; on plough-land, meadows, and vineyards cultivated by monks and their peasants, the so-called allodium; on the privileges enjoyed by certain vassals, and on the contracts with foreigners regarding exploiting the land. Cf. Ivan Krstitelj Tkalčić, "Urbar bivšeg pavlinskog samostana u Strezi" [Urbarium of the former Pauline monastery in Streza],

Vjesnik Kraljevskog Hrvatsko-slavonsko-dalmatinskoga Zemaljskoga arkiva 5 (1903): 201-219; Josip Adamček, "Pavlini i njihovi feudalni posjedi" [The Paulines and their feudal estates], in *Kultura pavlina u Hrvatskoj, 1244-1786,* 48-50; Mira Kolar Dimitrijević, "Urbar pavlinskog samostana u Strezi 1477. godine" [Urbarium of the Pauline monastery in Streza 1477], *Podravina* 2-3 (2003): 103-123.

²¹ Kolar Dimitrijević, "Urbar pavlinskog samostana," 113.

²² There are mentions in the literature that the Garić monastery possess only one mill (located at the Gračenica stream). Fülöpp-Romhànyi, "Die Wirtschaftstätigkeit der ungarischen Pauliner im Spätmittelalter," 190.

²³ CD, 10, 2-3; cf. DAP3, 316.

²⁴ CD, 17, 335-336; Cf. DAP, 3, 316.

²⁵ Mályusz, "A szlavóniai," 10, 1-2 (1932), doc. 77; *DAP*3, 318; *MHEZ* 5, 314, 315.

²⁶ HR-HDA-647, fasc. 5, 98; Mályusz, "A szlavóniai," 11, 1-2 (1933), doc. 263.

²⁷ HR-HDA-647, fasc. 6, 19; Mályusz, "A szlavóniai," 12, 1-4 (1934), doc. 346.

the preserved documents we often find complaints regarding the mills.²⁸

The Moslavina Pauline monastery owned a number of peasant tenements and hamlets, as well as manor houses in some villages – in Romačin Dol, Beketinec, Kosovac, and Remetinec.²⁹ In the monastic settlement of Ljubljana, the Garić Paulines leased out their wine cellar, so it is clear that this was one of the ways of supporting themselves in other villages as well.³⁰ Unfortunately, the documents do not reveal the extent of these undertakings.

A devise was one of the common ways of obtaining land and other material possessions for the Pauline monastery on Moslavina Hill, yet it remains unknown just how much the monastery profited from the deaths of its benefactors.³¹ This goes particularly for material possessions, because if no last will and testament were preserved, or if there was no record of a dispute in case the devisor's will was not carried out, the documents tell us nothing. Among the documents from the Garić monastery there are only three fully preserved last will and testaments: those of Helen, the chaplain of the Garić castellan Stephen, and Stephen Chupor de Monozlo.³²

Helen left the estates located near Kutinica and the Lukačevec estate to the Garić monastery

and to the St. Michael the Archangel church in Podgorje, along with the money left to her by her late husband Korard. She also mentioned that whoever legally owned these estates must pay, for the sake of her own and Korard's souls, a compensation of 20 gold forints to the brother hermits and a compensation of five gold forints to the St. Michael the Archangel church. In the meantime, the aforementioned estates could be used as their own by the brother hermits and Pastor Egidius. In addition, she had left the monks three books, a tunic, an ox, a cow, and one chest. ³³

Stephen left the Garić Paulines four forints and a breviary (with the option that the chaplain pastor of St. John, Barnabas, could purchase it for the price of three forints). He also left to the monastery a good tunic and a horse (valued at four forints), as well as an additional forint for burial preparations as he has chosen the monastery as his final resting place. To the Pauline brothers George and Fabian he left one forint, while George received a pillow with a leather cover as well. Three regular and three decorative pillows were left explicitly to the vicar of the Garić monastery, who was also entrusted to decide who would receive a hat, two sheets, and other items.³⁴

According to the testament of Stephen Chupor de Monozlo he left the Kosovac estate to

²⁸ E.g. *CD*, 12, 139, 140; *CD*, 16, 398, 399, 400; Mályusz, "A szlavóniai," 9, 3-4 (1931), doc. 21; HR-HDA-647, fasc. 5, 123; Mályusz, "A szlavóniai," 11, 1-2 (1933), doc. 293; HR-HDA-647, fasc. 4, 12; Mályusz, "A szlavóniai," 10, 1-2 (1932), doc. 111. Fülöpp-Romhányi does not exclude the possibility that the Paulines led certain disputes regarding mills in order to get rid of the competition. On the milling and disputes regarding mills, see: Fülöpp-Romhányi, "Die Wirtschaftstätigkeit der ungarischen Pauliner im Spätmittelalter," 155-162.

²⁹ Cf. Pisk, "Pavlinski samostan," 80-100.

³⁰ HR-HDA-647, fasc. 6, 61; Mályusz, "A szlavóniai," 12, 1-4 (1934), doc. 398.

³¹ The bibliography about last wills and inheritance can be found in: Zoran Ladić, "Oporučni legati *pro anima* i *ad pias causas* u europskoj historiografiji. Usporedba s oporukama dalmatinskih komuna" [Legacies *pro anima* and *ad pias causas* in European historiography. Comparison with the wills of Dalmatian communes], *Zbornik Odsjeka za povijesne znanosti Zavoda za povijesne i društvene znanosti Hrvatske akademije znanosti i umjetnosti* 17 (1999): 17-29. About legal aspects of inheritance and wills in Slavonia, see: Lujo Margetić, *Hrvatsko srednjovjekovno obiteljsko i nasljedno pravo* [Croatian medieval family and inheritance law] (Zagreb: Narodne novine, 1995), 275-339; Lujo Margetić, *Prikazi i diskusije* [Reviews and discussions] (Split: Književni krug, 2002), 408-

^{424;} Lujo Margetić, *Srednjovjekovno hrvatsko pravo: obvezno pravo* [Croatian medieval law: law of obligations] (Zagreb, Rijeka: HAZU, 1997), 319-377; Lujo Margetić, *Zagreb i Slavonija: izbor studija* [Zagreb and Slavonia: a selection of studies] (Zagreb, Rijeka: Adamić, 2000), 251-350; Lujo Margetić and Magdalena Apostolova Maršavelski, *Hrvatsko srednjovjekovno pravo: vrela s komentarom* [Croatian medieval law: sources and commentary] (Zagreb: Narodne novine: Pravni fakultet u Zagrebu, 1990), 124-126.

³² The main literature about the kindred Chupor de Monozlo can be found in Pavao Maček, "Rod biskupa Demetrija Čupora. Prilog rodoslovlju Čupora Moslavačkih" [Family of bishop Demetrius Chupor], *Tkalčić: godišnjak Društva za povjesnicu Zagrebačke nadbiskupije* 12 (2008): 277-313; Zrinka Nikolić Jakus, "The Čupor of Monoszlo – an Example of Noble Kindreds in the Area between the Sava and Drava Rivers," in *Slovakia and Croatia*, 231-237; Zrinka Nikolić Jakus, "Obitelj Čupor Moslavački" [The Čupor of Monoszlo], *Radovi Zavoda za znanstvenoistraživački i umjetnički rad u Bjelovaru* 4 (2011): 269-300.

³³ HR-HDA-647, fasc. 5, 120; Mályusz, "A szlavóniai," 11, 1-2 (1933), doc. 289, 290.

³⁴ HR-HDA-647, fasc. 7, 24; Mályusz, "A szlavóniai," 13, 1-4 (1935), doc. 429.

the Garić monastery, as well as 20 forints. Some literature suggests that the Garić Paulines received a huge amount of money in this will, 600 forints to be precise.³⁵ However, Stephen Chupor left the aforementioned amount to the nearby Franciscan monastery of the Holy Virgin Mary in Varallya.³⁶

Others testaments can be reconstructed mainly from files on registering property, or from documents about legal battles - if the testament was being disputed.³⁷ Last wills and testaments were a way the monastery could get land, peasant tenements, movable assets (things and animals), but also money. Secular and ecclesiastical persons from different social groups gave endowments to the monastery. For example, a chaplain of the Garić castle left to the Garić monastery, among other things, four forints, while Zagrebian bishops John Albeni and Osvald Thuz each left 50 forints.³⁸ These are the only fully preserved last wills of the Zagrebian bishops from the 15th century (at the same time the oldest preserved), so it is safe to say that Zagrebian bishops had a tendency to remember the Garić monastery on their death bed.

Aside from the high ecclesiastic officials, the poorest social groups were inclined to leave the care of their afterlife in the hands of Paulines from the Garić monastery. There is only one known case of a peasant leaving his property to the Church in Slavonia, and it is noted that he left it precisely to the Garić white monks: in 1411, Jacob, son of Marijaš (a serf to the Garić Paulines) devises to the monastery his vineyard, in his name and in the name of his wife Ana.³⁹

Andrew Kapitan de Desnica's widow, Margaret, wanted to leave to the monastery an especially large endowment. But, disgruntled relatives prevented the execution of the last will, so the Paulines filed a lawsuit. According to their complaint, it is evident that they had suffered damage when it came to property and, in addition, 1,000 forints. Namely, Margaret's relatives took from the house, among other things, five barrels of wine, two barrels of vinegar, 100 bags of salt, 20 iron plates, 30 buckets of flour, 40 buckets of grains, and a large amount of food worth around 100 forints. Apart from that, they also took a vast number of wheat sheaves, 50 buckwheat sheaves, 30 sorghum sheaves, 50 oat sheaves, 17 oxen, 18 cows, five bull calves, three two-year old calves, three one-year old calves, six horses with two foals, 160 geese, 50 ducks, eight peacocks, 200 wagons of hay, 1,200 buckets of wine, 28 empty barrels, 19 decanters, and five cupboards. They also confiscated the money for paying the levies to the state, amounting to 200 gold forint coins. Whether the Paulines received any compensation, the documents do not say.40

One of the ways for a monastery to become wealthier was by conducting mass for the souls of still living benefactors. One can only guess how much money those individuals paid for this service. For instance, it is known that the Paulines bought one estate for 330 forints, and paid for it from the fund for holding masses for the Chupor-Monozlo family.⁴¹ This is only one example, one cannot guess the exact number of such funds, or the amount of money held there.

Related to this, and also worth mentioning, is the granting of indulgences. The Garić vicar, Stephen, turned to the Roman Curia regarding the privilege of granting indulgences. In March 1471 the Roman Curia granted the vicar a right to grant (a plenary) indulgence for a period of 100 days to all those who come to feast days of the Garić church (especially Marian feasts)⁴² and contribute financially to the renovation of the buildings and

³⁵ Fülöpp-Romhányi, "Die Wirtschaftstätigkeit der ungarischen Pauliner im Spätmittelalter," 169.

³⁶ HR-HDA-647, fasc. 7, 44, 45; Mályusz, "A szlavóniai," 13, 1-4 (1935), doc. 449, 450, 452.

³⁷ E.g. HR-HDA-647, fasc. 6, 37; Mályusz, "A szlavóniai," 12, 1-4 (1934), doc. 366; HR-HDA-647, fasc. 6, 43; Mályusz, "A szlavóniai," 12, 1-4 (1934), doc. 374 and 12, 1-4 (1934), doc. 375.

³⁸ Ivan Krstitelj Tkalčić, ed., *Povjestni spomenici slobodnog kraljevskog grada Zagreba = Monumenta historica liberae regiae civitatis Zagrabiae metropolis regni Dalmatiae, Croatiae et Slavoniae*, vol. II (Zagreb, 1894), 72-74, 516-521.

³⁹ HR-HDA-647, fasc. 4, 2.

⁴⁰ HR-HDA-647, fasc. 6, 43; Mályusz, "A szlavóniai," 12, 1-4 (1934), doc. 374. For more details regarding the Kastelan family see: *Hrvatski biografski leksikon* [Croatian biographical lexicon], eds. Nikica Kolumbić et al. (Zagreb: Leksikografski zavod Miroslav Krleža, 1983-2009), 7: 42.

⁴¹ HR-HDA-647, fasc. 7, 18 and 20; Mályusz, "A szlavóniai," 13, 1-4 (1935), doc. 423, 424.

⁴² "...in nativitatis, annunciacionis et assumptionis beate Marie virginis, visitacionis eiusdem Marie ad Helisabeth et ipsius eeclesie dedicacionis festivitatibus et celebritatibus."

procurement of goods and supplies for the church. $^{\!\!\!\!\!\!\!\!\!^{43}}$

The monks were undoubtedly making money from the annual fair outside the monastery. It was the most important feast day, dedicated to the main altar in the monastic church. The fair outside the Garić monastery was organized annually on March 25, or the day before, to celebrate the Annunciation.⁴⁴ Unfortunately, the terms of participation at the fair are unknown. According to the Urbarium found in Streza, it is known that the villici had, for example, the right to choose pots from the exhibitors first, but had to show these to the Paulines, who kept the right to take some of the pots they wanted.⁴⁵ Similar rules probably applied in case of the Garić fair, too.

Conclusion

The Garić monastery, in its 300 years of existence, evolved from a small and poor hermits' community to a prominent landlord, having in its possession numerous properties: plough land, meadows, forests, vineyards, fish ponds, and mills. They gained land and other possessions mostly from endowments/donations or by inheritance. Some of the contributors conditioned their donations by asking that a mass be held for their soul, or served at a specific altar. In the second half of the 15th century the Paulines also begin buying estates and land, and prior to that, they regularly obtained real estate by leasing it out. All this is evidence that the monastery had enough money at its disposal.

They were earning most of their money from vineyards, because aside from having enough wine for their needs, they were also selling it. Undoubtedly, the milling business followed suit.

The Moslavina Pauline monastery owned a number of peasant tenements and hamlets, and manor houses in some of the villages. They would sometimes lease out some of the manor houses, or parts of these (for example, the basement), and in this way increased their wealth. Besides land and estates, the monastery was endowed with various movable assets and considerable amounts of money. The donators came from very different backgrounds and social classes: there were peasants, chaplains, middle and lower nobility, but also high ecclesiastical officials such as the Bishop of Zagreb, or Tiburcius, a personal doctor to King Béla IV. Still, some of the donations, particularly big endowments, were often disputed and the Paulines had to go through long legal battles, with uncertain outcomes.

Profit from the annual fair outside the monastery is also worth mentioning. Unfortunately, what the profit amounted to is unknown. It is also not known to whom the Paulines granted indulgence for a period of 100 days after donating to the Church, as it remains unknown how much money they gave. It is presumed that the amounts differed, depending on the social status and class of the donator, as was the case with other endowments.

Comparative studies on all ten of the Pauline monasteries in Slavonia would help to improve the understanding of the issue of monastic wealth and how it was attained. However, despite a large number of preserved documents, the Pauline monasteries in Croatia, unfortunately, are not in the focus of interest of Croatian Medievistics, so we shall have to wait a while for new facts and parallels, further conclusions, and comparisons to Hungarian monasteries.

HR-HDA-650 (Pavlinski samostan Lepoglava), fasc. 21, 15; Mályusz, "A szlavóniai," 3, 1-4 (1925), doc. 53 (Lepoglava).

⁴³ HR-HDA-650, fasc. 21, 15; Mályusz, "A szlavóniai," 3, 1-4 (1925), doc. 53 (Lepoglava). The document was written during papacy of Paul II. None of the authors who wrote on the Pauline monastery had used it for reference. They clearly overlooked it, since it is preserved among a set of preserved

documents from Lepoglava. About the indulgences, see: Dominik Budrović, "Pregled obnovljenih oprosta" [Overview of the indulgences], *Bogoslovna smotra* 39, 2-3 (1970): 203-204.

⁴⁴ HR-HDA-647, fasc. 5, 105; Mályusz, "A szlavóniai," 11, 1-2 (1933), doc. 271.

⁴⁵ Kolar Dimitrijević, "Urbar pavlinskog samostana," 115, 116.

THE SPIRITUAL ENVIRONMENT AND ARTISTIC PATRONAGE OF SOUTH BOHEMIA IN THE 14TH CENTURY

ZLATA GERSDORFOVÁ^{*}

South Bohemia was a fascinating area within the Kingdom of Bohemia. This region borders Bavaria and Austria and due to this fact, different cultural influences met here in the Middle Ages and beyond.¹ South Bohemia also holds an important position in cultural activities of the Kingdom of Bohemia thanks to the fact that this area has not been fragmented neither administratively nor politically, unlike other regions. There were compact territorial possessions of the House of Vítkovci² (fig. 1). This family belonged to the oldest and the most significant dynasties in the Kingdom of Bohemia; heraldry of individual house branches can even be found in the arm gallery of the Lauf Castle near Norimberk. We can see very often that this family reached for the crown in Czech history. Among the most significant branches of this house there is a family of Český Krumlov and their heirs the Rosenberg family. Thus, the residential town of the Rosenberg family was Český Krumlov for three hundred years (fig. 2). All the branches of the House of Vítkovci had a rose in the coat of arms; the Rosenberg family had a red rose in a silver field.

During the thirteenth and fourteenth century some significant monasteries closely connected to the Rosenberg family were built in South Bohemia. They were Cistercian monasteries in Vyšší Brod (1259), Zlatá Koruna (1263) and also the monastery of the Poor Clares and of the Conventual Franciscans in Český Krumlov (1357) and the monastery of the Augustinian canons in Třeboň (1367). While they were not the only foundations in the Rosenberg dominion, those four monasteries played an important role in South Bohemia during the Middle Ages.

The monastery in Vyšší Brod (fig. 3) was founded by the one of the most significant members of the House of Rosenberg, Vok I, allegedly as thanks for rescue from drowning in a river. In fact, this Cistercian monastery was founded as a family mausoleum for the family of Krumlov and the Rosenberg family.³ The last member of the family, Petr Vok, was also buried there in 1611.⁴ It is a working Cistercian monastery so far, settled by monks from Wilhering in Austria. The Vítkovci family was linked to Austria in many ways; they were connected with the Austrian nobility by many marriages particularly in the thirteenth and fourteenth centuries and their homesteads and dominions were situated on both sides of today's borderline.⁵

The foundation of the monastery in Zlatá Koruna was initially the monarch's initiative.⁶ This Cistercian monastery was originally called "Sancta corona" after a thorn relic, from Christ's crown of thorns, which was donated to the monastery. Allegedly it was founded in the middle of the territorial possessions of the Vítkovci family to moderate their territorial expansionism. The mother monastery was the monastery of Heiligenkreuz in Austria. This is the time when the Czech king Přemysl Otakar II also rules over

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¹ Jiří Kuthan, "Jižní Čechy. Kulturní provincie na pomezí země" [South Bohemia. Cultural province on the border of the country], *Jihočeský sborník historický* 62 (1993): 30-49.

² Matthias Pangerl, "Die Wittigonen. Ihre Herkunft, ihre ersten Sitze und ihre älteste Genealogie," *Archiv für österreichische Geschichte* 51 (1873): 79-94; Vratislav Vaníček, "Vzestup rodu Vítkovců" [Rise of the Vítkovci family], *Folia historica bohemica* 1 (1979): 93-108.

³ Milan Hlinomaz and Vlastimil Kolda, "Vyšebrodský klášter – nekropole Rožmberků" [Vyšší Brod Monastery - Necropolis of the Rožmberk family], *Jihočeský sborník historický* 42 (1973): 77-82.

⁴ Zuzana Thomová, "Lokalizace a nedestruktivní průzkum rožmberské hrobky v cisterciáckém klášteře Vyšší Brod" [Localization and non-destructive survey of Rosenberg vault in the Cistercian Monastery], in *Rožmberkové: rod českých velmožů a jeho cesta dějinami* [The Rosenbergs family: czech nobles and its journey through the history], ed. Jaroslav Pánek (České Budějovice: Národní památkový ústav, 2011), 242-245. ⁵ Vratislav Vaníček, "Die Familienpolitik der Witigonen," in *Böhmisch-österreichische Beziehungen im 13. Jahrhundert*, eds. Marie Bláhová and Ivan Hlaváček (Prague: Charles University in Prague, 1998), 85-106.

⁶ Martin Gaži, ed., *Klášter Zlatá Koruna: Historie, památky, lidé* [Monastery of Zlatá Koruna: History, monuments, people] (České Budějovice: Národní památkový ústav, 2007).

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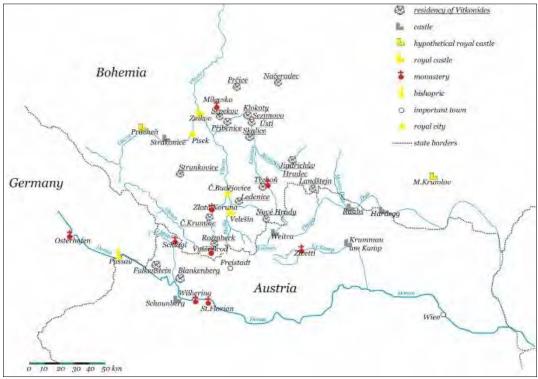


Fig. 1. The possessions of the House of Vítkovci in South Bohemia in thirteenth century (map by Zlata Gersdorfová).



Fig. 2. Český Krumlov. The residential town of the Rosenberg family (photo by V. Isajenko).

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the Austrian lands and strives for the Kingdom of Hungary. Maybe that is why it was the daughter house of an Austrian monastery. During one revolt of the Vítkovci family against the king Přemysl Otakar II (when the Vítkovci family actively supported the Austrian party) in the thirteenth century the monastery was demolished in the wars. ⁷ Despite being a royal foundation, the monastery was in the sphere of cultural influence of the Rosenberg dominion. The Rosenberg family practically gained direct control over the monastery during the Hussite Wars when they appropriated most of its possessions.

In Český Krumlov, the residential town of the Rosenberg family, the monastery of the Poor

Fig. 3. Vyšší Brod. Cistercian monastery (photo by Zlata Gersdorfová).

Clares and of the Conventual Franciscans was founded as a double monastery. ⁸ The huge premises contained monasteries for men and women and a house for beguines (figs. 4, 5). These monasteries in Český Krumlov were some of the last foundations of these orders in Bohemia. It was the only monastic area in the town and it had an irreplaceable social role. The festival of displaying relics was held here annually and there is quite an exceptional document about it which has survived to present. This monastery was functionally interconnected to the Rosenberg family residence

⁷ Lukáš Reitinger, "Sporné místo Chrumnowe a "zkáza Vítkovců" roku 1277" [The disputed place of Chrumnowe and "the doom of the Witigons" in 1277], in Český Krumlov: od rezidenčního města k památce světového kulturního dědictví [Český Krumlov: from the residence town to the World heritage site], ed. Martin Gaži (České Budějovice: Národní památkový ústav, 2010), 57-76.

⁸ Helena Soukupová, "Klášter minoritů a klarisek v Českém Krumlově" [Minoriten- und Klarissinnenkloster in Český

Krumlov/Krumau], *Průzkumy památek* 6 (1999): 69-86; Zlata Gersdorfová, "Theatrum fidei Crumloviensi: sakrální prostory Českého Krumlova ve světle slavností ukazování ostatků v oktáv svátku Božího Těla" [Theatrum fidei Crumloviensi. The sacred spaces of Český Krumlov in the light of the relics-showing in the Feast of Corpus Christi] (PhD diss., Charles University in Prague, 2013).

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Fig. 4. Český Krumlov. The monastery of the Poor Clares and of the Conventual Franciscans (photo by Zlata Gersdorfová).

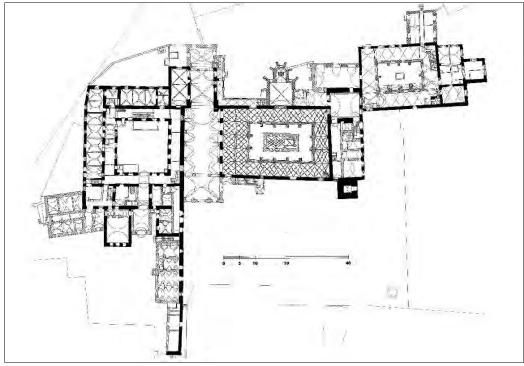


Fig. 5. Ground plan of the monastery of the Poor Clares and of the Conventual Franciscans in Český Krumlov (Soukupová, "Klášter minoritů," 70). and its location in the town plan is also very relevant (see the next text in this volume).

The last important foundation worth mentioning is the foundation of the Augustinian monastery in Třeboň, which is one of the first monasteries of this order in the Kingdom of Bohemia. The Rosenberg family founded it immediately after they had gained Třeboň in 1367.⁹ Magnificent works such as the Master of the Třeboň Altarpiece were designed for this monastery; the Master was one of the most significant European Gothic painters of the second half of the fourteenth century.

The situation for learning about medieval art in South Bohemia (as well as in Bohemia in general) is complicated by the fact that only little work from that time is still in existence. Most of it was destroyed during the Hussite Wars, when radical Utraquists were destroying church furnishings, or they were lost during next centuries. Another problem is the absence of written sources when it is not always possible to link an artist to a particular piece of work, since we know practically nothing about the person except for their name. Even interpreting the sources themselves is very difficult, since it is possible to interpret any representation (from a picture and all its different forms to sculpture work) as "pulchro opere imago".10 While we do not know the name of any medieval sculptor from the Rosenberg dominion area, we have records of several painters. A priest and painter from the Monastery of Augustinian Canons in Třeboň is mentioned in 1404^{11} and there is also a painter Jan in Třeboň in the second half of the fifteenth century.12 Records of painters Jindra and Vít from Český Krumlov come from the same time period.¹³

However, we have no records of this kind at all from the fourteenth century. Furthermore, an attempt to link the work of the Master of Vyšší Brod cycle or the Master of the Třeboň Altarpiece, two the most significant personalities of Czech art of the fourteenth century, to a particular artist's name has been unsuccessful so far.¹⁴ There are only a few sculptures documented from the fourteenth century, usually from indulgence documents. These are a pieta and Madonna sculpture from the Minorite Monastery (the Monastery of Conventual Franciscans) in Český Krumlov, a sculpture and a picture of the Mother of God from a Krumlov castle chapel and from the monastery in Vyšší Brod. We are only able to link these mentioned pieces of work to particular sculptures by coincidence - a pieta from the Krumlov monastery, the so called "Krumlovská madona" and several sculptures from the round of the Master in question. ¹⁵ This is largely a coincidence since determining the origin of these surviving pieces of art is very difficult and this issue lies at the brink of artistic-scientific research which mainly deals with style analysis.

Petr I of Rosenberg, a member of the elite of the Kingdom of Bohemia, was a very important person in South Bohemia in fourteenth century.¹⁶ He held the position of highest chamberlain and judge of the Kingdom of Bohemia. One of his sons fell with Jan Lucemburský in 1346 in the Battle of Crécy. Petr I married Viola Těšínská, a widow of the king Václav III, which shows us that he was one of the most significant Czech lords. But he only had children with his second wife Kateřina,

⁹ Jaroslav Kadlec, *Klášter augustiniánských kanovníků* v *Třeboni* [Convent of the Augustinian Canons in Třeboň] (Prague: Karolinum, 2004).

¹⁰ More on this topic: Milena Bartlová, "Imago: k pojetí obrazu v předhusitské a husitské době" [Imago. On the concept of image during the Pre-Hussite and Hussite period], *Umění* 40 (1992): 276-279.

¹¹ Kadlec, *Klášter augustiniánů*, 73-74.

¹² František Mareš and August Sedláček, Soupis památek uměleckých a historických v Království českém 10: Politický okres Třeboňský [The inventory of monuments and historical art in the Czech Kingdom 10: the district Třeboň] (Prague, 1900).

¹³ František Mareš, "Materiálie k dějinám umění, uměleckého průmyslu a podobným" [Materials to the history of art, art industry and similar], *Památky archeologické* 16 (1893-1895): 146.

¹⁴ Latest summary of attempts to identify the Master of the Třeboň Altarpiece is by Jan Royt, *Mistr Třeboňského oltáře* [Master of the Třeboň altarpiece] (Prague: Karolinum, 2006).
¹⁵ Roman Lavička deals with medieval sculpture from the Rosenberg dominion in detail: Roman Lavička, "Středověké sochařství v rožmberském dominiu" [Medieval sculpture in the Rosenberg possession], in *Rožmberkové*, 530-543.

¹⁶ Anna Kubiková, *Petr I. z Rožmberka a jeho synové* [Peter I. of Rosenberg and his sons] (České Budějovice: Veduta, 2011).



Fig. 6. Petr I of Rosenberg. Detail of the altarpiece (painting "Nativity") from Master of Vyšší Brod, around 1350 (Pešina, *Mistr vyšebrodského cyklu*, Tab. 7).

whose origin is shrouded in mystery to this day.¹⁷ It was her and her sons who finished the founding work of Petr I. During his reign the administrative system of dominium was consolidated. It was his connection with the reigning dynasty that allowed an extraordinary cultural boom in South Bohemia because the pieces of art, which were designated for the monasteries and residences in South Bohemia, belong to the top examples of the Gothic art of this period in the Kingdom of Bohemia.

Petr I ordered a magnificent collection of panel paintings which is known as the cycle of the Master of Vyšší Brod. The donor himself is pictured there with a model of the monastery in his hands. Although Petr I did not found the monastery, he supported it very generously. He is pictured wearing a ducal cap and an ermine cloak - the clothing designated only for the highest aristocracy (fig. 6). After all, his position as Petr of Rosenberg, "*primus inter pares*," was confirmed in a document of Jan Lucemburský. Petr I died in 1347 and it is said that before his death he retired to the monastery in Vyšší Brod.¹⁸ The year of his death is considered as a date of origin of the work of the Master of Vyšší Brod.¹⁹ It is a cycle of 9 paintings which show joyful events of Christ's life (Annunciation, Nativity, and the Adoration of the Magi), Passion scenes (Christ at the Mount of Olives, Crucifixion, and Lamentation) and mystical scenes (Resurrection, Ascension, and Pentecost). These paintings formed an unknown composition. While it could have been an altar, it also could have been a choral divider²⁰ or the panels could have been on the inner or outer side of choral pews.²¹ A distinct Marian iconography suggests that the panels were designated for a monastic church dedicated to the Assumption of Mary. Other pieces of art which are attributed to this Master suggest that his sphere of activity was probably at the court in Prague. We do not know his origin, but a restoration and a style analysis confirmed a link to an Italian training for painters. Together with Master Theodoric of Prague, this

¹⁷ There are speculations that she may have come from the dynasty of Vartenberk or Prüschenk of Harddegg. Anna Kubíková deals with this matter in detail: Anna Kubíková, "K původu druhé manželky Petra I. z Rožmberka, paní Kateřiny" [On the parentage of Catherine, the second wife of Peter I of Rosenberg], in *Per saecula ad tempora nostra: sborník prací k šedesátým narozeninám prof. Jaroslava Pánka* [*Per saecula ad tempora nostra:* Proceedings of the sixtieth birthday of prof. Jaroslav Panek], eds. Jiří Mikulec et al. (Prague: Historický ústav Akademie věd ČR, 2007), 112-117.

¹⁸ This may be a trope of the chronicles which was embodied in historic tradition by a Rosenberg archivist V. Březan – see: Václav Březan, *Rožmberské kroniky krátký a summovní výtah od Václava Březana* [The short summary of the Rosenberg chronicles from Václav Březan], ed. Anna Kubíková (České Budějovice: Veduta, 2005).

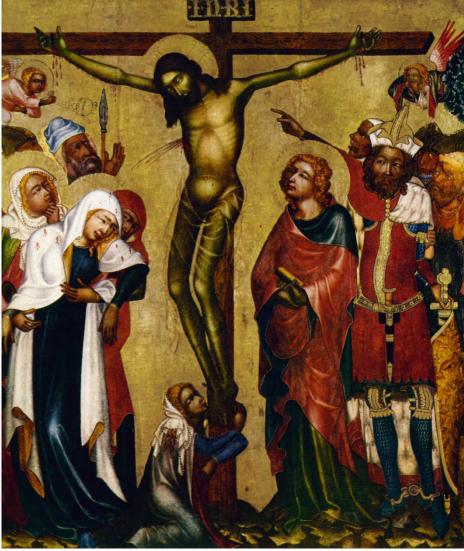
¹⁹ Jaroslav Pešina, *Mistr vyšebrodského cyklu* [(Master of the Hohenfurth Cycle] (Prague: Odeon, 1987), 11-13.

²⁰ This opinion is supported mainly by Jana H. Hlaváčková, although it is not generally accepted by the academic community without objections. See: Jana H. Hlaváčková, "Panel Paintings in the Cycle of the Life of Christ from Vyšší Brod," in *King John of Luxembourg (1296-1346) and the Art of His Era*, ed. Klára Benešovská (Prague: Koniasch Latin Press, 1998), 244-255.

²¹ For the permanent exhibition in the monastery in Vyšší Brod was made perspective reconstruction of images placement in the interior of the monastery church. Based on the spatial aspects and specifics of Cistercian liturgy it was found that were only two possibilities of paintings locations – on a choral divider or as the main altar. The author of these drawings is the author of this paper.

painter defined the basic development of the Czech art in the middle of the fourteenth century.

In this connection, the festival of displaying relics which is held annually in Český Krumlov at the Feast of Corpus Christi seems rather noteworthy. We can find an interesting detail in the Master of Vyšší Brod's Crucifixion (fig. 7). It is the blood running from Christ's side which stains the Virgin Mary's veil.²² We can also find a similar iconographic motif in the picture of Crucifixion from Vyšší Brod (fig. 8) which is in style related and technique to the so-called panel from Protivín (fig. 9), which will be mentioned later. Both pictures seem to originate from the same workshop. ²³ Given the strong emphasis put on the Eucharist, the panel of Crucifixion from Vyšší Brod (if it really was meant for the monastery in Vyšší



Brod) may have been a part of the Corpus Christi altar, which was quite common in Cistercian monasteries. Another possibility is that it may have been placed on the True Cross altar, which was usually established behind a rood screen in Cistercian monasteries. It is not a coincidence that a motif of blood on Mary's veil appears in this panel as well as in the Master of Vyšší Brod's cycle.

The Rosenberg family owned this veil as a relic and it was annually shown at the feast along with other relics.

Fig. 7. Master of Vyšší Brod – Crucifixion. Tempera on wood, around 1350 (Pešina, *Mistr vyšebrodského cyklu*, Tab. 35).

Even though a liturgical calendar of Český Krumlov did not deviate from similar celebrations held in bigger towns, this Feast of Corpus Christi was exceptional in many regards. In the National Library in Prague there is a manuscript which describes this feast in detail. It is written in the German language and is a detailed description of one particular festival (probably from the summer

²² This motif is derived from the text of Pseudo-Anselmus' Dialogue between St. Anselmus and Virgin Mary. See development of this motive: Jan Royt, *Slovník biblické*

ikonografie [Dictionary of biblical iconography] (Prague: Karolinum, 2007), 207.

²³ Royt is inclined to this opinion. Jan Royt, "Mistr Třeboňského oltáře," in *Rožmberkové*, 472-476.



Fig. 8. Crucifixion of Vyšší Brod. Round of the Master of the Třeboň Altarpiece? Tempera on wood, around 1380 ((Royt, *Mistr Třeboňského oltáře*, Tab. 68).

1393) which is written in the final pages of *necrologium* of the Minorite Monastery (the

Monastery of Conventual Český Český Krumlov.²⁴ Without this manuscript we would only know these celebrations as a reference from some indulgence documents. These documents are related either to certain relics (thorns from the Christ's crown, the Last Supper Tablecloth, the True Cross, Virgin Mary's bloodied veil) or certain sacral premises (a castle chapel, a hospital, and a monastic church).²⁵ Visitors of these feasts were given indulgences so high that they were equal to a pilgrimage to Jerusalem which shows the importance and the extent of the festivals. When the celebrations were being held, the liturgical areas of the monastery, the town (the parish church) and the noble residence (the castle chapel) were connected in a very interesting way. The celebrations were held from the early 50s of the fourteenth century up to 1417, when they were held for the last time probably because of the increase in supporters of Utraquism in the South Bohemian dominion and their different perception in regards to doctrinal matters and respect for relics.²⁶

On the eve of the festival, the remains (in valuable reliquaries) were transferred from the Minorite Monastery, to the Church of Corpus Christi.

²⁴ The manuscript is generally regarded as a set of rules which stated course of the celebrations. Its name, *Ordo ostendendarum reliquiarum Crumlovii in festo corporis Christi cum proclamationibus bohemicis et germanicis* is a little misleading. Apparently, this is a later title based on the content of the manuscript; however, it is not necessarily true since the first page of the manuscript (and thus a title) is absent and the record about course of the celebration begins in the middle of a sentence. This manuscript is a part of a *necrologium* of the Minorite Monastery (the Monastery of Conventual Franciscans) *Martyrologium praecedente calendario Necrologium monasterii fratrum minorum sancti*

Francisci Crumloviensis continente of which final fol. 139r-141r describe, as mentioned before, course of celebrations of showing relics. Specific dating proceeds from a direct notion of Urban's VI Papal bull in fol. 140v on which basis an indulgence document for the church in Český Krumlov was issued by a Prague archbishop Jan of Jenštejn on 3.1.1392. ²⁵ Gersdorfová, "Theatrum fidei," 40-41.

²⁶ For example, different perception of Virgin Mary's veil relic by Catholics and Utraquists was described by Šroněk "The Veil of the Virgin Mary: Relics in the Conflict between Roman Catholics and Utraquists in Bohemia in the fourteenth and fifteenth Centuries," *Umění* 57 (2009): 118-139.



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Fig. 9. Panel of Protivín. Madonna between St. Bartholomew and St. Margaret. Round of the Master of the Třeboň Altarpiece? Tempera on wood, around 1390 (Royt, *Mistr Třeboňského oltáře*, Tab. 69).

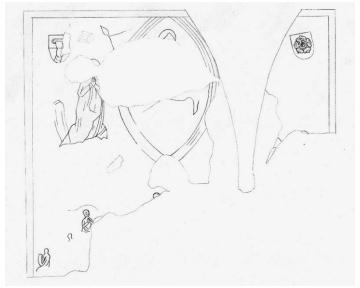


Fig. 10. Wall painting in the cloister of the monastery of Conventual Franciscans in Český Krumlov, around 1480 (drawing by Zlata Gersdorfová).

The next day there was a procession coming out of the monastic church and going through the town to the parish church and then coming back to the cemetery nearby the monastery where the remains were announced in Czech and German. Then the indulgences were bestowed. Pilgrims were divided into four groups - prelates left for celebrating mass, the second group went to the monastic convent, the third stayed at the cemetery where they attended preachments and the nobles probably went to the castle chapel. During these celebrations, the convent of the Minorite Monastery was open to laymen, which is very unusual. In the cloister, medieval wall paintings are preserved in many layers and they definitely prove that they were presented to the general public. The only completely uncovered wall painting is on the west wall in the northwest part of the convention. It is an iconographic motif deesis with symbols of an alliance between the Rosenberg family and the Lords of Harddegg (fig. 10). Some researchers identify the coats of arms as those belonging to Peter I of Rosenberg and his wife Kateřina, who founded the monastery with her sons.²⁷ According to identification on the left coat of arms we think she originated from the Prüschenk family, although there are no contemporary sources that would confirm this speculation. Given the heraldic position of the coats of arms, however, they are most likely symbols of alliance belonging to Eliška of Rosenberg and her husband Jindřich Prüschenk of Harddegg. It was unusual for the convent to be open to the lay public in the Middle Ages. We can find one analogy in Bohemia – during the festival of showing the remains, which was held in Prague, the ambulatory of the monastery Na Slovanech was open like this. In the local cloister there is a significant typological cycle of wall paintings to the north of Alps.²⁸

When comparing the monasteries in Český Krumlov and Prague, we have two conventions of completely different religious orders which nonetheless played a similar role during the celebrations. The cloisters, which usually fall into closed enclosure, were in both cases freely accessible to the public. Concerning the Prague monastery of Na Slovanech, this was assumed for a very long time on the basis of a manuscript describing the celebrations in Český Krumlov. It is confirmed not only by an iconographic program of a cycle of wall paintings which is directly related to the program of displaying relics, but also by the discovery of a description of this typological cycle in the ambulatory of Emmaus Monastery in the notes of a Swedish student of Charles University. 29 However, these are two monasteries that were based on a completely different functional arrangement and established for completely different reasons. Introducing the Poor Clares and Minorites into the residential town of Český Krumlov was copying a contemporary model of patronage of Mendicant orders, especially the Minorites. It was also related to creating the social network of the town; the monastery Na Slovanech was given Slavic liturgy, which confirmed the legitimacy of the ruling Luxembourg dynasty in relation to the Přemyslids, thanks to a reference to a cultural element of Czech society – i.e. the Slavic language. The interior decoration of the ambulatory halls, which was open to pilgrims on a feast day, passed on the information about the unity of the scene with the history of salvation of mankind and giving historical scope to the shown remains. Although something similar could also be expected in Český Krumlov, restoration explorations of the ambulatory did not reveal any intact paintings from the fourteenth century.³⁰ The surviving work on the west wall more likely

²⁷ Kubíková, "K původu," 112-117.

²⁸ Karel Stejskal, "Malby v klášteře Na Slovanech a jejich vztah k evropskému malířství" [The paintings in the Na Slovanech Monastery in the european context], in *Emauzy: benediktinský klášter Na Slovanech v srdci Prahy* [Emmaus: Benedictine Slavonic Monastery in the Heart of Prague], eds. Klára Benešovská and Kateřina Kubínová (Prague: Academia, 2007), 220-266 and Jan Royt, "Poznámky k ikonografii

Emauzského cyklu" [Notes on the iconography of the Emmaus Cycle], in *Emauzy: benediktinský klášter*, 290-308.

²⁹ Margarette Anderson-Schmitt, "Eine mittelalterliche Beschreibung der Fresken im Emauskloster zu Prag," *Umění* 43 (1995): 224-231.

³⁰ Karel Stretti, Zpráva o orientačním průzkumu maleb v ambitu kláštera řádu křížovníků v Českém Krumlově [The Report of indicative Survey of paintings in the cloister of the Monastery of Ritters of Crusaders order with red star in Český

shows just the presentation of the founders and donors of the monastery rather than an elaborate theological conception of painting decoration.

The emperor and Bohemian King Charles IV established the festival of displaying the most valuable imperial relics in the early 1350s in Prague.³¹ His collector's passion for the remains of saints and his peculiar religiosity were influenced by his upbringing at the French court. There he came to know a developed cult of relics of the torture of Christ. He built the castle Karlštejn near Prague as a treasury intended for the imperial treasure and the valuable remains. When showing remains in Prague, the remains were transferred from the castle and temporarily put in the so called Imperial chapel in the monastery of Na Slovanech.

There are hypotheses which identify a chapel in the castle in Český Krumlov, alleged to be built as a reliquary room in the manner of Prague celebrations. Some researchers even class this chapel as a Saint-Chapelle kind.32 These are bold claims, but according to findings within an architectural-historical research of the castle in Český Krumlov, there used to be a different room, which was used as a safe room and a kunstkammer.33 Even the most valuable remains from neighbouring monasteries were still deposited there and not returned to them, which is proven by a castle inventory from 1418. This was the case for the so-called Zavis Cross which comes from the second half of the thirteenth century and contains wood from Christ's True Cross or crystal remains panel made in the shape of a rose. The same remains connected to the

torture of Christ were shown at the festivals in Český Krumlov as well as in Prague. We do not know how they became the possession of the Rosenberg family or whether they were a gift from the emperor. In any case it says a lot about the meaning of the celebrations and about the selfpresentation of the House of Rosenberg which saw its residential town as *"imitatio Pragae"* and the festivals in Český Krumlov were very similar to those held in Prague; their course is often reconstructed on the basis of the mentioned manuscript from Český Krumlov.

Český Krumlov can be compared to Prague in another respect as well. It is generally known that the foundation of the New Town by Charles IV was sacralised through the elaborated position of churches and shrines, including the monastery of Na Slovanech.³⁴ Urban planning in Český Krumlov had to adjust to an older business route which went through the city. The dedication and position of sacral areas in the town (the castle chapel, the parish church, the hospital church and the monastery) were thoroughly thought-out. Two buildings especially dominated the town the castle as a profane element and the parish church as a sacral element. In both cases, however, they were a symbol of aristocratic representation and legitimacy. The castle faced the city with its monumental south facade, its most perfect part represented by the castle chapel and the palace. A presbytery protruding from the mass of the palace was not just a visualisation of lordly piousness, but also an expression of its sacral legitimacy.³⁵

Krumlov] (Prague, 1999) manuscript from Archive of the National Heritage Institut (Národní památkový ústav) in České Budějovice, Nr. AČ 2193.

³¹ Zorana Opačić, "Charles IV and the Emmaus Monastery: Slavonic Tradition and Imperial Ideology in Fourteenth-Century in Prague" (PhD. diss., Courtauld Institute of Art, London, 2003).

³² Jiří Kuthan and Jan Royt, "Hradní kaple v Krumlově jako Sainte-Chapelle" [Castle chapel in Krumlov like Sainte-Chapelle], in *Český Krumlov: od rezidenčního města*, 443-454. Comparing the castle chapel to the Sainte-Chapelle is bold, however, it is not actually based neither on sources nor on the legal position of the chapel (for a definition of the term "Sainte-Chapelle kind of a chapel" see: Claudine Billot, *Les Saintes-Chapelles royales et princieres* (Paris: Editions du Patrimoine Centre des monuments nationaux, 1998). In literature, the small castle chapel is compared to the Sainte-

Chapelle only because of a small fragment of Passion decoration (or rather one stained glass with a *veraicon* – an alleged imprint Christ's face into cloth) and a fact that the relics related to the Christ's death by torture were supposed to be put in there. However, they were kept in a different room, according to a castle inventory from 1418.

³³ Zlata Gersdorfová, "*Sakrální prostory českokrumlovského hradu*" [The sacred spaces of the Castle Český Krumlov] (MA Thesis, Charles University of Prague, 2012), 73-81.

³⁴ Klára Benešovská, "Emauzy a Nové Město pražské: otázka architekta" [Emmaus and the Prague New Town: The Question of the architect], in *Emauzy: benediktinský klášter*, 77-92; Vilém Lorenc, *Das Prag Karls IV.: Die Prager Neustadt* (Stuttgart: Deutsche Verlags-Anstalt, 1982).

³⁵ Protruding presbyteries have their own symbolism and it is not a coincidence that we can often find them on the facades of mansions. A copybook case essay on this topic was written

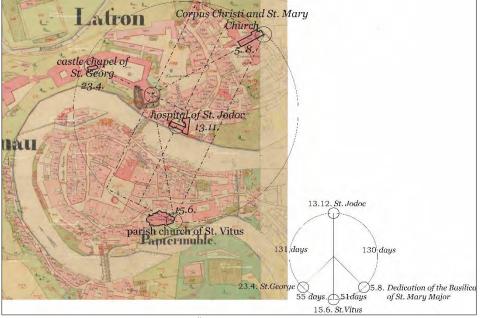


Fig. 11. The principal axis of the town Český Krumlov around 1350 (drawing by Zlata Gersdorfová on the cadaster from 1826).

After the foundation of the monastery in the Old Town c. 1350, the two was structured into three functional parts; the parish premises, the castle, and the monastic compounds where a manorial residence had a prominent position dominating the town below. The symmetry of religious buildings was extended by an attempt to balance the structure of the street network. Basically, the square, as one of the most important social areas, shows the only element of symmetry in the whole town. As mentioned before, a potential locator did not have too much space for developing greater ideas since a significant part of the settlement had to conform to the passage of the old business route. However, despite its apparent asymmetry, the square is strongly connected to the main composition axes of the whole town. The axis of the town square - Hrádek, i.e. the axis of the earthly element of the town – is basically parallel to an axis of the main religious buildings and institutions within the town, i.e. the parish church and the monastery.

According to documentary materials the double monastery of the Poor Clares and the Conventual Franciscans was founded in 1350 or rather 1357.³⁶ There are sources suggesting that the monastery had existed even before the date of consecration of

the monastic church. The year 1357 is a very symbolic date that supposedly refers to the legendary founding of the eternal city Rome, if it is read backwards – 753 – 1357. Not long after the church was supposed to be officially founded and taken over by the Minorites, the monastic church was consecrated to honour Mary, the mother of Jesus, and the Corpus Christi. It was in 1358 on the feast of the Corpus Christi, the Thursday after the Trinity, which fell upon the 31st of May that year and which we can draw graphically as follows: 13 58.5.31. Similar patterns, both numerical like this one and words were supposed to provide protection to the building and its inhabitants as well as legitimizing the act of foundation. The date for the Corpus Christ feast day was not chosen by chance. Besides breaking the date down symmetrically, we can find other relations in it it was related to other significant local feast days; St. Vitus' Day and St. Peter's Day (perhaps

by Eva Richtrová, "Rezidence Alberta ze Šternberka ve Šternberku na severní Moravě" [The residence of Albert of Šternberk in Northern Moravia], in *Korunní země v dějinách českého státu III: Rezidence a správní sídla v zemích České koruny ve 14. a 17. století* [Lands of the Bohemian Crown in the History of the Czech State III: The residence and administrative seats in the countries of the Czech Crown in the 14th and 17th centuries] (Prague: Charles University of Prague – Togga, 2007), 171-185.

³⁶ The Minorites took over the monastery that year. As we know from other indicia. See a document from 1347: *Urkundenbuch der Stadt Krummau in Böhmen*, I, eds. Valentin Schmidt and Alois Picha (Prague: Verein für Geschichte der Deutschen in Böhmen, 1908), Nr. 87:23 and results of dendrochronology, the convent had existed before – the dendrochronological analysis of a transom in a gable wall between the presbytery and a nave showed that the transom came from wood cut down in 1349/1350.

intended as a reference to Peter I. of Rosenberg, whose improvement of the whole town is indisputable). There another interesting is relation in connection to other dates: the 24th of April is the day when the Rome supposedly was founded. davs later twenty Constantinople was founded and exactly twenty days later the date was of it consecration of the monastic church in Český Krumlov.

The whole formation of the town of Český Krumlov is a real piece of art with respect to functional and artistic points of view and urban planning, which only emphasizes the unusual terrain. Relations between individual buildings stress their importance in the town system where the earthly axis is not inferior to the sacral one and vice versa. In fact, they complement and accentuate each other; the monastery is linked to a dominant feature of the whole town promontory, i.e. Hrádek. When the St. George's Chapel of Horní hrad, is linked to the monastery and the monastic church and parish church of

St. Vitus, the geometry and ground plan create together a figure of an almost equilateral triangle (fig. 11). The dominance of the manorial residence, which is included in this geometrical calculation of sacral places, could not be stressed more.

It is certain that the Rosenberg family reacted to the current cultural and spiritual milieu

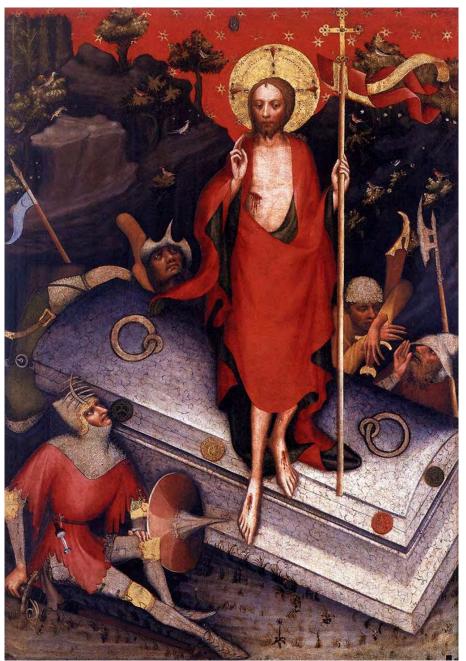


Fig. 12. Master of the Třeboň Altarpiece. Resurrection of Christ, tempera on wood, around 1380 (Royt, *Mistr Třeboňského oltáře*, 113).

of that time.³⁷ It is proven not only by pieces of art but also by founding the Monastery of Augustinian Canons in Třeboň, which belonged to Contemplative orders and pointed to changes of period piety, the *devotio moderna* movement.

 $^{^{\}rm 37}$ This is also proven by a press belonging to a significant reformatory preacher Jan Milíč of Kroměříž, who addressed

one of his last letters from Avignon to the Rosenberg family in 1374.

Apart from the Minorites, it was mainly this order that influenced the spiritual atmosphere of the South Bohemian court. Many pieces of art were created for this monastery, such as the paintings of the Master of the Třeboň Altarpiece.38 This painter belongs to the most significant artists of the international style in the European context. Only three panels painted on both sides have been preserved - Christ at the Mount of Olives, the Resurrection of Christ (fig. 12) and placing Christ in the Tomb. The central scene of the altar was perhaps the crucifixion (you can see Crucifixion from the Saint Barbara's chapel nearby in Jindřichův Hradec; this scene is also attributed to this painter or to a member of his circle). Some researchers think that the remains shown during the Feast of Corpus Christi in Český Krumlov were part of the altar or the treasure of the monastic church in Třeboň on the basis of the saints depicted in the back panels. In addition, the choice of the saints pictured on the back side of the panels is not done at random. St. Giles refers to consecration of the church, St. Mary Magdalene to the consecration of the altar in the monastic church and St. Jerome and St. Augustine were patrons of the Order of the Augustinian canons. The Master of the Třeboň Altarpiece's painting style is based on the Franco-Flemish tradition, although the painter's work is based on artistic tradition of his home. All the Passion scenes have a distinctively sacred character. The painter worked with diagonals in the scene compositions, which optically lead the viewer to the centre of the altar. The characters are dematerialized, their body cores are denied, and they are unclearly anchored in space. The light is very important here. The painter practically suppresses spacetime relations in favour of a spiritual image of a painting. Abstract (as the portrayal of the nature) and realistic (as trees and birds) features intermingle. This piece of art was created in about

1380. Restoration researches were unable to confirm hypotheses of the painters' French origin, but rather confirmed the full connection with home art (at least concerning the painting technology). This painter apparently worked for the archbishop Jan of Jenštejn, who founded the first Augustinian church in Roudnice nad Labem, Bohemia, where the Master of the Třeboň Altarpiece repeatedly created artistic pieces. After all, the Augustinian canons came to Třeboň from Roudnice nad Labem. The work of this Master influenced a large artistic movement in Central Europe and there are even responses in France and in Rhineland.

A picture of the Madonna between St. Bartholomew and St. Margaret, today known as so called panel of Protivín (fig. 9),39 is enrolled in an castle inventory from 1674 and then repeatedly in inventories from 1752-1779. The author is a painter close to the Master of the Třeboň Altarpiece. The question is where the picture was originally placed. It may be "pulchro opere imago virginis Marie gloriose" which is repeatedly captured in indulgences documents that are connected to the castle chapel of St. George in Český Krumlov.⁴⁰ It may also be a sculpture; magnificent sculptures of the Master of Krumlov Madonna (fig. 13), gorgeous pieces of art of socalled beautiful (international) style, are still in existence up to now. Henry III of Rosenberg, the contemporary head of the family, was in touch with top personalities of the Czech royal and archbishopric courts and contacts to the kingdom's top elite; this influenced various orders realised in the Rosenberg dominion.⁴¹ Besides relations to the cultural milieu of Prague, which was dependant on the position of the Rosenberg family at court or on their stays in Prague, close bonds to neighbouring countries (Bavaria, Austria, South Moravia), which in certain periods constituted homogenous artistic territory to a

³⁸ Royt, "Mistr Třeboňského oltáře,"

³⁹ Roman Lavička, "Madona mezi sv. Bartolomějem a sv. Markétou (tzv. Protivínská deska)" [Madonna between St. Bartholomew and St. Margaret (so called Panel of Protivín)], in *Rožmberkové*, 481.

⁴⁰ Gersdorfová, "Sakrální prostory," 38-45.

⁴¹ Here we can mention the construction of the monastery Sancta Corona in Zlatá Koruna and the brother of Petr Parléř's brother (one of the builders of the St. Vitus Cathedral in Prague) who participated in its realisation or the realisation of a presbytery vault of the parish church in Č. Krumlov realised by brother of builder, which worked for Václav Králík z Buřenic - a patriarch of Antioch).

certain extent, played an important role during the whole Middle Ages.

The Rosenberg family used art as a tool for representing themselves and legitimizing their power; this can be seen in surviving sources, artistic works, and operating liturgical premises, however partial their re-construction. On the other hand, we are unable to find an unequivocal cult or semantic level of Rosenberg acquisitions and foundations. Even a very pragmatic method of attempted with Oldřich II, who did not hesitate to pawn many pieces of arts and jewellery, including relics, failed to show a close relationship he would have had with them. In some respects, we can call Český Krumlov "imitation Pragae" nevertheless on a completely different semantic level. Firstly, it was transferred legitimization of power, which is connected to a medieval conception of a government provided by mercy of God. It was definitely an act of demonstration intended as period piety, not a thought-out policy such as the one Charles IV had.



Fig. 13. Madonna of Krumlov. Master of Madonna of Krumlov, 1390-1400 (Lavička, "Středověké sochařství," 535).

Artistic Connections; Art and Technology in the Monastic Milieu

MARBLE WORKS AND MARBLE FLOORS IN MEDIEVAL HUNGARY IN THE LATE 12TH CENTURY. FRAGMENTS OF A CHOIR SCREEN AND *OPUS SECTILE* FROM THE MEDIEVAL CATHEDRAL OF EGER AND ITS ARTISTIC CONNECTIONS¹

KRISZTINA HAVASI*

In medieval Hungary towards the end of the 12th century many cathedrals from the era of St. Stephan were in the process of being rebuilt; some undergoing modification, others renewal, or still others nearing completion.² In this renewal process it is remarkable that the completion and renewal of two of the superior such structures – Esztergom and Eger – with excellent marble works and the use of large-scale elegant and exclusive marble material are connected with the discovery of local marble mines.

The beginning of the use of the red marble mines in the nearby Gerecse Hills, which is also the starting point of the workshop activities of the processing of this stone material, can be seen in the context of the late 12th-century construction of Esztergom Cathedral, which was first rank in the country and closely related to the royal center.³ Recently, geological and archaeometrical studies of the large number of preserved white and gray marble fragments from the Eger Cathedral around the year 1200 confirmed their local origin and drew attention to the mines located in the Bükk (Beech) Hills. Unlike Gerecse red marble, which enjoyed widespread use, the use of white marble in Eger after its discovery at the end of the 12th century still remained a local phenomenon.⁴

In Esztergom during the final period of rebuilding, the interior and former parts of the cathedral were certainly "encased" with marble as well. The walls and pillars of the sanctuary and the nave (probably with the choir connected) were also covered with (red) marble. In addition, the preserved details of the variety of patterns incrustation and *opus sectile* floors have been associated with the preferred sites and routes of the cathedral's liturgy (figs. 1-2). In the art historical research well-known red marble works of the Esztergom Cathedral and the completion of the cathedral's renovation could be indicated by the western decorated doorway, which is included in the foyer.

The *Porta Speciosa* is dated by the common ruling years (between 1185-1196) of King Béla the III (1172-1196) and Archbishop Job (1185-1204), illustrated together on the tympanum.⁵

Művészettörténeti kérdések és természettudományos vizsgálatok. Fragments from the Eger Medieval Cathedral around 1200. Art Historical Questions and Archaeometrical Examinations," Archeometriai Műhely 4 (2009): 65-70; Krisztina Havasi, "A középkori egri székesegyház az 1200-as évek elején. Király, püspökök és újjáépülő székesegyházak a korabeli Magyarországon" [The medieval cathedral of Eger in the early 1200s. King, bishops and rebuilt cathedrals in thattime Hungary], I-II (PhD Diss., Eötvös Loránd University, Budapest, 2011), 208-222; Pál Lővei, "Uralkodói kőanyagok. A király és az elit díszítőkő használata a középkori Magyarországon [Stone for rulers. The use of decorative stone by Kings and magnates in medieval Hungary], in In medio regni Hungariae. Régészeti, művészettörténeti és történeti kutatások az "ország közepén. Archeological, art historical and *historical researches 'in the middle of the kingdom',*" eds. Elek Benkő and Krisztina Orosz (Budapest: MTA BTK Régészeti Intézet, 2015), 79-101.

⁵ Ernő Marosi, "Einige stilistische Probleme der Inkrustationen von Gran (Esztergom)," AHA XVII (1971): 171-228; Ernő Marosi, Die Anfänge der Gotik in Ungarn. Esztergom in der Kunst des 12–13. Jahrhunderts (Budapest: Akadémiai Kiadó, 1984), 59-67; Imre Takács, "Az 1200 körüli márványművesség néhány emléke" [Marble masonry monument around 1200], in Maradandóság és változás [Permanence and mutability], eds. Szilvia Bodnár et al. (Budapest: MTA Művészettörténeti Kutatóintézet, Képző- és

¹ This paper is the annotated version of the presentation of the conference. The study was prepared in the framework of the research program and with the support of HAS RCH Institute of Art History, and OTKA PD 112, 126th (Contributions to the History of Art of the Arpadian Age I) and the HAS János Bolyai Research Scholarship.

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² Recently about the topic comprehensively, additional literature: Béla Zsolt Szakács, "Cathedrals in the Early 13th Century in Hungary," in *Secolul al XIII-lea pe meleagurile locuite de către români* [The 13th century on lands inhabited by Romanians], ed. Adrian Andrei Rusu (Cluj-Napoca: Mega, 2006), 179-205.

³ Pál Lővei, "Virtus, es, marmor, scripta. Red Marble and Bronze Letters," *Acta Historiae Artium* XLII (2001): 39-55; Pál Lővei et al., "Vörös és fehér díszítőkövek, kristályos és metamorf mészkövek, márványok (Műemléki kutatások természettudományos diagnosztikai háttérrel 1) [Red and white decorating stones, crystalline and metamorphic limestones, marbles. Monument researches with the help of scientific diagnostic methods 1], *ME* LVI, no. 1 (2007): 75-82. ⁴ Krisztina Havasi, "Reneszánsz márványdombormű töredékei az egri várból" [Fragments of a renaissance marble relief from Eger castle], *ME* LV (2006): 104-105; Krisztina Havasi, "1200 körüli kisarchitektúra a középkori egri székesegyházból.

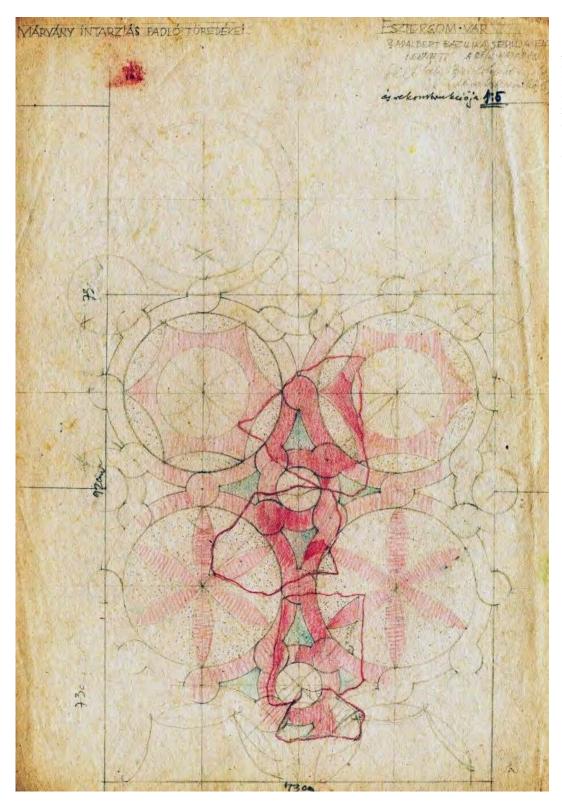


Fig. 1. Esztergom (Gran), St. Adalbert Cathedral. Fragments of decorative marble floor, Last quarter of 12th century (Photo: K. Havasi, 2002).

(Pilis) in Esztergom (Gran)], *ME*LVII (2008): 192-198; Havasi, "A középkori egri székesegyház az 1200-as évek elején," 190-207, fig. 455-461; Lővei "Uralkodói kőanyagok," 79-101.

Iparművészeti Lektorátus, 2004): 39-52; Krisztina Havasi, "A pilisszentkereszti ciszterci apátság töredékei Esztergomban" [The fragments of the Cistercian Abbey of Pilisszentkereszt

Situated in the northeastern part of the Hungarian Kingdom, the Eger Diocese was one of the most prestigious in the country. The post of the Eger bishop – already in the 12th century – often served as a springboard for the Archdiocese of Esztergom. Another important historical fact that draws attention to the role of the cathedral ca. 1200 was the fact that the successor of King Bela III, King Imre (Emerich), interrupted the 12th century's burial tradition of the Árpád dynasty when he selected Eger Cathedral as a burial place.⁶

The remains of the mid-16th century destroyed Eger Cathedral were discovered during archaeological research. The Romanesque part of the cathedral deriving from the early 12th century is made up of a sanctuary, introduced with powerful prismatic pillars and ending with three semicircular apses. This polychrome ashlar-wall chancel is the only in situ part of the earlier cathedral that remains standing at any considerable height. Its spatial features and structural elements were subsequently preserved and incorporated into the late medieval rebuilding of the cathedral. Although the nave, with its exterior buttresses, is the result of a late 13th early 14th century rebuilding, its ground-plan preserved the contours of its Romanesque predecessor. The former pillars of the Romanesque church refer to the dense layout of the foundation remains. In the eastern part, on the wider stage before the sanctuary, a stronger pillar formation and ruins could be observed. Here it could be assumed that there was an arched arcade demarcation, perhaps with a vault as well. In addition, according to the surviving remains of the staircase among the sanctuary sections, the floor of the main Romanesque sanctuary could have been raised, compared to the lower nave and aisle.⁷



Fig. 2. Esztergom (Gran), St. Adalbert Cathedral, one of the reconstructed patterns of marble floor. Last quarter of 12th century (Drawing by Dezső Várnai, Forster Centre, Museum of Architecture, Archive).

In addition to the early 12th-century remains, the carved stone fragments, some capitals, and pillar and rib fragments with early Gothic character point out to the renewal and restructuring of the internal building of Eger Cathedral at the end of the 12th century. The form of pillars, capitals, and ribs indicate the reception of the early Gothic style in medieval Hungary. The ornamentation of the capitals represents a certain degree of originality in art around 1200. The rib vaulting and the pillar types reflect the most-widespread and common practices of the period as seen for example at the Cathedral of Alba Iulia and the church of the Cistercian Abbey at Pilisszentkereszt, both begun at the end of the 12th century. However, the relationship of the pillar fragments and its direct correlation between the remains of the foundation traces of the cathedral nave are now uncertain, so is difficult to judge whether these fragments indicate the entire reconstruction of the Romanesque nave or the renewal of only certain section(s) around 1200.8

⁶ Havasi, "A középkori egri székesegyház az 1200-as évek elején," 143-163, 222-224.

⁷ Krisztina Havasi, "1200 körüli faragványcsoport töredékei a középkori egri székesegyházból" [Carved stone fragments from Eger's medieval cathedral around 1200], *Agria. Az Egri Múzeum Évkönyve* XXXIX (2003): 123-129, fig. 25-26;

Havasi, "A középkori egri székesegyház az 1200-as évek elején," 11-32.

⁸ Havasi, "1200 körüli faragványcsoport," 129-131, 160-161, fig. 1-3; Havasi, "A középkori egri székesegyház az 1200-as évek elején," 163-169, fig. 345-367.



Fig. 3. Eger (Erlau), Medieval Cathedral. Remains of destroyed marble carvings and marble floor pieces about 1200 in the northern nave of the cathedral. Excavations of Károly Kozák, 1967 (Forster Centre, Archive).

The most demanding part of the renewal of the cathedral ca. 1200 was the high quality of the interior architecture (figs. 3-11). The fragments were found, without exception, in secondary positions. Their sites are linked to the destruction layers of the 16th-century cathedral, but it is certain that the building group had been partially disrupted during the rebuilding of the nave in the early 14th century. Among the fragments can be recognized a thin-walled, small architectural detail crowned by a cornice consisting of variously sized blind niches.



Fig. 4. Fragment of a white marble cornice with figure of grape picking Pan from Eger Cathedral, ca. 1200. Eger Castle Museum (Photo: Attila Mudrák, 2007).

This small architectural element was built from different materials with different characteristics, white marble and a red-colored stone (andesite tufa), which also expressed the polychromy (figs. 4-7). The blind niches most often were ca. 30 or 60 cm (in medieval scale: one and two feet) wide and framed, and their profiles give the marble niches a classical air (figs. 6-7). Whereas the niches carved in red stone are without ornamentation, some of the white marble niches have decorative borders. The tympanum of one of the larger scale niches is decorated with an incrusted motif too.⁹

On the cornices were various styles of ornament. The quality of the red and the white elements were different. High quality inhabited scrolls could be found on the white marble cornices (fig. 4). Among the animals and birds appears a figure of Pan, who is picking grapes. Among the red cornices two versions could be differentiated: one with flat designs and decorative tendril-palmette ornament, and on the other a more fluid grapevine-shoot ornament (fig. 5).

⁹ Havasi, "1200 körüli faragványcsoport," 113-186; Havasi, "A középkori egri székesegyház az 1200-as évek elején," 170-224, fig. 368-415.



Fig. 5. Fragment of a red antesite-tuff cornice from Eger Cathedral, ca. 1200. Eger Castle Museum (Photo: K. Havasi, 2004).

The first group of "red" cornices represented a somewhat provincial shadow; its local connection can be seen on the Romanesque churches in the region of Eger.

The parallels of the latter version (fig. 5) can be seen in the late Romanesque ornamentation in medieval Hungary, for example in some carvings of the former Benedictine abbey Ercsi or the Cathedral of Alba Iulia.¹⁰

The reconstruction of the fragmented smaller architectural elements is problematic. It is certain, however, that the white marble and red stone pieces ornamented different sections. It can be assumed that the high quality marble fragments decorated the main facade. This small structure might have separated the chancel and the canons' choir, in other words it might have been a choir screen which isolated the main liturgical locations from the rest of the church. Further aspects in the analysis of the cathedral decoration include white marble blocks with inscriptions carved into their main surfaces (fig. 11). A large number of white, grey, pink, black, and red marble fragments of various sizes and shapes have also come to light on



Fig. 6. Eger, Medieval Cathedral. Fragments of blind niches of the small architecture, carved from white marble and red andesite-tuff. Eger, Castle Museum (Photo: K. Havasi 2001).

the site of the cathedral (figs. 3, 8-9). This opus sectile would have originated from a richly decorated and polychrome pavement, which would in all probability have born some relationship to the choir screen and the renewal of the cathedral around the year 1200. The decorative pattern on one part of the reconstructed floor is created by dividers and is composed of alternating white and pink mandorla-shaped marble pieces connected with white and black elements.¹¹ A similar pattern, a classical astragal, appears as a frame decoration on one of the incrusted white marble fragments (fig. 10 a). Another pattern with semi-circle motifs also appears on the fragments of marble (covering?) plates and on the floor decoration (fig. 10 b).

¹⁰ Havasi, "A középkori egri székesegyház az 1200-as évek elején," 171-175, 208-220, fig. 379-382; Ernő Marosi, "Bemerkungen zum neuen Fund von Steinskulpturen aus dem Kloster Ercsi," *AHA* LII (2011): 207-208.

¹¹ Havasi, "1200 körüli faragványcsoport," 131-135, fig. 20-24; Havasi, "A középkori egri székesegyház az 1200-as évek elején," 109-207, fig. 416-439.





Fig. 8. *Opus sectile* floor-pieces from Eger Cathedral (reconstructed pattern), ca. 1200. Eger, Castle Museum (Photo: K. Havasi, 2007).



Fig. 7. a-b. Eger, Medieval Cathedral. Fragments of blind niches of the small architectural elements, carved from white marble. Eger, Castle Museum (Photo: a: K. Havasi 2001; b: A. Mudrák, 2014).

It is remarkable that this pavement pattern appears in the same area in the same size engraved in the white marble. This suggests that the floor and incrustation makers were closely related (figs. 8, 10). In addition, a number of other fragments, varied and with geometric patterns, and more white and gray marble floor tiles are also known (fig. 9). Among them it is important to point out the fragments that refer to the approximately one meter large circular pattern(s) [medallion or rota] of the former floor composition.



Fig. 9. *Opus sectile* floor-pieces from Eger Cathedral (reconstructed pattern), ca. 1200. Eger, Castle Museum (Photo: K. Havasi, 2007).

This decorative circular pattern, which is larger according to surrounding patterns, could indicate an important place of the liturgy.

In Eger Cathedral were found *opus sectile* floor samples and fragments made from a variety of colored marble elements, which – surprisingly – show close similarities to the decorated floor fragments found in Alba Regia (Székesfehérvár) from the 11th century. It is a remarkable relationship, despite the fact that the same patterns were used in decorative flooring throughout the centuries (figs. 12-13). The fragments of the decorated floor of the basilica of Alba Regia founded by King Stephen I were found in the area of the main nave and represent the earliest details of the ground level of the church from the 11th century.

Marble works and marble floors in medieval Hungary in the late 12th century



Fig. 10. a-b. White marble fragments from Eger Cathedral, ca. 1200. Eger, Castle Museum (Photo: K. Havasi, 2007).



Fig. 11. Eger Cathedral, white marble elements with inscriptions, ca. 1200. Eger, Castle Museum (Photo: K. Havasi, 2002).



Fig. 12. Alba Regia (Székesfehérvár), Royal Provostal Church, *in situ* remains of marble floor in the main aisle (around the pulpit/ambo), eastern from the tomb chamber of St. Stephen, 11th century. Archaeological research: Alán Kralovánszky (Archive Photo).

Among the floor details *in situ* remains also are known (fig. 12). The decorative floor in Alba Regia only adorned one part of the nave and could have a liturgical significance. The rest of the nave was covered with limestone tiles and terrazzo. This special decorative work was located in an important area – supposedly an ambo/pulpit – raised in front of the choir, as well as the location of the burial chamber, found in the middle of the nave – *in medio ecclesiae*. The latter could be identified as a location of burials and the relic cult of the 1083 canonized King Stephen.¹² This part of the decorated floor according to the wear tracks was used until the late Middle Ages.

Piroska Biczó, "Das Marienstift Stuhlweißenburg," in *Europas Mitte um 1000. Beiträge zur Geschichte, Kunst und* Archäologie, II, eds. Alfried Wieczorek and Hans-Martin Hinz (Stuttgart: Konrad Theiss Verlag, 2000), 621-624; Piroska Biczó, "Archäologische Beobactungen zur Baugeschichte der Stiftskirche Unserer Lieben Frau zu Székesfehérvár," *AHA* XLII (2001): 285-287; Havasi, "A középkori egri székesegyház az 1200-as évek elején," 198-207, fig. 441-451.

¹² Alán Kralovánszky, "Szent István király székesfehérvári sírjának és kultuszhelyének kérdése" [St. Stephen's grave and the matter of Székesfehérvár cult place], in *Szent István és kora*, eds. Ferenc Glatz and József Kardos (Budapest: MTA Történettudományi Intézet, 1988), 166-172; Alán Kralovánszky, "Szent István király székesfehérvári sírja és kultuszhelye" [St. Stephen's grave in Székesfehérvár and the place of worship], *Folia Archaeologica* XL (1989): 155-173;



Fig. 13. Alba Regia (Székesfehérvár), Royal Provostal Church, fragments of decorative floor. White, grey, and green marble pieces and roman tegulas, found in the main aisle near the tomb chamber of King St. Stephen, 11th century. Archaeological research: Alán Kralovánszky, 1970 (Archive Photo, Székesfehérvár, Szent István király Museum).

Samples of the *opus sectile* floor also could be varied in Alba Regia. To the engraved white and gray marble pieces recarved Roman tegulas and bricks were added.¹³ Curved floor tiles were also found, which refer to a composition of a nearly one



and a half meter large *medallion*(*s*] or *rota*(*s*).¹⁴ We know that during the construction of the basilica of Alba Regia in the 11th century a large number of Roman limestone carvings and as *spolia* huge granite column shafts were used.¹⁵ Together with the Roman tegulas used for a floor, the research has assumed the Roman, Pannonian origin of the marble.

Future examination of these materials could contribute to clarifying this assumption, if in fact the use of recycled Roman materials from the nearby environs can be expected. It is also a

the porphyry rota kept from the former building from Constantine the Great's era, which played a role in the Pope's and Emperor's coronation liturgy since Emperor Otto I. See: Dorothy Glass, "Papal Patronage in the Early Twelfth Century. Notes on the Iconography of Cosmatesque Pavements," Journal of Warburg and Courtauld Institutes 32 (1969): 386-390; Percy Ernst Schramm and Florentine Mütherich, Denkmale der deutschen Könige und Kaiser. I. Ein Beitrag zur Herrschergeschichte von Karl dem Großen bis Friedrich II. 768-1250 (München: Prestel Verlag, 1962), 62, Kat. 66, 140-141; Sible de Blaauw, "Papst und Purpur. Porphyr in frühen Kirchenausstattungen in Rom," in Tesserae. Festschrift für Josef Engemann, Jahrbuch für Antike und Christentum, Ergänzungsband, XVIII (Münster: Aschendorff, 1991), 36-50; Peter Cornelius Claussen, "Renovatio Romae. Erneuerungsphasen römischer Architektur im 11. und 12. Jahrhundert," in Rom im hohen Mittelalter. Studien zu den Romvorstellungen und zur Rompolitik vom 10. bis zum 12. Jahrhundert in Reinhard Elze zur Vollendung seines siebzigsten Lebensjahres gewidmet, eds. Bernard Schimmelpfennig and Ludwig Schmugge (Sigmaringen: Jan Thorbecke Verlag, 1992), 96-97.

¹⁵ About all of this with additional literature: Mentényi, "Romanische Steinmetzarbeiten," 34-49.

¹³ From the 11th century building of the Basilica of Alba Regia of Székesfehérvár, a number of mosaic eyes and smaller ornamental mosaic details are known (Székesfehérvár, St. Stephen's Museum). Their techniques and implementation, however, (mainly they are mosaic fragments on the gold basement) refer to the former decoration of the vertical wall (main sanctuary?); Melinda Tóth, Árpád-kori falfestészet [Árpádian Age mural painting], Művészettörténeti Füzetek 9 (Budapest: Akadémiai Kiadó, 1974), 23-25, fig. 18; Melinda Tóth, "A művészet Szent István korában" [The art in St. Stephen Age], in Szent István és kora [St. Stephen and his Age], eds. Ferenc Glatz - József Kardos (Budapest: MTA Történettudományi Intézet, 1988), 115-121; Klára Mentényi, "Romanische Steinmetzarbeiten der Stiftskirche der Jungfrau Maria in Székesfehérvár (Die Geschichte der Skulpturen im 19. Jahrhundert)," AHA LII (2011): 75-77, Abb. 49. It is likely that the ornamental floor in Székesfehérvár was without mosaic ornament (opus tesselatum).

¹⁴ The presence of the larger medallion (rota, or omphalion/όμφαλος) in the floor decoration both in Eger and Székesfehérvár should be considered not only because it is very decorative, but also because of its iconological meaning. It seems that with this privileged location some highlight of the liturgy was emphasized inside the marble paneling zone. See, inter alia, in the middle of the nave of San Pietro in Rome,

possibility that there were "imported" marble together with the decorated floor makers, as was the case at contemporary imperial construction sites with marble floors for example in Magdeburg Cathedral of Emperor Otto I (963–973)¹⁶ and Bamberg Cathedral of Emperor Henry II (1007-1024). The decorative flooring of the eastern sanctuary of the 1012 consecrated Bamberg Cathedral, because of the close historical and dynastic connections, could be taken into consideration as a possible model for the Alba Regia.¹⁷ The use of transported materials from the Mediterranean, mainly from Italy (Rome and Ravenna) on the transalpine, imperial construction sites and closely related notion of translatio and renovatio, is well known.

¹⁷ As a parallel to the contemporary constructions of King Stephen and as a theoretical model it is not uninteresting that during the excavation of Bamberg cathedral's nave marble tiles of various shapes were found. They were by the archeologist reasonably related to the early floor level of the cathedral, consecrated in 1012. According to the material studies of marble fragments of Bamberg remains they originate mainly from Greek territories (Phrygia, Thasos, porphyry: Sparta). Most likely they are antique *spolia*, recycling of the marble tiles of the *opus sectile* marble floor from the ancient Mediterranean area. Walter Sage, "Die Ausgrabungen im Bamberger Dom," in *Kaiser Heinrich II. 1002-1024. Landesausstellung 2002, Bamberg, 9. Juli bis 20. Oktober 2002*, Veröffentlichungen zur bayerischen

The dating of the decorative opus sectile floor of Eger to ca. 1200 and its place in the building process are defined by the church furnishings and interior architectural features. So it is dated at least one and a half centuries later, as the Alba Regia. The latest finds from south-eastern Hungary and Transylvania (such as Kutaspuszta or Bizere and other monasteries in the Maros-Valley) start to fill up this one and a half centuries.¹⁸ They will refine our knowledge on the appearance and use in the 12th century of this uncommon technology and its masonry in medieval Hungary. However, the model role of the Alba Regia in this area, because of other relationships, is not negligible. In 1937, in the western part of Eger Cathedral in the middle of the nave, under the

Geschichte und Kultur 44, eds. Josef Kirmeier et al. (Augsburg: Haus der Bayerischen Geschichte, 2002), 196-198. The archaeological contexts suggest that parts of the decorative flooring in the nave were disturbed before the fire in 1081. After the fire the floor was covered with limestone tiles. Additional floor tiles were found from filling up the eastern crypt, which collapsed in 1185. According to Sage it may indicate that after the fire in 1081 and augmentation of the eastern crypt, parts of the exclusive flooring were recycled and reused in Georgenchor: Nelo Lohwasser, "Fußbodenplatten des Heinrichsdom," in 1000 Jahre Bistum Bamberg, 1007-2007: Unterm Sternenmantel: Katalog [der Jubiläumsausstellung, 12. Mai - 4. November 2007, ed. Luitgar Göller (Petersberg: Imhof, 2007), 410-411 (Kat. No. 16); Christian Forster, "Karolingische und romanische Bauskulptur und opus sectile," in Kloster Lorsch. Vom Reichskloster Karls des Großen zum Weltkulturerbe der Menscheit, ed. Anette Zeeb (Petersberg: Imhof, 2011), 241-257.

¹⁷ Katalin B. Nagy and Melinda Tóth, "Kutaspuszta Árpád-kori templomának díszítése" [Church decoration from Árpádian Age in Kutaspuszta], in *A középkori Dél-Alföld és Szer*, ed. Tibor Kollár (Szeged: Csongrád Megyei Levéltár, 2000), 244-250, Fig. 9; Havasi, "1200 körüli kisarchitektúra," 65-70; Havasi, "A középkori egri székesegyház az 1200-as évek elején," 190-207.

¹⁸ Nagy and Tóth, "Kutaspuszta," 244-250, fig. 9; Zsuzsa Heitelné Móré, "Monostorok a Maros mentén" [Monasteries along the Maros river], in *Paradisum plantavit. Bencés monostorok a középkori Magyarországon. Benedictine Monasteries in Medieval Hungary*, ed. Imre Takács (Pannonhalma: Pannonhalmi Bences Fo'apátság, 2001), 268-270, fig. 3; Ileana Burnichioiu and Adrian Andrei Rusu, *Mozaicurile medievale de la Bizere. Medieval mosaics from Bizere. Die mittelalterlichen Mosaiken von Bizere* (Cluj-Napoca: Mega, 2006); Ileana Burnichioiu and Adrian Andrei Rusu, "Medieval Floor Mosaics at Bizere Monastery. A Brief Survey," *Trans R* XX, 2 (2011): 3-13; Ileana Burnichioiu, "The decorative heritage of Bizere monastery. Fragments of the *opus sectile*," in this volume.

¹⁶ Inter alia: Hiltrud Kier, *Mittelalterliche Schmuckfußboden*, unter besonderer Berücksichtigung des Rheinlandes. Kunstdenkmäler des Rheinlandes (Düsseldorf: Rheinland Verlag, 1970), 123-124, Abb 35; Ernst Schubert. "Der Dom Ottos des Großen in Magdeburg," in Bernward von Hildesheim und das Zeitalter der Ottone, I-II, eds. Michael Brandt and Arne Eggebrecht (Hildesheim – Mainz am Rhein: Bernward Verlag - Philipp von Zabern, 1993), 34-39. In the case of Magdeburg, the eastern crypt (1049) as an expansion of the cathedral from the Ottonian era was covered with a decorated floor. Its pattern was very similar to the remains known from Bamberg and the rural Lower Rhine in the 11th century. The cathedral of Otto I itself is full of antique spolia. The marble of the floors refers on the one hand in the case of the black tiles to local materials (Schiefer), on the other hand, to the secondary use of Roman material. According to the fragments' subtitles, the research indicated that is it likely that their origin is not from Italy, but from Trier, and from there (as also from Aachen of Charlemagne) the Roman, the Constantine the Great-era archetype of the used pattern is known. See: Rainer Kuhn, "Die Kirchen des Magdeburger Domhügels," in Aufbruch in die Gotik 1209. Der Magdeburger Dom und die späte Stauferzeit, I, ed. Matthias Puhle (Mainz: Philipp von Zabern, 2009), 39-53; Abb 4 and Kat. I. 12, 18-19 (Bd. II).

pavement level one tomb chamber was found. The chamber is ashlar walled and vaulted. In the chamber is a tomb chest made up of large slabs of stone. The burial chamber was vaulted by a segmented barrel vault, the entrance was in the western part, and a straight staircase led down to it. The ashlar walls of the tomb chamber are made of the same materials and have the same surface handling as the Romanesque parts of the cathedral still in evidence today. The tomb chamber would therefore appear to have been built either during the 12th century or the early 13th century, forming an organic part of the Romanesque cathedral. The construction of the tomb chamber with its "marble pieces" built into the foundations - probably workshop waste of the decorative pavements and marble works - makes it possible that it dates to the time of the decoration of the cathedral, around 1200. Based on historical sources it is most probably the burial place of King Imre, who died in 1204. In the Árpadian Age a similar ashlar walled, vaulted tomb chamber positioned in an important place of the church could be found in Alba Regia where the first holy king of Hungary rested.19

Finally, a few words about the founders. During the reconstruction of Eger Cathedral at the turn of the century (between 1198 and 1217) Katapán was the bishop of Eger. Of his career we know that earlier he was provost of Alba Regia and that he served as counselor in the royal court of both Béla the III (1172-1196) and Imre (1196-1204). Apart from Eger's prominent position among the dioceses it was probably bishop Katapán's close contacts with the court that contributed to Imre being buried in Eger, thus breaking the tradition of royal burials in Alba Regia. The choice of memorial is represented by a tomb chamber in the central aisle of the nave. In this setting the tomb contained relics, and took a that form combined all the necessary

representative and referential elements reserved for particularly respected persons such as rulers and founders. Such an architectural form could testify to the advanced selection of the burial site and raises the question of the role of the king as a founder along with the bishop. The choice of source may have been influenced by that part of the legend of King St. Stephen that refers to his foundation at Alba Regia. "...in ipsa regalis sedis civitate, que dicitur Alba, sub laude et titulo virginis eiusdem perpetue, famosam et grandem basilicam opere mirifico, celaturis in chori pariete distinctis, pavimento tabulis marmoreis strato construere cepit..."20 Indeed, the standard image of the donor overseeing the suitable decoration of his church may have extended to King Stephen having had the choir walls, screens, and pavements covered in marble. And this marble floor in Alba Regia as the work of St. Stephen was certainly a "tangible" reality for the late 12th-century people in the areas related to the tomb of Saint Stephen, the holy King.

¹⁹ About the detailed examinations, documentation, building archaeological and art historical questions of the tomb chamber: Krisztina Havasi, "A középkori egri székesegyház emlékei a XII-XIII. század fordulójáról" [The relics of medieval cathedral of Eger at the turn of the 12th and 13th centuries] (MA Thesis, Budapest Eötvös Loránd University, 2004), 40-50; Havasi, "A középkori egri székesegyház az 1200as évek elején," 143-163.

²⁰ Legenda maior Sancti Stephani regis (around 1080). About the foundation of the basilica of Alba Regia: Scriptores Rerum Hungaricarum tempore ducum regumque stirpis Arpadianae gestarum, ed. Emericus Szentpétery, II (Budapest: Magyar Tudományos Akadémia, 1938), 385.

SOME REMARKS ON FRAGMENTARY CAPITALS FROM THE MONASTERY OF BIZERE

ERNŐ MAROSI*

In the last two decades archaeological investigations, following earlier studies of the local history and monasticism of medieval Hungary, have contributed much to our knowledge about a series of disparished Benedictine monasteries in the south-eastern part of the Hungarian Lowland. Destroyed buildings could be successfully located and identified. The archaeological finds are mainly of the 12th and 13th centuries (up to the Mongol invasion of 1241/42), from the flourishing period of Benedictine monastic culture in the Maros (Mureş) Valley.¹ They seem also to fill a gap in the history of the medieval art of this region. The excavations at the site of the Bizere monastery in 2003 brought to light a high quality mosaic pavement,² a unique example of its kind from medieval Hungary, and numerous architectural fragments from both the church and the monastery. Their art historical classification is made difficult by the fact that practically no key monument for the region is preserved and the written sources also do not reference foundation or building dates.³ Under such circumstances stylistic criticism and archaeological typology in the classical sense provide the last refuge. However, one cannot be sure whether, when judging artistic qualities, specific formal features indicate regional peculiarities or chronological signs. This is a typical dilemma for the initial studies of recently discovered material.



The following preliminary remarks characterize the difficulty of the historical evaluation as well as the dating of a group of architectural stone-carvings, found among the ruins of the destroyed cloister of Bizere. Few of these carvings, still laying on the tile pavement of the monastery rooms, are documented by photos made during the excavation.⁴

The fragments belong to a series of large imposts, capitals and columns now conserved together with other finds of Bizere monastery in the deposits of the Arad Museum Complex (*Complexul Muzeal Arad*)⁵ making evidently parts of an arcaded construction, perhaps of the cloister.⁶

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¹ A concise introduction to the history and historical geography of the region, with a critical survey of both written sources and earlier literature: László Koszta, "Dél-Magyarország egyházi topográfiája a középkorban" [The Ecclesiastic Topography of South Hungary in the Middle Ages], in A középkori Dél-Alföld és Szer [The Medieval South Great Plain and the Szer Monastery], ed. Tibor Kollár (Szeged: Csongrád Megyei Levéltár, 2000), 41-80 (about the Bizere monastery, see 55–59); from the archaeological point of view: Zsuzsa Heitel-Móré, "Monostorok a Maros mentén" [Monasteries along the Maros river], in *Paradisum plantavit.* Bencés monostorok a középkori Magyarországon. Benedictine Monasteries in Medieval Hungary, ed. Imre Takács (Pannonhalma: Pannonhalmi Bences Foapatsag, 2001), 267-274 (for Bizere, see 268-269). This study is dedicated to the memory of both authors.

² See Ileana Burnichioiu and Adrian Andrei Rusu, *Mozaicurile medievale de la Bizere. The Medieval Mosaics* from Bizere. Die mittelalterlichen Mosaiken von Bizere (Cluj-Napoca: Mega, 2006); Ileana Burnichioiu and Adrian Andrei Rusu, "Medieval Floor Mosaics at Bizere Monastery: A Brief Survey," Trans R XX, no. 2 (2011): 3–13; Xavier Barral i Altet, "Les mosaïques de pavement romanes de Bizere: un programme iconographique et décoratif occidental de style très original aux portes de l'Orient byzantin," in this volume: 239–248.

³ György Györffy, *Az Árpád-kori Magyarország történeti földrajza* [Historical Geography of Hungary in the Age of the Árpáds] (Budapest: Akadémiai Kiadó, 1963), 173–174; Hervay F. Levente, O. Cist., "A bencések és apátságaik története a középkori Magyarországon. Benedictine Life in Medieval Hungary," in *Paradisum plantavit*, 484–485.

⁴ Burnichioiu and Rusu, *Mozaicurile medievale*, figs. 11, 22, 23.

⁵ My thanks are due to Ms. Ileana Burnichioiu together with members of the Arad Museum Complex staff for offering me access to the Arad deposit.

⁶ The first information about the cloister: Ileana Burnichioiu, Ileana Burnichioiu, "Fragments from the Abbey of Bizere: the Lavabo in the Cloister," *EJST* 9 (2013): 222, 227–228;











The upper part of the square imposts measure about 1 ft (between 33 and 37 cm) (fig. 1) and they may correspond to large supports of 21 to 25 cm. It seems that the series of columns were alternated with quadratic pillars in the corners. The stone material of these architectural features was varied: they were made of different types of sandstone (figs. 1-2, 4), travertine (fig. 4), and so-called "white marble" (fig. 3) indicating that they were probably chosen for a polychromic effect.



Fig. 3.

Ileana Burnichioiu, "Lavatorium-ul abației Bizere – de la arheologie la reconstituire" [The Lavabo of Bizere Abbey – From Archaeology to Reconstruction], *AUA hist.* 17, no. 2 (2013): 101–102.

Capital fragment of a free sculpted travertine animal figure fit together with on fragmentary impost in a reconstitution attempt (fig. 4). The same type of capital with animals on corners (fragments of three of them are found) was made by sandstone (fig. 5). Many of the imposts in travertine or sandstone are decorated with different patterns (undulating scrolls with alternating leaves, axially composed large palmettes) in a concave profile and an articulated plate of a concave strip between two small tori (figs. 1-2, 4-6).

The decorations of the imposts have a soft character as the edges are rather smooth or blunt, rather than being sharply distinguished from the background. This same quality (and stone material) seems to also characterize the gothic capitals, which are composed of crochet capital types with sharp leaves or with crochets (fig. 7-8). In the lower part of the animal a fragment of a strigillated leafs can be seen indicating that it might have originally belonged to an upper row of capital decoration, above a wreath of leaves.

According to our opinion, the rich sculptural and polychromic decoration of the Bizere cloister can be dated to the first half of the 13th century. This was the period – due to reform initiatives of Benedictine monasteries - when, beginning with the most important houses, regular-shaped cloisters were built in Hungary. These patterns were borrowed from the Cistercians; Cistercians' centralized the was also preferred by organization the Benedictine reform in Hungary since the time of Pope Innocent III.⁷





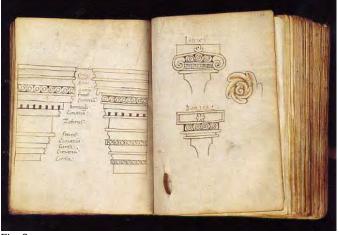


Fig. 7.





⁷ Ernő Marosi, "Bencés építkezések a 13. században" [Benedictine building activity in the thirteenth century], in *Paradisum plantavit*, 275–288, 651–658; and Ernő Marosi, "Die Baukunst der Benediktiner im Ungarn der Árpádenzeit - Zum Problem der 'Ordensbauschulen," *AHA* XXXVIII (1996): 15–30. The letter of Pope Honorius III (1225) about the Benedictine reform containing the expression *Paradisum plantavit* (used as the title of the 2001 exhibition) was also published in Hungarian translation in the catalogue: *Paradisum plantavit*, 564–566.





The little capital fragment of Bizere surely does not reflect Cistercian simplicity and austerity, representing instead a curiosity in its subject matter and, in its formal treatment as an \dot{a} *jour* stone sculpture, a superfluity – condemned by both St. Bernard and the legislation of the order as signs of the corruption of monks. The animal supporting the impost, almost resembling a reptile, was possibly meant to be a lion, as its swept tail can prove. Such a predilection by the Benedictines for the use of figural ornaments can be observed also in other Hungarian Benedictine cloisters of the same period: e.g. in the figural sculptures of Somogyvár Abbey and in the column figures of Pusztaszer Monastery. They differ also in their formal treatment: instead of sharply articulated gothic details, more softly carved Romanesque decorative patterns can be seen.8

Our fragment appears to be part of a peculiar block capital supporting an impost. The form of the support is not certain: the position of

the animal figure suggests a square arrangement corresponding to the shape of the impost, but the small diagonal leaf fragment suggests that it could have belonged to a capital above a cylindrical column shaft. Its most striking stylistic and technical feature consists of the free rendering of the form and in the pierced structure contradictory to the static function of a block capital; this represents evidently a kind of *tour de force* of the mason, which gives an insight into the meaning of medieval architectural vocabulary. To explain this rare quality, it is necessary to look back on the history of the typology of medieval capitals.

A commonly held opinion amongst medievalists is that richly decorated (mainly foliated) orders were preferred in the Middle Ages⁹ both as *spolia* and in contemporary imitations as well.¹⁰ Most of the examples show a capital covered with foliage, which is also the main subject matter of rare extant collections in medieval model books.¹¹ Discussions concerning the date of the earliest model drawings clearly show the continuity of these *exempla* from the Carolingian tradition into the 11th century. Compared to the prevailing Corinthian and Composite capital types the Ionic order played a rather subordinated role.

⁸ Ernő Marosi, Die Anfänge der Gotik in Ungarn. Esztergom in der Kunst des 12.-13. Jahrhunderts (Budapest: Akadémiai Kiadó, 1984), 133–136. For Somogyvár, see: Szilárd Papp and Koppány Tibor, "Somogyvár," in Paradisum plantavit, 353– 358. See also Sándor Tóth, "A 11-12. századi Magyarország Benedek-rendi templomainak maradványai" [Remnants of the Benedictine Churches in 11th-12th centuries of Hungary], in Paradisum plantavit, 251–254. For the Pusztaszer monastery, see: Ernő Marosi, "Szermonostor gótikus kerengőjének szobrai" [The Sculptures of the Gothic Cloister of the Szer Monastery], A középkori Dél-Alföld és Szer, 107–122; Melinda Tóth and Imre Takács, "Szermonostor," in Paradisum plantavit, 383–389.

⁹ Ernő Marosi, "Pilaszter, Az optikai érzékelés és a perspektivikus térértelmezés kérdése az építészetben. Pilaster. The Question of Optical Perception and Perspectival Spatial Analysis in Architecture," in *Perspektíva. Perspective*, eds. László Beke and Miklós Peternák (Budapest: Műcsarnok, 2000), 155–160.

¹⁰ Willibald Sauerländer, "Die gestörte Ordnung oder 'le chapiteau historié," in Studien zur Geschichte der europäischen Skulptur im 12.-13. Jahrhundert, eds. Herbert Beck and Kerstin Hengevoss-Dürkop (Frankfurt am Main: Heinrich, 1994), 436-437; cf. Carlo Bertelli, "Traccia allo studio delle fondazioni medievali dell'arte italiana," in Storia dell'arte italiana. Dal medioevo al Quattrocento, vol. 5 (Torino: Giulio Einaudi, 1983), 23-25; Salvatore Settis, "Verbreitung und Wiederverwendung antiker Modelle," in Studien zur Geschichte der europäischen Skulptur, 351–366. ¹¹ See Eliane Vernolle, "Un carnet de modèles de l'an mil originaire de Saint-Benoît-sur Loire (Paris, B.N. lat 8318 + Rome, Vat. Reg. lat. 596)," Arte medievale 2 (1984): 23-56; cf. Robert W. Scheller, Exemplum. Model-Book Drawings and the Practice of Artistic Transmission in the Middle Ages (ca. 900 - ca. 1470) (Amsterdam: Amsterdam University Press, 1995), cat. no. 3, 98-108.

One of the few examples of the latter is contained in the illustrated pages of the 10thcentury Sélestat Vitruve manuscript (fig. 9). Here we have to do with profile drawings of architrave moldings with inscriptions naming their parts and, on the near-by page, the schematic drawings of an Ionic and a Doric capital. Both appear to be decorated with rosettes, with the difference being the presence of the Ionic volutes. Generally, the Ionic capital in the Sélestat manuscript is a good parallel to the exterior articulation of the gateway of Lorsch Monastery in Germany (fig. 10). It is conceived as a kind of conically-shaped vessel. A number of 7th-century capitals in the crypt of the Notre-Dame Abbey in Jouarre, France (fig. 12) are evidently based on this type with the exception of one piece, that in front of the sarcophagus of the abbess Theodochilde, shows volutes (meant as belonging to the Ionic or perhaps Composite order) on its corners, evidently derived from vessel handles (like early medieval chalices). In the room above the Lorsch gateway, painted pilaster capitals are rendered in a similar form (fig. 11).





Fig. 13.















Thus, in the application of the architectural orders of Antiquity during the Middle Ages, there appear to be several dominating tendencies, which seem to continue even into the later centuries of the Middle Ages. The first of these peculiarities is that the capital shapes were understood as independent decorative forms, not primarily determined by technical or structural laws. Therefore not only model books, but also paintings of architecture (mainly in the decoration of manuscripts since Carolingian times) are rich treasures of architectural invention, being less limited by the actual buildings. technical conditions of The compositional freedom and the ideal appearance of the ornaments were transmitted in an exemplary way not only by painted models, but also by similar representations in the minor arts. The early 9th-century reference in a letter of Einhardus to the ivory columns of a casket made by Eigil as helping in the interpretation of difficult passages in Vitruvius' scenography is a well-known example of the role of ivory carvings,¹² also witnessed in Carolingian and Ottonian ivory sculpture. For the ideal formal freedom of the ornament one can find models in Romanesque goldsmiths' works, in, for example, the feet and capital ornaments of bronze candlesticks (fig. 13) and crosses. The vessels of Abbot Suger of Saint-Denis (e.g. his sardonyx chalice now in the National Gallery of Washington – fig. 14) show the same way of mounting precious stone objects of Antiquity as we have already seen in the Jouarre Composite capital. This proves at the same time the importance of the principle of the distinction between core (chalice) form and additional foliage, going back at least to the Vitruvian (IV.1, 9–10) myth of the invention of the Corinthian capital by Callimachus.

In his splendid analysis of the genesis of the Romanesque historiated capital, Willibald Sauerländer used the expression "disturbed order" for his interpretation of the sculptural decoration in Romanesque architecture because of the use of "pseudo-columns" (as he interprets this type of statue-column) in spite of the biblical prohibition of the sculpted image as well as the fact that the capitals derived from Late Antique tradition were used to represent didactic histories. In the same organized by colloquium the Frankfurt Liebieghaus Karl Clausberg also stressed the importance of the edge-position of the Romanesque figure (corresponding to the "pseudo-columns" of Sauerländer).¹³ Both of these recent fundamental contributions help us to outline the art historical position of the capital fragment of Bizere.

Two additional examples may have been influential for the Bizere fragment. One of them is the protome-capital of Antiquity, also represented by several *spolia* borrowed from Roman buildings and re-used in medieval constructions. This is the case, for example, with the Roman capitals adorned with military trophies on the corners in secondary use in the later part of the San Lorenzo Church fuori le mura in Rome (fig. 15).

Different types of capitals with halflength human or animal figures (heads, heraldically stylized eagles, lions, sheep, etc.) belong to this category.

¹² Julius von Schlosser, *Schriftquellen zur Geschichte der karolingischen Kunst* (Wien: C. Graeser, 1892), 6–7.

¹³ Karl Clausberg, "Kanten, Profile & Atlanten. Zur Fraktal-Topologie mittelalterlicher Skulptur," in *Studien zur Geschichte der europäischen* Skulptur, 469–482.

The fitting of these figural elements into the compositional system of the Corinthian/ Composite order also plays an important role in scenes of historiated capitals.

The other important model for the capital fragment from Bizere could be atlant figures, Antique which followed models since Carolingian times (e.g. on a rare Carolingian example in the parish church of St. Martin, Zyfflich - fig. 17 and a painted capital on a calendar page in the Lorsch Gospels in Alba Iulia - fig. 18). There are numerous such examples in Romanesque and Early Gothic decoration. Since the early 11th century examples of figure capitals demonstrating the technical skill of detaching figures from the relief ground (e.g. Saint-Benoîtsur Loire, crypt of Saint-Bénigne in Dijon - fig. 19) grew up until the late 12th century when we can find series of rich cloister decorations (e.g. Arles, St. Trophime; the cloisters in Monreale, Cefalù – figs. 20-21). Thus our little fragment appears to be sufficiently embedded in the history of European Romanesque art, except for its brave sculptural technique, and the free carving of the figures on its edges - either atlantes or animal protomes - expressing the great ambition of the mason.

In Hungary, all the artistic conditions necessary for producing a capital like the Bizere fragment were in place at the supposed time of the construction of the cloisters of Hungarian Benedictine monasteries that is since the late 12th century on. The use of classical types of Corinthian and Composite capitals was introduced at the same as the skill of free carved acanthus leaves in the early 12th century. The cathedral of Esztergom and the royal priory in Óbuda were probably the first places in Hungary to use this style, following Lombard-Comasque models as well as imperial buildings in the Middle Rhine region (Speyer, Mainz).¹⁴

Following this trend different types of protome capitals were introduced in Hungarian Romanesque architecture. Their art historical context was recently vividly discussed in the thesis of the late Sándor Tóth, in particular their historical continuity and iconographic meaning (in the sense of animal symbolism).



Fig. 16.



Fig. 17.

As the starting point of this supposed series Tóth dated a small capital with ram heads and festoons from Pécs Cathedral to about 1100.¹⁵

¹⁴ Marosi, *Die Anfänge der Gotik*, 14–22.

¹⁵ Sándor Tóth, "A székesfehérvári szarkofág és köre" [The Sarcophagus from Székesfehérvár and its Circle], in Pannonia Regia. Művészet a Dunántúlon 1000-1540. Kunst

ERNŐ MAROSI

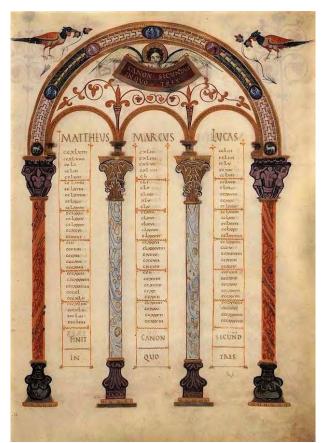


Fig. 18.





und Architekur in Pannonien 1000-1541, eds. Árpád Mikó and Imre Takács (Budapest: Magyar Nemzeti Galéria, 1994), 82–86, cat. no. I-33, 91–92; and Sándor Tóth, *Román kori kőfaragványok a Magyar Nemzeti Galéria Régi magyar* gyűjteményében [Romanesque Stone Carvings in the Collection of Old Hungarian Art of the Hungarian National Gallery] (Budapest: Magyar Nemzeti Galéria, 2010), 42-45, cat. no. 7, 118–119.



Fig. 20.



For defining the formal and typological tradition a capital fragment with a lamb protome has a key position. It was identified as belonging to a group of fine sculptures from the Óbuda priory and therefore dated to the second half of the 12th century.¹⁶ However, the Hungarian National Museum's record of provenience of this piece was recently proved incorrect by the publication of a measured drawing showing it among stone sculptures excavated in the 1930s in the royal palace of Esztergom,¹⁷ and thus belonging to the group of capitals kept *in situ* in a Romanesque room of the aforementioned palace.

¹⁶ Tóth, "A székesfehérvári," 110, cat. no. 1–55; Tóth, *Román kori kőfaragványok*, 42.

¹⁷ Dezső Várnai's drawing is reproduced by Konstantin Vukov, "Szemelvények az esztergomi vár kőtárainak történetéből" [To the History of the Lapidary Collections of Esztergom Castle], in *Az Esztergomi Vármúzeum Kőtárának katalógusa* [Catalogue of the Lapidarium of Esztergom Castle], eds. Gergely Buzás and Gergely Tolnai (Esztergom: Esztergomi Vármúzeum, 2004), 80.

According to the state of research Northern-Italian artistic relationships played an important role in the art of Esztergom (both in the cathedral and the royal palace building) since the mid-1180s, not only in the transmission of the "Antelami style," but also perhaps by ushering in the first influences of Parisian Early Gothic. For the pilaster capital with lamb protomes in question (fig. 22) Endre Raffay has found a convincing analogy in a column capital on the upper part of the bell tower (*Ghirlandina*) of Modena Cathedral, for both style and dating.¹⁸ He also emphasized that this style was not only limited to the circle of the Magistri campionesi of Emilia, but was present in the cloister of Monreale as well. A capital without an exact location of origin and with a hypothetical provenance from Southern Italy currently in The Cloisters Collection of New York (fig. 23)19 belongs evidently to the same style widespread in the 12th-century Mediterranean region.²⁰ What seems to be the most important for our analysis is that the Esztergom pilaster capitals and (mainly) their Italian parallels represent the norms of technical skill, which are mirrored in the Bizere fragment. With a much discussed column capital from Zagreb (fig. 24) (with the evidently false indication of a provenance from Medvedgrad Castle and the lack of the architectural context of the town itself²¹) we can witness a transformation similar to that of our piece. In this artistic circle capitals with atlant figures supporting the abacus or impost (e.g. from the cathedral of Kalocsa II fig. 25²² and in the church of Aracs Monastery – fig. 26²³) are also known.



Fig. 22.



Fig. 23.



Fig. 24.

¹⁸ Endre Raffay, *Esztergom, Vértesszentkereszt* (Újvidék – Novi Sad: Forum, 2006), 6, 28–38.

¹⁹ Lisbeth Castelnuovo-Tedesco, "Romanesque Sculpture in North American Collections XXIII," *Gesta* 24 (1985): 161.

²⁰ The problem was analyzed in great and accurate detail by Tóth, *Román kori kőfaragványok*, 42–45.

²¹ Marosi, *Die Anfänge der Gotik*, 136; cf. Mirko Valentić, *Kameni spomenici Hrvatska XIII-XIX stojeća* [Stone monuments from 13th-19th centuries in Croatia], (Zagreb: Povijesni muzej Hrvatske, 1969), 87, cat. no. 50; Tóth, *Román kori kőfaragványok*, 42 and note 102.

²² Géza Entz, "Les pierres sculptées de la cathédrale de Kalocsa," *Bulletin du Musée Hongrois des Beaux-Arts* 28 (1966): 48, fig. 36; Imre Takács, "Egy eltűnt katedrális nyomában. Újabb töredékek a 13. századi kalocsai

székesegyházból" [In the Wake of a Disparished Cathedral. Recent Fragments from the 13th-century Kalocsa Cathedral], *A középkori Dél-Alföld és Szer*, 318–322.

²³ Endre Raffay, "Az aracsi templom" [The Church in Aracs], in *A középkori Dél-Alföld és Szer*, 449–474 (in particular 459, 469).



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LES MOSAÏQUES DE PAVEMENT ROMANES DE BIZERE : UN PROGRAMME ICONOGRAPHIQUE ET DECORATIF OCCIDENTAL, AU STYLE TRES ORIGINAL, AUX PORTES DE L'ORIENT BYZANTIN

XAVIER BARRAL I ALTET*

Au début du XIIe siècle, dans un poème adressé à la Comtesse de Blois Adèle, fille de Guillaume le Conquérant et épouse d'Etienne de Blois écrit par Baudri, abbé de Saint-Pierre de Bourgueil qui deviendra par la suite archevêque de Dol-de-Bretagne, Baudri y décrit la chambre de la comtesse. Il s'agit d'une vaste salle aux murs couverts de riches tapisseries. Sur la voûte, la décoration imite le ciel avec les constellations. On v distingue les signes du Zodiague, les noms et le cours des étoiles ainsi que les planètes. Le pavement en mosaïque figure une grande mappemonde sur laquelle se détachent les mers, les fleuves, les montagnes et les villes. Baudri écrit au début du XIIème siècle, c'est à dire au moment même où beaucoup d'églises en Occident (tout au moins en Italie et en France) se dotent de pavements figurés luxueux ainsi que de peintures murales et de plafonds décorés.

Un des aspects les plus importants de l'édifice religieux roman. Si peu d'édifices ont conservé leurs pavements d'origine, il reste cependant en Italie de nombreuses églises qui présentent encore leurs mosaïques médiévales comme à Venise, Rome, Otrante (fig. 1), également en Sicile ainsi qu'en Italie du Nord (figs. 2-4), notamment à Pavie ou à Plaisance. En France également, ce type de décor était très présent dans les édifices les plus importants du XIIème siècle, qu'il s'agisse de Cluny ou de Saint-Denis, en Provence dans le monastère de Ganagobie, à Moissac ou à Saint-Sever. Les textes nous disent d'ailleurs qu'un édifice n'était pas terminé sans avoir auparavant été orné d'un pavement. Quel en était le but? Essentiellement de doter le sol d'un décor qui puisse remplacer l'idée du tapis étalé sur toute la surface du sol.¹

Ces pavements sont exécutés en mosaïque de tesselles, matériau et technique qui font donc référence à la décoration des sols de l'Antiquité, mais aussi en plaques de pierre ou marbre.



Fig. 1. Otranto. Cathédrale, pavement de la nef centrale. (Erich Lessing/Art Resource, NY http://www.artres.com, 12.03.2015).

française de Rome 429 (Rome: École française de Rome, 2010).

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¹ Xavier Barral i Altet, *Le décor du pavement au Moyen Âge: les mosaïques de France et d'Italie*, Collection de l'École



Fig. 2. Reggio Emilia. Museo civico, pavement de la cathédrale - detail (I. Burnichioiu).

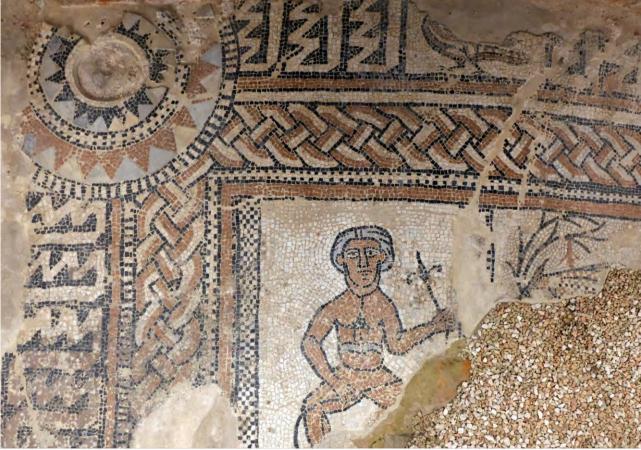


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Les mosaïques de pavement romanes de Bizere : un programme iconographique et decoratif occidental



Fig. 4. Pavie. San Pietro in Ciel d'Oro. Mosaïque de l'absidiole de droite (I. Burnichioiu).

Ce sont donc des mosaïques qui reprennent les techniques anciennes, antiques, de décor du sol, avec des tesselles, c'est à dire des cubes de pierre dure juxtaposés pour former un décor et enfoncées sur des couches préliminaires de mortier. La différence par rapport à la mosaïque tient notamment au style antique très caractéristique de la période romane avec des différences de style pour chaque région. La chronologie couvre tout le XIIème siècle, néanmoins dans certaines régions, ces mosaïques apparaissent de manière très précoce au cours du premier art roman. Les tesselles sont beaucoup plus grosses que celles de la mosaïque antique, ce qui donne un aspect plus irrégulier à ces décors. Quant aux couleurs, elles sont moins nombreuses que sur les mosaïques antiques et sont limitées le plus souvent au nombre de trois ou quatre dont le blanc et le noir auxquelles vient s'ajouter l'ocre rouge.

La fonction première de ces pavements est d'être suffisamment solides pour supporter les innombrables passages des religieux et visiteurs. Par conséquent, les éléments les plus fragiles caractéristiques de la mosaïque murale, comme les petits cubes de pâte de verre ou les cubes dorés, ne seront jamais utilisés sur les pavements, sauf dans des cas très exceptionnels, dans des endroits de l'édifice peu exposés au passage des personnes. La réalisation des mosaïques de pavement est le résultat d'une exécution collective, comme celle de la peinture murale. Ce travail doit se faire par étapes successives étant donné que les cubes ne peuvent être enfoncés que dans un mortier frais, encore humide. Il est donc nécessaire de délimiter des portions de sol d'un ou de deux mètres carrés, qui pourront être travaillées pendant que le mortier est frais. Sur ce mortier, le dessin que l'on veut figurer est représenté afin de déposer ensuite selon des contours préétablis l'ensemble des tesselles. Là encore, il y a un ordre à suivre: on commence par placer les cubes qui constituent les

contours du décor avant de placer ceux du remplissage. Pour ce qui est de ce domaine particulier de la technique, on retrouve au Moyen Age des procédés tout à fait équivalents à ceux de l'Antiquité. La spécificité de ce travail va donc de pair avec un coût particulièrement élevé. En fait, il est important de souligner qu'en raison du coût élevé de ces mosaïques, souvent les commanditaires ont décidé de ne décorer qu'une petite partie du sol de l'église, et bien sûr la partie la plus sacrée, c'est à dire le chœur. Parfois même, dans les églises monastiques ou dans les cathédrales. ces pavements illustrés seront cantonnés à des lieux qui ne sont pas accessibles au grand public, notamment autour de l'autel.

Pour cette raison, la commande de ce type de pavement représente à l'époque un événement seuls d'envergure que les principales communautés pourront se permettent d'entreprendre. Les édifices moins importants devront se contenter de pavements en opus sectile c'est à dire en plaques de marbre juxtaposées, voir même en plaques de pierre ou de terre cuite. Très rapidement, les décors qui associent tesselles et plaquettes de marbre seront abandonnés en raison de leur coût trop élevé au profit d'une fabrication sérielle qui, à partir du milieu du XIIIe siècle, imposera les carreaux de céramique vernissée.

iconographiques Les thèmes des mosaïques de pavement appartiennent pour l'essentiel à quelques grands registres. Tout d'abord, l'art roman accorde un intérêt particulier aux images extraites des bestiaires, c'est à dire aux décors animaliers, qui peuvent à leur tour être classés en plusieurs registres, parmi lesquels les animaux réels, d'une part, les animaux fantastiques et imaginaires, d'autre part. Pour ce qui est des animaux connus, il s'agit à la fois d'animaux côtoyés dans la vie quotidienne ainsi que d'animaux réels mais inconnus physiquement car ils ne vivent pas en Occident comme par exemple les éléphants. Quant au registre des animaux imaginaires, il s'agit dans la plupart des cas de monstres dont on imagine l'existence, parfois hybrides comme le basilic (formé d'un corps de reptile et d'un buste et d'une tête d'oiseau), ou bien d'animaux qui proviennent de la mythologie antique, tel le sphinx. En parallèle à

cet univers d'animaux plus ou moins inconnus, d'autres monstres totalement imaginaires peuplent les sols décorés, comme les centaures, les animaux à plusieurs têtes, monstres hybrides qui procèdent de la juxtaposition de deux animaux différents. Cet intérêt de l'iconographie romane pour les décors zoomorphes a un rapport étroit avec la géographie, puisque tel animal, par exemple, évoquera un endroit connu ou inconnu de la terre.²

On voit également se développer au sol les représentations géographiques, notamment les cartes du monde, avec les différents continents symbolisés par différents animaux, séparés par des mers ou des fleuves. De ces cartes du monde vont dériver les images cosmologiques; ainsi, comme le précise la description de Baudri de Bourgueil évoquée plus haut, à côté des images géographiques, c'est tout le cosmos qui est représenté, avec les planètes et les constellations. De ce cosmos vont également dériver d'autres images comme par exemple les signes du zodiaque, ou les personnifications des mois de l'année et des saisons qui représentent le du cycle de l'année. mouvement Les représentations des travaux des mois, qui suivent le cycle des saisons, sont variables d'une région à l'autre.

Outre ces registres d'images profanes, on trouve sur les pavements romans des illustrations directement issues de l'Antiquité et de la mythologie antique, comme Thésée et le Minotaure, par exemple. Accompagnant ces représentations, l'histoire contemporaine prend également place sur les sols des églises romanes: il s'agit le plus souvent d'histoires légendaires, récits d'exploits plus ou moins historiques en rapport avec des conquêtes, évocations de personnages particuliers.

On aime figurer sur le sol des images tirées de la littérature épique et populaire, comme la légende du roi Arthur, le récit de l'Ascension

² Xavier Barral i Altet, "*Il mosaico pavimentale del duomo romanico di Casale Monferrato: osservazioni sull'iconografia*," dans *Arte e carte nella diocesi di Casale*, dir. Alessandro Casagrande and Gabriella Parodi Travaglia, Provincia di Alessandria: i tesori delle sue diocesi 3 (Alessandria, 2007), 156-173.

d'Alexandre, le roman de Renard et bien d'autres. Les images de la vie quotidienne des plus puissants entrent dans ce même cadre, avec principalement des scènes de chasse.

Dans les églises, à coté de ces différents registres qui appartiennent tous au domaine profane, intervient l'iconographie proprement religieuse, bien que le registre de la vie publique du Christ qui implique la représentation du Christ lui-même, de Dieu, ou de la Vierge Marie soit toujours exclu de manière systématique des décors de pavements afin de ne marcher sur des représentations du Christ.

On y trouve donc des images religieuses extraites de la Bible, mais limitées à l'Ancien Testament. Il arrive parfois, à titre exceptionnel, que l'opposition entre l'Ancien et le Nouveau Testament soit évoqué avec, par exemple les représentations des symboles des évangélistes, comme à Saint-Paul-Trois-Châteaux, mais elles sont très rares et limitées à l'environnement de l'autel. On trouve également au sol, très souvent, des vies de saints, surtout lorsqu'il s'agit de saints locaux.

Dans la plupart des églises, le décor du sol peut à la fois se considérer dans sa globalité et dans le détail, grâce à un découpage du programme en différentes scènes. On a le cas par exemple, à Otrante, de la représentation d'un grand arbre sur un pavement qui couvre la totalité de la nef, tandis que tout autour de lui s'organise l'ensemble du décor (fig. 1).³ Si l'observation de cette mosaïque depuis un point haut permettrait d'en embrasser la totalité, il est important de noter qu'aucun visiteur médiéval ne pouvait avoir une telle perception du décor et qu'il n'est possible d'en percevoir qu'une petite partie à la fois.

Autour de l'arbre se développent d'abord divers thèmes profanes, comme la construction de la tour de Babel — épisode intéressant par ailleurs pour la connaissance de la construction médiévale — l'image du roi Arthur, des luttes d'animaux ou des décors végétaux. On rencontre également les représentations des mois de l'année, souvent dans des médaillons circulaires, accompagnées d'inscriptions qui précisent à la fois le mois et l'activité figurés. En parallèle à ces illustrations, les signes du zodiaque s'insèrent également dans des médaillons à côté de ceux des mois.

A Otrante, on retrouve l'idée du tapis déployé sur le sol où les scènes ne se suivent pas dans un ordre rigide les unes après les autres. Des décors analogues se situent dans les nefs latérales.⁴ Devant le chœur, à la manière d'un grand tapis solennel, on rencontre une représentation du Bestiaire dans lequel s'insèrent dans la partie basse les personnages d'Adam et Eve et au sommet, le roi Salomon. Après ces épisodes historiques bibliques, ce sont des images plus ou moins imaginaires qui y sont figurées : un centaure qui attaque un autre animal à double queue, des animaux en lutte dans des médaillons, des épisodes extraits du roman de Renard (l'âne qui joue d'un instrument de musique, des animaux faisant des acrobaties). Le résultat d'ensemble donne un univers foisonnant, très coloré, dans un style propre à l'art roman du XIIe siècle, notamment par l'irrégularité de la juxtaposition des cubes de mosaïque. Dans les sols des églises médiévales on distingue toujours des zones terrestres et les zones marines dans une conception géographique du décor qui correspond à la vision du monde des hommes de l'époque.

La France, l'Italie, la Rhénanie ou la Catalogne sont les principales régions de développement de la mosaïque de pavement médiévale.5 Mais la technique de la mosaïque de pavement pour décorer le sol notamment des églises, n'est pas limitée au Moyen Age aux seules régions comprises dans les actuelles France et Italie. Il est évident cependant, par la entre disproportion existante le nombre d'exemples conservés dans ces deux pays et ceux

³ Christine Ungruh, *Das Bodenmosaik der Kathedrale von Otranto (1163-1165): Normannische Herrscherideologie als Endzeitvision*, Studien zur Kunstgeschichte des Mittelalters und der Frühen Neuzeit 9 (Affalterbach: Didymos-Verlag 2013).

⁴ Xavier Barral i Altet, *Otranto (mosaico della navata sinistra)* e Conques (timpano): osservazioni su un poco noto parallelo iconografico del Giudizio universale, dans Tempi e forme dell'arte. Miscellanea di Studi offerti a Pina Belli D'Elia, dir., Luisa Derosa et Clara Gelao (Foggia: Claudio Grenzi Editore, 2011), 94-103.

⁵ Xavier Barral i Altet, "*Pavement*," dans *Dictionnaire critique d'iconographie occidentale* (Rennes: Presses Universitaires Rennes, 2003), 659-663 (avec bibliographie).

que nous connaissons ailleurs, que c'est dans ces régions que cette technique a connu une préférence de la part des commanditaires et du public de l'époque. Mais, au-delà de l'Occident européen, la mosaïque de pavement de tesselles s'est aussi développée dans les zones orientales de la Méditerranée au cours des XIe et XIIe siècles et même au-delà. En Grèce et au Moyen Orient, dans ce que l'on peut appeler les rives orientales de la Méditerranée, existait au haut Moyen Age une tradition de la mosaïque de pavement de l'Antiquité tardive peut-être plus forte encore qu'en Occident. Une tradition qui va connaître une continuité dans deux directions, celle des pavements figurés d'une part et celle des pavements géométriques à compositions de plaques de l'autre. Cette dernière, avec ses imbrications de rosaces, ou cercles enlacés, semble avoir eu une certaine répercussion en Occident que l'on a probablement exagéré à partir du pavement du Mont-Cassin et de ceux de Sicile, et certainement à propos de ceux de Venise.⁶

C'est concrètement par la présence d'éléments figurés sous forme d'*opus tessellatum* ou de marbres taillés et incrustés que les pavements du Moyen Age byzantin se rattachent à l'Occident.⁷ Les pavements des églises du Moyen Age byzantin ont une histoire et des traditions propres jusqu'à une date même tardive,⁸ certes, mais l'importance et l'impact qu'ont certainement eus les pavements des églises d'Occident au cours des XIe et XIIe siècles, n'aurait pas laissé indifférent les commanditaires byzantins au moment même de l'arrivée dans ces régions, d'un art roman en provenance de France et d'Italie qui nous a laissé bien des témoignages, notamment dans le domaine de l'architecture et de la sculpture.⁹ Il y a, en Grèce et dans l'Orient byzantin, à Constantinople même, un certain nombre de pavements, des XIe, XIIe et XIIIe siècles, exécutés en *opus sectile* ou *tessellatum*, qui intègrent un décor figuré de source occidentale au sein de sols organisés sur la base de compositions locales, de cercles et de compositions enlacées ou centrées.

C'est au sein de toute cette problématique que les mosaïques de pavement médiévales de Bizere occupent une place singulière, car les mosaïques découvertes dans l'église du monastère de Bizere¹⁰ se trouvent situées géographiquement aux confins du monde médiéval occidental et aux portes des régions dans lesquelles on décèle la présence des formes artistiques du monde byzantin.

Grâce aux fragments conservés on peut deviner une grande composition organisée sur la base d'une quadrillage oblique formé de bandes au décor géométrique et végétal frappées d'un carrée aux intersections. Ces carrés sont ornés d'un quatre feuilles. Les cases triangulaires générées par la composition générale sont ornées de thèmes végétaux ou animaliers. On y voit des rinceaux de feuillages, des animaux et des monstres, parmi lesquels on identifie probablement un chien au museau très long, peut-être un basilic – animal composé d'un corps de coq et d'une queue de reptile-, qui dans ce cas présente une tète de félin ou de chien, un autre monstre hybride de deux

⁶ Xavier Barral i Altet, *Les mosaïques de pavement médiévales de Venise, Murano, Torcello*, Bibliothèque des Cahiers archéologiques 14 (Paris: Picard, 1985).

⁷ Xavier Barral i Altet, "Un programme iconographique occidental pour le pavement médiéval de l'église du Christ Pantocrator de Constantinople," *Convivum. Exchanges and Interactions in the Arts of Medieval Europe, Byzantium, and the Mediterreanean* II, no. 1 (2015): 218-233.

⁸ Alessandra Guiglia Guidobaldi, *La decorazione pavimentale bizantina in età paleologa*, dans *L'arte a Bisanzio e l'Italia al tempo dei Paleologi, 1261-1453*, eds. Antonio Iacobini et Mauro della Valle (Rome: Argos, 1999), 321-358.

⁹ Par exemple, Mosche Barasch, *Crusader figural sculpture in the Holy Land. Twelfth century examples from Acre Nazareth and Belvoir Castle* (New Jersey: Rutgers University Press), 1971.

¹⁰ Ileana Burnichioiu and Adrian A. Rusu, *Mozaicurile medievale de la Bizere. The Medieval Mosaics from Bizere. Die mittelalterliche Mosaiken von Bizere* (Cluj-Napoca: Mega, 2006); Ileana Burnichioiu and Adrian A. Rusu, "Medieval Floor Mosaics at Bizere Monastery: A Brief Survey," *Trans R* XX, no. 2 (2011): 3-13. Voir egalment sur les problematiques du monastère: Adrian A. Rusu and Ileana Burnichioiu, eds., *Mănăstirea Bizere*, I (Cluj-Napoca: Editura Mega, 2011); Ileana Burnichioiu, "Lavatorium-ul abației Bizere – de la arheologie le reconstituire" [The lavatorium of Bizere abbey – from archaeology to reconstruction], *AUA hist.*, 17, no. 2 (2013): 101-121; Adrian A. Rusu, "Spatial organization and monastic life in Bizere abbey (Arad county, Romania)," in this volume.

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Fig. 5. Bizere. Mosaïque de la nef, vue d'ensemble (F. Mărginean).



Fig. 6. Bizere. Mosaïque de la nef, détail (I. Burnichioiu).

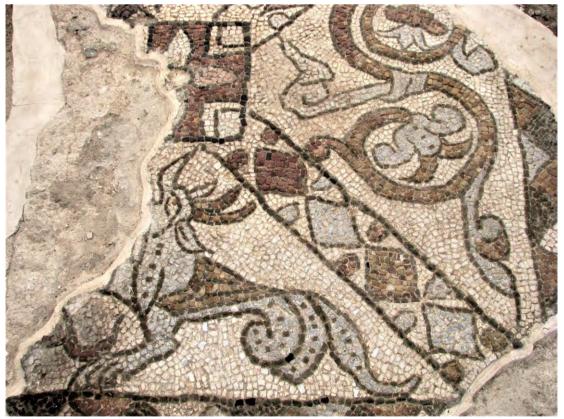


Fig. 7. Bizere. Mosaïque de la nef, détail (I. Burnichioiu).

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Fig. 8. Bizere. Mosaïque de l'absidiole de droite, *opus sectile* et *opus tessellatum* (I. Burnichioiu).

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animaux marins, et un centaure dont le torse humain est complété par une tête d'animal. Enfin on identifie encore peut-être un griffon. Il s'agit par conséquent d'un programme iconographique, au moins dans sa partie connue, pour l'essentiel fait d'animaux et de monstres, distribués au sol dans un contexte végétal et géométrique.

Toutes les caractéristiques de cette mosaïque appartiennent pleinement à ce que l'on connait des mosaïques romanes occidentales, aussi bien sur le plan iconographique que technique, avec l'utilisation d'un faible nombre de couleurs et l'association étroite dans un même pavement d'opus tessellatum et d'opus sectile. Des plaquettes semi-circulaires, carrées ou rectangulaires ont été découvertes en grand nombre ; certaines d'entre elles encore insérés dans le pavement lui-même.¹¹ La forme de ces plaquettes fait penser aux mosaïques de pavement de la région vénitienne mais elles ne sont pas rares ailleurs. La technique d'exécution de la mosaïque de tesselles est caractéristiques des mosaïques romanes occidentales par l'irrégularité dans la pose des cubes mais aussi dans le format et la taille des cubes eux-mêmes.

Les animaux et les monstres, les éléments végétaux, la composition et la technique des mosaïques de Bizere se référent à l'art roman occidental et à celui des mosaïques en particulier. Rien de tel à Byzance, parmi les pavements connus, ne justifierait une orientation vers l'Orient de la Méditerranée des mosaïques de Bizere. Les pavements qui pourraient lui être portés en comparaison en Grèce sont eux-aussi fruit de l'expansion des formules occidentales.

Si l'orientation culturelle des mosaïques de Bizere paraît claire, leur style est assez insolite et semble fruit d'une production locale assez éloignée du style des grands ensembles connus et de l'art monumental le plus prestigieux de la période. Mais cela est habituel dans la production des mosaïques de pavement, qui sont toujours exécutées collectivement dans des contextes très locaux.

¹¹ See Ileana Burnichioiu, "Decorative heritage of Bizere monastery. Fragments of the *opus sectile*," dans cette volume: 249-264.

On peut supposer et imaginer la volonté et le désir du commanditaire local de posséder un sol en mosaïque dans la nef de son église monastique tel qu'il les aurait connus probablement, directe ou indirectement, dans l'un des principaux monastères occidentaux. Les plus prestigieux d'entre eux signifiaient leur richesse artistique par l'exhibition d'un sol en mosaïque.

A Bizere, celui-ci ne peut pas être très ancien au cours du Moyen Age central. Son style fait penser, par rapport à ce qu'on sait des mosaïques romanes de l'Europe occidentale, à une date vers la fin du XIIe siècle ou la première moitié du XIIIe. Ce sera l'archéologie à préciser ces données chronologiques. Mais, sur le plan culturel, la mosaïque conservée à Bizere indique clairement une appartenance artistique à l'art roman occidental, pour un complexe monastique situé d'une certaine manière aux portes de l'Orient byzantin.¹² De ce point de vue, la découverte de Bizere est essentielle pour comprendre la diffusion de la technique artistique de la mosaïque de pavement romane de l'Occident vers l'Orient, du monde roman occidental vers Byzance.

¹² Emilia Jamroziak and Karen Stöber, eds., *Monasteries on the Borders of Medieval Europe. Conflict and Cultural Interaction* (Turnhout: Brepols, 2013).

THE DECORATIVE HERITAGE OF THE BIZERE ABBEY. FRAGMENTS OF *OPUS SECTILE*

ILEANA BURNICHIOIU*

During eleven archaeological campaigns (1981, 2001-2009, and 2014) at the site of the former Benedictine abbey in Bizere, a great quantity of archaeological material was gathered. This collection mainly comprises fragments of sculpture, of mosaic and of fresco, coming especially from the eastern side of the island, where the most important part of the ensemble was raised. 1 From this collection, several carved pieces have been studied for this volume,² and the catalogue of the sculptures is in progress. The two in situ mosaic surfaces, discovered in 2003 in the perimeter of the main church, were first presented in a brochure and then in an article,³ but they have been revisited in the present volume.⁴ Also published here are the first analyses of the archaeometric material that was used in the mosaics of Bizere. A brief report on the fragments of fresco and paint, which makes use of the results of lab analyses was published before, in 2013.5

Even from the first archaeological campaign (1981) various tiles of mosaic called *opus sectile*, now in the collection of the Arad Museum Complex, were discovered. ⁶ Subsequently, when the research

resumed after 2001, they continued to be recovered along with small tesserae (similar to those from the in situ floor mosaics found later, in 2003), pieces of white and blue-grey limestone, and red marble with various sections, having one or two polished faces (figs. 1–3). Since the research of the site is not yet completed, it is very possible that such discoveries will continue to be made, especially in the eastern side of the former island of the abbey.



Fig. 1. Tesserae and pieces of *opus sectile* discovered during the 2009 archaeological campaign.



Fig. 2. Fragmentary limestone slabs discovered during various archaeological campaigns.

⁵ Erika Nemes Feketics and Ileana Burnichioiu, "Analize ale fragmentelor de frescă descoperite la Bizere în anii 2001-2009 (I)" [Analysis of the fresco fragments discovered at Bizere between 2001 and 2009 (I)], *AUA hist.* 17, no. 2 (2013): 223-226.

⁶ The journal of this first archaeological campaign, headed by Mircea Rusu, was recovered and published posthumously in Adrian Andrei Rusu and Ileana Burnichioiu, eds., *Mănăstirea Bizere* [Bizere Monastery], vol. I (Cluj-Napoca: Mega Publishing House, 2011), 129–131, after the references to the pieces of *opus sectile* with photographs or drawings had been given in Adrian A. Rusu et al., *Biserici medievale din județul Arad* [Medieval churches from Arad County] (Arad: Complexul Muzeal Arad, 2000); Zsuzsa Heitelné Moré, "Monostorok a Maros mentén. Adatok" [Monasteries along the Maros River. Data], in *Paradisum plantavit. Bencés monostorok a középkori Magyarországon. Benedictine Monasteries in Medieval Hungary.* Exhibition at the Benedictine Archabbey of Pannonhalma 21 March – 11 November 2001, ed. Imre Takács (Pannonhalma: Pannonhalmi Bencés Főapátság, 2001), 268–269.

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¹ For the position and the organization of the space of the Bizere Monastery (as much as can be currently ascertained), see: Oana Toda, "Das Kloster auf der Flussinsel: Fernverbindungen und lokale Abgeschiedenheit im Fall der Abtei Bizere?," in this volume: 17–30, Abb. 2; Adrian A. Rusu, "Spatial organization and monastic life in Bizere abbey," in this volume: 91–112, figs. 2, 94.

² Ernő Marosi, "Some remarks on a fragmentary capital from the monastery of Bizere," in this volume: 229–238.

³ Ileana Burnichioiu and Adrian Andrei Rusu, *Mozaicurile medievale de la Bizere. The Medieval Mosaics from Bizere. Die mittelalterlichen Mosaiken von Bizere* (Cluj-Napoca: Mega, 2006); Ileana Burnichioiu and Adrian Andrei Rusu, "Medieval Floor Mosaics at Bizere Monastery: A Brief Survey," *Trans R* XX, no. 2 (2011): 3–13.

⁴ Xavier Barral i Altet, "Les mosaïques de pavement romanes de Bizere: un programme iconographique et décoratif occidental de style très original aux portes de l'Orient byzantin," in this volume: 239–248, figs. 5–8.



Fig. 3. Fragmentary red marble slabs with polished surfaces.



Fig. 4. Detail from the mosaic of the southern chapel/apsis, at the western limit (towards the southern lateral nave).

The large quantity (still impossible to estimate) of scattered mosaic fragments discovered at Bizere were made from a variety of materials (figs. 1–12). In the following pages I offer a perspective on this variety of materials, shapes, and colors, along with information regarding the technique and context of the discoveries, from which hypotheses regarding the chronology, placement, and design of the mosaics in the initial phase can be offered.

Materials, techniques, shapes, and colors

As previously observed, two types of pavement mosaics from the Bizere abbey can be associated with each other: *opus tessellatum* and



Fig. 5. Detail from the southern panel of the mosaic on the central nave, with the frame and trace of a strip of *opus sectile*.

*opus sectile.*⁷ The mixed technique is visible firstly in the southern chapel of the basilica (fig. 4), where the strip immediately next to the threshold is made of small tiles of brick and stone placed in an oblique position, with the openings between them filled with tesserae. Further east, large bricks with sides of about 28–30 cm have been fitted in a repetitive floral design with a background of white tesserae.⁸

The existence of the mosaic tile can also be considered certain in the mosaic of the central nave, where at the eastern border of the western panel there remained the obvious trace (even in its precarious state of conservation) of a strip that could have initially been composed of slabs (fig. 5). Only in these two places can we speak of evidence with a clear initial archaeological context, otherwise all of the pieces were discovered isolated from each other (fig. 7) or in later contexts that betray the successive recycling of materials on the island throughout the Middle Ages. Such is the most obvious case of several rectangular limestone slabs, so-called "white marble," reused along with fragmentary bricks for the redevelopment of a cist discovered in a central position in the funerary chapel, named M 1119 (figs. 8–9).

⁷ Burnichioiu, Rusu, "Medieval Floor Mosaics," 8.

⁸ See also Xavier Barral i Altet, "Les mosaïques," 247, fig. 8.

⁹ Ileana Burnichioiu, "Capela funerară" [The funerary chapel], in Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 70–71.

The decorative heritage of the Bizere abbey. Fragments of opus sectile



Fig. 6. Fragments of *opus tessellatum* and *opus sectile* mosaics from Bizere in the preparation phase of the October 2014 exhibition (University "1 Decembrie 1918" of Alba Iulia).

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Fig. 7. Round tile in "white marble" at the moment of discovery in 2004.



Fig. 8. The cist of M 111 (inside of the funerary chapel) covered by reused bricks and "white marble" slab.



Fig. 9. "White marble" slabs from M 111: frontal and lateral views with traces from the initial processing phase.



Fig. 10. Various pieces of mosaics made by brick and rocks discovered in 2001 (Photo by Ancuța Cotae).

In the mosaic of the southern chapel white or black stone slabs (either square or rectangular) alternate with those of square or rectangular burned brick. The scheme is simple, and the shapes do not vary much, even when the large painted bricks of red color, which had been inserted in the rest of the mosaic tapestry, are taken into consideration (fig. 4). However, the collection of pieces discovered during the archaeological excavations, as we shall see, has much more varied shapes and chromatics.

Among the brick pieces gathered over the years, there can be found both ones that are completely burnt (the majority), and ones that are only partially burnt. In the context of their discoveries they alternated with stone blocks, depending on their position in the stratigraphy, which had been ravished by treasure hunters and agricultural works. There are both complete and fragmentary pieces of 8-shaped tiles about 4.6-5 cm long (fig. 10/a), as well as rhomboidal slabs with elongated corners (b, i), halves of discs (in large number) (c), discs (d), rectangles (with a trapezoidal section) (f), trapezoids (g), almond shapes (e), and squares (k). These ceramic pieces are mostly similar in shape and size to the stone ones, including several that were discovered in the mosaics in situ (the square, rectangular, and rhomboidal with elongated corners shapes) (fig. 4).¹⁰ Two other fragments make a discordant note through their slightly sunken decoration, made by pressing the material before firing it with a mold with a repetitive interior pattern, consisting of groups of four triangles inscribed in squares, and having towards the exterior circles with small marginal decorations with lines or dots (fig. 11/j).

The laboratory analyses of samples of tegular material from Bizere–originating from the in situ pavements of the portico and refectory, as well as smaller tiles of *opus sectile* discovered at various points of the site–gave an estimate of the burning temperatures of around 800–900° C in the first analyses and then of \leq 650–700 °C,¹¹ and also indicated the presence of sand, which most probably came from the Mureş River. Thus, the quality and composition of the material support

the hypothesis that the tegular material from the buildings and pavements had largely been made on the island. The possibility that Roman spolia had been brought from another place, especially in the case of the square bricks or the 8-shaped tiles, should also be considered.

The lithic material is even more varied than the tegular, and from this category about 40 samples have been analyzed in the laboratory in 2009–2014. The analyses showed that many of the mosaic fragments (tesserae and tiles) had been made from metamorphic rocks such as marble, marble," magmatic rocks such as basalt, and sedimentary rocks such as sandstone, limestone,

Fig. 11/a–k. Types of brick tiles discovered at the Bizere site (1981, 2001–2014).



¹⁰ See also Xavier Barral i Altet, "Les mosaïques," 247, fig. 8.

¹¹ Bernadett Bajnóczi et al., "Archaeometric analysis of mosaic *tesserae* and a 'red marble' decorative stone from the Bizere Monastery (Arad County, Romania)," in this volume: 265–278.



Fig. 12. Various slabs and *opus sectile* tiles in "white marble."

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and breccia. 12 However, the samples that have been subjected to archaeometric analysis until now do not comprise all the materials from which the mosaics of Bizere have been made. Among those delayed for another phase of analysis are two types of rocks, which can be seen in fig. 6, and which have the characteristics of so-called red porphyry or Imperial Porphyry (Lapis Porphyrites, porfido rosso antico) and of green porphyry (Lapis Lacedaemonius, verde antico). The former was extensively quarried in the Mons Porphyrites in the Eastern Desert of Egypt and had oftentimes ended up in medieval buildings and decorations after being exploited from Roman ruins. 13 A somewhat similar fate was shared by the green originating from Lacedaemonia porphyry (Laconia), also extracted from Roman sites to be reused during the Middle Ages.¹⁴ In the case of the Bizere abbey, the Roman-era place or places from which the fragments of the two rocks might have originated are yet undetermined. However, most certainly, these Roman spolia had been brought to the site to be used in mosaics.



Fig. 13. Red porphyry: fragmentary slab and tesserae.

 $^{\rm 13}$ The bibliography on the subject is rather vast, therefore, I am limiting myself here to only a few titles: Marilda De Nuccio and



Fig. 14. Detail from the mosaic of the southern chapel of the basilica with tesserae of white limestone, red porphyry, red marble, quartzite, and greenschist.

Until now, of the Imperial Porphyry there have been discovered two slab fragments with different thicknesses and polygonal shapes, as well as several tesserae (fig. 13). These have correspondences in the tesserae of a petal from the repetitive motif of the mosaic in the southern lateral chapel (fig. 14).

From the green porphyry there have been recovered three fragmentary slabs with different

Lucrezia Ungaro, eds., *I marmi colorati della Roma imperiale* (Rome: Marsilio, 2002); Ben Russell, *The Economics of the Roman Stone Trade* (Oxford, 2013), (with bibliography); Lorenzo Lazzarini, ed., *Interdisciplinary studies of ancient stone. ASMOSIA VI. Proceedings of the sixth international conference of the "Association for the study of marble and other stones in antiquity," Venice, June 15-18 2000* (Padova: Bottega d'Erasmo, 2002).

¹⁴ Lorenzo Lazzarini, *Poikiloi Lithoi, Versiculores Maculae: I Marmi Colorati della Grecia Antica* (Pisa-Rome: Fabrizio Serra Editore, 2007); Ben Russell, "Stone quarrying in Grecia: Ten years of research," in *Archaeological Reports* 63 (2017): 77–88.

¹² Corina Ionescu and Ioan I. Bucur, "Analiza unor roci sedimentare [The analysis of certain sedimentary rocks]," in Rusu and Burnichioiu, *Mănăstirea Bizere*, vol. I, 103–106; Corina Ionescu and Lucreția Ghergari, "Studii preliminare de mineralogie și petrografie asupra materialului tegular: compoziție și microfabric [Preliminary mineralogical and petrographic studies on the brick material: structure and microfabric]," in Rusu and Burnichioiu, *Mănăstirea Bizere*, vol. I, 107–116; Bajnóczi et al., "Archaeometric analysis," 268– 271; other analyses were made in 2015 by Brigitta Maria Kürtösi. I would like to take this opportunity to thank all for the information provided.



Fig. 15. Green porphyry: fragmentary slabs and tessera.

sizes and number of polished surfaces, in addition to a tessera (fig. 15). From the three fragments of slabs, only two of them seem to have become elements of *opus sectile*.

Among the rock samples that have been analyzed in the second phase there are tesserae of "red marble" (in fact, a red nodular limestone) originating from the Gerecse Mountains (Hungary).¹⁵ However, although the number of tesserae from this material is large (both from the in situ mosaics and among the isolated discoveries), until now only several fragments of crushed material from massive slabs, which have varied thicknesses and one or two polished surfaces (fig. 3), have been discovered. For now, only a few tiles of sectilia made of "red marble" are known. We can, however, draw another hypothesis from the discovered samples, that they may be more connected to stone inventory other than the mosaics (building parts, funerary slabs, etc.).

A similar situation, to a certain extent, might be that of the river stones of various colors (red, yellow, white, etc.) from which ubiquitous tesserae exist (isolated and in the mosaic surfaces). Although the working site of the mosaics had acquired larger boulders (as shown by the remains gathered during research), they seem to have only been used for making tesserae. Similarly, we have no clues yet on any floor arrangements made only with simple river stones (as in pebble mosaics), even if the material was available in the immediate proximity, on the River Mureş, or in the region.

The discoveries made thus far suggest the preponderant use of "white marble" on the island of the Bizere abbey. A portion of the "white marble" material is made of shapes that are clearly defined, or easily reconstructed (even when they are fractured), another is too fragmentary to allow for the identification of the initial forms. Especially as, amongst the archaeological discoveries there are also fragments of columns, capitals, and even a column base made with so-called "white marble."

From the first category the following have been identified: tiles/8-shaped pieces, disc halves, rhomboidal pieces with elongated corners (sharing analogies with some of those of burnt clay), almond-shaped pieces (in large number), basic triangles of many types and sizes (of which some have an arched side), segments of circular arches about 5 cm wide (also numerous), rectangular and square pieces of various dimensions (including sizes that are similar to ordinary bricks), heartshaped pieces, and small rectangular tiles with one concave edge and another that is rounded or straight. To these there is added the discoid slab having a straight edge (figs. 12/r). The shapes mentioned above were not exclusively made of "white marble" or brick, but also of fragments of breccia or other qualities of stone, which were found among them. Among these were found: one heart-shaped piece, a rhombus with straight edges, a fragment of small trapezoidal or triangular slab (of breccia), small square slabs, rectangular trapezoid-shaped pieces, and a small tear-shaped piece (fig. 6).

From other fragmentary slabs of "white marble" with various polished surfaces there have been found shapes that are not repeated in other materials, most of which have a marginal listel (which forms an L in section: fig. 12/j),¹⁶ others with one or two beveled edges and/or with traces from carvings specific to jointing or with one or two straight grooves on one of the margins. In 2004, from the disturbed stratigraphy above the mosaic of the central nave, a stone was recovered,

¹⁵ Bajnóczi et al., "Archaeometric analysis," 275–276.

¹⁶ These appeared in particular in 1981 and were drawn for the volume published by Rusu et al., *Biserici medievale*, 167, fig. 30.

which has on its edge parts of two incised volutes and a worn-out surface (as if it had been part of an intensely frequented pavement in a secondary use) (12/i). Another piece has at the end of its marginal groove the trace of a drill hole, and another has the remains of an iron holdfast securely lodged in its mass (fig. 12/e, h).

In the second category of "white marble" there are fragments of slabs with various sections, in which there can be distinguished one to two polished faces (figs. 2, 12/a). Their state of conservation would allow us at most to suppose that they had generally been used as primary material for the mosaic decorations.

As can be seen in the lot analyzed here (figs. 2, 6, 12), some of the pieces of so-called "white marble" have uniform tints of blue-grey or just veins of blue-grey color. Such shades can also be seen in isolated tesserae, as well as in groups of tesserae that constitute details from in situ mosaics: flowers (fig. 17), stalks, rhombuses, etc. In order to obtain more information on these, in 2014 several samples were submitted to analysis in the laboratory and compared to marble of the same shade from sites in Hungary, especially with fragments from the Benedictine monastery in Pécsvárad. The author of the analyses also identified the possibility of the existence of Roman spolia and introduced as a hypothesis the Proconnesian origin of the marble.¹⁷ Without completely excluding such a theory, possibly thanks to some "imports" from Roman times that could have then circulated as spolia with mixed provenience, there should alsobe considered a series of similitudes demonstrated in the previous petrographic analyses on the area of Porțile de Fier (e. g., Bucova, Zeicani).¹⁸ Also, it has to be considered that for the blue-grey of the tesserae, the artisans could have had selected from the socalled "white marble" exactly those blue-grey veins that corresponded chromatically. Equally important was their association with other colors, which ensured a better contrast.



Fig. 17. Blue-grey tesserae in a floral motif in the nave floor mosaic.



Fig. 18. Pieces of *tessellata* (a) and *sectilia* (b) having the same traces of mortar with crushed brick.

b

The large quantity of raw material jetsam found all over the site confirmed the supposition that the materials had been brought to the island in a raw, semi-processed, or finished form, in the last case as Roman spolia.¹⁹ The manner in which they were used can be seen partially in the mosaic surfaces in situ. During the archaeological research observation of the mosaics' margins determined that they were made with the well-known stratification from the Roman era: statumen, rudus (made by lime plaster), and *nucleus*; the stones of the mosaic are fixed in the lime plaster from the bottom and in a layer with crushed brick. The same type of mortar was also encountered in isolated tesserae groups detached from the *rudus*, in addition to some tiles of opus sectile (fig. 18/a-b). This mortar with crushed brick does not seem to have been used exclusively, as some of the opus sectile pieces have traces of lime and sand mortar.

¹⁷ A report on this topic: Brigitta Maria Kürtösi, *The Bizere blue. Archaeometrical Investigation of Medieval greyish-blue Mosaic Tesserae from Bizere Monastery*, MSS.

¹⁸ Bajnóczi et al., "Archaeometric analysis," 265-278; for analyses of the Roman material, including in Bucova where

one can see the marble walls of a quarry that has blue-grey veins, see: H. W. Müller et al., *Der Marmor in Römischen Dakien* (Cluj-Napoca: Mega Publishing House, 2012).

¹⁹ On the layers of processing of the stone observed in the area of the basilica and cloister: Rusu, "Spatial organization," 98.

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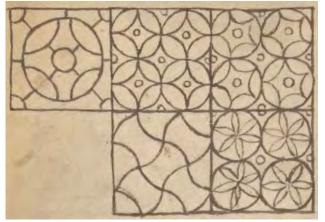


Fig. 19. Detail from Villard de Honnecourt's volume (first half of the thirteenth century).

Although we are speaking of isolated fragments, on which we have no information regarding their association in situ, the multitude of slabs of white and blue-grey marble, the white background of the mosaic in situ, and the presence of a large number of brick pieces, allow for the supposition that white-grey and brick-red were predominant chromatically also for the *opus sectile* areas.

After the inventory of the decontextualized shapes and materials of mosaics tiles, some of the questions that could be raised about them include: In which areas of the abbey did they exist? What were the models? In addition to floor mosaics, did wall mosaics also exist? and How long did the mosaics survive after their execution?

Considering the presence of the two floor mosaic surfaces preserved in situ, both with fragments of *tessellata* and *sectilia*, as well as because the basilica was the main liturgical space of the abbey, it can be considered that the pieces that were discovered isolated originate primarily from the interior of basilica. The floor mosaics were organized in panels that took into account at least the structure of the three naves, the pillars, the separation between the choir from the side chapels, and the other arrangements pertaining to the cult. As the traces from the central nave and its dimensions suggest, a row of tiles was aligned precisely between the mosaic with tesserae and the western columns of the central nave.



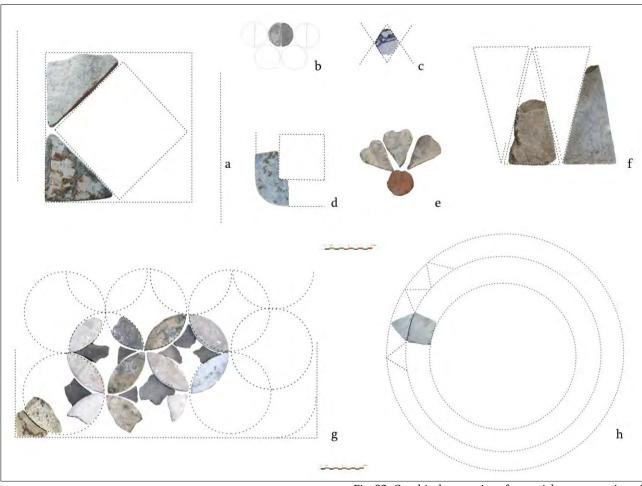
preserving a trace of the first processing stage (probably from the Roman era).



Fig. 21. Isolated 8-shaped pieces combined with an edge piece in the 2014 October exhibition (Alba Iulia).

The shapes of the isolated pieces of tessera allow for various combinations using simple geometry, allowing us to make some suggestions of partial reconstructions of the design and hypotheses for the future. To this end, a helping hand is offered by analogies with other mosaics that have been better preserved in situ (from Roman to medieval examples, both of opus sectile and of mixed technique) and other evidence such as the sketches of Villard de Honnecourt (from the first half of the thirteenth century) (fig. 19). The almond-shaped pieces have contours that match the arched edges of some of the rhombuses made of ceramic (fig. 20) or stone and could have been placed in rectangular frames, which were then completed at the corners with trapezoid form having one arched side and two straight ones (fig. 22/g).

Fig. 20. Isolated almond-shaped pieces combined with fragmentary ceramic rhombuses including one piece



The mosaic 8-shaped pieces combine the most easily (and in this regard, the multitude of Roman and medieval analogies leave no room for doubt) within several rectangular or circular panels, either two-toned or monochrome (fig. 21). As edge pieces for these panels, small tiles with a straight or rounded exterior edge have been discovered (in one case, in 2007, they have even been gathered together from the same archaeological layer), all of white marble and with concavities adapted to the 8shape (figs. 12/l, 21). In the journal of the 1981 campaign, Mircea Rusu, whose archaeological section was located in the northern half of the basilica, noted that "...At each end of the mosaic made of 8-shapes there was a rectangular tile also of marble, 7.5 cm long and 4.7 cm wide."20

Fig. 22. Graphical suggestions for partial reconstruction of patterns of *opus sectile*.

However, even if the information seems to be precise and their existence even plausible, it is not known what exactly was discovered on site. In the Museum in Arad there only arrived disparate pieces of brick and white marble, not bound by any mortar, and in the later archaeological trenches no preserved surfaces in situ with this type of mosaic have been identified.

The half- discs, numerous in both categories of material-brick and white marble-could have been combined in the simplest manner, with the straight edges front to front (fig. 22/b).

The larger triangles suggest one of the simplest and most frequently encountered patterns

²⁰ Rusu, Burnichioiu, *Mănăstirea Bizere*, 129. Its archaeological section could not be identified precisely, but after all the descriptions and sketches had been made it was ascertained

that it was located immediately north of the mosaic in the central nave, discovered later on, in 2003.



Fig. 23. Possible model suggested on a sand bed in the exhibition in Alba Iulia for the circle segments of white marble and small pieces of brick.

of opus sectile, resulting from their positioning around a square slab (fig. 22/a). Other triangular pieces of various colors (white-grey marble or greypurple rock), also large and based on an isosceles triangle, could have been combined with each other (fig. 20/f). Additionally, the smaller triangles, according to many analogies, could have alternated with rhombuses (fig. 22/c), with which they would have been placed between horizontal bands made of rectangular or trapezoidal pieces.²¹ Alternatively, the smaller triangles-with one longer, arched sidecan also be assembled with the 5 cm-wide marble segments, which could form a circle. Their placement would fit on the exterior of the circles; in the spaces between the triangles square tiles $4 \ge 4$ cm could have been inserted (figs. 22/h, 23).

Apart from these shapes of relatively simple geometry, there also exist several complete or fragmentary pieces of stone that are more unique, such as the heart- and tear-shaped pieces (fig. 6), which complicate the hypothetical reconstructions. Based on the examples of in situ mosaics in which these shapes appear, they could possibly represent the petals of floral motifs with small discs in their centers (fig. 22/e). Other finished tiles were simply rectangular or square (fig. 22/d); one of them was only described in the 1981 journal of Mircea Rusu, as having a side of 50–56 cm and being 4–5 cm thick.²²

The white marble circle segments found in rather large numbers during the archaeological campaigns prove the presence of circular panels of mosaic (figs. 12/p; 22/h; 23). However, there are no clues concerning the pieces that filled the interior areas of these circles. The white marble disc has a straight edge (fig. 12) betraying the fact that it was fixed adjacent to a straight piece or a rectangular panel, and not a circle. At the same time, all these circular and discoid shapes recovered thus far, along with other curved tiles (figs. 12/m, o, h; 22), allow for the hypothetical existence of a form found in other similar models of medieval mosaics that, in their central areas, with their liturgical and symbolic significance, have shapes such as medallions, rotas, and quincunx.23

Fig. 24. View of the remains of the eastern side of the basilica (2004) (Photo by F. Mărginean).



²¹ See such a pattern in Krisztina Havasi, "Marble works and marble floors in medieval Hungary in the late 12th century. Fragments of a choir screen and opus sectile from Eger medieval cathedral and its artistic connections," in this volume: 224–225, figs. 9, 12, 13. ²² See Rusu and Burnichioiu, *Mănăstirea Bizere*, I, 131.
²³ About the *medallions*, *rotas*, and *quincunx* in floor decoration, see in this volume: Havasi, "Marble works," 226, note 14.

After the first archaeological campaign in 1981, Mircea Rusu gave a series of reports to Suzana Móré Heitel on his discoveries of decorative elements in the Bizere abbey. As a consequence, in the articles and in the introduction of the doctoral thesis of Heitel (published posthumously), the sectilia pieces are mentioned: "tiles of marble with anthropomorphic representations and vegetal decoration, in the incrustation technique." ²⁴ However, also in this case, we do not know exactly what floor artifacts displayed vegetal anthropomorphic representations, since they have not been identified in the Museum in Arad. Thus, there exists the possibility that this oral exchange of information was miscommunicated, especially since the journal of the archaeological campaign only mentions one fragment of figural enameled tile of mosaic,²⁵ which was actually an enameled stove tile.

Similarly, the presence of the decoration in the incrustation technique is still an open question. There is proof of the material exposed here, of slabs with details such as: grooves, marginal cuts at right angles on the back of the pieces, incrustrated lines, lateral beveling on the secondary and lateral faces, and also scraps of nails or nail holes (fig. 12/e-j). Thanks to these details we can accept the hypothesis that at least the basilica of the abbey decorated also with was wall mosaics. Nevertheless, even after so many archaeological campaigns, there should be some reserve regarding this hypothesis. The first argument against this hypothesis would be that in the first stone row of the elevation, namely at the choir and the southern apse (fig. 24) and in other walls identified west and south of the basilica (fig. 27/a), no traces were identified (e. g., holes, mortar, pigments of color) that could have been associated with mosaics or other mural decorations (such as frescoes). Another reason for caution is the ` origin of the material in fragmentary tiles or blocks that display clear signs of spoliation from other Roman buildings, which raises the question: For what building(s) were these slabs with grooves, gripping holes, bevels, and inlays prepared? For something

²⁴ Suzana Móré Heitel, Începuturile artei medievale în bazinul inferior al Mureșului [The beginnings of medieval art in the from the Roman era or for the medieval wall decorations of Bizere abbey?

During the archaeological research conducted after 2001 there have been attempts to check whether other spaces of the abbey have ever had polychrome mosaics, and the results were negative. Where more exigently assembled portions of original floor have been discovered, they were only made of bricks.



Fig. 25. Detail of the refectory floor in 2003 (Photo by F. Mărginean).



Fig. 26. Detail of the *opus spicatum* floor in the northern side of the portico in S13/2004 (Photo by F. Mărginean).

Out of all the floors, the ones in the refectory should be mentioned. They were set in long rows partially combined with pairs of bricks

lower basin of the River Mureş] (Timişoara: Excelsior Art, 2010), 15.

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close to those in *opus figlinium* (fig. 25); also here the elevation fragments that were preserved (thus, the inferior ones at the central pillars) only had traces of white paint. Another that should be mentioned are the *opus spicatum* floors of the portico (fig. 26), preserved in many areas on the eastern, southern, and western sides of the portico and in adjacent spaces in the cloister (in the eastern part).





Fig. 27. a. Fragment of the northern wall of the portico cloister (Photo by F. Mărginean); b. Scrap tesserae of river stone, red marble, and red porphyry collected from the emplecton of the northern wall of the portico.

Relevant data on the decorations in general would be expected from the northern side of the portico and from the south-eastern side of the basilica, where important spaces of the abbey could have functioned, such as the sacristy or the chapterhouse. However, the entirety of the stratigraphy on the northern side of the portico was ruined by burials and treasure hunting.



Fig. 28. Section 122 from 2014 where the traces of a pillar from the central nave can be seen, as well as the last floor from inside the basilica made from fragmentary bricks and recycled slabs of marble.

The only significant information on the mosaics, besides the plethora of isolated pieces recovered from the ravished layers, was the recovery from the emplecton of the northern wall of the portico (set parallel to the basilica) of a scrap tesserae made of river stone, red marble, and even Imperial Porphyry (fig. 27/a–b).

Final observations

In future research, the variety of *opus sectile* tiles might grow and new data may be supplied by archaeometry and other methods of investigation of the materials. At this point, it is obvious that the stone and brick slabs presented here fall into one of two large categories: 1) Roman spolia brought to the abbey island probably even from the beginning of the abbey or basilica; white marble slabs and blocks were observed already in the foundation of the basilica (in 2003 and 2004); 2) pieces that had been specially processed on the

island for the new mosaics from the spolia or "new" raw material.

The last category of tiles should be dated along with the surfaces of mosaics discovered in situ. Regarding the dating of the mosaics in the ensemble, observations pertaining to the style and context. archeological along with general chronological limits supplied by the written documents, are available; all of these suggest their relative establishment at the end of the twelfth century and the beginning of the thirteenth. When the research has advanced, it can be confirmed if they are contemporaneous with the project of the cloister in the second stage of the abbey. The initial form of the abbey, which we assume to have been U-shaped, was modified and thus, between the refectory²⁶ and the basilica a rectangular portico around a courtyard appeared.

The years 1235 and 1236, in which the documents attest that the abbey was severely damaged by the people of the Bishop of Cenad in solidarity with the clerics of Arad,²⁷ represent the superior limit of the interval in which the monks here would have been permitted to accomplish very exigent works, well rounded stylistically, and made by foreign artisans. The most important facts disclosed by the documents from 1236 summarize the conflicts and the resulting state of the cult place. A hoard of people sent by the bishop broke down the gates of the abbey, trying to imprison the abbot. During the conflict, the abbot and two monks were killed, while others were injured or expelled. Another abbot, Cornelius, was installed at the head of the abbey. Bizere was also robbed of a number of goods: from the sacristy, the enemies took five expensive vessels and three letters of privilege. The poor condition of the monastic complex is noted. After this blow, even though the documents still mention Bizere and its abbots up to

the sixteenth century, the monastery does not appear to have gone through flourishing intervals similar to that spanning from the twelfth century to the beginning of the thirteenth.

The remains of the architecture and decoration are predominantly Romanesque, while the latest elements of decorative architecture do not go beyond the early Gothic. Moreover, numerous fragments of decorated limestone or construction elements originating from arches and vaults, some of which belonged to the main church and cloister, bear traces of serious burning. Some were later covered with white, blue, and light red paintings, a possible sign of the attempts made to renovate them.

Apart from the human loss, the abbey had also lost the papers that brought it its privileges²⁸ and it can be supposed, from the way in which it was built and how the materials on the island were recycled, that its income was drastically reduced. The written documents also mention the absence of abbots at Bizere at certain moments, the loss of properties, and unfriendly relations with the noble families from the area.²⁹ To the reasons determined by the local circumstances, there have to be added the general context within the Hungarian Kingdom and the competition with other monastic orders. After another three centuries in which it seems that it only fought for its survival, the Bizere abbey collapsed and gradually fell into ruin. The site became a treasure hunting ground and a quarry for construction material until the twentieth century.

A series of evidence shows that the mosaics suffered damage before the ruining of the basilica and the monastery. Furthermore, there are suspicions that their integrity was affected even from the thirteenth century during the armed conflict when the abbey attacked and robbed.

²⁸ Ileana Burnichioiu, "Bizere abbey: A chronology," in *Mănăstirea Bizere* [Bizere monastery], vol. I, eds. Adrian Andrei

Rusu and Ileana Burnichioiu (Cluj-Napoca: Mega, 2011), 124.

²⁹ Burnichioiu, "Bizere abbey," 125–126.

²⁶ Two dinars issued by the kings of Hungary–Stephen II (1116–1131) and Bela II (1131–1141)–were discovered under the brick floor of the refectory.

²⁷ The headquarters of the two institutions were about 20 and 100 km away, respectively, from the Bizere abbey.



Fig. 29. Detail of *opus spicatum* floor on the western side of the portico repaired with a decorated block of stone.

in the interior, made during the Middle Ages. At several points (e. g., in the southern chapel) there was even found remains of the last floor set on a bed of yellow sand and pebbles, which ended up partially covering the first row of blocks of the elevation (fig. 28). The last floor discovered in the southern half of the basilica is made of a very mixed material: fragmentary bricks that alternate in places with remains of marble slabs or malformed blocks everything in a very precarious arrangement. Such repairs with recycled materials happened in other spaces of the abbey that had initially had brick floors, as can be seen on the southern edge of the portico where a Romanesque block decorated with a quatrefoil was used (fig. 29).

Taken from their context, these pieces of *opus sectile* now display the prevalence of geometrical and non-figural patterns. However, originally, they were probably combined with *tessellata* as in the in situ nave's mosaic, which included some zoomorphic representations. Together they made a major contribution to the general decorative ensemble of the basilica.

Within the region, the lot of *opus sectile* from Bizere is the richest deposit of materials of this type, which originates from a medieval site. Along with the in situ surfaces, they represent one-of-a-kind discoveries in Romania, although there are clues to such decorations existing in other medieval ecclesiastic centers,³⁰ especially in the Valley of the Lower Mureş River.



Fig. 30. Very unskillfully made white marble tile, extremely different from the other similar pieces, which might suggest some repair attempts of the mosaic.

At the moment of discovery, especially on the southern and central panels of the mosaic of the nave, there were traces of a fire. Even more certain is that they had been affected by the burials

Fortress (information from Adrian A. Rusu, who is taking them into consideration for a repository).

³⁰ Until now few pieces have been known that originate from other medieval sites, such as the monasteries in Bulci and *Ahtunmonostor* (both on the Lower Mureş) and the Oradea

ARCHAEOMETRIC ANALYSIS OF MOSAIC TESSERAE AND A "RED MARBLE" DECORATIVE STONE FROM THE BIZERE MONASTERY (ARAD COUNTY, ROMANIA).

BERNADETT BAJNÓCZI, DOROTTYA GYÖRKÖS, VIKTÓRIA MOZGAI, MÁTÉ SZABÓ, MÁRIA TÓTH^{**}

Introduction

A large variety of building and decorative materials, including masonry blocks, bricks, slabs, and mosaic tesserae made of rock and ceramic were discovered during archaeological research at the medieval Bizere monastery (Frumuşeni village, Arad County, RO). Most of the mosaic tesserae were dispersed throughout the site, however, two surfaces of pavement mosaic, belonging to the basilica of the abbey, were found *in situ.*¹

Few building and decorative materials mineralogically previously were and petrographically analyzed by Corina Ionescu and Ioan I. Bucur.² Using polarized light optical microscopy (OM), they studied four sedimentary rocks, i.e. one sandstone and three limestone samples,³ and suggested a local provenance for most of them. The authors presumed that sandstone and limestone might have been extracted ca. 30 and 65 km, respectively, east of the Bizere site. In addition, fifteen samples of bricks from different parts of the Bizere monastery were studied by Corina Ionescu and Lucretia Ghergari.⁴ The mineralogical composition of the bricks indicated the use of a ferruginous red mudstone

(clay) as raw material mixed with sand from the River Mureş as temper. An apparent firing temperature of ca. 900°C was proposed for most of the bricks.

In order to assess the material usage for decorative elements in the Bizere monastery, we have studied additional artifacts, namely several types of mosaic tesserae and tiles made of rock and ceramic and found isolated. A "red marble" decorative stone fragment and a brick were also examined. Thirty-three samples including both rocks and ceramics (Table 1) were studied by means of optical and cathodoluminescence (CL) microscopy, X-ray diffraction (XRD), electron microprobe (EMP), and stable isotope analyses. Based on the mineralogical, petrographic, and geochemical characteristics the probable sources (provenance) for the rocks were suggested, and the firing conditions (temperature) of the ceramics were established.

Analytical methods

Petrographic analysis of the samples (determination of mineralogical composition and texture/microstructure) was carried out on thin sections of ca. 30 µm thickness using a Nikon Eclipse E600 polarizing microscope. The photomicrographs and the grain size of particles were recorded by the SPOT (v4.6.4.2) software. During petrographic analysis of the ceramics, the amount of inclusions, their size categories, degree of sorting, and roundness of the components were determined in accordance with the guidelines of the Prehistoric Ceramic Research Group.⁵

^{*} The rock and ceramic samples were provided by Ileana Burnichioiu and analyzed in the framework of the project *"Monastic Life, Art and Technology at the Bizere Monastery (Arad County, Romania)."*

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¹ Ileana Burnichioiu and Adrian A. Rusu, *Mozaicurile medievale de la Bizere. The Medieval Mosaics from Bizere. Die mittelalterliche Mosaiken von Bizere* (Cluj-Napoca: Mega Publishing House, 2006); Ileana Burnichioiu and Adrian Andrei Rusu, "Medieval floor mosaics at Bizere Monastery," *TR* XX, no. 2 (2011): 3–13; see also, the papers of Xavier Barral i Altet, "Les mosaïques de pavement romanes de Bizere: un programme iconographique et decoratif occidental, au style

tres original, aux portes de l'orient byzantin," and Ileana Burnichioiu, "The decorative heritage of Bizere monastery. Fragments of *opus sectile*," in this volume: 249–264.

² Corina Ionescu and Ioan I. Bucur, "Analiza unor roci sedimentare [The analysis of certain sedimentary rocks]," in *Mănăstirea Bizere* [Bizere monastery], vol. I, eds. Adrian Andrei Rusu and Ileana Burnichioiu (Cluj-Napoca: Mega Publishing House, 2011), 103–106.

³ One sample came from the structure of a well, the second one was a building material, and two others were mosaic tesserae.

⁴ "Studii preliminare de mineralogie și petrografie asupra materialului tegular: compoziție și microfabric [Preliminary mineralogical and petrographic studies on the brick material: structure and microfabric]," in Rusu and Burnichioiu, *Mănăstirea Bizere*, vol. I, 107–116.

⁵ Prehistoric Ceramic Research Group, "The study of Prehistoric pottery: general policies and guidelines for analysis and publication," *Prehistoric Ceramic Research*

No.	Description	Material type	
Bizere-1	mosaic tessera	hornfels	
Bizere-2	mosaic tessera	hornfels	
Bizere-3	mosaic tessera	marble	
Bizere-4	mosaic tessera?	quartzite	
Bizere-5	mosaic tessera	marble	
Bizere-6	mosaic tessera	quartzite	
Bizere-7	mosaic tessera?	impure marble	
Bizere-8	mosaic tessera?	breccia	
Bizere-9	mosaic tessera	serpentine marble	
Bizere-10	mosaic tessera	hornfels	
Bizere-11	mosaic tessera	quartzite	
Bizere-12	mosaic tessera	sandstone (yellow)	
Bizere-13	mosaic tessera	marble	
Bizere-14	mosaic tessera	sandstone (red)	
Bizere-15	mosaic tessera	greenschist	
Bizere-16	mosaic tessera	sandstone (red)	
Bizere-17	mosaic tessera?	quartzite	
Bizere-18	mosaic tessera	marble	
Bizere-19	mosaic tessera	brecciated limestone	
Bizere-20	mosaic tessera	crystalline limestone	
Bizere-21	mosaic tessera?	breccia	
Bizere-22	decorative	limestone	
	stone?		
Bizere-23	mosaic tessera	basalt	
Bizere-24	mosaic tessera	marble	
Bizere-25	mosaic tessera	quartzite	
Bizere-26	mosaic tessera	ceramic (grey-coloured)	
Bizere-27	mosaic tessera	ceramic (sandwich-	
		structured with outer red	
		rim)	
Bizere-28	mosaic tessera	ceramic (red-coloured)	
Bizere-29	brick	brick (red-coloured)	
Bizere-30	mosaic tessera	basalt	
Bizere-31	mosaic tessera	ceramic (grey-coloured)	
Bizere-32	mosaic tessera	ceramic (sandwich-	
		structured with an outer	
		red rim)	
Bizere-33	mosaic tessera	ceramic (red-coloured)	

Table 1. List of the studied rock and ceramic samples from the Bizere monastery site.

In order to identify mineral phases, different mineral generations, and the microstructure of minerals, selected samples were studied by cathodoluminescence microscopy. This method also provides information on the spatial distribution of trace elements and defects in minerals.⁶ Cathodoluminescence investigation was performed using Reliotron "cold-cathode" equipment mounted on a Nikon E600 polarizing microscope. The equipment operated at 5 to 9.5 kV accelerating voltage and 0.4 to 1.2 mA current. Photos were obtained using a defocused electron beam and a Nikon Coolpix 4500 digital camera with automatic exposure.

The mineral phases and the microstructural characteristics of the selected rock samples were studied by a JEOL JXA-733 electron microprobe. Quantitative chemical measurements were performed using an Oxford INCA 2000 energy dispersive X-ray spectrometer (EDS) attached to the microprobe. Analytical conditions were 20 kV accelerating voltage, 6 nA electron beam, and 40 sec spectrum collection time. The natural and artificial materials provided by the Taylor Co. (Stanford, California, USA) were used as standards for calibration. PAP correction was automatically made by the Oxford Instruments INCA software.

Furthermore, mineralogical/phase composition was determined on powdered samples by X-ray diffraction using a Philips PW 1730 diffractometer with Bragg-Brentano alignment. Instrumental parameters were as follows: CuKa radiation, 45 kV tension, 35 mA intensity, 0.05°- $0.01^{\circ} 2\Theta$ step size, 1 s time constant, 1° detector slit, 1° divergence slit, PW-1050/25 goniometer, graphite monochromator, and proportional counter detector. Data processing and analysis was made by Philips APD and X'-pert software and based on the PDF (Powder Diffraction File) database.

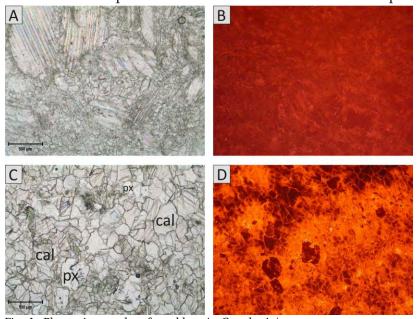
For stable carbon and oxygen isotope measurements one limestone and six marble samples were powdered and analyzed using the continuous flow technique with the H₃PO₄ digestion method. ¹³C/¹²C and ¹⁸O/¹⁶O ratios of the CO₂ gas generated by acid digestion (one hour reaction time with phosphoric acid) were measured using a Thermo Finnigan delta plus XP continuous-flow mass spectrometer equipped with an automated GASBENCH II preparation device as an inlet port. Although dolomite was also detected

Group: Occasional Papers 1-2 (3rd edition) (2010), http:// www.pcrg.org.uk/News_pages/PCRG%20Gudielines%203rd %20Edition%20(2010).pdf (accessed 20.12.2015).

⁶ Bernadett Bajnóczi et al., "Kerámiák vizsgálata katódlumineszcens mikroszkóppal, zalavári – kora középkori –

leletek példáján [Cathodoluminescence microscopy analysis of Migration period pottery from Zalavár, Hungary]," *Archeometriai Műhely* II, no. 2 (2005): 31–41.

in samples Bizere-3 and -5, only one hour reaction time with phosphoric acid was applied and we consider that the produced CO₂ mainly comes from calcite. The results are expressed using standard δ notation relative to V-PDB for C and V-SMOW for O in permil (‰). The reproducibility for both C and O isotope analyses is better than 0.15 ‰, based on replicate measurements of standards and samples.



(fig. 1A). The xenoblastic carbonate grains have straight to curved boundaries. The carbonate is mainly calcite, in some samples (Bizere-3 and -5) a low amount of dolomite is also present. Opaque minerals were detected by optical microscopy, whereas other minerals (quartz, feldspar, sphalerite (?), pyroxene (?), and gypsum) have been identified by XRD. The marble sample Bizere-13 is anisotropic with a heteroblastic and foliated

texture, and shows alternating bands of coarse- and fine-grained calcite. All these marble samples show reddish-orange to orange cathodeluminescence with moderate to strong intensity and homogeneous distribution (fig. 1B).



Fig. 1. Photomicrographs of marbles. A: Cataclastic/mortar texture (larger crystals are embedded into a groundmass of fine-grained calcite crystals) (sample Bizere-5, polarized light, one polarizator). B: Homogeneous orange luminescence (sample Bizere-5, CL image). C: Heteroblastic texture, with unoriented grains (sample Bizere-7, polarized light, one polarizator). Among the calcite crystals (cal) tabular-rounded jadeite (px) occurs. D: Inhomogeneous, patchy orange luminescence both with dull and intensively luminescent parts (sample Bizere-7, CL image).

Results

Rock samples

Most of the studied mosaic tesserae consist of metamorphic rocks such as marble, quartzite, greenschist, hornfels, and "serpentine marble" (ophicalcite). Magmatic rocks (basalt) and sedimentary rocks (sandstone, limestone, and breccia) were also identified.

Marble. Most of the white marble samples (Bizere-3, -5, -18, and -24) have a heteroblastic and cataclastic/mortar texture. The rock consists of variously-sized grains, ranging from <0.05 to 0.5–0.7 mm. Large grains, up to 1 mm are also present

Another white marble sample (Bizere-7) has a different appearance. It is an impure marble with heteroblastic and isotropic texture. The xenoblastic calcite grains are from <0.1 to 0.5 mm in size (fig. 1C). Besides calcite, chlorite, quartz, pyroxene (jadeite according to EDS data), and micas (biotite and chlorite), apatite and plagioclase were also detected. The carbonate part of the rock shows inhomogeneous, patchy CL with both dull and intense luminescent orange parts (fig. 1D).

No.	Sample	δ ¹³ C (V-	δ ¹⁸ O (V-PDB,
	<u>r</u>	PDB, ‰)	‰)
Bizere-3	marble	1.8	-2.7
Bizere-5	marble	1.8	-2.5
Bizere-7	marble	2.3	-2.8
Bizere-13	marble	1.5	-4.5
Bizere-18	marble	1.8	-2.8
Bizere-22	limestone	2.8	-1.9
	('red marble')		
Bizere-24	marble	1.9	-2.1

Table 2. Stable isotope composition of the marble tesserae and a limestone ("red marble") sample.

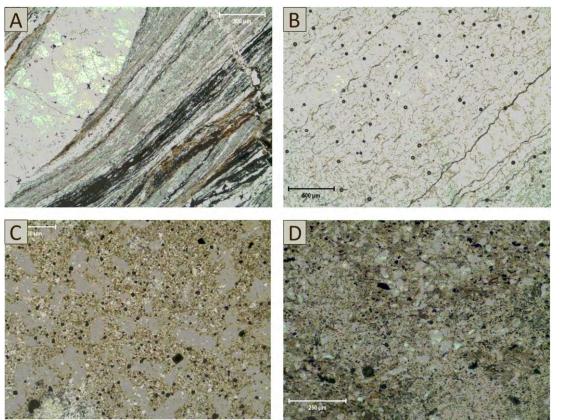
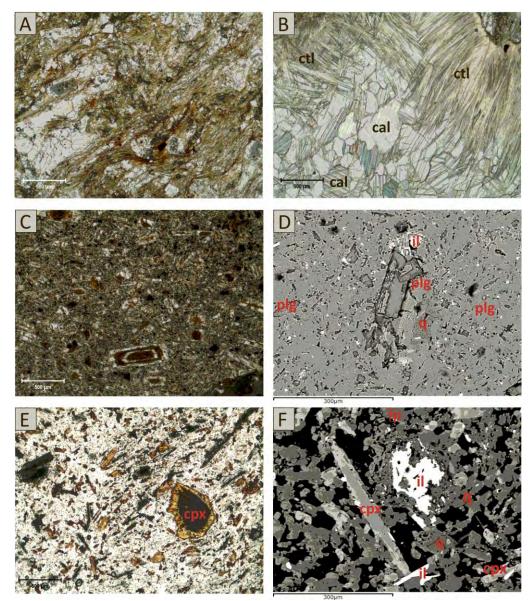


Fig. 2. Photomicrographs of quartzite and hornfels (polarized light, one polarizator). A–B: Oriented microstructure of quartzite with bands of fine- and coarse-grained quartz crystals. Densely interlocking fine dark stripes, probably of organic origin, are present among the grains (A: sample Bizere-4; B: sample Bizere-25). C-D: Hornfels composed of fine-grained chlorite, quartz, feldspar, epidote, and opaque minerals (A: sample Bizere-2; B: sample Bizere-10).

Quartzite. The quartzite samples (Bizere-4, -6, -11, -17, and -25) are macroscopically light or dark grey-colored and banded-foliated. The microstructure is oriented with less than 2 mm thick bands composed of fine- and coarse-grained crystals of up to ca. 0.3 mm in size (fig. 2A, B). Densely interlocked fine dark stripes probably containing organic matter mark the orientation. Sample Bizere-11 shows a weakly oriented microstructure with bands composed of slightly elongated, 0.1 to 0.5 mm sized crystals of mainly xenoblastic quartz. Muscovite or biotite lamellae occur in samples Bizere-4, -6, and -25. Small of feldspar, amounts calcite, diopside, muscovite/illite, goethite, and anhydrite were detected by XRD.

Hornfels. The contact metamorphic rocks are represented by *hornfels* (Bizere-1, -2, and -10). Their greenish matrix is composed of fine-grained (<0.05 mm), homogenously distributed chlorite, chloritized biotite, quartz, epidote, feldspar (mostly plagioclase), opaque minerals (magnetite), and accessories such as zircon and apatite (fig. 2C-D). Large voids are sometimes infilled with epidote. Patches of fine-grained phyllosilicate and/or clay minerals are frequent. The mineralogical composition indicates that the original material was most probably a clayeycalcareous rock, which recrystallized due to the thermal effect of an intrusive mass.

Greenschist. Only one tessera (Bizere-15) proved to be made of foliated greenschist. It is macroscopically composed of a green to brownish mass with scattered pink-colored minerals. Microscopically, the rock contains a large amount of elongated and deformed chlorite lamellae (fig. 3A). Amphibole (actinolite, hornblende), epidote, feldspar (albite), quartz, and a small amount of calcite also occur. Accessory minerals are titanite, ilmenite, and apatite.



Archaeometric analysis of mosaic tesserae and a "red marble" decorative stone

"Serpentine marble" (ophicalcite). The sample Bizere-9 is probably an ophicalcite, here referred to as "serpentine marble." Macroscopically, the rock consists of coarsegrained, whitish carbonate minerals in a mass of light green fibrous minerals, with some blackbrown clasts. The rock is dominantly composed of a fibrous needle-like serpentine mineral, namely chrysotile (fig. 3B). Smaller serpentine fibers occur as subangular clasts. Among the serpentine clasts and the serpentine fibers fine-grained calcite as well as crystalline limestone and marble clasts are visible.

Fig. 3. A: Photomicrograph of greenschist showing deformed chlorite lamellae (sample Bizere-15, polarized light, one polarizator). B: Photomicrograph of "serpentine marble" (ophicalcite, sample **Bizere-9**, polarized light, one polarizator), predominantly composed of chrysotile fibers and calcite grains. C-D: Basalt with zoned plagioclase phenocrystals embedded into fine-grained groundmass composed mainly of plagioclase (sample Bizere-23, C: polarized light, one polarizator; D: Backscattered electron image). E-F: Basalt with clinopyroxene phenocrystals embedded into the fine-grained groundmass composed mainly of plagioclase (sample Bizere-30, C: polarized light, one polarizator; D: Backscattered electron image). Abbreviations: ctl – chrysotile, cal – calcite, fp – feldspar, plg – plagioclase, q – quartz, cpx – clinopyroxene, il – ilmenite.

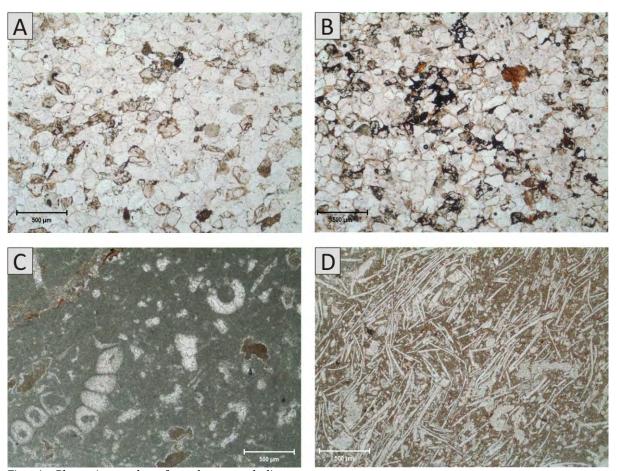


Fig. 4. Photomicrographs of sandstone and limestone (polarized light, one polarizator). A: Yellow-brown sandstone (subarkose, sample Bizere-12). B: Red sandstone (subarkose, sample Bizere-14). C: Brecciated micritic limestone with bioclasts (foraminifera, bryozoa (?)) (sample Bizere-19). D: Biogenic limestone with high amount of *Bositra* shell fragments (sample Bizere-22).

These clasts have heteroblastic and isotropic texture, and are composed of calcite grains of 0.1 to 0.5 mm in size with straight to curved grain boundaries. Opaque minerals are iron oxide and chromite. Quartz and plagioclase were also detected by XRD analysis.

Basalt. The volcanic rocks are represented by two mosaic tesserae made of basalt (Bizere-23 and 30). The first sample has a porphyritic intersertal texture with tabular phenocrystals of zoned plagioclase, up to 0.5 mm in size. The latter are partly brown-pigmented due to hematiticargillaceous (?) alteration (fig. 3C-D).

In the groundmass small plagioclase laths show a quasi-fluidal texture, among them glass occurs.A small amount of quartz was also detected. The accessory minerals are ilmenite and Ti-bearing iron oxide. The sample Bizere-30 has a porphyritic intergranular texture. The phenocrystals, up to 0.5 mm in size, are mainly zoned clinopyroxene (diopside, augite), rarely biotite (fig. 3E-F). A high amount of opaque residues, most likely resulting from mafic minerals (amphibole?) alteration, occur. The fine-grained groundmass is composed of feldspar crystals (mostly plagioclase), with rare quartz. The accessory minerals are apatite and ilmenite. The XRD analysis detected small amounts of β-cristobalite, 10Å phyllosilicate (muscovite/illite), and amphibole.

Sandstone. Three types of sandstones occur among the studied mosaic tesserae: a yellow-

brown oligomict subarkose, i.e. quartz-rich arkose⁷ (sample Bizere-12), a red monomict quartzarenite⁸ (Bizere-16) and a red oligomict subarkose⁹ (Bizere-14).

The yellow-brown subarkose is dominantly composed of quartz and K-feldspar, with low amounts of biotite and muscovite (fig. 4A). The rock is a well-sorted, grain-supported, oligomict, and mature rock. The grains are 0.1 to 3 mm in size. The irregular, sometimes wavy grain contacts and the syntaxial overgrowths around quartz grains are signs of diagenesis (pressuresolution). Accessory minerals are zircon, ilmenite, rutile, barite, and monazite.

The red sandstones are well-sorted, grainsupported rocks. The red monomict quartzarenite is composed of mostly quartz and subordinate micas, whereas the red oligomict subarkose consists of quartz, K-feldspar, biotite, and muscovite (Fig. 4B). The grains are subangular to subrounded and reach 0.5 mm in size.

Disseminated hematite flakes and accessory minerals such as rutile, apatite, and barite are present. In addition, XRD analysis detected small amounts of chlorite and pyroxene (?) in sample Bizere-14, and K-feldspar, plagioclase, and calcite in sample Bizere-16.

Limestone. Limestones are represented by three different kinds of rock, a brecciated limestone (Bizere-19), a red crystalline limestone (Bizere-20), and a light red fine-grained limestone (Bizere-22).

The brecciated limestone (Bizere-19) has a brown, fine-grained (micritic) calcitic cement among grey and white clasts. The brown color of the cement is due to ferruginous staining. The clasts are composed of bulk micritic calcite as well as patches and fossils filled in with sparitic calcite (fig. 4C). The bioclasts are foraminifera, green algae, crinoid (?), and bryozoan (?) fragments. Veinlets filled with calcite crosscut the fossils. According to the textural classification, ¹⁰ the limestone is a wackestone.

The red crystalline limestone (Bizere-20) shows a mosaic texture and is composed of anhedral calcite grains ranging from 0.05 to 0.1 mm in size. Disseminated opaque grains (hematite?) occur sometimes, forming thin seams (stylolite-like stripes). The mosaic texture as well as the dark seams are signs of diagenesis. No intraclasts, peloids, and fossils are visible. Quartz, feldspar, as well as fine-grained muscovite are present among the calcite grains. XRD analysis indicates the presence of vermiculite (?) and some amphibole as well.

The light red fine-grained limestone (Bizere-22) contains a high amount, between 20 and 50 vol%, of calcitic bioclasts (fig. 4D), such as *Bositra* shells, *Echinodermata*, and *Globochaete*. The limestone is grain-supported. The brownish matrix is micrite pigmented by goethite/hematite. Scattered quartz and opaque minerals are present. According to the textural classification, ¹¹ the limestone is a packstone. The stable isotope composition of the limestone sample is shown in Table 2.

Breccia. Among the studied mosaic tesserae, two kinds of breccia with a variegated appearance (black-and-white color) occur (Bizere-8 and -21). Macroscopically they are composed of white- and black-colored parts or clasts with angular to subangular shapes (figs. 5A and 6A). The black color is most probably due to organic matter. In the sample Bizere-8 the angular clasts, from 0.5 cm up to a few centimeters in size, are made of homeoblastic marble. The latter consists of xenoblastic calcite grains less than 0.5 mm in size and has granoblastic (grains with straight to curved boundaries) and isotropic texture (fig. 5B). The marble clasts show dull to moderate, patchy reddish-orange luminescence (fig. 5C). The black matrix among the clasts is composed of calcite, Tibearing iron oxide and phyllosilicates (fig. 5D).

⁷ Textural classification is according to: Robert L. Folk, *Petrology of sedimentary rocks* (Austin, Texas: Hemphill Publishing Company, 1974).

⁸ Folk, Petrology of sedimentary rocks, 127.

⁹ Ibid.

¹⁰ Robert J. Dunham, "Classification of carbonate rocks according to depositional texture," in *Classification of carbonate rocks – A Symposium. American Association of Petroleum Geologists Memoir 1*, ed. William E. Ham (Tulsa, Oklahoma: AAPG, 1962), 108–121.

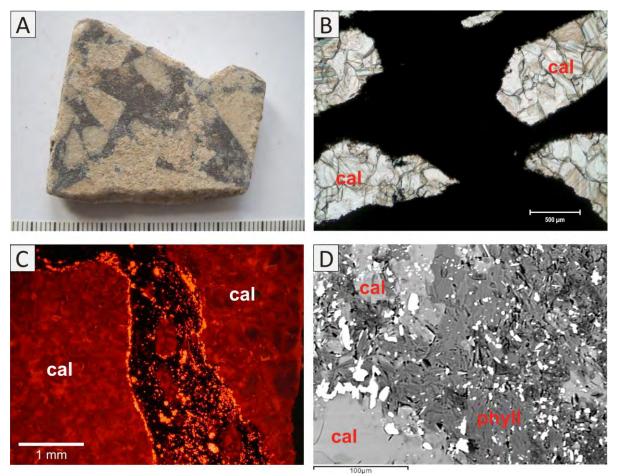


Fig. 5. A. Mosaic tessera made of breccia (sample Bizere-8). B. Photomicrograph of breccia showing white marble clast in a black matrix (polarized light, one polarizator). C: Marble clasts with dull to moderate patchy reddish-orange luminescence. Bright orange luminescent crystals occur on the rim of the marble clasts and among them in the matrix (CL image). D: Marble fragments, bright Ti-bearing iron oxide crystals and phyllosilicate flakes (backscattered electron image). Abbreviations: cal – calcite, phyll - phyllosilicate.

The iron oxide particles (with bright orange luminescence) concentrate on the rims of the marble clast and also occur scattered in the matrix (fig. 5C-D). XRD indicated the predominance of calcite, and the presence of 10Å phyllosilicate, hematite, β -cristobalite, plagioclase, and K-feldspar.

The white clasts in sample Bizere-21 are made of coarse-grained, homeoblastic, and isotropic marble composed of xenoblastic calcite grains up to 0.5 mm in size. The clasts are crosscut by calcite veinlets (fig. 6B).

The black matrix in between the white parts contains a high amount of rounded or elongated calcitic clasts dominantly <0.05 to 0.15 mm in size. Larger clasts up to 0.5 mm also occur and they clearly show a similar texture to the white marble parts. The black matrix is composed of quartz and phyllosilicates (fig. 6C-D). According to XRD data, the latter are probably corrensite and a 10Å phyllosilicate.

XRD also detected K-feldspar and plagioclase. The rim of the white marble parts is frequently brown-stained.

The larger clasts in the matrix also contain an inner brown zone, and brown staining occurs in the matrix as patches and circles (fig. 6C-D). Brown staining is due to Ti-bearing iron oxide and titanite particles. Archaeometric analysis of mosaic tesserae and a "red marble" decorative stone

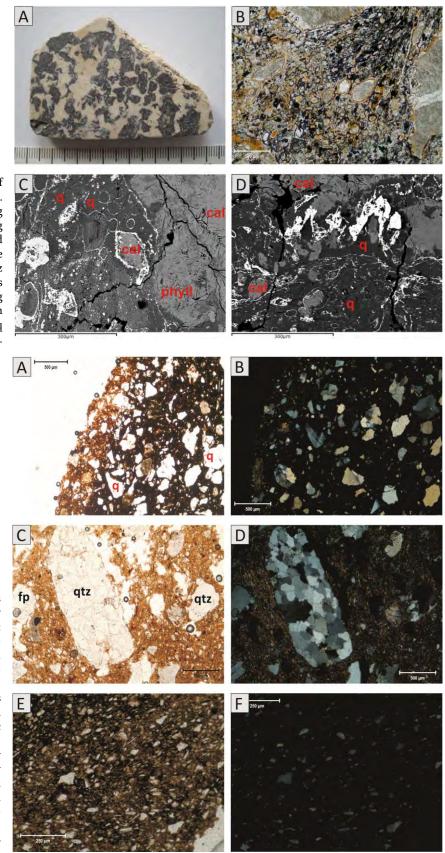


Fig. 6. A. Mosaic tessera made of breccia (sample Bizere-21) B.
Photomicrograph of breccia showing marble clasts and black matrix showing places with brown staining (polarized light, one polarizer). C–D: Marble clasts in a matrix composed of quartz and phyllosilicate. The bright patches and circles are composed of Ti-bearing iron oxide (backscattered electron images). Abbreviations: cal – calcite, q – quartz, phyll – phyllosilicate.

Fig. 7. Photomicrographs of ceramics (polarized light images, one polarizer and two polarizers, respectively). A-B: Sample Bizere-27 is a sandwichstructured ceramic with an outer red rim, hiatal texture, and moderatelysorted non-plastic components in ca. 25-30 vol%. C-D: Sample Bizere-33 is a red-colored ceramic with hiatal texture and poorly-sorted non-plastic components in ca. 10-15 vol%. Polycrystalline quartz grains or quartzite rock fragments occur abundantly. E-F: Sample Bizere-26 is a grey-colored ceramic with serial texture and moderately-sorted nonplastic components in ca. 30 vol%. Abbreviations: q - quartz, qtz quartzite, fp - feldspar.



Ceramics

The studied ceramics (Table 1) are diverse and include grey tesserae (samples Bizere-26, -31), red tesserae (samples Bizere-28, -33), and sandwich-structured tesserae (samples Bizere-27, -32), as well as a red brick (sample Bizere-29).

Microscopically, the ceramic mass consists of a dark brown-reddish brown, isotropic matrix. The texture is generally hiatal (fig. 7A-B), with two grain size maxima: 10–150 (-250) µm and 300–600 µm on average; in sample Bizere-33 it ranges up to 1500 µm (fig. 7C-D). Only sample Bizere-26 has a serial texture, with the grain size from 10 to 100 μm (fig. 7E-F). The amount of poorly to moderately-sorted non-plastic components is from 10–15 up to 30 vol%. The non-plastic components angular quartz are mostly (monoand polycrystalline, the latter is a quartzite rock fragment) and feldspar grains. Amphibole, micas (biotite, muscovite), chlorite, and hematite occur scarcely in the ceramics. Calcite and 10Å phyllosilicate (muscovite/illite) were detected by XRD in all samples. Sample Bizere-31 contains very low amount of dolomite. Limestone, argillaceous, metamorphic, and volcanic rock fragments are rare.



¹² Pál Lővei, "A tömött vörös mészkő – "vörös márvány" – a

Discussion

Provenance of the rocks

The decorative stone made of light red biogenic limestone (sample Bizere-22) containing a large amount of Middle Jurassic Bositra shell fragments is a red nodular limestone. It is usually called "red marble" in the art historical and even the architectural literature.¹² In historic times, Lower and Middle Jurassic "red marbles" had been mined for building and decorative purposes at several well-known occurrences such as the Mountains (Hungary), Gerecse Menyháza/ Moneasa (Apuseni Mountains, Romania), Adnet (Northern Calcareous Alps, Austria), and Verona (Southern Alps, Italy).¹³

Despite the fact that the Menyháza/Moneasa deposit is located closest to the Bizere monastery (ca. 100 km NE), it can be safely excluded as a possible source due to the different age (Lower Jurassic) and the different macroscopic and microscopic appearance of the rock (red-yellow patched, microstylolitic, breccia-structured limestone),¹⁴ compared to the studied sample.

"Red marble" of Middle Jurassic age occurs in the Gerecse Mountains as well as near Verona.¹⁵ To determine the provenance of the Bizere "red marble," petrographic analysis has to be combined with stable isotope analysis.¹⁶ The stable isotope composition of the Bizere "red marble" (δ^{13} C = 2.8 ‰, δ^{18} O = -1.9 ‰) fits into the range of δ^{13} C and δ^{18} O values obtained for the Middle Jurassic Gerecse red limestone, as well as for various artifacts made of this limestone, e.g. medieval architectural fragments from Ellésmonostor, Szermonostor, and Décse (Hungary)¹⁷ (fig. 8).

középkori Magyarország művészetében [Massive red limestone – "red marble" – in the art of the medieval Hungary]," *Ars Hungarica* XX, no. 2 (1992): 3–28.

¹³ Farkas Pintér et al., "The provenance of 'red marble' monuments from the 12th-18th centuries in Hungary," *EJM* 16 (2004): 619–629.

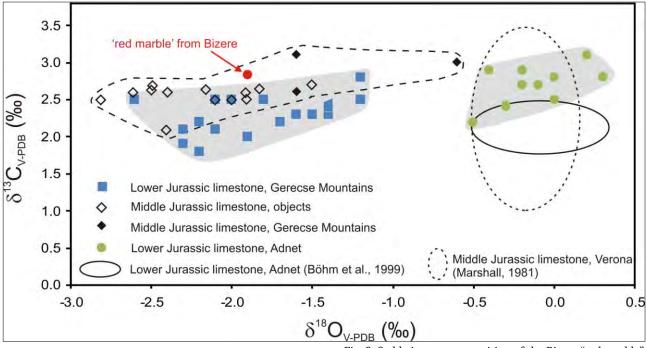
¹⁴ Ibid., 623.

¹⁵ Ibid., 619–629.

¹⁶ Ibid., 619; Pál Lővei et al., "Vörös és fehér díszítőkövek, kristályos és metamorf mészkövek, márványok (Műemléki kutatások természettudományos diagnosztikai háttérrel 1.) [(Red and white decorative stones, crystalline and metamorphic limestones, marbles (Monument investigation

with natural scientific background 1.)]," *ME* 56, no. 1 (2007): 75–82; Farkas Pintér and Bernadett Bajnóczi, ""Vörös márvány" műtárgyak kőanyagának eredethatározása petrográfiai és stabilizotóp-geokémiai vizsgálatokkal [Provenance analysis of 'red marble' works of art using petrographic and stable isotope analyses]", in "*Magyarország földjére küldtek*". *Villard de Honnecourt és az érett gótika megjelenése Közép-Európában. A klosterneuburgi Capella Speciosa és Pannonhalma francia kapcsolatai*, ed. Tibor Rostás (Budapest: 2014), 183–203.

¹⁷ Pintér et al., "The provenance of 'red marble' monuments," 624, 626; Éva Kelemen et al., "Archeometriai vizsgálatok Békés megyei középkori templomok építőanyagain [Archeometric studies on building materials of Medieval churches of Békés



Therefore, we suggest that the material of the Bizere "red marble" originates from a relatively distant occurrence located ca. 300 km NW in the Gerecse Mountains. The white limestone with filaments (sample FB-14e) already studied by Ionescu and Bucur¹⁸ is most probably a faded "red marble." The filaments are *Bositra* shell fragments and we presume that this limestone also originates from the Gerecse Mountains. Compared to the "red marble" decorative stone, based on the geology of the region, we can assume much closer sources for the most of the rock types found among the mosaic tesserae from Bizere.

Regarding the provenance of the white marbles there are several Precambrian and Paleozoic marble occurrences in the Apuseni Mountains and the Southern Carpathians, namely Fig. 8. Stable isotope composition of the Bizere "red marble" decorative stone (sample Bizere-22) compared to the stable isotope range of Lower and Middle Jurassic "red marbles" from Hungarian, Austrian, and Italian quarries and the stable isotope range of the archaeological objects made from Middle Jurassic Gerecse "red marble" (modified after Pintér et al., 2004, including data from Kelemen et al., 2012; Pintér and Bajnóczi, 2014, and unpublished data).

Bucova, Zeicani, Poşaga, Sohodol, Ruşchiţa, Alun, Ocna de Fier, Râul Vadului, Căpâlna, Apoldu de Sus, and Răşinari.¹⁹ The marble at Bucova, in the Tarcu Mountains of the Southern Carpathians, has already been exploited since Roman times.²⁰ The Bucova marble shows either a mortar texture, with larger crystals up to 3.4 mm embedded into a finegrained mass, or a mosaic-granoblastic texture, with grains up to 3 mm and toothed grain boundaries. Calcite is the main carbonate mineral in the Bucova marble, but rarely dolomite occurs

County (Hungary)]," *A Békés Megyei Múzeumok Közleményei* 35 (2012): 83–123; Pintér and Bajnóczi, ""Vörös márvány" műtárgyak kőanyagának eredethatározása," 183-203; Bernadett Bajnóczi's unpublished data.

¹⁸ Ionescu and Bucur, "Analiza unor roci sedimentare," 103–106.
¹⁹ Harald W. Müller et al., "Marbles in the Roman province of Dacia," in Archéomatériaux – Marbres et autres roches (Actes de la Conférence internationale ASMOSIA IV, Bordeaux, France, 9-13 Octobre 1995), ed. Max Schvoerer (Bordeaux: Presses Universitaires de Bordeaux, 1999), 131–140; H. W.

Müller et al., *Der Marmor in Römischen Dakien* (Cluj-Napoca: Mega Publishing House, 2012).

²⁰ Müller et al., "Marbles in the Roman province of Dacia," 131-140; Harald W. Müller et al., "The single Roman marble quarry in Romania," in *Archaeometry 98, Proceedings of the 31st International Symposium, Budapest, April 26 – May 3 1998*, BAR International Series 1043 – Archaeolingua Central European Series 1, vol. 2, eds. Erzsébet Jerem and Katalin T. Biró (Oxford: Archaeopress, 2002), 685-689; Müller et al., *Der Marmor in Römischen Dakien*, 23–33.

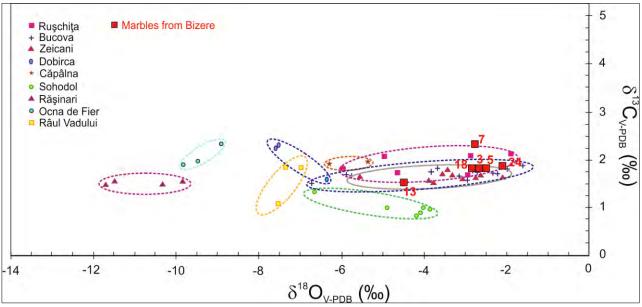


Fig. 9. Stable isotope composition of the Bizere marbles (sample Bizere-3, -5, -7, -13, -18, and -24) compared to the stable isotope fields of marbles occurring in the Southern Carpathians and the Apuseni Mountains (Müller et al., 1999).

as well. Most of the Bizere marble samples (Bizere-3, -5, -18, and -24) have similar characteristics to the Bucova marble, i.e. a cataclastic/mortar texture with a 1 mm maximum grain size, and the presence of dolomite was also detected in two Bizere marble samples (Bizere-3 and -5). The stable isotope composition of the Bizere-3, -5, -18, and -24 marble samples varies in a narrow range ($\delta^{13}C = 1.8$ to 1.9 ‰, δ^{18} O = -2.1 to -2.8 ‰, Table 2) and fits well into the stable isotope field of the Bucova marble (fig. 9).²¹ Therefore, Bucova, located ca. 150 km SE from the Bizere site, can be regarded as a potential source for the Bizere-3, -5, -18, and -24 marble samples. However, other possible sources for the cataclastic/mortar marbles cannot be excluded. For example, the marble quarried at Zeicani (and Păucinești) belongs to the same marble level at Bucova and only stable isotopic and petrographic methods are not enough to make a clear distinction.

Further geochemical analyses have to be performed, as it is known that the Zeicani marble has lower Fe and higher Y and La concentrations compared to the Bucova marble.²²

The foliated marble (Bizere-13) has lower δ^{18} O value (-4.5 ‰) and the impure marble with patchy luminescence (Bizere-7) has higher δ^{13} C value (2.3 %) compared to the Bizere cataclastic/mortar marbles samples (fig. 9). Although their δ^{13} C and δ^{18} O values mostly overlap with the isotope fields of Bucova, Zeicani, and Ruschita marble, the texture and mineralogy suggest that the sources of Bizere-7 and -13 marbles are most probably not these occurrences (e.g. pink-colored Ruschita marble contains epidote²³). Therefore, further studies should be carried out to determine their possible provenance, and the reuse of marbles imported earlier from the Mediterranean region should also be taken into account.24

The basalt samples (Bizere-23 and -30) may originate from the Jurassic ophiolitic sequence cropping out in the Southern Apuseni Mountains.²⁵ The texture of basalts in the Southern

²¹ Müller et al., "Marbles in the Roman province of Dacia," 133; Benea et al., "The single Roman marble quarry in Romania," 685–689.

²² Müller et al., "Marbles in the Roman province of Dacia,"
133; Benea et al., "The single Roman marble quarry in Romania," 685–689.

²³ Ibid., 131–140.

²⁴ Ibid.

²⁵ Emilio Saccani et al., "Tectono-magmatic setting of the Jurassic ophiolites from the South Apuseni Mountains (Romania): petrological and geochemical evidence," *Ofioliti* 26, no. 1 (2001): 9–22; Volker Hoeck et al., "The Eastern Carpathians "ophiolites" (Romania): Remnants of a Triassic ocean," *Lithos* 108 (2009): 151–171; Corina Ionescu and

Apuseni Mountains ranges from aphyric to highly porphyritic. Phenocrysts are plagioclase and clinopyroxene laying in a groundmass that consists mainly of small clinopyroxene, plagioclase, and iron-titanium oxides. Some of the coarse-grained basalts have an intersertal structure. The ophiolitic basalts and basaltic andesites are highly altered and show a wide range of geochemical compositions.²⁶

The material of the mosaic tessera made of greenschist (Bizere-15) may also have local origin as greenschist occurs in the Apuseni Mountains.²⁷ For example, in the Drocea Mountains, east of Bizere, the Jurassic ophiolitic volcanic sequence is exposed, e.g. at Julița, where some parts of sheeted dykes are altered to greenshist facies.²⁸ Greenschist may also originate from the alluvial pebbles of the River Mureş.

"Serpentine marble" (ophicalcite, Bizere-9), a special rock type found among the mosaic tesserae, might also be related to the Jurassic ophiolitic sequence, although up to now we have not found a description of this type of rock in the geological literature of the Apuseni Mountains. It is also possible that this rock does not have local source, but originates from a distant occurrence located in the Dinarides, where serpentinized ultramafic rocks occur, therefore further studies are necessary.

For the source of the mosaic tesserae made of hornfels (Bizere-1, -2, and -10) one may think of the Upper Cretaceous "banatitic" zone, extending in a north-south direction in the western part of Romania, from the northern part of the Apuseni Mts. to the Danube. The banatites include several granitic-granodioritc intrusive bodies that generated large contact zones, containing hornfels and skarns, in the Permian siliciclastic rocks and Mesozoic carbonates. 29 Several types of hornfels are known, ranging from calc-silicate to siliceous and aluminous. These hornfels contain biotite- or quartz-dominant assemblages, or and alusite + cordierite ± corundum and actinolite + chlorite + epidote \pm zoisite.³⁰ The studied tesserae made of hornfels also contain chlorite-biotite, epidote, and quartz. Hornfels around banatitic intrusions occur east from the Bizere site, in the Drocea Mountains and in the Poiana Rusca Mountains. ³¹ Another possible source of the hornfels is the Highis Mountains, also close to and northeast of the Bizere site, where granitoid intrusions of Variscan age occur. These granitoids are surrounded by a contact zone characterized by biotite-rich hornfels.32

Among the mosaic tesserae studied five pieces were made of quartzite (samples Bizere-4, -6, -11, -17, and -25). Quarzite occurs in the Highiş and Drocea Mountains,³³ as well as in the Poiana Rusca Mountains. ³⁴ Quartzite may come from alluvial pebbles of the River Mureş originating from erosion of these occurrences.

The potential source of the sandstones (samples Bizere-12, -14, and -16) may be the Upper Cretaceous Gosau succession of the Apuseni Mountains. The heavy mineral studies of the Gosau sediments indicate low to high-grade metamorphic mineral assemblages, such as staurolite-epidote-zoisite and zircon-tourmalinerutile.³⁵ Sandstones found at the Bizere site contain

Volker Hoeck, "Mesozoic ophiolites and granitoids in the Apuseni Mts.," *Acta Mineralogica-Petrographica Field Guide Series IMA2010 Field Trip Guide RO2* 20 (2010): 1–44.

²⁶ Saccani et al., "Tectono-magmatic setting of the Jurassic ophiolites," 9–22.

²⁷ György Szakmány, written communication, 2016.

²⁸ Ionescu and Hoeck, "Mesozoic ophiolites and granitoids in the Apuseni Mts.," 23.

²⁹ Corina Ionescu, "Stage relations in the contact aureoles of the Budureasa and Pietroasa banatitic intrusions (Apuseni Mountains)," *Studia Universitatis Babeş-Bolyai. Geologia* 41 (1996): 127-13; Gheorghe Ilinca, "Upper Cretaceous contact metamorphism and related mineralization in Romania," *Acta Mineralogica-Petrographica, Abstract Series* 7 (2012): 59–64. ³⁰ Ilinca, "Upper Cretaceous contact metamorphism," 61.

³¹ Dan Giuşcă et al., *Geological map of Romania, 1:200,000 scale, 17. Brad sheet* (Bucharest: Geological Institute, 1964);

Alexandru Codarcea et al., *Geological map of Romania, 1:200,000 scale, 25. Deva sheet* (Bucharest: Geological Institute, 1965).

³² Giuşcă et al., *Geological map of Romania, 1:200,000 scale, 15. Arad sheet* (Bucharest: Geological Institute, 1965); Elemér Pál-Molnár et. al., "Mineralogy and mineral chemistry of Variscan granitoids from Highiş Mts. (Apuseni Mts., Romania)," *Acta Mineralogica-Petrographica, Szeged* 45, no. 2 (2004): 49–54.

³³ Giuşcă et al., *Geological map of Romania, 1:200,000 scale, 15. Arad sheet*; Giuşcă et al., *Geological map of Romania, 1:200,000 scale, 17. Brad sheet.*

³⁴ Codarcea et al., *Geological map of Romania, 1:200,000 scale, 25. Deva sheet.*

³⁵ Volker Schuller and Wolfgang Frisch, "Heavy mineral provenance and paleocurrent data of the Upper Cretaceous

mostly zircon and rutile. Zircon in the sandstone can originate from the Upper Cretaceous banatitic intrusions, whereas the possible source for rutile is the erosion of Permo-Mesozoic sedimentary successions. ³⁶ Ionescu and Bucur have already studied a sandstone sample (FB-28f) from Bizere, which is composed of fine quartz grains, mica, and iron oxide.³⁷ They supposed a rather close origin for the sandstone, the Ususău-Dorgoș area, located 25–30 km to the east of Bizere, where Cretaceous (non-calcareous) sandstones appear. Red sandstone pebbles are also found in the Pleistocene alluvium of the River Mureş.³⁸

In contrary to the "red marble" (the red nodular limestone), the other two studied limestone samples (a brecciated bioclastic limestone, Bizere-19, and a red crystalline limestone, Bizere-20) show no specific fossils indicating the possible age (lithostratigraphy) of the rocks. Several outcrops of Mesozoic and Neogene carbonates are known in the Southern Apuseni Mountains and the Poiana Rusca Mountains, ³⁹ therefore a local origin is very probable for these two limestone samples.

The two black-and-white breccia samples (Bizere-8 and -21) are unique among the studied rocks. According to the texture and mineralogy they might be connected to the marbles, in which tectonic events presumably generated brecciation and the cracks were infilled by organic matter-rich cement. However, description of the black-and-white rocks has not yet been found in the literature dealing with the local geology. Further studies are to be performed for determination of the possible (local or distant) provenance.

Ceramic raw materials provenance and firing conditions

Comparing our ceramic samples with the bricks studied by Ionescu and Ghergari, ⁴⁰ the dominant minerals are similar (mostly quartz,

feldspar, micas, and amphibole). Additionally, Ionescu and Ghergari also detected pyroxene and garnet in the ceramics. We accept their suggestion that sand, most probably originating from the River Mureş, was used to temper the clay. The phase composition determined by XRD, i.e. presence of calcite, chlorite, and 10Å phyllosilicate (muscovite/illite) in the ceramics, suggests a firing temperature of <650-700 °C for the ceramics and the brick sample.⁴¹ It is noticeably lower than the average firing temperature of ca. 900 °C estimated by Ionescu and Ghergari, although they also estimated occasionally medium (800–850 °C) and higher (900-850 °C) temperatures as well.

Conclusions

Different types of mosaic tesserae and tiles from the Bizere monastery, such as pieces made of some white marble, basalt, greenshist, hornfels, quartzite, sandstone, and limestone, were prepared from rocks originating most probably from "local" sources — the Southern Apuseni Mountains, Poiana Rusca Mountains, and/or the Mures Valley, that is the alluvial pebbles of the River Mureş, as well as the Southern Carpathians. The possible local or distant sources of other tesserae made of white marble, "serpentine marble" and black-andwhite breccia, are still to be identified. It is suggested that the material of the "red marble" decorative stone, that is red nodular limestone, originated from a distant source, from the Gerecse Mountains (Hungary).

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Gosau succession of the Apuseni Mountains (Romania)," *Geologica Carpathica* 57, no. 1 (2006): 29–39.

³⁶ Schuller and Frisch, "Heavy mineral provenance," 29–39.

³⁷ Ionescu and Bucur, "Analiza unor roci sedimentare," 104.

³⁸ Information: György Szakmány, 2015.

³⁹ Giușcă et al., *Geological map of Romania, 1:200,000 scale, 15. Arad sheet*; Giușcă et al., *Geological map of Romania, 1:200,000 scale, 17. Brad sheet.*; Codarcea et al., *Geological map of Romania, 1:200,000 scale, 25. Deva sheet.*

⁴⁰ Ionescu and Ghergari, "Studii preliminare de mineralogie și petrografie," 107–116.

⁴¹ Based on Giuseppe Cultrone et al., "Carbonate and silicate phase reactions during ceramic firing," *EJM* 13 (2001): 621– 634; Robert B. Heimann, *Classic and Advanced Ceramics: From Fundamentals to Applications* (Weinheim: Wiley-VCH GmbH & Co., KGaA, 2010).

FRIARS AT WORK: CRAFTSMEN OF THE DOMINICAN ORDER IN 16TH CENTURY TRANSYLVANIA

MIHAELA SANDA SALONTAI^{*}

The presence of skilled workers among the brethren of the religious orders has been a subject of research for many years, particularly in regards to the builders of Cistercian abbeys. Recent studies call into question the traditional image of the White Monks raising their buildings with their own hands, inspired by the twelfth-century writings of the Benedictine monk Orderic Vitalis and perpetuated to modern days.¹ In his account, he relates that the Cistercians erected their first abbeys in lonely, wooded places by means of their own labor, a statement that lasted a great while in literature on Cistercian architecture. Moreover, this situation is portrayed in late medieval votive panels depicting the construction of Cistercian monasteries such as Maulbronn and Schönau, where the workforce consists entirely of Cistercian lay brothers. Most recent studies in the field consider the late medieval representations of Cistercian worksites as highly imaginative and historically questionable in that they portray a situation that is not supported by documentary evidence.² It is assumed that the participation of lay brothers in such building activities only applied to temporary timber constructions while for the lasting masonry structures, their contribution mainly consisted in site supervision.

Nonetheless, there are written references and material evidence pointing to Cistercian lay brothers skilled in various trades who contributed to construction projects and artistic works. One such example is Brother Berthold, the mason depicted on a corbel in the abbey church of Maulbronn or *Johanes Lapicida* recorded on a door tympanum at Ebrach and dated ca. 1424.³ Perhaps a more accurate picture of this phenomenon is the one rendered on an altarpiece panel from 1518 depicting the foundation of the Cistercian Abbey of Neuberg an der Mürz (Styria) by St. Bernard, where secular craftsmen are assisted by Cistercian lay brothers in building the church (fig. 1).

The Order of Friars Preachers, also known as the Dominican Order, includes famous artists such as the Italian painters Fra Angelico and Fra Bartolomeo (alias Baccio della Porta), and the architects Fra Sisto da Firenze and Fra Ristoro da Campi.⁴ Outside Italy, medieval documents occasionally point to the presence of skilled friars who may have contributed to the construction, arrangement, planning, and decoration of houses of the order or took part in secular building enterprises. One of the names recorded in the literature is Andreas of Poland, the friar credited as the artisan of the stained glass windows of the Dominican churches of Pisa and Milan.⁵

The available evidence on Dominican artisans and artists is scarce and interpretation of the sources is not always easy. A well-known example in this respect is Brother Diemar, who is rendered on a capital in the north side choir of the former Dominican church of St. Blasius in Regensburg along with an inscription bearing his name (fig. 2). He wears the habit of the Dominican lay brothers, with a long black scapular over a white tunic, and carries a big compass in his right hand. German art historian Kurt Gerstenberg assumed that Brother Diemar was the master builder of the choir completed as early as 1254,⁶ probably due to the symbolic

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¹ "Monasteries were erected in the wastes and woods by their own labour, and the names given, were by a wise provision, of a sacred character, such as Maison-Dieu, Clairvaux, Bonmont and L'Aumône, and others of the same sort." Thomas Forester, ed., *The Ecclesiastical History of England and Normandy by Ordericus Vitalis*, vol. 3 (London: Henry G. Bohn, 1854), 48; Matthias Untermann, *"Forma Ordinis": Die mittelalterliche Baukunst der Zisterzienser* (München-Berlin: Deutscher Kunstverlag, 2001), 208.

² The subject was discussed and questioned extensively by Untermann, *"Forma Ordinis"*, 208-227.

³ Kurt Gerstenberg, *Die Deutschen Baumeisterbildnisse des Mittelalters* (Berlin: Deutscher Verlag für Kunstwissenschaft, 1966), 35; Untermann, *"Forma Ordinis"*, 225; James France, *Separate But Equal: Cistercian Lay Brothers (1120-1350)* (Kentucky: Liturgical Press, 2012), 63-72.

⁴ Vincenzo Marchese, *Memorie dei piu insigni pittori, scultori e architetti domenicani*, vol. 1 (Firenze: Presso Alcide Parenti, 1845), 21.

⁵ Gilles Meersseman, "L'architecture dominicaine au XIII^e siècle. Législation et pratique," *Archivum Fratrum Praedicatorum* 16 (1946): 179-180.

⁶ According to Gerstenberg, *Baumeisterbildnisse*, 34, the choir was built around 1270-1275. However, recent research puts the completion of the choir about two decades earlier.

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significance of the compass representing a professional attribute of medieval master masons.

Fig. 1. Neuberg an der Mürz, altarpiece panel depicting the foundation of the Cistercian abbey by St. Bernard, right wing workday-side, 1518 (photo by author). However, without further evidence the image is subject to interpretation and one might see in the oversized instrument a less prosaic association with the picture of God as Great Architect of the Universe. This is a theme rendered as early as 1220 in the *Bible Moralisée* and evoked in the writings of Thomas Aquinas and Albertus Magnus. Furthermore, the compass is found in medieval representations of the Liberal Arts, mainly Geometry, or associated with more general intellectual abilities; therefore in this particular case it may well symbolize the clerk of works.⁷

Legal framework

First, let us examine the premises for the practice of various trades outlined by the legislative framework of the Dominican Order. general The regulations stated bv the constitutions as well as the particular rules set by the provincial chapters should be considered the primary sources in this respect. In a Dominican priory, those responsible for all the manual work were the lay brothers or *conversi* whose rule was set forth in Chapter 15 (De conversis) of the primitive constitutions.

These regulations stated their duties at daily church offices and at feasts as well as the behavior to be observed inside the convent and which clothing to wear. Unlike their fellows clerics, the lay brothers were not supposed to spend their time studying and could receive dispensation from fasts, abstinence, and other restrictions in view of their work.⁸ There is no mention regarding the mandatory or permitted occupations for the lay brothers, nor does it say whether or how many qualified workers were required for a regular convent.



Fig. 2. Regensburg, former Dominican church of St. Blasius, Brother Diemar (Kunsthistorisches Institut der Universität Köln, Abteilung Architekturgeschichte, Diathek).

Furthermore, the constitutions give us no indication about the involvement of the friars in building activities and the rule referring to architecture and decoration divulges no particular information in this respect. Since around 1235, a new provision was introduced that required the election of a committee of three friars in each convent, "without whose advice no edifices ought to be constructed."⁹ It seems that this rule had

⁷ On the symbolism of the compass in medieval and Renaissance iconography, see: Anthony Blunt, "Blake's Ancient of Days': The Symbolism of the Compasses," *Journal of the Warburg Institute* 2 (1938-39): 54-55; Lonnie R. Shelby, "Medieval Masons' Tools II. Compass and Square," *Technology and Culture* 6, no. 2 (Spring, 1965): 240.

⁸ Heinrich Denifle, "Die Constitutionen des Prediger-Ordens vom Jahre 1228," *Archiv für Litteratur- und Kirchengeschichte des Mittelalters* 1 (1885): 226-227; G. R. Galbraith, *The Constitution of the Dominican Order 1216 to 1360* (Manchester: The University Press, 1925), 215, 252-253.

⁹ Victor Mortet and Paul Deschamps, *Recueil de textes relatifs à l'histoire de l'architecture et à la condition des architectes en France au Moyen-Âge (XFe-XIII^e siècles), 2nd edition, vol. 2 (Paris: Éditions du Comité des Travaux historiques et scientifiques, 1995), 247; Richard A. Sundt, "Mediocres domos et humiles habeant fratres nostri: Dominican Legislation on Architecture and Architectural Decoration in the 13th Century," <i>Journal of the Society of Architectural Historians* 46 (Dec. 1987): 400. On both Dominican and Franciscan building regulations see the

only been compulsory until 1241, yet it was maintained in the Dominican provinces of Spain and Provence for a further decade. It has been assumed that the role of these three advisory friars was to ensure the compliance with the rules on architecture and decoration set out in the order's constitutions.¹⁰ Indeed, one might wonder whether these *periti* advisers were invested with further responsibilities such as the organization and supervision of the building site. Due to the scarce documentary evidence from the acts of the provincial chapters, little is known about the effect, the spread, or the duration of this rule.

The brethren's involvement in preparing and ensuring appropriate conditions for the construction of their convent was listed as a duty by master general Humbert of Romans (1254-1263) in his Opera de vita regulari. According to his prescriptions, when works were to be done either to a new building or for repairs, the friars ought "to think and to take care of the provision and transportation of building material to the worksite such as timber, stones, tiles, sand, lime and others alike."11 Furthermore, he established the necessity of the election of a praefectus operum from the brethren whose task was to ensure the proper management of the labor; he also recommended appropriate measures for the comfort of the craftsmen, particularly those coming from remote places.¹²

Some aspects relating to the condition of the Dominican artisans are revealed by the acts issued in 1248 and 1255 by the provincial chapter of Provence, which contain specific ordinances on work tools. The decrees stipulate that carpenters and other craftsmen were free to carry tools that they brought with them to the order when they moved from one convent to another.¹³ We learn that there were two kinds of tools: those belonging to the convent (which remained as property of the house where the friar carpenters did their work), and respectively the friars' own tools, which they were allowed to carry with them elsewhere. These regulations prove that the friaries could possess their own tools and that the brethren counted among their number skilled friars. Most likely they were lay brothers who moved from one house to another according to the needs they were called or sent for. On the other hand, hiring an external workforce was a common practice that sometimes was subject to special regulations as shown in the acts of the provincial chapter of the province of Rome (held in 1250 at Orvieto), which banned meat in the meals provided to secular workers.¹⁴ In 1298, the provincial chapter of Provence prohibited both the hiring of women and their access to the construction site of a convent.¹⁵

One may wonder how the friars gained their skill in various crafts. In the first place, it could relate to the age the lay brothers entered the order, which was established in Chapter 13 (De recipiendis) of the general constitutions at no less than 18 years old.¹⁶ By consequence, one can assume that some of the lay brothers already mastered a craft by the time they entered a convent. The situation had been previously covered in the Benedictine rule, which stated that if a man had a trade before entering the monastery he was permitted to continue at that craft.17 A case in point is the Dominican convent of Santa Maria Novella in Florence where, in 1256, the prior received into the order, as conversi, the brothers Sisto and Ristoro along with several sculptors, stone cutters, and

recent study by Panayota Volti, "L'explicite et l'implicite dans les sources normatives de l'architecture mendiante," *Bibliothèque de L'École des Chartes* 162 (Janvier-Juin 2004): 51-74.

¹⁰ Sundt, "Mediocres domos," 400.

¹¹ Humbert de Romans, *Opera de vita regulari*, vol. 2 (Rome: A. Befani, 1889), 331.

¹² "Ad ipsum etiam pertinet conducere operarios et servare et sollicitare eosdem et cum sunt in expensis domus, in cibo et potu debito providere eisdem loco et tempore opportuno; et si debent aliqui aliqua occasione jacere in domo, de loco et lectis secundum dispositionem prelati ordinare." Humbert de Romans, *Opera*, 332.

¹³ Sundt, "Mediocres domos," 406.

¹⁴ Mortet and Deschamps, *Recueil*, 247.

¹⁵ "Item, cum in conventibus nostris, propter opera, interdum operarios conducere et introducere oportebit, inhibemus de nullo modo mulieres ad hujusmodi opera conducantur, nec infra cepta monasterii hac occasione ingredi permittantur." Mortet and Deschamps, *Recueil*, 247.

¹⁶ Galbraith, *The Constitution*, 215.

¹⁷ Herbert A. Applebaum, *The Concept of Work: Ancient, Medieval, and Modern* (Albany: State University of New York Press, 1992), 195.

masons.¹⁸ In his nineteenth-century work on Italian Dominican painters, sculptors, and architects, Vincenzo Marchese assumed that the craft could be learned from skilled friars within the order as well.¹⁹

Transylvanian friar-craftsmen

The Dominican vicariate of Transylvania, which was part of the Dominican province of Hungary, counted as many as nine houses of the First Order and five nunneries up to the midsixteenth century.²⁰ For most of them neither the conditions nor the date of their foundation is known. Written evidence about the size and organization of the priories is only available for the third decade of the sixteenth century, i.e. shortly before the outbreak of the Reformation. As for the physical evidence, only a few buildings have survived and of these mainly the churches, sustained which in their turn more transformations over time.

The first Transylvanian Dominican friar presumed to master a craft was Nicolaus Pictor, a painter and probably a canon friar who lived in 1289 at St. Mary's convent of Alba Iulia.²¹ Except for his name, we have no further indication of his work either in Alba Iulia or elsewhere.

The following evidence concerning the presence of skilled craftsmen among the Transylvanian brethren dates back to the beginning of the sixteenth century. The primary sources in this respect are the city account books of Braşov (Kronstadt/Brassó), as well as a record from the Dominican convent of Sighişoara (Schäßburg/Segesvár) comprising the names of the friars living in the Transylvanian houses between 1524 and 1529.22 According to the latter document, aside from the friars charged with domestic work, at Bistrița (Bistritz/Besterce), Cluj (Klausenburg/Kolozsvár), Sibiu (Hermannstadt/ Nagyszeben), and Sighişoara there are records of as many as five building craftsmen; of them, two were bricklavers (*murator*), two were stonemasons (lapicida), and one was a carpenter (carpentarius). With the exception of friar Urbanus Lapicida, a canon brother in the convent of Cluj, all of them were *conversi*, respectively: Michael murator (Sibiu), Laurencius murator (Sighisoara), Petrus *lapicida* (Bistrita) and Laurencius de Silesia carpentarius (Bistrita). Apart from their names, nothing is known about their work performed either for the houses of the order or elsewhere.

Some other Dominican craftsmen are revealed in nineteenth-century writings containing brief descriptions of structures no longer extant.

Local historian Friedrich Müller recorded an inscription from the former chapter house of the convent in Sighişoara mentioning a certain friar *Benedictus* who served or assisted the masonry works from the year 1510.²³

Another literary source points to the Dominican Johannes Welther as master builder of the parish church restored in 1506 in Şura Mică (Kleinscheuern/ Kiscsűr), a Saxon village near Sibiu.²⁴

¹⁸ Meersseman, "L'architecture," 179.

¹⁹ Marchese, *Memorie*, 163-165.

²⁰ The houses of the First Order (convents or friaries) were located in: Alba Iulia, Bistriţa, Braşov, Cluj, Sibiu, Sighişoara, Sebeş, Vinţu de Jos, and Odorheiu Secuiesc. Beside the friars' convents there were sisters' houses of the Second Order of St. Dominic (monasteries or nunneries) at Bistriţa, Braşov, Cluj, Sibiu, and Sighişoara.

²¹ *Ub*, I, 160. Although sometimes in literature the canon brothers (*canonici*, since 1256 *clerici*) are only called "friars" (Galbraith, *The Constitution*, 114), it should be noted that at the least in the Transylvanian written records, each fellow member of a convent was called *frater*, the lay brothers formed the body of *fratres conversi* (see footnote 22 below).

²² The share of the lay brothers was about a quarter of the fellow members, counting as many as 44 *fratres conversi* with various occupations. It is not known for all of them what their duty within the community was. Always present are the cook (*cocus*), the tailor (*sartor*), and the shoemaker (*sutor*), while there are sporadic mentions of the harness maker (*corrigiator*, Braşov), the miller (*molendinator*, Braşov), the guardian of the fishpond (*magister piscinae*, Bistriţa), the smith (*faber*, Bistriţa and Sibiu), the cooper (*doleator*, Sighişoara), the butcher (*carnifex*, Sighişoara), the wainwright (*curripar*, Cluj), or the cellarer (*cellarius*, Cluj). Also registered among the *conversi* were the guardian of the sick (*infirmarius*, Cluj) and the gardener (*hortolanus*, Bistriţa). Karl Fabritius, "Zwei Funde in der ehemaligen Dominikanerkloster zu Schäßburg," *AVSL*, Neue Folge 5 (1861): 23-33.

²³ Friedrich Müller, "Archäologische Skizzen aus Schäßburg," AVSL, Neue Folge 2 (1855), 421.

²⁴ Wilhelm Wenrich, "Künstlernamen aus siebenbürgischsächsischer Vergangenheit," *A VSL*, Neue Folge 22 (1889): 45-46.

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Fig. 3. Bistrița, timber doorframe on the first floor of the former Dominican cloister, west wing (currently Almshouse) (Photo by author).

The entry in the church book, mentioning him as "D[o] minus Johannes Welther, Ordinis Dominicani ecclesiae Aedificator 1506,"²⁵ would rather lead us to think of him as a master workman or a clerk of the works. In any case, one can assume that he was a fellow member of the Dominican convent of Sibiu.

In absence of further evidence, tracing the works of these friars remains a matter of speculation. Some of the surviving structures, such as the sacristy vault of the former Dominican church of Sighişoara or the timber doorframe preserved in the former cloister of Bistrița, date from the early sixteenth century.



Fig. 4. Sighişoara, sacristy of the former Dominican church (currently Lutheran church) (Photo by author).

These structures could have been built by local workshops or, perhaps, by Dominican friars like the aforementioned stonemason Benedict or the carpenter Laurence of Silesia (figs. 3, 4). It seems that craftsmen were more likely to be displaced from one convent to another than their fellow lay brothers. Quite relevant in this respect is the case of master Laurencius murator, fellow of the convent of Sighisoara in 1525, who was missing from both the 1524 and 1529 friars' lists of names, leading to the assumption that his stay there only lasted as long as required for completing some works in the convent. On the other hand, according to written sources at the end of the fifteenth century, the friars of Sighişoara financed the construction of the dormitory and paid the carpenters with money from a private donation. This means that for

²⁵ Johann Wolf, "Aus dem Kleinscheuerner Kirchenbuch," *KVSL* 5, no. 5 (May, 1882): 112.

major building endeavors the brethren hired external labor force.²⁶

Usually, the domestic facilities and the workshops, which ensured the daily life and a certain autonomy to the brethren, were housed within the confines of the convent. Some of them were integrated into the main cloister buildings, like the kitchen and the cellar, while others were set next to the infirmary in an adjacent cloister yard. Although these rooms were part of a regular house, there is little known about their display within a monastic complex. One can presume that workshops like the forge or the carpentry were sheltered in outbuildings located in the domestic courtyard.

An inventory report from the Dominican convent of Cluj, drawn up in 1509 and published in 1866 by Count János Eszterházy, includes a record of facilities and working tools held by the priory at the time. In the first line, it states that the convent was built by the hard work of many friars and could not have been achieved without their common effort and the proper tools.²⁷ In the following lines it is said that the convent had all the necessary working tools to break up the stones into smaller pieces, to cut and shape the stones, as well as to cut the wood and process the timber. Finally, the brethren also had the means to fabricate glass windows.28 This document reveals remarkable material and technological resources that probably were used primarily for the construction and maintenance of their buildings. The presence of the stonemason Urbanus in 1524 clearly supports this evidence. It also points to the existence of a glass workshop, which was probably located within the convent's area, perhaps in the cloister's backyard (fig. 5).

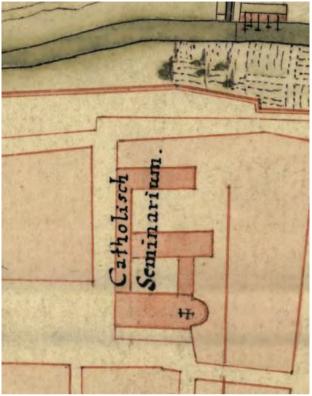


Fig. 5. Cluj, former Dominican convent, detail of 1718 city plan (Österreichisches Staatsarchiv Vienna, Kriegsarchiv, Festungen Inland c VI. a) Klausenburg No. 6).

As we learn from the second book of Teophilus' twelfth-century treatise *De Diversis Artibus*, the making of glass required not only technical knowledge but also suitable premises and facilities. Setting up a glass workshop started with the construction of a kiln divided into two parts, one of which was called "the work-oven" (*clibanus operis*); this was followed by a second, smaller kiln called "the annealing oven" (*clibanus refrigerii*) and then by a third kiln "for spreading and flattening the glass."²⁹ Furthermore, the author provides a detailed description of the working process of different kinds of glass, including the making and cutting of clear glass sheets for windows.

As far as Transylvania is concerned, there is little evidence about the craftsmanship of medieval glass making aside from some artifacts uncovered through archaeological excavations and a few records from city account books. The

²⁶ Fabritius, "Zwei Funde," 10.

²⁷ "Cum luce clarius pateat, structuras huius conuentus multis laboribus per fratres ut plurimum esse erectos quod utique fieri non potuit nisi per conueniencia et debita instrumenta." János Eszterházy, "A Kolozsvári Boldog-Asszonyról czimzett Domonkosok, jelenleg Ferencziek Egyháznak Történeti és Epitészeti Leirása" [Historical and architectural description of the former Our Lady's Dominican, currently Franciscan, church of Cluj], *Magyar Sion* 4 (1866): 584.

²⁸ "Item habet instrumenta necessaria pro fenestris vitreis fiendis." Eszterházy, "A Kolozsvári," 584.

²⁹ Teophilus, *De Diversis Artibus*, ed. C. R. Dodwell (London: Thomas Nelson and Sons Ltd, 1961), 37-43.

earliest material evidence known thus far on the use of stained glass windows seems to date back to the beginning of the fourteenth century and comes from the Dominican convent in Vințu de Jos (Unterwintz/Alvinc). Written sources referring to glass-makers and local production of window glass date back to the mid-fifteenth century, leading to the assumption that by this time glazed windows were already in use.³⁰ As early as 1453 five glaziers (*wytripari, syweges*) are recorded at Cluj and in 1496 a certain Gothard installed glass windows in the city hall.³¹

Although there is no known material evidence to support it, it can be presumed that the Dominican glass workshop of Cluj was something similar to the late medieval glass workshop uncovered at Visegrád (Hungary), though perhaps somewhat smaller.³² It might have consisted of an atelier provided with furnaces for melting the glass and a kiln or a chamber for cooling the objects. The workshop likely functioned according to the technological process described by Teophilus and illustrated in an early fifteenthcentury Bohemian codex and later by the German scholar and scientist Georgius Agricola in the twelfth book of his treatise De Re Metallica (fig. 6).33

Working for the city

The Dominican convent of St. Peter and Paul in Braşov deserves special attention with respect to the friars' involvement in building works. The city account books recorded services provided by the friars preachers to construction sites especially in the third decade of the sixteenth century. It was a period when the city was carrying out various building works that included the fortifications, the town hall, and other public constructions. At the beginning of the sixteenth century, the friars maintained a brickyard that delivered tiles and masonry bricks for the city. Their brick kiln is mentioned in 1524 in an entry concerning the transportation of as many as 950 brick units *de fornace fratrum ordinis praedicatorum* to a small tower under construction on St. Martin's Hill (Martinsberg).³⁴

The quantity of brick material supplied by the Dominican friars between 1521 and 1533 was quite large. According to the city accounts, in 1521 the friars manufactured as many as 1,450 tiles and 13,900 bricks for the city, usually ensuring the transportation to the worksite as well. For the year 1524 a total of 8,900 tiles and 16,750 bricks were delivered by the Dominicans; of these, 13,000 brick units were meant for the town hall.35 In the following years, the convent continued to produce large quantities of brick for public building sites. Thus, in July 1532 Prior Dominicus de Valle Rosarum received 28 florins for the brick delivery, and in October the convent got another 6 florins and 35 aspers for as many as 6,700 masonry bricks manufactured for the city; one year later, in 1533, a supply of 800 fire bricks is recorded for the construction of a furnace.³⁶

³⁰ Adrian Andrei Rusu, "Sticlăria medievală din Transilvania. Repere generale şi documente arheologice" [Medieval glassware in Transylvania. General reference points and archaeological documents], *Ephemeris Napocensis* 5 (1995): 304; Adrian Andrei Rusu, *Investigări ale culturii materiale medievale din Transilvania* [Investigătions on the medieval material culture of Transylvania] (Cluj-Napoca: Mega, 2008), 117, 126.

³¹ Samuel Goldenberg, *Clujul în sec. XVI. Producția și schimbul de mărfuri* [Cluj in the sixteenth century. The merchandise production and exchange] (Cluj-Napoca: Editura Academiei R.P.R, 1958), 164.

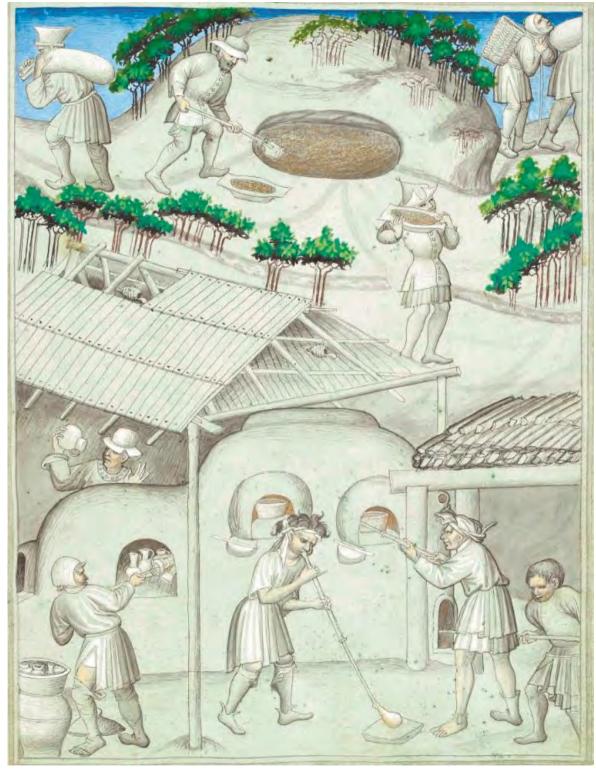
³² Orsolya Mészáros and Mátyás Szőke, "The Fifteenth-Century Glass Workshop in Visegrád," in *Matthias Corvinus, the King. Tradition and Renewal in the Hungarian Royal Court 1458-1490. Exhibition catalogue*, eds. Péter Farbaky and András Végh (Budapest: Budapest History Museum, 2008), 345-347.

³³ Georgius Agricola, *De Re Metallica Libri XII*, ed. Carl Schiffner (Berlin: VDI-Verlag, 1928), 500-508.

³⁴ *Quellen Kron.*, vol. 1, 568.

³⁵ *Quellen Kron.*, vol. 1, 577.

³⁶ *Quellen Kron.*, vol. 2, 243, 245, 293. Just to get an idea about the Dominicans' brickyard productivity at that time, it should be noted that in 1777 the production capacity of the city's brickyard was standardized at 6,000 roof tiles annually. *Quellen zur Geschichte der Stadt Brassó*, vol. 4, *Chroniken und Tagebücher 1143-1867* (Brassó: Druck von A. Gust, 1903), 319.



Friars at work: Craftsmen of the Dominican Order

Fig. 6. Glassmaking, miniature from *The Travels of Sir John Mandeville*, Bohemia, first quarter of the fifteenth century (© The British Library, Add. MS 24189, f.16r).

Thus far, it has been unknown how long the brickyard of the Dominican friars functioned and where it was located. Its construction could relate to a building campaign carried out in the second half of the fifteenth century at the Dominican convent. Most medieval brickyards were temporary facilities set up to serve a specific building project, but occasionally they could be maintained in operation for further purposes, and the same probably happened with the friars' brickyard of Braşov.³⁷



Fig. 7. Israelites making bricks, miniature from the *Flemish Bible History*, mid-fifteenth century (© The British Library, Add. 38122, f.78v).

In principle, a brick manufacture required a large space for the preparation and molding, a barn for drying, and a kiln for firing the bricks. In addition, the source of raw materials (clay, sand, water) ought not to be too far, in order to render the fabrication process more efficient (fig. 7). For these reasons, as well as the danger of fire and the smell, brickyards were usually located outside the cities' walls.³⁸ One can assume that similar criteria applied for the brickyard of the Dominicans in Braşov. The records reveal a sole property of the convent outside the city walls where this facility could possibly have been situated. It consisted of an estate in the eastern neighborhood of Blumenau, in the so-called *Burghals* in the

> foothills of Tâmpa Mountain (German: Zinne), which was donated in 1464 by two local supporters named Simon Clomp and Christian Rod.³⁹ From this act of donation we learn that it was a fairy large property comprising a garden, a fishpond, a barn, stables, and other outbuildings.

> Apart from the Dominican brickvard, the city had its own brick workshop recorded as early as 1527, when bricklayers were paid for the preparation of a brick kiln that was located in the horreum laterum. Five years later, the facility was rebuilt and mentioned several times as the starting point for the shipping of brick material to the worksites; the city

property on this brickyard is certified in an account from 1535 mentioning the *horreum laterum civitatis* as the place where a brick maker called Melchior carried out his work.⁴⁰ The site of the brick workshop remained unknown, however a report from 1704 mentions an ancient brickyard (*Ziegelschoppen*) that stood outside the city wall, in the north suburb and not far from the Langgasse, the main street of the Altstadt (Old Town) leading to St. Bartholomew Church.

³⁷ Brickyards were a source of income for monastic communities. A good case in point is offered by the Carmelite houses, which in 1368 received the right to keep the *fornace laterum vel calcis ad usum monasterij* after the completion of their buildings and to sell the bricks or the lime to *extraneis*. Antoine du Saint Esprit, *Directorium Regularium Tripartitum* (Lyon, 1670), 241.

 ³⁸ Terence Paul Smith, "The late medieval bricks and brickwork of London Wall in Saint Alphage Garden," *London Archaeologist* 10, no. 10 (Autumn 2004): 258.
 ³⁹ Ub, VI, 162.

⁴⁰ Quellen Kron., II, 36, 39.

Some decades later, in 1776, the brickyard was rebuilt in approximately the same area, on a plot located on the *Grassweg.*⁴¹ The latter could match the location of the *Ziegel-Ofen* (brick kiln) marked on a survey map from 1886, west of the Altstadt (fig. 8).

Brick was not the only building material the Dominicans of Braşov supplied to the city. According to the account books, in the years 1520 and 1526 stone was transported from the convent to several worksites. It is unclear, however, what kind of stone material it was and if the convent also ensured its extraction and processing for use in construction.

The intense activity carried out by the Friars Preachers for the city's construction sites took place at a time when the head of the convent was Prior Dominic of Valle Rosarum, who seems to have played an important role in the brethren's venture into the construction industry.

In a record from 1529 referring to the reconstruction of a timber fortification in the old castle near Sachsenberg (today at Dâmboviței Bridge, in Argeș

County), Prior Dominicus de Valle Rosarum is mentioned as being in charge of the architecture of the respective structure.⁴² The question then arises as to what exactly did the prior do for this construction? At first glance one would be tempted to think of an architect in the modern sense of the word. Yet, his role seems to have been of a different nature.

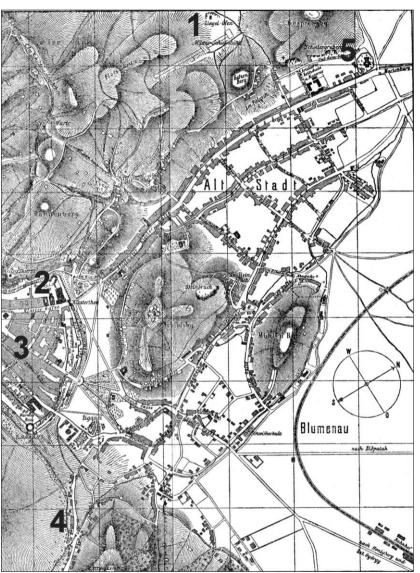


Fig. 8. Braşov, north and east suburbs on the 1886 survey map: 1 – Brickyard; 2 – Former location of the Dominican convent (currently Catholic church rebuilt in eighteenth century); 3 – Inner-city; 4 – Burghals; 5 – St. Bartholomew Church. After Erich Jekelius, ed., *Das Burzenland*, vol. 3, *Kronstadt* (Kronstadt: Burzenländer Sächsische Museum, 1928), Pl. 2).

The meaning and accurate interpretation of the medieval terms architect and architecture has been extensively discussed by Nikolaus Pevsner, and more recently by Günther Binding, so we will not dwell on the topic.⁴³

⁴¹ Chroniken und Tagebücher, 303, 319.

⁴² "[...] munitionem ligneam in veteri arce intra tres hebdomadas extructam [...] retro saxeum montem (ut vulgo nominant) posita [...] Praefuit autem archytecturae isti doctor Dominicus professionis dominicanae huius monasterii prior et ceterarum omnium monasteriorum vicarius generalis." *Quellen Kron.*, II, 154, 157.

⁴³ Nikolaus Pevsner, "The Term "Architect" in the Middle Ages," *Speculum* 17 (Oct. 1942): 549-562; Günther Binding, *Baubetrieb im Mittelalter* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1993), 52-59; Günther Binding, *Der frühund hochmittelalterliche Bauherr als sapiens architectus*, 2nd

The clue to Friar Dominic's participation in the aforementioned works is to be found in the same city account, which states that the timber structure was built in three weeks by a team of secular craftsmen. Nicholas was hired as master carpenter, and he was assisted by seven fellow carpenters named Stephen, Martin, Peter, Johannes Sabloss, Lucas Grüen with his son, and Simon Wynderlich.⁴⁴ According to this record, the timber structure was part of an old castle and its reconstruction took place after it had been burned down, most likely during the 1529 campaign of the Moldavian Voivode Petru Rareș.45 Also known under the names Oratia or Podul Dâmboviței (Dâmbovița Bridge), the castle was located southwest of Brasov on the road to the Wallachian market town Câmpulung, on the Dâmbovita River.

The medieval term *architectura*, which occasionally was linked to artis carpentariae as well, might indicate in this context the term architecton in the sense given by St. Thomas Aquinas as the one who directs and commands the hired craftsmen.⁴⁶ It is most likely that Friar Dominic was the clerk who managed the construction site, supervised the building works and the administration of money for wages, building materials, and meals, but nonetheless it remains unclear whether he played a role in the design as well. Prior Dominic owned the academic title of Sacrae Theologiae Baccalaureus and at the time he was head of the Transvlvanian vicariate. It was under his leadership that the brethren of Braşov delivered the large quantities of tiles and bricks for the city's construction sites. His name indicating the toponym de valle *Rosarum* points to his Transylvanian origins, from

the village of Ruja/Roseln in Sibiu County and he was most likely of Saxon ancestry.

Conclusion

The information available so far only allows a brief evaluation of the Dominican friars' participation in the building activities of late medieval Transylvania. For many of the names mentioned in written sources, such as the masons, bricklayers, and carpenters living in the houses of the order in 1524, the works they carried out nonetheless remain unknown. Some other, anonymous brothers contributed with their skill to the manufacture of thousands of bricks and tiles delivered by the convent of Braşov to the city's construction sites. The documentary evidence, however, only covers a short period of their presence in Transylvania, coinciding with the twilight of the medieval Catholic orders in the province. For the period discussed, one may notice that most Dominican craftsmen were lay brothers, with one exception represented by the stonemason Urbanus, recorded as canon brother at Cluj in 1524. Given the short time of only a few decades covered by the written records, it is hard to say whether the presence of skilled workers was constant throughout the entire existence of the Dominican Order in Transylvania, i.e. since the second quarter of the thirteenth century. One can only presume that in a time span of more than two centuries, between Nicolaus Pictor attested as early as 1289 at Alba Iulia, and the masons, bricklayers, carpenters, and blacksmiths recorded in 1524, there must have been some other skilled craftsmen living in the assumption Transvlvanian friaries. This is supported by a brief reference in a 1491 manuscript from the convent of Braşov containing a *tabula officiorum* for the Dominican church, where a certain *frater lapicida* is mentioned among the officiants who performed the religious services.⁴⁷ In the end we are faced with two peculiar situations in which we either know the names of the craftsmen but there is no evidence of their work, or we know of the work but the craftsmen's names remain unknown as in

edition (Darmstadt: Wissenschaftliche Buchgesellschaft, 1998), 249-282.

⁴⁴ *Quellen Kron.*, II, 157-160.

⁴⁵ Leon Şimanschi, ed., *Petru Rareş* (Bucureşti: Editura Academiei R.S.R., 1978), 95-96. Local chronicler Hieronymus Ostermayer mentioned that in the autumn of 1529, after the unsuccessful siege of Braşov, the Moldavian voivode burned down a bastion of timber "auf dem Burg" and took twenty captives that were later redeemed by the city. *Chroniken und Tagebücher 1143-1867*, 499.

⁴⁶ "[...] qui dirigit et imperat ministris artis qui manu operantur." Pevsner, "The Term," 557, 560.

⁴⁷ Friedrich Wilhelm Seraphin, *Eine Kronstädter Handschrift des Jacobus de Voragine* (Kronstadt: W. Gabony, 1901), 7.

the case of the Dominican brick makers of Brasov.⁴⁸

The involvement of the Mendicant Friars in the building and construction trades is not yet fully clarified. The evidence available thus far rather points to random cases than to a common situation and the presence of skilled stonemasons, bricklayers, and carpenters within the convents was a possibility but not necessarily a rule. Concerning the Transvlvanian Dominicans, not all houses counted artisans among their fellow members, nor did they have the same kind of work facilities. Written evidence shows that amongst the brethren there were friars skilled in various trades and the houses could hold specific work tools and appropriate facilities. In the construction field, the friars were able to supply building materials and provide services to secular worksites in some cases. The latter furnished an additional source of income to the convent, which in the case of the Dominicans of Brasov was not negligible. In the current state of knowledge it is hard to ascertain the level of involvement on the part of the friars in construction sites of the order or their skill level and ability to carry out works of greater complexity.

As shown above, beyond the spiritual life there was a significant lucrative part, of material and economic character, which reveals a lesser known side of the lives of Transylvanian friars. The available data leaves much unsaid and still raises many questions, yet the topic deserves further research, especially in the field of archeology, which may bring additional information in order to broaden our knowledge of the complex landscape of the medieval monastic world.

⁴⁸ In the names' list of the Dominican friars of Braşov in 1524 there is none to suggest a possible brick maker, usually called in medieval documents *laterator*. At that time, the city account books recorded several local artisans such as: Stephen *laterator* in 1527-28, Melchior *laterator* in 1535 or Fabian *laterator* in 1536, who manufactured both bricks and tiles. *Quellen Kron.*, II, 36, 384, 433.

MONASTIC LANDSCAPE

OANA TODA, *The river island monastery: long distance connections and micro-regional isolation in the case of Bizere abbey?*

The Bizere abbey appeared and functioned, along with several other monastic foundations, in direct connection to the watercourse of the Mureş River. The location of this archaeological site was, most likely, an island during its active days and favored the development of a particular archaeological landscape. Various types of data (archival, cartographic, archaeological, geological, and geophysical) allowed valuable assertions to be made about the relationship the abbey shared with the river in terms of both local and long distance communication possibilities. These also made it possible to retrace the watercourse configuration prior to the Habsburg river regulations and to comment on the negative impact the river eventually had on the site, due to its accelerated hydromorphology. Moreover, Bizere abbey is, so far, the only medieval site of the region where archaeological research has retrieved data pertaining to the topic of inland navigation and water transport. Remains of boats and at least one possible mooring location, along with other features, are proof of the practical solutions the Benedictines employed in order to make good use of, and even profit from, a location that, at times, could have become quite unfriendly.

Key-words: inland navigation, water management, watercrafts, historical hydromorphology, Transylvanian salt.

BENCZE ÜNIGE, *Reconstructing a monastic landscape: the case of Cârța (Kerc, Kerz) abbey*

The study deals with the reconstruction of a monastic landscape of the easternmost Cistercian abbey in Europe, which is located today in central Romania, in the region called the Land of Făgăraş, which during the Middle Ages belonged to the border region of Transylvania of the Hungarian Kingdom. The research synthesizes the data from written sources, cartographic and archaeological data, as well as the results of non-invasive surveys, such as a geophysical survey, and extensive field walking. Results unveiled the existence of an elaborate water system (including traces of stream regulation, water channels, ditches, a mill site, and at least one fishpond), which was most probably developed and used by the Cistercian monks during different periods of time. Since the monastic buildings were situated in the floodplain of the Olt River and rich mountain streams ran through the area the water had to be regulated, controlled, and drained. The exact dating of the landscape features could not be carried out because these features were destroyed in 2014 by the establishment of a fishery.

Key-words: monastic landscape, Cârța monastery, Cistercian Order, monastic water management.

ANDREJ JANEŠ, Shaping a monastic landscape in medieval Slavonia

The remains of the Benedictine abbey of St. Margaret are situated 500 m south of the village Bijela, south-east of Daruvar (central Croatia), on a 120 m long and 85 m wide oval elevation. On the south-eastern side, the hill sharply descends into the Brzica Stream.

During the fourteenth and fifteenth centuries, the Benedictine Monastery of St. Margaret, on the western slopes of Papuk, was one of the order's most important centers in medieval Slavonia. Although the exact date of the foundation and construction of the monastic complex is still unknown, Bijela Abbey has the best recorded history. The number of known documents mentioning the monastery, from only ten in the fourteenth century increases significantly to a total of seventy in the fifteenth and sixteenth century, documenting the transformation of a priory into a flourishing abbey. In its beginnings the monastic community in Bijela was subordinated to the abbey of St. Margaret of Garab in Srijem. The old abbey had vast estates in Slavonia, on the border of the Zagreb and Pécs dioceses, and organized the community in Bijela as a priory and grange to manage that estate. The abbey's possessions encompassed a large area on the western edges of Papuk Mountain.

This paper will present the possibilities of studying topography, Franciscan cadastre, contemporary maps, and written sources as a tool for mapping the structure of the abbey's estate, with a market town, villages, parish church, mills, fish ponds, quarries, and distribution of arable land and woods.

Key-words: monastic landscape, Bijela Abbey, Benedictine Order.

SPATIAL ORGANIZATION OF MONASTIC COMPLEXES

ERIC FERNIE, Monastic buildings: Questions of function and design from an Anglo-French perspective

The paper will begin with an examination of the meanings of the words 'function' and 'design' and in particular their application to the practical and presentational aspects of buildings. They will be applied first to the monastic church, concentrating on those characteristics which distinguish it from churches for the laity. In this context the English eccentricity of the monastic cathedral will be examined.

The pair of opposites will then be used to explore aspects of the claustral buildings. These include the relationship of the chapter house to the main sanctuary of the church and the status and purpose of the sculptural decoration on its façade. The multiple openings on the façades of many chapter houses are assessed for their practical and symbolic value, and the openings are then compared with other entrances in the east walk, namely those into the book-room, the slype, the day stairs, and the parlour, which involves the role of the prior. The round and polygonal chapter houses of Norman England are then introduced, along with their iconography and the question of the extent to which centralised chapter houses are found on the Continent. This part of the investigation will also refer to Villard de Honnecourt's diagram of a chapter house. With the reredorter, the chief question will concern the large size of some examples, with the refectory it will be its location on the St Gall Plan, while the kitchen will be discussed in terms of the contrast between standard types and the highly sophisticated designs of some examples in western France. In the case of the cloister the arrangement of walkways at Saint-Riquier is considered.

The paper concludes with a comparative assessment of the claustral building types and their parallels in secular contexts.

Key-words: medieval cloister, chapter house, monastic architecture, medieval England.

BÉLA ZSOLT SZAKÁCS, The early phase of cloister architecture in Central Europe

The topic of medieval cloisters has been the subject of a number of important conferences (see *Gesta* 1973, *Der mittelalterliche Kreuzgang* 2004, and *The Journal of the British Archaeological Association* 2006). The Hungarian materials have been discussed by Ernő Marosi in 2001. However, the problem has not been investigated in the Central European context.

Although the idea of the cloister is clearly manifested in the Sant Gallen Plan, the earliest standing cloisters date from the first half of the eleventh century in Western Europe. Opposed to Western Europe, where cloisters were common in the eleventh through twelfth centuries, monasteries in East Central Europe were usually lacking the cloister before the late twelfth century. The early monasteries were often built with wood (especially in Bohemia and Poland), and later stone constructions did not follow a severe regular plan (see e.g. Feldebrő or Pásztó in Hungary). In many cases the full cloister was built only in the thirteenth century (Mogilno in Poland or St. George Monastery in Prague) or even later (Kladruby, Teplice). Cistercian abbeys were among the first abbeys built with a cloister; however, this is not as regular as was previously supposed and many of the early Cistercian foundations did not have cloisters for a period of time. Thus, they probably had less impact on other monastic buildings than was previously suspected. An important wave of cloister building was the activity of the royal Benedictine abbeys in western Hungary between 1210 and 1240. This can probably be connected to reform movements, although the papal letter of 1225 seems to be too late to be the major inspiration source. In other orders (e.g. Premonstratensians) and other territories, such as Bohemia and northern Hungary, cloisters from a somewhat earlier period cannot be excluded. Bizere might have been one of these early examples. The earliest datable cloisters in Bohemia and Hungary were attached to cathedrals and collegiate churches that might have served as prototypes for the monastic cloister as well. This was just the opposite to the practice of Western Europe where cathedral monasteries were built less frequently and often later than was usual among the monastic orders. This phenomenon may shed some light on the difference between the roles monastic and secular churches played in East Central Europe. We should remember that bishops, members of the royal court, were always incomparably more important figures than any of the abbots; and the size of monastic churches was usually much below the Western standard. It would not be surprising, then, if the secular church played a leading role in cloister architecture, too.

Key-words: monastic architecture, medieval cloister, monastic orders, religious architecture, East Central European monasticism.

ADRIAN ANDREI RUSU, Spatial organization and monastic life in Bizere abbey (Arad County, Romania)

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The results of the archaeological excavations at the former Benedictine abbey of Bizere are represented now by a series of buildings' remains and approximately ten thousand artifacts. Even so, the archaeological research is far from being exhausted allowing more working hypotheses regarding the spatial organization and monastic life. Therefore, at this stage everyday life at Bizere is recomposed from artifacts intended for intellectual activities, constructions related to water management, various types of crafts (stone and masonry workshops, ceramic production, smithy, glass production), games, and pilgrimage. Isolated artifacts offer clues and generate discussions on shapes and functionality, as well as on their origin and production place.

Key-words: Benedictine monastery, monastic life, monastic architecture, monastic archaeology.

TAJANA PLEŠE, Comparative ground-plan analysis of Pauline monasteries in Late Medieval Slavonia

The latter half of the thirteenth century in the territory of Slavonia was defined by a turbulent political and economic situation. However, it was also the time of the initial expansion of the newly constituted Pauline Order that began with the arrival of recently gathered hermits in Dubica. This was a crucial moment for the order, as it had to obtain additional property in the attempt to secure its legality. Through many benefits from the Crown and numerous bequests from powerful noble dynasties and politically influential individuals, the order was rapidly strengthened. By the beginning of the fifteenth century, the Pauline monks had founded ten monasteries in Slavonia alone.

Because of their transformation during the seventeenth and eighteenth centuries into the Baroque style, change of purpose from sacral to profane or military, or their complete disintegration, knowledge of late medieval Slavonian Pauline monasteries was scarce up until the end of the twentieth century. To amend this lack of information, the Croatian Conservation Institute begun a large-scale archaeological excavation project on Slavonian Pauline monasteries founded prior to the Battle of Mohács. Eight monasteries (Moslavina highlands, Remete, Zlat, Streza, Šenkovec, Lepoglava, Kamensko, Donja Vrijeska) have been ascertained and (partially) examined, while two are still only known on the basis of archival data (Dubica and Bakva).

The objective of this paper is to present an overview of the characteristics of Slavonian Pauline monasteries' spatial organization, deduced in compliance with the results achieved thus far through archaeological excavations. **Key-words:** monastic architecture, monastic archaeology, Pauline Order, Croatia.

VALÉRIE SERDON-PROVOST, Architectural design and the cult of Holy Relics in Saint-Vanne abbey (Verdun)

The subject of this conference proposal comes from the results of a newly excavated suburban monastery, the Saint-Vanne Abbey in Verdun: located on a hilltop at the crossroads of major roads and rivers during Antiquity and the Middle Ages, the former abbey was later incorporated inside a major modern fortress (sixteenth century), the High Citadel of Verdun, and thus left untouched by contemporary buildings. The paper will summarize the results of the two first seasons of excavations, whose main objective was the global understanding of the site's layout, from the earliest ecclesiastical occupation (first half of the seventh century) to the different building and occupation phases of the monastery in the Gothic era (fifteenth century), with an emphasis on the most magnificent period, under Richard's abbacy (eleventh century). The function of spaces (place of worship and burial ground) will be especially considered, in relationship with the local cult of Holy Relics. A comparison with other monasteries of the greater Mosan area (today's Belgium) will be made, regarding their architectural and stylistic character.

Key-words: monastic archaeology, monastic architecture, the cult of Holy Relics, medieval Verdun.

ARTISTIC PATRONAGE AND SOURCES OF MONASTIC WEALTH

BEATRIX F. ROMHÁNYI, *Church and Salt. Monasteries and Salt in the medieval Kingdom of Hungary (11th–13th centuries)*

In medieval Hungary the kings often supported monastic institutions by salt donations. Although—unlike in many Western European provinces—salt mines were and remained until the end of the Middle Ages royal property, the participation in the salt trade was a major income source for quite a number of monasteries. The best known source for this is the Bereg treaty from 1233 by which Bizere Abbey also received a certain quantity of salt. The ecclesiastic and particularly the monastic participation in the salt trade was significant especially from the late eleventh until the mid-thirteenth century. According to the charter evidence mainly Benedictine and Cistercian abbeys, as well as the military orders, had a privileged position. The paper deals with certain political and economic aspects of the Bereg treaty and with the monastic participation in the Arpadian-Age salt trade.

Key-words: monastic wealth sources, monastic royal privileges, salt trade, Arpadian-Age.

PÉTER LEVENTE SZŐCS, *Monasteries under private patronage within the social and economic topography: Centers, residences, estates. Several case studies from medieval Hungary*

The social and economic relation between private monasteries has proven to be an important issue in assessing their function and role. In this sense, several cases from medieval Hungary were selected, in order to analyze the position of monastic sites within the structure of estates of that micro-region, especially the relation between the monasteries and the landed properties of the patrons. Furthermore, sources on the residence of the patrons will be reviewed in context with the monastic site. Several abbeys were connected to earthen fortifications or to other types of castles as well. These features and the topography revealed through this analysis suggest that the site of private monasteries had a more or less a central character. Aside from the obvious advantages offered by this position, the abbeys became more vulnerable towards the patrons. The patrons, according to custom, were directly involved in the administration of the monastic estates. Moreover, they were able to use the economic resources of the monasteries not only for the abbey, but also for their own benefits and purposes—sometimes even by expropriating their lands. **Key-words:** private monasteries, monastic topography, monastic patronage.

PIOTR PAJOR, *A Turn to* Fratres Minores. *The Franciscans in 13th-century Lesser Poland and the patronage of Duke Boleslaus the Chaste*

The time around the middle of the thirteenth century was a period of popularization of the mendicant orders in the whole of Central Europe including Lesser Poland, which was one of the duchies existing after the feudal fragmentation of Poland. The Franciscans in particular, who arrived in Cracow during the apostolic mission led by the Saxon province, were quickly taken under the patronage of Duke Boleslaus the Chaste, who founded a church as his mausoleum in Cracow, although his predecessors were buried in Cracow Cathedral. The duke also founded cloisters in Nowy Korczyn and Zawichost; his sister, Salomea, became the first Polish St. Clara's nun; his wife, Kunegund of Hungary, as a widow established and joined the convent in Stary Sacz. In this way Franciscans became the most important order, protected by the local ducal family. The same process took place in other Polish provinces and had significant consequences. For instance, in Silesia the local branch of the Piast dynasty was strongly connected with the Cistercians, but Duke Henry the Pious and his heirs of the Wrocław throne were buried in Franciscan churches. This turn to the Mendicants in the Piast dukes' patronage seems to be much more complex than in, for example, Bohemia. In Lesser Poland this phenomena is even more visible because of some extraordinary examples, such as the central-Greek cross-plan of the Franciscan church in Cracow or the relocation of the first Clarissan cloister from Zawichost to the isolated site near the former castle of Scala. Comparative analysis of the role of the Franciscan cloisters in Boleslaus the Chaste's patronage and propaganda will be the main subject of the paper. Key-words: mendicant orders, Bohemia, Boleslaus the Chaste's patronage.

SILVIJA PISK, Pauline monasteries in medieval Croatia: Sources of monastic wealth. The case of the Blessed Virgin Mary on Garić Hill in Slavonia

The Pauline Order was not officially recognized until 1308, even though Pauline eremites had tried to get recognition from Pope Urban IV as well as authorization for using the Rule of St. Augustine since the mid-thirteenth century. Recognition never happened, as Paul, the bishop of Veszprém, determined that the eremite accommodations did not fulfill the Pope's main requirement after visiting and inspecting them; it appeared that the eremites did not have enough resources to support themselves. It was not until 1308 that Cardinal Gentilis de Montafiore assessed that this requirement was fulfilled and granted the Paulines the freedom to use the Augustine's Rule. After the initial poverty and modest hermit-like accommodations, Pauline monasteries throughout the later Middle Ages transformed into wealthy and distinctive monasteries.

This process can be tracked very easily by looking through examples of Pauline monasteries, especially through the 545 medieval manuscripts from the Holy Virgin Mary Monastery of Garić. During its 300 years of existence, the monastery progressed from a small and poor hermit-like community to a significant feudal power with numerous estates, which included ploughlands, grasslands, forests, vineyards, fishing ponds, and mills. The estates were acquired through donations, leasing, and purchasing. Even though they tended to the estates themselves at first, maintenance became impossible without the use of peasants, servants, and other help after the expansion. This work will describe the course of monastic development and the Pauline's ascent from poverty to riches.

Key-words: Pauline Order, monastic wealth sources, Croatia.

ZLATA GERSDORFOVA, The spiritual environment and artistic patronage in South Bohemia of the 14th century

The contribution deals with the both spiritually and materially rich environment of the dominion of the *Rožmberk* Lords, the most powerful noble dynasty in Bohemia. Thanks to their contacts and position in the Czech Kingdom, South Bohemia along with its monasteries (Cistercian monasteries in *Vyšší Brod* and in *Zlatá Koruna*, the Augustinian canonical monastery in *Třeboň*, and the monastery of Conventual Franciscans and Poor Clares in *Český Krumlov*) are associated with magnificent pieces of medieval Bohemian art that count among the top representatives of Gothic art in Bohemia and in Europe in general (the Madonna of *Český Krumlov*, works of the Master of Vyšší Brod, works of the Master of the Třeboň altar piece, e.g.). This contribution attempts to outline both the spiritual and the cultural background of these works' origin, mirroring the piety that reflected the respect for relics. In this context, it is important to point out the relics of the Corpus Christi Feast, which was, in the manner of Prague festivities, held annually in the residential town of the *Rožmberk* dynasty, the city of *Český Krumlov*, and interconnected both functionally and spiritually the individual monasteries of South Bohemia.

Key-words: the Rožmberk Lords, Bohemia, medieval Bohemian art, medieval piety, the cult of relics.

ARTISTIC CONNECTIONS; ART AND TECHNOLOGY IN THE MONASTIC MILIEU

KRISZTINA HAVASI, *Marble works and marble floors in medieval Hungary in the late 12th century. Fragments of a choir screen and* opus sectile from the medieval cathedral of Eger and its artistic connections

In medieval Hungary towards the end of the twelfth century many cathedrals from the eleventh century were in the progress of being rebuilt or approaching completion. Remarkably, the completion and superior renewal of two such architectural works—at Esztergom and Eger—with excellent marble works and the large-scale use of an elegant and exclusive marble material, are connected to the simultaneous identification of the local marble quarries.

In Esztergom the interior of the Cathedral was certainly "encased" with marble as well. The walls and the pillars of the nave, which probably connected the choir, were also covered with marble. In addition, the preserved details of the variety of incrustation patterns and *opus sectile* floors have been associated with the preferred sites and routes of the cathedral's liturgy. In the art historical research the famous red marble works of the Esztergom Cathedral and the completion of the cathedral's renewal are dated to the common ruling years (1185–1196) of King Béla III and Archbishop Job, illustrated together on the tympanum of the *Porta Speciosa*.

The relics of the renewal of the Eger Cathedral at the end of the twelfth century—the turn of the year 1200—are represented by some early gothic pillar, rib, and capital fragments as well as by a large number of fragments of architectural details, carved in outstanding quality from white marble and red andesite. From these series of blind niches of various sizes and entablatures unfolds the articulated barrier architecture (probably the choir screen). To all this a varied sampled *opus sectile* floor was associated. The ornamental small architecture partially accompanied by inscriptions and incrustations could be related to the elevated level of the main sanctuary and choir of the cathedral, as well as the vaulted burial chamber at the west end of the nave, which certainly represents the burial memory of King Emeric (1196–1204). A possible antecedent and iconographic model of the decorated marble choir and decorative floor at Eger could be the Deanery Church of Alba Regia founded by King Stephen, which got its decoration with the founder's burial (1038) and his canonization (1083). The close connection between the chamber and the barrier architecture in Eger also raises the question of the king's role as a builder. However, next to the king, the most important role was that of Bishop Katapán (1198–1217), who was an important person at the court of King Béla and his son. He started his career as provost of Alba Regia, in the 1190s he advanced to the chancellor's office, and from there to the bishop's chair. The bishop could have played a part in Emeric's decision to interrupt the royal burial series in Alba Regia by choosing to be buried in Eger Cathedral.

Key-words: medieval art, marble decoration, opus sectile, Esztergom, Eger, Alba Regia, Arpadian Age.

ERNŐ MAROSI, Some remarks on fragmentary capitals from the monastery of Bizere

ABSTRACTS

This paper is the first to deal with a collection of carved fragments discovered during archaeological research at Bizere monastery. It is mainly about fragments of zoomorphic capitals probably originating from the most important area of the monastery: the main church and cloister. The author tries to find European stylistic connections and has dated them to the first half of the thirteenth century.

Key-words: zoomorphic capitals, medieval art, medieval sculpture.

XAVIER BARRAL I ALTET, *Les mosaïques de pavement romanes de Bizere: un programme iconographique et décoratif occidental de style très original aux portes de l'Orient byzantin*

La découverte des mosaïques de pavement médiévales de Bizere est un évènement notable pour les études d'Histoire de l'art du Moyen Age. En effet, il s'agit de l'exemple de décoration du sol en *opus tessellatum* situe le plus à l'Est du territoire européen, aux confins du monde byzantin. Son étude permet, sans conteste, de situer ces pavements dans l'orbite culturelle et artistique du monachisme occidental. Le style, très particulier, n'incite pas à proposer l'arrivée dans ces territoires d'équipes d'artisans mosaïstes provenant directement des grands chantiers occidentaux. Mais le répertoire et les caractéristiques générales de ces pavements font supposer la présence d'artisans ayant eu des contacts avec l'Occident roman; ils devaient probablement répondre a la volonté d'un commanditaire souhaitant situer les réalisations artistiques de Bizere à la hauteur de celles des grands monastères de l'Ouest. Au-delà des considérations de technique, de style et de chronologie, la question des rapports avec les pavements en mosaïque de Byzance est également évoquée.

Key-words: mosaïques de pavement, opus tessellatum, opus sectile, l'art du Moyen Age.

ILEANA BURNICHIOIU, *The decorative heritage of Bizere abbey: fragments of the* opus sectile

The Bizere monastery gradually fell into ruin during the sixteenth century and the site became a treasure hunting ground and a quarry for construction material. Consequently, all that was left for scholarship was fragmentary, difficult to patch together, and dependent on the archaeological investigations. This type of research first began in 1981 and carried on between 2001 and 2009, and in 2014, retrieved a notable quantity of mosaic, sculpture, and fresco fragments. This paper is dealing specifically with isolated opus sectile fragments. It analyzes the variety of materials and shapes, technical aspects, and tries to identify some elements of the original design. This study is connected to articles dedicated to mosaics discovered in situ at Bizere as well as to the archaeometric analysis of mosaic tesserae in this volume.

Key-words: medieval art, medieval mosaics, *sectilia*, Benedictine abbey.

BERNADETT BAJNÓCZI, DOROTTYA GYÖRKÖS, VIKTÓRIA MOZGAI, MÁTÉ SZABÓ, MÁRIA TÓTH, *Archaeometric analysis* of mosaic tesserae and a 'red marble' decorative stone from the Bizere monastery (Arad County, Romania)

A large variety of building and decorative materials, including mosaic tesserae, were discovered during the archaeological excavation of the medieval Bizere monastery. In order to assess the material usage for the decorative elements of the monastery, several tesserae made of rocks and ceramics and a "red marble" decorative stone were studied using optical and cathodoluminescence microscopy, X-ray diffraction, electron microprobe, and stable isotope analyses. Most of the studied tesserae consist of metamorphic rocks such as white marble, quartzite, greenschist, hornfels, and "serpentine marble" (ophicalcite). Magmatic rocks (basalt) and sedimentary rocks (sandstone, limestone, and breccia) were also identified. Based on the geology of the region we can assume that most of the rocks have a local source in the Southern Apuseni Mountains or in the Poiana Rusca Mountains. Moreover, the Mureş Valley, that is the alluvial pebbles of the Mureş River, could also be a possible source for the rocks. Some of the white marbles may originate from the Southern Carpathians (Bucova/Zeicani). The "red marble" found at the site is a bioclastic nodular limestone containing a large amount of Middle Jurassic Bositra shell fragments. Its petrographic and stable isotope characteristics point to a distant source, the Gerecse Mountains in Hungary. The possible local or distant sources of some white marble mosaics and other unique tesserae made of "serpentine marble" and black-and-white breccia are still to be identified. The ceramics studied are diverse in appearance including grey, red, and sandwich-structured mosaic tesserae and a red brick. All but one was made from clay intentionally tempered with sand, most probably from the Mureş River. The phase composition of the ceramics suggests a firing temperature of ≤650-700 °C.

Key-words: roman and medieval marble, decorative rocks and ceramics, optical and cathodoluminescence microscopy, X-ray diffraction, electron microprobe, stable isotope analyses.

MIHAELA SANDA SALONTAI, Friars at work: Craftsmen of the Dominican Order in 16th-century Transylvania

The purpose of this study is to examine the presence of friar-artisans within the Transylvanian Dominican convents, and their involvement in carrying out works for the houses of the order and for lay communities. Starting with the regulations set by the Dominican constitutions and the provincial chapters in regards to the friars' participation in building activities, the study will focus on written evidence for the presence of skilled workers among the Transylvanian brethren. The main sources for the topic are the early sixteenth-century city account books of Braşov (Kronstadt/Brassó) as well as two records from the priories of Sighişoara (Schäßburg/Segesvár) and Cluj (Klausenburg/Kolozsvár). The documents reveal names of lay brothers skilled in construction trades and point to the ownership of appropriate tools and working facilities by the convents, but bring no reliable evidence about the friars' work. A case example of prolific cooperation between the local communities and the Dominican brethren of Braşov, who provided building materials and management assistance to the city's construction sites, is also discussed. **Key-words:** Dominican convents, friar-artisans, medieval architecture, medieval Transylvania.

LIST OF ABBREVIATIONS

AAASH	<i>Acta Archaeologica Academiae Scientiarum Hungaricae</i> . Budapest: Magyar Tudományos Akadémia.
AB	Analele Banatului. Serie nouă. Arheologie-Istorie. Timișoara: Muzeul Banatului.
ACi	Analecta Cisterciensia. Rome.
AHA	Acta Historiae Artium Academiae Scientiarum Hungaricae. Budapest: Magyar Tudományos Akadémia.
AMN	Acta Musei Napocensis. Cluj-Napoca: Muzeul Național de Istorie a Transilvaniei.
Apulum	<i>Apulum. Acta Musei Apulensis</i> . Alba Iulia: Muzeul Național al Unirii.
AUA hist.	Annales Universitatis Apulensis. Series Historica. Alba Iulia: Universitatea "1 Decembrie
11011 1100.	1918".
ÁÚO	<i>Codex diplomaticus Arpadianus continuatus/Árpádkori új okmánytár</i> [Documents from the Árpád Age], XI, ed. Gusztáv Wenczel. Pest, 1873.
AVSL	<i>Archiv des Vereins für Siebenbürgische Landeskunde.</i> Neue Folge. Hermannstadt: Verein für Siebenbürgische Landeskunde.
BAM	Brukenthal Acta Musei. Sibiu: Muzeul Național Brukenthal.
Banatica	<i>Banatica</i> . Reșița. Muzeul Banatului Montan.
CCA	Cronica Cercetărilor Arheologice din România. București: cIMeC.
CD	<i>Codex diplomaticus Regni Croatiae</i> , <i>Dalmatiae et Slavoniae</i> , I-XVIII, eds. Tadija Smičiklas et al. Zagreb: Jugoslavenska akademija znanosti i umjetnosti, 1907-1990.
CDH	Georgius Fejér, ed. Codex Diplomaticus Hungariae ecclesiasticus ac civilis, I-XI. Budae, 1829-1844.
CDTrans	Codex diplomaticus Transsylvaniae. Diplomata, epistolae et alia instrumenta litteraria res Transsylvanas illustrantia. Erdélyi okmánytár. Oklevelek, levelek és más írásos emlékek Erdély történetéhez, I-III. Eds. and trans. Zsigmond Jakó, Géza Hegyi, and András W. Kovács. Budapest: A Magyar Országos Levéltár, 1997, 2004, 2008.
CommArhHung	Communicationes Archaeologicae Hungaricae. Budapest: Magyar Nemzeti Múzeum.
DAP	Documenta artis Paulinorum: a magyar rendtartomány kolostorai, I-III Eds. Béla Gyéressy et al. Budapest: Magyar Tudományos Akadémia, 1975-1978.
DHA	Diplomata Hungariae antiquissima, vol. I: 1000-1131. Budapest: Akadémiai Kiadó, 1992.
DIR.C	Documente privind istoria României. Seria C. Transilvania. Veacul XIV [Documents
	Concerning the History of Romania. C. Transylvania. Fourteenth Century], vol. IV (1341-1350). București: Editura Academiei Române, 1955.
EJM	European Journal of Mineralogy. Stuttgart.
EJST	European Journal of Science and Theology. Iași: "Gh. Asachi" Technical University.
EM	Erdélyi Múzeum. Cluj-Napoca: Erdélyi Múzeum-Egyesület.
HAG	<i>Hrvatski arheološki godišnjak.</i> Zagreb: Ministry of Culture Directorate for the Protection of the Cultural Heritage.
HR-HDA	Hrvatski Državni Arhiv [Croatian State Archives]. Zagreb.
HS	Hungarian Studies. A Journal of the International Association for Hungarian Studies. Budapest.
IANSA	Interdisciplinaria Archaeologica – Natural Sciences in Archaeology. Olomouc.
JBAA	Journal of the British Archaeological Association. Covent Garden: British Archaeological
	Association.
KDM	<i>Kodeks Dyplomatyczny Małopolski</i> [The Diplomatic Codex of Lesser Poland], I-II. Kraków: Akademia Umiejętności, 1876, 1886.
KVSL	Korrespondenzblatt des Vereins für Siebenbürgische Landeskunde. Hermannstadt: Verein für Siebenbürgische Landeskunde.
LK	Levéltári közlemények. Budapest: Magyar Nemzeti Levéltár.
MAQ	Medium Aevum Quotidianum. Gesellschaft zur Erforschung der materiellen Kultur des Mittelalter. Krems-Budapest.
MÉ	Művészettörténeti Értesítő. Budapest: Magyar Tudományos Akadémia.
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LIST OF ABBREVIATIONS

MFME	A Móra Ferenc Múzeum Évkönyve. Szeged.
MHEZ	<i>Monumenta historica episcopatus Zagrabiensis</i> , I-VII. Eds. Andrija Lukinović et al. Zagreb: Kršćanska sadašnjost: Hrvatski državni arhiv, 1992-2004.
MLATB-DB	Monastic Life, Art and Technology at the Bizere Monastery (Arad County, Romania). Online database, http://diam.uab.ro/bizere/guest_free.php?fx=lista_fise_guest.
MOL DF/	Magyar Országos Levéltára, Diplomatikai Fényképgyűjtemény. Budapest: Magyar Nemzeti
MNL OL DF	Levéltár, Országos Levéltára, Diplomatikai Fényképgyűjtemény.
MOL DL/	Magyar Országos Levéltára, Diplomatikai Levéltár. Budapest: Magyar Nemzeti Levéltár,
MNL OL DL	Országos Levéltára, Diplomatikai Levéltár.
<i>MonVatHung</i>	<i>Monumenta Vaticana historiam regni Hungariae illustrantia</i> , series I-VI. Eds. Asztrik Várszegi et al. Budapest: Szent István Társulat, 1887-91.
MPH	Monumenta Poloniae Historica, II-III. Ed. Augustyn Bielowski. Lwów, 1872, 1878.
MRT	<i>Magyarország régészeti topográfia</i> [Archaeological Topography of Hungary], I-XI. Budapest: Akadémiai Kiadó, 1966-2012.
PRT	László Erdélyi and Pongrác Sörös, eds. <i>A Pannonhalmi Szent Benedek-Rend története</i> [The History of the Benedictine Order in Pannonhalma], vol. VIII. Pannonhalma: Pannonhalmi Főapátság, 1903.
Quellen Kron.	<i>Quellen zur Geschichte der Stadt Kronstadt in Siebenbürgen</i> . Vol. 1. <i>Rechnungen aus 1503-1526</i> . Vol. 2. <i>Rechnungen aus 1526-1540</i> . Kronstadt: Druck von Römer und Kramner, 1886, 1889.
RA	Emericus Szentpétery, ed. <i>Regesta regum stirpis Arpadianae critico-diplomatica</i> , I/1.
1/1	Budapest: Magyar Tudományos Akadémia, 1923.
RHEF	Revue d'histoire de l'Église de France. Paris: Société d'histoire religieuse de France.
RK	Rocznik Krakowski. Kraków: Towarzystwo Miłośników Historii i Zabytków Krakowa.
Skyllis	<i>Skyllis: Zeitschrift der Deutschen Gesellschaft zur Förderung der Unterwasserarchäologie e.V.</i> Regensburg.
SPFFBU	Sborník Prací Filozofické Fakulty Brněnské Univerzity/Studia Minora Facultatis Philosophicae Universitatis Brunensis. Brno.
Studii	<i>Studii. Revistă de Istorie</i> . București: Institutul de Istorie.
Trans R	Transylvanian Review. Cluj-Napoca: Academia Română, Centrul de Studii Transilvane.
UЪ	Franz Zimmermann et al., eds. Urkundenbuch zur Geschichte der Deutschen in
	Siebenbürgen. Hermannstadt - Bucharest: Ausschuss des Vereins für siebenbürgische
	Landeskunde - Editura Academiei Române, 1892-1991.
VAMZ	<i>Vjesnik Arheološkog muzeja u Zagrebu</i> . Zagreb: Arheološki muzej u Zagrebu.
VHAD	<i>Vjesnik Hrvatskoga arheološkoga društva.</i> Nova serija. Zagreb: Arheološki muzej u Zagrebu.
VMMK	A Veszprém Megyei Múzeumok Közleményei. Veszprém.
Ziridava	Ziridava. Studii și cercetări. Arad: Buletinul Complexului Muzeal Arad.

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