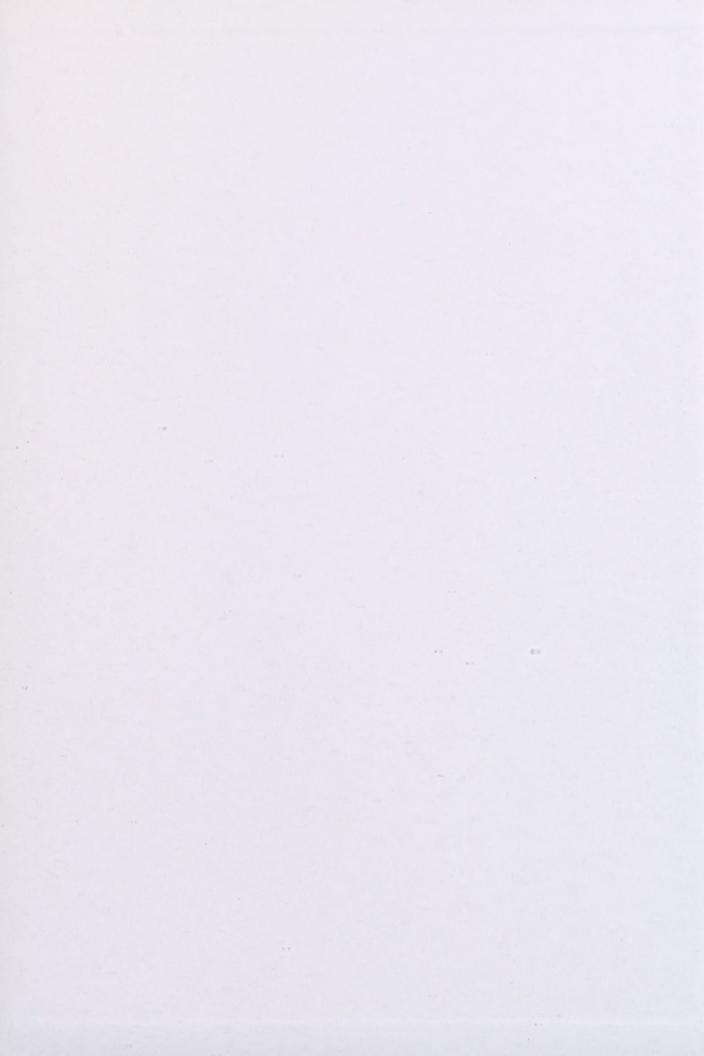
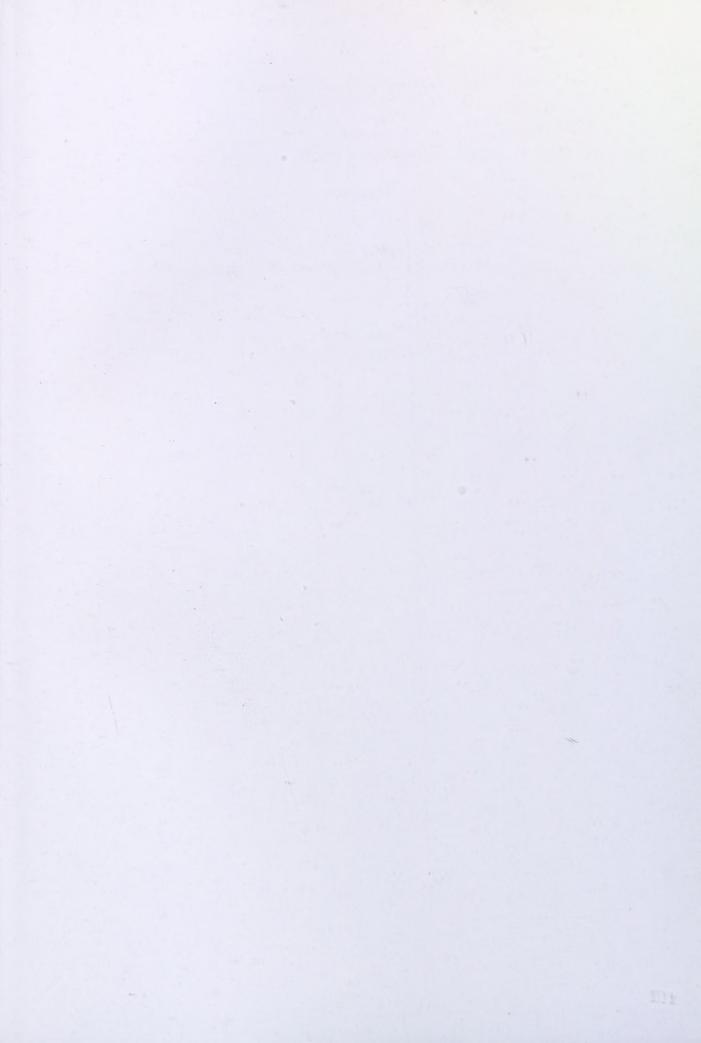
THE MEDIEVAL ROYAL PALACE AT VISEGRÁD

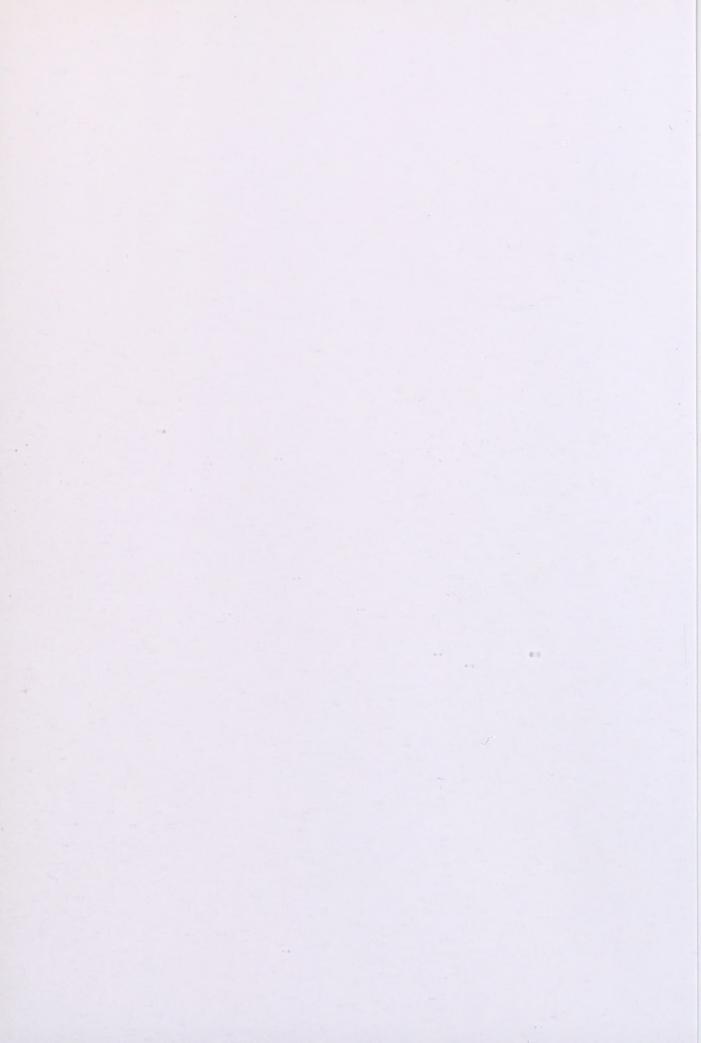


Edited by
GERGELY BUZÁS and JÓZSEF LASZLOVSZKY









ARCHAEOLINGUA

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Volume 27

MEDIEVAL VISEGRÁD Archaeology, Art History and History of a Medieval Royal Centre

Volume 1

Series editor JÓZSEF LASZLOVSZKY

ARCHAEOLINGUA

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THE MEDIEVAL ROYAL PALACE AT VISEGRÁD

Edited by
GERGELY BUZÁS and JÓZSEF LASZLOVSZKY





The publication of this volume was funded by a generous grant from the National Cultural Fund (Nemzeti Kulturális Alap)



Published in cooperation with

King Matthias Museum of the Hungarian National Museum at Visegrád Department of Medieval Studies of the Central European University, Budapest





Front cover: Red marble fountain of the lions with the coat of arms of King Matthias. Reconstruction drawing and full size replica of the fountain in the palace (Reconstructed by Ernő Szakál)

Back cover: Fragment of the coat of arms of King Matthias on the fountain of the lions

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English translation: Kyra Lyublyanovics

MTA KÖNYVTÁR ÉS INFORMÁCIÓS KÖZPONT

Copy editor: Christopher Mielke

Digital work of the images: Narmer Architectural Studio

Architectural survey of the palace and the friary buildings: ART'V Kft. Studio for Documenting Historical Monuments and Archaeological Sites

Softwares used for the digital 3D models and reconstructions:
Adobe® Creative Suite® 2 Premium, ARCHLine.XP,
Autodesk® 3ds Max®, Chaos Group V-Ray (render),
Breuckmann OPTOCAT, Geomagic Studio 10

BC-102.675
The medieval royal palace at Visegrád

201401273

MTA KIK

ISBN 978-963-9911-39-0 HU-ISSN 1215-9239

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2013 ARCHAEOLINGUA ALAPÍTVÁNY H-1250 Budapest, Úri u. 49

Desktop editing and layout by Gergely Hős

Printed by AduPrint Kft.

201401273

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Preface

Visegrád stands out among the medieval sites of Hungary, and the royal palace complex can be regarded as one of the most important monuments for the artistic and architectural production of the royal court during the period of the late Middle Ages. The importance of Visegrád for the history, art history and archaeology of the medieval period is indicated by its large number of monuments, by the historiography of the research, and more recently by major restoration projects of the most important complexes. The palace complex is the key element of this medieval site, not only because the investigation of this particular site and complex was begun in the first half of the twentieth century, but also because it offered and offers today as well exceptional research possibilities compared to other medieval palace sites. The size and the complexity of the palace would in itself ensure that the Visegrád royal residence became one of the principal sites of Hungarian medieval archaeology. However, additional elements need to be mentioned that further enhances the crucial position occupied by Visegrád in the interdisciplinary research of the Middle Ages.

In 1995, the volume of "Medieval Visegrád. Royal castle, palace, town and Franciscan friary." has been published as the first attempt to provide a short summary on the results of the most recent archaeological investigations in English language. At that time, a comprehensive study of the site faced serious problems, because the detailed evaluation of the architectural remains and finds never came to be published, or only some of them appeared in volumes in Hungarian language. Often the publications of some of the most important excavations were only realized several decades after the actual excavations. During the last two decades this situation has fundamentally changed. The monographs, exhibition catalogues on the old and recent excavations and on their historical and art historical interpretations were published year after year in a rather systematic way. The first comparative work on the palace complex was the result of one of the last such volumes. The present work is a revised, extended, in some other parts compressed version of that volume, with a detailed catalogue of the finds as well. We hope that the publication of this volume is the first one in a longer series, which will cover all major aspects of medieval Visegrád in English, thus for a broad and international audience of archaeologists, art historians and historians, interested in many aspects of medieval royal centres.

of historical interpretances were published year after year in a rather systematic way, the first

The Medieval Royal Palace at Visegrád and its Impact on the Research of Medieval Residences

JÓZSEF LASZLOVSZKY

Visegrád, Visegrád, where is thy old glory High citadel? Riverside building? Garden beauty along the Danube? Miles long park inhabited by panthers?

Where then all splendour of the courts
Belonged to the four kings could accomodate,
Not even occupying all its halls
Now a little fox is digging its holes.

János Arany: Toldi's Love. Canto VII. 20-21.

Vizsegrád, Vizsegrád! hol hajdani fényed? Magas fellegvárad? parti építményed? Dunaparti hosszában kerti ékességed? Mérföldekre nyúló párduclakta nyéked?

Ott hol négy királynak azon idő tájba' Megfért volna minden udvari pompája, meg sem töltve bizony negyedfélszáz termét, Most rókafi sunnyog, ássa kicsiny vermét.

History and Memory

János Arany, one of the greatest Hungarian poets, the master of historical panoramas written with the most carefully selected words in beautiful Hungarian language, described the ruins of Visegrád with these lines in the nineteenth century. His description of the palace in the context of a fourteenth century courtly love story was based on the text of a visitor of the site in the sixteenth century.² As this description by Nicolaus Olahus (Miklós Oláh) has already shown the building complex in a somehow abandoned condition, this character of the site was used by János Arany in his poetic interpretation. Ruins and ancient glory were key elements of Romantic poetry or landscape paintings of the period, but historical sources of the Middle Ages have also described the site of Visegrád, and particularly its palace, as an outstanding monument.³ The late medieval palace was presented by contemporary authors, who have visited the site, as a "paradise here on earth".⁴ These descriptions referred to one of the most lavish creations and buildings of the splendour-loving king, Matthias Corvinus (1458–1490), surpassed only by the royal castle of Buda, the main residence and capital of the kingdom.⁵ Although king Matthias did not intend the structure to become a true royal seat, but rather a country residence, his rebuilding activity at Visegrád can be regarded as one of the most important Late Gothic and Early Renaissance building programs in Central Europe in the late fifteenth century. The crucial role of the

English translation is quoted in Réti 2011, 32–33

² Olahus 1938, 11–12. Notes for the text of his poem: http://mek.oszk.hu/00500/00597/html/tsz07.htm#06 07

³ Buzás – Laszlovszky 1995, 20–25.

^{4 &}quot;ex Vissegrado paradiso terrestri". Buzás – Laszlovszky 1995, 20.

⁵ Middle Ages and the post-medieval period 2003; Magyar 2008.

ruler in the reshaping of the palace complex influenced the humanist writers of the period and at the same time the scholars of the twentieth century, as they were formulating their ideas on the palace.⁶ At the same time, the astonishing dichotomy between the descriptions of Visegrád by the humanist writers of the Renaissance era and of the contemporary reality of János Arany's visit can be understood even today after centuries of historical research and decades of archaeological investigations. This dichotomy is also present in the works and writings of modern scholars and writers, particularly before the sensational archaeological finds of the 1930s, which revealed for the first time the artistic and archaeological remains of the medieval complex. Thus, the most striking difference in the view of Visegrád, comparing the mid-nineteenth century and the present day situation, is obviously the building complex of the medieval royal palace. The site of the medieval palace complex, as we can clearly identify it with the fifteenth and sixteenth century descriptions, thus became the main target of the archaeological investigations of the twentieth and twenty-first centuries.⁷ As a result of this, the royal palace of Visegrád is one of the most complex and thoroughly researched monuments of medieval architecture in Hungary. It is also an outstanding site for the courtly culture, royal patronage and art production in the medieval Kingdom of Hungary.

Many examples of the Gothic and Renaissance palaces survived in their original form with their buildings and building complexes of rulers' residences in Western and Southern Europe. Paintings, sculptures and the material culture of the courtly life preserved with care decorating these palaces belong to the most important pieces of art for these periods and they are enriching collections of museums. Other areas of Europe were less fortunate than Italy, England or France which preserved that wealth, often quite completely, which was created by artists helped by Maecenases supporting the production of arts and crafts in spite of natural disasters and wars of centuries. However, even in these cases we need mediators to visualize this intellectual and art movement. We can rarely admire these artworks in the same conditions as they were created over several hundred years ago. Very often the fate of these monuments was devastation just like that of the antique heritage of the Mediterranean world and other parts of Europe.

The royal residences, palaces and castles of the medieval Kingdom of Hungary belong to this less fortunate part of Europe.8 However, not only did these monuments disappear, often seemingly without a trace, but also the medieval Hungarian Kingdom collapsed during the Ottoman-Turkish conquest and wars in the sixteenth-seventeenth centuries. It only existed torn into three parts for almost two centuries, the country which used to play an important role in the history of Middle Europe. The liberating wars at the end of the seventeenth century finally repulsed the newer and newer attempts of the Turkish Empire to occupy Vienna and then roused by all the success they managed to expel the soldiers of the Ottoman Empire from the territory of the former Hungary. These battles and the following freedom fights, however, initiated another wave of devastation causing further disappearance of medieval and Renaissance monuments. As the main royal castles of the Middle Ages remained important military centres,9 mainly because of their castles and their strategic importance, the destruction was particularly devastating in the areas of the "Medium Regni", the heartland of the kingdom. Esztergom, Buda or Székesfehérvár, former royal seats and centres with important residential complexes suffered several sieges in the Early Modern period, some of the most destructive attacks happened during the last phase of Ottoman occupation and as a result of the reconquista of the Christian armies in the last decades of the seventeenth century.

⁶ Balogh 1966; 1985; Buzás – Laszlovszky 1995, 19–21.

⁷ Balla 1993; Buzás – Laszlovszky – Magyar 2003.

⁸ Laszlovszky 2003; Buzás – Laszlovszky – Magyar 2003.

⁹ Buzás – Laszlovszky – Magyar 2003.

The same was the fate of Visegrád, one of the royal centres of medieval Hungary, the capital city of the country in the fourteenth century and the far-famed royal palace of King Matthias at the end of the fifteenth century. The first wave of the Ottoman-Turkish invasion had already caused devastation in the buildings of the palace, this extraordinary complex was emptied after the troubled decades of the battle of Mohács in 1526, in which king Louis II died and the palace stood recalling the faded memory of its golden years from a few decades earlier. The destruction of the Gothic and Renaissance monuments and perhaps most spectacular ornaments started during this period of time, and one of the most extraordinary artworks of the period, the Hercules Fountain decorating the inner courtyard, was likely to end up the same fate.

Regarding the royal palace at Visegrad, the one and a half century following the Ottoman conquest of Buda (1541) brought important military role for Visegrád, which meant new periods of devastation. The royal castles of Visegrad (the Lower Castle – the so-called Solomon Tower, and the Upper Castle), which were among the most significant fortifications of the country, were still playing key roles in the military events of the sixteenth and seventeenth centuries. 10 They were the targets of newer and newer reoccupying before they were re-conquered as part of the European Christian military expeditions against the Ottoman defenders of Buda. The palace, however, was not able to take on military tasks in absence of serious defence structures, so it started slowly to ruin and disappear. So did the ornaments decorating the Palace. The Gothic and Renaissance pieces of art, fountains, reliefs and sculptures in the spirit of rebirth were waiting broken often under meters of rubble to resurrect from their fate. The destruction process was long and slow. Without inhabitants the palace complex was abandoned and the most vulnerable parts, the Gothic vaults, collapsed. Fortunately, natural processes, which otherwise were responsible for the destruction, also played a role in the "protection" of the site. The ruins and the collapsing parts of buildings were covered by earth, the erosion from the hill slope behind the palace complex and below the Upper Castle provided large amount of soil for covering the medieval ruins. A recent, extremely heavy rainfall and thunderstorm in the summer of 2012 has shown how much earth can be moved down from the slopes to the lower part of the settlement. Most probably, this process was also speeded up by the disappearance of the woodland below the Upper Castle. Fortification work, sieges or simply military occupation of settlements often resulted in the total clearing of woodland in the surrounding area. This must have been the case in the sixteenth and seventeenth century in the Visegrad area, thus the fast erosion of the castle hill above the palace complex contributed to the disappearance of the palace ruins. The Visegrad palace, thus, was not used by anyone after the Middle Ages. Its ruined buildings were not utilized for any other purpose, and so the later alterations were minimal. Despite suffering immeasurable damage from being abandoned and unused after the Middle Ages, Visegrad is almost free from later alterations, making it a unique survival.

By the time of the national revival and the emergence historical interest in medieval monuments, in the first half of the nineteenth century, only the ruins of the two royal castles dominated the landscape of Visegrád, at that time a silent small village with its German inhabitants, who settled in the deserted area after the Ottoman period. While the romantic ruins of the medieval castles of Visegrád often appeared in nineteenth century publications, the traces of the palace complex have been lying under the soil of gardens and small orchards behind the village houses of the settlement. Some retaining walls at the foot of the castle hill could have indicated the presence of medieval buildings in the modern village area of Visegrád, but they were not spectacular enough to be compared with the beautiful descriptions of the humanist authors. Few years before the first excavations have started in the area of the palace, scholars still argued about the humanist descriptions of the palace in a skeptic way, and it has been

¹⁰ Buzás – Laszlovszky – Magyar 2003; Iván 2004.

suggested that these texts only indicate the imagination of the court humanist to build the glorious image of the ruler. Therefore, these texts cannot be taken seriously; the archaeological investigation of sites in Visegrád will not produce significant results for the palace itself. In this sense the first archaeological excavation of the palace site can be regarded as a resurrection of the monuments of the late medieval and Renaissance courtly culture and architecture. Yet, this resurrection had to wait for centuries.

The First Archaeological Investigations

Scholarly interest in the royal centres of the medieval Hungarian realm was awakaned in the mid- and later nineteenth century. Following the first excavations in Székesfehérvár by Imre Henszelman, a key figure of the archaeological investigations in this period, he also began his research at the castle of Visegrad. At the beginning of the twentieth century, Kalman Lux, the outstanding architect of the National Monuments Commission, directed the restoration program of the castle complex. His work was continued by János Schulek, who began the research for the lost palace of Visegrád. 12 The disappeared palace was found only in the 1930s and archaeology helped to bring its first remains to the surface by the shovel of the archaeologist the night before World War II, another war causing enormous devastation in the country. The Visegrad palace was not the only monument of this kind and importance which has been revealed in the 1930s by the first major archaeological investigations. During the search for the birthplace of Saint Stephen and the building complex of the early royal residence at Esztergom, one of the other medieval royal centres, equally significant large remains, standing building parts were excavated. Although the excavated spectacular building elements (parts of a royal chapel and rooms of a medieval palace complex) cannot be identified with the period of the first king of Hungary, the late twelfth century royal chapel building belongs to one of the most important archaeological finds of the first half of the twentieth century. 13 In this way Visegrad and Esztergom and their archaeological investigations in the 1930s became outstanding and played crucial role in the emergence of medieval archaeology in Hungary. Later, after the World War II, the archaeological investigations of the palace complex at Buda have also revealed extraordinary finds, including the famous gothic statue find. 14 The three sites together, and to some extent with the remains of the royal basilica at Székesfehérvár, can be regarded as the most important reference points in the architectural history and the material culture of the royal centres in Hungary. The size and the complexity of the palace at Visegrad would in itself ensure that this royal residence became one of the principal sites of Hungarian medieval archaeology. Thus, the excavations at the Visegrád palace also served as one of the most significant steps in the development of medieval archaeology in Hungary. Since its rediscovery in 1934, the palace of Visegrád has been the focus of detailed study, and is central to understanding twentieth and twenty-first century archaeological research and heritage protection in Hungary.

¹¹ Réti 2011.

¹² Buzás – Laszlovszky – Magyar 2003, 348–350.

¹³ Buzás – Laszlovszky – Magyar 2003, 350–351.

¹⁴ Buzás – Laszlovszky – Magyar 2003, 355–359; Takács 2006, 200–235, 311–330.

The Medieval Royal Palace and its Impact on the Art Historical Research

The archaeological investigation of the palace at Visegrád also contributed to the art historical interpretation of the late medieval courtly culture and art in Hungary. Even the first findings made obvious that we were facing extraordinary pieces of art, the ones we could only dream about based on humanist texts and which had almost no standing monuments remained in Hungary since the Buda Castle, the other important centre of the first appearance of Renaissance outside Italy, also fell victim of the destruction of the same wars. The moment when the first Renaissance fragments appeared during the excavation of the palace of Visegrad, it was obvious that the fragments of red marble fountains and white marble Italian reliefs could only recapture the glory and artistic impact of the old Golden Age if the researches and noble work of professionals recreate and regenerate these monuments which are wonderful even in their ruins and fragments. 15 The "Renaissance palace of king Matthias at Visegrád" thus emerged as a standard reference point in history, art history and archaeology after the first traces of the complex have been found in the 1930s and some of the most important pieces of art in the period, such as the Hercules fountain, were excavated in the first years of the archaeological investigations, influencing the art historical interpretation of the whole period.16 Eight decades of archaeological research, however, has already created a much more complex image of the palace, with many building phases and architectural periods. During its two hundred years of habitation, it was subject to continuous alteration and expansion. The palace was a sophisticated complex that encompassed everything from great displays of status and prestige to mundane realities of daily life: ecclesiastical buildings (including a royal chapel and a Franciscan friary), loggias, balconies, fountains, gardens, kitchens, workshops, and storage. The Late Gothic architectural elements and the Renaissance carved stone material (fountains, reliefs, etc.) belonged to the highest level of artistic production in Central Europe and to the group of exceptional pieces of the earliest Renaissance period outside of Italy. The first conquest of the new art movement evolving in Italy is related to Central Europe, everything which is defined as Renaissance by modern art history researches appeared in the royal court and its surroundings in Hungary, to the North of the Alps. Only a few decades after the arrival of artists and masters with an Italian queen consort bringing the most fashionable architectural, sculptural and painting style of the period, 17 such destruction swept through this part of Europe which abolished almost everything without a trace that used to be the most famous group of pieces of art of this golden age in Central Europe.

This volume, the first English language monograph concerned with the site, records the previous excavations and reconstructions while newly placing Visegrád within its European archaeological and art historical context. As a part of this, it offers a summary of the previous and recent excavations since 1934 and the interpretation of the palace from the point of view of medieval royal residences. It also contains the functional analysis of the palace complex and the discussion of the interactions between the residence and the Franciscan friary. All these questions are crucial for the understanding of art and royal patronage in the Late Middle Ages. Artistic production of a royal court, however, can also be demonstrated on a different level of objects. Material culture, decorated stove tiles, carved bone figures are also relevant research questions for a complex investigation dealing with courtly culture in a palace complex. The material culture of the palace complex, therefore, is also treated in an explicit way, chapters focus on the most important group of finds (pottery, stove tiles, worked bone material, etc.) along with the detailed catalogue of objects.

¹⁵ Meller 1946.

¹⁶ Balogh 1966; 1985.

¹⁷ Dowry of Beatrix 2008.

Methodological Issues: Documentation, Restoration and Reconstruction

During the excavation work of the palace of Visegrád the fragments of a red marble fountain were discovered. Its pieces were not recovered from one place, but the archaeologist attempted to reconstruct it in sketches. The pieces of the upper bowl were found broken in one place near the courtyard of the palace. The side panels, which were decorated with coats of arms, were found where they could have been standing, on the platform surrounded by stairs, or nearby. Some of the side panels were intact while others only survived in fragments, some side panels were even missing. It is all connected to destruction process since those fragments which were lying under a thick layer of rubble were not attractive enough for those who were looking for building material and valuable red marble among the ruins. Those fragments, however, which were lying on the surface or were barely covered by layers of destruction, became pieces of recreation instead of rebirth in the eighteenth-nineteenth century. They were recreated in a way that their original shape and ornaments were destroyed and were likely to be used as the decorations or parts of churches or other important buildings re-carved or reformed unrecognisebly.

However, surviving Gothic and Renaissance pieces of art in fragments uncovered during archaeological explorations could be reborn if they fell into competent hands, who recreated them recognizing their original artistic value and significance. Archaeologists humbly attempted to recreate this great - even in fragments - artwork to consider original artistic concept and artwork to be preserved as the most important viewpoint in reproducing the former works of art. Fortunately, since the first excavations, generations of professionals have been working on the success of recreation not only in artistic sense but to be also authentic historically in restoring the long-lost monuments of the past.

The first scholarly, and at the same time artistic, recreation of medieval Gothic and Renaissance fountains in Visegrad is associated with Ernő Szakal who contributed to the rebirth of monuments not only with his professional skills but as a creative artist, as well. 18 He was both an excellent specialist of the history and art of medieval sculptural and ornamental monuments and an artistic master of stone carving and statuary. With his works he recreated a group of Gothic fountains in Visegrád and laid principal and practical foundations to be followed by the next generations if they wish to recreate the fragmented monuments which measure up to the standards of these works of art. As it is also described in this volume, his methodology of reconstruction and restoration still influences the work of contemporary scholars. The first full size replica of the Hercules fountain, its artistic reconstruction, is also based on the methodological concepts worked out and presented by Ernő Szakál, although the work has been done by the next generations of scholars and artists. His footsteps have been followed later by Mária Réti when she carried on exploring and reconstructing Renaissance pieces of art. 19 She did not approached these monuments as a sculptor but as an art historian and she had the opportunity to participate in a task with the target of exploring and, if possible, reconstructing or recreating the Renaissance art of Visegrad. Today, when we are able to use digital technologies for the virtual reconstruction²⁰ of the palace complex and for the computer-aided design of the reconstructed building complexes, the theoretical and methodological principles worked out by the first generation of scholars working on the palace (János Schulek, Ernő Szakál, Péter Meller) and followed by later scholars and architects (János Sedlmayer) are still valid for the most important concepts of theoretical, architectural or digital reconstructions.²¹ The present volume also offers examples from this process,

¹⁸ Szakál 1959.

¹⁹ Réti 2011.

²⁰ The first attempt for this at Visegrád: Medieval Visegrád 1995, 158–160.

²¹ Collection of earlier reconstructions: Medieval Visegrád 1995, Buzás – Réti – Szőnyi 2001.

as the last reconstruction of some of the main monuments, such as the Hercules fountain, is based on these generations and concepts of scholars and artists.

Owing to the extraordinary artistic qualities of these pieces of art, it was clear from the very first moment that this was not an academic routine task where simply questing and interpreting artistic parallels or outlining the cultural processes of the era are satisfactory. The examination of partially destroyed and fragmented monuments uncovered during archaeological excavation needed much more than this. As more and more fragments were used for the reconstruction and more complicated artistic questions emerged, a series of new drawings was created, which broke the boundaries of ordinary scholarly documentation. In this phase of processing the art historian was a bit effaced by the creative artist who prepares individual works of art herself. The aim of these drawings is to understand, analyse and get acquainted with artworks partly fated to devastation of a past era. Scholarly documentation has its own serious rules and principles such as capturing and authentic restoring the tiniest details of the monument. This, however, cannot mean simply copying. One of the most essential documentation methods of archaeological/art historical work is drawing. It has always been important and remains so to this day. Even in the age of the most modern photographical and digital techniques we cannot give up on interpreting all details visible on a monument, simply through a drawing. This sight, however, is not simply perception through sensory organs. This special perception enables differentiating master hands on a work of art where noticeable small details in the carving suggest that more than one masters were working on the artwork.²² In other cases, tiny details recognizable by the expert eye imply traces of repair or removal of damage, which can be noticed by skilled eyes from a lot of learning and experience to recognize such details. Drawing is one of the most important tools of this recognition process.

When processing and recreating the fountains of Visegrád, the last projects (1996, 2000) followed this path, but at the same time, members of these teams also undertook such tasks which were not regular elements of similar work especially traditional art history work in the usual sense.²³ Interpretation of the excavated walls and architectural elements, combined with spatial studies on medieval palace complexes, led to a functional analysis of the palace. Residential wings as well as spatial organization of inner courtyards with their decorative fountains were key elements of the process. Although various reconstruction attempts of these fountains followed all periods of archaeological investigations and restorations of the palace, the most recent documentation campaign of these architectural elements created particular methodological and technical problems. Drawing the huge red marble side panels with comprehending the smallest details is an extraordinary challenge in itself. Preparing all this in the actual size of the carving is an even more demanding task. The result, however, can convince everybody that it was a necessary, in fact crucial phase of this work, because those minor details which bring us closer to the interpretation of these often problematic monuments can only be explored by long and detailed observation and explanatory documentation.

The reconstruction drawing of the fragmented Hercules figure or the interpretation of small fragments in drawing goes further than this. It condenses the knowledge revealed by generations of art historians, and compresses it with the knowledge gained from the surviving fragments. In this process, the most important tool was also drawing, which exceeds simple documentation and becomes the instrument of explanation and analysis. The final reconstruction comes into life and initiates two processes. On the one hand, it is the starting point of the reconstruction made by the sculptor, the most

²² Digital photogrammetry survey of the site: ART'V KFT, Studio for Documenting Historical Monuments and Archaeological Sites.

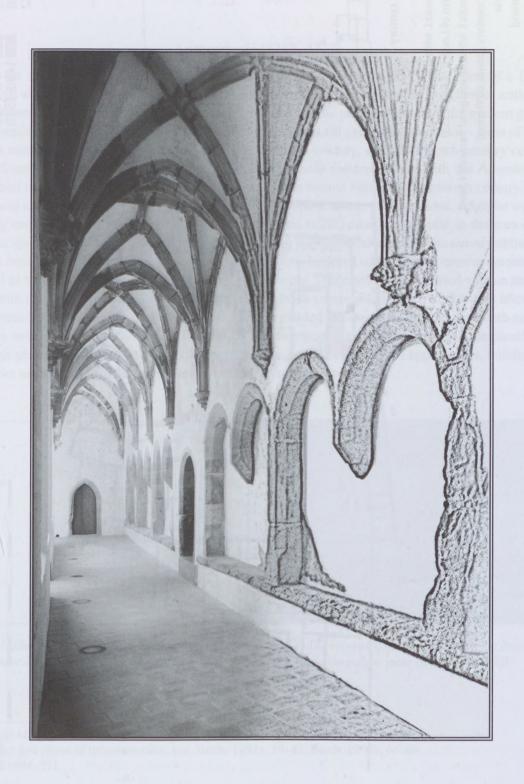
²³ Buzás – Réti – Szőnyí 2001; Réti 2011.

important document of the original-scale reconstruction to be carved and created.²⁴ On the other hand, these drawings are individual works of art, as well. New artwork was born based on other artwork. It is not made with such great freedom as Renaissance masters redefined or recreated antique artwork, but bearing in mind the principle of authenticity which, both ties the creator and enables them to lead us to the extraordinary artwork of a past era through their own work: Documentation, reconstruction, recreation, creation. The reader should decide where the boundary is among them. This process is clearly one of the most debated issues in the presentation of the palace complex. Pencil and chalk drawings and photographs are all proofs of this process. More recently three-dimensional, computeraided reconstructions and animations were also created. Their role is crucial in the recreation of the most characteristic features of the building complex. Excavated building parts have mainly lost their colorful facade decorations or the different decorative elements made of marble or glazed pottery (floor and roof tiles, etc.). The new digital reconstruction methods allow us to create an image of those building parts which were lost and cannot be recreated in stone or brick. At the same time, this reconstruction process should also be based on the detailed documentation of archaeological finds, features. Therefore, the documents of recreation, rebirth are also presented in this volume. However, they are more than that, they are individual pieces of art in the process of recreating Late Gothic and Renaissance monuments for the lost courtly culture of medieval Hungary. They include everything which represents many stages of this process. The creative genius of the medieval master, the tiresome excavating work of archaeologists, researches of art historians, historians, the creative work of the artists and sculptors of present, and, of course, the artistic making of this book and its pictures. However, above all this, primarily the creative and recreating work of generations. Therefore the palace site can also be interpreted as the rebirth of Gothic and Renaissance art, particularly in the context of the artistic production of the royal court.

²⁴ Buzás – Réti – Szőnyi 2001; Reneszánsz látványtár. Virtuális utazás a múltba. [Collection of Renaissance Images. Virtual Journey into the Past.] Exhibition Catalogue – Hungarian National Museum. Eds. BUZÁS, Gergely – OROSZ, Krisztina – VASÁROS, Zsolt. Budapest, 2009.

History of the Visegrád Royal Palace

GERGELY BUZÁS



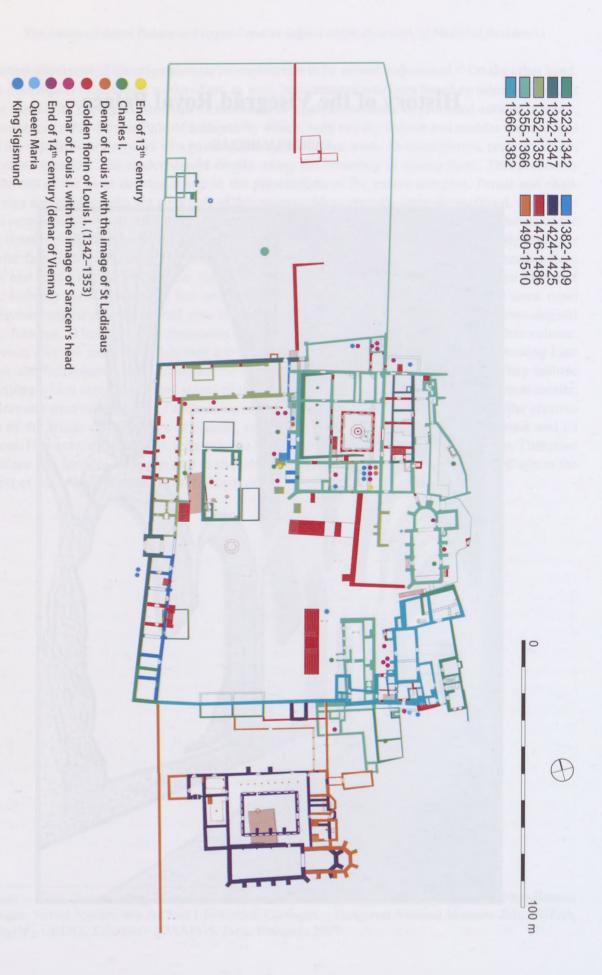


Fig. 2. The most important coin finds of the palace from the Angevin- and Sigismund periods

History of the Visegrád Royal Palace

Antecedents (1285–1323)

During the archaeological excavations carried out in the area of the Royal Palace, ruins of a former settlement were brought to light. This settlement dates to ca. 1300 and is identified as a hospes settlement known from a 1285 charter. At the former reception court of the palace, 3 m under the modern ground level, remains of four ovens as well as weak traces of a ground sill and a plastered floor - parts of a past wooden construction – were unearthed.² The late thirteenth-century, early fourteenth-century ceramic shards found in the plaster served as a basis for dating these features, along with the Austrian coin discovered in the pit of one of the ovens and issued in the second half of the thirteenth century.³ This dating was also confirmed by the features' stratigraphic relation to later constructions. After the wooden building and the ovens had been demolished, a large-size stone house was erected in the area of the lower reception court. The floor level of the latter building was identical to that of the already obliterated wooden house. One of the ovens uncovered outside the stone building contained the same archaeological material as the other three but had only two layers of plaster. This oven was associated with an ashy pit paved with bricks identical in size to those used in the brick compositions (arch of the vault above the main entrance, hypocaust) of the stone house. This pit yielded the above mentioned thirteenth-century Austrian coin, along with a number of thirteenth- and fourteenth-century potsherds. Consequently, the oven was probably still standing when the stone building was erected. To all appearances, buildings of the earlier settlement were destroyed only when the stone house was built.

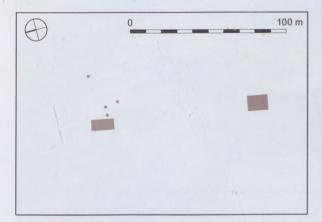


Fig. 3. The ground plan of the houses and ovens excavated in the palace area, dated to ca. 1300



Fig. 4. The reconstruction of the settlement excavated in the palace area, dated to ca. 1300

Knauz 1874–1882, II: 207–208.

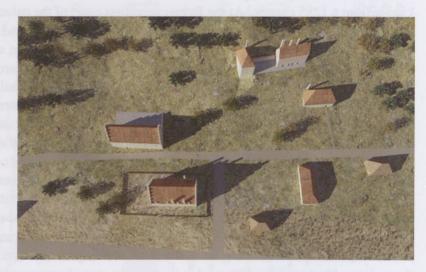
On the first phase of the excavation, see: Buzás 1994a, 39–47, Buzás 1994b, 66–69.

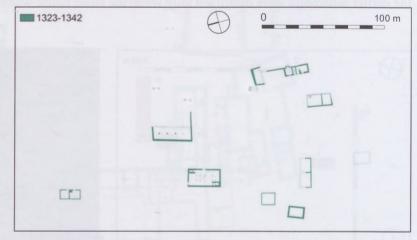
³ Tóth 1994, 211.

The Age of Charles I (1323-1342)

The Visegrád Royal Palace was founded and constructed after Charles I appointed the town as his seat in 1323.⁴ The complex is first mentioned by historical sources in connection with the 1330 assassination attempt of Felicián Zách against the royal family.⁵ Coeval written records on the palace⁶ do not provide sufficient data to precisely localize the complex. The assumption that the building used by Charles I is to be found in the recent palace area is supported by the architectural continuity from the reign of Louis I onwards. Moreover, archaeological observations confirm that the most of the large buildings dating to the age of Charles I are concentrated in this part of the complex.⁷ In the area of the palace garden a house with a wooden structure was erected; at the foot of the hill a timber frame hall was constructed on a walled terrace,

and beside the latter, in the plain area, a two-story stone house was built. A number of buildings of different size were built at the foot of the hill on the southern side and on one of the terraces. In the plain under the hill a series of houses must have been erected but as their excavation has not yet been finished, and at the moment only insufficient data are available. Parts of a large size wooden house were brought to light south of the present palace, at the cloister of the Franciscan friary. A former palace chapel dedicated to St George might have stood somewhere in the vicinity of the subsequent Franciscan friary. perhaps already under the reign of Charles I. This chapel, however, is only known from fifteenth-sixteenthwritten records.8 century The excavated wooden buildings found at the two ends of the complex, that is, in the garden and at the cloister of the Franciscan friary, were in all probability simple town houses. They were situated in a relatively





Figs 5–6. The buildings of the palace complex in the period of Charles I. Ground plan

⁴ Engel 1988, 132

⁵ SRH I. (1937) 493–494; Mészáros 2009, 25–26.

⁶ A summary of these is provided by Mészáros, 2009, 25–26.

Stone houses brought to light within the framework of large-scale excavations are all dated to the age of Louis I, King Sigismund or Matthias, on the basis of the finds and other archaeological observations alike.

Buzás – Laszlovszky – Papp – Fehér – Szőke 1994, 282; Buzás – Mészáros 2008, 86–87.



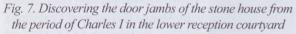




Fig. 8. The eastern entrance on the ground floor of the house

large distance from the stone buildings in the palace's central area, and their simple structure and dwelling function speak for a civilian use. The building excavated in the garden was 13×5.5 m in size, was oriented north to south, and had timber walls that rested on an unworked stone foundation. The walls were built with timber frames filled with stones and daub. A large hearth was discovered at the northeastern corner of the smaller, southern room of this bipartite house. The entrance door was probably situated on the western facade and opened to the nearby main road. At the time when the palace garden was built during the reign of Louis I, a well was dug in the midst of the house's ruins. The ground plan and size of the house found at the friary's cloister are still unknown, as only the line of its western wall was observed and the pavement of a street north of it has been excavated so far. These indicate that the building probably opened to a small street perpendicular to the main road. This building had no stone foundation and the large amount of charcoal that came to light during the excavation speaks for a construction made entirely of wood. The rich find material



Fig. 9. The hypocaust in the southwestern corner of the house, after the excavation

Pálóczi-Horváth 2000, 29, 33.



Fig. 10. The excavation of the hypocaust in the southwestern corner of the house

unearthed from under the ruins also confirms that the building functioned as a dwelling. The chronology of this house might be divided into two phases. In the second half of the thirteenth century a first construction was erected here, which burned down at the beginning of the fourteenth century, as it is attested by a 1307-1310 parvus coin issued by Henry II (Henry if Carinthia), king of Bohemia, found in the destruction layer of this early building. The house was rebuilt in the age of Charles I and was in use during the fourteenth century.

From the floor level of this later building a 1343 denar of Louis the Great (*Corpus Nummorum Hungariae*, henceforth: CNH, 11.72.6.) was collected.¹⁰

Buildings dated to the age of Charles I and excavated in the inner part of the palace may be divided into two groups. The first group of constructions was found in the northern part of the area, that is, under the western wing of the subsequent northeastern palace building and the northern part of the lower reception court. The construction discovered under the later reception court is known in more detail. This was a two-story stone building 14 × 28 m in size, oriented north to south. Its 1 m thick rubble stone walls, strengthened with tuff ashlars at the corners, were preserved to a height of ca 1 m. There were two entrances on the ground floor: a large door at the middle of the longer, eastern facade, and a smaller one at the western end of the short northern front. Fragments of the chamfered, round arch stone frame of the eastern gate were also found. The bays of both doors were floored with planks. The ground floor was occupied by a single, large hall, with a ceiling supported by two rows of wooden poles set on stone slabs. Two hypocausts were situated in its two opposite corners, and these heated the first-floor rooms above them. Fragments of a fireplace11 and a tile stove12 were discovered fallen onto the ground floor. The composite heating system indicates an upper floor divided into several rooms. As there were no partition walls on the ground floor, the dividing walls on the first floor must have been wooden constructions supported by the ground floor beams. Based on the location of the heating units and the supporting wooden poles, the ground plan of the first floor is reconstructed as follows: on both sides of a central hall equipped with a fireplace, a two-room suite was situated, and in each suite one of the rooms was heated by a tile stove, and the other by a hypocaust. The loft was also converted for residential use. This is suggested by fragments of the high, triangle-shaped stone gable recovered from a secondary walling, along with hypocaust cover slabs and fireplace fragments as well as carvings produced by the stone carver's workshop that later operated here, all of which were incorporated into the Louis I period pillar foundations dated after the demolition of this building. Behind the building, traces of a hedgerow with a gate were found that separated the plot from the main road. The main entrance, however, was

¹⁰ Koller – Polgár 2010

One of the fireplace columns fell into the heating chamber of southwestern hypocaust, while one of its consoles was later secondarily used and incorporated into the Louis I-era pillar foundations discovered nearby, along with unfinished stone carvings produced by the stone carver's workshop that operated in the building.

¹² Stove tiles were found in large quantitites in the demolition layer excavated in the southeastern corner of the building.

not located here but on the eastern side, where a pitched stone surface was unearthed. Several horseshoes and lance tips were collected from this surface, suggesting a road or yard where tournaments might have been held. The building's archaeological material comprises of good quality fourteenth-century pottery, glass and metal objects. Spurs and a dagger count among the most interesting finds. North of the house, from under its building layer, a ban's denar issued in 1309–1315 was recovered, 13 while the outer floor level revealed another, Slavonian denar minted in 1325-1343 as well as a Charles I denar from 1338,14 while on the building's first inner floor level a guilder issued by Louis I between 1342 and 1353 was found. 15 The building seems to have been a dwelling.16

Another building was erected on a terrace northeast to this house, at the place of the present western wing of the northeastern palace building. Its northern, southern and western supporting walls were found during the excavation. The 31 m long western wall was best preserved, right behind the western facade of the later northeastern palace building. Only remains of the northern wall were brought to light beside the northern wall of the



Fig. 11. The remains of the hypocaust found on the upper floor of the southeastern palace

subsequent northeastern palace building, and its original dimensions, thickness and length could not be estimated. However, the southern wall could be traced its entire length of 23 m: it is considerably thinner than the wall on the western side. Nothing has been preserved of the eastern wall, but in all probability it ran along the eastern facade of the subsequent palace wing. This is also attested by the location of the inner pillars of the building dated to the reign of Charles I, as these were discovered along the central axis of the later palace wing. In the northern part of the building three column foundations carved of stone were excavated; two additional column foundations were destroyed when the layer was disturbed in the modern age. The northern foundation was best preserved, and the imprint of the original column footing indicates that it was probably made of wood and 50 cm × 50 cm. The coeval floor level of the building was estimated on the basis of this column foundation, as its level was right below the hall's terrazzo paving, dating to the reign of King Matthias.¹⁷ A thick layer of roof tile and plaster fragments was discovered in the large reception hall west of this building, right above the demolished walls and wall fragments of the Charles I era complex. As this layer consisted of roof tiles and damaged fragments of plaster, it certainly did not belong to the building whose destruction layer it covered, but must have derived from a nearby building from where it was taken and deposited as refuse. Since no other buildings

¹³ ÉH 29; Buzás – Bodó – Deák 2003, 11.

¹⁴ Inventory no. 94.672.1; CNH II, 18.

¹⁵ Buzás – Bodó – Deák 2003, 15, 17.

For a detailed study of the building, see: Buzás – Bodó – Deák 2003, 17.

In 2000 the northern column foundation was excavated, to which two further ones were added in 2002, south of the first one. Buzás – Szőke 2003; Buzás – Bodó – Deák 2003, 16, 17.

of such size and character is known in the vicinity except for the northeastern palace building, this layer of debris must have accumulated during its transformation. This observation is the only guideline for the dating of the northeastern building. As its transformation was undertaken right after the demolition of the house excavated from under the courtyard, this building must have been more or less contemporary with the latter house.¹⁸

Excavations of the southern palace buildings dating back to the reign of Charles I are still in progress. The constructions located to the southeast are best known. Here at the foot of the hill traces of a two-story building of a 20 × 10 m size, oriented north to south, have been discovered. Its lower stone floor was carved out of the rock face of the hill. South of a huge block of rock on the northern side two rooms were created. The entrance was located on the southern end of the western wall of the southern room. The upper floor was probably constructed entirely of wood. It seems that a building corner, found above the rock formation, and identified as the northeastern corner of this building's first floor, belonged to this wooden floor. Between the preserved sill beams a red colored mortar floor and a stove with



Fig. 12. The front facade of the Charles I era building unearthed south of the southeastern palace

three building phases were discovered. In its first phase, the stove was small and horseshoe-shaped. Its foundation was discovered as a course of $5 \times 10 \times 23$ cm bricks. Later it was transformed into a rectangular-shaped construction, partly made of the already used bricks, partly of new ones of a dimension of $5 \times 13 \times 25.5$ cm. Eventually, the stove was somewhat narrowed even though the rectangular shape was more or less preserved. Bricks of $6 \times 11 \times 24$ cm size were used in this third construction phase. A heating door was added to the stove's eastern side, for which covering panels of a hypocaust were used. The presence of the tile stove indicates the floor's use as a dwelling space. From the debris layer over the building's ground floor level a denar minted by Charles Robert in 1338 (CNH II.18.) was collected. This building of the Charles Robert era seems to have been closely associated with two other stone buildings located to the northeast on one of the higher hill terraces. The southern of these latter two houses was 20×7.5 m in size, oriented north to south, and had two rooms on the ground

First the walls of the substructure's terrace came to light during the 1952 excavation conducted by Miklós Héjj. Buzás 1994b, 69–70. I identified them earlier as remains of a fence wall. Buzás 1994b, 113. The building's demolition layer found in 1993–1997 did not contradict this theory, as this layer was spread out on the lower courtyard and so it did not pinpoint the precise location of the house. Buzás – Lővei 2001, 14–15. Determining the building's precise location and a correct interpretation of the remains discovered by Miklós Héjj was only made possible by our 2000–2002 excavations, during which the three pillar foundations in the west wing of the northeastern palace were brought to light. Buzás – Bodó – Deák 2003, 16, 17.

¹⁹ Buzás 1992.

The coin was found during the 2009 excavation in the test trench 2009/III, along with fourteenth-century pottery.

floor. On the eastern wall of the second, northern building a large fireplace protruding from the wall, was built. The room attached to the fireplace might have been used as a kitchen. The southern room of the same building was a compartment equipped with a hypocaust. The subfloor hypocaust oven could be approached through a staircase carved into the base rock between the two rooms. A post attached to the western wall, probably supporting the staircase that led to the first floor, pervaded the northern third of the room's space. Entrances were located on this longer, western facade. The shorter, southern facade was preserved at a considerable height, and featured two archivolt windows, whose traces were observed at the place of the larger, later windows that were cut in the Matthias period. The fact that the bricks of the hypocaust are identical in size to those used in the first phase of the tile stove's foundation discovered in the house used during the reign of Charles I, makes its dating more feasible. The eastern back wall continued to the north as a supporting wall and reached another house. The original wall joints, however, were destroyed when this latter, northern building was enlarged. The original building had an upper floor, was 14 × 8 m in size, oriented east to west, and was made of stone. Its entire eastern wall, as well as the eastern end of the northern and southern walls were carved out of the hill's rock face. In its southeastern corner, stubs of the console and chimney vault of the original fireplace, along with remains of a carved corbel supporting the overlying floor level, were brought to light.²¹

The existence of at least two underlying Angevin era stone buildings beneath the southwestern range of the present palace building is confirmed: one under the southern fence wall, and another underneath the southern fringe of the southwestern building. It is, nevertheless, impossible to securely date these until they are fully excavated. They were certainly demolished in the first years of the fifteenth century. From beneath the court facade of the southwestern palace building, ruins of a moderately sunken wooden house that yielded fourteenth-century finds were unearthed. Its fill was covered by a mortar layer dated earlier than the southwestern building itself, suggesting that the wooden house was destroyed well before the construction of this palace wing during the reign of Sigismund. Since the closest stone construction associable with the mortar layer covering the wooden house's remains is the fence wall of the palace built in the middle of the 1340s, the wooden house was probably erected under the reign of Charles I and demolished in the era of Louis I.

Even if it is hypothesized that the later palace was erected at the same location where the palace of Charles I was built, it is dubious which ones of the buildings from the time of Charles I, excavated in the castle area proper, belonged to the royal palace. It is first and foremost the northern group of buildings that might have had such a function, as it is suggested by its size and spatial arrangement. Its identification as an early royal complex is further supported by the fact that a large size chapel whose construction started under the reign of Louis I, was attached to this northern building group. Of these latter two, the western building equipped with a hypocaust is interpreted as a dwelling house, while the hall with a central row of columns was presumably a more public building meant for status display. A similar spatial arrangement was observed in the Visegrad citadel erected also in the era of Charles I, where two one-story stone buildings of similar size (26 × 10 m) and with timber structure ceilings were raised as parts of a palace complex; one of them comprised two dwelling rooms while the other consisted of a single hall.²² The Magna Curia of Buda, built by Charles I, is even closer to the Visegrád Palace from a functional point of view. Nevertheless, the excavation of this latter, significant construction has not yet been accomplished, only certain parts have been examined, and on this basis a firm periodization is not feasible due to the multifarious nature of the history of the complex.²³ Research has revealed that the Magna Curia of Buda constituted of two main groups of buildings. A great hall and an adjoining gatehouse of the city wall stood in the center of

Buzás 1992, 33. The building was later enlarged to the south and the west, but its northern wall was left in place, and the substructure of its western wall has been preserved.

²² Buzás – Szőke 1992, 133–134.

²³ Zolnay 1967; H. Gyürky 1984.

one building group, while the other was adjacent to the chapel dedicated to St Martin. The latter chapel, however, was not contemporaneous with the buildings from the time of Charles I, but was erected after the death of King Charles by his widow Elizabeth and his son Louis I,24 perhaps as to substitute the proper royal residence in Óbuda, donated to Elizabeth by Louis I in 1343. 25 In Visegrád, the St George chapel was separated from the northern buildings in a similar manner, and was located somewhat to the south, perhaps in the vicinity of the Angevin era buildings excavated in the northern, external yard of the Franciscan friary and the later, southern range of the palace. It is, however, uncertain, when the chapel dedicated to St George was erected, since it is first mentioned in 1424 by King Sigismund as an old construction already not in use, but utilized by his royal predecessors. ²⁶ It is logical to associate the chapel with the knightly order of the court, the Order of St George, 27 established by Charles I between 1323 and 1326. This date coincides with the available data on the palace construction works in Visegrad: these must have taken place some time after the building of the royal residence in the lower castle, that is, after the 1325 completion of the St John church, 28 but before the 1330 assassination attempt of Felicián Zách. Thus, the southern group of the Visegrad palace buildings might have constituted a part of the royal palace proper already under the reign of Charles I, and it might have been identical with the office buildings and dwelling houses around the royal chapel. This spatial arrangement might have served as a pattern followed during the 1349 enlargement of the Magna Curia of Buda, when this royal townhouse, previously only of moderate significance, was transformed into a complex suitable for housing the whole court. These assumptions, however, might be approved only after the localization and comprehensive excavation of the St George chapel in Visegrád.

The Visegrád royal palace lost its significance in the twilight years of Charles I's life, and after this point the king rather used the citadel. This is attested by a 1339 royal charter claiming that "Charles held his residence there.²⁹ A fourteenth-century Hungarian chronicle also affirms that king Charles died in 1342 in the Visegrád fortress (that is, the citadel) where he had dwelt.³⁰

The Age of Louis I (1342-1382)

1342-1347

After the death of Charles Robert Louis the Great kept his court in Visegrád until 1347. The actual dwelling place of the royal family might have still remained in the fortress,³¹ but the renovation of the palace certainly begun. In the building that once stood at the place of the later northeastern palace building, an Angevin-era "group I" tile stove was erected, which was later discarded in the first half of the 1350s when the building was transformed.³² The most significant construction work at this time was the erection of a church in the palace area. In the northern part of the palace, inside and beside the building from

²⁴ Kumorovitz 1963, 119; H. Gyürky 1984, 29.

²⁵ Kumorovitz 1966, 9.

²⁶ Buzás – Laszlovszky – Papp – Fehér – Szőke 1994, 281–282.

²⁷ Veszmprémy 2008, 174–175.

²⁸ Buzás – Mészáros 2008, 80–81.

²⁹ Mészáros 2009, 25.

³⁰ SRH I (1937), 503.

This is suggested by the fact that the stove dated to these years (the so-called Angevin I stove) was also erected in the citadel. See the study of Edit Kocsis in the present volume.

The glazed tile fragments were found in a layer of roof tiles deposited during the renovation of the building. See the study of Edit Kocsis in the present volume.

the era of Charles I, excavated from underneath the lower reception court, the stone carver's workshop associated with the construction works was identified. In front of the Charles I period house's northern facade a sill beam of an open wooden construction as well as a thick layer of the workshop's debris consisting of limestone and andesite tuff, were found. Similar sill beam remains and the same debris layer was observed in front of the house's eastern facade. The layer yielded a number of articulated carved stone fragments. These fragments are analogous to the profile of a carved stone type used for voussoirs. Fragments of this type have been unearthed around the southwestern corner of the northeastern palace, where these, including unfinished pieces, were secondarily incorporated into three later pillar foundations. These voussoirs were utilized as raw material for the construction of a church, that is, for the carvings of the quadrant corner pilasters. The workshop's dating is based on a guilder minted by Louis I (1342-1353), found on the second - and last habitation level of the Charles I era building.33 Products of the workshop were brought to light from the above mentioned pillar foundations, along with other carvings (fireplace consoles, hypocaust cover slabs, dormers) originating from the demolished Charles I era building excavated



Fig. 13. The reconstruction of the royal palace around 1347

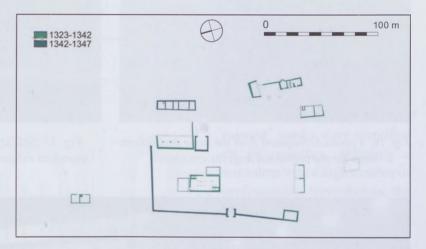


Fig. 14. The groundplan of the royal palace around 1347



Fig. 15. The northern entrance of the Charles I era stone building on the lower reception court, and the sill beam of the stone mason's workshop

³³ Buzás – Bodó – Deák 2003, 17.



Fig. 16. A pinnacle fragment from the stone decorations made for the unfinished Angevin-era church



Fig. 17. Sedilia from the unfinished Angevin-era church as exhibited in the Angevin-era lapidarium



Fig. 18. Sanctuary wall of the unfinished Angevin-era church

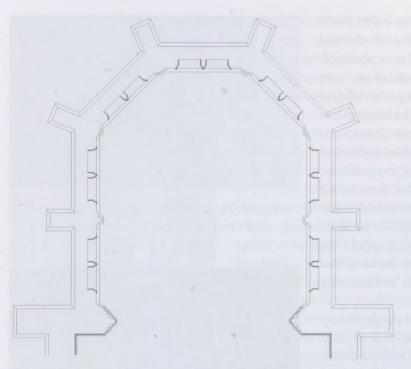
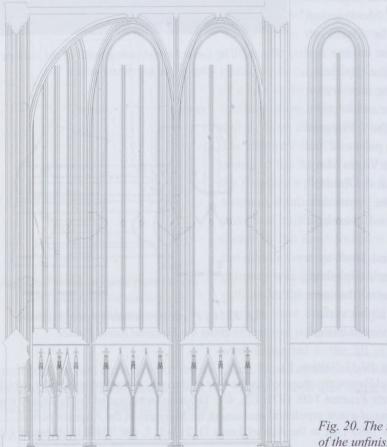


Fig. 19. The reconstructed groundplan of the sanctuary of the unfinished Angevin-era church



10m

from under the reception court. This indicates that carvings of the workshop might have been stored in this building until its demolition. These carvings were made for the sedilia in a finely articulated, polygonal sanctuary of a church, as well as for its pilasters, groined vault, window traceries, and for its triumphal arch and the windows in the nave, which, having thicker walls than the sanctuary, have a different profile than the sanctuary windows. Some of these carvings (a sedile arch, a window frame fragment, parts of the vaulting) were left unfinished. The finished pieces did not display any paint traces either that would confirm their original location. 26 different masons' marks were identified on the carvings, signaling a workshop with a high number of professionals. Nevertheless, the number of identified carvings sums up only to 170, which suggests that the workshop operated only for a short period of time, perhaps only for a single season. The church for which it originally produced the carvings seems to never have been built. Not even the footing was put into place, which means that only the foundation had been laid. Therefore, it is difficult to identify the precise location where the church was planned to have been built. Foundations of the wine cellar in the southern wing of the northeastern palace,

Fig. 20. The reconstructed longitudinal section of the unfinished Angevin-era church

however, seem to be older than the cellar itself: on the southern side, under the uneven external surface of the wall, a regular wall was observed. which might indicate that the foundations were originally laid for an earlier building of a different function. As this construction is located next to the stone carver's workshop, these foundations may possibly belong to the planned but unfinished church or chapel, and were later used for the building of the cellar wall. Pillar foundations which revealed stones of the never finished chapel were made in this period and around this building. The chapel was probably planned to adjoin the southern end of the Charles I era building that once stood at the place of the later western wing of the northeastern palace.

The preserved carvings provide an opportunity to outline the style associable with the workshop. This reveals a reception of Late Classical Gothic forms prevalent in France around 1300. Thus the workshop's aspirations were analogous to the most modern coeval architectural efforts in Central Europe, especially Austria, Moravia and Hungary in the second third of the fourteenth century. Architectural remains closest in time and space, such as the rood screen of the Cistercian church in Pilis,34 the sanctuary of the nunnery on Margaret Island, 35 and the large-scale architectural enterprises that started after the Visegrád constructions were interrupted (the palace of the queen, the provostry dedicated to the Virgin Mary, or the church of the Poor Clares – all in Óbuda)36 might also be associated with the workshop producing carvings for the unfinished church of Visegrád.37

As the northeastern building first used as a dwelling was given to the stone carver's workshop, a new dwelling was erected behind the northeastern hall, parallel to the latter's axis, on a higher surface of the hill slope, at the place of the present eastern



Fig. 21. The Louis I era stove foundation found in the eastern wing of the northeast palace



Fig. 22. The Louis I era dividing walls of the eastern wing of the northeast palace

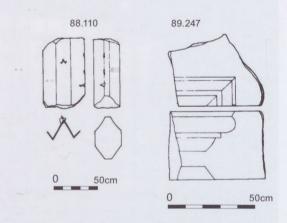


Fig. 23. A 14th-century window frame fragment from the Visegrád Royal Palace

Pannonia Regia 1994, 264–265. Kal. IV-33 (Takács, I.)

Characteristic, pointed ogee keel moldings were observed on the foot of the only preserved wall pillar, which are also found in the Visegrád church. Feuerné Tóth 1971, Fig. 4/1. The transformation of the sanctuary was probably associated with the building of a new sepulchral monument for Margaret in the Angevin period.

³⁶ Bertalanné 1982; Művészet I Lajos 1982 (Art in the Age of Louis I), 213–217, cat. 111–112. (Marosi E.); Bertalanné 2006.

For a detailed study of the stone carver's workshop and the church, see: Buzás – Bodó – Deák 2003.



Fig. 24. The Louis I era cellar door of the eastern wing of the northeast palace

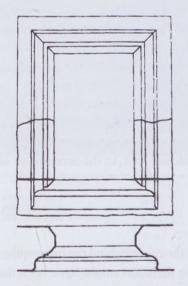


Fig. 25. A window frame from the era of Louis I, on the eastern facade of the northeast palace

wing of the northeastern palace. The northern end of the preserved eastern wall of this dwelling house suggests that it was erected earlier than the northeastern palace. This wall was built into the hill slope, and thus the outer surface of the wall could not be regularly formed. It was only at the time of the bath's construction that the earth was removed from behind this wall and so the irregular outer surface was exposed at several meters' height. The northern facade of the northeastern palace was attached to this wall in such a way that the latter's southern, originally external, irregular surface was leveled out, which means that at that time the soil had already been removed from behind the old building. As the floor level outside the building had been elevated, windows on the eastern facade were placed higher. This new dwelling house was 34 m long with a ground plan widening to the south. Most probably it consisted of five rooms, four of which, on the northern side, were 6.3 m long, while the southern room was only 4.2 m. Its walls were 0.8 m thick, except for the 1–1.2 m wide eastern supporting wall. At the middle of the eastern side of all five rooms a stone framed wall niche was created.³⁸ The windows were placed above these, though only the traces of three windows have been found, and the original stone frame has been preserved only in one case. This small, rectangular, highly articulated window with a slanted sill³⁹ is unparalleled among the carvings; only a window frame fragment with a similar molding40 and a window tracery is associable with it from the palace's stone carving assemblage. The rooms were heated by stoves and fireplaces. The 1.65 × 1.65 m brick foundation of a tile stove was discovered in the southeastern corner of the northern room. The stove could be fueled from the other side, that is, from the neighboring southern room, through a fireplace. The chimney shaft has been preserved in the wall. Unfortunately, owing to the demolition of the original wall surface, all traces of the fireplace's piers have been erased. Nevertheless, in the second southern room the carved pier of the fireplace is still visible. A stove was built adjoining this fireplace, perhaps in the northeastern corner of the most southern room. In the northeastern corner of the middle room probably another tile stove was erected, whose chimney was destroyed when a large-size window was cut into the wall under the reign of King Matthias. Tile stoves in the building seem to have been renewed in the 1360s, at the time when the northeastern palace was built. The group I Angevin era stove tiles were deposited in the fill of the small, neighboring "livingstone

courtyard", a yard carved out of the rock face. Based on the remains of this stove, this wing of the building must have been constructed before 1347, because stove tiles of the same kind, as mentioned above, were discarded in the first half of the 1350s.

³⁸ Buzás 1990, Fig. 152.

³⁹ Buzás 1990, Fig. 83.

⁴⁰ Buzás 1990, Fig. 164b.

It was presumably this period when the construction of the gatehouse and the defensive walls began. The western section of the wall is 125 m long and slightly angled in the middle. The gate tower of 8 × 8 m size is located a bit to the south from the wall's midpoint. At the southern end of the wall no proper excavations have been carried out so far, nevertheless, in its vicinity a wall fragment was brought to light which suggests the presence of a stone building, presumably earlier than the wall, which would explain the irregularity of the wall's line. The wall's northern section adjoins the western part in an obtuse angle. This must have been rooted in an alignment with an earlier building, because the wall runs parallel with the northern wall of the Charles I era building excavated in the area of the western wing of the northeastern palace. This parallel wall section is 57 m long and runs to the foot of the hill. Examinations of the southern part of the defensive walls are in an early stage. It has been made clear, however, that the southern part had several building periods, unlike the other two wall parts. The eastern and middle sections were in all probability constructed after 1360, according to the associable Saracen's head type denar finds. This means that the southern defensive wall was left unfinished in this early building stage under the reign of Louis I. The postponing of the wall's construction might be associated with the unfinished chapel. Until the consecration of the new chapel, the old St George Chapel had to be used. However, according to the original rebuilding plans, the St George Chapel and the southern buildings around it would have been excluded from the enclosed palace area. Nevertheless, these buildings remained in use, as it is attested by its tile stoves similar to those in the northeastern palace. 41 On the wooden first floor of the house standing at the foot of the hill, the old, horseshoeshaped stove was substituted by a bigger one, 2 × 2 m in size. Only its brick foundation has been preserved. 42 It is possible that a stove belonging to the Angevin group I, stood here. The plans to divide the palace into two and enlarge its northern part might be explained by the fact that Louis I donated the palace's southern part to his mother, the widow Queen Elizabeth. This is also suggested by the Thuróczy Chronicle which mentions that in 1344, upon her arrival from Italy, the queen traveled to her own residence in Visegrad. 43 A 1346 report of an English deputy also confirms that the queen held her court at Visegrad. 44 Consequently, the queen must have had an own dwelling here at that time. In 1343, the queen received the Óbuda Royal Castle from his son in a similar manner. After the latter became her property, she initiated constructions here, which were finished only in the second half of the 1340s. 45 As suggested by the written sources, the queen probably used her Visegrad residence during the development of the Óbuda complex, and only moved to the Óbuda residence later, in the second half of the 1340s at the earliest.

1352-1355

In 1347 the royal court moved from Visegrád to Buda. Probably this was the cause behind the interruption of the building activities in the Visegrád palace. The reason of moving the court might have been the 1347 military campaign against Naples following the assassination of Louis' brother Andrew, duke of Calabria in 1345. The king led his armies in person in the first and third campaigns, and for this time

⁴¹ See the study of Edit Kocsis in the present volume.

The bricks of $12.5 \times 24.5 \times 5.5$ cm size used in the foundation of the stove are identical to those discovered in the stove foundation in the northern room of the northeastern palace's eastern wing.

^{43 ,}in domum suam in Wyssegrad': Thurocz 1985–1988, I: 164.

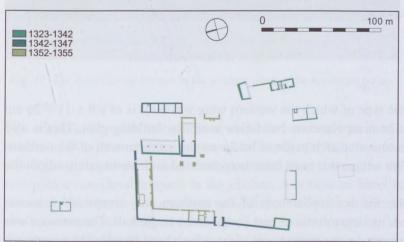
⁴⁴ Homonnai 1999.

The queen asked the pope's permission to grant indulgences in the Church of the Virgin Mary in 1348 and 1349 (Kumorovitz 1966, 11), and the church of the Poor Clares in 1348 and 1350 (Karácsonyi 1922–1924, II: 483); the permissions were granted. There is no written record concerning the transformation of the royal palace but archaeological excavations proved that construction works were undertaken in the fourteenth century. Budapest műemlékei (The Monuments of Budapest) 1955–1962, II. 373.

he left the governance in Hungary to his younger brother, prince Stephen. Stephen, however, was only 15 at that time, and the real power was held by their mother Elizabeth, who already held her court in Óbuda. This might be the reason why prince Stephen had his own residence built in the town of Buda, next to Óbuda; this complex later became the core of the Buda Castle. After the Neapolitan wars ended in 1352, Louis moved his court back to Visegrád only three years later, in 1355, probably because the large-scale transformation works were started only in 1352, and thus the complex was not yet suitable for housing the whole court. This is also supported by the several plan versions and building phases in the palace's mid-fourteenth-century history.

First an L-shaped building was erected in the northeastern part of the palace, next to the defensive wall. The building's walls, nevertheless, are clearly separated from the defensive walls, and so the L-shaped building was certainly erected later. The 14 m wide and 55 m long northern wing had a lunette vault whose preserved imposts were secondarily attached to the internal side of the northern defensive wall. The southern imposts, however, were built contemporaneously with the southern facade of the L-shaped building. The row of imposts does not run down the whole wing but on the eastern side it is closed by





Figs 26-27. Groundplan of the Royal Palace, ca. 1355

the pillars of a transverse arch, creating a small, rectangular, unvaulted space. This building wing must have expanded as far as the building from the era of Charles I that stood at the place of the later western wing of the northeastern palace. Consequently, the eastern end of the L-shaped building's southern wall was dismantled when the buttressed western facade of the new, northeastern palace was erected. The destruction is made evident by a partly ruined opening - probably an opening through which building material was handed in, as it was situated much lower than the proper windows. A similar, fully preserved opening was discovered on the northern half of the western wing's yard facade. The doorstep level of the latter was 60 cm lower than that of the proper doors and windows, that is, it was identical to the floor level used during construction. The L-shaped, northwestern palace

⁴⁶ Buzás 1997a, 74–77.

⁴⁷ Gárdonyi 1944, 224–225.

building was namely erected on a lower habitation level, which was artificially heightened when the building was finished, probably in order to level down the floor that originally slanted from the hill to the Danube. The northern wing's entrance opened at the middle of the yard front. Only its doorstep and its unmolded springers have been preserved. A lancet door with "graphic cross section" (rounded groove, horizontal surface wide, sloping element) led to the unvaulted building section to the east. Only small fragments of the windows have been preserved: cellar windows placed at a considerable height were observed both on the northern and the yard facades of the wing. The lower part of a small, narrow window was discovered on the southern half of the western facade. In the vaulted section of the building wing a walled ice pit of considerable size was found. The yard facade of the western wing is separated from that of the northern wing. The bricks used in the building of the two wings are not identical either: those used for the northern wing



Fig. 28. A cesspool shaft excavated in the western wing of the northeast palace



Fig. 29. The stove of the Angevin-era kitchen unearthed in the western wing of the northeast palace

are $7 \times 13 \times 28$ cm in size, while the type of which the western wing was built is of a $8 \times 11 \times 26$ cm dimension. The two wings are not contemporaneous but follow a similar building plan. This is also attested by the presence of a wide transverse arch made of bricks on the southern wall of the northern wing, at the meeting point of the two wings; this must have been inserted in order to safely adjoin the two wings.

The western wing, erected after the accomplishment of the northern one, consisted of several rooms and was originally unvaulted. Its larger northern part comprised a single hall. The entrance was located on the southern side of the room, on the central axis of the wing's yard facade. The round-arch door frame was rabbeted on the outside, the cross section forms three sides of an octagon. The rabbet accommodated the door leaf so that it could be closed from the outside just as a cellar door. The hall was probably divided in two by a timber-frame wall whose presence is suggested by its foundation trench. Between the pillars supporting the vault traces of a transverse arch were discovered: an open, shaft-like



Fig. 30. The eastern end of the northern wing of the northeastern palace, with the door entering to a winding staircase; the door cuts an earlier opening, contemporary to the building of the wall.



Fig. 31. The Angevin-era kitchen in the western wing of the northeast palace

recess was left after the bricks of its pillar were removed. In the northern part of the hall remains of a smoking chamber were found: a foundation made of unmortared bricks laid in a single course was unearthed, and in the space enclosed by the bricks thick layers of ash as well as fish scales came to light. The next, rectangular room had one door and one window on the vard facade. Only the socket of its windowsill stone, the door's threshold and its lower voussoirs were preserved. The voussoirs were ornamented by a molding with "graphic cross section".48 A small chamber opened from this rectangular room to the southeast. The space between the chamber and the fence wall was taken up by a large, walled cesspool, whose bottom extended deeper than the fence's foundations. The cesspool walls, however, reached the bottom of the pool. Two slope shafts led to the pool from the first floor. Another shaft has been preserved on the western side of the southern wall, creating a connection between the pool and a ground floor room. The latter ground floor room must have functioned as a kitchen.

The whole kitchen has not yet been excavated and only its northern half has been explored. At the middle of its northern wall a fireplace-like hearth was built in a recess. Due to the depth of the fire pit a polygonal niche was formed which protruded from the wall to the north. The sidewalls of the hearth occupied a considerable space in the kitchen. A horizontal lintel bar made of andesite tuff slabs was placed on the top; the slab elements were shaped to form semicircular joints. Imprints of a stone-framed shaft door were seen west of the hearth;⁴⁹ this door belonged to the waste disposal shaft. The shafts of the cesspool leading to the first floor, and the transverse arches present in both wings suggest that the western palace was originally planned as a multi-story building. Only a small section of the first floor

On the northern wing of the northwestern palace and the bigger, northern part of the western wing see: Buzás – Lővei 2001, 7–17.

On the excavation of the kitchen and the neighboring rooms see: Buzás – Szőke 2007.



Fig. 32. The southeastern corner of the northern wing of the northeastern palace, with the springer of the arch leading to the western wing, as well as the foundation of the vaulting pillar



Fig. 33. The refuse shaft of the Angevin-era kitchen discovered in the western wing of the northeast palace

has been preserved in the eastern half of the northern wing: a lavatory built in the northern wall with an outfall on the external side of the wall. A similar outfall has also been preserved at another spot to the east. According to the location and position of the transverse arches, at the eastern end of the northern wing a smaller room (11 × 11 m) and a larger hall (38.5 × 11 m) were built; similarly, at the northern end of the western wing a small, 8 × 8 m and a bigger, 20 × 8 m room were located. The space above the kitchen and the other ground floor rooms might have been arranged in a similar manner. The presence of the kitchen, the smoking room and the ice pit testify to the ground floor's function as a space for storing and preparing food meeting the court's demands. The large first-floor premises in the northern wing might be interpreted as the palace's halls used for status display. Both northern halls had their own privies. The smaller but still monumentally arranged space of the western wing probably functioned as a temporary dwelling for the royal family until the construction of the palace was finished. The privies accommodated this wing, their outfalls led to the cesspool. Consequently, the two wings of the new, northeastern palace might have substituted the older (i.e. the building complex from the period of Charles I) and served the same function.

This explains why the buildings from the era of Charles I were demolished and transformed after the northeastern palace was constructed. The older northeastern building which earlier served as a dwelling and later as a stone carver's workshop, was dismantled and its building material re-used: the carved stones as well as the unfinished carvings left in the workshop were incorporated into three pillar foundations supporting the western facade of the southern wing adjoining the northeastern palace building. The foundations of the previously planned but never finished chapel might have been utilized in the construction of this wing as well. Its piers were supposed to support the buttresses reinforcing the corners. On the northern side of the building, however, no buttress was built, which is an indication that the earlier building from the era of Charles I that stood here was planned to be preserved. Of the southern wing only the cellar, or at least its



Fig. 34. Traces of the fourteenth-century timber vault in the eastern room of the northeast palace's south wing



Fig. 35. A pillar foundation built of secondarily used carved stones, west of the southwestern corner of the northeast palace



Fig. 36. A pillar foundation built of secondarily used carved stones, south of the southwestern corner of the northeast palace

eastern end was built in this phase. The eastern end of the cellar was carved out of the rock face, and its wooden vault was supported by a row of pillared arches, with the pillars placed in front of the carved sidewalls. A timber-frame partition wall divided this space into two;50 the wall did not cut the arches. This partition wall was probably planned to have supported another dividing wall on the ground floor. The bricks used in the cellar walls and arches had a $5 \times 12 \times 24$ cm dimension. which makes them dissimilar to the brick type preserved in the northeast palace buildings. This suggests that this structure was built in a different period of the construction works in the 1350s. The original spatial arrangement of the cellar's western two-thirds is impossible to reconstruct; nevertheless, in this phase it was probably not yet finished. Its final shape was formed only later, contemporaneously to the present northeastern palace.

The transformation of the Charles I period building is attested to by a layer of roof tiles and mortar on top of the demolition layer of the Charles I era dwelling excavated in the reception court. The material in this layer must have originated from the nearby northeastern building. A pinnacle fragment that might have belonged to the

⁵⁰ A counterfeit ban's denar dated to the end of the thirteenth or the beginning of the fourteenth century was recovered from the mortar of the wall, this, however, is not of much help in dating the feature. Tóth 1994, 211.



Fig. 37. The southwestern corner of the Angevin era building excavated on the chapel terrace

unfinished chapel was also found in this layer. This fragment was probably discarded when the incomplete carvings were incorporated into the pillar foundations of the southern wing of the northeastern palace. As there were no other wall fragments in this layer of mortar and roof tiles, this piece certainly originated from a construction phase that aimed to transform a building (re-plastering, constructing a new roof) and not from demolition.⁵¹ These debris layers, along with the demolition layers of the Charles I period house in the lower court, yielded tile fragments of the stove erected in the northeastern palace building in the 1340s, which was dismantled in this period.

On the central axis of the palace's gatehouse, on a terrace where later a chapel was erected, wall remains of another terrace building have been found. The building was encircled by a U-shaped retaining wall and its 10 m wide western facade looking to the lower yard was divided by two small buttresses placed in the middle.⁵² Unfortunately, neither the dating nor the function of this terrace can be identified, even though its location suggests that it was built to fit the gatehouse, and it was enlarged when the present northeastern palace and the chapel were constructed. On this basis, it was probably built in the 1340s or 1350s.

Thus, the northern part of the palace yard was encircled with new constructions in a U shape by the building of the new northwestern and the enlargement of the northeastern palace in the first half of the 1350s. A new, southern wing adjoining the northeastern building was also started to be built; nevertheless, construction finished in this phase. The suite accommodating the royal family was established in the western part of the new buildings. In the northern building a large hall

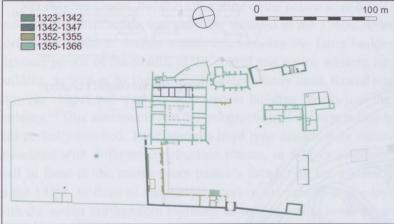


Fig. 38. The western buttresses of the Angevin era building excavated on the chapel terrace

⁵¹ Buzás – Bodó – Deák 2003, 16–17.

There was a cellar carved into the rock face between the buttresses, however, its dating is completely unknown. At the beginning of the excavations in the 1930 it still existed, it cannot be excluded that it was entirely built in the modern age.





Figs 39-40. The palace complex around 1366: ground plan and reconstruction

suitable for status display was planned: offices or a chapel were possibly planned for the eastern one. These transformations were probably necessary because the southern buildings were donated to the queen and had to be substituted with new premises.

1355-1382

Louis I moved his court back to Visegrád in 1355, while the palace was still under construction but was suitable for accommodating the royal court. The construction works, however, were not concluded, but continued intensively. Because of the plague that decimated Hungary, on April 19, 1360 Queen Elizabeth asked the pope to allow the church dedicated to Virgin Mary in Visegrád - which belonged to the Veszprém Diocese – to grant indulgences. Until this reference there had been only one church dedicated to the Virgin, a parish church under the supervision of

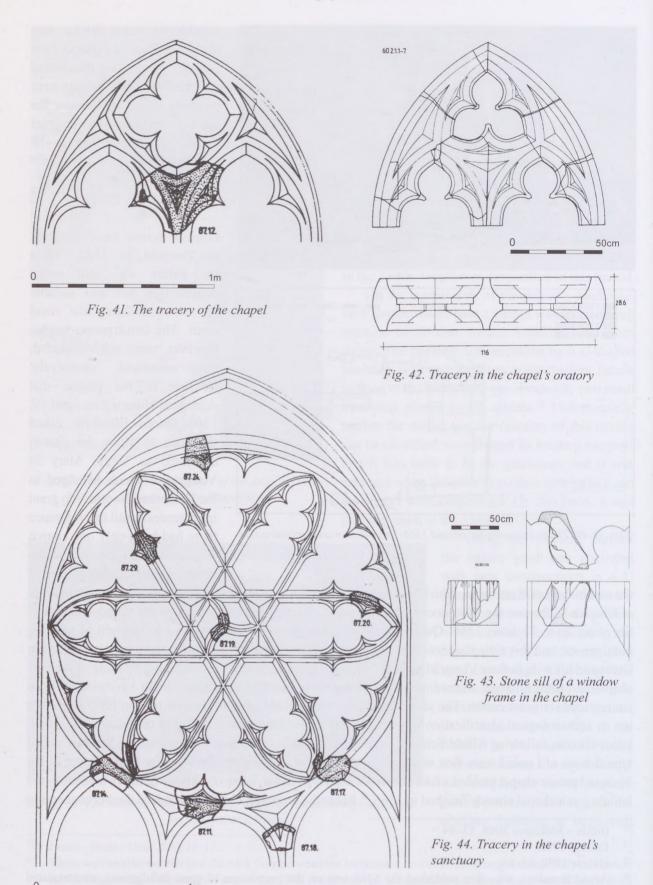
the archbishop of Esztergom, which was mentioned in the sources several times already under the rule of Charles I. The one the 1360 document referred to must have been another, newly founded church. Six years later, 23 June, 1366, Queen Elizabeth asked pope Urban V again for the right of offering indulgences, and this time she identified the church as the chapel of the Virgin Mary built by Louis the Great and his wife in their Visegrád palace. This permission clearly shows that the building of the new chapel had been finished. According to the permit some parts of the chapel might have already been consecrated six years earlier. The same chapel was mentioned in the documents both in 1360 and 1366, but its archaeological identification was set back by a false numismatic dating of the denarii of Louis I. Lajos Huszár, following Alfréd Schulek, argued on the basis of written sources that the Saracen's head type denarii of Louis I were first minted between 1372–1374. Since the lowermost floor layer of the Visegrád palace chapel yielded a fake Saracen's head type denar, it seemed highly unlikely to identify the building as a chapel already finished in 1366. Recently, however, Csaba Tóth raised doubts concerning

⁵³ Buzás – Mészáros 2008, 83–84.

⁵⁴ Érszegi 1992.

⁵⁵ Huszár 1958, 63–64.

⁵⁶ Árpád Bossányi, who first published the 1366 text on the permission to grant indulgences, mistranslated the Latin text and mentioned a chapel "to be built" (Bossányi 1918, 446 no. 412.). Even though Bernát L.



the dating of the denar in question, and argued that this type of coin was minted already at the end of the 1350s.⁵⁷ Thus, its presence in the first-period floor layer of the palace chapel corresponds to the dating suggested by the written sources.⁵⁸

The chapel had one nave, a polygonal sanctuary, a vestry with an upper floor, and was oriented to the north. Its 18.1 m long and 9.6 m wide nave's vault was divided into four sections, with the two entrances located in the second section from the south. Its vaults was supported by ribs with rounded ogee keel molding and rested on wall pillars with an identically shaped molding, reinforced by buttresses from the outside. The 7.2 m long and 7.4 m wide sanctuary had an elevated floor level, and was covered by a sexpartite rib vault. A triumphal arch with a rounded ogee keel connected the nave with the sanctuary, and both spaces were illuminated by lancet windows with tracery and molded stone frames. The vestry was attached to the eastern side of the church, had a somewhat irregular rectangular shape, a 5.4 m wide and 6.5 m long floor space and a horizontal ceiling, and was lightened by a small and narrow window. The vestry could be approached from the sanctuary through a door. In its southwestern corner, a winding stair led up to the oratory. The oratory's double window with tracery opened to the east.

Not only the chapel, but also other parts of the palace were dated by the Saracen's head type denarii,⁵⁹ and so their construction was probably finished in the 1360s. Among these is the new building of the northeastern palace. A clear connection between the latter building and the chapel is shown by the identical profile of the plinths in the chapel and on the western facade of the new northeastern palace building, as well as by the presence of secondarily used, flawed and discarded carvings that originated from the chapel and were incorporated as building blocks into the middle buttress of the new palace building.⁶⁰ This also means that the construction of the new palace building started only after the chapel was partially finished. The Saracen's head type denarii were discovered on several surfaces: in layers associated with different construction phases, in a layer associable with the building of the buttress wall in front of the northeastern palace's facade, on the surface associated with the buttresses built in the 1350s, in front of the northern part of the facade, in the layer of roof tile fragments associated with the earlier northeastern building, as well as in the lower layers of the small northern livingstone courtyard along with the demolition debris from the stoves built in the 1340s. Consequently, the present northeastern palace was built contemporaneously to the palace chapel. Flawed carvings originally made for the higher wall parts of the chapel were incorporated into the lower part of the wall buttresses,

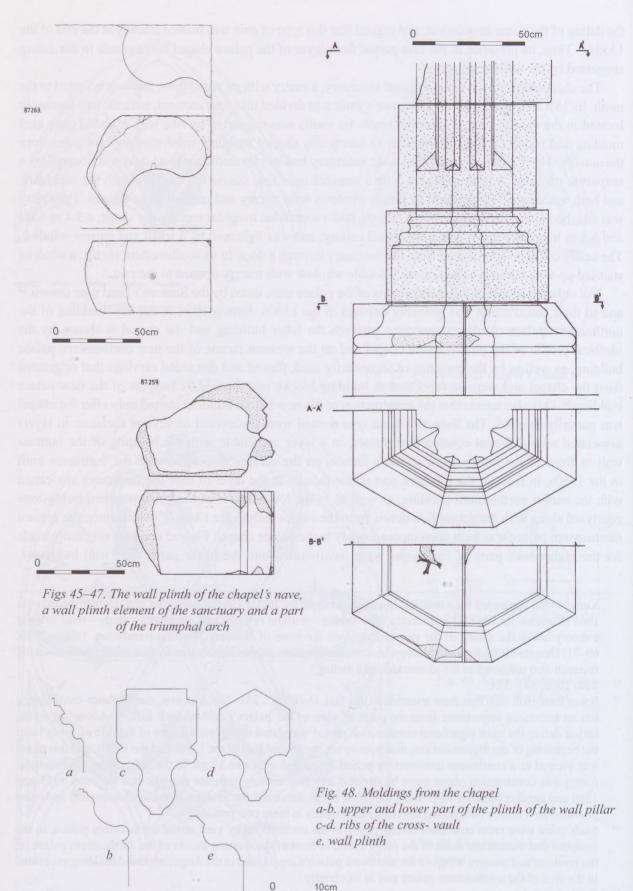
Kumorovitz, supported by a detailed linguistic analysis by József Gerics, corrected this misinterpretation in 1963 (Kumorovitz 1963, 117), recently Imre Takács – without refering to Kumorovitz's study – tried to build a theory about the dating of the palace chapel on the basis of Bossányi's wrong translation. Takács 2006, 69–71. Despite his faulty methodology, his conclusions were proven largely true by new results in numismatic research also unknown to the aforementioned author.

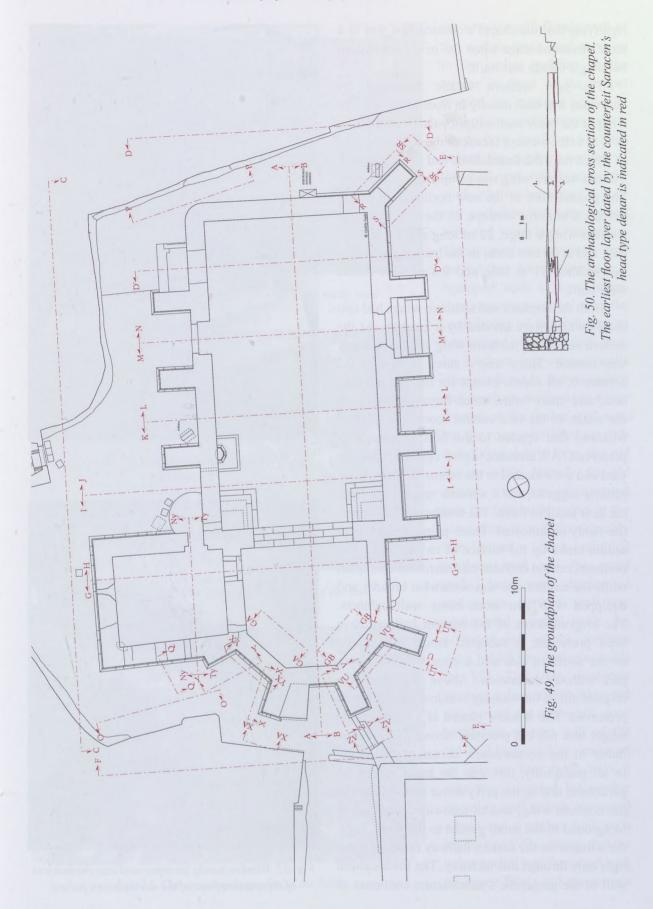
⁷ Tóth 2009, 343–344.

It was Imre Holl who first drew attention to this fact. Holl 2007, 235–238. The new, numismatics-based dating has an enormous importance from the point of view of the palace's architectural history. According to the earlier dating the most significant construction period was dated to the last decades of the rule of Louis I and the beginning of the Sigismund era, that is, between the second half of the 1370s and the 1390s, and this phase was viewed as a continuous construction period associated with two kings. In the light of the numismatical dating this construction phase must be divided into two entirely separate periods: one between 1355 and 1366 and another between 1387 and 1409. New excavations and the analysis of the archaeological finds also provided new results concerning the works undertaken in these two periods.

Such coins were recovered from dating layers in the northern rocky yard of the northeastern palace, in the cesspool and wastewater drain of the privy tower, in front of the western facade of the northeastern palace, in the northern and western wings of the northwest palace's loggia, and in the Angevin-period building excavated in the area of the southeastern palace and in its vicinity.

⁶⁰ Buzás 1990, 25.





signifying that the chapel's construction was in a more advanced stage when the new northeastern building's facade was built.

The new western facade supported by buttresses was built closely in front of the western wing of the older northeastern palace building, so as to fit to the western facade of the southern wing, of which only the foundations had been prepared. The old western wing was completely dismantled. The ground floor of the new northeastern palace reflects a uniform concept. In the middle of the western wing a large, 22 m long and 11 m wide hall, and at its two ends, in the building's corners two smaller, 11 m long and 9.6 m wide rooms were built.

Both the northern and southern wings had two rooms which were divided by a corridor. At the eastern end of the northern wing another hallway was formed. There was a stove in one of the corners of all rooms except for the southeastern one, and there were stone-frame cabinets on the walls. In the two eastern rooms the original windows that opened to the outside have been preserved. All entrance doors opened from the yard and were located in the rooms' corners. Their placing suggests that a window might have been cut next to all of them. The southern hallway was the richly ornamented. Three pairs of chamfered sedilia broke up the surface of its sidewalls. The northern, central corridor was narrow and simpler, while the eastern one was somewhat broader and equipped with two stone-frame wall cabinets. The original doors of the broader hallway have been preserved: a rabbeted lancet arch frame on the southern side and a door with flat upper part without decoration. Above the latter the original sill of the transom window has also been preserved. The window placed at a considerable height was not cut precisely above the door but rather in the northwestern corner of the room. In all probability, this was the point where the garderobe, that is, the privy tower was attached to the northern wing, and an archway connected its foreground to the small garden to the west. Thus, the window on the eastern hallway received some light only through this archway. The thick eastern wall of the garderobe's substructure continues as



Fig. 51. The only wall footing of the chapel that was left in place



Fig. 52. Window jambs incorporated into the buttress of the western front of the northeastern palace



Fig. 53. The western wall of the small western rocky yard



Fig. 54. The bath yard and the substructure of the bath



Fig. 55. The excavated remains of the bath

the new western facade wall of the eastern wing, and runs up to the earlier building on the terrace in front of the chapel beyond the southern bordering wall of the northeastern palace. There is a small, rocky yard behind the northern section of the wall part that borders the garderobe's substructure. A door and a window had been opened here and were later walled up. These openings are not - and maybe they have never been equipped with a stone frame. Contemporaneously to the construction of the wall a room was carved out of the rock face. Its southern and western walls were made ready, but its eastern and northern walls were never erected on the timber wall-seat, but the room was filled up with demolition debris from the old eastern wing. Namely, the old eastern wing was incorporated into the new building but at the same time it was considerably transformed. Its original northern wall and the small rocky yard were dismantled and a new northern wall was constructed aligned with the northern wall of the northern wing, which ran further towards the hill. This was necessary because a deep, trench-like yard was carved out of the hill slope beside the eastern wall of the old building, with drainage on its bottom. The yard's eastern side was bordered by another retaining wall, which supported a bath and a garden, built on a higher level. This means that the eastern wing was furnished with an upper floor, and the wing's

southern room was turned into a staircase in order to create a safe passageway to the upper level. A hallway was created between the old building's western wall and the new building's western facade. This continued to the south in the upper floor's entrance corridor ornamented with sedilia, which opened to the terrace in front of the chapel. Behind this corridor, in the southeastern corner of the block, a new kitchen was built, with an external oven in its northeastern corner.

A bridge connected the newly created second floor with the bath and the upper garden. The bath consisted of a foreground and two chambers: a niche with a red marble bathtub and a sudatorium equipped with a hypocaust. Beside the sudatorium another small, vaulted chamber was created, which was partly sunken into the floor, and which could be approached through a long hallway from the northern end of the eastern upper garden. The garden was surrounded by high fence and retaining walls. A pair of sedilia and a bench, which was presumably equipped with armrests, were incorporated into the retaining wall on the hill's side. On the inner side of the western wall a row of sedilia was built, which continued further on the western end of the southern wall. A pillared veranda was created along the fence wall on which the sedilia were placed. A bridge was built on both its ends: the northeastern one led to the second floor of the palace, while the oratory above the chapel's vestry could be approached through the southern bridge. Nevertheless, no bridge pier was built on the vestry wall, suggesting that the vestry's construction had already been finished when the bridge was built. In the southwestern corner of the garden a buttress was also added to the chapel's already finished sanctuary. These observations confirm that the northeastern palace must have been built after that the chapel was completed. In front of the posterior retaining wall of the upper garden a wall fountain was built.61 Its quadrangular foot supported a double, red marble structure. Small columns held the baldachin on its corners and in the middle. The baldachin ornamented with traceries and the ostrich crest of the Angevins. The



Fig. 56. Waste water spout of the privy tower in the northeastern palace



Fig. 57. The western wall of the Louis I period northeastern palace, built in front of the facade of the Charles I era building



Fig. 58. Sedilia and vaulting support of the Louis I period corridor



Fig. 61. Remains of the Matthias-era buttress period ornamental well



Fig. 59. Fragments of the Louis I era well from the ornamental yard incorporated into the Matthias-era buttress of the chapel terrace



Fig. 60. Foundations of the Matthias-era cloister walk and stones of the Louis I period ornamented well



of the chapel terrace, and fragments of the Louis I Fig. 62. Foundations of the Matthias-era cloister walk and stones of the Louis I period arches



Fig. 63. A reconstruction of the lower segment of the Louis I era ornamental well in an exhibition in the Solomon Tower



Fig. 64. Corbel of the fountain on the ornamental courtyard from the period of Louis the Great, decorated with a grotesque head

back wall of the fountain was decorated also with traceries, as well as with lion gargoyles with two bodies and one head, holding a red marble coat of arms. An aqueduct delivered water from the hill and supplied spring water to the bath, the fountain and the garderobe. On the so-called Calvary Hill, an elevation south of the hill's crest, the foundations of a water tower were brought to light; the aqueduct led to this direction. A wooden trough made of planks attached to each other by iron nails transported the water from the water tower to the palace by the force of gravity. Above the southeastern group of buildings the wooden conduit continued in pipes made of ceramics, and later in a stone trough above the chapel to the north. The aqueduct eventually led to the cesspool of the garderobe, and from its stone slab bottom a vaulted canal led the refuse water to the Danube. However, only the superfluous water ended up in the cesspool. A lead pipe in the upper garden's retaining wall led the water to the Ostrich Fountain from the stone trough; another lead conduit, placed in a stone channel covered by bricks incorporated in the wall supplied the bath and the sudatorium's water tank with water. A third pipe branch ran downwards from the upper garden. Beside the bridge that led to the palace the pipe passed through a pier and continued on the underlying level. A small, simple fountain with a red marble basin was placed on this pier. The pipe running under the external yard of the northeastern palace passed through the eastern wall of the previous palace building, signaling that this wall was built earlier than the pipe and the upper garden. The water conduit ran further under the floor of the eastern wing and ended at the upper level of the fountain of the ceremonial court. This monumental fountain was the most significant element of the richly decorated internal courtyard. This yard was entirely transformed under the reign of King Matthias, and therefore only the fourteenth-century carvings, later secondarily incorporated into the Matthias period constructions, can serve as a basis for reconstruction. The only element preserved in its original



Fig. 65. Reconstruction of the Angevinera wall fountain of the upper garden, exhibited in the Hungarian National Museum in Budapest



Fig. 66. Baldachin of the Angevin-period wall fountain in the upper garden, decorated with the ostrich crest



Fig. 67. The coat of arms with a double cross on the Angevin-period wall fountain of the upper garden



Fig. 68. Reconstructed copy of the Angevin-period red marble pinnacle fountain in the orchard

form is the semicircular pairs of sedilia that embellished the lower part of the eastern wall. Between the two rows of three pairs of sedilia a door led to a cellar carved out of the rock face; the building of this cellar seems to postdate the completion of the earlier eastern wing.62 The sedilia also suggest the presence of a corridor that led through the yard. A corbel found in the northeastern corner of the yard above the impost of the Matthias period cloister walk suggests that the corridor was covered by a wooden ceiling. The corridor's yard wall, however, was never brought to light during the excavations, which means that it must have stood at the very place where the wall of the later Matthias era cloister walk were erected. This is also suggested by the fact that the foundation of the fourteenth-century well is aligned to the cloister walk's wall. The well's foundation, however, was not brought to light in the central axis of the courtyard but south of it.

The cellar vent opens below the eastern facade wall of the eastern wing, a space earlier occupied by the mountain side. In the cellar's foreground, under the old western facade wall of the wing a broad transverse arch was built whose orientation differs from that of the earlier wall, and there is no sign of doors or windows on it either. Thus it cannot be considered coeval to the wall above it.



Fig. 69. The foundation of the fountain in the orchard



Fig. 70. The wall fountain of the northwestern palace



Fig. 71. Excavation of the western porch of the northwestern palace



Fig. 72. The flight of stairs of the western porch of the northwestern palace



Fig. 73. Excavation of the wall fountain in the northwestern palace

This might be explained with contemporaneously built corridor running not only along the eastern but also along the northern side. This is also attested by the post holes associated with the construction of the fourteenthcentury northern corridor, which came to light in front of the Matthias era cloister walk's northern wall, from under the fourteenth-century floor level. 63 However, as a fourteenth-century window was cut into the yard facade of the western wing, precisely in line with the reconstructed northern corridor, this passageway must have turned in another direction in front of the western wing. This also means that the section of the corridor in front of the southern wing was not built in this phase. Building blocks that once belonged to octagonal piers and voussoirs and whose width is identical to that of the Matthias era cloister walk walls were found incorporated into the lower section of these walls. These elements must have

⁵³ Buzás 1994b, 85.

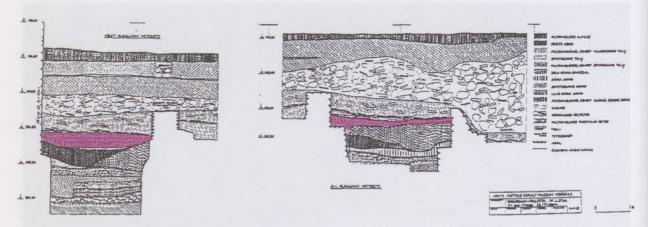


Fig. 74. Archaeological section drawing of the northern porch of the northwestern palace; the layer dated with the Saracen's head denar is highlighted in red

Fig. 75. Archaeological section drawing of the northern porch of the northwestern palace; the layer dated with the Saracen's head denar is highlighted in red

originated from the yard facade of the fourteenth-century corridor. In the middle of the eastern side a richly ornamented octagonal fountain was erected. Archaeological excavations revealed that this fountain's building elements were later re-used during the construction of the Matthias era Hercules fountain as well as the southeastern buttress of the retaining wall on the chapel terrace. These carvings served as a basis for the reconstruction of the fountain by Ernő Szakál. Further carvings were brought to light at these spots, and the foundations of the Matthias period staircase that led to the chapel terrace also yielded a considerable amount of fourteenth-century carved stones. These findings offered an interpretation for the previously known carvings of uncertain function, and also contributed to the reconstruction of the architectural arrangement of the yard's upper level.⁶⁴ A string course counts among these new findings, which closed the archway on the ground floor. One element of these stones turns to the lower part of the octagonal fountain attached to the arched wall. Another group of carvings is associated with a breastwork which ran above the archway on the upper level and was decorated with a blind tracery. On top of this breastwork ornamented piers were placed. Their external side had a half octagonal shape, while their side facing the corridor was adorned with slender, three-quarter columns whose capitals were carved with leaves. The piers were closed by a ledge and might have supported arches of a yet unknown arrangement. The fountain had an upper level too. Above the central pier of its lower level a rectangular pier and a quatrefoil basin were placed. Another, pinnacle-shaped pillar stood in the middle of the basin, while slender columns stood on its corners and supported a baldachin above. The gargoyles were placed at the apex of the pinnacle's tracery. A balcony was created around this rectangular pinnacle fountain, enclosed by baldachined balusters of hard limestone. Between the balustrade and the balcony ledge a metal grid decorated the breastwork. The parapet sill was supported by slender, octagonal limestone pillars resting on the transom consoles and the corner piers. The balcony's roofing is not known, however, it was probably a tower-shaped construction adorned with pinnacles, not necessarily of stone but perhaps made of wood.

Extensive painting remains were observed on both the Ostrich Fountain and the fountain in the internal ornamental courtyard. These fountains were made of various types of raw material: their basins and gargoyles were carved out of red marble, their pillars and sills of freshwater limestone, while the rest of their elements of gray andesite tuff and breccia. The different raw materials were selected on the basis of their

Szakál 1963–1966. On the upper level of the fountain, see: Buzás – Réti – Szőnyi 2001, 24.

different static characteristics and suitability for carving; it is only the red marble which might have been chosen for aesthetic considerations. There are no traces of painting on elements carved of the latter, and their polished surfaces suggest that they were not painted at all, just as the pinnacle fountain standing in the palace garden and carved entirely out of red marble was not painted either. On carvings made of other materials than red marble, nevertheless, the original painting can still be observed. The coloring depended not on



Fig. 76. Excavation of the workshop from the period of Louis I in front of the southeastern palace

the raw material but on the type of the given carving. Columns, piers, ledges, sills, beams, traceries-that is, all kinds of molded structural elements – were painted bluish-gray⁶⁵ and thus fitted the natural color of the andesite tuff that served as the main component of the fountains. Consequently, the painters aimed to give the fountains a natural color of stone by masking the differences between the various raw materials, with the exception of the ornamental and figural decorations. Column capitals were decorated with vermillion



Fig. 77. Excavation of the workshop from the period of Louis I in front of the southeastern palace



Fig. 78. Room equipped with a hypocaust excavated on the external side of the palace's southern fence wall, dating back to the era of Louis I

⁶⁵ Szakál 1963–1966, 181; Szakál 1969–1970, 364.

leaves against a green background, ⁶⁶ while red paint has been preserved on the mane of the octagonal fountain's lion gargoyle, and black dye on its eyes, depicting the animal's pupil. ⁶⁷ It is open to question whether the red paint served as a ground coat for gilding. ⁶⁸ The upper plate of the baldachin part of the fountain was also painted; traces of dark blue, light blue and red colors were identified in the moulds. ⁶⁹ These intense and vivid articifial colors applied on the fountains were either painted to the likeness of natural andesite tuff or were carved out of unpainted red marble, emphasizing the decorations and ornamental reliefs.

In addition to the Ostrich Fountain and the fountain on the ornamental inner courtvard, two other fountains were erected in the palace in this period: a wall fountain on the street facade of the northeastern palace⁷⁰ and another fountain in the palace garden. 71 The formation of the palace garden was closely associated with the transformation of the northeastern palace. The fence wall enclosing the garden was built as a continuation of the large retaining wall of the northeastern palace's eastern wing. The western wall that faced the street was added later to the northwestern corner of the palace. A timber house was built on the inner side of the fence wall in the northwestern corner, and a well was dug in front of it. A hexagonal pinnacle fountain, resting on a round pier and carved out of red marble stood in the middle of the garden. The palace's aqueduct supplied it with water. The other fountain was located on the street facade of the palace, on the central axis of the large northern hall. The foundation and the niche accommodating



Fig. 79. A cellar window of the workshop



Fig. 80. A cellar window of the workshop

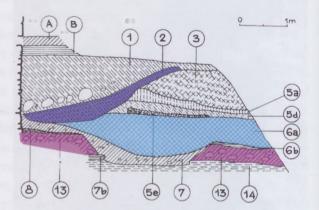


Fig. 81. Successive layers excavated outside the southern fence wall of the palace, behind the building dated to the period of Charles I. The layer dated by the Saracen's head denar is highlighted in red, the layer dated by a coin issued by Queen Mary is indicated in light blue, while the layers dated by coins issued by King Sigismund are highlighted in dark blue

In 2006, a capital of a rectangular pinnacle from the upper level of the octagonal Angevin-period fountain was found during the excavation of the fill of the substructure which supported the flight of stairs leading to the loggia of the reception court. The original green paint has been preserved on this pinnacle fragment.

⁶⁷ Szakál 1963–1966, 181.

Red lead paint or lead minium was used for ground coating gilded stones that stood outdoors. Wehlte 1996, 732.

⁶⁹ Szakál 1969–1970, 364.

⁷⁰ Medieval Visegrád 1995, Fig. 91.

⁷¹ Buzás 2006.



Fig. 82. A survey trench opened inside the workshop building, with a part of the back wall on which traces of a timber structure were observed



Fig. 83. The southern end of the workshop building



Fig. 84. The southern end of the workshop building with the hypothetic substructure under the walls of the later tower



Fig. 85. The heating chamber and the iron door of the oven unearthed in the workshop from the period of Louis the Great, in front of the southeastern palace



Fig. 86. The heating chamber after excavation, with the lower part of the chimney is seen on the right side

Gothic, lavabo-like baldachined fountain created later than the wall itself. The source of its water supply is unknown. Not only the street facade of the northeastern palace was embellished in this period, but the yard facade was also transformed. A two-story loggia was built here whose construction layer yielded two Saracen's head type denarii. Only a few fragments have been preserved from loggia's hexagonal pillars due to its transformation in the Late Gothic period under the reign of King Matthias. Two staircases led up to the eastern and southern ends of the loggia.

Large-scale construction works were carried out in this period in the southern palace area as well. The building from the period of Charles I at the foot of the hill was transformed, its timber frame upper floor was reconstructed, and the building was enlarged by adding new wings, which resulted in a T-shaped complex. On the upper floor of the older wing the infirm tile stove was replaced by a new one, whose door frame was made of slabs previously used for covering a hypocaust.⁷² A stove tile of the Angevin I group along with a Saracen's head type denar minted by Louis the Great was found on the eastern side of the building, on the surface of the somewhat elevated external floor level into which the stove's fire pit was dug. Simultaneously to the alteration of the upper floor the ground floor was enlarged too. A clear connection between these two building activities is testified to by the identical, 6 × 11 × 24 cm bricks of which the new wing's hypocaust and the foundation of the upper floor tile stove were built. Bricks of the same size were used in the construction of the northeastern palace as well. An L-shaped western extension was added to the old, one-wing building: a narrow eastern wing and two additional rooms on the northern side, protruding to the west. Only the western room of these two had a cellar underneath. Half of the cellar was occupied by a hypocaust stove that heated the room above. The heating chamber could probably be accessed through a staircase attached to the northern part of the building. There was a narrow lane behind the staircase, between the new building and the neighboring workshop, from which a cellar carved out of the rock face can be accessed today. Without a proper excavation it is impossible to say whether this cellar still used in modern times was built in the fourteenth century; it might have constituted a part of the medieval building complex. A St. Ladislaus denar from the age of Louis I and a denar of Queen Mary were collected from the floor level of the cellar under the aforementioned building's western room, while the fill associated with the dismantlement of the cellar yielded a counterfeit Saracen's head type denar of Louis I (CNH II.91). Consequently, the building must have been demolished at the close of the fourteenth century.

Bricks identical in size to those utilized during the construction of the northeastern palace were used in the foundation of the new tile stove on the upper floor of the south building, for the hypocaust on the

The bricks used for the foundation of the stove were smaller than in earlier cases, $5-5.5 \times 11 \times 24.5$ cm.



Fig. 87. Reconstruction of the royal palace in 1382



Fig. 88. Ground plan of the royal palace in 1382

ground floor, as well as for a new building attached to the western wing. This 32 m long and 12.5 m wide two-story building was built at the foot of the hill, oriented from north to south. It was probably built in the second half of the 1350s or the 1360s, even though an obulus of Charles Robert was found in front of its cellar door on the coeval floor level. The cellar level of the building was built of stone; the cellar was divided into two parts by a partition wall. The cellar's entrance opened into the bigger, northern cellar room on the long western wall. The beam sockets formed in the eastern wall, that is, the

⁷³ Buzás 1992, 42. Note 14.

back wall of the cellar, testify to a timber structure. Two chamfered, rectangular windows have been preserved in the western wall, north of the entrance, in the northern cellar room. The southern room could be accessed through a small door cut into the dividing wall. Its windows and spatial arrangement are yet unknown. The upper floor had timber frame walls, however the northern, eastern and southern walls were covered with a stone curtain wall from the outside. On the northern and southern sides these curtain walls supported the gable walls, but on the eastern side it functioned as a retaining wall as well. The eastern end of the building extended further to the east than the cellar underneath, and was hewn into the rock face similarly to the cellar's back wall. Due to the earth load the stone wall had to be reinforced by a T-shaped buttress in the middle and an L-shaped one in the northern section. The stone retaining wall and the buttresses preserved the impression of the back wall's timber structure. The timber frame consisted of a sill plate and an upper wall plate supported by vertical posts and oblique wooden braces. Impressions of a timber frame partition wall have also been preserved on the surface of the T-shaped buttress. No traces of covering planks or stone filling in the frame's cavities were found, and the layer of the building's demolition debris did not yield remains of a wall filling either. Therefore, a plank cover is more probable in case of the partition wall and the western facade. The entrance to the upper floor presumably opened at the southern end of the western facade. Here remains of short, parallel walls were discovered, probably the understructure of a flight of stairs. A large, rectangular stone kiln was erected in the eastern half of the southern room, on a floor space under which there was no cellar. The kiln consisted of two parts; its smaller, northern chamber was preserved in a better condition. Its narrow, rectangular, stone-framed door was closed by an iron plate which was thrown inside the chamber at the time of the demolition of the building. On the top of the eastern wall the lower section of a chimney as well as a fragment of the chimney opening's stone jamb have been preserved. Only the foundation of the kiln's fire chamber has been preserved due to the later transformations of the building. The layout and size of the kiln shows similarities to the Charles I period hypocaust stoves of the palace, however, no covering slabs or freshwater pebbles were found. Moreover, the original, slanting wall top and the timber structure of the eastern wall exclude the possibility of another floor above which could have been heated by the kiln. It seems that this structure was used not for heating but for manufacturing. A kiln of similar position and structure was discovered in the corner of a fifteenth-century metal working and minting workshop, therefore, the above mentioned building might have possibly served a similar function. This is also suggested by a small melting pot found in the demolition debris. Nevertheless, the function of the building cannot be determined until a proper excavation is done.

Leastwise, the building certainly did not exist for a long time, as the present southeastern palace was constructed after its dismantlement. The southwestern wing of the palace was built on top of the earlier workshop's kiln and southern end. A number of Saracen's head type denarii of Louis I were unearthed from a burnt layer of rubbish and whitewash covering the rock surface, associated with the western facade of the southeastern palace's central wing. This suggests that the building must have been ready by the time of Louis I's reign. The two buildings from the era of Charles I were incorporated into the new complex. The southern one, the house equipped with a hypocaust, does not show any traces for a transformation in this period. The northern building equipped with a fireplace, however, was totally altered: it was enlarged to the south and to the west, and a partition wall oriented from north to south was added, which thus divided the building into two. The yard between the two buildings was closed from the west by a multi-story wing. The northern wall of this palace wing was merged with the substructure of the new, southern facade of the northern wing. In a corner between the two wings a rectangular cesspool was created which was probably associated with the latrines of both wings. The newly erected western wing rested on a hill terrace and had altogether four floors. Its ground floor consisted of a large cellar, reinforced by a molded stone transverse

⁷⁴ Inventory no. 68.98.1, 68.98.2, 68.98.3; Dercsényi 1951, 80.



Fig. 89. Masonry lines painted in red on the building attached to the southern fence wall of the palace



Fig. 90. Masonry lines painted in red on the external side of the palace's southern fence wall



Fig. 91. Plaster with painted masonry lines on the external wall surface of the sanctuary of the palace chapel. The painting was still visible at the time of the excavation, November 14, 1935

arch; the arch was supported by a buttress on the western wall. The above mentioned Saracen's head type denarii were found next to this buttress. The cellar door was situated in the middle of the western wall. The southern section of the cellar was illuminated by a sloping window situated at a considerable height.75 A small, rectangular space, probably a spiral staircase tower was situated at the northern end of the facade. Two smaller, vaulted cellars carved into the rock face could be accessed from the large cellar in an eastern direction.⁷⁶ Only the eastern wall that supported the hillside as a retaining wall has been preserved from the first floor.77 On this wall the springer of a transverse arch was observed, right above the transverse arch on the ground floor. Both the third and the fourth floors - the latter must have been at the same level as the buildings of the upper yard - have been totally ruined. Simultaneously to the construction of the new western wing, two rectangular buildings

The northern side of the facade suffered heavy ruination and so no traces of windows could be preserved.

The southern one collapsed, while the northern cellar was used even in the modern age and its eastern section still exists.

Unfortunately, the static of the National Heritage Protection Board had most of this wall dismantled in 1951, and the rest was demolished in the 1980, therefore we have only its survey.



Fig. 92. Excavation of the northern part of the southwestern building

were attached to its southeastern and southwest corners. The ground floor of the southeastern wing was situated lower than the upper yard. It was oriented in accordance with the preserved southeastern Charles I period building of the upper yard; its enlarged southern facade ran up to the western wall of the latter, and a gate was opened in it. This building wing must have initially comprised two rooms, but its larger, northern hall was ruined due to the collapse of the underlying cellar, and only a wall block in it southeastern corner has been preserved. This block probably formed a part of an oven; its interior, possibly made of bricks, was later dismantled. The smaller, southern room of the building wing was equipped with a stone trough for draining refuse water, placed in the southeastern corner of the room. These features suggest that the room might have been used as a kitchen. A large, double cesspool shaft was attached to the western wall, which was later turned into a staircase during the reign of King Matthias. The shafts were located in the corner of a small, rectangular yard. The yard was bordered from the north by the southern wall of the large cellar supported with a transverse arch, and from the west by the eastern wall of the building wing adjoining from the southwest. There was a door with a couple of stairs in the middle of the western wall, through which the southwestern building could be accessed. In the middle of the southern wall another, stone jambed door was opened, placed much higher than the first door.

Another building wing was attached to the southwestern corner of the large cellar, west of the small yard with the cesspool shafts. This wing originally consisted of three parts, arranged in a U shape oriented to the north. A workshop was built on the eastern side, equipped with an subfloor brick kiln in its northeastern corner. Its heating chamber was placed into the northern wall of the room. The chimney was built on the northern wall of the chamber and probably ran along the wall of the cellar to which a transverse arch was attached. The small door of the heating chamber could be approached through a walled shaft in front of the building's northern facade, covered by a half-barrel vault. West of the kiln a wide vault reinforced with a brick transverse arch intersected the room's northern wall. A post hole was discovered behind the transverse arch, whose fill yielded unfinished as well as complete coins, identified as products of a Vladislaus I period mint. The post was probably used as a fixing for the anvil, and small pieces of metal fell into its hole during operation. A tall wall niche made of bricks was built into the middle



Fig. 93. Walled-in door of a baking oven in the great kitchen of the southwestern building

of the workshop's southern wall. A door with a couple of stairs opened into the workshop from the small southern yard. A trapezoid hallway was attached to the workshop's southwestern corner, which rested on a barrel vaulted substructure. This substructure as well as the western wall of the workshop were built on top of the demolished building with a timber frame upper floor which stood here earlier. The hallway led to the upper floor of a rectangular, tower-like building, which was divided into two by a partition wall. Under its spacious northern part a deep cellar was created; the smaller, southern part might have been a staircase connecting the floors. This three- or fourstory building might be interpreted as a treasury (domus tavernicalis) on the basis of its tower-like structure and its association with the mint. The tower's southwestern corner is contemporary to the palace's southern fence wall. Several buildings adjoined the middle section of the southern fence wall, their excavation, nevertheless, is yet in an initial phase. On the southern side of the fence

wall, 3 m above the fifteenth-century floor level the original plastering is still visible at one spot. The wall itself is dated to the fourteenth century, and the plaster does not come off the pebbled mortar layer of the wall, and therefore, it seems to be the original plastering. The heavily worn, yellowish surface of the plaster was decorated with dark, reddish brown masonry lines forming 45×90 cm quadrangles. The painted lines follow marks preliminarily scratched into the soft plaster.

During the 2005 excavation a building that yielded fourteenth-century finds was unearthed west of this spot, adjoining the fence wall from the south. The original, painted plaster has been preserved on the lower section of this building's external eastern facade. Another building part was attached to this wall later, in the Matthias or the Jagiellonian era, and so the painted plaster was covered. Therefore, its surface was still in an excellent condition when it was discovered. The quadrangular pattern scratched into the plaster and then painted, reached down as deep as 15 cm above the medieval floor level. The lines were cut into the soft and wet plaster using a sharp tool, and later painted with a red dye that turned pinkish after drying.

A plaster surface of considerable size was brought to light in 1964 in the northern half of the fence wall's western section, that is, on a wall segment that faced the palace's reception court. However, only a survey drawing survived of this discovery. A similar pattern of 45×90 cm quadrangles were found here too, formed by scratched and painted lines.

Painted decorations of the fourteenth-century palace are known from other sources too. The sanctuary of the palace chapel provided the biggest coherent painted surface. A painted piece of plaster was documented on a 1935 black-and-white photograph; this finding was located on the northern wall at the termination to the sanctuary and above the plinth course on the western surface of the buttress that supported the corner of the eastern upper garden.⁷⁹ This plastered surface has been destroyed nevertheless, and therefore it is impossible to say if it was contemporary to the wall itself. The photo

⁷⁸ King Matthias Museum, Database, 1964.

King Matthias Museum, Photo Database, 1736, 14 November 1935. Published in Buzás 1990, Fig. 17.

depicts a dark quadrangle pattern against a light wall surface. The estimated height of the quadrangles based on the photo is 40–45 cm, while their longer side was ca. 70 cm (the latter was observed only in one case). As the photo is black-and-white, the color of the dye is uncertain. However, a mullion fragment preserved from the chapel that was decorated with a painted red line along its axis suggests that this kind of ornamental design was applied to the windows as well.

Plaster with a similar quadrangle pattern survived in the palace in an internal space of less importance. A double-layer plaster was described by Miklós Héjj in 1953 on the southern side of the northern buttress supporting the western facade of the northeastern palace. Under the smooth upper coating another, rough plaster surface was discovered, decorated with a quadrangle pattern against a white covering. 80 Originally this buttress was not located outdoors but in an internal space of the corridor that led to the garden under the northwestern palace wing. One of the winding stairs through which the upper levels of the palace could be approached was also built here. Under the reign of king Matthias a chamber was created in the space beside

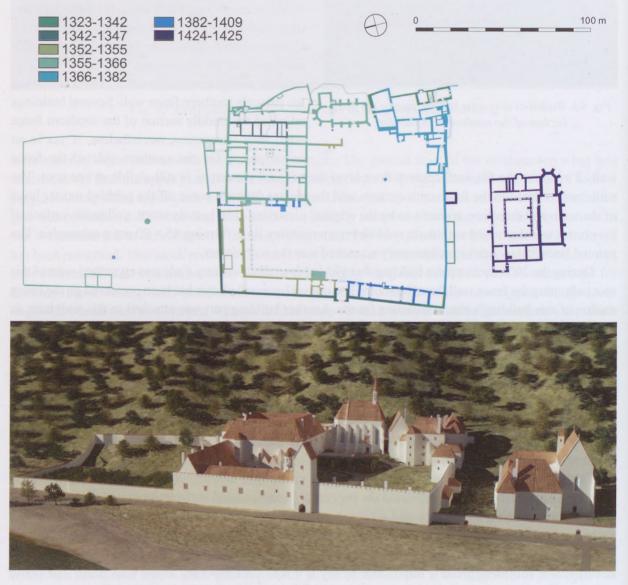


Fig. 94–95. Ground plan of the royal palace at the end of the Sigismund period

⁸⁰ Buzás 1994a, 29; Buzás 1994b, 63.



Fig. 96. Excavated remains of the balcony's substructure with sedilia, in front of the great cellar's door of the northeastern palace



Fig. 97. The substructure of the staircase built between the buttresses of the western facade of the northeastern palace



Fig. 98. Excavation of the southern part of the southwestern building: remains of a pillar of a transverse arch supporting the chimney in the great kitchen

the buttress and the winding staircase's door. The re-plastering of the southern side of the buttress, which thus became part of the chamber's interior, might be related to this alteration. The lower layer of plaster was probably applied on the wall during the Angevin era building phase. Unfortunately, the plaster was quickly worn and destroyed because the walls were left uncovered after the excavation, and nothing remains of them.

The Age of Mary (1382–1397) and Sigismund (1387–1437)

Even though the survey of the palace's southern part is still in progress, on the basis of our present knowledge it seems that parts of the buildings situated outside the southern fence wall and erected earlier than the wall itself were still standing during the reign of Louis I. Their dismantlement can be dated by the denarii of Oueen Mary. One coin was found in the building's southeastern wing, in the fill of the heating chamber of a stove that heated an upper floor room. This could be deposited only after the dismantlement of the building. Another denar of Queen Mary was recovered from the cellar fill of the southwestern wing, in the debris layer associated with the destruction of the building.

Excavations in the palace's southwestern wing have not been finished, but preliminary

results make it possible to identify the wing's function and age. This wing was in all likelihood built as a kitchen. In the first period it had only one floor divided into four rooms. On its southern end two, almost regular square shaped rooms were situated. Both of them had independent entrances from the courtyard; the entrances were placed in the rooms' southeastern corners. Their placement suggests that a window was located beside each entrance door. North of these rooms a large, 29.2 m long hall was built. On both ends of the hall the last 5 m long section was separated by a molded stone transverse arch. These were formed similarly to the arch discovered in the southeastern palace's cellar. The transverse arches were supported by small buttresses on the courtyard facade; chimney vaults of open fireplaces might have rested on them. This is suggested by a thick layer of ash that was unearthed on the ground floor of the building's northern section. In the middle of the courtyard facade an oven door has been preserved. The furnace itself was destroyed by a buttress built in the Matthias era, but the door proves the past existence of an external oven at this spot. From the courtyard one could enter the hall through two stone jambed doors: one was located south of the oven, another under the northern chimney vault. The northern room of the wing had a square

shape, and its entrance from the courtyard was again placed in the southeastern corner. Most probably there was a window beside the door here, too. In the southwestern corner of the room a wall niche was formed. Its back wall has not been preserved but in all probability it was pierced through by a drain; namely, a wet brick shaft was discovered outside the facade, aligned with the wall niche. Accordingly, the refuse water of the kitchen must have been drained through this wall niche. The shaft was dug into the fill above the building layer of the palace's fence wall. Two parvii (CHN II.125A) as well as a denar (CNH II.121) of King Sigismund were found in this fill, signifying the date when the kitchen wing was built. This dating is also supported by the observations concerning the types of bricks used during the construction of this building: these 6×14×26 cm bricks are not used anywhere else in the palace complex. Brick fragments (of the 4×12×24 cm type) characteristic for the last construction phase under the reign of Louis I and the southwestern palace, were also



Fig. 99. The waste water shaft of the washing chamber of the southwestern building; on its right side part of the street pavement dated to the period of Charles I



Fig. 100. The door of the kitchen in the southwestern building, walled in the Matthias period

utilized. The unearthed stone carvings, however, suggest that the construction of the kitchen wing was undertaken by the same workshop as the one that earlier contributed to the building of the southeastern palace.

During the reign of Sigismund alterations were made in the northeastern palace as well. A stone barrel vault was now constructed in the large cellar of the southern wing; its dating was established on the basis of coins found in the associated fill. Two pieces of the St Ladislaus type denar of Louis I (CNH II.94A), four Saracen's head type denarii (CNH II.89A and 89B) and four parvii of Sigismund (CNH II.125A) were collected. Other building parts could not be dated to the reign of Sigismund. Certain parts of the complex were certainly built after the construction wave around 1360 but predate the age of Matthias. One of these is the staircase created between the third and fourth buttresses of the western facade, which connected the lower reception court and the great hall on the ornamental courtyard's level. Two chambers in the staircase's substructure as well as its starting step survived. The staircase was probably vaulted. A springer carved of andesite tuff belonging to a cross vault with rounded ogee keel and its supporting console depicting a devil's head, found in front of the staircase during the excavation, probably originated from here. A balcony built above the entrance of the large cellar was added to the facade later. The balcony was built of different raw materials than the staircase: its stone carvings were made not of andesite tuff but freshwater limestone, suggesting that it is not contemporary to the staircase.

Stoves of the palace were also changed in the Sigismund era as part of the modernization attempts. The earliest Sigismund period stoves of the palace were built after 1408. The king's itinerary as well as the significant diplomatic events that took place at Visegrád suggests that Sigismund used this residence more intensively from 1409 onwards. After the death of Sigismund and his successor, Albert, the royal palace of Visegrád gradually lost its former importance. Vladislaus I still utilized the mint of the southeastern building; however, Ladislaus V did not use the complex anymore.

The Art Historical Importance of the Royal Palace Complex Built in the Second Half of the Fourteenth Century

Due to the unusual abundance of written sources and archaeological data concerning the dating of the Visegrád royal palace, along with the new results produced with an interdisciplinary approach, it proved possible to correct and refine the earlier datings and thus a more coherent picture of the palace's fourteenth-century history has emerged. The intensive building phase that started probably before 1355 and lasted until the close of the century is seen as the most significant construction period in the palace's architectural

There is proof for King Sigismund being present at Visegrád three times in 1387 and in 1388, twice in 1395, while he visited Visegrád only once in 1403 and in 1405. In the second half of 1409, however, he was traveling back and forth between Buda, Tata and Visegrád, and visited the palace four times. In 1410 he came to Visegrád only once but he spent the last four months of the year in the southern part of the kingdom. In the second half of 1411 he regularly visited Visegrád, altogether five times. He received Vladislaus, king of Poland here in 1412, before his journey in Europe. Courts of law operating in the royal court, that moved to Buda around 1407–1408 – perhaps because of the palace constructions that started around 1412 – moved back to Visegrád between 1412 and 1416 in the king's absence. Kondor 2008, 423–427; 2012. After returning from his journeys, Sigismund came to Visegrád four times in 1419. Thereafter he went to Bohemia from where he returned in the 1421, and visited Visegrád in the same year. He came back to Visegrád four times in 1423, three times in 1424, once in 1425, twice in 1426. In the 1420s he spent relatively much time here, in some cases a whole month. Engel – C. Tóth 2005, 157. In 1410 he welcomed the Duke of Saxony and the Viscount of Nuremberg (Windecke 2008, 32.), and in 1412, as mentioned before, the king of Poland (Iván 2004, 39–40). In 1423–1424 he received the king of Denmark here several times (Windecke 2008, 135–137, 144).

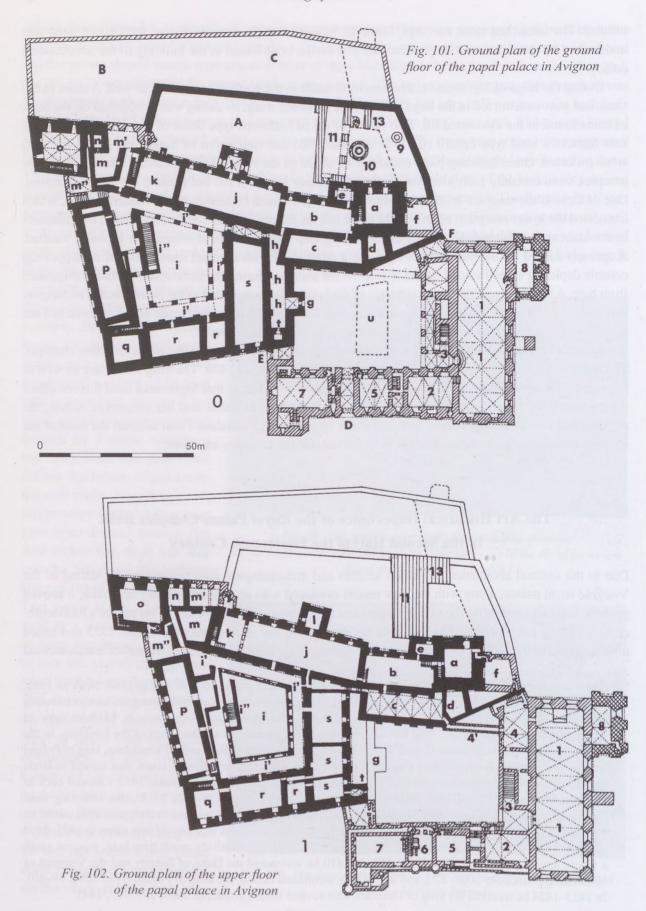




Fig. 103. The main front of the papal palace in Avignon



Fig. 104. The inner courtyard of the Old Palace of the papal palace complex in Avignon

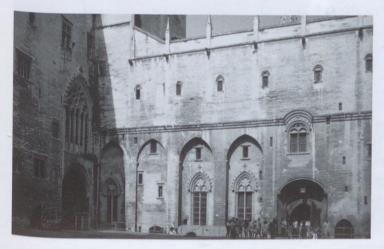


Fig. 105. The inner courtyard of the New Palace in the papal palace of Avignon

history. The space inside the framework created by the embracing walls built in the 1340s was taken up in this period. In the first construction phase in the first half of the 1350s a new, L shaped building was erected beside the renovated old palace complex some of whose buildings were demolished, and a rectangular courtyard was created. In the second half of the 1350 the enlargement of the old southeastern group of buildings was finished. Simultaneously, the building of the palace chapel started and was finished by 1366. In the next phase - which is also closely associated with the chapel the new northeastern palace was erected in place of the old northeastern complex in the middle of the 1360s. Finally, and presumably independently from all other construction works, the new southeastern palace and the southern fence wall were erected in the 1370s. which also meant the dismantlement of a building wing built at the end of the 1350s. The last stage of the palace construction is dated to the 1380-1390s when the big kitchen was created.

The integration of the scattered group of Charles I period buildings into a more coherent palace complex started already between 1342-1347, however, this construction phase resulted in a spaciously arranged courtyard surrounded by a fence wall. The new concept of the 1350s aimed to create a new, uniform palace complex consisting of geometrically arranged building wings and courtyards. The new buildings were placed along symmetrical axes around rectangular yards, the overall structure, however, was not rigid as the large blocks of the complex were arranged in a somewhat asymmetrical manner. There is a clear connection between this spatial setup and that of the Pope's Palace

in Avignon, the most magnificent and influential palace establishment of the era. In place of the bishop's palace reconstructed by Pope John XXII (1316-1334), Pope Benedict XII (1334-1342) had erected the so-called Old Palace flanked with two towers, consisting of a cloister, an irregular shaped rectangular building and a wing attached to the latter with an adjoining dwelling tower. The wing annexed a former reception hall built by Pope John XXII, which was separated from the new building block by an external courtyard. Behind the long building wing a garden surrounded by high walls was created. The successor of Pope Benedict, Clement VI (1342-1352) had the reception hall demolished and built a new, more spacious rectangular external courtyard bordered by an L-shaped new building wing, the so-called New Palace. A new reception hall and a large chapel above was created in this new palace while the other wing accommodated the offices. Pope Clement VI had also elaborated the garden and erected a polygonal fountain inside, while the Old Palace was equipped with a monumental kitchen. The construction of the New Palace was accomplished under the supervision of Pope Innocent VI (1352-1362), who had built the two additional towers. Thus the extensive palace complex turned into a fortification-like group of buildings with two yards, four corner towers and one colossal central tower. The two last popes who resided in Avignon, Urban V (1362-1370) and Gregory XI (1370-1378) only brought about minor alterations and extensions.82 A key figure in the formation of the Avignon papal palace was Jean de Louvres, the architect of Clement VI and Innocent VI, who supervised the construction of the New Palace in 1343-1357.83

The 127 m wide and 227 m long plot of the Visegrád palace complex (including the garden) was of a similar dimension to the popes' palace in Avignon, the latter occupying a 120 × 160 m floor space. It is important to note, however, that the two-story Avignon palace with its many towers and ashlar buildings far exceeded the Visegrád



Fig. 106. The fountain in Paradise. Miniature from the Très Riches Heures by the Limbourg brothers. Chantilly, Musée Candé



Fig. 107. Centerpiece, Paris, between 1300 and 1350, The Cleveland Museum of Art

⁸² Vingtain 2002.

⁸³ Bernardi-Dautrey 2002.



Fig. 108. Fountain on the ornamental courtyard of the Visegrád palace, from the period of Louis I



Fig. 109. Wall fountain in the upper garden of the Visegrád palace, from the period of Louis I



around 1370, Krakow, Wawel Cathedral



Fig. 110. The sepulcher of Casimir III, king of Poland, Fig. 111. The pinnacle fountain of the orchard of the Visegrád palace



Fig. 112. The Fontana Grande in Viterbo

complex in terms of architectural quality. The similarity between the two complexes is rather limited to the two-courtyard structure and the right angle arrangement of the Avignon New Palace; nevertheless, it is possible that the Avignon papal palace finished in the 1350s was an important model for the constructions that started under the reign of Louis I also in the 1350s.⁸⁴

The palace fountains were erected in the most momentous period in the construction history of the complex, that is, in the 1360s, and the models are again found in France. The two tier, octagonal, tower-shaped fountain of the ornamental courtyard is the most monumental of all the Visegrád fountains. A polygonal fountain of a similar ground plan and size was erected by Clement VI in the Avignon palace. St Unfortunately only its plinth survived and its superstructure is

not known; it is, however, suggested by contemporary illustrations that fountains similar to the one in Visegrád were built throughout France around 1400. A representation of Paradise in the Très Riches Heures created by the Limbourg brothers for Duke Jean de Berry around 1410 depicts an ornamental fountain of a similar type. Ré A fine metalwork centerpiece manufactured in Paris in the second half of the fourteenth century resembling the shape of an octagonal two tier fountain is of even more importance from the point of view of analogies. The piece was taken from Istanbul to the Cleveland Museum where it is now stored, Romando it cannot be excluded that it was stolen by the Turks from Hungary along with other valuables.

Another ornamented baldachine fountain was erected in the upper flower garden. It has a special shape to which no contemporary analogies are known. However, its structure resembles the baldachine sepulchral monuments that became widespread in Central Europe at that time. The tomb-chest type of monuments adorned with a baldachine supported by pillars, which might be considered as a model for the Visegrád fountain, crystallized in England at the end of the thirteenth century on the basis of a series of local antecedents. A clear example is the sepulchral monument of Edward II from the 1330s. This monument type became fashionable in Avignon and the tomb-chest of Pope John XXII (1316–1334) was made according to this standard too, serving as a model for monuments in fourteenth-century France and Central Europe. In the latter area this type of monuments might have appeared already in

In this period, connections to Avignon are not unparalleled in Hungarian art. The sepulchral monument of one of the king's prominent diplomats, William the bishop of Pécs, shows the influence of the sepulchral monument erected for Innocent VI in Villeneuve-lès-avignon. In this case the Avignon connection is evident. Bishop William visited Innocent VI in Avignon in 1361 as a deputy of Louis I, when the pope's sepulchral monument was under construction, and so he could see it himself or even obtain plans from the masters. Buzás 2004a, 116. The existence of such plan drawings made specifically for future procurers or as models is also shown by the example when king Sigismund asked the masters working on the Avignon papal palace to prepare a scaled construction drawing in 1415, when he visited the city. Marosi 1984, 13–14.

⁸⁵ Gagnière 1985, 106–107.

⁸⁶ Longnon-Cazelles 1993, 20.

⁸⁷ Lightbown 1978, plates XLVIII–LXXIX.

Buzás – Réti – Szőnyi 2001, 24. My hypothesis is cited (without a proper reference) by Takács 2006, 71. The connection between the Visegrád fountain and the Cleveland metalwork was also spotted by Wixom 2003, 10.

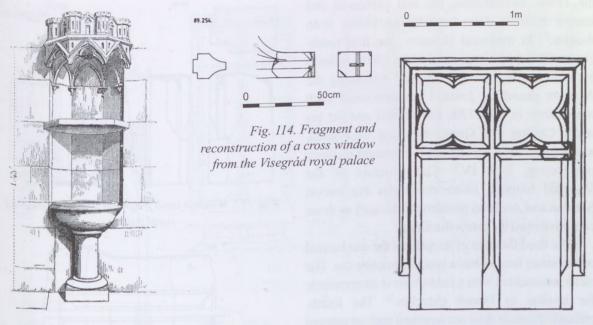


Fig. 113. Saint-Thibault, lavabo

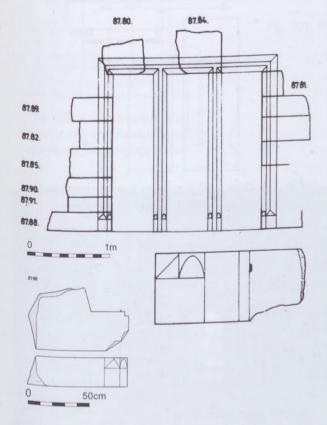
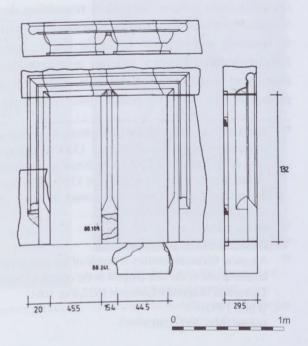


Fig. 116. Bipartite window from the northeastern building of the Visegrád royal palace

Fig. 115. Reconstruction of a tripartite window from the northeastern building of the Visegrád royal palace



the 1350s, nevertheless, the first preserved and known example dates back to the 1360s, from Austria. ⁸⁹ In medieval Hungary, the first tomb-chest of this type was erected in the 1360s, ordered by William, the bishop of Pécs. ⁹⁰ Following the Austrian examples, Louis I commissioned such monuments in the 1370s for himself and for his uncle Casimir the Great, the king of Poland, and maybe also for his own thirteenth-century predecessor, Béla IV. ⁹¹ The structure of the Visegrád fountain rather resembles the coeval Silesian and Austrian monuments as well as those commissioned by Louis the Great.

The third fountain of the palace, the one located on the street facade, has a special structure too. The niche ornamented with a baldachine is characteristic for lavabos in French churches.92 The fourth, pinnacle-fountain does not represent such an unusual shape; fountains of this type are known already from the thirteenth century; its closest analogy is the 1279 Fontana Grande of Viterbo.93 Above the Greek cross-shaped basin of the Viterbo fountain a column was placed whose octagonal abacus supported a quatrefoil bowl. In the middle of the latter a quatrefoil watersprout rotated at a 45 degree angle rested on a small pillar, with the gargoyle heads situated in its corners. The watersprout is crowned by a pinnacle. The most important difference between this pinnacle fountain and the one at the Visegrad palace is that the latter lacks a basin. Structures resembling the Visegrád pinnacle fountain are known only from the fifteenth and sixteenth centuries, that is, from fifteenth-sixteenth-century pictorial representations throughout Europe.94 The fountain construction project at the Visegrad palace must have been

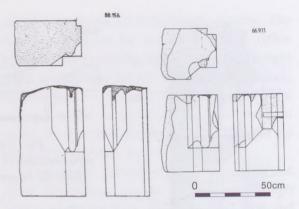


Fig. 117. Window jamb fragment from the Visegrád royal palace

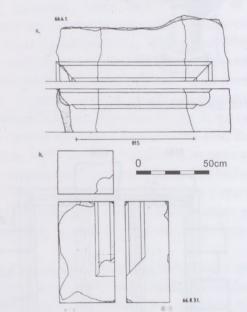


Fig. 118. Door jamb fragments from the northeastern building of the Visegrád royal palace

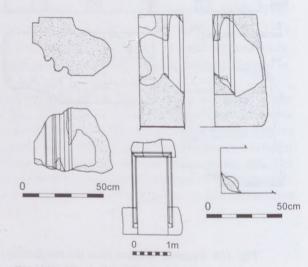


Fig. 119. Window jamb fragment from the Visegrád royal palace

The sepulchre of St Hedwig of Silezia in Trebnitz is represented in this form in a 1353 miniature. Rudolf IV had erected his baldachined tomb-chest in the Stephansdom in Vienna in 1359–1366 and the similar sepulchre of St Coloman in Melk in 1362–1363. Buzás 2004b, 96–97.

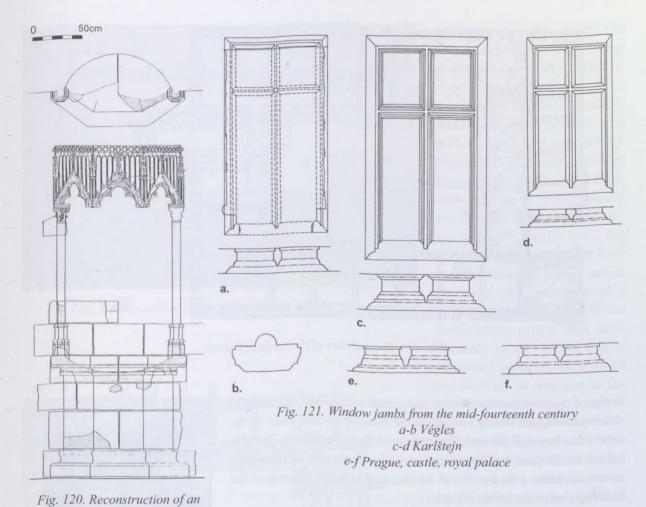
⁹⁰ Buzás 2004a.

⁹¹ Buzás 2004b.

A typical thirteenth-century example of the type is the lavabo in one of the side chapels in the church of Saint Thibault in Burgundy. Lasteyrie 1927, Fig. 1061.

⁹³ White 1993, 89.

⁹⁴ Buzás 2006, 287–290.





Angevin-era wall fountain on the courtyard facade of the palace

Fig. 122. The ground floor entrance hallway of the northeastern palace building, decorated with sedilia



Fig. 123. Sedile in the upper floor entranced corridor of the northeastern palace building, Budapest History Museum

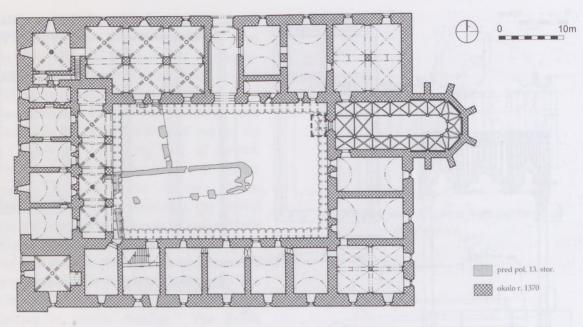


Fig. 124. Ground plan of the castle of Zólyom

designed by a creative stone carver acquainted with coeval architectural developments, and during realization the most up-to-date ideas of the time, often based on Western European models, were utilized. The idea behind the fountain building project as well as the source of its models is in accordance with the overall architectural concept inherent in the building plan of the palace complex.

The building phases of the complex in the second half of the fourteenth century reflect a uniform style not only in terms of an overall architectural concept but also from the point of view of stone carving types. While stone carvings made in the 1340s are easily distinguishable from the products of other building periods, it is demanding to differentiate between those manufactured during the series of construction waves in the second half of the century. The main reason lies in the simplicity of these forms – except for the fountains and the chapel. The chamfered moldings with the combination of rounded grooves, flat surfaces and a ridge do not provide a firm basis for a more precise dating within the half century. Details such as the footing profiles or the structural design of mullions seem to be decisive characteristics nevertheless. The typical moldings and profiles⁹⁵ of the door and window jambs and sedilia of the Visegrad palace are well known from fifteenth-century stone carving assemblages of Hungary. 96 The closest contemporary



Fig. 125. Window jamb from the castle of Zólyom, fourteenth century

Simple rabbeted moldings accommodating the window panels and ornamented only on the outside are typical for the Visegrád palace, as well as the richly articulated, staged or polygonal terminus of the moulding on the plinth. Buzás 1990, 28–29.

⁹⁶ Buzás 1990, 33–35.

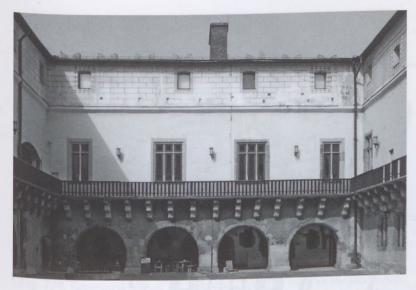


Fig. 126. Western side of the inner courtyard of the Zólyom castle

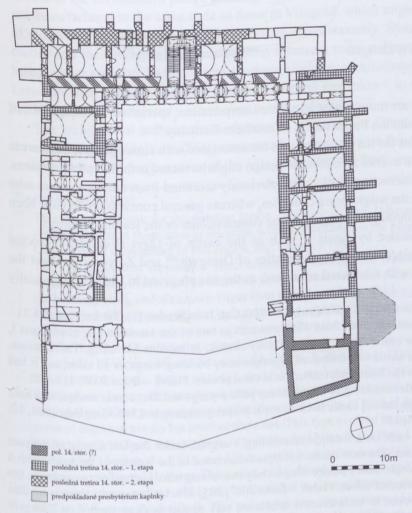


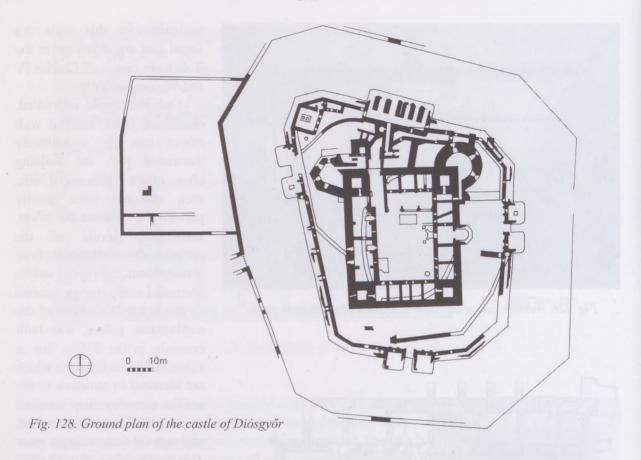
Fig. 127. Ground plan of the castle of Végles (Liget)

analogies for this style are found first and foremost in the Bohemian castles of Charles IV and Wenceslaus IV.⁹⁷

Only the simple, unprofiled, chamfered jambs molded with rabbet can be undoubtedly associated with the building phase of the 1350s and 1360s; such elements were mostly preserved in situ on the lower, subordinate levels of the complex. Among the upper floor constructions, the row of sedilia decorated with a tracery, located on the entrance corridor of the northeastern palace, was built certainly in the 1360s; this is suggested by its consoles which are identical in structure to the sedilia consoles that survived in situ on the entrance corridor, although the former have a more elaborate molding. A similar but not identical profile is shown on the plinths of the sedilia in the eastern upper garden with the baldachin wall fountain, even though here the profile resembles those observed on window jambs with clear fifteenth-century analogies.98 To all appearances, a new style of stone carvings emerged at Visegrád in the 1350s and 1360s, which at that time characterized only the local workshop but later became the most widespread standard throughout the country and was predominant for a whole century. The abundant carvings and statuettes of the

Buzás 1997a, 94–101. The captions for figs. 34–35 and figs. 36–37 were accidently switched.

⁹⁸ Buzás 1990, 26, figs. 160–161.



fountains constructed in the 1360s are more apt for a stylistic interpretation; specialists have emphasized analogies to the style associated with the Parler family in southern Germany.⁹⁹

It is not surprising that analogies for the stone carvings are associated with closer geographical areas while the sources and models of the overall architectural design might be rooted in farther prefigurations. Stone carvers employed in the construction works were obviously recruited from among masters who had gained working experience in the neighboring countries, whereas general concepts could have been transmitted over longer distances through the person of the commissioner or the leading architect.

Other constructions commissioned by Louis I, such as the castle of Liget (Végles), 100 erected simultaneously to the Visegrád palace, as well as the castles of Diósgyőr 101 and Zólyom, 102 reflect the same, regular spatial arrangement with a centered courtyard, as the one observed in Visegrád, especially

⁹⁹ Művészet I Lajos korában. 1982 (Art in the Louis I Era), 225–226. Cat. 116. (Marosi, E.); Takács 2006, 70–71.

The castle of Liget, mentioned several times from 1368 onwards as one of the favourite places of Louis I, is most probably identical to the castle of Végles (Vígľašský zámok, in modern Slovakia). The spatious, rectangular inner courtyard of the castle was embraced by single-story building wings on all sides, and it had no towers. The castle was built in the fourteenth century in several phases. Plaček – Bóna 2007, 319–322.

The new, rectangular-shaped castle consisting of single-storey palace wings and four corner towers, was built in the 1360s in Diósgyőr, although the old castle became royal property already in 1340. Czeglédy 1988, 12; Boldizsár – Kocsis – Sabján 2007, 15.

The new castle of Zólyom was built on a location resembling Visegrád, under the Old Castle of Zólyom that stood on the top of a mountain. The new castle was thus constructed in the vicinity of the town, with a rectangular inner courtyard and single-storey palace wings. Only two towers were planned on two corners, but in all probability these were not erected either. Plaček – Bóna 2007, 335–339. Unfortunately, there is no data concerning its construction, however, its architectutral details are very similar to those applied on Diósgyőr castle, and so it might be dated to the 1360s as well.

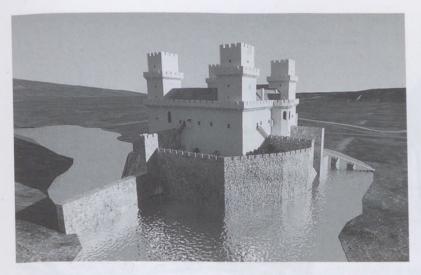


Fig. 129. Reconstruction of the castle of Diósgyőr, built in the fourteenth century



Fig. 130. Reconstruction of a fourteenth-century window jamb from the castle of Diósgyőr

in case of the northeastern palace building.¹⁰³ The stone carvings found in these castles, however, were not manufactured in the same style as those in Visegrád, which might be explained by the employment of different stone carver's workshops working simultaneously. Stone elements of the aforementioned castles and their technical implementations represent more rudimentary types.¹⁰⁴ The style observed here is rather associated with the mid-fourteenth-century architectural designs widespread in Silesia and Lesser Poland, although the Bohemian architectural repertoire – to which the Visegrád stone carver's workshop is also connected – is not alien to this style either.¹⁰⁵

The architectural antecedents to the castles of Louis the Great, especially due to the rectangular corner towers of Diósgyőr and Zólyom, are to be found in South France in the first half of the fourteenth century, just as the predecessors of the Visegrád palace. ¹⁰⁶ Such complexes were the castle of Sorgue

¹⁰³ Buzás 1990, 31-32.

This is characteristic for the window jambs. In Diósgyőr and Zólyom frame moldings and mullions were applied, similar to those used in traceries, without moulding on the plinth.

On the coeval architecture of this region, see: Crossley 1985.

The hypothesis that supposes a direct connection between the regular-shaped castles of Louis I, and the thirteenth-century Hofburg. The latter had four corner towers, one palace wing and a keep that protruded from the building block and was much larger than the other towers. Takács 2006, 71–73. The Hofburg represents a castle type which predominated in Europe in the twelfth-thirteenth centuries. These castles had rectangular ground plans and four corner towers, and evolved from the Roman castrum through influences from Byzantium and the Holy Land. Such castles existed in large numbers in thirteenth-century Central Europe, also in Hungary. The castles of Vienna, Wiener Neustadt, Ebenfurth, Kadaň, Písek, Chrudim, Kőszeg and the Margaret Island belonged to this type. These, however, could only serve as indirect models for the castles of Louis I, as here the emphasis lies on the four corner towers and the rectangular inner courtyard, which was usually not fully encircled by palace wings. As opposed to these, the castles of Louis I always had closed inner courtyards and some of them had towers but some of them not. This type evolved from the aforementioned twelfth-thirteenthcentury prefigurations, but this form, which also had roots in the Holy Land, flourished in France. The Óbuda royal palace, built in the 1220s and 1230s, might be a better example for connections with thirteenth-century predecessors than the Hofburg. This palace had a closed inner courtyard, a regular rectangular ground plan and no corner towers, and as such, it was unparalleled in Central Europe, though it resembled the southern Italian castles of emperor Frederick II. This palace became the residence of Queen Elizabeth after 1343, and so it played a significant role in the life of the royal court in the mid-fourteenth century. Even though its different

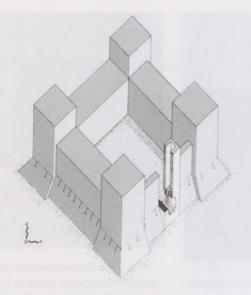


Fig. 131. Drawing of the building mass of Lagarde castle

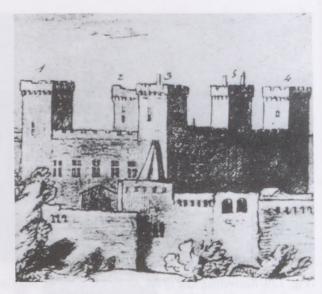


Fig. 132. Seventeenth-century representation of the castle of Sorgue (Châteauneuf-du-Pape)

(Châteauneuf-du-Pape) built by Pope John XXII in the 1320s, which had a square ground plan and four corner towers, ¹⁰⁷ or the similarly arranged castle of Lagarde erected by Francois de Lévis in the 1320 and 1330s, ¹⁰⁸ as well as the Old Palace of Avignon built by Pope Benedict XII. This castle type was widespread throughout Europe from the 1360s onwards, but as their popularity grew simultaneously with the construction works accomplished in Hungary, castle buildings of a similar arrangement in other regions cannot be considered as models for the Hungarian complexes dating back to the 1360s. ¹⁰⁹

The uniform architectural concept reflected in the Visegrád royal palace and the contemporaneously built three regular-shaped royal castles was, in all probability, the achievement of a single architect. It even seems possible to identify this figure. According to our written sources, Louis I donated a plot in Buda to John the stone carver 4 February, 1365, for his loyal service and his skill in the mechanic arts he proved during the construction of the royal stone houses. The text of the charter leaves no doubt that this person was a royal architect who received this donation specifically because of a contribution of this kind; the charter mentions stone houses, which obviously means residential royal buildings. This charter has already drawn much attention in previous research; Bernát Kumorovitz brilliantly connected it to the indulgence permit requested by Queen Elizabeth in 1366 for the Chapel of the Virgin in the palace of Louis I. The connection is logical as both the donation charter and the indulgence permit reflect an almost finished construction. Nevertheless, Kumorovitz associated the 1366 indulgence permit with the palace chapel of Buda, thus diverting the path of research for decades. Archaeological and art historical misinterpretations of the Buda Palace added further problems to this field of study. Namely,

proportions and layout as well as the emphasis laid on its gatehouse, it could not serve as a direct model for the castles of Louis I, its importance might have contributed to the spread of the regular, closed castle type embraced by palace wings in fourteenth-century Hungary. For a study of the development of this castle type, see: Buzás 2001a.

- 107 Balogh 1981, 144.
- ¹⁰⁸ Mesqui 1997, 205–206.
- 109 Buzás 2001a, 55–56.
- 110 Kumorovitz 1963, 118; Végh 2006–2008, II: items 34 and 35.
- ¹¹¹ Pór 1908, 753.
- 112 Kumorovitz 1963, 117–118.

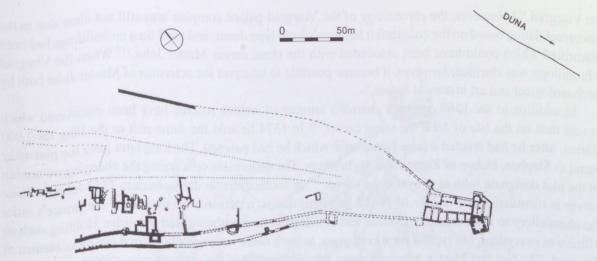


Fig. 133. Reconstructed ground plan of the castle of Buda in the mid-fourteenth century

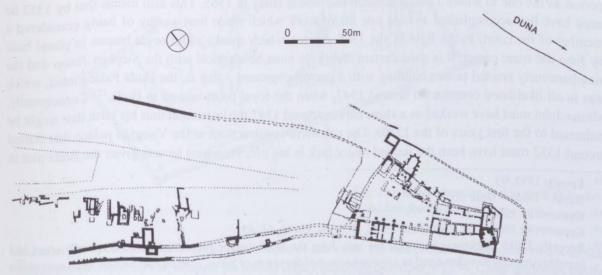


Fig. 134. Reconstructed ground plan of the castle of Buda in the late fourteenth century

László Gerevich dated the palace chapel to 1366 and assigned it to Master John on the basis of a single door jamb fragment of dubious origin, which exhibited similarities with the so-called Mary Gate of the parish church dedicated to the Virgin Mary in Buda, and so it was associated with the alteration of the aforementioned parish church in the Late Gothic period. This theory influenced the dating of other parts of the Buda Palace as well, especially after the stone carver's marks observed on the Mary Gate were discovered in the palace complex as well. ¹¹³ The archaeological dating of these building parts, however, produced entirely different results, and the detailed art historical dating of these elements of the palace and the parish church exhibiting this style also estimated their construction to age of King Sigismund. ¹¹⁴ Consequently, the theory concerning the impact of Master John the stone carver collapsed, and scholarly opinions about his significance took a 180-degree turn. ¹¹⁵ In the meantime Géza Érszegi's diplomatic research proved that the 1366 indulgence permit does not concern the palace chapel of Buda but the one

¹¹³ Gerevich 1966, 276–282.

¹¹⁴ Buzás 1994d, 115–123.

¹¹⁵ Végh 2006–2008, I: 160, note 530.

in Visegrád. 116 However, the chronology of the Visegrád palace complex was still not clear due to the incorrect dating based on the counterfeit Saracen's head type denar, and until then no buildings had been identified which could have been associated with the stone carver Master John. 117 When the Visegrád chronology was clarified, however, it became possible to interpret the activities of Master John both by archaeological and art historical means.

In addition to the 1365 donation charter a number of written records have been discovered which reveal data on the life of John the stone carver. 118 In 1374 he sold the same plot to the king for 3,000 florins, after he had erected a large house on it which he had pawned. The king later gave the plot away again to Stephen, bishop of Zagreb and his brothers. The documents concerning the changing ownership of the plot designate John as a royal stone carver. 119 In another charter dating back to 1352 John the stone carver is mentioned as a relator of Prince Stephen, that is, a person who forwarded the prince's order the chancellery to issue a certain charter, and at the same time authenticated the order. Holding such an office was everything but typical for a craftsman, as such tasks were usually carried out by noblemen of the court. The fact that Master John was given this assignment in the court of prince Stephen speaks for his close connection to the court. 120 This suggests that this 1352 event can be associated with the same person as the one to whom Louis I donated the plot in Buda in 1365. This also means that by 1352 he must have had accomplished at least one major work which made him worthy of being considered a member of the court. In the light of the 1365 charter, which speaks about royal houses in plural built by John the stone carver, it is quite certain that these must be identical with the Stephen Tower and the simultaneously erected palace building with a central courtyard - that is, the Buda Palace itself, which was in all likelihood constructed around 1347, when the royal court moved to Buda. 121 Consequently, Master John must have worked as a stone carver around 1347 the latest, and thus his birth date might be estimated to the first years of the 1320s. The extensive constructions at the Visegrád palace that started around 1352 must have been the second major task in his life, for which he was given the Buda plot in

¹¹⁶ Érszegi 1992, 95.

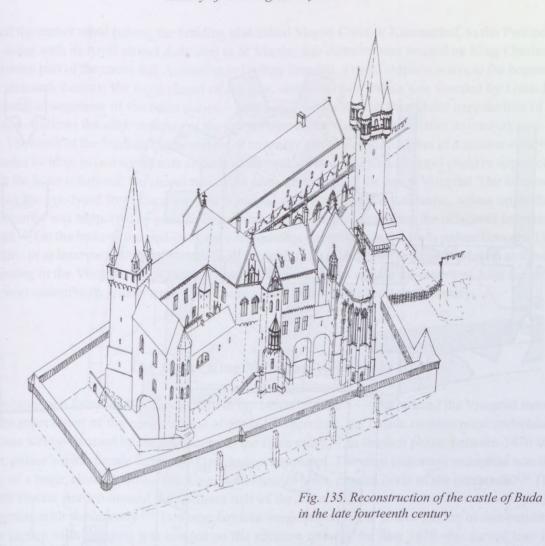
¹¹⁷ Buzás – Bodó – Deák 2003, 35.

¹¹⁸ Kumorovitz 1963, 118.

¹¹⁹ Kumorovitz 1963, 118; Végh 2006–2008, II: items 35–36, 61–63.

Recently Enikő Spekner questioned the role John the stone carver played in prince Stephan's court and hypothesized that he rather acted as a commissioner of the towns of Sáros, Eperjes and Szeben Sáros against the castellan of the Szepes castle. Spekner 2002, 409-410. It is, however, hard to believe that the prince would have given the task of issuing a document reprimanding the castellan, to a person representing the plaintiff party and visiting the court as a stranger. The existence of such a practice is not supported by Spekner's analysis of the activities of the prince's relators either. Relators were usually in the prince's confidence, as it was pointed out by Bernát L. Kumorovitz (Kumorovitz 1963, 118) referring to observations of Imre Szentpétery (Szentpétery 1933, 482). Even though other, unknown persons also appear as relators of prince Stephen, nothing suggests that they were not connected to the prince's court at all. John the stone carver was certainly not a stranger in royal circles: the 1365 donation charter calls him a royal architect and suggests that he belonged to the royal court, just like other relators, whom Spekner - in the light of later data - accepts as belonging to the circle of the court. There is, however, no data supporting Spekner's hypothesis on the activity of John the stone carver in towns of the countryside. The only coeval written source from Northeastern Hungary mentioning a stone carver called John is a charter issued on May 25, 1362, in which the named person was commissioned to build a tower in the Premonstratensian convent in Lelesz in Zemplén county. This document, however, identifies John as a resident of Buda (Spekner 2002, 410, note 50), and in all probability he was not commissioned due to his local contacts: the contract, as it was requested by the provost in Lelesz, was made between John and the provost of the Premonstratensian monastery of the Island of Hares near Buda. Magyarországi művészet 1987, 403. (A communication of Géza Entz.) Identifying John the stone carver from Buda who worked at Lelesz with John the royal architect is uncertain, as the latter probably resided in Buda only after 1365 when he was donated a plot by the king; he appears as a local resident only in 1374 in the town charter of Buda.

¹²¹ Buzás 1994d, 109-114.



1352 after the accomplishment of the lion's share of the work. He was probably commissioned with this work as a royal stone carver, because his former lord, Prince Stephen died in 1354. Close analogies for the carving of the Visegrád palace are known from the town buildings of Visegrád as well. One of these is a keystone decorated with the coat of arms of the Angevins, which perhaps belonged to the central nave of the parish church dedicated to Virgin Mary. This carving pinpoints that the stone carver's workshop and its leader, who participated in the palace constructions, also took a share of the work in town. In 1358, during the time of the palace construction at Visegrád, John the stone carver is mentioned in a charter as the town's judge. 122 This office also suggests a high social status, and it would be inconsistent not to associate this data with the person who undertook the tasks of a leading architect in the palace as well in an important church of the town. It is assumed that Master John participated in the building of the Végles, Diósgyőr and Zólyom castles as well, simultaneously to – or maybe a little bit later than – the Visegrád constructions. 123 The new royal palace at Buda started to be built in the second half of the 1370s

around the Stephen Tower at the southern end of the hilltop. This is also supported by the fact that Louis I

¹²² Mészáros 2009, 40.

Edward I, king of England started a large-scale castle building project in North Wales in the last quarter of the thirteenth century, similarly to the construction wave under the reign of Louis I. One architect was identified as the mastermind behind the strikingly unified concept reflected in these castles: James of Saint George of Savoya, who appears in the sources as *ingeniator*, that is, an engineer, or *mazun*, mason. He supervised and conducted several constructions at the same time. Taylor 1950.

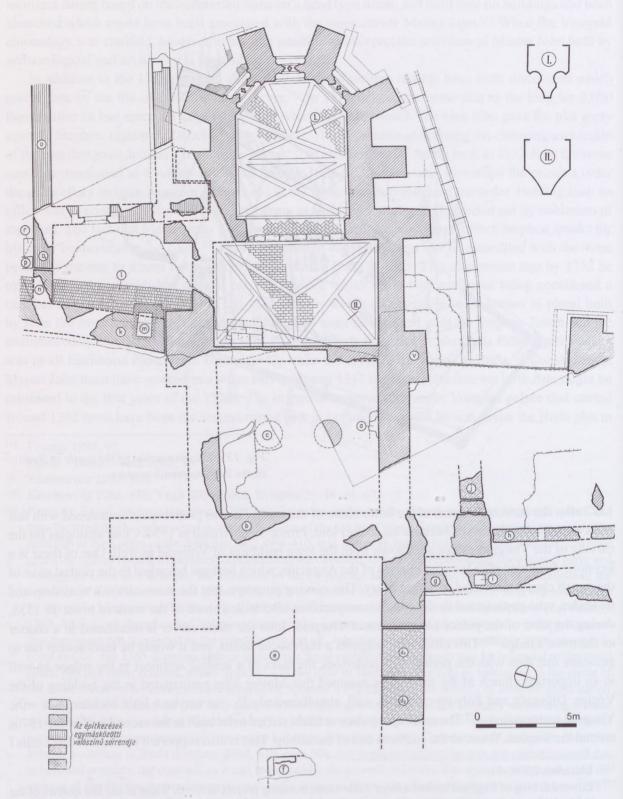


Fig. 136. The ground plan of the palace chapel in Buda and the rib moldings from the lower chapel

donated the earlier royal palace, the building also called Magna Curia or Kammerhof, to the Paulines in 1382, along with its royal chapel dedicated to St Martin; this complex was erected by King Charles on the northern part of the castle hill. According to György Szerémi, a royal chaplain active at the beginning of the sixteenth century, the royal chapel of the new, southern Buda palace was founded by Louis I.¹²⁴ The spatial arrangement of the Buda palace – although it complies with the natural irregularities of the landscape – follows the same structure as the ground plan of the Visegrád palace after its renovation in the 1360s. The block of the Stephan Castle embraced an inner courtyard, while in front of it another courtyard surrounded by large palace wings with arched facades was created. The palace chapel could be approached through the latter courtyard; the chapel was of the same dimension as the one at Visegrád. The fence wall bordering the courtyard from the north was equipped with a rectangular gatehouse, whose upper floor with balconies was supported by plinths reminiscent to the consoles supporting the octagonal fountain at Visegrád. On the basis of the analogies, the constructions undertaken in the Buda palace between 1370 and 1380 – or at least parts of them¹²⁶ – can in all probability be ascribed to the same workshop as the one participating in the Visegrád renovations. These engineering works outline the œuvre of John the stone carver, who undoubtedly counts among the distinguished artists of the fourteenth century.

The Age of King Matthias (1458–1490)

Matthias' attention focused on Visegrád only in the 1470s. 127 After 1476 he ordered the Visegrád manor under the supervision of the *comes curiae* of Buda. 128 Therefore, the palace constructions undertaken at that time were organized by the dignitaries of the Buda court. 129 In the first phase, between 1476 and 1481 the palace's main facade facing the Danube was renovated. The most important enterprise was the building of a huge, closed balcony decorated with coats of arms, created north of the gatehouse. 130 The new, Late Gothic portico around the northern half of the lower reception court was presumably built in connection with the balcony. 131 Two new terraces were formed in the palace garden in this building phase; a garden villa building was erected on the northern terrace; the date 1479 was carved into its

In all likelihood the construction was finished only after the death of Louis I, because coins associated with the reign of Mary were recovered from the fill of the cellar belonging to an earlier dwelling house in front of the trench bordering the palace from the north. Buzás 1997a, 77–84.

¹²⁵ Buzás 1997a, Figs. 16-17.

Contemporary molded bricks, originating probably from the western palace wings, cannot be ascribed to this workshop. These are namely identified as products of a Lombardian workshop, and they are unparalleled in Hungary and thus in Visegrád. This group of molded bricks is exceptional also in the Buda palace complex. Végh 1998, 28–34; Buzás 1997a, 80–82, 84.

¹²⁷ Buzás – Laszlovszky 1995, 19.

¹²⁸ Kubinyi 1964.

According to a source dated to 1525–1526, Balázs Ráskai, the comes curiae of Buda, had built a royal residence for king Matthias. Ráskai held this title between June 13, 1484 and May 23, 1492. Kubinyi 1964, 83–84, notes 121–122, 94; Buzás 1990, 42.

The bay window features the coat of arms of Beatrix, who was crowned queen at the end of the year 1476; the coat of arms of Benedek Pyber, castellan of Visegrád between 1476 and 1481, as well as the coat of arms of the Garai family that died out in 1481. One of the coats of arms might be identified as that of Gábor Matucsinai, archbishop of Kalocsa (1471–1478) and secret chancellor. In this case the possible dating of the bay window may be narrowed down to 1476–1478. Lővei 2001, 29.

On the foot of one of the columns in the portico features the coats of arms of Queen Beatrix, and thus it must have been built after 1476. Buzás 2001b, 17.

cellar door frame.¹³² The second construction phase is dated to the first half of the 1480s. The royal dwelling, that is, the northeastern palace was reconstructed in 1484; its halls were vaulted, its door and window jambs as well as the cloister and the fountain of the inner courtyards were replaced. This dating is provided by a date carved into one of the vault ribs of the new cloister.¹³³ In the eastern upper garden adjoining the northeastern palace a new portico was erected in place of the old one. The fountain was also replaced by the Late Gothic, so-called Fountain of the Lions,¹³⁴ which was carved out of red marble and was probably dated by an inscription to 1483.¹³⁵ A new terrace and a huge, ornamented flight of stairs were created in front of the chapel.¹³⁶ In the middle of the 1480s, installations of the chapel were renovated too, and an organ balcony was attached to the chapel wall.¹³⁷ On one of the corbels of the balcony a fragmented date, probably 1485, was preserved.¹³⁸

Thus, Matthias had the Visegrád palace renovated from floor to ceiling, and had its ornamented fountains, furniture and stoves replaced. Even though new buildings were not erected, almost all visible details, window- and door jambs, fireplaces and columns were altered in the course of this mostly Late Gothic style transformation period. 139

The balcony decorated with coats of arms on the street facade of the palace was the most richly embellished Late Gothic element of the complex. Its net vaulted substructure was accessible from the street through a double archway, and the room behind its upper floor hall could be approached through a similar archway. A small secondary balcony opened from the upper floor hall lightened by tripartite cross windows. The vault of the upper floor hall and the main facade ledge were decorated with coats of arms. Telamons holding the coat of arms were placed into the statue niches of the facade. The walls of the upper floor were decorated by blind traceries, while the ledges and the vault were covered with leaf ornaments. A similar balcony was built on the west wing of the northeastern palace, above the staircase leading to the ground floor hall. Two elaborately molded quadripartite windows were opened on the facade supported by triangular buttresses with lion figures on the top. The balcony was probably covered by a net vault with double-grooved ribs. 141

Spaces of a subordinated function, such as storage rooms, ground floor chambers, kitchens etc. usually had brick barrel vaults. In the first-floor dwelling rooms of the northeastern palace, unribbed vaults were applied which rested on profiled stone consoles. 142 Only several spaces of the palace – such as the two aforementioned balconies – were covered by rib vaults in this period. Probably a net vault with double-grooved ribs was created above the great hall occupying the upper floor of the northeastern palace's western

¹³² Buzás 1990, 42, 105. Cat. 142, Figs. 134A, 259.

¹³³ Buzás 1990, 109–110. Cat. 169, Figs. 134B, 401; Buzás – Réti – Szőnyi 2001, 25, Fig. 36.

¹³⁴ Szakál 1959

On the baldachin of the fountain the inscription reads: "Anno domini millesimo quadringent[esimo]... tercio". The part indicating the decade has been destroyed. Jolán Balogh dated the fountain to 1473 (Balogh 1966, I. 247), however, as there is no sign for construction works before 1476, a dating to 1483 is more probable. Buzás 1999D, 147.

Angevin-period stone carvings from the disassembled walls of the transformed northeastern palace were reused and incorporated into the retaining wall, buttress and ornamented flight of stairs of the terrace.

¹³⁷ Buzás 1990, 115. Cat. 190, Figs. 417-125.

The stone fragment featuring this date was recovered from the modern fill of the palace's lower court in 2001, and is associated with the Renaissance balcony corbels of the chapel due to its raw material, coarse lithotamnium limestone, which was used only here. On the fragment the number 8 and parts of the next digit has been preserved; the latter might be interpreted as 5, or perhaps 2. Szőke – Buzás 2003.

¹³⁹ Buzás 1990, 41.

¹⁴⁰ Buzás – Lővei 2001.

¹⁴¹ Buzás 1990, 37, fig. 264c.

¹⁴² Buzás 1990, 37, Figs. 261b and 378



Fig. 137. The date 1479, carved onto the rise above the cellar door of the garden villa



Fig. 138. The date 1484, carved onto one of the rises of the cloister walk



Fig. 139. Fragment of a Renaissance corbel of the chapel, probably with the date 1485 carved onto it



Fig. 140. Fragment of the coat of arms of Dalmatia, from the bay window decorated with the coat of arms of King Matthias



Fig. 141. Cover slab of the wall fountain with lions, with the inscription "14.3"



Fig. 142. The head of a dog-headed dragon with two bodies, from the bay window decorated with the coat of arms of King Matthias



Fig. 143. Reconstruction on the bay window decorated with the coat of arms of Matthias



Fig. 144. Reconstruction of the lower floor of the bay window decorated with the coat of arms of Matthias



Fig. 145. Reconstruction of the upper floor vaulting of the bay window decorated with the coat of arms of Matthias



Fig. 146. Reconstruction of the vestry of the palace chapel



Fig. 147. Reconstruction of the oratory of the palace chapel

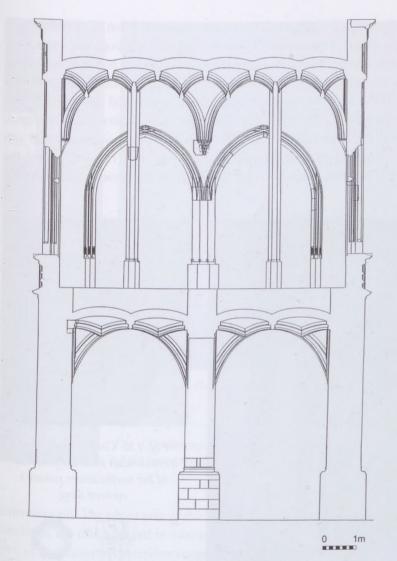


Fig. 148. Reconstructed section of the bay window decorated with the coat of arms of Matthias

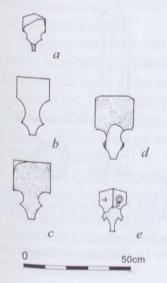


Fig. 149. Late Gothic rib moldings from the Visegrád palace

- a double grooved rib, probably from the cloister walk of the ornamental courtyard
- b double grooved rib, probably from the great bay window of the northeastern palace
- c double grooved rib, probably from the upper-floor great hall of the northeastern palace
- d double grooved rib, from the chapel's vestry
- e three finger shaped rib from the cloister walk











Fig. 150. a-e Corbels supporting a stellar vault, from the cloister walk of the northeastern palace

wing as well, nevertheless, too little is preserved of this vault for a proper reconstruction of its structure. ¹⁴³ The chapel's vestry was covered with a row of two ribbed vaults, with double-grooved and chamfered ribs ¹⁴⁴ and profiled consoles. ¹⁴⁵ Probably another rib vault covered the oratory above, however only small fragments of the consoles on which the vaults rested have survived. ¹⁴⁶ Identical consoles supporting a stellar vault have been preserved in the ground floor cloister walk of the ornamental courtyard. ¹⁴⁷ The reconstruction of this vault was made possible by the by the ribs (which are three fingers wide), springers, extradoses and junctions discovered in the demolition layer of the cloister walk, as well as the *in situ* preserved consoles, springers and extradoses on the cloister walk's eastern wall. Five ribs spring from the moulded corbel, cutting into a cylindric element, while two ribs emerge from the corners, with a double



Fig. 151. The eastern wing of the cloister walk of the northeaster palace

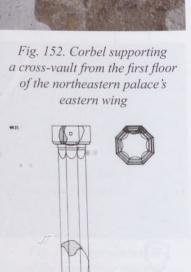


Fig. 153. Reconstruction drawing of a late Gothic column from the courtyard of the Fountain of the Lions, Budapest, Hungarian National Museum

¹⁴³ Buzás 1990, 37, Fig. 264b.

¹⁴⁴ Buzás 1990, 36, Fig. 264d.

¹⁴⁵ Buzás 1990, 36, Fig. 261a.

¹⁴⁶ Buzás 1990, 36, Fig. 379.

¹⁴⁷ Buzás 1990, 39, Figs. 299, 380–391.





Fig. 154. The reconstructed northwestern corner of the Gothic loggia of the lower reception court

Fig. 155. Reconstructed column from the northwestern corner of the Gothic loggia of the lower reception court

transverse rib. The upper part of the vault had a different structure in each section. Based on the preserved junctions, the ribs adjoined in a cross shape in some cases, or the net of the ribs formed a rhombus shape. One of the preserved junctions suggests that in at least one case the ribs adjoined in a cross shape inside a rhombus. A drilled cross shaped keystone suggests that at least one section of the vault had a boss. Another junction has been preserved that testifies to a complex, asymmetrical stellar vault section. On one of the keystones the date 1484 was inscribed. The cloister vault at the Visegrád palace resembles the one at Pannonhalma, built in 1486, 148 however, there are immense differences between them in terms of details and structural methods.

Not only the vaults, but also the doors and windows of the ornamental courtyard's ground floor cloister were built in a Late Gothic style. High lancet windows with concave moldings pierced through the courtyard walls of the corridor which was erected in accordance with the traditional structure of cloister walks. The window profiles suggest that they were glazed with glasses in timber frames. In the middle of all the four wings a gate with ridge molding and transom consoles was opened, above which a lancet transom window was cut. A stone ledgement ran under the windows of the cloister walk's courtyard facade. 149

The new, L-shaped corridor in front of the northern and northwestern wings on the lower reception court, which replaced an Angevin-period row of columns, was also built in a Late Gothic style. At the eastern end of the corridor column bases are found somewhat dislocated from the Angevin-era foundation. The original

Papp 2001, 294–297. Buzás 1990, 38–39.

low wall has been preserved west of the central door of the northern wing, and the newly made columns were placed on top of it. The column plinths are square-shaped with rounded corners, connected to the octagonal upper part by a concave element. Above the elaborated Gothic plinth moldings flutes of the octagonal columns adjoin at an obtuse angle at the top. The octagonal column capitals are also ornamented with an enhanced profile. At the corner of the passageway fragments of a more elaborately ornamented column were found: both its plinth and capital were given a cylindrical shape, its moulding had concave curves and form an intersection at the corners. The lower part as well as the main body of the plinth was ornamented with a diamond work. A column plinth decorated with the coats of arms of Moldavia, Dalmatia, Aragonia and Jerusalem was unearthed beside the door in the middle of the corridor's western section.¹⁵⁰ The columns in all likelihood supported a timber frame above which an upper-floor loggia, probably with a structure entirely made of wood, was built. 151

Elements from another Gothic row of columns of a larger dimension, with lesser ornaments but similar forms, have also been preserved. The capitals of the huge, octagonal columns with concave sides have profiles identical to those found at the reception court, and the plinths are built as to form shape that mirrors the capitals. 152 These columns perhaps belonged to the porch around the courtyard where the Fountain of the Lions was erected. The plinth and a number of other fragments of the Late Gothic fountain were found in situ during the excavations on the courtyard. Other fragments were discovered scattered around in the nearby areas. The fountain was entirely carved out of red marble and was attached to the retaining wall rising above the garden. Two cylindrical and one half-cylinder shaped piers were placed on the onestep plinth and supported a double foil basin; the piers rested on statues of recumbent lions. Lions in the middle were represented as arrested by two dogs each, while the lions in the corners are held



Fig. 156. Fragment of the Hungarian coat of arms, from the baldachin of the Fountain of the Lions



Fig. 157. Lions and dogs from the plinth of the Fountain of the Lions

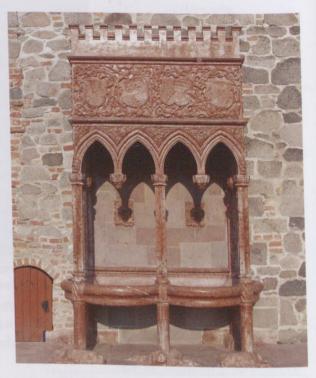


Fig. 158. A complemented reconstruction of the Fountain of the Lions

¹⁵⁰ Buzás – Lővei 2001, 29, Fig. 50.

¹⁵¹ Hunyadi Mátyás 2008, 335–336. Cat. 9.7.a-b (G. Buzás)

¹⁵² Buzás 1990, 110. Cat. 171, Figs. 267 and 403.



Fig. 159. Restored tripartite window from the upper floor of the northeastern palace



Fig. 160. Reconstruction of a frame of a cross window with iron bars from the eastern facade of the northeastern palace



Fig. 161. Restored frame of a cross window from the ground floor of the western facade of the northeastern palace

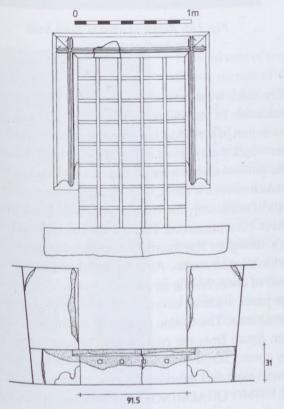


Fig. 162. Reconstruction of a window frame with iron bars from the northern room of the upper floor in the northeastern palace's eastern wing



Fig. 163. Frame of a cross window from the northeastern palace

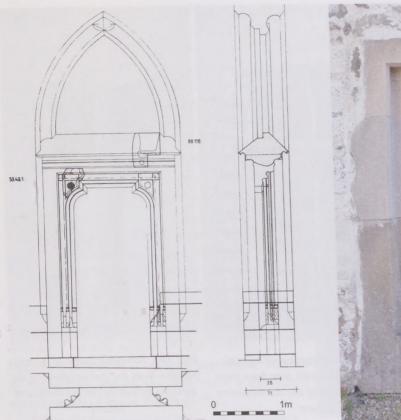


Fig. 164. Reconstruction of the cloister walk's southern door in the northeastern palace



Fig. 165. Restored window jamb from the northeastern palace

down by one dog each. Hexagonal columns with hollow sides were built above the piers. They rested on plinths ornamented with flutes, and supported the baldachin of the fountain. Both the plinths and the capitals of these columns had articulated profiles. The lower part of the baldachin was supported by a series of lancet arches resting on the pendants of the baldachin which were carved in the shape of lions' heads, positioned between the columns. The spandrels above the profiled arches were decorated with Late Gothic tendril ornaments. Above the ledge that crowned the structure rose a frieze with similar ornamentation, partitioned by a row of a bouche-shape shields with coats of arms. Only the Hungarian and the Dalmatian shields and fragments of a coat of arms with an eagle have been preserved. There is another ledge above the frieze, and on the top a dentil closed the fountain's structure. The internal cover panel was carved out of one single slab, and was supported by the baldachin's lancet arches. An a bouche shield decorated with a crest and the raven from the Hunyadi family's coat of arms, resting on a branch and holding a ring in its beak, was carved onto the underside of the cover panel. Patterns covering the whole panel spring out from the helm of the shield and turn into tendril ornaments. The Gothic coronet is ornamented with gems and accommodates two eagle's wings. The raven figure from the coat of arms appears again in front of the wings. The helm ornament is surrounded by a wavy scroll on which the date of the fountain's accomplishment could be seen, written with early Humanist capitals. Unfortunately only a single fragment has been preserved of the text: ANNO DOMINI MILLESIMO QUADRINGENT(ESIMO) ... TERCIO. The ornamentation of the fountain's back wall between the baldachin and the bowl is almost completely unknown. The two lion's head gargoyles that emerged from the tendril ornaments were certainly placed here; most probably the whole surface was covered with panels decorated with tendrils, some of which also

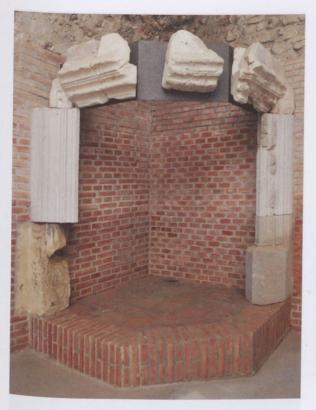


Fig. 166. Fireplace from the northern wing of the northeastern palace's upper floor



Fig. 167. The Hercules Fountain in the palace exhibition



featured coat of arms representations. Fragments of three such panels were found; on one of them the coat of arms of the Szilágyi family, while on the second that of the Szapolyai family is seen; the third fragment features a coat of arms with an animal figure, presumably an ox. The panels decorated with tendrils and coats of arms was probably bordered by friezes also embellished with tendril ornaments; a smaller, quadrangle fragment of such a frieze has been preserved. The uncommon overall shape of the fountain that mostly resembles a Gothic tomb chest was a heritage of the earlier, Angevin-era fountain that was dismantled while erecting this piece. Craftsmen working on this Late Gothic fountain must have been sculptors acquainted with heraldic representations, which is also attested by the similarity to the works of the Buda gravestone carvers in the Matthias period. The closest analogies of the fountain's architectural details are also found in the material of the Buda royal palace: pillar and capital fragments of red marble, similar in style to those of the fountain, are

Fig. 168. Gable top decoration and finial from the gable wall above the palace chapel's triumphal arch

¹⁵³ Szakál 1959.

¹⁵⁴ Szakál 1969–1970.

known from the Buda assemblage. 155 The featured figural and heraldic representations have first and foremost a political agenda: they symbolically picture the realm of King Matthias. The lions arrested by dogs, that carry the fountain's weight, might be interpreted as the enemies of the king and his domain overthrown by the king's allies. The whole structure represents the realm consisting of a number of countries, resting upon the defeated enemies with the king in the center, surrounded by the countries' inhabitants. This concept is reflected in the fountain's overstructure and the representations on its coat of arms. On the sides of the baldachin the coats of arms of the kingdoms ruled by Matthias are shown, in the center the royal coat of arms is depicted, while coats of arms of influential aristocratic families are placed under the baldachin and on the fountain's back wall.

The windows, doors, ledges and fireplaces of all the palace complex' buildings were made exclusively in a Late Gothic style. Most doors had a concave profile cutting into a sloping surface profile, even though some fragments that testify to more complex, and profiles with ridge and ogee keel moldings have also been discovered. In most cases they had a shoulder-arched door surround, although doors with straight headers have been brought to light too. Beside the simple profile that already prevailed in the fourteenth century, which consisted of a sloping element, square ridge and groove, two other profile types with ogee keel moldings and four other types featuring a complex pattern of ridges and ogee keel elements were invented. The latter were applied on tripartite cross windows, the others on undivided window forms with straight headers. All window types had variations of sills with corbels as well. The fireplaces also had a simpler, chamfered version, and a more elaborately ornamented type profiled with ridges. All fireplaces were similar to the Angevin-era corner fireplaces. 156



Fig. 169. Detail of the base of the Hercules Fountain's basin, decorated with the coat of arms of Bohemia



Fig. 170. Detail of the base of the Hercules Fountain's basin, decorated with the coat of arms of King Matthias



Fig. 171. Detail of the base of the Hercules Fountain's basin, decorated with the coat of arms of Beszterce

Renovation of the roof structure is only evident in the chapel. The gable of the chapel nave rising above the triumphal arch had a 60-degree slope, was bordered by a ledge with a concave profile and its apex was ornamented with a large finial. Stones fallen from the gable wall were found north of the chapel. 157 The

¹⁵⁵ Hunyadi Mátyás 2008, 334–335. Cat. 9.6.a-b (A. Végh).

¹⁵⁶ Buzás 1990, 38-39.

¹⁵⁷ Buzás 1990, 36, 113. Szerk kat 185, Figs. 274–275 and 407–409.





Fig. 172. Fragment of a putto from the Well of the Muses

Fig. 173. Head of a putto from the Well of the Muses

roof itself was covered with green, brown, yellow and white glazed roof tiles. ¹⁵⁸ Roofs of other buildings were covered with unglazed, mostly plain tiles, although sometimes barrel tiles, in some cases even painted red, were also utilized. A green and a yellow decorative sphere were also found, which might have been placed on the roof's ridge as ornaments. The floor in the chapel's sanctuary was covered with small, square-shaped floor tiles similarly glazed to those used on the chapel's roof.

A number of utterly significant Renaissance artworks are found among the predominantly Late Gothic stone carving assemblage of the palace. These are mostly sculptural (two ornamental fountains, the altar and the tabernacle of the palace chapel). The Renaissance architectural elements comprise the loggia in the ornamental courtyard of the royal dwelling house and the organ balcony of the chapel. Perhaps the terraces of the palace garden and some other garden features might count among these as well.¹⁵⁹

Fragments of two Renaissance fountains were unearthed at the Visegrád palace. The Hercules Fountain is better known; it was located inside the royal dwelling, that is, in the northeastern palace, in the center of the ornamental inner courtyard. The fountain was carved out of red marble of Hungarian origin, except for its plinth. In contemporary sources the Hercules Fountain is only mentioned by Nicolaus Olahus, he however, mistakenly described it as a fountain made of alabaster. In the contemporary sources the Hercules Fountain is only mentioned by Nicolaus Olahus, he however, mistakenly described it as a fountain made of alabaster. In the contemporary sources the Hercules Fountain is only mentioned by Nicolaus Olahus, he however, mistakenly described it as a fountain made of alabaster. In the contemporary sources the Hercules Fountain is only mentioned by Nicolaus Olahus, he however, mistakenly described it as a fountain made of alabaster.

¹⁵⁸ Nyékhelyi 1994, 163.

¹⁵⁹ A recent publication on the Renaissance at Visegrád: Buzás 2008a.

¹⁶⁰ Buzás – Réti – Szőnyi 2001.

This material is actually red limestone, similar to the ones from Salzburg and Verona, and was extracted in the mountain of Gerecse between the towns of Esztergom and Tata. It is not marble in the geological sense, although it was traditionally called so in Hungary. Its architectural use dates back as early as the twelfth century. Lövei 1992.

He might have meant white marble instead of alabaster. He made a similar mistake by stating that the altars and the tabernacle of the chapel were also made of alabaster while these were certainly carved out of Carrara marble. In the case of the Hercules Fountain he might have confused red with white marble because the color of the Hungarian red marble fades and whitens if its surface is not properly maintained.



Fig. 174. Susanne and the Elders, mural by Pinturicchio, Vatican, Appartamento Borgia



Fig. 176. Representation of the fountain in front of the Santa Maria in Travestere in Rome, on a map by Pietro del Massaio, 1472



Fig. 175. The copy of the Hercules Fountain in the ornamental yard of the palace



Fig. 177. The copy of the Hercules statue of the Hercules Fountain



Fig. 178. The Hercules statue of the Hercules Fountain

Nicolaus Olahus provides a more detailed description of the other fountain. 163 According to his testimony, this ornamental fountain must have had a very similar structure to that of the Hercules Fountain. It was also made of red marble, with a circular basin decorated with the figures of the Muses. A fountain bowl rose above the basin, and the fountain was crowned with a sculpture of Cupid pouring water from a bag. According to Olahus' description the fountain was erected on the terrace in front of the palace chapel. Although this terrace underwent an intensive archaeological investigation, no traces of a fountain were discovered, and thus it is highly probable that the location Olahus specified was wrong. 164 Even though the fountain's foundation has not been recovered, a number of significant

fragments of its upper structure came to light. ¹⁶⁵ Pieces of the huge, circular, red marble bowl are of cardinal importance. ¹⁶⁶ On the basis of these finds the diameter of the bowl was identical to that of the Hercules Fountain. Even though its ornamentation is different, it resembles the decorations seen on the Hercules Fountain: it imitates a gem adornment. Another remarkable piece is a free-standing red marble sculpture representing the upper body of a putto wearing a gown, which is in all probability identical to the Cupid in Olahus'account. ¹⁶⁷ Beside these, a number of different red marble fragments were found that probably belonged to the fountain, too: pieces representing a gown, a leg of a putto and a fragment of a wing. Most of these were discovered around the chapel terrace.

The architectural plans of these two fountains were undoubtedly creations of the same architect. This is supported by the similarities in the bowl decoration as well as the resemblance in the form of the two fountain statuettes. Péter Meller ascribed the better known Hercules Fountain to Giovanni Dalmata. ¹⁶⁸ This theory was seriously criticized only by Jolán Balogh, who ascribed the fountain to the Master of the Marble Madonnas, ¹⁶⁹ and suggested Chimenti Camicia to have been its architectural designer. ¹⁷⁰ The stylistic analysis of the fountain's remaining fragments, however, does not support Balogh's assumptions,

[&]quot;Huius in meditullio exurgit fons miro artificio ex rubro fabricatus marmore cum sculptis Musarum imaginibus, ex cuius cacumine, effigies Cupidinis utri marmoreo insidens aquam exprimit, quae non minius sapida, quam frigida ex vicini montis fonte per canales eo ducta cum iucundissimo strepitu in lancem ex siphunculis desilit marmoream, hinc in labrum orbiculare. Hic fons Mathiae illius Corvini regis iussu, cuius universa haec aedifica, quae narro, sunt opus, dum plerumque triumphum ageret, vino, ut a maioribus accepi, nunc alba, nunc rubro fluebat superius in radice montis arte canalibus immisso." Olahus 1938, 11.

The description of the hanging garden and the fountain in the *Tractus Danubii* by Magnus Gruber, written in 1541, follows Olahus' narrative almost word by word, therefore it is highly probable that Gruber used Olahus as a source of information. Gruber's text was published by: Mikó 2002, 240.

¹⁶⁵ Buzás – Réti – Szőnyi 2001, Fig. 12.

¹⁶⁶ Unfortunately it is uncertain from where these pieces were recovered.

This piece was found in one of the ground floor halls that opened from the lower courtyard in the western palace wing, where it was secondarily used in the sixteenth century during the Turkish-Ottoman wars as raw material for the building of an open stove. Pannonia Regia 1994, 335–336. Cat. VII-6 (G. Buzás – Á. Mikó).

¹⁶⁸ Meller 1947.

¹⁶⁹ Balogh 1950.

¹⁷⁰ Balogh 1961, 60–71; Balogh 1966, I: 248–250.



Fig. 179. Reconstruction of the tabernacle in the palace chapel



Fig. 180. Reconstruction of the tabernacle's central panel

while Meller's attribution is still considered correct. The recently discovered fragment of a sculpture of the other fountain also seems to fit into the works of Giovanni Dalmata. The representations of the wing, gown and upper body of the Visegrád Cupid resembles the winged puttos on the eastern gate of the Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Visegrád Cupid resembles the visegrád Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Visegrád Cupid resembles the visegrád Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Visegrád Cupid resembles the visegrád Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Visegrád Cupid resembles the visegrád Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Visegrád Cupid resembles the visegrád Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Visegrád Cupid resembles the visegrád Palazzo Venezia in Rome, certainly a creation of Dalmata, The representations of the Visegrád Palazzo Venezia in Rome, certainly a creation of Dalmata, The representation of Dalmata, The repres

Dalmata arrived in Hungary from Rome at the beginning of the 1480s,¹⁷⁴ and the fountains of the Visegrád palace must have been his first assignments here. Therefore, the fountain Nicholas V had erected in front of the Santa Maria in Trastevere in 1450 might have served as a model for the Visegrád fountains. A sketchy representation of the former on a 1472 map of Rome shows a circular bowl above a polygonal basin, a statuette rising above the latter, and a pillar crowned by another, smaller bowl.¹⁷⁵ A very

Fig. 181. The tabernacle of Desiderio da Settignano's tabernacle int the San Lorenzo church in Florence

¹⁷¹ Röll 1994, 124–128.

¹⁷² Röll 1994, 54, Fig. 56.

¹⁷³ Röll 1994, 134–135, Figs. 145–147.

¹⁷⁴ Röll 1994, 122.

This fountain was revamped by Alexander VI around 1500; the Baroque fountain standing in its place today was made by Bernini in 1658–1659. Marta 1995, 81.





Fig. 182. Detail of an adoring angel on the tabernacle

Fig. 183. Fragment of the tabernacle

similar fountain is seen in the mural *Susanne and the Elders* by Pinturicchio, painted in 1492–1495 in the apartment of the Borgias in the Vatican. A smaller and less elaborately ornamented example of this fountain type was built in Frascati, near Rome, in 1480, where it still stands today.¹⁷⁶

Another sculptural assemblage of the palace is associated with the palace chapel. Nicolaus Olahus also reported on the altars and the tabernacle of the chapel;¹⁷⁷ he mentions three alabaster altars and a tabernacle. Small pieces of carvings, predominantly made of Carrara marble and gilded, have been recovered from the chapel; most of these belonged to the tabernacle. A number of these fragments originate from a thinned stone slab which served as the central, quadrangular plate of the cabinet. Above the cabinet's door ornamented with a string of astragals, a representation of Christ as Vir Dolorum was placed in a lunette. A plain relief around the cabinet door imitates a church interior in perspective representation: it shows a spatially receding coffered vault, decorated with rosettes above a trefoil ledge adorned with a dentil frieze; the imagined interior's floor is embellished with a net pattern. The two sidewalls of the interior are pierced through by openings through which adoring angels enter. A string imitating a braid ornament runs over the arch, and a brocade curtain was attached to it, hanging on small rings. The curtain is pulled apart and tied at the springers of the arch. Cherubs might have been represented under the curtain and in the upper corners, however, only the ends of their wings have been preserved. The Visegrad tabernacle follows the overall composition of that in the San Lorenzo church in Florence, created by Desiderio da Settignano; some of its details also display a clear resemblance to Desiderio's work. Pieces of the adorning angels, especially elements such as the foot of one of the angels on the left and the upper body and face of the angel in the front on the right side, closely follow the corresponding details of Desiderio's representation. 178 At

¹⁷⁶ Buzás – Réti – Szőnyi 2001, 67, Fig. 126.

[&]quot;Introrsus ad latus areae in radice montis, quae Paulo elevatior est, extat sacellum amaenissimum operibus musaicis, ut aliae etiam pro majore parte aedes, stratum, in quo instrumentum est musicum preciosum, qoud vulgus organum vocat, fistulis nonnulis argenteis omatum, praeterea reservaculum Corporis Dominici, et tria altaria cum structuris et tabulis ex alabastro purissimo inaurato fabrefactis." Olahus 1938, 12.

Réti 1993, 219-225.



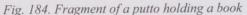




Fig. 185. Fragment of a putto blowing a tuba

the same time, these are the elements where the differences between the two masters are most evident: the master who produced the piece at Visegrád, even though he imitated Desiderio's carving methods, used sharper and more pronounced contours.

The material of the remaining white marble carvings is similar to the raw material of the tabernacle. The ornamentation of a candelabrum fragment¹⁷⁹ also imitates those represented on Desiderio da Settagnano's work in the San Lorenzo church, although in a somewhat simplified form. A gilded buquet of fruits placed in a fluted bowl¹⁸⁰ might have constituted a part of a frieze ornament or a lesene, as a similar pattern is observed on the lesenes embellishing the tabernacle created by Desiderio. Some elaborately articulated architectural and ornamental fragments have also been found. One of them represents delicately carved bending acanthus leaves. 181 A number of pieces have been preserved from a small, abundantly garnished ledge. 182 Two significant figural pieces count among these finds: a child's head carved as a free-standing statue, with a detail above its head which is difficult to interpret but might represent a string of fruits; 183 the other one is a relief fragment depicting a head. A gracefully carved representation of clouds might also have been part of a relief. In all likelihood, all the aforementioned fragments belonged to the tabernacle's frame. Although some of them might have originated from the altars, there is no piece among them which undoubtedly could be identified as belonging to an altar, even though Nicolaus Olahus mentions three altars made of alabaster (that is, white marble). A possible explanation is that the altars were later transported elsewhere in order to save them from the destructions of the Turkish occupation. At the same time it is important to note that a fourteenth-century friar's head, carved out of white marble, was recorded in the inventory of the Visegrád Museum along with the Renaissance fragments of the tabernacle. This find raises the question whether the marble altars mentioned by Olahus - or at least one or two of them - were created in the Matthias era or belonged to the original interior of the church that dated back to the 1360s. The chapel's tabernacle, however, was certainly commissioned by king Matthias in Florence and was transported to Visegrád as a completed piece.

¹⁷⁹ Pannonia Regia 1994, 338. Cat. VII-8a (Á. Mikó)

¹⁸⁰ Balogh 1966, I: 244, II: Fig. 396.

¹⁸¹ Balogh 1996, I: 244, II: Fig 394; Pannonia Regia 1994, 338. Cat. VII-8b (Á. Mikó)

¹⁸² *Pannonia Regia* 1994, 338. Cat. VII-8c, d, e (Á. Mikó)

¹⁸³ Balogh 1966, I: 251; Matthias Corvinus 1982, 391, Cat. 359 (M. Héjj)



Fig. 186. The Madonna of Visegrád

In addition to the white marble pieces some relief fragments carved out of red marble of Hungarian origin have also been conserved. The most significant finding is the lunette relief called the Madonna of Visegrád, 184 which has been associated with the Master of the Marble Madonnas, 185 identified as the sculptor Gregorio di Lorenzo of Florence. 186 Two fragmented reliefs are ascribed to this sculptor: a putto sitting on a volute ornamented with leaves and blowing a tuba, 187 and another putto sitting with an open book in his hand. 188 On the book's left page the Hungarian coat of arms is depicted against an ornamented background, while on the right page the inscription REX/MAT/HIA V/NGH/ARIA reads. On the sides of both putto reliefs a curved surface to be placed in a fixture can be seen: in case of the figure sitting on a volute this surface was observed on the left hand side behind the volute, while in case of the one holding the book this surface is on the underside. These might have been the acroterium figures of a lunette - most probably, the aforementioned Madonna lunette. The backsides of the reliefs suggest that they were originally attached to the wall. However, the main altar of the chapel must have stood in the middle of the sanctuary according to the location of its unearthed foundation. Consequently, the reliefs could have ornamented the pinnacle panel of one of the side altars or the tabernacle. 189 The width of the lunette and the acroteria, nevertheless, exclude the possibility that they would have constituted a part of one of the side altars standing in front of the triumphal arch, and so one has to interpret them

The lunette was spotted at Karva (today Kravany nad Dunajom, Slovakia) in 1863, incorporated into a wall; its owners stated that the piece originated from the Visegrád palace. It was taken to the Christian Museum in Esztergom; today it is exhibited in the King Matthias Museum in Visegrád. Balogh 1966, I: 243–244, II: Figs. 357–358, 365; Matthias Corvinus 1982, 387, Cat. 352 (M. Héjj), Figs. 13–14; Réti 1993, 225–229; Hunyadi Mátyás 2008, 459–460 Cat. 11.4. (F. Caglioti).

First by Pulszky 1890.

Butterfield – Radcliffe 2001, 39. Catalogue item of Alfredo Bellandi (Gentilini's proposal); Pisani 2002.

The carving was found in front of the gate of the palace chapel, in the demolition layer of the building, in 1949. Balogh 1966, I: 240, II: Fig. 363; *Matthias Corvinus* 1982, 390, Cat. 356 (M. Héjj); *Pannonia Regia* 1994, 335, Cat. VII-5 (G. Buzás).

The putto on the right side featuring the insciption was taken to the collection of the Piarist Monastery in Budapest before 1847, and appears in its inventory. Balogh 1966, I: 251; *Matthias Corvinus* 1982, 390. Cat. 357 (M. Héjj). A fragment of the lower part of the aforementioned piece was found in 1990 in front of the southeastern palace, in a modern fill. *Pannonia Regia* 1994, 335. Cat. VII-4. (G. Buzás).

Réti 1993, 224-226.



Fig. 187. Reconstruction of the palace chapel's interior with the organ loft

as decorative elements of the tabernacle. This also indicates that the tabernacle was probably located at one of the sidewalls of the sanctuary – perhaps on the vestry's side, as it was usual. During the Matthias-era transformation of the chapel a balcony was built, the fragments of whose corbels, carved of white limestone, were found among the ruins of the chapel. 190 One of the corbels features the Hungarian-Bohemian royal coat of arms of king Matthias, with a raven in its escutcheon, while the Neapolitan-Aragonese coat of arms of Beatrix is depicted on the other. The date was probably carved on the side of one of these two, but only a hardly legible date of 1485 (?) is visible today. This probably dates the completion of the balcony and thus the Renaissance reconstruction



Fig. 188. A complemented copy of a corbel of the organ loft, decorated with the coat of arms of King Matthias



Fig. 189. A complemented copy of a corbel of the organ loft, decorated with the coat of arms of Queen Beatrix

The frontal part of the corbel featuring the coat of arms of Matthias was found in the Danube at Kisoroszi, near Visegrád. Then it was incorporated into the wall of the parish house where it was spotted and recognized by Béla Czobor in 1890. It was transported to the National Museum in Budapest and later to the Castle Museum of Buda. It was brought back to Visegrád only in 1950, when adjoining fragments of the same piece were discovered during the excavations of the palace chapel. All other fragments were brought to light in Visegrád, most of them in the palace chapel. Buzás 1990, 115. Cat. 190, Figs. 417–425.



Fig. 190. A corbel of the organ loft, decorated with the coat of arms of King Matthias



Fig. 191. A corbel of the organ loft, decorated with the coat of arms of Queen Beatrix

of the chapel. The corbels are wider than usual, indicating that they might have been connected by an arch. A top rail fragment of a parapet with a Renaissance style molding that perhaps once belonged to the balcony was also discovered. ¹⁹¹ The chapel's balcony was probably adorned with paintings. This is attested by the traces of polychrome paint on the corbels. There are also remains suggestive of the original location of the balcony. A small external staircase was erected beside the eastern (right side) wall of the chapel nave. ¹⁹² This flight of stairs intersected the earlier buttresses and reached the upper floor level at the third vault section. The protruding parts of the internal, Angevin-period piers of this vault section were carved off, down to the Matthias-era floor level, indicating that a structure stood here and the piers would have blocked the space. In all probability, this structure was the Renaissance balcony, and the flight of stairs led up here. The original function of the balcony might be revealed by the description of Nicolaus Olahus, who mentions an organ in the chapel, ornamented with silver pipes. The location of the balcony on the nave's wall corresponds to the usual placement of fifteenth-century organs, and so it is likely that the balcony in fact accommodated the organ. ¹⁹³

The most important Renaissance element of the palace was a loggia on the inner courtyard of the royal dwelling. 194 The courtyard where the loggia was located was rebuilt in 1484, and it is without doubt the most intriguing space of the palace from an art historical point of view. A Late Gothic cloister

¹⁹¹ Buzás 1990, 112. Cat. 175, Figs 271b and 304b.

Due to the unusual lie of the land the palace chapel was not oriented to the east but its sanctuary looks to the north.

¹⁹³ Balogh 1966, I. 47.

¹⁹⁴ Buzás 1990, 38–40; Buzás – Réti – Szőnyi 2001, 25–34.

walk encircled the courtyard on the ground floor. Even though this ornamental courtyard is known exclusively from excavations and only its ruins have been preserved, its remains still constitute the best known segment of the Visegrad palace complex. As the reconstruction of this courtyard gained a special importance, it is necessary to revise here the data on which the reconstruction is based.

the excavations During the carved 1940-1942. stone bases of the walls of the Matthias-era¹⁹⁵ cloister walk were brought to light on all four sides of the courtyard, as well as the adjoining stone wallseats and door jamb bases of the Gothic doors that opened in the cloister walk's walls. In the southwestern corner of the cloister walk, the lower part of a staircase with an L-shaped layout that occupied the external side of the walk, as well as the foundation of a pier supporting the meeting point of the staircase and the upper floor, were excavated. The external, eastern wall of the cloister wall has been preserved in its entire height, along with remnants of the stellar vault and its consoles. 196





Figs 192–193. Reconstruction of the Renaissance loggia of the ornamental courtyard

A vast amount of carved fragments came to light from among the ruins of the courtyard. There were Gothic carvings among these, first of all fragments of the window and door jambs of the cloister walk and fragments of the vault ribs; however, a number of Renaissance fragments also came to light.

This cloister walk is dated to the Matthias era as its foundation was merged with the Hercules Fountain decorated with the coat of arms of Matthias. One of the vault ribs of the cloister walk features the date 1484. Discarded, broken or spoilt vault ribs of the cloister walk were incorporated into the foundation of the Hercules Fountain. Stone carvings from the earlier, Angevin-period cloister walk and fountain were inbuilt into the clositer walk's walls as well as the Hercules Fountain's foundation. Buzás – Réti – Szőnyi 2001, 25–28; 37–38.

The eastern part of the cloister walk was rebuilt in 1951–1952 following the plans of Kálmán Lux. Between 1966 and 1970 this reconstruction was slightly altered and enlarged, according to János Sedlmayer's plans. In 1998–2000 the whole cloister walk (except for the vault) was rebuilt following the plans of Zoltán Deák.

In addition to the remains of the Hercules Fountain, a lot of other architectural elements, such as parts of a balustrade and a row of columns, were discovered. Several running meters of the coarse limestone balusters decorated with a cyma reversa, and of the asymmetrically molded top rail, were found, ¹⁹⁷ among them rectangular corner pieces. On a number of fragments the peg holes for anchoring the balusters were seen, and on the fragments of the lower rail also the sockets into which the balusters were inserted could be observed. There was one piece on which two such sockets have been preserved, and thus the baluster spacing could be reconstructed. The preserved sockets made it possible to associate with them the balusters found on the ornamented courtyard. 65 almost intact (that is, broken but possible to reconstruct) balusters and 223 further fragments were recovered. The balusters were carved out of white freshwater limestone. They were imprecisely carved and consequently there is a difference of one or two centimeters in their heights. That's why it was necessary to form sockets on the lower rail for the higher balusters to fit into. A couple of dwarf pillars carved out of red marble were found on the courtyard as well; their height and width is identical to that of the balusters. There are pieces with a quadrangular or L-shaped layout among the pillars, and an L-shaped fragment whose shorter projection was cut off and transformed into a surface for adjoining another element was also discovered. The L-layout pillars have Tuscan entablatures, while the quadrangular pieces are crowned with Ionic ones. 11 quadrangular pillars have been reconstructed and ten other fragments are at our disposal. Four L-shaped pillars have been brought to light along with another, stubbed piece. The L-shaped pillars certainly supported corners. The corner elements of the upper rail were carved out of one piece to which another simple element, resembling those used in the straight sections of the rail, was attached. The dwarf pillar at the corner was given an L shape in order to be able to reinforce both of the aforementioned rail elements. The red marble pillars were much more precisely carved than the limestone balusters, perhaps because these, unlike the balusters, were created in order to carry real weight load.

Fragments of Renaissance columns were brought to light from the courtyard as well. Their shafts were carved out of hard quartz sandstone, while their entablatures and Attic bases were made of sandstone, rough limestone and andesite tuff alike. The shafts narrow upwards. The capitals have a specific composite order, in which the section above the lower astragal is not decorated with acanthus leaves but a fluting embellished with pipe ornaments. The unarticulated, tongue-shaped leaves that hang from the colutes have an unusual form. The columns are small in size: their height is only 202.5 cm, which indicates that they probably stood on the parapet. 15 pieces were identified as base fragments, in addition to 10 shafts, 4 shaft fragments, 13 capitals and 17 capital fragments; a capital of uncertain origin was also collected. 198

The relation between these elements can be reconstructed only in the light of the architectural layout of the entire courtyard. Fortunately, this is possible as not only the ground plan of the courtyard is known, but also the relation between the floors which has been preserved at a considerable height in the eastern wing. The *in situ* arches of the wing's cloister walk, the preserved floor surfaces and vault springers on the first floor, the lower part and the landing of the staircase that led to the second floor, as well as the bathroom preserved on the second floor provide data that make it possible to estimate the height of the both floors. According to the aforementioned features, the first floor was at a height of 7.5 m. The presence of a closed corridor on the first floor can be excluded, as there is a huge hall in the eastern wing on whose high external wall no windows were cut. This means that the windows must have been located on the opposite wall

The precise number of fragments in unknown, because these were incorporated into the reconstructed balustrade in 1951–1952 and 1966–1970, before they would have been catalogized. In addition to these, there are 27 lower rail and 46 top rail fragments.

The latter is exhibited in the Budapest History Museum, under no. 36; it was discovered in a town house in the Buda castle district. Probably it was transported here from the ruined Visegrád castle in the modern period. Balogh 1966, I: 123, II: Fig. 72.

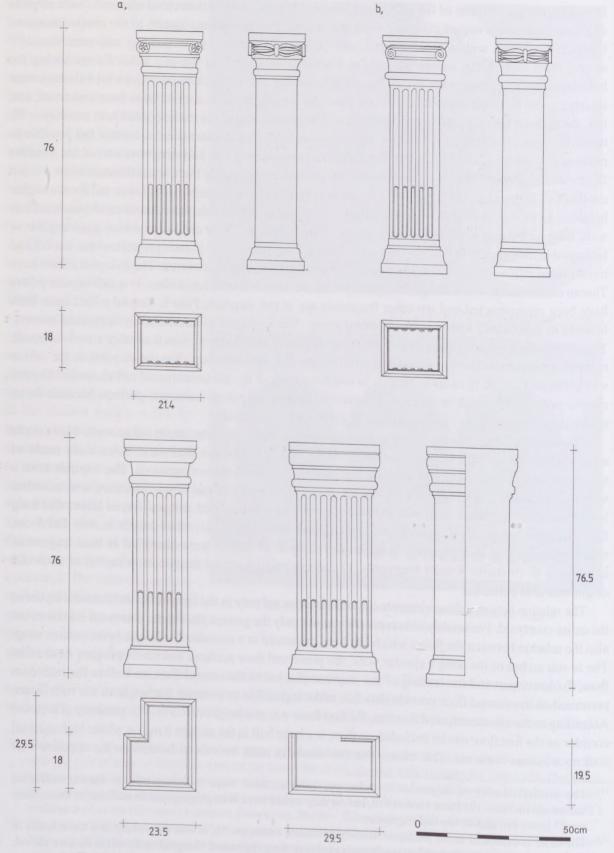


Fig. 194. Red marble pillars of the balustrades of the loggia in the ornamental courtyard

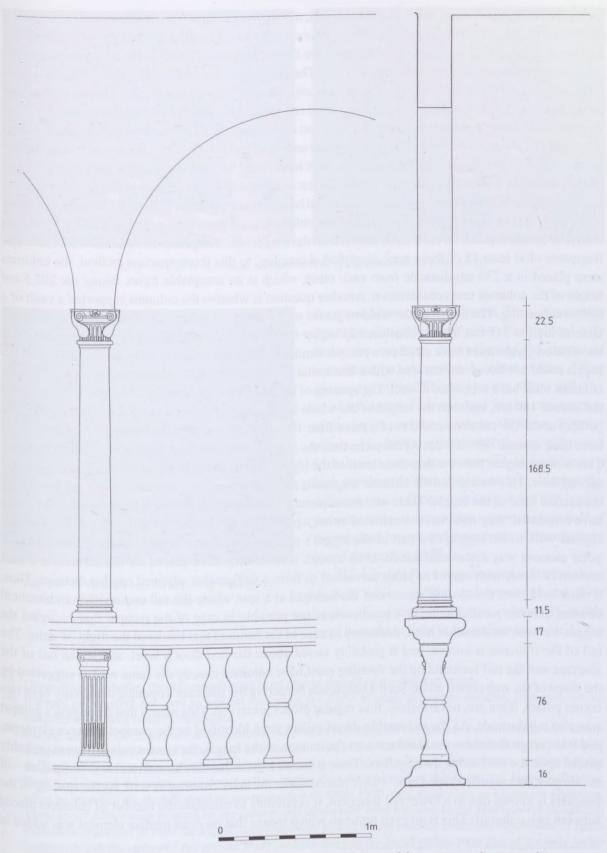


Fig. 195. Reconstruction drawing of the Renaissance loggia of the ornamental courtyard

facing the courtyard. If the corridor had been closed, this hall would have been left dark. However, even if the corridor's side was open, it must have been covered with a roof in order to keep the rain from falling into the cloister walk. The Renaissance columns are the only elements found in the courtyard that might have supported the roof of the first-floor corridor. The only relevant written source that reports about the courtyard, that is, the account of Nicolaus Olahus, suggests that the loggia with the columns was located on the first floor. Olahus also mentions that the small courtyard was encircled with a column corridor. As there was no column corridor on the ground floor (on the basis of the discovered walls and stone carvings it was rather a cloister walk with glass windows that embraced the ground floor), the description in Olahus' account must be associated with the first floor. This level could be accessed from the chapel terrace, and Olahus describes it after discussing the chapel terrace as a space that was accessible through the latter.

The number of the columns and their spacing can be reconstructed on the basis of the layout proportions of the ground floor cloister walk. The sides of the oblong ground floor have a ratio of 4 to 5. Calculating with four column spaces on the shorter and five on the longer side, altogether 18 columns were used. The fragments of at least 15 of these were identified. According to this reconstruction method, the columns were placed in a 280 cm distance from each other, which is an acceptable figure taking the 202.5 cm height of the columns into consideration. Another question is whether the columns supported a vault or a horizontal ceiling. The height of the window jambs on the inner side of the corridor wall is known: they were as high as 311 cm. This is considerably higher than the 202.5 cm height of the columns, and since the window jambs must have stood on a parapet similar to those the columns relied on, it is clear that the loggia could not have been covered with a horizontal ceiling at the height of the column capitals, but the columns must have supported a vault. The spacing of the columns suggests that the height of the vault did not exceed 140 cm, and thus the height of the whole loggia structure can be estimated. The height of the parapet under the columns could not be more than 100-120 cm, and thus the height of the loggia must have been around 380-400 cm. At the same time the height of the first floor level is also known, 750 cm. This is much higher than the first-floor level of the loggia, and so it can be excluded that the loggia had a second floor. This means that the baluster fragments recovered from the courtyard cannot originate from the second floor of the loggia. There are, consequently, only two spots from where these balusters could have originated: they must have constituted either a part of the handrail of the staircase that led from the cloister walk to the loggia, or a part of the loggia's parapet. The former is more likely because a dwarf pillar element was discovered which, even though it resembles those placed on the corners, is a stub version of those, with one of its sides carved off to form a surface that adjoined another element. Thus, it must have been the closing element of the handrail at a spot where the rail met another architectural element that ran parallel to it. This position was not possible in case of the parapet that encircled the loggia, but was, on the other hand, necessary in case of the handrail that bordered the flight of stairs. The rail of the staircase is known, and it probably raised above the first floor's level, and so the rail of the staircase and the rail surrounding the opening must have adjoined exactly the same way as suggested by the shape of the stub corner pillar. Such a balustrade bordering the staircase's opening could only have two corner pillars; there are, nevertheless, four regular pillars preserved. This means that the loggia's parapet was also a balustrade. As the red marble dwarf pillars were identified as the parapet's corner elements, and it is certain that there stood columns on the corners of the loggia, the corner columns were probably placed upon the red marble dwarf pillars. Thus, it seems logical that similar red marble dwarf pillars - of the simpler, rectangular-shaped type - were placed under the inner columns as well. As the spacing of the balusters is known due to a lower rail fragment, it is possible to calculate the number of balusters placed between two columns. This is an even number, which means that no extra median element was added in

¹⁹⁹ "Hic quoque in medio areolae fons est ex alabastro exsurgens, quem ambit ambulation columnis marmoreis sustentata, quae a solis aestivi ardore tuta est." Olahus 1938, 12.





Fig. 196. a-b. A virtual reconstruction of the ornamental courtyard



Fig. 197. A virtual reconstruction of the loggia in the ornamental courtyard

the space between two columns. Thus, it is certain that the red marble dwarf pillars were placed only under the columns. According to the described reconstruction, altogether 6 corner pillars, 18 or 20 simple pillars, 200 one closing pillar, and 131 or 133 balusters 201 were used in the construction of the loggia and the staircase. Of these, 4 corner pillars, 11 simple pillars, one closing pillar and 65 balusters have been preserved, in addition to a high number of other fragments. So, although the different types of components have not survived in the same ratio, it seems that approximately half of the original loggia and balustrade elements were found and collected. 202

The loggia's floor was covered with rhombusshaped, white, yellow and green glazed floor bricks of a considerable size, whose fragments were brought to light in huge quantities during the

²⁰⁰ Depending on whether these elements were used also in the rail of the flight of stairs.

²⁰¹ If dwarf pillars were not used to support the rail of the flight of stairs as section dividing elements, simple balusters must have stood in their place.

During the 1951–1952 monument reconstruction project that targeted the palace, the balustrade was rebuilt without the red marble dwarf pillars above the eastern wing of the renovated ornamental courtyard, following the suggestions of art historian Dezső Dercsényi, and the plans of Kálmán Lux. Nevertheless, the conservator Ernő Szakál used the red marble dwarf pillars in the plans he prepared at that time, and János Sedlmayer, when he modified the already standing reconstruction in 1966–1970, took these plans as a basis for alteration. Thus, dwarf pillars were inserted on the corners and after every third baluster. In the Matthias-era lapidarium exhibition organized in 1991 the loggia's columns were placed on the baluster under the supervision of János Sedlmayer and the author of the present study, and the red marble dwarf pillars were placed not only under the columns but also in between, as section dividers. During the most recent monument reconstruction in 1998–2000, following the plans of Zoltán Deák, this pattern was applied.

excavation of the courtyard.²⁰³ The loggia's construction is dated by a broken baluster²⁰⁴ which, along with the Gothic ribs of the cloister walk, was incorporated into the foundation of the Hercules Fountain. Thus, the Hercules Fountain, the cloister walk and the loggia were probably built at the same time, and the given date of 1485 inscribed on the vault of the cloister walk dates all the three architectural units.

The significance of the loggia on the ornamental courtyard of the Visegrád palace lies in its structure which was distinctive in its time. Even though all elements of the Renaissance loggia that encircled the entire courtyard associated with the balustrade appeared in the Italian architecture of the previous decades, such a combination of these elements was exceptional and has no earlier or contemporary analogies. Carved stone balustrades as parapets were first applied in the 1470s in Rome²⁰⁵ and Urbino.²⁰⁶ One of the first examples of combining a balustrade with a loggia with columns is observed on the uppermost loggia on the Torricini facade of the Urbino palace.²⁰⁷ This, however, is in fact a balcony, and its architectural function and appearance differ greatly from the one in Visegrád that encircled a whole inner courtyard. It was only in the next decades that architectural solutions resembling those applied in Visegrád started to appear in the engineering of Renaissance courtyards.

Even if no obvious prefigurations are found for the structure of the Visegrád loggia, the stylistic analysis of its elements might be fruitful. The column capitals represent a simplified version of a widespread capital type. On the Italian forerunners, the leaves bending on the volutes are acanthus leaves. This form was already frequently used by Brunelleschi and Michelozzo, and in the third quarter of the fifteenth century it prevailed not only in Florence but also appeared in Rome;²⁰⁸ later it became predominant in a wider region. The balustrade in



Fig. 198. Red marble pillar from the royal palace of Buda, probably from the loggia of the ornamental courtyard

Visegrád is much more exceptional. Dwarf pillars dividing the balustrade appeared as simple, prism-shaped elements, enlarged with half balusters on each side; the earliest Italian analogies are found in Urbino, ²⁰⁹

²⁰⁴ Buzás – Réti – Szőnyi 2001, Fig. 64A.

²⁰⁸ On the peduccios of the eastern gateway of the Palazzo Venezia, or on the windows decorated with the coat of arms of pope Paul II on the back wall of the Forum of Augustus.

²⁰³ Rhombus-shaped glazed floor bricks identical to those used in Visegrád were found in the royal villa of Nyék. I would like to thank István Feld, the leading archaeologist of the site, for allowing me to examine the finds.

²⁰⁵ In the loggia of the Vatican palace from which the blessings were given, inserted between the pillars of the loggia (Davies – Hemsoll 1983, 6), as well as in the oratory of the Sistine Chapel.

In the upper floor balcony on the facade of the duke's suite (Davies – Hemsoll 1983, 6), and in the parapet bordering a corridor on top of the wall embracing the hanging garden from the west. Of the latter parapet, only the first element was preserved, the one that adjoins the wall of the northern wing. Ougliese 1985, Fig. XX.2.3.

A loggia with columns combined with a balustrade appears in the Loggia del Gallo of the palace, it which, however, a modern reconstruction in its present form. The loggia and its parapet was previously walled in and disassembled only in 1954, when the balusters were added. The basis for this reconstruction is, however, uncertain. Compagnucci 1985, Figs. XVIII.2.12–14.

On the upper balcony on the two-tower facade of the duke's suite. No half balusters stand on the decorated, prism-shaped dwarf pillars and column plinths of the Loggia del Gallo, and so the reconstrucion of the parapet with balusters is doubtful.



Fig. 199. Capital of a red marble dwarf pillar from the royal palace of Buda, probably from the balustrade of the loggia in the ornamental courtyard



Fig. 200. Fragment of a red marble balustrade from the royal palace of Buda, probably from the loggia of the ornamental courtyard

and on the terrace of the villa in Poggio a Caiano. ²¹⁰ Dwarf pillars similar to the ones used in Visegrád, that is, dwarf pillars with plinths and a capitals but without complementary half balusters, first surfaced in Rome before 1484 on the cantoria of the Sixtus Chapel in the Vatican. The latter were, nevertheless, much more elaborate, and their Corinthian capitals and shafts were ornamented with festoons. This prefiguration in Rome, however, raises the possibility that the architect associated with the Visegrád loggia must be looked for in the Renaissance circles of Rome, and might have had ties to Giovanni Dalmata, who created the Renaissance fountains of the palace, and who were present at the construction works commissioned by the pope Paul II and his nephew, Marco Barbaro, ²¹¹ and participated in the decoration of the Sixtus Chapel in 1477–1480. ²¹²

The peculiarity of the Visegrád loggia lies in the fact that its dwarf pillars are more slender than the columns above them. In fact, the width of the dwarf pillar capitals is identical to the diameter of the column shafts, but the shafts of the dwarf columns are thinner. Although this does not imply a statical problem, as the dwarf pillars were made of the most solid material available at Visegrád – that is, red marble – the structure makes a visual impression of instability. However, there were probably no conventional methods for affixing the columns to the balustrade. In the prince's suite of the Urbino palace, the columns of the balcony rely on the floor level and the balustrade continues in the column shafts with a half dwarf pillar in between.²¹³ A variety of architectural methods were applied to solve this problem.²¹⁴ The one used in Visegrád is a less sophisticated structure, which might have been built

The balustrade was finished in the 1480s. Davies – Hemsoll 1983, 6.

²¹¹ Röll 1994, 51-52.

²¹² Steinmann 1897.

A similar example is known from Buda. A column shaft supplemented with two half balusters was discovered in a house of the castle district (Dísz Square 6), but its original location and dating is unkown. Balogh 1966, I: 111, II: Fig. 77. Feuerné Tóth 1986, 20, note 25, fig. 9.

On the loggia encircling the dome of the Madonna di Piazza church in Busto Arsizio, Lombardy, built in 1515–1523 following the plans of Antonio Lonati, the columns rest on unarticulated, prism-shaped dwarf

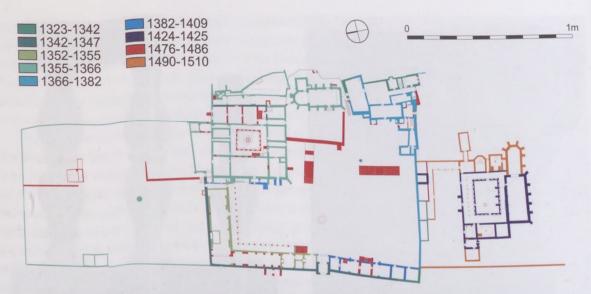


Fig. 201. Ground plan of the royal palace at the end of the Middle Ages



Fig. 202. Reconstruction of the royal palace at the end of the Middle Ages

following a not very detailed, sketchy plan prepared by the local stone carver's workshop on the basis of foreign structural elements and details known to them, such as the form of the balustrade that originated from Rome. ²¹⁵ On the other hand, the loggia and the balustrade in Visegrád are not unmatched. A direct

pillars. These dwarf pillars, however, are not thicker than the rail. On the sixteenth-century loggia of Varasd in Slavonia (modern Varaždin, Croatia), the prism-shaped dwarf pillars under the columns are not thicker than the rail either, moreover, the pillars are even thinner than the columns, but they are supplemented with half balusters on both sides. In the Late Renaissance the columns were typically supported by prism-shaped bases, thicker than the rail, enclosed by the lower and upper rails. Loggias with columns and balusters were widespread in sixteenth-century Central Europe. Probably the courtyard loggia of the Jagiellonian palace in Krakow, built in the first half of the sixteenth century, served as a model.

I would like to thank Paul Davies for directing my attention to the possibility that such sketchy plans might have been used.

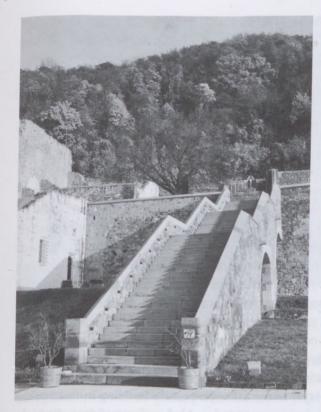


Fig. 203. Reconstruction of the ornamental flight of stairs in the chapel terrace

analogy is known from the Buda royal palace. Here a similar, but two-story loggia was created out of a better quality material (pure red marble) and with a more elaborate ornamentation; it rested on a Gothic archway. This loggia was built in front of the wings of the palace's second courtyard on the commission of king Matthias, probably by the same masters who constructed the Visegrád loggia.²¹⁶

The Matthias-era painted decorations of the Visegrád palace are well explored. The previous external plastering was left in its place and repaired at some spots. Considerable remains of this plaster have been preserved on the street and courtvard facades of the western palace wing. On the internal, courtyard facade of the western wing, south of the gatehouse, in the middle section of the wing, under the staircase that leads from the courtyard to the upper floor, on a relatively protected surface of the walling of a Sigismund-era door, the plaster survived. A horizontal masonry line is still visible on it. The flight of stairs above and in front of this surface is certainly a later construction. Another, more extensive plastered surface with a horizontal masonry line has been preserved on the northern

side of a Matthias-era buttress north of the staircase, and partly on the wall above the buttress. On these spots the decoration was created with a sharp tool: a horizontal line was incised into the whitewashed surface, and a light red, pinkish paint was applied thereafter.

In 1989, another extensive plaster surface was discovered on the northern side of the western, street facade of the palace, north of the Matthias-era bay window decorated with the coat of arms. It was clearly plastered contemporaneously to the construction of the bay window or after that the latter was finished. The incision was inflicted on the soft plaster with a blunt tool with a wide edge and forms a 45×90 cm rectangle; a wide, white brush stroke is also seen around the incised line.²¹⁷

A similarly painted, 25 m long surface was brought to light in 2005 on the southern part of the palace facade, south of the gatehouse. The irregular lower edge of the plaster, although it reached down to the Matthias-era external floor level which was higher than that of the Angevin and Sigismund-period, follows the line of the Sigismund-era floor. The lowest horizontal masonry line crossed this level at some spots. The 45×90 cm rectangles are formed by deep incisions and brush strokes here too. An open hearth was discovered at the northern end of the facade, in front of the wall. The plaster was burnt above the hearth, and a red discoloration was observed. However, there were no traces of burning on the surfaces covered with the brush strokes that form the masonry lines, and so the masonry lines appeared white against a red background. At the time when the surface was burnt, the original paint coating that protected the surface from discoloration might have been still there, and fell off only after the burning. There was, nevertheless, no trace of any red paint. This suggests that the painted decoration on the street

²¹⁶ Buzás 2008b, 80-84.

Buzás – Lővei 2001, 12. In this publication I mentioned "masonry lines once painted in red". This phrasing, however, is doubtful and probably wrong. In fact there is no trace for the use of red paint.

facade differed from that applied on the courtyard facade. The tool with which the masonry lines were incised was also different, and the coating material to create the brush strokes was altered. This was probably not red paint but rather a simple whitewash.

Significant paint remains have been conserved on the *in situ* foot of the balcony on the street facade, as well as on a high number of the recovered stone fragments. Sandstone of varying color (from gray to red), retrieved in the Hárshegy area, was used in the building of the ground level of this carved stone construction, while the upper level was carved out of yellowish white, coarse limestone. Both the external and internal surfaces, nevertheless, were covered with the same whitewash. On the internal side, the same whitewash was applied on the ornaments, sculptures and coats of arms decorating the vault bosses and consoles. The external side, however, was much more colorful. On the coats of arms placed on the main facade ledge as well as on those held by angels under the baldachines, remains of colorful painting applied without a base coat of paint, were observed. Harsh green paint was applied on a voussoir fragment of an ogee wimperg originating from an upper floor window. Another fragment representing the coat of arms of the Hunyadi family, on which black paint has been preserved on the raven figure, probably derives from a window wimperg as well. The traceries and the ornaments decorating the window jambs, frames and the ledges, were whitewashed just as the walls. Therefore, the colors served to emphasize the most important heraldic elements against the white background of the facade.

The coats of arms on the balcony were not the only colorful elements of the palace's street facade. On the carved stone moldings recovered in the 1980s paint remains are clearly visible. Several fragments of a large-size, chamfered ledge with a concave surface and a window jamb with an ogee keel molding were recovered from the early modern demolition layer of the fifteenth-century building in front of the middle section of the facade's southern part. On the deeper, protected molded surfaces of the yellowish-pink sandstone carvings traces of a pink whitewash painting are seen. The border of the painted zone was 17 cm from the molding and ran parallel to it, as it is attested by the preserved window jamb. A gradually thinning plaster was applied on the irregular external edge of the stone, and it was coated with whitewash. On this relatively well preserved fragment there is no trace of masonry lines, even though the 45 cm high rectangles should be visible on the 135 m high stone fragment. This suggests that the pink painted frame was surrounded by a white band and the masonry lines ran into the latter.

A transom fragment displaying a molding and painting identical to the aforementioned piece, was found in 1989 during the excavation of the window bay on the northern part of the facade, south of the bay window. A window jamb piece with a similar molding and paint but only with a 9 m wide pink painted band is also known from the older assemblage of the palace; the precise location of its recovery, however, is unclear.²¹⁸ Another lintel piece with a different molding type was brought to light on the northern side of the bay window. The painting of the latter resembles that on the aforementioned pieces, however, in this case the pink band is bordered by an articulated line incised into the plaster that covers the stone's edge and is emphasized with black paint. This painted frame turns upwards at a right angle at the end of the fragment, which suggests that this might have been a head jamb with stair shaped cross section, tripartite window. This more elaborately ornamented window probably opened into the upper floor hall to whose southwest end the bay window was attached. The hall's entrance was located opposite to the bay window and faced the Late Gothic loggia in front of the building's courtyard facade. The richly molded shoulder-arched door surround, whose fragments were discovered during the 1987 excavations,²¹⁹ shows a painting identical to the one observed on the window on the external facade: the molding and the a surrounding, 8.5 cm wide band are painted in pinkish red, bordered first by a black line, and then by the whitewashed plaster that

²¹⁸ Inventory no. 66.2.1. Published by: Buzás 1990, 98. Cat. 1180, Fig. 240.

²¹⁹ Buzás – Lővei 2001, 10.



Fig. 204. Excavation of the buttress of the chapel terrace

covers the stone's edge. The hall had another internal door through which the neighboring room to the north could be accessed. It has a simple, chamfered, concave molding but was more elaborately painted. The concave surface was dyed in brownish red, the square ridges surrounding it in light blue, while the band that encircled the molding from the outside had a pink coloring here too.²²⁰ From the hall whose floor was covered by mortar painted in red, other plaster fragments were recovered which attest

to painted walls. The whitewashed walls were dyed probably around the double arch connecting the hall and the bay window. The preserved pieces show yellow and black bordering lines against a blue background, as well as white, green, black and yellow plant ornaments against dark purple.²²¹

It seems that the carved stone moldings were usually painted pink in the Matthias-era palace. Traces of this kind of painting were observed on other window and door jamb fragments as well as on ledges, ²²² and the same pink paint has been preserved on a fallen ashlar that once reinforced a corner of the southeastern palace.

It can be concluded that the Matthias-period painting of the palace facades facing the reception court followed a pattern already applied in the Angevin- and Sigismund periods. The original plastering was left in place where possible and was only replenished when necessary. This decoration was formed by incisions and painted red masonry lines against a white surface, with ashlar blocks at the corners, ledges and jambs painted in pink or light red. The jambs were also surrounded by a painted white frame. The red roof tiles harmonized with the palace's white and pink decoration, and this was emphasized with a secondary painting of the roof tiles applied on the already laid tiles in order to give them a more homogeneous color. Only a few glazed tiles were placed on the roof in order to make it more colorful: above the chapel sanctuary and nave the flat, glazed roof tiles were green, white, yellow and brown, while on the corners of the southeastern palace's roof yellow and green glazed ornamental spheres were placed.²²³

Nevertheless, in the Matthias era this decoration pattern characterized only the facades that surrounded the big reception court, but the building's street facade was ornamented differently. A new plastering was applied on this entire facade, which suggests that the Angevin- and Sigismund-era painted decoration was altered. The new decoration pattern was less harsh: the masonry lines were not emphasized with red painting, but the windows and ledges were also dyed light red, and the roof tiles were secondarily painted red too. The colors, however, rather served to highlight the coat of arms on the bay window. In addition to the red barrel tiles several glazed and unglazed plate tiles were discovered. These might have decorated the secondary balcony of the large balcony. The coats of arms of Matthias and Beatrix were placed on this

²²⁰ Buzás – Lővei 2001,12.

²²¹ Buzás – Lővei 2001, 11, 24.

²²² Buzás 1990, 40.

²²³ Nyékhelyi 1994, 163.

secondary balcony, along with the statues of the royal couple, and thus it must have constituted the most significant part of the facade.²²⁴

A third painting pattern was employed in the innermost part of the palace building, that is, in the ornamental courtyard of the northeastern palace: this was the actual royal dwelling. The courtyard was profoundly transformed in the Matthias period: its ground floor was encircled with a cloister walk entirely made of carved stone, pierced through by huge, glazed lancet windows and shoulder-arched door surround with similar, lancet transom windows. Several fragments of window jambs

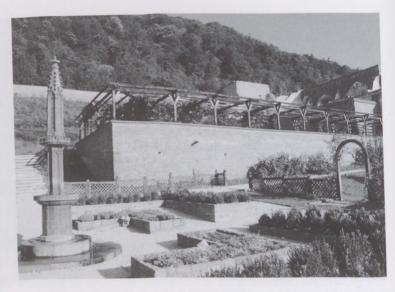


Fig. 205. The reconstructed southeastern terrace of the palace garden

with simple, chamfered concave moldings display paint traces; on one of these the white coat that covered the chamfered, concave jamb profile is easily differentiated from the light red paint applied on the external wall surface. Thus, the jambs were highlighted with white against the light red wall, as an inverse of the colors employed on the external plastered facade. The level above the cloister walk was occupied by the open, Renaissance loggia with a balustrade. Its coloration was the inverse of the one applied on the ground floor. Light red paint has been preserved on a rail fragment of the balustrade; the white limestone balusters and the red marble dwarf pillars under the columns, however, were not dyed. The loggia columns carved out of pinkish sandstone from the Hárshegy area or coarse, yellowish limestone show no traces of dying either. Therefore, the structural layout of the loggia was emphasized visually by light red paint and the natural pink, light red color of the stones, as a contrast to the white walls of the corridor and the white balusters. The decoration was complemented with green, white and yellow glazed floor bricks. 227

On the whole, a white and red-pinkish color dominated the palace buildings, which were, in fact, the natural colors of the stones. The color of the unpainted white limestone and pinkish-red marble and Hárshegy sandstone appear here and there in the complex. Approaching the innermost parts of the palace, however, the ratio of these two dominant colors was gradually and consciously altered. While the white color was emphasized on the street facade, the two colors were applied equally on the reception court, and the ornamental courtyard was dominated by a pinkish-red color. Polychrome elements were added in order to counterbalance the monotony of the two-color pattern: on the bay window, the coat of arms and the roof of the secondary balcony; on the reception court, the colorful glazed roof tiles and sanctuary floor of the chapel; on the ornamental courtyard, the variegated floor of the upper floor loggia and the roof ornament spheres. Only one faience floor tile fragment, embellished with floral ornaments, is known from the ornamental courtyard of the northeastern palace. Unfortunately, its original location cannot be precisely established.²²⁸

²²⁴ Buzás – Lővei 2001, 22.

²²⁵ Buzás – Réti – Szönyi 2001, Fig. 37.

²²⁶ Buzás – Réti – Szőnyi 2001, Fig. 52.

²²⁷ Nyékhelyi 1994, 163.

²²⁸ Pannonia Regia 1994, 338. Cat. VII-37 (G. Buzás); Dowry of Beatrice 2008, 115. Cat. 2.73 (G. Balla)

The Matthias era terraces of the courtyards and gardens also testify to an Italian influence. The chapel terraces bordered the upper part of the palace's great courtyard. The small, Louis I period terrace that could be accessed through a ramp, was replaced by a bigger one under the rule of Matthias, and an ornamental staircase was attached to it.²²⁹ This construction was accomplished approximately contemporaneously to the 1484 transformation of the ornamental courtyard, as suggested by the large number of architectural elements originating from the earlier structures of the ornamental courtyard and incorporated into the terrace's retaining wall, the buttress supporting its southwest end, as well as into the foundation of the new flight of stairs.

Remains of terraces similar to the one in front of the chapel were found in the orchards north of the palace complex.²³⁰ These terraces were built in the Matthias period in the southeastern and northeastern corners of the orchard garden. A garden house was erected on the northeastern terrace. 231 In all likelihood, a ramp led up to the terrace in front of the house. The central room of the house was a larger hall, from which a short flight of stairs led to the long and narrow room, or rather a loggia, to the south. A number of baluster fragments were recovered from here, similar to those found among the ruins of the ornamental courtyard. It is possible, although not certain, that the loggia of the garden house resembled the one on the ornamental courtyard. A small room with a timber structure, brick walls and a terrazzo floor was attached to the end of the loggia, in an eastern direction. A wine cellar was carved into the rock face under the building, whose porch supported the loggia as an understructure. The date 1479 was inscribed onto the keystone of the cellar porch door; this also dates the garden house and the terraces. The other, larger terrace of the orchard garden was attached to the southeastern flower garden, and could be accessed through a system of stairs from the northwestern palace. The upper rail slabs of its walled parapet have a Renaissance style molding.²³² The terraces of the garden, along with the pergola mentioned by Bonfini and maybe also the garden villa might have been constructed following Italian prefigurations. This contradicts the predominantly Gothic style transformation of the complex, and raises the possibility of the contribution of a garden engineer who was trained in Italy.

The Architects of the Matthias-era Palace

The contribution of the carpenter Chimenti Camicia from Florence has been emphasized in the Hungarian scholarship in relation to the Matthias-era construction works.²³³ Giorgio Vasari reported on Camicia's activities in Matthias' court, and mentions that he built "palaces, gardens, fountain, churches, fortresses" for the Hungarian king.²³⁴ Contemporary data testify that in 1479 Camicia's

The walls of the terrace have been preserved almost in their full height, only the original parapet was destroyed. The foundation of the first step of the ornamented flight of stairs as well as the two slabs of the first thread, along with the imprint of the next seven steps were discovered. The flight of stairs rested on two arches; the springer of the second arch was preserved on the retaining wall of the terrace. These details made the reconstruction of the terrace and the flight of stairs possible, which was accomplished in 2006.

Only the lower part of the retaining brick walls supporting the two terraces has been preserved. The southern one was entirely renovated in 2001–2002, while only a small section of the northern one was rebuilt.

The cellar and the cellar entrance of the garden house have been preserved; only foundation walls and floors were recovered of the other rooms.

A fragment of one of these slabs was found near the terrace. Buzás 1990, 112. Szerk. kat. 176. Fig. 271a and 304a.

²³³ For a summary of the data on Chimenti Camicia, see: Farbaky 2008.

[&]quot;se non che a servizio del Re di Ungheria egli fece palazzi, giardini, fontane, tempii e muraglie grandissime di fortezze, con intagli e ornamenti di palchi molto garbati". Vasari 1550, 406–408. He repeats this observation in the 1568 edition as well.

commissioner entered a contract with four Florentine carpenters for a work in Hungary. There is direct evidence for his presence in Hungary from 1488-89.235 Other carpenters from Florence sometimes teamed with him, such as Baccio Cellini, who according to Vasari's account stayed in Hungary after that Camicia had left.²³⁶ The 1479 data rather suggest that Camicia worked as a foreman of the carpenters participating in the royal constructions, and thus the enterprises Vasari referred to were not necessarily carried

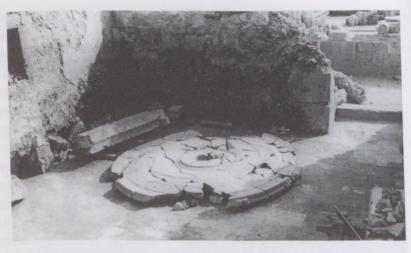


Fig. 206. Excavation of the bowl of the Hercules Fountain in the northeastern room on the ground floor of the northeastern palace, 1942

out under Camicia's supervision - he might have conducted only the carpenters' tasks. This is highly probable, because some of the constructions Vasari associated with Camicia do not follow a Renaissance style at all, and so these could not have been products of a Florentine master. The transformed Visegrád and Tata palaces, as well as a considerable part of the Buda castle were built in a Late Gothic style, as well as all the churches king Matthias had erected. Besides, some of the Renaissance constructions are attributed to other masters and not Camicia; the two Renaissance fountains of the Visegrad palace were certainly built by Giovanni Dalmata. Vasari's report, however, is not necessarily wrong. Coffered ceilings were employed in the Buda palace for certain, and Nicolaus Olahus mentions similar structures in the Visegrad palace; according to Bonfini's report, these might have been constructed in Tata as well. Building the timber trusses of the churches, as well as a number of other tasks in the construction of the gardens, required trained carpenters: they were assigned to make the fences, arbors, pergolas, and timber frame buildings. Many of the fortifications were also made of wood. Carpenters were needed to prepare the scaffolding and the cranes for constructing stone buildings; Vasari mentions such tasks when he lists the assignments of Camicia. This, nevertheless, does not exclude the possibility that Camicia might have acted as a real leading architect in some cases. He might have had a role in the planning of the Matthiasera gardens and terraces at Visegrád and Buda; his contribution might explain the characteristic Tuscan elements, such as the emphasis laid on the terraces.

Another important question is whether it is necessary to look for a leading architect behind the Renaissance style constructions of the Matthias period. The Renaissance transformations commissioned by Matthias in the second half of the 1470s and in the 1480s have a distinct character, and in all cases they aimed to transform the older, Gothic buildings into Late Gothic or Renaissance complexes. Even though both styles were present, to all appearances they were not mixed: the carved stone elements are either made in a pure Late Gothic, or in a pure Renaissance style. This signifies that not only two styles but also two groups of masters were employed. In the Gothic architectural workshops of Western Europe, beyond the Alps, all tasks were supervised by a single master who also acted as a sculptor and stone carver. In Italy, however, the processes of planning and implementation were separated. The architect's

²³⁵ Balogh 1966, I: 485–487.

[&]quot;Che furono, condotti di poi per le mani di Bacchio Cellini, con bellezza e grazia infinita. Dopo le quali cose Chimenti, come amorevole della sua patria, se ne tornò o Fiorenza, e Baccio si restò in Ungheria." Vasari 1550, 407. The same remark is repeated in the 1568 edition.



Fig. 207. Pits for preparing mortar in the loggia of the lower reception court, from the age of John of Szapolyai

only task was to prepare the plans, his presence was not even necessary during the construction itself, because the realization was carried out by a couple of stone carvers and sculptors under the supervision of a foreman. Thus, most probably there were separate working groups following a Late Gothic or a Renaissance style; as the building structures rather follow a Gothic scheme, in all likelihood it was the Late Gothic style stone carvers who had a leading role as conductors. Therefore, the Renaissance monuments of the period in Hungary are rather artistic creations of stone carvers and sculptors than usual architectural structures. Structures such as the Renaissance loggia might have easily been built by using and adapting architectural plans received from Italy. These pieces might be attributed to sculptors who are known from the sources and whose presence is also attested by stylistic analyses, such as Giovanni Dalmata or Gregorio di Lorenzo, and other Italian and Dalmatian stone carvers working under their supervision, while the leading architect employed at the Visegrad palace's transformation was probably a master trained in the Late Gothic tradition of Central Europe.

The Ruination of the Palace

After the transformation in the Matthias era, the Visegrád palace was further used under the rule of the Jagiellion dynasty. Reconstruction works were only made in the neighboring Franciscan monastery at that time. The first devastation of the palace was caused by the invading Turkish-Ottoman forces in 1526. The damaged buildings were later repaired by John Zápolya in 1539,²³⁷ however, in 1544, when the palace fell into Turkish-Ottoman hands, the complex became uninhabitable. An intensive ruination of the buildings started at that time, as sixteenth-century travelers who visited Visegrád reported.²³⁸ The 1595 siege of the complex left it in ruins, even though some remains were standing as late as in the mid-eighteenth century, when the ruins started to be exploited as a quarry. The walls were demolished and exploded in order to collect the carved stones. By the 1760s the palace was razed to the ground, only the stubs of some buttresses signified the location of the past complex.²³⁹ By the twentieth century, the ruins of the palace sank into oblivion.²⁴⁰

²³⁷ Buzás 1994c, 121–123.

Both Salomon Schweigger, who visited the place in 1577 and Reinhold Lubenau, who described the palace in 1587, write about a ruined complex. Balogh 1966, I: 227.

²³⁹ Buzás 1994c, 125.

²⁴⁰ Elemér Varjú even questioned the very existence of the palace. Varjú 1932, 198–203.

The Excavation of the Palace Remains in 1934-1945

The architect János Schulek, son of Frigyes Schulek who restored the Salamon Tower, started the excavations at New Year's Eve in 1934, and found the remains of the palace chapel. The excavations were financed by the National Monument Advisary Comittee (Műemlékek Országos Bizottsága, MOB), and the chapel and parts of the northeastern palace were brought to light until 1936. After a break of necessity the excavations continued between 1939 and 1944 in the area of the northeastern palace. The ornamental courtyard and the Hercules Fountain were found in this phase, and the latter was recognized as the greatest sensation of the site.²⁴¹

János Schulek made attempts to protect the excavated monuments, with the assistance of an architect of MOB, Kálmán Lux. As a protective measure, the top of the excavated walls were covered with turf and a roof was erected above the monuments considered most valuable: the eastern wing of the cloister walk, the entrance corridor with the sedilia, and the Hercules Fountain. A missing wall section in the eastern side of the cloister, the seat slabs of its sedilia and its door jambs were replenished right after the excavation. János Schulek intended to restore the sedilia on the entrance corridor of the southern wing as well, and planned to erect a timber building above the southern wing that would have served as a a lapidarium. The timbers and the carved stone elements were prepared for this lapidarium; however, World War II interfered.²⁴²



Fig. 208. The first survey trench made by János Schulek on the chapel terrace, 25 March, 1935



Fig. 209. Excavation of the Gothic cloister walk of the ornamental courtyard, 7 September, 1940

²⁴¹ Schulek 1941a; Schulek 1941b.

²⁴² Balla, 1993.

Excavations in 1948–1952

The excavations continued in 1948 after the war. This year students of the Department of Art History and Christian Archaeology of the Pázmány Péter University carried out research in the palace area under the leadership of Kálmán Lux, János Kálmán and Dezső Várnai. Excavations of a larger scale were conducted from 1949 onwards by Dezső Dercsényi and Miklós Héjj; the latter participated in



Fig. 210. The orchard in the area of the chapel terrace, before the archaeological excavations, March 1935



Fig. 211. The retaining wall of the chapel terrace at the beginning of the excavations, 25 March, 1935



Fig. 213. Excavation of the northeastern corner of the cloister walk, 8 September, 1941



Fig. 212. Excavation of the eastern wing of the northeastern palace, 1943



Fig. 214. Excavation of the entrance hallway on the ground floor of the northeastern palace, August 1942



Fig. 215. Excavation of the western facade of the northeastern palace, 1952

the fieldwork as a student in the previous year. The chapel's survey was continued, and a considerable part of the western wing and western facade of the northeastern palace were brought to light. The northwestern palace building was discovered in this phase. The excavation of the southeastern palace begun, but the survey was, unfortunately, interrupted.



Fig. 216. Excavation of the Hercules Fountain, 1941

The First Reconstruction in 1949–1952

Parallel to the restarted excavation works, the reconstruction of the previously excavated monuments started under the supervision of László Gerő and following the plans of Kálmán Lux. The missing wall parts were rebuilt in bricks and in some cases the monuments were covered with wooden



Fig. 217. Excavation of the bath, September, 1942



Fig. 218. Excavation of the small "stone courtyard" next to the northeaster corner of the northeastern palace, 1951

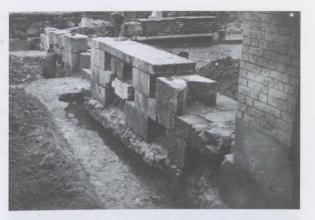


Fig. 219. Survey of the cloister walk walls, 1952



Fig. 220. Excavated ruins of the palace chapel, 1951

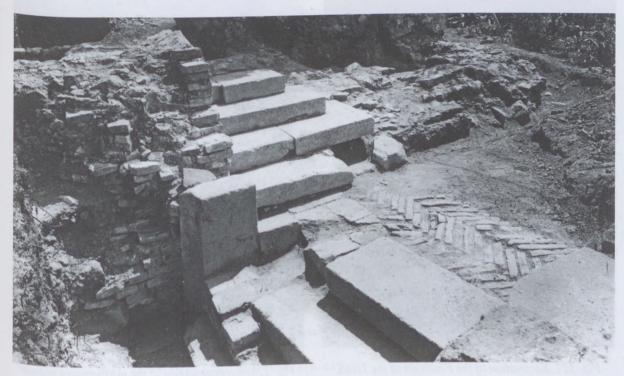


Fig. 221. Excavation of the stairs that led to the orchard from the palace, 1950



Fig. 222. Excavations in the courtyard of the Fountain of the Lions, 1955



Fig. 225. Survey of the eastern row of rooms in the northeastern palace wing, and the excavation of Angevin-period walls and floors under the middle hall, 1957



Fig. 227. Excavation of the Fountain of the Lions, 1955



Fig. 223. The second excavation conducted in the bath, 1952



Fig. 224. The exhibited chapel walls, second half of the 1950s



Fig. 226. Excavation of an embankment behind the retaining wall of the chapel terrace, 1959



Fig. 228. Reconstruction of the northeastern corner of the lower reception court, second half of the 1950s

shingles. The largest enterprise was the reconstruction of the eastern part of the cloister walk on the ornamental courtyard. Within the rebuilt brick walls of the cloister, the sculptor and restorer Ernő Szakál created a Late Gothic vault reconstruction. The ribs were complemented with artificial stones, and the space between them was filled with woven reed. The web between the ribs was formed by reed covered in plaster. The first reconstruction of the Renaissance balustrade was accomplished according to Dezső Dercsényi's plans, using brick pillars instead of the red marble dwarf pillars. No significant reconstruction work was carried out in the southeastern palace in this period, although the higher and weaker wall remains were in some cases dismantled, given a brick support or complemented.²⁴³

Research of the Palace in 1953-1960



Fig. 229. The ornamental courtyard after the demolition of the protecting roof Schulek had built and before the building of Lux's reconstruction, 1951



Fig. 230. Reconstruction of the cloister walk's vault, 1951

From 1953 Miklós Héjj led the excavations alone, and the pace of research slowed down considerably in these years. However, important areas were surveyed: the aqueduct system of the palace was excavated, as well as the bath, the courtyard of the Fountain of the Lions and the Late Gothic red marble fountain. The excavation of the chapel was finished, and the survey of the western facade of the northeastern palace continued. Excavations were conducted in the garden, and the 1479 cellar and the garden terrace were explored. A survey of the walls began on the chapel terrace as well as in the area of the northeastern palace, and excavation of the layers under the late medieval floor level started, providing plentiful data on the Angevin- and Sigismundcomplex. The most significant accomplishment was the discovery of the fountains their reconstruction. realized by Ernő Szakál.²⁴⁴

²⁴³ Dercsényi 1951, 34–35; Dercsényi – Héjj 1958, 418–449.

Buzás 1990, 16–20; Buzás 1994a, 29–31.



Fig. 231. Reconstruction of the entrance hallway with a sedile on the ground floor of the northeastern palace



Fig. 232. Removing the fill over the cellar vault under the southeastern wing of the northeastern palace, and unearthing the remains of the wooden ceiling under the eastern hall, 1968

Conservation of the Palace Remains in 1953-1966

By 1953, the brick replacements of the walls suffered serious frost damage. Therefore, the reconstructed cloister walk wall was whitewashed. and after this point, all supplementary wall structures were made of hard andesite from the Dunabogdány region, while stone carving complements were built of artificial stone and crushed basalt. As a consequence, it was mostly the medieval stone elements of lower quality that suffered frost damage later. The western facade of the northeastern palace as well as the retaining wall of the chapel terrace and the courtyard of the Fountain of the Lions were reconstructed, along with a number of other carved stone elements. The entrance corridor of the ornamental courtyard and the bath were protected by a slated roof. In 1959 Ernő Szakál erected a reconstructed copy of the Fountain of the Lions at its original location, while the fragments of the original were exhibited in the Solomon Tower.245 Szakál also made a reconstruction of the Sigismund-era fountain of the ornamental courtyard in 1957-1964, which was put on display also in the Solomon Tower.²⁴⁶ In 1965–1966 the reconstruction of the Sigismundperiod predecessor of the Fountain of the Lions was finished, and exhibited in the Hungarian National Museum in Budapest.²⁴⁷

Fig. 233. Excavation of the foreground of the great cellar under the southern wing of the northeastern palace, 1955

²⁴⁵ Szakál 1959.

²⁴⁶ Szakál 1963–1966.

²⁴⁷ Szakál 1969–1970.

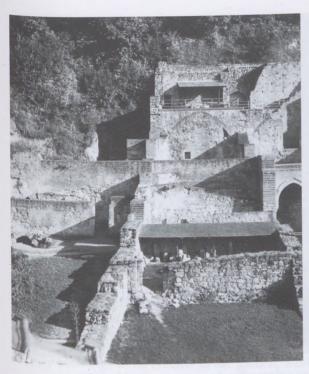


Fig. 234. The northern wing of the northeastern palace after the reconstructions in 1970

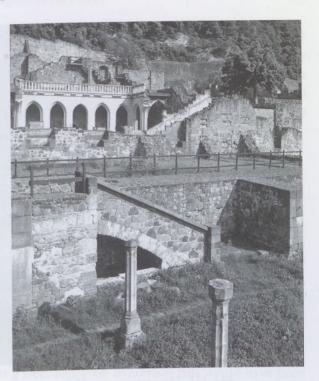


Fig. 235. View of the palace after the reconstructions in 1970



Fig. 236. The reconstructed cloister walk, after 1970



Fig. 237. The reconstructed ornamental courtyard, after 1970

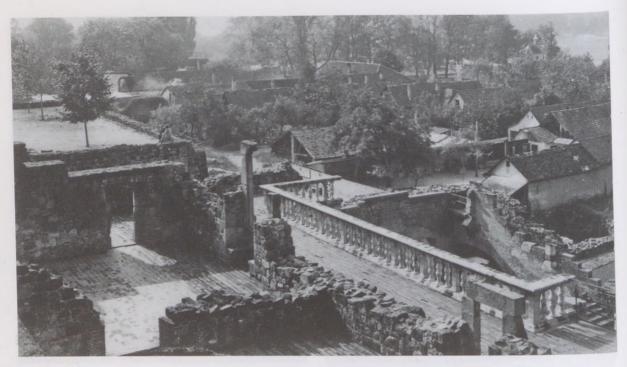


Fig. 238. The eastern wing of the northeastern palace after the reconstructions in 1970

Excavations in the Palace between 1967 and 1975

Within the framework of the monument reconstruction project that started in 1966, the southern wing of the northeastern palace and the big cellar underneath were researched in 1967–1973. Between 1972 and 1975 large-scale surveys were conducted in the area of the northwestern palace. The remains of the Angevin-period wall fountain in the northwestern corner of the palace and fragments of the Sigismundera tile stove were discovered; the latter were scattered on the medieval street level. The most spectacular finding of this period, however, was the Matthias-era bay window, whose substructure yielded a huge amount of Late Gothic sculpture fragments and pieces of other architectural elements. The research continued in 1975 with the exploration of the southern end of the western palace wing, where the remnants of the kitchen were unearthed.²⁴⁸

Reconstruction of the Palace in 1966-1970

By 1966 the ruins became extremely weathered. The original walls suffered considerable freeze damage, and the wall complements built in the 1950s were ruined too. The tasks of monument protection raised the opportunity of putting the ruins on display and modify some of the earlier reconstructions. The rebuilding was supervised by János Sedlmayer. By rebuilding the press house of the big cellar, the block of the northeastern palace was fully complemented. The cellar itself was made suitable for accommodating exhibitions of the material collected in the lapidarium. The cellar's reinforced concrete winding stairs were built in this phase. The rebuilding of the cloister, started by Kálmán Lux in the previous years, continued, following the complementing method applied by Lux who used bricks; these brick wall parts had to be regularly replaced later due to frost damage. The cloister walk was completed by a newly built

²⁴⁸ Héjj 1975.

section that turned to the southern side of the courtyard, and the lower parts of the window jambs were restored on the other sides of the cloister walk. The cloister walk's vault, previously rebuilt by Lux, were modified at the corners, and the upper floor balustrade was also altered (the red marble dwarf pillars were added). János Sedlmayer proposed to transform the modern era house that stood in the place of the northeastern palace into a museum, however a public tender had to be announced in order to make a decision concerning the museum building.

A Tender for Planning the Museum Building at Visegrád in 1972

In 1972 an invitation to tender was announced concerning the building of the King Matthias Museum. The planned museum building was supposed to be built in the area of the former palace garden or on the lot facing the palace; the already known parts of the northwestern palace and the remains that would come to light during the construction would have been incorporated into the museum area. In other areas of the former complex, the plans went only as far as to outline the landscaping of the garden, but the planned construction activity was not allowed to disturb medieval remains. 70 of the 192 contestants who showed interest did eventually submit a plan, and finally 12 of these plans were accepted by the evaluation committee. Margit Pázmándi and Csaba Virág were awarded the first prize; they designed the facility buildings to be erected in the garden, while a steel-and-glass exhibition hall would have been constructed on top of the remains of the northwestern palace. They were commissioned to prepare a plan for the museum building, which they accomplished in 1973. However, the construction works have never been realized.



Fig. 239. The reconstructed ornamental courtyard, after 1970

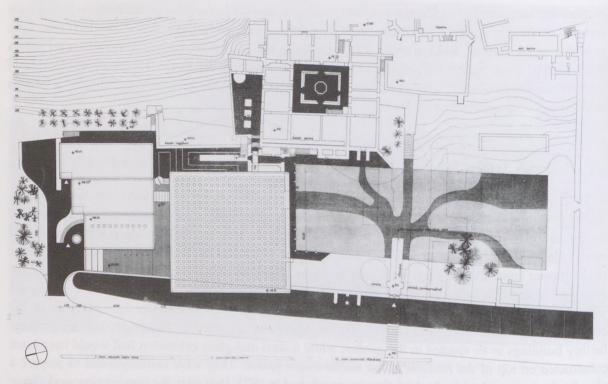


Fig. 240. Program plan of the Visegrad Museum, 1973. Plot drawing, by Csaba Virág and Margit Pázmándi

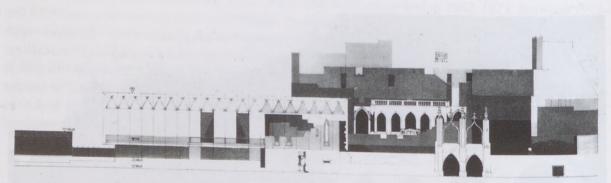


Fig. 241. Program plan of the Visegrad Museum, 1973. The western facade, by Csaba Virág and Margit Pázmándi

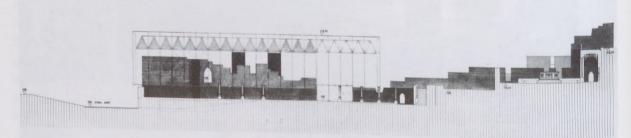


Fig. 242. Program plan of the Visegrad Museum, 1973. East-west section drawing, by Csaba Virág and Margit Pázmándi

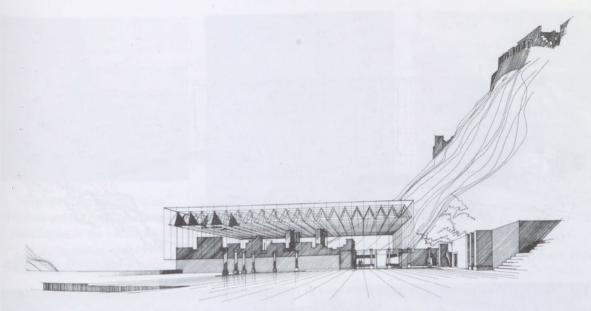


Fig. 243. The first prize winner of the planning tender in 1972: bird's eye view of the palace's lower courtyard from the north, by Margit Pázméndi, Csaba Virág, Levente Thorma, Ottó Chatel, István Perniss, Dr. László Vargha, András Korényi, Endréné Mártha and Anna Vágvölgyi

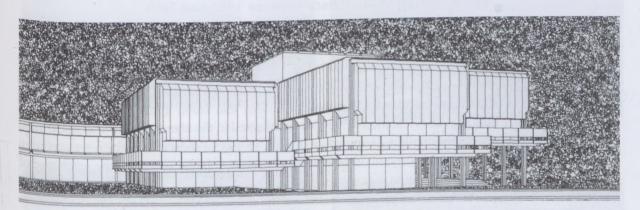


Fig. 244. Second prize winner of the planning tender in 1972: bird's eye view of the museum building planned to be erected in place of the palace garden and the northwestern palace wing, by Zsuzsa Szőke, János Mónus, Róbert Rády, Sándor Szalay and István Lombár

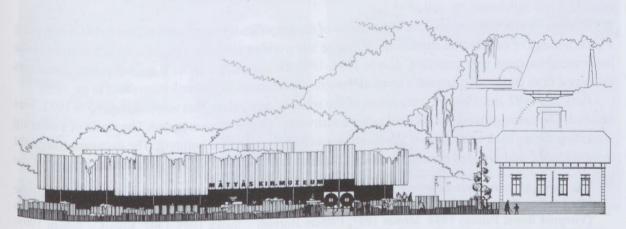


Fig. 245. Second prize winner of the planning tender in 1972: the western facade, by Zsolt Gyüre, Zsoltné Gyúre, István Kovács and György Csejtei

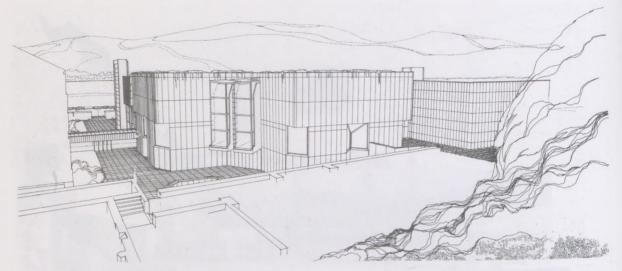


Fig. 246. Third prize winner of the planning tender in 1972: bird's eye view from the southeast, by Endre Rátz and János Vonák

The Research of the Palace between 1983 and 2010

After a decade's break, the excavation of the royal palace and the archaeological analysis of the findings re-started in 1983. These tasks have been, and are still carried out by a large research team under the supervision of Mátyás Szőke. As a result of the work undertaken, the architectural history and the chronology of the medieval construction phases of the palace and its vicinity are now relatively clear.²⁴⁹

In 1983–1984, after the demolition of the modern houses that stood above the remains of the southwestern palace building, an orientation survey was conducted in the area, during which the ground plan of the late fifteenth-century building wing was explored. In 1985 a short authenticating excavation was organized in the ornamental courtyard of the northeastern palace. In the same year the gatehouse of the palace was found but its excavation was not feasible.

Between 1984 and 1997 excavations were undertaken in the northeastern palace and the northern part of the lower reception court. In the first phase, in 1984–1987 the still standing northern wing of the building and its vicinity were investigated, while in 1987–1991 the research targeted the ground floor of the building wing facing the street. The most significant find the latter yielded was a Matthias-era tile stove that had fallen into the cellar.

In connection to this enterprise the bay window of the street facade was brought to light in 1989, providing a great number of new carved stone findings. In the last working phase, in 1992, the middle section of the lower reception court was unearthed, then in 1994–1997 the large-size Charles Robert-era stone house was excavated from under the courtyard's level, along with the remnants of the settlement dated to ca. 1300.

Between 1987 and 1990 the excavation of the southeastern palace that was interrupted in 1951, was finished. The entire ground plan as well as the construction phases were revealed. The waste of a minting workshop dating back to the age of Vladislaus I was discovered in the building. The excavation brought to light a stone-and-wooden house of considerable size, dating back to the Angevin period, in front of the

The results of the research have been published in a number of studies and volumes from 1990 onwards. These count among the most important ones: Buzás 1990; Buzás – Szőke 1992; Buzás 1992; Visegrádi királyi palota (Visegrád Royal Palace) 1994; Mester 1997; Pálóczi Horváth – Szőke 1995–1997; Kocsis – Sabján 1998; Buzás – Lővei 2001; Buzás – Réti – Szőnyi 2001; Buzás – Bodó – Deák 2003; Buzás 2003a; Buzás 2004e; Buzás 2006; Buzás 2007; Buzás 2008a.



Fig. 247. Excavation of an Angevin-period floor and fireplace foundation in the western room of the northern wing of the northeastern palace, 2000



Fig. 248. Excavation of the mint on the middle level of the southeastern palace



Fig. 249. Excavation of the southwestern palace, 1984



Fig. 250. Excavation of the Charles I era building on the upper level of the southeastern palace, 1988



Fig. 251. Excavation of the bay window on the street facade, 1990



Fig. 252. Excavation of the western wing of the northwestern palace, 1992



Fig. 253. Excavation of the Angevin-era building on the ground floor of the southeastern palace, 1990



Fig. 254. Excavation of the foundation of the grand stand of the reception court, 2009

palace building; however, it was not possible to fully excavate it. This was perhaps a treasury from the era of Louis I. A Matthias-era grand stand facing the southern part of the lower reception court was also surveyed and then buried back. Outside the present bordering walls of the palace, on the mountain side an Angevin-period timber house with several building periods and the remains of a stove were explored. In 1990–1991 the foundation of the Matthias-era grand stand was investigated under the southeastern palace wing by opening several test trenches.

In 1987–1989 authenticating excavations of the chapel were undertaken. The yet unexplored layers under the late medieval levels of the northeastern palace were examined between 1992 and 1995; in 1992 this was finished in the area of the northwest hall of the northern wing and the northern flower garden. The excavation of the archaeological layers dating back before the Matthias period in front of the western facade also started this year. Until 1995 three Louis I period pillar foundations were brought to light, built of secondarily used carved stones. These carvings had previously been prepared for a church built in the 1340s, which was never fully finished. The foundation of the Matthias-era flight of stairs that led up to the chapel terrace was excavated in 1997; this yielded a number of Angevin-period stone carvings that originated from the Louis I-era loggia of the ornamental courtyard.

Excavations under the conduct of András Pálóczi-Horváth (Museum of Agriculture) were undertaken in the palace garden between 1993 and 1999. Two timber houses from the Angevin period, two fourteenth-and fifteenth-century fountains and the foundation of an Angevin-period fountain were discovered, along with the terrazzo-floored and timber-framed back room of the Matthias-period garden house. Further details of this house were brought to light in 2002, namely, the foundation walls of the northern room and the retaining wall of the terrace in front.

The palace reconstructions that started in 1995 and sped up in 1997 provided an opportunity to conduct authenticating excavations in the northeastern palace, which served with significant results. During the restoration of the ornamental courtyard the foundation of a flight of stairs was found. In

2000 and 2002 the remains of the Angevin-period house that once stood in the place of the northeastern palace's western wing, were surveyed. The Angevin-period brick floor under the northwestern hall of the ornamental courtyard was also unearthed in 2000, while in 2002 the partition walls and the stove foundation of the Angevin-period house incorporated into the western wing were investigated.

In 2001 the excavation of the lower reception court continued. In the middle of the reception court, in front of the chapel terrace, the southwestern corner of the Charles Robert-era house excavated from under the courtyard's level was brought to light, along with the sill beam of the Louis I-period stone carver's workshop in front. A place where terrazzo was prepared during the palace reconstructions in John Zápolya's time was identified to the south. Between 2002 and 2005 three rooms in the northern wing of the southwestern palace were excavated along with the internal and external facades of this section. In 2003 an area in front of the palace's northern side, across the Fő Street, was surveyed in 2003. This area was left unbuilt in the Middle Ages. Only a fourteenth-century wall was discovered on the northern border of the plot, in line with the palace's northern wall, and the palace's big, fourteenth-century wastewater channel beside it.

Between 2004 and 2006, and later in 2009 the southern fence wall of the palace and the adjoining buildings were researched. A number of significant Angevin- Matthias- and Jagiellonian-era buildings have been discovered here, nevertheless, the excavations are to be continued. Kitchens north of the gatehouse and a flight of stairs leading to the upper-floor loggia of the northwestern palace wing were discovered in 2006. In 2008 an authenticating excavation was undertaken on the chapel terrace, where parts of the previous terrace level were observed. In 2008–2009 the Matthias-era grand stand rising above the southern lower court of the palace was entirely brought to light. A number of baluster fragments and Renaissance ledge remains were collected above its staged foundation, partly from the demolition layer, partly from the foundation itself into which these were secondarily incorporated. Under the northern side of the grand stand a part of an earlier brazier workshop was disclosed.

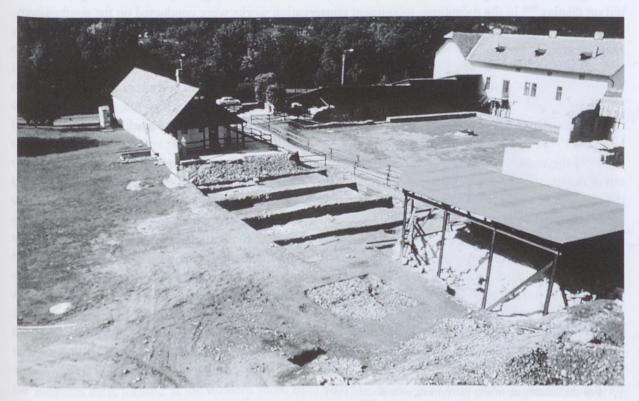


Fig. 255. Survey of the middle section of the reception court, 2001



Fig. 256. A first-floor window niche in the northeastern palace, reconstructed in 2000

Restoration Plans of the Visegrád Palace between 1974 and 1994

The appreciation of the whole palace area and the demolition of most of the modern age houses were finished in the 1970s and 1980s, according to the museum construction plans. After the accomplishment of these tasks the King Matthias Museum commissioned the engineers in 1986 to restore the remains according to a new, more didactic concept. Thus the exhibition halls would have been placed in the partly reconstructed northeastern palace building, while the northwestern palace, left in its nineteenth-century state, would have accommodated all other

facilities. The National Heritage Protection Board, however, refused to discuss the new plans. The excavations conducted in the southeastern palace, however, made the restoration of the ruins necessary, and so in 1991 János Sedlmayr prepared a detailed plan for the reconstruction of the entire palace complex. According to his ideas the western and southeastern buildings of the complex as well as the Franciscan monastery would have been partly rebuilt and covered with protective roofs. At the same time, the Franciscan Monastery would have accommodated all other facilities, while he envisioned the roof-protected parts of the palace as exhibition halls and touristic areas. This plan left the northeastern palace and the chapel untouched. He later prepared a plan to build a protective roof over these as well, however the Monument Protection Office rejected the idea. In 1990–1991 only a lapidarium exhibition was organized in the big cellar of the northeastern palace, where carvings from the Matthias period were put on display. ²⁵⁰ In the meantime, monument conservation works were conducted on the southeastern palace building and as a result three barrel vaulted ground floor halls were reconstructed according to János Sedlmayr's plans.

Reconstruction of the Northeastern Palace between 1994 and 2010

By 1994 the condition of the ruins had become so poor that a further delay of a proper restoration was out of the question. The planning was taken over by Zoltán Deák²⁵¹ who prepared a conception plan for the restoration of the whole palace complex. These plans were accepted by the monument protection committee and so the actual restoration work could begin. In the first three years of this phase the protection of the monuments, interrupted ten years before, had to continue, while the concept plan was further developed and permissions procured. Ruins in life-threatening condition were demolished and replaced by newly built constructions. Smaller as well as large-scale completion works were undertaken in the whole palace area. Between 1994 and 1997 conservation tasks were carried out, a collapsed Baroque cellar vault on the eastern end of the northwestern palace was rebuilt, and the vault of a nineteenth-century cellar adjoining the southwestern corner of the northeastern palace was renovated. In the summer of 1996 we started to renovate the southern wing of the northeastern palace, which also served

²⁵⁰ For the catalogue of the exhibition, see: Buzás 1991.

²⁵¹ On this reconstruction phase and the relevant literature, see the study of Zoltán Deák in the present volume.



Fig. 257. The Renaissance loggia of the northeastern palace, reconstructed in 2000



Fig. 258. The bay window of the northeastern palace, reconstructed in 2000

as a model for further reconstruction. Renovation of the rooms surrounding the ornamental courtyard started in 1998 with the reconstruction of carved stone elements and the restoration of the cloister walk. In spite of the financial difficulties the team succeeded in accomplishing the whole cellar of the northeastern palace, the level of the ornamental courtyard as well as the eastern part of the first floor. The reconstruction of the ornamental courtyard and the Hercules Fountain was finished, and furthermore, we organized an archaeological exhibition in the reconstructed halls of the northern and southern wing that opened from the ornamental courtyard. The lapidarium exhibiting Angevin-period finds, set up in a modern cellar adjoining the big cellar of the palace, was ready by 2001. In 2001-2002 the palace garden was reconstructed. In 2002-2003 we accomplished the renovation of the northeastern palace's great hall; the museum café, located in the western room of the southern wing, was erected and its interior



Fig. 259. The western front of the northeastern palace, reconstructed in 2000

design created. At the same time an archaeological storage room was built on the level between the medieval upper floor and the restored Baroque cellar vault, by creating a supplement space to the short section of the northwestern palace that adjoined the northeastern palace. In 2003 the reconstruction of the Angevin-period fountain in the palace garden was implemented, the medieval plaster- and paint remains of the palace were restored, and it proved possible to buy at least some of the private plots occupying the forecourt of the palace. The palace bath was reconstructed in 2004, along with a fourteenth-century dwelling room and the interior of the royal kitchen. The first room in the Matthias-era ducal apartment was equipped with a reconstructed stove, to which two further stoves were added in the next year. In 2005 the first room was fully furnished. In 2004–2006 the reconstruction of the flight of stairs leading to the chapel terrace was finished, and in 2006 the landscaping in its surroundings was made; a new, barrier-free palace entrance was also built in order to make the museum accessible for disabled visitors. By 2007 an elevator was built in place of a Matthias-period buttress through which the chapel

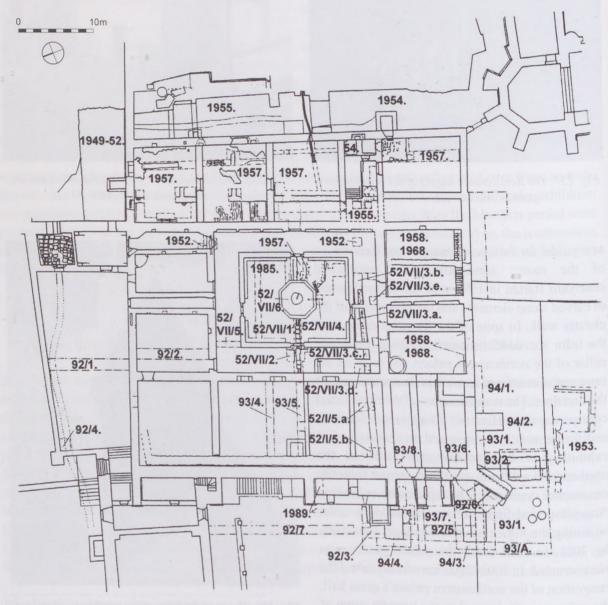


Fig. 260. Excavations in the northeastern palace, 1952-1994

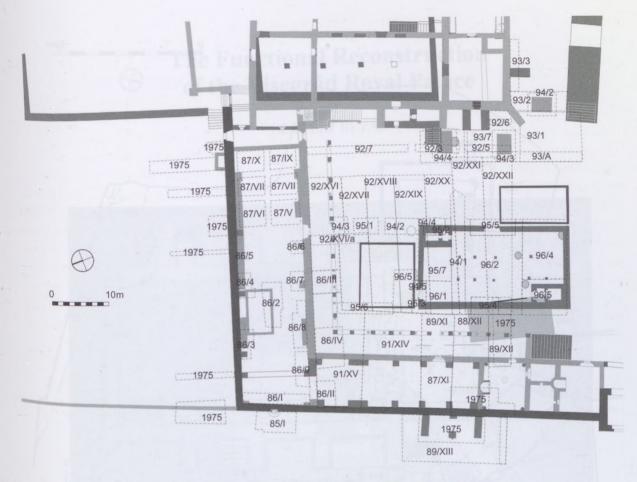


Fig. 261. Excavations in the northwestern palace, 1975-1996

terrace and the palace's first floor are easily accessible. As a first step in the chapel's reconstruction, the vestry's interior was rebuilt in 2008 within the framework of the Year of the Renaissance program; an exhibition was also installed here displaying the Renaissance stone carvings of the chapel. At the same time the interior renovation of the Matthias-era suite in the northeastern palace was finished, and the archaeological exhibition on the ground floor as well as the lapidarium exhibition in the cellar were renewed. The chapel reconstruction continued in 2009–2010 with the partial renovation of the oratory above the vestry, the eastern wall, the organ balcony and the sanctuary.

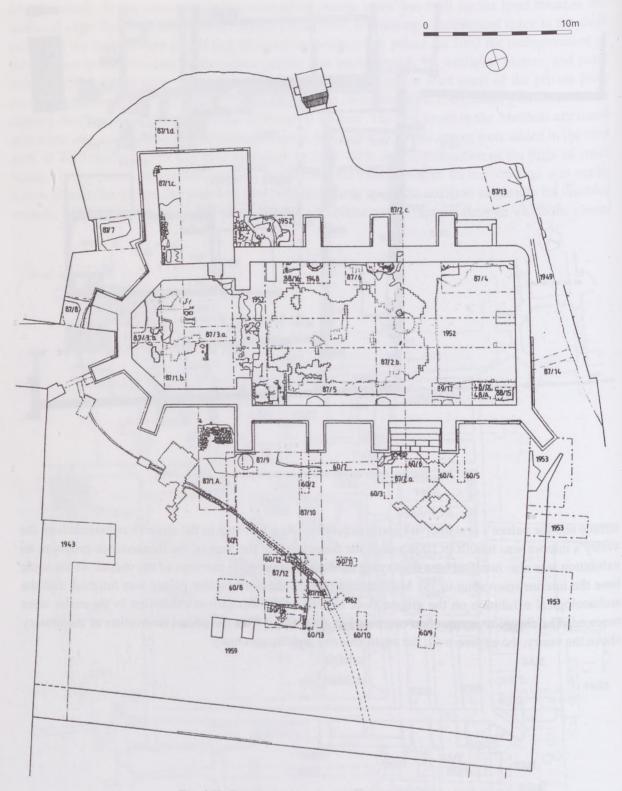
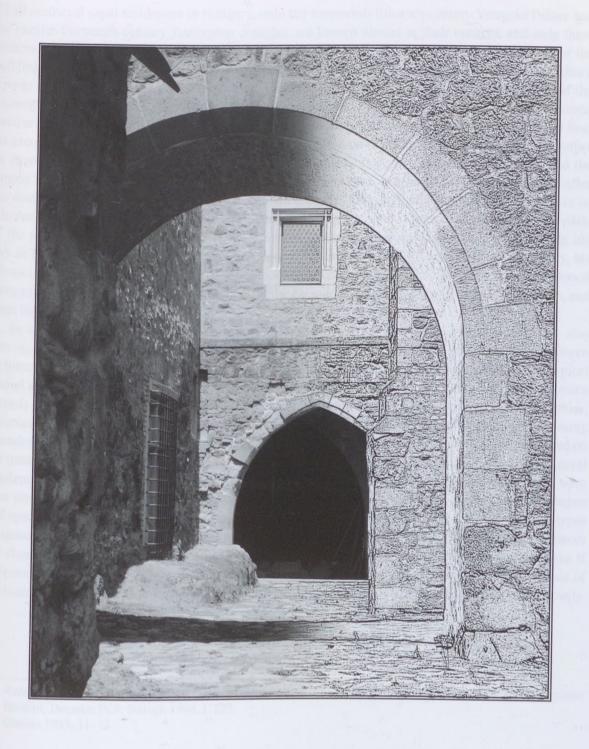


Fig. 262. Excavations on the chapel terrace, 1953–1988

The Functional Reconstruction of the Visegrád Royal Palace

GERGELY BUZÁS



The Functional Reconstruction of the Visegrad Royal Palace

Of all medieval royal residences in Hungary, only the fourteenth-fifteenth-century Visegrad Palace and the twelfth-thirteenth-century Esztergom complex are known almost in their entirety, and only these edifices provide an opportunity to reconstruct their medieval setting and the original function of the buildings, halls, courtyards and gardens. There is little written data at hand: only Antonio Bonfini's reports from the end of the fifteenth century, and Nicolaus Olahus' account from the first half of the sixteenth century² describe the palace. Bonfini's preface to the Latin translation of an architectural treatise by Averulinus (Filarete), which Bonfini wrote in king Matthias' lifetime, is more detailed than his second account. Even though his report on the Visegrad complex is a concise text which is rather an enumeration than a proper description, it lists the most important elements of the palace and the garden. A similar, even more laconic text of his, the Ten Volume of Hungarian Matters, finished after the death of Matthias, presents valuable information on the Visegrad palace garden. The narrative in Nicolaus Olahus' Hungaria is much more detailed; this is a proper description, discussing the parts of the palace in a topographic order. Unfortunately, however, Olahus wrote this account during his stay in Brussels, far away from Hungary, and decades after his visit in Visegrad, and consequently, his otherwise authentic report is spoiled by a number of mistakes and inaccuracies. These aforementioned three sources, nevertheless, enable us to identify the excavated buildings, halls, courtyards, gardens, and most features in the palace complex.

In addition to the written sources, an architectural historical analysis of the complex may also provide information crucial for a proper reconstruction. Medieval architecture – secular as well as church architecture – created complexes by combining well-defined types of buildings and spaces. These typical spatial arrangements are widespread in European medieval architecture, and there are available written records through which different spaces might be interpreted: descriptions, accounts in biographies, inventories, service books and account books. In the last decade scholarship has directed an increasing attention to the functional analysis of royal residences. A number of significant results were published on the matter, such as the analysis of the Louvre in Paris, the papal palace in Avignon or the English royal residences, while in addition to these, certain typical spatial arrangements of secular architecture were also studied. Even though specific spaces might significantly differ in details, the basic space shapes and space connections create characteristic and easily recognizable patterns. The function of these types of spaces certainly depended on the era and the geographic location, besides, multi-functional spaces are characteristic for secular architecture, and therefore, reconstruction will always be sketchy, even if supported by written data. Nevertheless, it is necessary to perform even a rough functional analysis of the buildings, as it provides a crucial means of interpretation and the formal reconstruction of the details.

² Olahus 1938, 11–12.

Antonio Bonfini's preface to the translation of Averulinus' architectural treatise: Balogh 1966, I: 224. Antonio Bonfini, Decades IV.7: Balogh 1966, I: 225.

The Hippodrome

According to Antonio Bonfini's description, the hippodrome, that is, the equestrian track, was situated on the bank of the Danube.³ Bonfini used the same term to designate the yard where tournaments were held in Buda.⁴ In Visegrád, the space between the palace and the Danube must have accommodated similar tournaments. This ground was left unbuilt in the Angevin period too. Organizing such tournaments in the Matthias era might explain why it was necessary to build the bay window decorated with enormous coats of arms and statues,⁵ which probably served as a royal lodge during the tournament festivals. During the 1477–1481 construction of the bay window,⁶ the stone carver's workshop was set up in this open area, and when the work was finished, the ground was graded and it became suitable for accommodating tournaments.⁷ As only a northern, ca. 60 m long area in front of the palace is known, whose closure corresponds to the line of the palace's northern bordering wall,⁸ the size of the hippodrome is uncertain. If the bay window was situated on the central axis of the track, the hippodrome could have covered a 80 m wide area. This is supported by Olahus' description as well, who mentions willow trees on the bank of the Danube between the town and the palace gate, while the palace gardens occupied the other

side. As the town center was located south of the palace, the gardens north of it, the riverbank zone planted with willows must be identified as the area south of the palace gate. Thus only the riverbank in front of and north of the gate could have served as the hippodrome mentioned by Bonfini.

Sites of chivalric equestrian tournaments constituted organic parts of medieval palace complexes. The tournament yard was usually located outside the complex itself, on a meadow or in the gardens. Their size varied. The tournament book written by René of Anjou in 1434 speaks about yards of 200×160 feet $(60 \times 48 \text{ m})$, bordered by a double fence, of which the inner one was 6, while the outer 12 feet high. In England in 1467 the site accommodating the fight between Lord Scales and Anthony, the Bastard of Burgundy

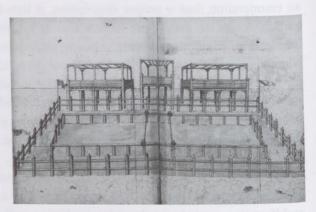


Fig. 2. Representation of a tournament yard in King René of Anjou's tournament book, ca. 1460, Paris, Bibliothèque Nationale de France, Département des Manuscrits, Division Occidentale, Français 2695, fol. 48v-49.

- ³ "Neque minus spectatorem distrahunt virides euripi, piscinae, gymnicus agon, et hyppodromi praeter Danubii ripam longe producti." Antonio Bonfini's preface to the translation of Averulinus' architectural treatise: Balogh 1966, I: 44.
- ⁴ Antonio Bonfini, Decades IV.2: Balogh 1966, I: 44.
- ⁵ Buzás Lővei 2001.
- ⁶ Buzás Lővei 2001, 29.
- During the 2003 excavations led by Mátyás Szőke this grounding level ws brought to light. It consisted of stone powder and stone fragments associated with the coarse limestone carvings used for the bay window.
- Mátyás Szőke examined the area in front of the palace's northern facade and concluded that it was built up in the Middle Ages. In the line of the palace's northern bordering wall, parallel to the wastewater drain, a fourteenth-century wall was discovered, oriented from east to west, which bordered the open area from the north.
- 9 "Porta huius patet in Danubium a se bis centum circiter passus recedentem, quo interstitio per id spatii, qoud est inter oppidum et portam, consitae sunt salices. Altera ex parte orientalis aulae hortus est vitibus et arboribus fructiferis amaenus." Olahus 1938, 11.
- At Kenilworth castle, a place "in medio Gardini pro le justyngplace" was mentioned in an 1463 source. Harvey 1981, 106.
- 11 Kovács 1995, 120.

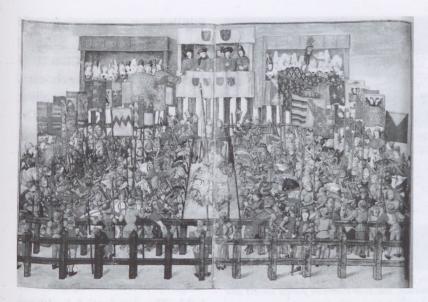


Fig. 3. Representation of a knightly tournament in King René of Anjou's tournament book, ca. 1460, Paris, Bibliothèque Nationale de France, Département des Manuscrits, Division occidentale, Français 2695, fol. 97v-98.

was 270 × 240 feet in size (82 × 73 m). 12 Tournament yards in England during the reign of Henry VIII had different sizes: the one at Eltham was 420×250 feet (128 × 76 m), at Whitehall 480×80 feet (146 × 24 m), at Greenwich 650 × 250 feet $(198 \times 76 \text{ m})$, the so-called yard of the Golden Fleece was $900 \times 328 \text{ feet } (274 \times 100 \text{ m}),$ while the one at Hampton Court was as huge as 1000 × 450 feet $(305 \times 137 \text{ m})$. There were, however, fenced areas inside these yards, where the actual tournaments took place, and according to a 1467 source from Greenwich, these were smaller in size.13 In a Hungarian context there are data on knightly

tournaments from the Sigismund era onwards. ¹⁴ Galeotto Marzio reports on a tournament between king Matthias and the Bohemian knight Holubar, and names the location where the fight was held as the St Sigismund street. ¹⁵ This might be identified as part of the street leading from the palace to the St Sigismund provostry, which widened to a square near the palace. The size of this square was 85 × 34 m, which is close to the assumed size of the tournament yard in front of the Visegrád palace, and its location is similar too.

The Reception Courtyard

The main entrance of the Visegrád palace led through a gatehouse built in the 1350s on the central axis of the complex. This gatehouse must have served rather symbolic than defensive aims, because the complex was seemingly not even enclosed by a bordering wall in the Angevin period. A similar role is ascribed to the late fourteenth-century gatehouse of the Buda palace: the high, slender building, decorated with a ring of balconies, was the highest point of the palace according to fifteenth to seventeenth-century illustrations. ¹⁶

The almost regular square-shaped Visegrád complex, built in the second half of the fourteenth century, encircled a large, central courtyard. According to Nicolaus Olahus, this central yard appeared as a huge flowery field in front of those who entered the gate.¹⁷ Due to its central location, this yard

Thurley 1993, 181.

Thurley 1993, 182.

¹⁴ Kovács 1999, 152.

¹⁵ Balogh 1966, I: 44.

Buzás 1997a, 83–84, figs. 16–18.

[&]quot;Oculis ingredientium portam offertur statim area spaciosissima, in omni parte viridis, floribus pratensibus vermans." Olahus 1938, 11.

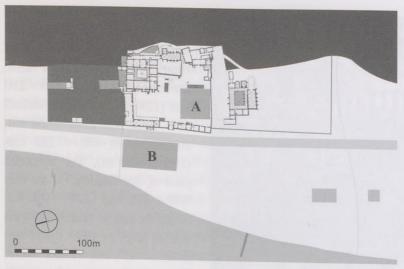


Fig. 4. The royal palace and its vicinities; the tournament yards (A-B) are marked in gray

fulfilled an organizing role complex. Separate buildings of different functions opened from here: storehouses, workshops, great halls, dwelling buildings, and the chapel. The courtyard was, however, not only a place for traffic, but also an independent area serving purposes of representation. This area was a public space - at least at times - where members of the court could meet the subjects, where festivities (e.g. knightly tournaments) could be held. The residential buildings received their oft-used Latin name, curia (and its Hungarian

counterpart, udvar), after this courtyard. The Esztergom palace was already equipped with a similar courtyard around 1200, with a spatial arrangement resembling the Visegrád palace; the mid-fourteenthcentury Magna Curia or Kammerhof of Buda and the late fourteenth-century edifices of the southern Buda palace also featured similar courtyards. A number of analogies can be counted from other regions of Europe, from the great courtyard of the Cité palace in Paris to the external courtyard of the papal palace in Avignon and of Hampton Court. Usually the presence of such courtyards differentiates between actual residences and ad hoc ones. Castles used by kings for personal rather than for representational purposes in Europe in the time of the Gothic typically had a regular ground plan and an inner courtyard from which all rooms and halls opened, and thus this central courtyard served the functions of the great yards of representational palaces and of the inner yards of dwelling buildings alike. It is not surprising that castles featuring a single courtyard became the most typical type of aristocratic private residences. 18 The Louvre in Paris is a special example which was originally built in the thirteenth century as a fortification and a residence of secondary importance, and later, in the mid-fourteenth century, was turned into the main residence of Charles IV. The transformation of the complex, however, did not alter the overall spatial arrangement, and thus the only courtyard served mainly as a public reception hall, where subjects even had the opportunity to meet the king in person on his way to the chapel. 19 Contrary to these, in the Perpignan residence of the kings of Majorca, although the regular square-shaped ground plan and the central courtyard was kept, the large courtyard used for purposes of status display was separated from the inner courtyards belonging to the king's and the queen's suites.20

At Visegrad the southern half of the reception court played a distinguished role in the Matthias period. A grandstand was built on its side, probably at the time when the ornamental courtyard was transformed in 1484, as it is attested by the Renaissance balusters found incorporated into the structure's foundation and also around it. The grandstand's structure, the traces of its flight of stairs, and the roof tile fragments recovered behind its middle part suggest that the construction had two flights of stairs without a roof on each side, while its terrace-likes middle part was covered by a roof. If this grandstand was built in the central axis of the corresponding part of the yard, then the latter must have been 46×46 m

¹⁸ Buzás 2001a

¹⁹ Whiteley 1994b, 50.

Le Palais des Rois de Majorque 1985, 20.

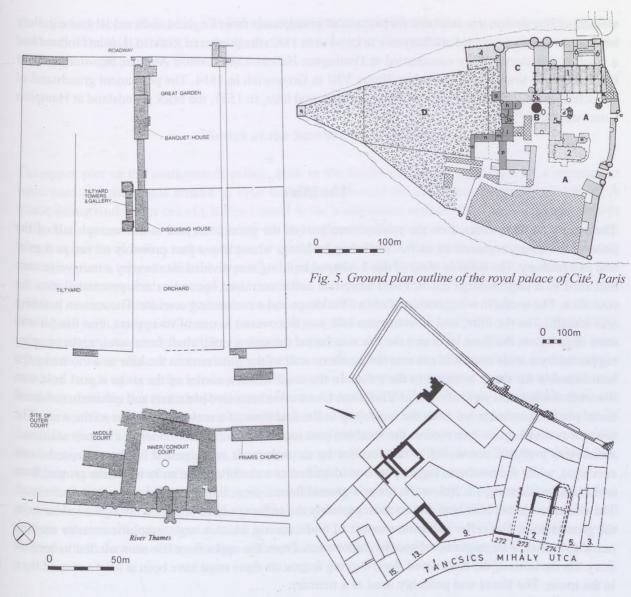


Fig. 6. Ground plan outline of the Greenwich palace

Fig. 7. Ground plan of the Magna Curia in Buda

large, which is not long enough for a hippodrome, but suitable to accommodate combat on foot. The grandstand's structure supports this hypothesis too, because its lowest seats are situated practically on the medieval floor level, making the presence of a fence usually used in equestrian tournament yards highly improbable, as it would have hindered the view. If this area was indeed used for combat on foot, it might be identified with the *gymnicus agon* mentioned by Bonfini.²¹ Although not much is known about grandstands used for watching foot combats, a considerable amount of data is available on those typical for equestrian tournaments. The stand from which the royal family watched the fight always had a central position; this was usually a lodge covered with roof. At the aforementioned 1467 fight between Lord Scales and the Bastard of Burgundy, the grandstands of the court members were built on the two sides of Edward IV's lodge.²² The tournament yards and the grandstands were usually only temporarily

Thurley 1993, 181.

Antonio Bonfini's preface to the translation of Averulinus' architectural treatise: Balogh 1966, I: 224

erected, although data are available on permanent grandstands from England. Edward III had a gallery built on the tournament yard at Cheapside in London in 1332; the brother of Richard II, John Holland had a similar, two-story gallery constructed at Dartington Hall in 1389–1399.²³ Another two-story gallery flanked by two towers was erected by Henry VIII in Greenwich in 1514. The permanent grandstand of Whitehall palace was constructed at the same time, and later, in 1537, the brick grandstand at Hampton Court was built.²⁴

The Mint

The palace building erected on the southeastern part of the great courtyard in the second half of the fourteenth century replaced an earlier workshop building, whose lower part probably served as a mint and as a treasury. The hillside wing of this L-shaped building was divided into two by a transverse arch and used as a huge storage room. From here, two cellar corridors opened, which penetrated into the rock face. The southern wing consisted of two buildings and a connecting corridor. The eastern building was identified as the mint, and an enormous kiln was discovered in one of its corners. The fire pit was sunk deep below the floor level and the fire was fueled through a small shaft from outside. An opening supported by a wide arch was cut into the northern wall of the mint next to the kiln so as to make the heat bearable for those working in the room. In the southwestern corner of the room a post hole was discovered whose fill yielded coins of Vladislaus I, as well as unminted planchets and unhammered small metal plates. A corridor led from the workshop to the first floor of a rectangular tower to the west. The tower was divided into two rooms: the southern part seems to have accommodated a narrow staircase, which was probably connected to the corridor by an arch (as it is suggested by the collapsed stone carvings), while the northern, bigger part was identified as a chamber. The stairs led to the ground floor which had no doors at all. Below the tower's ground floor a deep, timber-roofed cellar was discovered. The staircase did not lead here and so most probably the cellar could be accessed through a ladder from the ground floor. The cellar yielded a number of finds, among which a large, graphitic ceramic melting pot with a thick wall might be of special importance. From the upper floor the staircase led to another story. On the basis of the discovered stone carving fragments there must have been at least a second floor in the tower. The tower was probably used as a treasury.

In the southeastern corner of the building section, the mint and the eastern storage room flanked a small inner courtyard, with the cesspool shafts of the upper floor privies in one corner. The courtyard could be accessed from the mint through a door cut into the western wall. The door on the southern wall of the courtyard might have opened to a later demolished staircase leading both to the second floor of the palace to the east and to a corridor above the mint through which the rooms above the storage room could be accessed. This corridor was supported by a pillar; its foundation was unearthed inside the mint. Two rooms were built on the first floor above the storage room, of which the northern one was bigger. The dividing wall between them was supported by the ground floor transverse arch. The bigger room could in all probability be accessed through the staircase tower erected beside the northwestern corner of the building wing. These two rooms might have constituted a simple suite, and their connection to the mint suggests an office-holder resident with tasks related to the workshop.

The structure and function of the southeastern palace building were altered during the transformations under Matthias' rule. The ground floor mint probably operated further as a goldsmith's workshop, and

²³ Harvey 1981, 106

²⁴ Thurley 1993, 181.

the adjoining upper floor suite lost its representative role and rather served as accommodation for the workers of the mint. This is attested by the fact that the mint's workshop refuse was thrown out of the building through the privy of this very suite.

Suites of the Southeastern Palace

The upper part of the southeastern palace, built in the fourteenth century, consisted of a rectangular inner yard and the rooms around it. Four buildings embraced the courtyard from three directions. A house dating back to the era of Charles I stood in the southeastern corner of the yard, with a two-room suite on its ground floor and another on its upper floor. Nothing has been preserved of the western wing's upper level, however the springer of a supporting arch below its partition wall, observed during the excavations, suggests that the upper floor space was divided into two rooms also in this case, and so a similar two-rooms suite must have comprised the upper floor, which could be accessed through a winding staircase located on the northwestern corner of the building wing. The bigger room of the two could have been equipped with a privy as well, above the cesspool shaft north of the room. The building wing bordering the courtyard from the north also consisted of two rooms. Another privy might have opened from the western room. A flight of stairs on the northern side of the building, in front of the southern facade of the chapel, led up here. The eastern room of this wing was partly carved out of the rock face. Initially this room had two levels but the timber roof dividing them was later dismantled and a single space was created. It is uncertain whether this transformation was arranged under the reign of Louis I or that of king Matthias, and it is also dubious if the northern and western wings had two levels in the fourteenth century. Nevertheless, the two-room suites, with rooms both accessible from the outside, probably accommodated officials of the court, or might be interpreted as guest suits.

In the Matthias period the upper level of the southeastern palace was transformed too. By dismantling a partition wall in the northern wing a great hall was created, which was heated by a fireplace. This hall and the other rooms might have served as a dwelling of the *comes curialis* of Visegrád – who, by the way, also held the title of the castellan of the palace as well as the *comes provinciae* of Pilis county.

Kitchens and Storage Rooms

On the ground floor of the buildings bordering the central courtyard from the north, storage rooms, kitchens and a wine cellar were situated. The spacious, stone-vaulted ground floor storage room of the northern wing was lightened by narrow cellar windows. Its analogies are found under the fifteenth-century Sigismund palace of Buda or the great hall of the Esztergom palace, even though in the latter two cases the storage rooms are arranged in two rows. The roots of this space type are identified as the long, vaulted halls of the castles in the Holy Land. In the building of the Avignon papal palace Benedict XIII had built between 1334–1342, which also accommodates a central courtyard, the wine cellar and the food storage room were located on the lowest floor of the western and southern wings.²⁵ The archaeological finds these rooms yielded in Visegrád made it possible to identify their function: the room under the western wing was equipped with a fish-smoking chamber made of wood but with a

Schimmelpfennig 1994, 37.

brick foundation,²⁶ while a large, walled ice pit was found below the northern wing. A similar ice pit is known from the ground floor of one of the wings of the Nagykanizsa palace.²⁷ The wine cellar under the southern wing of the northeastern palace opened to the same courtyard as the kitchens and the storage rooms. The unvaulted fore room equipped with a wine-pressing vat was probably a press house. The vault of the second room was constructed in the Sigismund period. The upper levels of the building could be accessed from here through a winding staircase.

Only parts of the mid-fourteenth-century, Angevin-period kitchen have been excavated. A fireplace-like oven was unearthed on the northern wall of the square-shaped hall that opened from the central courtyard north of the gatehouse, in the western wing. The kitchen resembles the late fourteenth-century kitchen of the castle of Thil in Burgundy. The latter, barrel vaulted kitchen was also located on the ground floor and opened to the courtyard with a door and a small window. It had no central chimney, however three fireplaces were attached to its walls from the outside.²⁸

The monumental southwestern kitchen wing south of the gatehouse was constructed during Sigismund's reign. At the two ends of the big ground floor kitchen two transverse arches supported the chimney vaults. This arrangement mirrors and doubles the fourteenth-century kitchen of the bishop's palace in Esztergom, where only one chimney vault was built.²⁹ Three rooms, all of them accessible through separate entrances, adjoined the two sides of this long kitchen hall of the Visegrád palace. The spatial order of the wing resembles an early fifteenth-century building on the external courtyard of the Tarascon castle, whose kitchen and the adjoining rooms, as well as the refectory of the guards, are mentioned in a 1457 inventory.³⁰

The kitchens were also modified in the Matthias period: the kitchen of the southwestern wing was dismantled and a two-story dwelling was erected in its place. The room north of the Angevin-period kitchen, on the other hand, was transformed into another kitchen. Round pillars were placed in the room's corners, which probably supported a chimney vault; this is also suggested by the traces of a central fireplace in the room. Another fireplace was incorporated into the northern wall, and a third, smaller one was built beside the western wall. Consequently, the kitchen must have had an open central fireplace in the middle, to which separate fireplaces were added. A similar arrangement was observed in the fifteenth-century kitchen of the palace of Mountreuil-Bellay.³¹ At the time of this transformation, Visegrád was not a royal seat anymore, and so the number of court members who resided here must have significantly decreased, which would explain why the huge kitchen was not needed anymore but a smaller one was built instead. The building erected in place of the southwestern wing's kitchen perhaps served as the residence of the personnel or as a guesthouse.

The southern corner room on the first floor of the northeastern palace's eastern wing, built in the 1360s, was also identified as a kitchen. This kitchen opened from the staircase which led to the second floor. A large fireplace and an oven were found in one of its corners; the oven protruded from the building on the outside. Since the neighboring rooms served as suites for the king and his family, this kitchen must be interpreted as a private royal kitchen. Private kitchens serving the royal family, separately from the large kitchens cooking for other members of the court, existed from the thirteenth century

Inside the chamber, founded with a single row of bricks, a thick layer of ash was observed which yielded fishbones and scales in large quantities.

According to the excavator's report, two "cellar-like" rooms were found under the two terminal rooms of the northern castle wing beside the chapel, as deep as 2.5 m under the ground level, with their floors reaching the groundwater table. This description corresponds to the ice pit excavated from under the great hall of the Visegrád palace. Méri 1988, fig. 2.

²⁸ Mesqui 1993, II: fig. 161.

²⁹ Horváth 1990a, 40, figs. 5–7.

³⁰ Pressouyre 1982

³¹ Mesqui 1993, II: 141–142; I: fig. 57, 167.

onwards; an example is known from the palace of Claredon, England, from 1245. In the Avignon papal palace a private kitchen supplementing the pope's private refectory, the *tinellum parvum*, was built in the 1330s, during the papacy of Benedict XII.³² From the fifteenth-sixteenth century onwards the use of such private kitchens became widespread. These were usually placed next to the royal suite, and the strictly controlled meals prepared here were served only for the monarch and the royal family.³³

Another small kitchen, consisting of two rooms, was created in the southwestern corner of the upper level courtyard of the southeastern palace, built in the second half of the fourteenth century. The waste water was led away through a stone duct from the smaller, southern room of the kitchen. The larger, northern kitchen room was equipped with a baking oven made of bricks with a stone overlay. This kitchen must have served the officials who were accommodated on the upper floor of the southeastern palace.

The Great Halls

The wing that closed the courtyard from the north, built in the 1350s, contained the largest hall of the palace. Its size is estimated to 11×38.5 m, which means a length to width proportion of 1 to

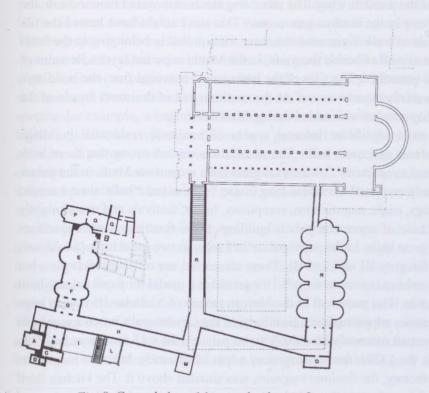


Fig. 8. Ground plan of the papal palace in Laterano

3.5. I was possibly divided into two separate levels. This is suggested by the fact that the pillars discovered on the ground floor probably supported a barrel vault, but only a groin vault could have covered the 11 m long western section, and this groin vault must have been higher than the barrel vault. In all likelihood, there was a platform-like upper level in the great hall, from which the rooms of the western wing could be accessed. Another smaller room of 11 × 11 m was attached to the upper level, to which the winding staircase in the southeastern corner of the building led up.34 It seems that this room served as an entrance hall in front of the great hall.

³² Gagnière 1985, plan II.

³³ Thurley 1993, 160–161.

Another staircase was built later in the northeastern corner of the reception courtyard, which connected the corridor in front of the great hall and the courtyard. A richly ornamented, shoulder-arched door surround fragment dating back to the Matthias period was brought to light in the vicinity, which probably belonged to the entrance connecting the loggia and the great hall. The present reconstruction of the flight of stairs leading from the northern flower garden to the hall is also based on a Matthias-era structure.



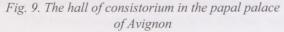




Fig. 10. The tinellum magnum in the papal palace of Avignon

The royal suite, which was created in the 1350s, adjoined the great hall from the southwest. This suite, however, lost its function already in the 1360s, parallel to the construction of the northeastern palace. Thus, its rooms probably served other functions of status display afterwards. Another greater hall adjoined the 8 × 8 m room of the western wing. The stone fragments discovered here indicate the presence of an Angevin-period stove in the northeastern corner. This stove might have heated the tile stove of the adjoining smaller room as well. Sigismund-era stove tiles, probably belonging to the latter structure, were found on the street as well as beside the room, in the Matthias-period layers. Remains of a Matthias-period stove were also unearthed. The tiles of the latter were recovered from the building's demolition layer, near the room's southeastern corner. At the southern end of the street facade of the greater hall a richly ornamented bay window was added during Matthias' reign.

Great halls constituted the most significant internal spaces of medieval residential buildings also used as status indicators, palaces and town halls. The association was so strong that these halls themselves were usually designated as "palaces". ³⁶ Medieval great halls were rooted both in the palace halls of Late Antiquity and the early medieval Germanic long house.³⁷ These great halls always served as multi-functional spaces: hearings, trials, negotiations, receptions, feasts, festivals and even knightly tournaments were held here. In case of enormous palace buildings these functions were sometimes associated with several, separate great halls. In the papal palace of Laterano two great halls (triclinium) were built during the papacy of Gregory III and Leo III. These were used not only as refectories, but also for holding ecclesiastical assemblies (consistorium). 38 This served as a model for papal palaces built in the thirteenth-fourteenth centuries. The great hall in the Vatican palace of Nicholas III was as huge as 33.6 × 11.8 m, and had two smaller adjoining halls. Similarly, in the Orvieto palace two lesser halls flanked the great hall, while one small room adjoined the Viterbo palace's 30 × 11.5 m great hall.³⁹ In the Avignon papal palace built in the 1330s, the consistorium, a special assembly hall was located on the ground floor, and the great refectory, the tinellum magnum, was situated above it. The kitchen itself could be accessed from the end of the refectory through the dressatorium, a room where the meals were prepared to be served. On the other side a ceremonial space, a camera paramenti of lesser size was set up, in which the papal throne was placed. The row of rooms of the papal suite could be accessed from

³⁵ Buzás – Lővei 1993

³⁶ Kubinyi 1992

³⁷ Thompson 1995

³⁸ Radke 1994, 13, 16.

³⁹ Radke 1994, 13–14.

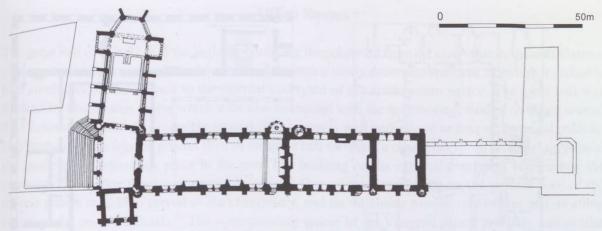


Fig. 11. Ground plan of the duke's palace in Bourges

this chamber. ⁴⁰ The layout with two great halls located next to each other was preserved in the fifteenth-century papal palaces, too. In the eastern wing of the Palazzo Venezia in Rome, dated to the 1460s, a smaller and a huge representational hall were created. ⁴¹ The representational halls of the Visegrád palace are more closely connected to secular buildings of fourteenth-century monarchs. The example known in most details is the Louvre in Paris, owing to the biography of Charles V by Christine de Pisan. The biography points out that feasts were held in the *grande salle*, while the adjoining, smaller *grande chambre* was the place were assemblies of the great council took place, ⁴² and after receptions the king drew back here, accompanied by members of the aristocracy. ⁴³ During the reign of Charles VI the largest residences of French dukes started to copy the layout of royal residences. The palace of Bourges is a spectacular example, where the row of representational halls resemble that in the Visegrád palace: the hallway (*galerie du cerf*) was adjoined by a great hall of 16 × 51 m, from which the *chambre à parer* or *chambre da parement*, that is, a hall for hearings and receptions, could be accessed, next to which the *chambre de conseil* or *chambre de retrait* was situated, which served as a place for private auditions and informal receptions. ⁴⁴ In the other palace of the duke of Berry, in Riom, a similar spatial arrangement was observed. ⁴⁵

The positioning of the two halls in Visegrád was not exceptional. In the Citè palace in Paris the *grande chambre* adjoins the two-story great hall in a perpendicular angle. A similar spatial arrangement is seen in the royal castle of Prague, where the so-called Old Diet hall adjoins the Vladislaus hall.⁴⁶ Hungarian examples are also known, e.g. from Diósgyőr, where a tower room, a one-nave hall and an adjoining small room were connected to the two-nave great hall on the upper level of the northern wing in an L shape.⁴⁷ The upper floor of the northern and western wings of the Zólyom castle contains two rooms in a similar spatial arrangement. A smaller hall with a red marble floor was attached to the southern end of the great hall building on the external courtyard of the Esztergom palace in the early sixteenth century.⁴⁸ A comparable

⁴⁰ Schimmelpfennig 1994, 29, 33-35.

⁴¹ Thornton 1991, fig. 326.

⁴² Whiteley 1994b, 50.

⁴³ Whiteley 1992, 64.

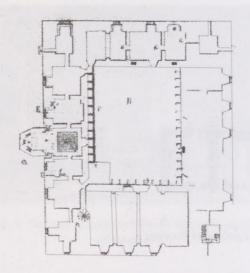
⁴⁴ Whiteley 1994b

⁴⁵ Mesqui 1993, II: 144, fig. 110.

⁴⁶ Homolka – Krása – Mencl – Pešina – Petrán 1984, 78–79.

This row of rooms is depicted on a 1758 drawing by Hugó Hazael. See: Czeglédy 1988, plate II.

⁴⁸ Horváth 1990a, 40.



G B L A

Fig. 12. Ground plan of the upper floor of the Diósgyőr Castle, an eighteenth-century drawing by Hugo Hazael

Fig. 13. Ground plan of the upper floor of the Palazzo
Venezia in Rome

spatial composition might have characterized the Buda palace, with the great hall comprising the southern wing of the second courtyard and the perpendicularly adjoining western wing, as well as at the northern great hall building of the Sigismund palace and the perpendicularly connected western palace building. Moreover, in Buda – just as in Visegrád – the kitchen must have been attached to the latter building, according to Schedel's engraving. On the basis of the known examples it seems likely that the northern great hall in Visegrád served as a feast hall, while the smaller, western one was a council hall, and a tiny hearing chamber was situated between them.

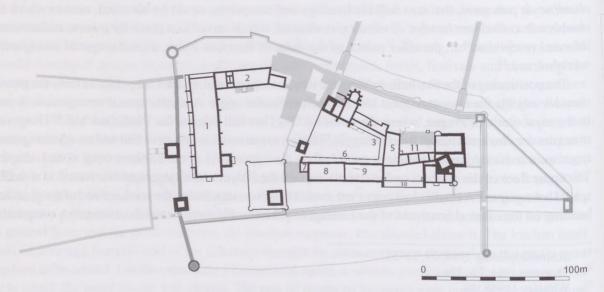


Fig. 14. Ground plan of the second floor of the royal palace in Buda

1 Great hall with a wooden vault 2 A floor of the "Unfinished Palace", probably dating back to the Jagiellon period 3 Matthias-period loggia and a representation of constellations 4 Hall with a ceiling decorated with cauldrons 5 Hall with a ceiling decorated with dragons 6 Jagiellon-period loggia 7 Staircase

8 Hall with the statues of Hungarian kings 9 A hall with a ceiling decorated with flowers 10 The bridge connecting the southwestern and northeastern palace wings 11 Suite

Office Rooms

The great hall of 11 × 22 m in the building bordering the courtyard from the east – that is, the northeastern palace – could be accessed from the courtyard through a richly decorated staircase, although it probably had another door that opened to the internal courtyard of the northeastern palace. The great hall was flanked by two smaller rooms which were also connected with the neighboring, modest dwelling rooms. The function of publicly accessible ground floor rooms is well understood in case of the papal palaces. In Viterbo and Orvieto the ground floor of the great hall served as a chancellery;⁴⁹ in the Avignon palace, the audientia publica took place in the great hall building on the external courtyard, adjoined by the room of the auditor litterarum contradictarum. 50 One of the largest halls on the ground floor of the duke's palace in Urbino served as the chancellery, and the adjoining rooms were offices and dwelling suites of the court's officials.⁵¹ The corresponding spaces of the Visegrad palace probably had similar functions, as courtrooms, chancelleries and other office rooms, while the two connected dwelling rooms might have been used by the officials. In the Matthias period the floor level of the vaulted great hall on the western wing's ground floor and the adjoining corner room was lowered, which meant that these were no longer connected with the rest of the northeastern palace, and could only be accessed from the lower courtyard. This signifies that even though these rooms probably kept their functions as offices, in the new palace this official space was clearly separated from the private space of the royal family.

The Ornamental Courtyard

The inner courtyard of the northeastern palace was a closed, rectangular yard built in the 1360s, bordered by two-story palace wings on all sides and loggias on three sides. An embellished, open upper floor loggia was built above the ground floor arches supported by simple, octagonal pillars. Its parapet was decorated with blind traceries, and supported slender pillars whose outside molding had a simple, half octagonal shape, and to which small columns with richly ornamented capitals were attached from the inside. A tower-like, two-level ornamental fountain stood in the middle of the courtyard. In 1484, during the reign of king Matthias, the courtyard was profoundly transformed. The previous loggia and ornamental fountain were demolished, and a regular, two-level, Gothic cloister walk was erected, with a Renaissance loggia on its upper floor, and a Renaissance fountain was built in the middle of the courtyard. The style of the late Gothic cloister walk corresponds to the style characteristic for the workshop with which the construction works of the comes curiae of Buda are associated, a style typical for the rest of the Visegrad palace as well.52 The cloister walk's doors with the transom lights above them testify to a connection between this workshop and the one associated with the St. Stephen's Cathedral



Fig. 15. The southern and eastern porch of the Black Church in Braşov

⁴⁹ Radke 1994, 17-18.

⁵⁰ Schimmelpfennig 1994, 27.

⁵¹ Palazzo di Federico de Montefeltro 1985, 194.

⁵² Buzás 1990, 42–44.



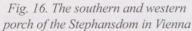




Fig. 17. The reconstructed ornamental courtyard of the Visegrád palace

in Vienna,⁵³ because the prefigurations of these doors are found in the cathedral's gateways. Another example from medieval Hungary has been preserved in the southern gateway of the Black Church in Braşov. The closest analogy for the consoles of the cloister walk's vault is found on the loggia of the Hunyad Castle,⁵⁴ where these might have been added during the castle's transformation in the time of Matthias.⁵⁵ The cloister walk itself, however, is unparalleled in secular architecture, and strictly follows the architectural style usually associated with cloister walks in monasteries.

The upper-floor loggia encircling the whole courtyard is first and foremost typical for the quattrocento architecture of Rome. The most monumental example that was built before the one in Visegrád is the loggia in the garden of Palazzo Venezia, a building Giovanni Dalmata also worked on. However, in case of the quattrocento Roman loggias, the parapet always has a compact structure. ⁵⁶ Loggias connected with a balustrade and embracing a courtyard were unknown even in Italy in 1484, when the Visegrád edifice was built. It was only later, from the middle of the 1490s, that such loggias appeared on Italian soil, and in the sixteenth century they gained a special role in the palace architecture of Genoa.

Dwellings of the Servants

Dwelling rooms of the servants opened from the inner courtyard of the northeastern palace, on the ground floor and on the first floor of the eastern wing. Initially there were eight such dwelling rooms but later, when a staircase was constructed, their number decreased to seven. All rooms had heating

⁵³ Buzás 1990a, 139.

⁵⁴ Nagy 1944, 191.

⁵⁵ Buzás 1990a, 137.

On the fifteenth-century loggias of Rome, see: Tomei 1942, Marta 1995.

equipment, usually a fireplace, and all rooms had a separate entrance door as well as a small window looking to the outside and placed at a considerable height. The first-floor rooms of the eastern wing opened to a closed hallway and not to the open corridor that embraced the inner courtyard. The closed hallway could be approached from the corridor which opened from the chapel terrace and on which the sedilia were placed. This signifies that these rooms were strictly separated from the suites of the aristocracy on the first floor.

Analogies to these rooms are found in residential buildings everywhere throughout fourteenthfifteenth-century Europe. Thirteen small rooms were built on the ground floor of Castilla de Bellver on Palma de Mallorca in the first half of the fourteenth century.⁵⁷ This room type appeared also in Central Europe in this period. The ground floor of the castle of Menštejn comprised four independent rooms whose doors opened to the courtyard; all of them had a window.⁵⁸ A similar row of rooms was situated on the ground floor of the chamberhouse at Kutná Hora.⁵⁹ Such spaces are also to be found in mid-fourteenth-century Italian castles, such as Spoleto in Central Italy or Pandino in Northern Italy. The castle in Montaner, Southern France, which was built between 1374 and 1380, had an irregular polygonal ground plan, and had eight rooms with a separate entrance each on the ground floor, beside the great hall and the kitchen. 60 In the palace of Mystras on the Peloponnese, the great hall building, constructed in 1400-1413 by Michele Steno, comprised a similar row of rooms. All rooms were rectangular shaped, and had a fireplace on the back wall as well as a separate entrance and a window, both of which opened to the courtyard. 61 A reminiscent row of rooms with a similar spatial arrangement was created in the first half of the fifteenth century in the outer castle of Tarasco. 62 In Urbino this row of rooms occupied the street side of the central palace courtyard, even though some of these did not have a separate entrance. 63 This type of space appeared in Hungarian castles and palaces in the last third of the fourteenth century. 12 rooms at Diósgyőr⁶⁴ and 14 rooms at Zólyom⁶⁵ were built on the ground floor as dwelling rooms of servants. Some of the rooms were connected. In the Buda castle two rooms of servants



Fig. 18. The courtyard of the Gyula castle



Fig. 19. A ground floor room in the northern wing of the Gyula castle

⁵⁷ Toy 1939, 165.

⁵⁸ Menclová 1972, II: fig. 106.

⁵⁹ Matejková 1962, fig. 13.

⁶⁰ Mesqui 1997, 243-244.

⁶¹ Sinos 1987, 117.

⁶² Pressouyre 1982.

⁶³ Palazzo di Federico da Montefeltro 1985, 194.

⁶⁴ Czeglédy 1988, fig. 57.

⁶⁵ Czeglédy 1988, fig. 76.

were identified under the western palace wing of the second courtyard; probably there are three more in the unexplored section of the palace wing.66 In Várgesztes four ground floor rooms were discovered in a spatial arrangement similar to the one in Menštejn in Bohemia.67 On the ground floor of the early fifteenth-century palace building of the Gyula castle similar rooms with separate entrance doors and windows were built.68 The function of these ground floor dwelling rooms is revealed by the inventory of the Urbino palace, according to which these were offices and dwelling suites for the servants, attendants and courtiers. The suites accommodating the duke's niece and the guests of the court were located in a separate palace wing.69 Ground floor rooms with separate entrance doors and equipped with heating

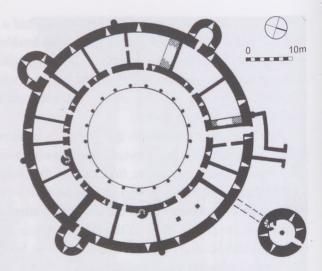


Fig. 20. The plan of the ground floor of Castillo de Bellver, Palma de Mallorca

units are identified as the dwellings of courtiers of the royal court and the aristocracy (knights, ladies-in-waiting, page boys, apprentice knights, officials). The connected rooms might have accommodated court officials of higher rank as well.

One or perhaps several of these ground floor rooms of the northeastern palace ceased to function as dwellings after the palace transformation in the Matthias period. In the western room of the northeastern wing, which initially adjoined the northwestern corner hall and perhaps served as a dwelling of officials, the stove was dismantled and two niches were walled in. The eastern room of the southern wing became a dark, cellar-like space when its window was walled in due to the enlargement of the chapel terrace. There is no data on any transformation of the two other rooms of the southern wing. The eastern room in the northern wing certainly preserved its residential function. The separate dwelling rooms from the Angevin era on the first floor of the eastern wing, however, were all dismantled. After this transformation only a one-room and a two-room suite was preserved which could accommodate courtiers, but these were obviously enough to house only the closest servants. The others were perhaps housed in the rooms built in the place of the Sigismund-era kitchen on the lower courtyard.

Royal Suites

On the upper floor of the northwestern palace wing a suite was constructed in the middle of the fourteenth century. A long hall occupied the northern half of the building wing. To its northern end one, to its southern end two connected, rectangular rooms adjoined. Between the latter two a small hallway and a privy were situated. The palace's gatehouse was attached to the wing's southern end, and its upper floor rooms could be approached through the aforementioned rooms. On the first and second floors of the northeastern palace a new, larger and more complex suite was built in the 1360s. Above the building's ground floor hall another, similar hall must have been situated. In the southern and northern wings there

⁶⁶ Gerevich 1966, fig. 94.

⁶⁷ G. Sándor 1975, fig. 116.

⁶⁸ Feld 2000, fig. 5.

⁶⁹ Palazzo di Federico da Montefeltro 1985, 194.

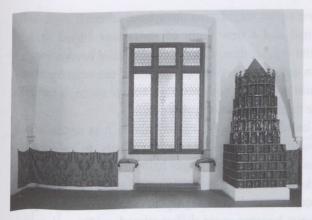






Fig. 21–23. The reconstructed dining hall, antecamera and bed chamber in the eastern wing of the northeastern range of the Visegrád palace

were no hallways above the corridors of the ground floor, except for the one leading to the privy tower. It seems that above the ground floor hallways there were a smaller and a bigger room on the upper floor. The space above the ground floor corridor might have been merged with the space above the small ground floor room, and thus two rooms of identical size were created in both building wings. Consequently, two suites, consisting of three rooms each, flanked the great hall. The first room of the suites was a corner room in all cases, which was bigger than the other rooms. In the southern wing a balcony was attached to this corner room in the Sigismund period. The balcony's substructure also served as a porch door for the great cellar; the balcony faced the reception court. The second, northern suite was more closed and private; its windows opened to the garden. The privy tower adjoined this northern suite, indicating that the suite was certainly used as a dwelling. The first room of the suite was probably connected to the winding stairs that led to the ground floor corridor through which the garden could be accessed. The spatial arrangement of the second floor must have been similar, even though the floor's great hall was situated in the eastern wing and an additional bath was built on this floor in the northern wing.

In the Matthias era the first-floor great hall in the western wing was transformed. Rib fragments recovered from here testify to a vaulting. A vault of such dimensions would not have fitted the floor's height, therefore, the great hall probably reached as high as the second floor's building height and there was no level above it. A large-sized bay window was added to the southern end of the hall's western facade, similar to the one attached to the hall of the northwestern palace building. Bay windows of this kind might have visually emphasized a seat reserved for the royal family, the throne or a table, and also served as a place

of status display. This arrangement is typical for fifteenth-century English⁷⁰ and German architecture.⁷¹

In addition to the two suites on the first floor, a third suite was built in the eastern wing. Its entrance opened from the staircase that led to the second floor. The suite consisted of three rib vaulted rooms of identical size, forming a row of connected cabins. The second room might have had a door that opened

⁷⁰ Thompson 1995.

The late fifteenth or early sixteenth-century bay window adjoining the late fourteenth-century great hall of the Amberg Town Hall is an example. Mader 1909, figs. 104, 107.

to the loggia, but it is yet unproven. The other two suites might also have been altered, especially in the southern wing. As the loggia was transformed and a new flight of stairs was added, it was impossible to connect the suite's second room and the loggia; thus, this suite must have been arranged as a row of lineally connected rooms, with one main entrance from the great hall of the western wing. In all probability, a row of two ribbed vaults was built above the southwestern corner room; a buttress supporting the middle section of the southern facade might indicate its presence.

In order to properly interpret the southeastern building of the Visegrad palace, it is necessary to provide a short overview of the development of dwelling spaces in medieval palaces. In case of the simplest medieval dwelling houses two separate spaces were used: a larger hall for public and a cabin for private functions. In more complex palaces, like the one in Visegrad, larger units of rooms and halls were used for public events, while suites used as actual dwellings were separated from these. As the functions of both the public and private rooms became more differentiated, additional cabins appeared in the public as well as in the private space. This internal differentiation was more general than a simply doubling of the space for the two different types of functions. Only in the largest medieval palace complexes were representative spaces showing wealth and power separated from the actual royal dwelling space. Papal residences usually followed the arrangement in the Imperial Palace on Palatine Hill, where the Domus Augustana was separated from the private Domus Flavia. The two types of spaces were kept divided in the most significant papal palaces, that is in Laterano, Avignon and the Vatican. In the Laterano palace the triclinia of Gregory III and Leo III were situated on the two ends of the building. In the twelfth century, the pope's rooms were situated beside the smaller triclinium associated with Leo III.72 A similar ground plan was developed in Avignon by the 1360s, through several building phases: the private dwelling rooms of the pope were situated in an independent building around a closed, small inner courtyard. This space was separated from the public external and the internal but official spaces. When pope Nicholas V had the Vatican palace reconstructed in the mid-fifteenth century, a private suite was added to the complex on the small courtyard called Cortile del Pappagallo, separated from the thirteenth-century official spaces.

French residential royal palaces show a similar pattern. In the fourteenth-century royal palace of the Cité in Paris the rooms of the king's private suite were situated around a small courtyard encircling the donjon that formed the center of the complex, behind the large courtyard flanked by the great hall, the Sainte Chapelle and the Galerie des Merciers. In the Peroignan castle of the Majorcan kings even the suites of the king and the queen were separated and built around two individual inner courtyards.⁷³

In the Esztergom palace in Hungary the large reception courtyard and the smaller inner courtyard with the dwelling tower and the chapel were separated already around 1200.⁷⁴ The Kammerhof in Buda probably had a similar layout after it was enlarged in 1349. This is attested to by the position of the palace's St Martin Chapel and the excavated wall remains around it, which were clearly detached from the great hall and its courtyard building excavated north of the chapel.⁷⁵ A similar ground plan was created during the transformation of the southern palace in Buda in the 1370s and 1380s. In this case the earlier small courtyard was transformed into a private inner courtyard of the royal suite and a newly built large courtyard took over some of the public functions. The western part of the large courtyard, however, was occupied by the queen's suite, and thus the private and public spaces were not fully separated. This might have motivated the creation of the so-called Sigismund courtyard around 1410, which – along with its great hall building – was used only for public purposes.⁷⁶ The separation of the private residence

⁷² Radke 1994, 19.

⁷³ Le Palais des Rois de Majorque 1985, 20.

⁷⁴ Horváth 1990b, fig. 2.

⁷⁵ H. Gyürky1984.

⁷⁶ Buzás 1997a, 86–90.

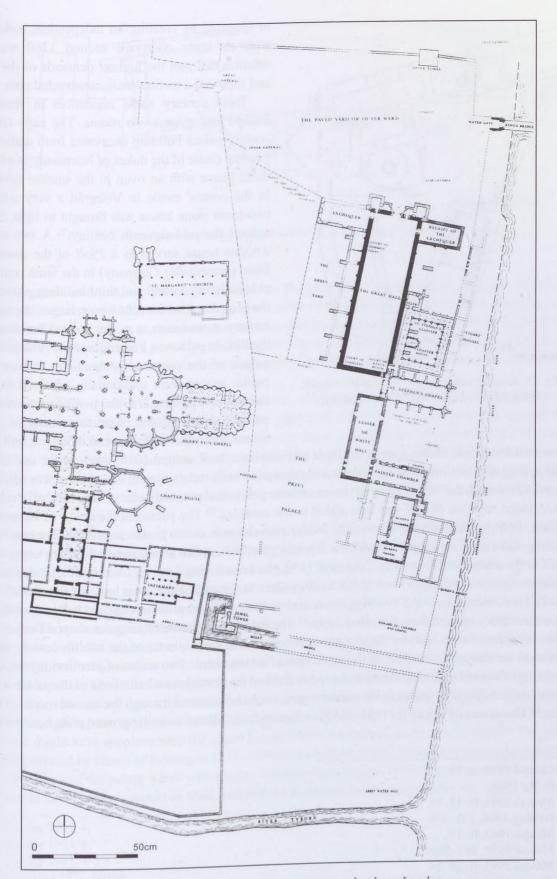


Fig. 24. Ground plan of the Westminster royal palace, London

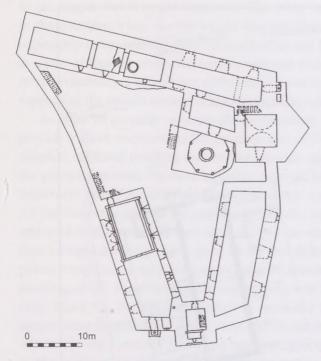


Fig. 25. Reconstructed ground plan of the citadel, Visegrád, first half of the fifteenth century

in Visegrád by creating an independent building with an inner courtyard around 1360 was a solution that met the highest demands of the era and followed a meticulously constructed plan.

Tenth century noble residences in Western Europe had at least two rooms. The early tenthcentury palace building excavated from under the Fécamp castle of the dukes of Normandy is a tworoom house with an oven in the smaller cabin.⁷⁷ In the comes' castle in Visegrad a very similar two-room stone house was brought to light, built around the mid-eleventh century.78 A two-room wooden house served as a Pfalz of the count of Elten (present-day Germany) in the tenth century, at least in the second and third building phases of the complex. There are, however, larger, late tenthcentury monuments, e.g. the second building of the duke's palace in Fécamp and the Villejoubert palace of the counts of Angoulême, where the public spaces were additionally adjoined to the two-room dwelling. In the two aforementioned palaces the L-shaped suite consisting of two rooms was attached to the end of a great hall.79 A

monumental example of this type is the Pfalz of Paderborn, built around 1015, where at the end of the 44.48 m long and 16.17 m wide hall two smaller reception halls were situated; one of them was adjoined by a private chapel, the other one by a two- room suite positioned perpendicular to the great hall's central axis. A large, separate chapel was also added to the complex. The palace of the dukes of Normandy in Caen, built by William the Conqueror in the mid-eleventh century, also consisted of a two-room dwelling and a separate chapel, to which a separate great hall and an also separate dwelling tower were added in the early twelfth century. Around 1130, the French king Louis VI had built an independent two-room suite on the upper level of his Senlis palace at the end of the great hall and the chapel. The suite had no connection to the dwelling tower and consisted of a smaller, ornamental hall and a cabin. A private oratory opened from the inner cabin. The palace wing in the rectangular-shaped Druyes-les-Belles-Fontaines castle built by the Counts of Nevers in the third quarter of the twelfth century might be seen as an elaborated version of the same spatial arrangement. Two suites of identical layout, each consisting of a small ornamental hall and a room, flanked the central great hall of one of the palace wings on both ends. Adjoining spaces in the corner towers could be accessed through the second rooms of both suites. The palace of Henry II (1154–1189) in Nottingham follows a similar ground plan; here the king

⁷⁷ Mesqui 1993, II: 15.

⁷⁸ Szőke 1986.

⁷⁹ Mesqui 1993, II: 15–17.

⁸⁰ Binding 1996, 123-130.

⁸¹ Mesqui 1993, II: 18.

⁸² Mesqui 1997, 353-355.

⁸³ Mesqui 1993, II: 22-24.

⁸⁴ Mesqui 1993, II: 24–25; Mesqui 1997, 154–155.

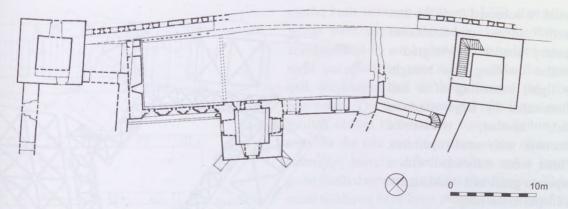


Fig. 26. Ground plan of the upper floor of the northern wing of the Kőszeg castle

and the queen both had two private rooms next to the great hall.⁸⁵ In the palace of Henry III, king of England, built around 1220, the two-room private suites of the king and the queen, both consisting of an *aula* (a hall) and a *camera* (a chamber), were attached to the sides of the hall.⁸⁶ The Westminster palace, also built by Henry III, has a partially similar layout. The royal suite behind the great hall comprised the White Hall, adjoined by the large *camera*, the Painted Chamber, and the private room and chapel of the queen.⁸⁷

In case of the *Pfalz* of Frederik I in Gelnhausen, built in the 1170s and 1180s, half of the palace building was occupied by a large hall, while the other half consisted of two rooms that opened from a hallway. The chapel was built separately beside the keep, and adjoined the palace building only by its corner. In the *Pfalz* of Cheb, the chambers of the royal suite and the connecting corridor were also situated at the end of the great hall, however a third chamber was added to the existing two. The chapel was constructed next to the palace building but independently from it, while the keep at the castle's entrance was situated farther.⁸⁸

The spatial arrangement of the Esztergom palace around 1200 differed from the coeval German examples, where the royal suite was usually connected to the great hall and no dwelling tower was built, but only a keep that served defensive functions. In Esztergom, the royal dwelling was situated in a dwelling tower on the private inner courtyard of the palace, beside the main chapel, strictly separated from the great hall and the public spaces. Nevertheless, the royal suite in Esztergom testifies to demands similar to the western examples. On the preserved lower – and probably central – level of the tower, two rooms were built: the inner room must have been the *camera*, while the other one served as an *aula*. A small, additional structure was attached to the hall, illuminated by a circle window and an embellished archivolt window. This structure might be identified as a private chapel. A small chamber in the wall, perhaps a private oratory, opens from here. A tiny winding staircase opened from the first room of the lower floor suite, right next to the large winding stairs that opened from the tower's hallway; this small, private staircase might have supplemented the queen's suite that was situated on the second floor. The palace building erected by Henry of Köszeg in 1279–1290 in the Köszeg castle, follows a similar floor plan. On the upper floor of the palace a hall with tracery windows and another, wainscoted room illuminated by a group of small, narrow windows were constructed. A timber wall separated the two spaces. A chapel

⁸⁵ Thurley 1993, 4.

⁸⁶ Thurley 1993, 4.

⁸⁷ Thurley 1993, 4–5.

⁸⁸ Menclová 1972, 86–96.

⁸⁹ Buzás 2004c, 13-15.

could be accessed from the first room. 90 In the mid-fourteenth century citadel of Visegrád a similar dwelling was brought to light, consisting of a hall illuminated by large windows and another, wainscoted chamber with small apertures. These were associated with a separate great hall building and a chapel in the keep. 91

The upper floor hall of the dwelling from the period of Charles I excavated on the reception court of the Visegrád palace was supposedly flanked by two-room suites on both sides. One of the rooms was heated by a hypocaust in both suites.

In Bohemia traditional two-room suites started to be enlarged as early as in the thirteenth century. In the Zvíkov

⁹¹ Buzás – Szőke 1992, 133–134.

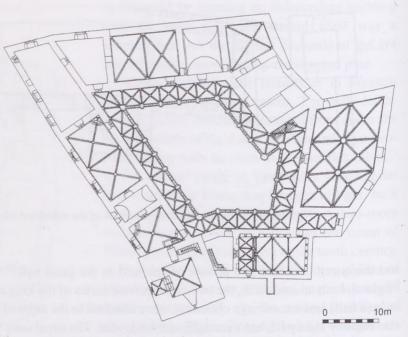


Fig. 27. Ground plan of the upper floor of the Zvikov castle

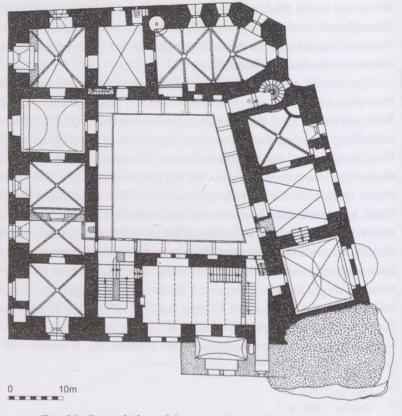


Fig. 28. Ground plan of the upper floor of the Houska castle

Holl 1992, 71-80. The author rises the possibility another small room might have been situated between the two mentioned rooms, behind the gatehouse that encompassed the chapel. This is, however, improbable, as such a space could have been illuminated only from outside, through openings cut into the castle wall. The groundfloor of the building was occupied by a single hall divided only by a row of timber pillars; however, in one of its corners, right below the wainscoted room, a 5 m × 3 m large, stone vaulted chamber was discovered. This might be identified as the remains of a hypocaust that heated the room above, similarly to the early fourteenth-century building excavated from under the royal palace in Visegrád.

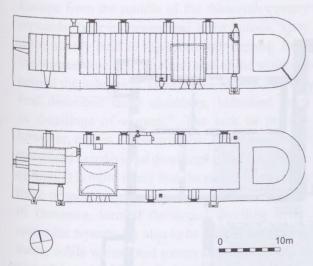


Fig. 29. Ground plans of the first and second floors of the Rdyně castle

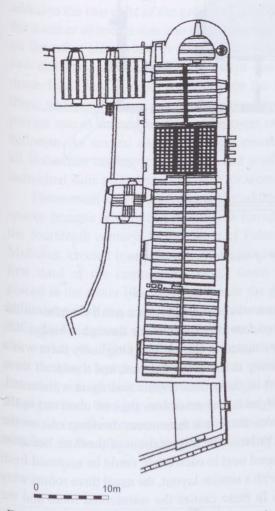


Fig. 30. Ground plan of the upper floor of the palace wing, castle of Karlštejn

castle, built between 1230 and 1270, the palace wings were situated around a closed courtyard encompassed by an archway. The palace wings were occupied by two suites, while the great hall, the chapel and the keep formed the other two wings. The suites consisted of a large, groin vaulted central hall and the rooms adjoining its ends. At the one end one room, at the other end a smaller, barrel vaulted chamber and a larger, groin vaulted room were built in both suites. Three small windows have been preserved in one of the barrel vaulted chambers. A similar floor plan was discovered at the royal palace of Bezděz, built by Ottokar II in 1264-1278. One of the rooms that opened from the central hall was wainscoted, had a barrel vault and a group of small windows. The chamber behind the wainscoted room was connected to the castle's chapel. In addition to the large palace building, three smaller palaces with an identical layout were erected in the castle. The main entrance opened to the central, vaulted room. At both ends of the hall a room was situated: the one had a groin vault, was heated by a fireplace and had access to a privy, while the other was a wainscoted room that had a barrel vault and was illuminated by a group of small windows situated under a single arch. An identical spatial arrangement of the three rooms was applied in the eastern palace wing of the castle of Houska around 1300. On the opposite side of the closed courtyard of the castle, in the western palace wing, a similar ground plan can be observed, even though two additional rooms were attached to the wainscoted room. In the last room there is a privy too, and this chamber is connected to the chapel. The two other wings of the castle are occupied by the chapel and the great hall. Dwelling units of three rooms are often found in other Bohemian castles built in the second half of the thirteenth and the beginning of the fourteenth century, e.g. in the castles of Poděbrady and Konopiště. This spatial layout became a key feature in the palace architecture of the Charles IV era, in the midfourteenth century. The royal palace in the castle of Prague was centered around a great hall in the Charles IV period. A smaller reception hall and a chapel could be accessed from the hall's one end,

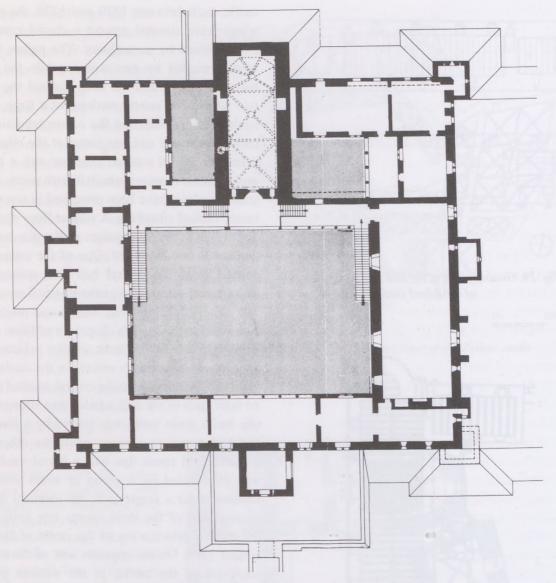


Fig. 31. Ground plan of the upper floor of the castle of Perpignan

and the two-room royal suite from the other. The first room was connected with a small chamber in the castle tower, while the royal oratory could be approached from the other room through a bridge. On the central level of the Karlštejn castle a larger hall was situated in the middle. Originally there was a wainscoted room, illuminated by a group of small windows, at the hall's one end, and a suite of three rooms and a small tower room at the other end. The first of these three rooms was again wainscoted, and the other two were equipped with privies. This enlarged layout resembles the one observed in the western palace wing of the Houska castle. Like in Houska, there is a three-room dwelling unit on the second floor of the small tower attached to the Karlštejn palace. The largest room of the three occupies half of the level, and both smaller rooms, which were placed next to each other, could be accessed from here. In Kašperk and Radyně, two castles of Charles IV with a similar layout, the usual three rooms were arranged a bit differently but preserved their functions. In these castles the wainscoted room and the chamber with the fireplace and the privy are situated at the end of the hall, but could be accessed only from a hallway. Wainscoted rooms illuminated by a group of small windows are typical only for Central

Europe from the middle of the thirteenth century onwards, both in castles and town houses. They were mainly built in the fourteenth century. Both the wainscoting and the small size of the windows helped the insulation. Dobroslava Menclová, who first described these chambers, identified them as dwellings of women.92 The lack of privies, however, makes it less probable that these rooms were used as individual dwellings either for women or men. It is more likely that the palace wings with three or more rooms, observed in almost all cases in Bohemia, formed the actual dwelling units: suites for women are also to be looked for among these, while wainscoted rooms constituted only a part of the suites. These Bohemian suites probably comprised a reception hall, a living room and a bedroom, that is, a more public and an entirely private space. In some cases rows of rooms were added to the two ends of the great hall: in Zvíkov, the number of rooms was one on the one and two on the other side, while in Bezděz they counted two and two, in Houska and Karlštejn one and three. In Zvíkov, Houska and Karlštejn the twothree additional rooms might be interpreted as private spaces formed by the enlargement of the bedroom. As several such suites were created in all Bohemian castles, it is possible that a whole, individual suite served as a dwelling for women.

Three-room suites supplemented by additional spaces became widespread in Western Europe in the fourteenth century. In the castle of Palma de Mallorca, erected by the kings of Majorca in the first third of the century, the king's room was placed in the tower-like dwelling beside the great hall, along with the *camera paramenti* (reception hall), the *anticamera* with the attached oratory and the workroom. The queen's suite was connected with the king's tower and the chapel that stood on the other side of the courtyard. In the palace in Perpigna both the king and the queen used three rooms. A reception room and a dining room were attached to the queen's bedroom. In front of the

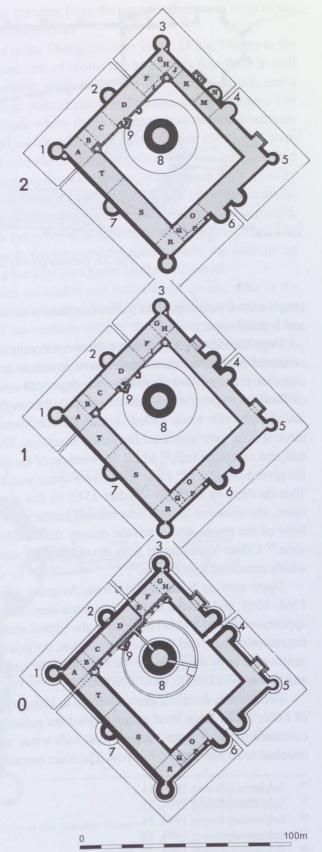


Fig. 32. Ground plans of the floors in the Louvre, Paris

Menclová 1963.

⁹³ Kerscher 1990, fig. 16.

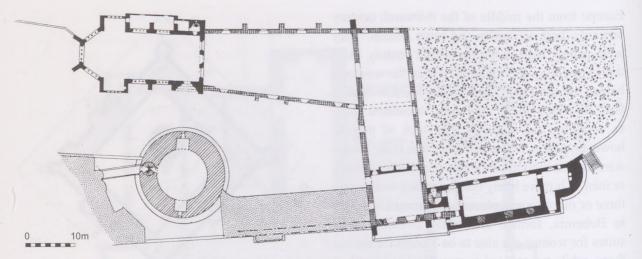


Fig. 33. Ground plan of the duke's castle in Riom

king's suite a larger space of public functions was situated, consisting of a dining hall, an assembly hall and a guard room.

Pope Benedict XII had built a three-room suite in the papal palace of Avignon in 1337.94 This suite consisted of a reception room (*camera paramenti*), a private dining room that opened from the latter (*tinellum parvum*), and the room of the pope (*camera pape*) situated in the dwelling tower (*Tour du Pape* or *Tour des Anges*), which could be accessed from the reception room. A workroom (*studium*) was also added in the side tower called Tour de l'Étude. Except for the workroom and the pope's private rooms, these spaces were also used for public functions. The *camera paramenti* was used as the actual throne hall and reception hall,95 while the window of the *tinellum parvum* facing the courtyard was also used for giving blessings.96 Later the private space was enlarged. Another side tower was added beside the Tour du Pape by Clement VI after 1342. In this tower, the Tour de la Garde-Robe, an internal private room, the *chambre du cerf* was created beside the *camera pape*. A bathroom was built on the ground floor of the tower, and a private oratory dedicated to St. Michael (*capella secreta*) was added to the suite.97 Urban V continued with developing the suite, and attached a new wing to the Tour du Pape, which expanded into garden.98

Upon moving back to Italy from Avignon, Urban V had the castle of Montefiascone rebuilt in 1368–1369, and created his own residence here. The castle resembled the Avignon palace not only in its appearance (blind arches) but also in the spatial arrangement of the papal suite. The *camera paramenti*, the reception hall, and the *tinellum parvum*, the private dining room could be accessed from the *tinellum magnum*, a large dining room. Behind these the *camera pape*, the private room of the pope, the *studium* and the *capella secreta* were situated.⁹⁹

Three-room dwelling units emerged in Hungary first in the mid-fourteenth century, under the reign of Louis I. The main level of the Louis I era palace on the northwestern corner of the Visegrád citadel consisted of three rooms: a large hall with a bay window on its western end, and two smaller rooms attached to its eastern end in a row. The main entrance opened to the second room in the middle, it is not

⁹⁴ Schimmelpfennig 1994, 31.

⁹⁵ Schimmelpfennig 1994, 33.

⁹⁶ Schimmelpfennig 1994, 34.

⁹⁷ Schimmelpfennig 1994, 38.

⁹⁸ Schimmelpfennig 1994, 39-40.

⁹⁹ Kerscher 1990, 91–92.

certain, however, whether the large hall had a separate entrance from the corridor that ran in front of the building. ¹⁰⁰ The level below the suite was used as a storage room.

Three-room suites appeared in a classic form first in the Diósgyőr castle in the 1370s. Owing to the 1758 survey of Hugo Hazael, the now demolished past row of rooms on the castle's first floor is well known. Three suites were built here, two in the eastern wing on the two sides of the chapel, and a third in the southern wing. The suites in the eastern wing were identical and comprised three rooms. The entrance opened to the second room in the middle, from where the two other, more modest chambers could be approached. One of the latter was equipped with a privy. The rooms beside the chapel were connected with the upper level of the chapel. The third suite of the Diósgyőr castle was arranged in a similar, though not identical manner. The original entrance, to which a huge, embellished flight of stairs led from the courtyard, opened to the middle room. To the east a hall of similar size could be accessed, which also had a separate exit to the courtyard corridor. West of the central room an oratory was placed, and the bedroom in the corner tower, equipped with the privy, was approachable only from here. The two suites in the eastern wing might be associated with the king and the queen, while the suite in the more spacious southern wing was perhaps a dwelling used by the Queen Mother, Elisabeth.

The Buda royal palace had a similar, although not so regular and symmetrical ground plan in the late fourteenth century. The royal suite was placed in the so-called Stephen castle, built in the southern palace area in the 1340s. The great hall that occupied the northern wing of the building was adjoined by three or four rooms in the western wing, with the Stephen's tower, which accommodated the treasury, and the chapel in the southern wing at the suite's end. A new palace wing was added on the other side of the great hall at the end of the fourteenth century; this might be identified as the queen's private dwelling. Its central room was a *stuba* heated by a hypocaust. One room adjoined it from the north, and presumably several chambers were connected to it from the south.

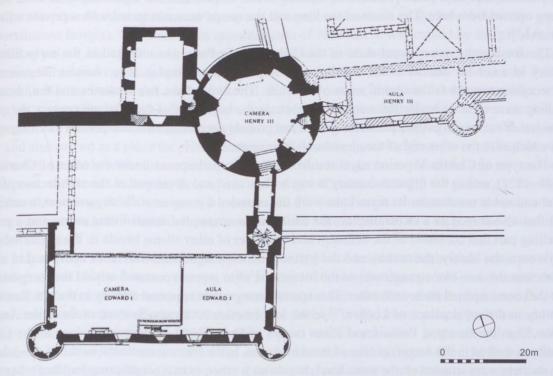


Fig. 34. Ground plan of the palace in the London Tower

¹⁰⁰ Buzás – Szőke 1992, 133–134.

¹⁰¹ Czeglédy 1988, 24, plate II.

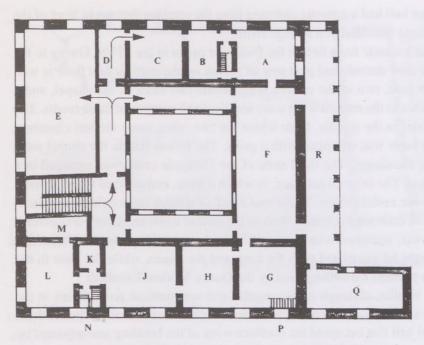


Fig. 35. Ground plan of the papal palace in Pienza

Private royal dwellings of the French kings in the second half of the fourteenth century had more complex floor plans. In the Louvre which emerged as a royal residence under the reign of Charles V (1364-1380), the king and the queen had suites of an identical layout, situated above each other in the northern wing of the building. A reception hall used for status display, the so-called chambre à parer, was situated in the center of the suite. West of this chamber the living rooms were to be found; these were not considered private, even though only a few people were allowed to enter them. The first was the chambre de retrait, a place where assemblies and

private hearings were held. Next to it the king's room, the *chambre du roi* was placed, where the king could withdraw to take a rest; however, some of his guest may have been permitted to enter this room too. The king's private oratory, where he listened to the vespers and the workroom combined with a library opened from here. The suites of the king and the queen were connected with a private winding staircase. 102

The fourteenth-century royal suite in the Cité palace in Paris was enlarged in the early fifteenth century in a similar manner to the development of the Louvre complex. The *chambre de parement*, the reception room was the central room of the suite. The two rooms, two oratories and the library of the king were situated beside this central chamber. At the beginning of the fifteenth century the *grand chambre du roi*, which extended into the garden and probably served as an actual private dwelling space, was attached to the other end of the *chambre de parement*.

The type of Charles V period royal residences became widespread under the reign of Charles VI (1380–1422), and in the fifteenth century it was widely used and developed in the architecture of both royal and noble residences. Its main units were the *chambre à parer* or *salle de parement*, a reception hall that also served as a status display; the *chambre de retrait*, the actual living room, and a private dwelling part that consisted of the bedroom and a number of other rooms beside it: the *garde-robe*, the workroom, the library, the oratory and the latrine. The most significant difference compared to earlier suites was the row-like arrangement of the rooms: the suite was not centered around the reception hall but the rooms opened from each other. This spatial arrangement appeared already in the late fourteenth century in the royal palace of Loches, ¹⁰³ in the late fourteenth-century Saumur castle of the Angevin dukes, ¹⁰⁴ in the Bourges, Poitiers and Riom castles of Duke Berry, in the royal palace of the Chinon castle, as well as in the Angers palace of René of Anjou. In the Saumur castle the suites of the duke and the duchess were situated on the same level, beside each other, in two neighboring building wings.

¹⁰² Whiteley 1992.

¹⁰³ Mesqui 1997, 219-220.

¹⁰⁴ Mesqui 1993, II: 133.

Another method of dividing the suites to internal and more public, outward spaces emerged in fourteenth-century England. The thirteenth-century two-room royal dwelling of the Tower's palace was enlarged around 1300 by Edward I by adding a new hall and a *camera*. Thus the previous royal *camera* was transformed into a *presence chamber*, a reception room, while the previous hall now served as a reception hall. This four-room suite which now encompassed internal, private as well as public spaces became the basic dwelling unit of English palaces in the Late Middle Ages. The watching chamber — that is, a guard room and a ceremonial reception hall — and the presence chamber, mostly used as a ceremonial dining room, counted as the outward spaces. The so-called "privy chamber" was a private room where the palace's lord also had dinner. Confidential servants slept in this room during the night. The lord's bedroom opened from here. In the Late Middle Ages further chambers were added: the workroom, the oratory, the library and the treasury. The lord of the lord of the library and the treasury.

The three main units of fourteenth-century palace architecture, the reception hall, the dining room and the bedroom served as a basis for the classic Italian appartamento that emerged in the first half of the fifteenth century. From the great hall, the sala a private dining room, the salotto or tinello opened, from where the anticamera or guardacamera, a reception room, could be accessed, which was also used as a storage room and as a place where guards could have a rest during the night. The last room in the row was the camera, the actual bedroom. The workroom, the studiolo was sometimes merged with the bedroom, but later it was often separated from it and adjoined the bedroom as an independent unit. The studiolo was, however, a library and a treasury at the same time as well. A classic example of the Italian appartamento is the mid fifteenth-century Vatican papal palace erected by Nicholas V. The central unit of the papal suite was the aula (called Sala di Constantino, Hall of Constantine today), from which the three rooms of the suite (the present Rafael Rooms) opened. The private oratory of the popes, that is, the chapel of Nicholas V, adjoined the aula's foreground (the present Sala dei Chiaroscuri). In front of the aula the papal lodge, from which the blessings were given, was placed; today the Rafael loggia stands in its place. A suite of identical layout and dimensions was built on the level below (the present Appartamento Borgia). The three-room appartamento of Nicholas V was copied by the papal suite of the Pienza palace, built by Pius II between 1458 and 1462. In the latter palace the two identical suites were situated in two opposite building wings, on the main level. The suite of Paul II in the Palazzo Venezia in Rome, built in the 1460s, followed the same pattern: the Sala del Mappamundo, which served as a reception hall and a dining room, opened from the great hall; the anticamera, the Sala dei Paramenti was situated behind it, while the pope's bedroom, the Sala del Pappagallo, was the last in the row, and also served as a place for private audiences. Behind the latter the great tower of the palace was constructed, similarly to the Tower of Angels in Avignon, which accommodated the true private rooms of the pope: the private bedroom, the studiolo and a flight of stairs that led to the garden. At the end of the fifteenth century, under the reign of Alexander VI, the Torre Borgia, another tower accommodating private spaces, was built behind the appartamento of the Vatican palace, as a copy of the tower in the Palazzo Venezia. 107

In Italy the men's and the women's suites were usually placed beside each other, and some parts may have been shared. In the Palazzo Altemps, built around 1470, only the dining room and the *anticamera* were used by both men and women; the separate bedrooms and *studiolos* of the husband and the wife opened from here. In the first suite of the duke and the duchess in the Urbino palace, built around 1460, the *appartamentos* of the duke and his wife were placed next to each other. In the second suite which was constructed later, the rooms of the duke and the duchess could be approached from the palace's great hall. Both units consisted of three rooms: a *salotto*, and *anticamera* or hearing room, and a *camera*.

¹⁰⁵ Thurley 1993, 5-8.

¹⁰⁶ Thurley 1993, 113–143.

¹⁰⁷ Matt – Barelli 1984, 227–228.

A *studiolo* and several small chambers adjoined the latter. The suites were divided into two levels in the fifteenth-century Italian palace architecture in order to divide the winter and summer suites: the suite used during summertime was usually situated on the lower level, while the winter suite was built above.¹⁰⁸

The suites of the Buda palace started to be expanded already in the Sigismund period. A huge tower was built on the second courtyard at the end of the western palace wing accommodating the queen's suite. The tower was connected with the palace wing by a unit that consisted of two rooms. The tower had a rectangular ground plan divided into six parts. The closest analogies are found in the towers of the Karlštejn palace that king Sigismund's father, emperor Charles IV had erected. These were dwelling towers attached to the palace building of the castle. The position of the Buda palace tower also resembles the Tower of Angels in Avignon. It was supposedly built as a private dwelling for the queen, and its appearance communicating wealth and power might have intended to emphasize the rank of Queen Mary as a monarch. Nevertheless, the tower was never finished, for which reason it was later called the Stub Tower. The construction works were maybe interrupted because of the sudden death of Queen Mary. Later, at least from the Matthias period onwards, the tower was used as a prison. 109

A new group of buildings was erected in the Sigismund era at the southern end of the Buda palace, around the Stephen's Tower. Behind the previous suite in the western building wing on the small inner courtyard, between the Stephan's Tower that accommodated the treasury and the garden above the huge cistern, a new building of three rooms was erected, which was embellished with bay windows. This building was connected to the queen's palace wing by a bridge over the garden. These building parts can probably be identified as the king's private rooms. The private suite was attached to a tower here as well, the Stephan's Tower, even though the small size of the tower made it necessary to expand the suite beyond the actual tower, and incorporate the rooms around it.

The suite in the western wing of the Visegrád palace, dated to the 1350s, represents an enlarged type of the three-room central suites that appeared in Central Europe in the thirteenth century. Strict analogies are found in the suites of Emperor Charles IV's coeval palaces. The room that opened to the north from the central great hall must have been a reception room, while the rooms to the south were probably private chambers, the king's bedroom and dining room. In the gatehouse a private workroom and perhaps also an oratory were situated.

The suites created in the northeastern palace in the 1360s followed the same system. The central great hall was flanked by two three-room suites, and this layout was repeated on the second floor. Such a spatial arrangement was only known from the Louvre in Paris at that time, and most likely not only the layout of these spaces but also their function was similar. This is also supported by a remark made by Antonio Bonfini on the suites of the palace. He mentions namely the separate spaces used by the king and the queen at day and night, divided into a dining room and a bedroom with a hallway. The three rooms Bonfini named – the dining room, the hallway and the bedchamber – can be identified with the three rooms of the suite. The first halls might be private dining rooms, while the ones in the middle might be interpreted as reception halls, and the innermost rooms were the bedchambers. The rooms used at day and at night are probably the public and the private spaces. The second floor suite was probably a dwelling used by a woman of the royal family, as it was equipped with a bath and had access to the flower garden and the oratory. Probably this was the queen's suite, while the first floor dwelling must have been used by the king. The Sigismund-period balcony of the king's suite that faced the courtyard followed a traditional pattern widespread in medieval Europe. This type of public space can be traced back to the imperial lodge of the Palatinus palace that looked on the Circus Maximus, where

¹⁰⁸ Thornton 1991, 288.

¹⁰⁹ Gerevich 1966, 95-96.

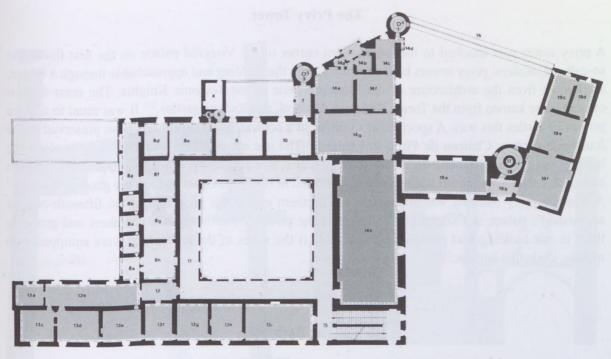


Fig. 36. Ground plan of the first floor of the duke's palace in Urbino

the monarch could show himself in front of his people in full dignity. This balcony was attached to the southern suite, while the northern suite faced the garden, and the privy tower and the bath were situated in the northern one. The southern suite seems to have been a more public space used for reception, while the northern rooms were the actual private chambers. The queen's second-floor suite might have been doubled in the 1360s in order to accommodate a princess. In Matthias' time, however, there was no need for a separate suite as Queen Beatrix did not give birth to any children, and so this space could have been merged with the queen's suite and used the same way as the king's apartment. In the Matthias era a new three-room apartment was built in place of the Angevin-era rooms of the servants on the first floor of the eastern wing. In this case the new apartment was not created through the renovation of a similar, already existing space, but a space that originally had an entirely different function and arrangement was transformed in order to construct a new suite. Based on the suite's position next to the king's apartment it is likely that the newly built rooms had a special significance. In this suite, however, private and public spaces were not separated, and therefore its dweller must have been a person whose position and rank did not require a division of these spaces. Ensuring that his bastard son, John Corvinus could inherit the throne was a key issue for king Matthias at the time when the northeastern palace was transformed around 1484. The Hercules Fountain erected in the middle of the courtyard symbolically hints to John Corvinus too. 110 The emphasized political role of the young prince made it necessary to build a suite for him in the palace worthy of an heir apparent to the throne. The row of rooms next to the king's apartment on the first floor of the eastern wing was perfect for this purpose.

According to Péter Meller's interpretation. Based on a report by Bonfini, the hydra defeated by Hercule was identified with Austria in the court. In 1485, after conquering Vienna, Matthias sent his son, John Corvinus, who was still a child, to lead the triumphal march to the city. This might explain why the Hercules Fountain depicts Hercule fighting the Lernaean hydra as a child, as opposed to the actual mythological account. Meller 1946, 12.

The Privy Tower

A privy tower was attached to the northeastern corner of the Visegrád palace on the first floor. The so-called *Danskers*, privy towers built separately from the building and approachable through a bridge, are known from the architecture of the Monastic State of the Teutonic Knights. The most famous examples are known from the Toruń, Kwidzyn, Malbork and Radzyń castles. ¹¹¹ It was usual to arrange privies in castles this way. A spectacular example of a separate privy tower has been preserved in the fourteenth-century Château de Pirou in France. ¹¹² The use of aqueducts or river water to clean the latrines was typical for medieval monastic architecture, however this practice also appeared in palaces and castles. The privies built in Eltham after 1460 and in Hampton Court in 1536 are good examples. ¹¹³ A separate privy building was attached to the northern end of the great hall of the fifteenth-century archbishop's palace in Esztergom. ¹¹⁴ Separating the privies from the private chambers and grouping them in one building was probably only possible if the suites of the aristocracy were equipped with mobile, chair-like latrines. ¹¹⁵

The Bath

The bath was a special element of the Louis I era dwelling of the Visegrad palace. The bath could be accessed from the palace through a bridge and consisted of three parts. The first, rectangular chamber, from which the other two opened, was situated higher than the bridge. The other two chambers were divided by a water warming tank which was heated from an underground chamber that could be accessed through a ladder from the bath's yard. A hypocaust built south of the water tank was also heated from here. A bath basin made of carved stone slabs was placed north of the water warmer in a niche in the thick back wall of the bath. The aqueduct that probably supplied the basin, the water tank and the chamber above the hypocaust with water, ran inside this back wall. Even though the bath's superstructure has not been preserved except for the eastern wall, and only a stub survived of the latter, the spatial division of the bath might be reconstructed on various grounds. The space above the hypocaust and the space in front of the bath basin must have been two individual chambers, as they were certainly separated by the water heater tank; the floor level of the space above the hypocaust was also a bit higher. The bath was transformed in the Matthias period. Although the technical details were not altered, the lancet arches on which the timber-deck bridge rested was transformed into a brick barrel vault which now also supported the small courtyard behind the bridge. The bath's foreground, the small bath chamber and the space between them were merged and thus a large room was created. Antonio Bonfini's account helps with interpreting these rooms. In his preface to the translation of Averulinus he mentions a bath transformed in the Matthias era. According to his description the bath consisted of two chambers: a frigidarium and a caldarium, that is, a hypocaust and an anointing chamber. 116 The description corresponds to the excavated remains. The hypocaust chamber can be identified as the caldarium, the hot plunge bath,

Piper 1912, 492–493.

¹¹² Mesqui 1993, II: fig. 196.

¹¹³ Thurley 1993, 174–176.

¹¹⁴ Horváth 1990b, 83-84.

¹¹⁵ Thurley 1993, 176.

[&]quot;Ad haec frigidariae atque caldariae cellae; item hypocaustum et cum unctuario baptisterium." Antonio Bonfini's preface to the translation of Averulinus' architectural treatise: Balogh 1966, I: 224

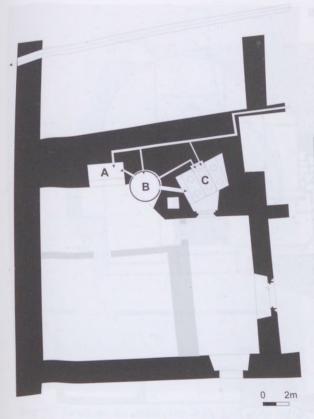
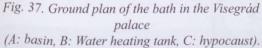


Fig. 38. A reconstructed section of the palace bath in Visegrád



(A: basin, B: Water heating tank, C: hypocaust).
The walls dismantled in the Matthias period are highlighted with grey.

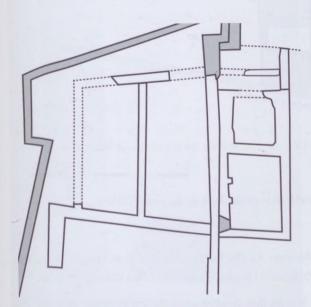


Fig. 39. Angers, ground plan of the castle's bath (hypothetical identification of the function)

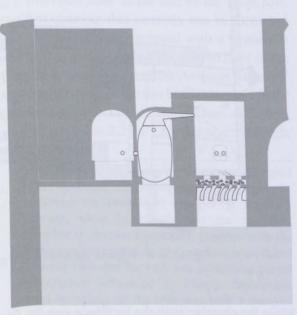


Fig. 40. Reconstructed section drawing of the bath in the palace of Visegrád, with the bath basin and the heating equipments

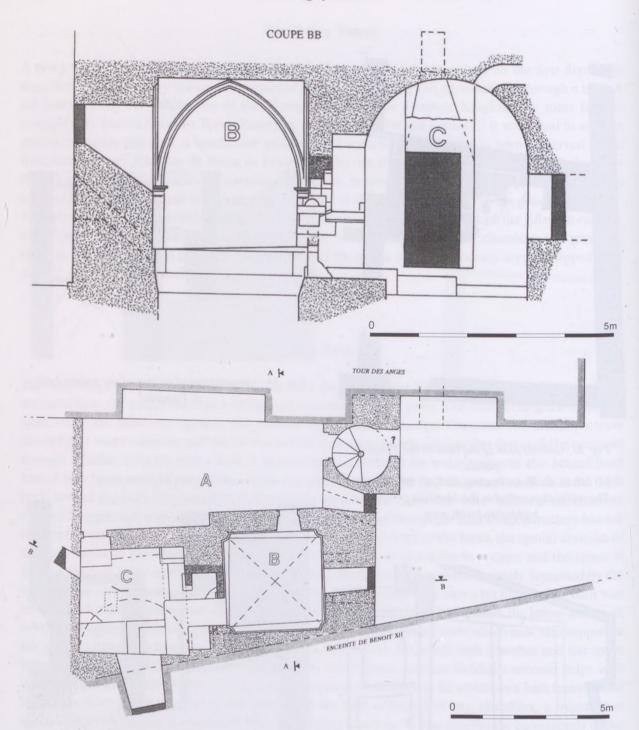


Fig. 41. a-b. Avignon, the section and ground plan of the bath in the papal palace

while the chamber with the bathbasin was the *frigidarium*. As the latter chamber was expanded in the Matthias period, the anointing chamber mentioned by Bonfini probably denotes this enlarged room.¹¹⁷

Rózsa Feuerné Tóth, after analyzing Bonfini's text, argued that Bonfini used the expressions in Pliny the Younger's bath description (Ep. II. 17. 10–11.) in his own account on the Visegrád bath. However, this observation supports the authenticity of this account: Bonfini may have used the same terms as Pliny, but wrote about a different spatial arrangement. While two opposite bathbasins were placed in the frigidarium in



Fig. 42. Tarascon, the sudatorium in the bath of the castle



Fig. 43. Tarascon, the hypocaust in the bath of the castle

Bath chambers in palaces appear in the written sources from the fourteenth century onwards, primarily in France. The bath of the Avignon papal palace was mentioned first in 1342.118 One of the royal houses in Paris, the Hôtel Saint-Pol, had a bath pavilion around 1360;119 in 1384, Margaret of Flanders had built a bathroom in the ducal palace in Dijon. 120 A bath chamber was constructed in the Château-Gaillard in 1395, and four years later in Germolles. From the fourteenth century onwards the written accounts make a distinction between the bath and the hot plunge bath, but these two always appear together. They are mentioned in connection with the Walle palace of Gent in 1395-1396, and the Hôtel d'Artois in Paris in 1409, built by John the Fearless. In 1418-1419 a new bath and a hot plunge bath were constructed in the palace of Ghent.

Of the two chambers of these baths the hot plunge bath with the hypocaust was more widely known. One of the earliest examples might be identified in the castle of Angers, where a tenth-eleventh-century chamber with a hypocaust was brought to light. It seems to have been attached to a two-room suite at the end of the great hall. The first chamber that certainly can be identified as a hot plunge bath equipped with a hypocaust was built in 1337–1344 on the ground floor of the Tour de la Garde-Robe of the Avignon palace. ¹²¹ Another hot plunge bath has been preserved in the Guémené-sur-Scorff, the castle of Jean de Rohan, after 1377. ¹²² The 2.25 × 1.8 m large, 2.5 m high,

Pliny's report, there was only one in the Visegrád bath; moreover, the anointing chamber and the bathbasin are mentioned together in Bonfini's account, while in Pliny's text the anointing chamber is discussed seprately, together with the hypocaust. Nevertheless, the conclusion of Rózsa Feuerné Tóth that the bath was a Matthias period construction influenced by Pliny's description, must be wrong, as the bath was built a hundred years earlier, in the Sigismund period. Feuerné Tóth 1987, 33.

- 118 Gagnière 1985, 31-32.
- ¹⁹ Kiby 1995, 188.
- 120 Kiby 1995, 197.
- ²¹ Schimmelpfennig 1994, 38.
- ²² Duhem 1929.

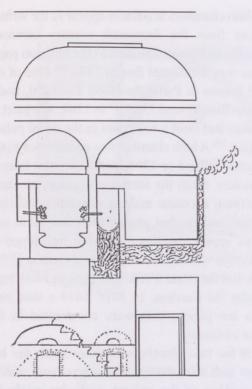


Fig. 44. Section of a bath, after Francesco do Giorgio
Martini

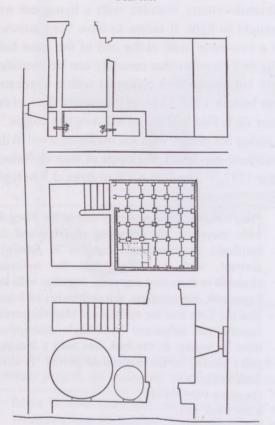


Fig. 45. Ground plan of a bath, after Francesco do Giorgio Martini

rib vaulted bath chamber was situated on the ground floor of the castle, separated from the suite. A hypocaust was built under it. The hot plunge bath in the Suscino castle of the dukes of Brittany is dated to the 1380s; its structure was similar, but it adjoined the suite, 123 just as the small bath chamber in the Tarascon castle of the Angevin dukes. The hot plunge baths in the Vitré¹²⁴ and Montmuran¹²⁵ castles date back to the first quarter of the fifteenth century. Those in the castles of Mehun-sur-Yèvre¹²⁶ and Châteaudun¹²⁷ and the Jacques Coeur house in Bourges¹²⁸ were built in the mid-fifteenth century, while the baths in the palaces of Sully-sur-Loire, 129 Montreuil-Bellay, 130 Bridoré¹³¹ and Gien ¹³²were built at the end of the century. All these chambers are small, vaulted rooms with a Roman type hypocaust beneath, that is, a hypocaust resting on small pillars and covered with floor slabs. Water was supplied by a small sewer drain cut into the wall through which warm and cold water was poured from the neighboring heating chamber into a small basin on the wall. A small foreground was also added to the bath complex in Avignon, Bridoré, Gien, Mehunsur-Yèvre and Montreuil-Bellay. In Châteaudun and Gien another small chamber, maybe a place for taking a rest, opened from the hypocaust chamber. 133 The hypocaust chamber served as the hot plunge bath, and the bath basin was placed in one of the neighboring chambers, in the foreground or the bedroom. Sometimes a small, dry resting

¹²³ Mesqui 1993, II: 183-184.

Mesqui – Amiot – Bon – Brodeur – Carru – Chevet – Fauchere – Marchant 2001, 12.

Mesqui – Amiot – Bon – Brodeur – Carru – Chevet – Fauchere – Marchant 2001, 12.

Mesqui – Amiot – Bon – Brodeur – Carru – Chevet
 Fauchere – Marchant 2001, 12, 48–51.

¹²⁷ Mesqui 1977, 161.

¹²⁸ Aubert 1929.

¹²⁹ Mesqui 1993, II: 185.

Mesqui – Amiot – Bon – Brodeur – Carru – Chevet – Fauchere – Marchant 2001, 12.

Mesqui – Amiot – Bon – Brodeur – Carru – Chevet – Fauchere – Marchant 2001, 12.

Mesqui – Amiot – Bon – Brodeur – Carru – Chevet – Fauchere – Marchant 2001, 13.

Mesqui – Amiot – Bon – Brodeur – Carru – Chevet
 Fauchere – Marchant 2001, 34–37, 43–45.

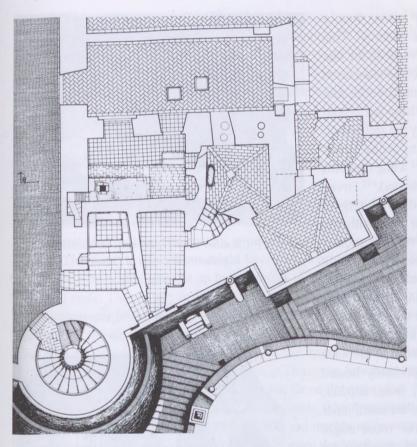


Fig. 46. Ground plan of the bath of the duke's palace in Urbino

chamber was added. Walled bath basins are not known from these monuments, though such have been preserved in Italy, dated to the late fifteenth century at earliest.134 The bath in the Urbino ducal palace, built under the duke's suite between 1477 and 1482, followed antique examples with walled bath basins and hypocausts. 135 The bath consisted of a calidarium, a fridigarium and a bath chamber equipped with a basin. 136 At the end of the vaulted bath chamber a 100 × 124 cm large bath basin was built. A hypocaust was situated under the calidarium, 137 while the frigidarium was equipped with a lavabo. The palace loggia could be accessed from here. 138 The heating equipment was handled from a back chamber, to which a firewood storage room was attached. A simpler, circular

bath chamber 3 m in diameter was built in the castle of Ostia in 1483–1485.¹³⁹ A hot plunge bath and a bath chamber similar to those in Urbino have been preserved in the castle of Nantouillet in France, built by Cardinal Antoine Duprat between 1520 and 1527. The two bath units were placed on the ground floor, next to each other.¹⁴⁰

There are three other palaces in medieval Hungary in which the presence of a bath chamber might be assumed. One of them is the royal palace of Óbuda (Old Buda), built in the second third of the thirteenth century. At the end of its southern wing a room terminated by a polygonal apse was discovered. Under its red marble floor a hypocaust resting on stone pillars was found, with channels circulating the hot air expanding into the walls above. Two sewer drains for discharging the wastewater were discovered close to the room.¹⁴¹ This chamber of modest size (ca. 3.5 m wide) resembles the hot plunge baths in

Baths in Italy are mentioned from the beginning of the fourteenth century onwards (e.g. the bath of Castel Nuovo in Naples, built in 1320–1331), but the preserved monuments date mostly to the sixteenth century, with a few exceptions from the second half of the fifteenth century. For a thorough discussion of Italian Renaissance bathrooms, see: Edwards 1982.

A small, fourth-century Roman bath was discovered at the fortress of Visegrád-Gizellamajor. The bath chamber was heated by a hypocaust, and two small, walled bathbasins were placed in one of its ends. Gróf – Gróh 1991, 88.

Palazzo di Federico da Montefeltro 1985, 194.

¹³⁷ Kiby 1995, 127-128.

¹³⁸ Edwards 1982, 12.

¹³⁹ Kiby 1995, 129; Edwards 1982, 12–13.

¹⁴⁰ Prinz – Kecks 1985, figs. 141–142.

Budapest műemlékei (The Monuments of Budapest) 1955–1962, II: 374.

medieval France, and probably there was a bath chamber somewhere in its vicinity. This assumption, however, is yet unproven as the site has not been fully excavated. Another Hungarian bath is mentioned both by Antonio Bonfini and Galeotto Marzio in connection with the Esztergom castle, as a construction ordered by the archbishop János Vitéz (1465-1472). Bonfini writes about baths with warm and cold water, 142 while Galeotto mentions a hot plunge bath (laconicum). 143 István Horváth, a scholar who researched the Esztergom palace, identified the hot plunge bath with the small, barrel vaulted chamber on the ground floor of the castle, situated between the dwelling tower and the kitchen. This chamber was added to the thirteenth-century dwelling tower later. The sewer drain and the vents on the barrel vault served as the basis for Horváth's identification. 144 The chamber was situated behind the fireplace of the palace kitchen and was probably heated from here. It opened, however, from another, bigger room at the southern end of the small inner courtyard of the palace. The latter room might be identified as the cold water bath described by Bonfini. The third bath in Hungary is also known from Bonfini's account: he mentions a caldarium and a frigidarium in the Buda royal palace; 145 their location, however, is uncertain.

The Visegrád bath resembles the ones in Urbino and Nantouillet. Its hypocaust differed from the French and Italian examples, because here — as it is attested to by the large quantities of freshwater stones brought to light — large pebbles were placed on the hypocaust vault, and the floor had openings which could be covered. This hypocaust type was widespread in Central and Northern Europe, and also in Hungary. In some regards it was more efficient than the traditional antique hypocausts



Fig. 47. Chamber with a hypocaust (probably a bath) in the royal castle of Óbuda



Fig. 48. Representation of a steam bath in the Bellafortis of Konrad Kyeser, ca. 1405. Niedersächsische Staats- und Universitätsbibliothek Göttingen, Codex Ms. Philos. 63

used in the West, because it was not necessary to warm up the floor slabs, but the hot air could enter the room immediately through the floor openings after that the fire was extinguished, and the stones kept the heat for a long time. Not only the heating, but also the water supply was very efficient in the Visegrád bath. Due to the aqueduct that supplied water and the inbuilt water heater tank, it was possible to pour water from taps attached to the wall in both chambers, similarly to a modern bathroom. The steam was

Antonio Bonfini, Decades IV.3.100: Bonfini 1941, 47–48.

¹⁴³ Horváth 1990a, 40.

¹⁴⁴ Horváth 1990a, 40.

Antonio Bonfini, Decades IV.7.95: Bonfini 1941, 136.

possibly led to the hypocaust chamber from the water heater tank. This bath type was known in Central Europe. A post-1400 miniature in a Bohemian manuscript of the *Bellifortis* of Konrad Kyeser depicts a bath where the steam is led from a water tank above the fireplace into a chamber adjoining the timber bathhouse equipped with wooden bath basins. ¹⁴⁶ The Visegrád bath, along with the fountains, flush privies and the drain system that supplied all these testify to a highly developed engineering.

The Chapel

The chapel was situated along the central axis of the Visegrad palace. A relatively large vestry adjoined the small sanctuary on one side. A winding stair led up to the upper level of the vestry. This upper level was illuminated by bipartite tracery windows and could be accessed through a bridge from the upper garden. The vestry's upper floor might have been a private oratory, and was connected to the sanctuary by arches. The bridge that led up here through the column corridor of the garden linked the oratory to the royal suite. The oratory in the royal chapel of the Buda palace could be approached similarly: here the Matthias-era library hall in the eastern palace wing had access to the chapel's royal oratory, as it is revealed by the description of the library by Naldo Naldi around 1484-1486.147 Private oratories of the king and the queen were also constructed in the upper chapel of the Diósgyőr castle, depicted on the 1758 survey of Hugo Hazael. The oratories in Diósgyőr, however, opened from the chapel itself and not from the suites, and had a narrow window that faced the main altar. A similar oratory window has been preserved in the upper chapel of the Zólyom castle. The forerunner of this oratory type is to be found in the chapel of the Esztergom castle, where a red marble niche was created on the western wall of the oratory, from which the main altar was visible, even though the oratory had an individual altar too. Such small private oratories that opened from the chapel were widespread in France, in thirteenth to fifteenthcentury private chapels. The type also appears in the Sainte-Chapelle in Paris, and later in all French castles and palaces. 148 Oratories located on the upper floor of the vestry, as in Visegrad, are rarely found in private chapels, but are common in larger churches. On the floor above the northern vestry of the eastern sanctuary in the St. Sebaldus parish church in Nuremberg a chapel was created, whose sanctuary was situated on a balcony. 149 This upper floor chapel was later used as a treasury. 150

The Chapel Terrace

The small, Angevin-era terrace in front of the palace chapel was transformed into a huge, significant construction in the Matthias period, and a monumental, straight flight of stairs was added to it. The terrace was covered with a brick floor, and lime trees were planted. Nicolaus Olahus called it a hanging garden; according to his account, the lime trees were arranged in a regular order and the rest of the garden was covered with rectangular slabs. He reports that the garden rested on vaults and cellars, and

Göttingen, Niedersächsische Staats- und Universitetsbibliothek, Cod. ms. Philos. 63. fol. 114v. Dieckhoff 1978, 85.

¹⁴⁷ Balogh 1952, 33.

¹⁴⁸ Mesqui 1993, II: 117–118.

Fragments of a similar, Sigismund-period balcony were recovered from the Pauline monastery of Budaszentlőrinc. Papp 2000.

¹⁵⁰ Fehring – Ress 1982, 121.

the Fountain of the Muses was situated in the middle.¹⁵¹ The flight of stairs, the brick cover and the lime trees are authentic elements of the description.¹⁵² The chapel terrace is, however, mistakenly called a hanging garden: even though a small cellar was indeed excavated from beneath, it certainly did not rest on vaults and cellars.

Straight, open stairways were prominent elements of medieval palace architecture. One of the most important models was the Scala Santa, the embellished stairway of the Lateran palace. This type was widely used in thirteenth-fourteenth-century Italian and French palaces too. Similar ornamental stairways, situated in closed inner courtyards, were built also in Hungary in the fourteenth century; there were two in the Diósgyőr castle. The ornamental flight of stairs of the Visegrád palace, however, is closer to the Italian analogies from the point of view of its position and structure.

The open terrace garden planted with trees, situated in the middle of the palace was a quite unusual feature of the Visegrád palace. The role of this garden as a place of status display is implied by the reception of a Turkish deputy which, according to the report of Nicolaus Olahus, took place here. The open terrace offered an opportunity for the king to line up the members of his retinue and thereby show the court's splendor. 154 Olahus also mentioned that the king liked to have his dinner and receive deputies here in the summertime; 155 so, the terrace served as a kind of an open air great hall.

Medieval gardens and buildings were usually used according to two patterns. In palaces, the gardens were closed, private spaces; in case of villas erected in gardens, however, the villa was considered a closed, private space strictly separated from the outside. The relation between the Visegrád palace garden and the edifices around it is, nevertheless, unusual and quite peculiar. The buildings were not surrounded by the

[&]quot;Ad centum et ultra a porta passus introsus incipit gradus ex quadris lapidibus septem aut octo latus ulnis, altus vero quadraginta circiter passus. Hic area est quadra, pensilis fornicibus sive cellis vinariis pro regio sumptu et amplis et magnificis insidens instructaque, lapidibus pariter quadris strata, in quia iuxta aequam dimensionem plantatae sunt tiliae arbores et odoribus verno tempore frgrantissimae et aspectu placidissimae." Olahus 1938, 11.

A pit 5 m in diameter, identified as a plantation pit of one of the trees, was brought to light at the southwestern corner of the terrace, during the excavation of the brick floor. The mortar bed was missing in a 5 m wide stripe along the western retaining wall, suggesting the presence of trees here. Buzás 1994b, 59.

E.g. in the Cité in Paris, in the castle of Montargis, in the palace of Troyes, in the papal palaces of Viterbo and Orvieto, in the town halls of Anagni, Gubbio, Todi, Orvieto and Verona, and in the Bargello palace of Florence.

[&]quot;Narratur res non minus risu digna, quam memorabilis olim eoloci certo contigisse. Turcarum quidam legatus, dum, ut moris est, ab aulicis regis ex oppido legationis suae exponendae gratia in aulam deduceretur et in porta, unde rectus patet ad hanc pensilem aream aspectus, parumper substitisset, circumspiciens tantam loci illius amaenitatem splendoremque et aulicorum tam in inferiore, quam superiore, ubi rex erat, area infinitam multitudinem serico, argento auroque contextis indumentis atque non ex minima sui parte baltheis (ut moris est nostrorum hominum) ensibusque argentalis ac torquibus aureis ornatam tanta subito admiratione stuporque perculsus est; ut totius suae legationis oblivisceretur, et, dum, per gradius in conspectum regis ascendisset, propter eius aspectum, qui ob magnos oculos cruore veluti perfusos terrorem inspicientibus incutiebat, conceptus iam antea timor ita magis ac magis hominem occupavit, ut post diuturnum silentium nihil aliud proferre potuerit, quam: Caesar salutat, Caesar salutat. Quem quum rex interrogaret, an quid ultra vellet, ille nihil respondit; Rex viso hominis tam nihili stupore ad suos, qui adstabant, purpuratos conversus. Videte, inquit, quales beluae nostros et aliorum principium Christianorum fines negligentia nostra publica incursent; verum, quantum in me erit, curabo fraena his beluis imponere, ne tam licenter excurrant. Si alii etiam principes socordia et internis dissensionibus sepositis hoc idem praestare curarint, agetur bene de rebus Christianis. Iubet deinde legatum reduci ad hospitium, Vade, inquiens, respira, resipisce! Is, quum post multum temporis largiens, ut fit, aulicis ampla munera ambiret revocationem, nunquam est revocatus, sed significatum ei a rege, ut domum rediret nunciaretque domino suo, alium mitteret, qui legatione fungi sciret. Ita ille pro regis dignitate magnifico nihilominus munere oneratus coactus est cum rubore reverti. Haec quamvis in rem praesentem minus pertinebant, nolui tamen silentio praeterire." Olahus 1938, 11-12.

[&]quot;Hoco loco rex ipse verno aestivoque sole florentibus arboribus solebat apricari, auram captare prandereque, nonnunquam etiam legatos audire et dare responsa." Olahus 1938, 11.



Fig. 49. The main facade of the papal palace in Viterbo

garden as it was usual in villas, and the garden lacked the intimacy usually attributed to palace gardens. The garden was inside the palace and was not separated from it, but emerged as an organic part of the architectural complex, as an open air great hall used for communicating status. This garden type resembles the thirteenth-century hanging garden of the papal palace in Viterbo. The Viterbo hanging garden was situated right at the end of the palace's great hall, next to the huge, open stairway leading to the palace, and faced the town area in front of the palace. This hanging garden was a proper status indicator, and as such, it might have been a model for the Visegrád chapel terrace where this function was emphasized.

The Northern Flower Garden

The northern garden was surrounded by the palace from the south and the east, and the high fence wall from the north and the west. A stripe of bricks covered with lawn ran at the foot of the fence wall; the bricks were found during the excavation. In all likeliness an arbor was created on the internal side of the fence wall. In the Angevin and Sigismund periods an open, although covered yard was situated in the eastern corner of the garden, under the arch of the quarter circle bridge that led to the privy tower of the palace. Not much is known about the southwestern end of the garden in this period. However, the upper floor hall of the northeastern palace was probably approachable from this garden. From the hall a winding staircase led to the rooms of the northern wing, and the corridor that connected the orchard and the reception court could be accessed from there.

During the reign of King Matthias a system of stairways was built in the southwestern corner of the garden, through which the new, southeastern terrace of the orchard and the orchard itself could be directly approached.¹⁵⁶ When the archway of the privy tower was walled in in the eastern end of the

Stone slabs of the ledge of the loggia on the Sigismund-era ornamental courtyard were secondarily used when these stairways were built.

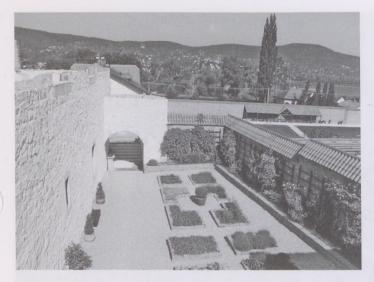
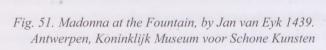


Fig. 50. The reconstructed flower garden of the Visegrád royal palace





garden, the view was blocked. ¹⁵⁷ A trench running to the middle of the garden was dug, which cut the walls of the northern palace wing, and therefore it was probably made to accommodate an aqueduct. This suggests that some kind of a fountain was situated in the middle of the garden. Unfortunately nothing has been preserved of its foundation; it may have been a metal fountain and not a proper built construction. Bonfini also mentions, that there were "hanging gardens and fountains here, decorated with red marble and metal basins". ¹⁵⁸ A similar garden fountain made of bronze is depicted in the 1439 painting *Madonna by the Fountain* by Jan van Eyck. ¹⁵⁹

The Eastern Flower Garden

The eastern flower garden that belonged to the second floor suite was surrounded by walls from all sides. A bench ran along the southern half of the eastern retaining wall; the regular rifts in the wall above might have been made for fixing the armrests. Remains of a pair of sedilia were discovered on the northern section of the retaining wall during the excavations. Beside these sedilia an ornamental wall fountain was erected during the reign of Louis I, 160 and its baldachin was decorated with the ostrich crest of the Angevins. 161 A portico and a row of sedilia were placed on the other side of the garden. The bridge that

¹⁵⁷ A Sigismund era door jamb was secondarily used during this walling. Buzás 1990, 89–90. Cat. 70.

^{158 &}quot;Hic horti fontesque pensiles, qui porphyrio marmore, aeneoque solio culti sunt." Antonio Bonfini, Decades IV.7.110; Balogh 1966, I: 225.

Antwerpen, Musée Royal des Beaux-Arts. Végh – Faggin 1993, 96–97. Cat. 29.

¹⁶⁰ Szakál 1969–1970, 345–372.

The crest depicting an ostrich holding a horseshoe in its beak was invented by Charles Robert and used by his successors. Foreign written sources mention it even in the sixteenth century as a royal crest used by the kings of Hungary. Vajay 1967, 10. It seems, however, that it was only rarely used in Hungary after the Angevin era.

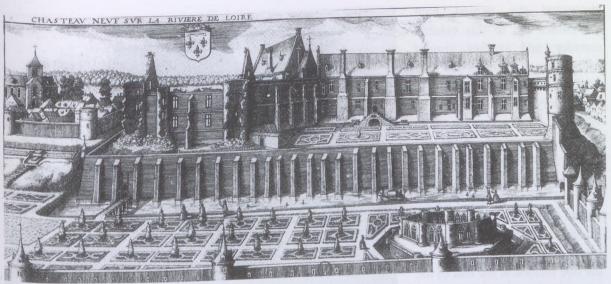


Fig. 52. Châteauneuf-sur-Loire, castle garden. Engraving based on a 1580 drawing by Claude Chastillon

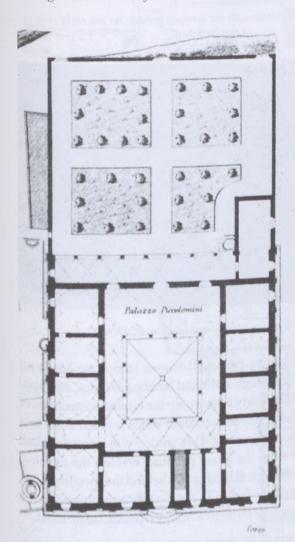


Fig. 53. Ground plan of the papal palace of Pjenza and its garden

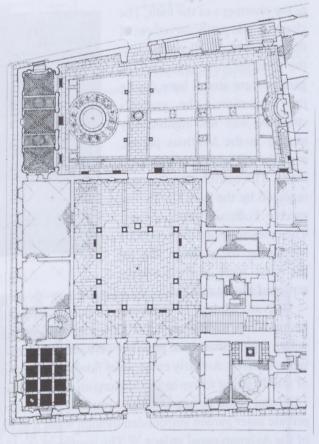


Fig. 54. Ground plan of the Medici palace of Florence and its garden

connected the garden with the palace led to this column corridor, and another, similar bridge was attached to the portico's other end, leading to the oratory above the chapel's vestry. 162 Consequently, portico served as a roofed hallway between the two bridges, and it secured the traffic between the dwelling and the chapel oratory in harsh weather. Besides, the portico created a loggia-like open space similar to the one formed at the end of the other garden. A small chamber was attached to the garden at the end of the corridor adjoining the northern edge of the garden, next to the chimneys of the bath. The chamber was partly carved out of the rock face. In all probability, the frost sensitive plants of the garden were stored here during the wintertime. The garden's structure was not significantly altered in the Matthias period, even though small changes were made. The ostrich fountain was replaced by the Late Gothic red marble Fountain of the Lions. The columns on the corridor occupying the western half of the yard were most probably replaced also at that time.

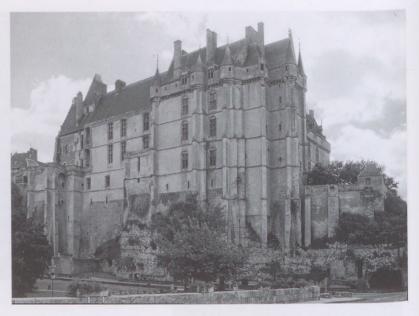


Fig. 55. Châteadun castle with the terrace garden on the right side of the building



Fig. 56. Garden of the papal palace in Pienza

Private gardens of the Visegrád palace represent a garden type well-known from Late Medieval pictorial representations. Small flower gardens surrounded by high walls and building facades, equipped with a loggia or an open pavilion were private yards of the nobility where only the closest acquaintances were received. An early example of flower gardens attached to medieval palace suites is found at the foot of the dwelling tower in the Esztergom castle, on the mountain crest. This garden was created around 1200 and could be approached through a flight of stairs from the lower dwelling level of the tower. A private inner garden surrounded by high walls was built by Pope Benedict XII behind the dwelling wing of the Avignon papal palace. ¹⁶³ The garden of the king and the queen in the Louvre was situated in the northern palace wing, under the royal suite, and was accessible through a bridge over the castle moat. ¹⁶⁴

It was György Szekér who first drew my attention to the traces of the chapel oratory and the bridge that led to it.
 Gagnière 1985, 106–107.

¹⁶⁴ Whiteley 1992, 69.

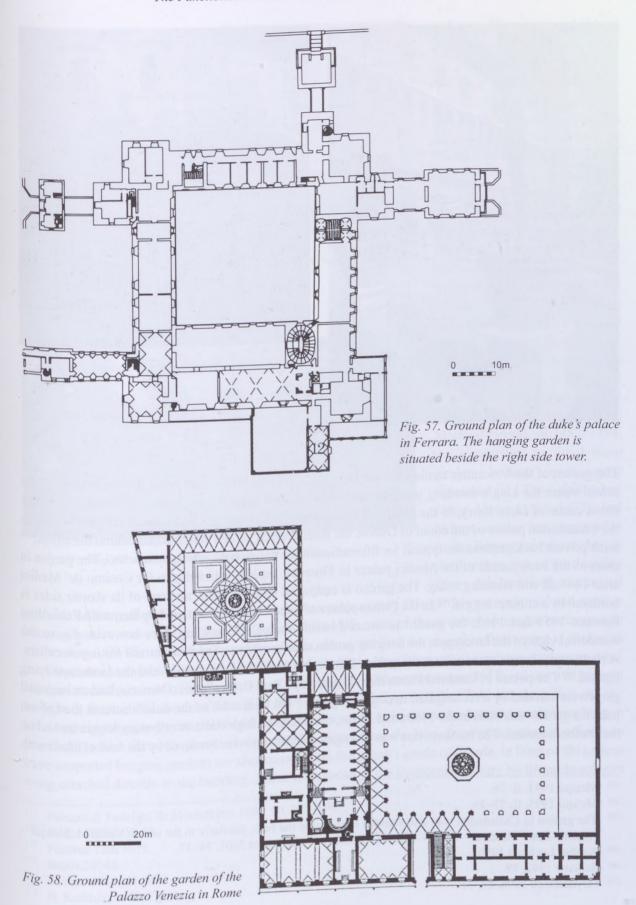






Fig. 60. Garden of the duke's palace in Urbino

Fig. 59. The hanging garden of the duke's palace in Ferrara

The garden of the Vincennes castle was similarly built: a small bridge connected the lower level of the tower where the king's dwelling was situated with the royal garden outside the castle walls. ¹⁶⁵ In the Riom castle of Duke Berry, in the palace of Louis, duke of Orleans in Châteauneuf-sur-Loir, ¹⁶⁶ and in the Châteaudun palace of the count of Dunois the small terrace garden was situated behind the suites. ¹⁶⁷ Such private back gardens are typical for fifteenth-century Italian palace architecture too. The garden in front of the back facade of the Medici palace in Florence, built by Michelozzo for Cosimo de' Medici after 1445, is still standing today. The garden is embraced by high walls, and one of its shorter sides is bordered by a column loggia. ¹⁶⁸ In the Pienza palace of pope Pius II, constructed by Bernardo Rossellino between 1459 and 1462, the garden is situated beside the palace building, here however, due to the wonderful view of the landscape, the hanging garden was formed as a spacious terrace resting on cellars. A multi-story loggia was built on the palace facade that looked on the garden and the landscape lying behind. ¹⁶⁹ The palace of Cardinal Pietro Barbo, later pope Paul II, the Palazzo Venezia, had an enclosed garden surrounded by a rectangular, two-story loggia. ¹⁷⁰ On both sides of the duke's suite in the Urbino palace a garden was built in the 1460s and 1470s, embraced by high walls. A two-story loggia looked on the southern garden. The northern one was a hanging garden, and was bordered by the wall of a hall with

¹⁶⁵ Mesqui 1993, II: 76.

¹⁶⁶ Mesqui 1993, II: 75–76.

The garden in Châteaudun was also situated next beside the bath, similarly to the one in Visegrád. Mesqui – Amiot – Bon – Brodeur – Carru – Chevet – Faucherre – Marchant 2001, 34–37.

¹⁶⁸ Acidini Luchinat 1996.

¹⁶⁹ Schiavo 1942, 79.

¹⁷⁰ Heydenreich 1996, 68-71.

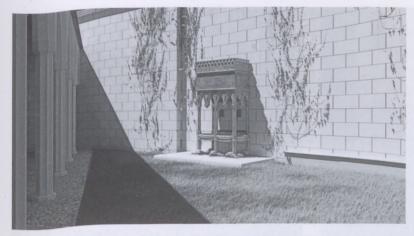


Fig. 61. A virtual reconstruction of the garden ornamented with the Fountain of the Lions



Fig. 62. Garden of the Medici palace in Florence

arches. The latter hanging garden was situated between the private suites of the duke and the duchess.¹⁷¹ The Urbino garden served as a model for the sixteenth-century hanging garden in the ducal palace in Mantua, where a loggia was also erected.

The private royal garden in the Buda palace must have resembled the one in Urbino. This garden was also situated between the two royal suites, but was built earlier than the Urbino garden, during the reign of King Sigismund, in the first third of the fifteenth century. 172 Later, when the garden was transformed into a hanging garden by the construction of a new, larger cistern in the Matthias period, in 1482-1484, the similarities to the Urbino garden became even more expressed.¹⁷³ The archbishop János Vitéz (1465-1472) had built a similar hanging garden in the Esztergom palace, beside the northern side of the dwelling tower. A column loggia occupied

one side of the garden here too.¹⁷⁴ In the early sixteenth century this garden was enlarged and another hanging garden was added to the new, Renaissance style suite of the archbishop on the northern side of the chapel.¹⁷⁵ The relation between the garden, the suites and the chapel in Esztergom is similar to the situation observed at Visegrád. Hanging gardens might have been used as private gardens in other Hungarian castles as well. The foundation of a huge, open substructure supported by pillars was brought to light in front of the southern facade of the Tata castle, facing the lake.¹⁷⁶ Above the pillars, on the level corresponding to the castle's first floor where the suites were situated, a hanging garden might have been built, which certainly provided a spectacular view across the lake. Similar substructures that may have supported hanging gardens are also known from the queen's castle of Óbuda, in front of the eastern wing, attached directly to the building. These were dated to the fourteenth century by the archaeologist

Palazzo di Federico da Montefeltro 1985, 90, 193–196.

¹⁷² Buzás 1997a, 90-95.

Feuerné Tóth 1975.

¹⁷⁴ Buzás 2004d.

¹⁷⁵ Klinger 2004, 45–46.

¹⁷⁶ B. Szatmári 1975, 279.

who excavated them.¹⁷⁷ Analogies of open hanging gardens with vaulted substructures dating back to the early sixteenth century have been preserved in Italy. A small hanging garden with a substructure accommodating a kitchen was built in Ferrara during the reign of Alfonso I d'Este (1505–1537). The construction emerged as a tower resting on a huge arch beside the keep of the castle. The present form of the garden – along with the loggia used as a winter garden – was created after a devastating fire in 1554.¹⁷⁸ The Medici family had built a hanging garden on top of the Loggia dei Lanzi, which was connected to their own palace, the Palazzo Vecchio, by the new Uffizi building.¹⁷⁹

The Orchard

In case of larger palaces huge orchards were also used as private spaces in addition to flower gardens. The Visegrád palace was no exception. The 80 m wide and 100 m long orchard surrounded by fence walls was situated north of the palace complex. The orchard is mentioned in Nicolaus Olahus' account as well. In his report he placed the orchard at the palace's side opposite to the town, which is correct, even though he mistakenly stated that it was east of the complex. The palace's barnyard with the stables was situated at the other side of the orchard; nevertheless, little is known about this area. Excavations testify that the orchard was established in the period of Louis I, when the timber house from the time of



Fig. 63. The Medici villa, Fiescole

Charles I was demolished in its northwestern corner and a well was dug in its place. The fence walls embracing the orchard were built at that time. A small door opening to the road may have been cut into the western wall. A garden house built partly or entirely of timber stood in the orchard's northwestern corner, Is in front of which a new well replacing the previous

¹⁷⁷ Altmann 1976, 251.

¹⁷⁸ Borella 1991, 49–50, 57–59.

¹⁷⁹ Balogh 1966, I: 225, note 3.

¹⁸⁰ "Altera ex parte orientalis aulae hortus est vitibus et arboribus frugiferis amaenus." Olahus 1938, 11–12.

During the excavations carried out at 21 Fő street east to the palace garden, led by me and Mátyás Szőke in 1996, parts of a large sized, buttressed medieval stone building were discovered. During this small-scale rescue excavation it was unfortunately impossible to date the building precisely or determine its function, but the remains may possible be connected with the farm buildings of the palace.

The eastern wall is associated with the privy tower built in the 1360s. A number of secondarily used Angevinera stone carvings were incorporated into the northern section of its foundation. These might be discarded carvings. Szőke – Pálóczi Horváth – Buzás 2002.

The only thing that suggests the existence of a door in the heavily ruined wall is a leveling which might be interpreted as a seat for the threshold. Szőke – Pálóczi Horváth – Buzás 2002.

Impressions of timber logs and the lower part of a chimney flue were observed on the internal side of the fence wall. A thin stone wall running perpendicular to the fence wall was also discovered during the excavations in 2001. Szőke – Pálóczi Horváth – Buzás 2002.





Fig. 64. The Casa del Curato in Rome

Fig. 65. The palace of Trebbio

one was constructed. Fragments of the well's upper brick walling, its mortar and whitewash, the remains of the well's carved andesite tuff ledge with roll molding, and the wooden shingles that once roofed the construction were discovered in the well. A red marble fountain was erected in the middle of the garden.¹⁸⁵

In the Matthias period two new, huge terraces were built in the southeastern and northeastern corners of the garden, but previous constructions were not altered. These new terraces occupied one third of the garden's length. A garden house was erected on the northeastern terrace. It was centered around a larger room, from which a couple of stairs led up to a long, narrow space, probably a loggia, on the house's southern side. A small room constructed of a timber frame filled with bricks opened from here to the east. This room had a terrazzo floor. Under the building a wine cellar was carved into the rock face. The substructure supporting the long southeastern room also served as the cellar porch. The date 1479 was inscribed onto the key stone of the cellar porch door, which dates the garden house and the terraces too.

The other large terrace of the orchard adjoined the southeastern flower garden and could be accessed through the stairways leading to the flower garden and the northwestern palace. The winding staircase that led to the upper level of the northeastern palace was also approachable through these flights of stairs, and so the terrace was easily accessible from the suites of the palace. Therefore, this terrace might be interpreted as an enlargement of the private royal garden. The cover slabs of its walled parapet show a Renaissance style molding: a fragment of this molding type was discovered close to the terrace. The *xistus*, that is, a pergola, mentioned by Bonfini, was in all probability situated in this garden area. ¹⁸⁶

¹⁸⁵ Buzás 2006.

[&]quot;Neque horti desunt et xisti violis odorati amoenaeque gestationes buxetis undique conviridantes." Antonio Bonfini's preface to the translation of Averulinus' architectural treatise: Balogh 1966, I: 224. Bonfini took the expression "xisti violis odorati" from Pliny the Younger's description of the villa in Laurentum. Feuerné Tóth 1987, 33. The term *xistus* was interpreted both by Jolán Balogh and Rózsa Feuerné Tóth as terrace. Balogh

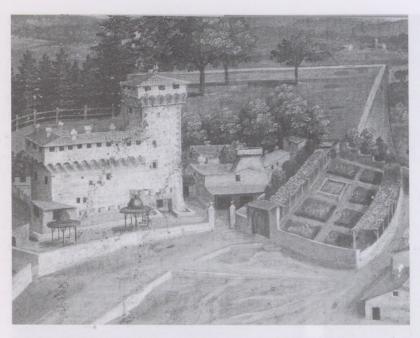


Fig. 66. The Medici villa in Trebbio in a painting of Giusto Utens, 1599-1602, Florence, Museo Firenze cam'era

Hardly anything is known about the house erected in the northwestern corner of the orchard. Its remains have mostly been destroyed by modern disturbances. Today a modern garden gate and several other structures stand in its place, and therefore it could not have been excavated yet. The impression of its timber frame wall has been preserved on the fence wall. It may have been built before the fence wall but it was certainly standing when the latter was constructed. The date of its demolition is completely unknown. The remains observed so far suggest a building made of timber and stones with at least one heated room.

Quite a lot is known about medieval garden houses. Houses of gardeners¹⁸⁷ and summer houses count among them. These were usually built of timber but had at least a timber frame. A typical example is the timber-frame royal summer dwelling in the palace garden of Westminster, built beside one of the corner towers and mentioned in sources in the 1450s.¹⁸⁸ The Matthias-era house in the northeastern corner of the palace garden of Visegrad must have had a similar function, although its position and appearance suggest that it was also used for status display. Its terrace and, perhaps, loggia provided a nice view of the garden and the Danube. Such villa-like garden pavilions with terraces and loggias were adapted in Christian Europe from Islamic garden architecture. Early examples were built in the royal gardens of Norman Palermo in the second half of the twelfth century.¹⁸⁹ The so-called *gloriett*, a building type known in the Hispanic Moor architecture appeared in England in the garden of Woodstock owing to the wife of Edward I, Eleanor of Castile.¹⁹⁰ The most famous model of this type was the so-called "House of Mars", a splendid timber house built on the lake of the Hesdin palace garden, constructed by Robert II, count of Artois in 1295. The garden was also known for its fountains and its water automatons copied from Arab models.¹⁹¹ The Hesdin garden and its buildings were renovated several times by the dukes of Burgundy in the fourteenth and fifteenth centuries, and it accommodated the most spectacular festivals and banquets

^{1985, 176;} Feuerné Tóth 1987, 33. The Greek word originally meant an open portico for aethletic excercises; in classical Latin it meant portico, a place to walk around or a garden terrace. In the *De re aedificatoria* by Alberti the term *xistus* is used as a courtyard sourrounded by a portico. In the 1604 Latin-Hungarian dictionary of Albert Szenci Molnár, the word *xystus* is identified as a wide veranda or a spacious, roofed corridor. It is likely that Bonfini also used it for a pergola, even though the pergola and the garden terrace were assumably closely connected in the Visegrád palace.

¹⁸⁷ Harvey 1981, 112.

¹⁸⁸ Harvey 1981, 112.

¹⁸⁹ Harvey 1981, 48.

¹⁹⁰ Harvey 1981, 106. Fourteenth-fifteenth-century English glorietts: Corfe Castle (1377–1378), Mews (1440–1441).

¹⁹¹ Harvey 1981, 106.

for Europe's most luxurious court. It was destroyed in 1553 by the troops of Charles V.192 The number of garden houses increased in the fifteenth century. An inventory from 1461 listed five different houses in the garden of Aix-en-Provance of René of Anjou. 193 The king and his court used these as summer dwellings. Similar summer houses were erected in other gardens of René of Anjou's palaces too, e.g. in Pontsde-Cé, mentioned in a 1459 document. 194 This building type was also widespread in Italy. The Villa del Belvedere, built



Fig. 67. The palace of Trebbio

by Innocent VIII between 1485 and 1487 in the Vatican papal palace is one of the most monumental examples. The early sixteenth century Casa del Curato, on the other hand, was smaller and was closer to the one in Visegrád both in its position and dimension. This garden house was situated in a vineyard outside the walls of Rome, was built above wine cellars, and comprised of dwelling rooms and a loggia; later it became part of the park belonging to the Villa Giulia. The garden house and its terrace corresponds the villa of Buda described by Bonfini, which stood in the garden of the Buda palace. According to his report the terrace was ornamented with candelabras, and the house accommodated a living room, a dining room and a veranda.

The terrace garden has been a characteristic element in the garden architecture of Tuscany from the fourteenth century onwards. ¹⁹⁸ The garden of the villa of Giovanni di Cosimo de Medici in Fiesole, built in 1451–1457, was a Renaissance model for these gardens. A garden of two terraces situated above each other and supported by huge retaining walls was attached to the villa. The main function of these terraces was to provide a view of the town of Florence. The upper terrace could be directly accessed from the suite of the villa, and similarly to the Visegrád example it was used as a private garden, while the lower terrace was approachable through the service buildings of the villa and probably had a subordinate function. ¹⁹⁹

The pergolas (*xisti*) mentioned by Bonfini, that is, arbors supported by vertical posts on which plants were trained, had antique roots. These were first used for grape cultivation in the Middle Ages. They were

¹⁹² Antoine 2002, 213–215.

¹⁹³ Antoine 2002, 212.

¹⁹⁴ Antoine 2002, 202.

¹⁹⁵ Marta 1995, 164–165.

¹⁹⁶ Coffin 1979, 19.

[&]quot;Extra arcem in proxima convalle, horti subiacent amenissimi, marmoreaque villa. Hujus propyleum columnis tessellatis embrycatisque circumdatum, que aenea candelabra sustinent. Triumphales sunt ville postes, et triclinium cubiculumque cum laquearibus et fenestris usque adeo spectabile, ut lautissimam antiquitatem proprius accederet. Qua spectat in hortos porticus subest... Argentatis villa tegulis contecta." Antonio Bonfini, Decades IV.7.105; Balogh 1966, I: 100–101.

¹⁹⁸ Pozzana 1996, 150.

¹⁹⁹ Galletti 1996.

usually erected in garden close to the dwelling building.200 Pergolas are also mentioned by Alberti in his De re aedificatoria.201 A number pictorial representations of are known from the fifteenth century; a pergola is still standing in the garden of the villa Trebbio in Mugello. This villa came into the possession of Giovanni di Bicci de' Medici in 1386. The garden and the two vineyards of the villa are mentioned in tax rolls from 1427 onwards. Between 1427 and 1436 the garden was rebuilt by Michelozzo for Cosimo and Lorenzo de Medici, even though the previous layout of the garden was probably not changed.202 The garden was depicted on a fifteenth-century drawing, and the pergola along the terrace's retaining wall is also seen on a 1599 painting by Giusto Utens.²⁰³ The long garden was surrounded by walls and was placed beside the fortified villa on the hilltop, next to the farm buildings, on terraces created on the hill slope. It was equipped with cisterns and herbs were cultivated in it; the rectangular beds were arranged like a chessboard. One of the pergolas,



Fig. 68. Representation of a pergola. "The Miracle of St Anthony" by Benvenuto di Giovanni, detail of the mural, 1456-1461, Siena, Battistero



Fig. 69. Representation of a pergola. "Annunciation" by Benvenuto di Giovanni, detail, 1470, Sinalunga, San Bernardino

which unfortunately has not been preserved, rested on the retaining wall and ran along the lower side of the garden. The other pergola, which still exists today, covered another, narrow terrace on the upper side of the garden. The molded brick columns of the pergola had carved capitals and were placed on the parapet of the terrace and on the walled plant beds. The columns supported a wooden construction that held the vine.

²⁰⁰ Pozzana 1996, 151.

²⁰¹ Azzi Visentini 1995, 45–46.

²⁰² Pozzana 1996, 148–150.

²⁰³ Azzi Visentini 1995, 41–46.

The Hunting Park and the Fishponds

The hunting park of the palace, which probably meant a considerable attraction, is mentioned both by Antonio Bonfini²⁰⁴ and Nicolaus Olahus.²⁰⁵ Visegrád was the center of the Pilis forests, used as a royal hunting territory already in the Arpad period; the town's growth under the reign of Andrew I, king Solomon and Bela IV may also be attributed to its role as a hunting center. After that Sigismund moved his official seat to Buda the Visegrád palace was in all likelihood considered a hunting residence used for recreation, and its enlargement in the Matthias period might also have been due to this function. Even though the whole area of the Pilis forest was a royal hunting territory, the hunting park mentioned in the *Decades* by Bonfini can probably be identified as the surroundings of the Visegrád castle hill.

Bonfini refers to the fishponds in both his texts about Visegrád. Their remains are visible on an eighteenth-century map, south of the palace on the riverbank of the Danube,²⁰⁶ as a rectangular and a square-shaped water basin. The southern end of the larger one was found by István Kováts and Péter Gróf during a rescue excavation in 2005. The clay extracted during the construction of the pond's basin was spread over the Sigismund-era demolition layer of a fourteenth-century timber house, and the basin was filled up and covered only in the nineteenth or twentieth century. Fish scales and bones were collected in large quantities in its vicinity.²⁰⁷ These basins on the riverbank seem to have been temporary depositories where fish was kept until it was taken to the palace kitchen.

*

The plans of the masters leading the Visegrád palace constructions operated with given spatial schemes. Units such as the great hall, the dining hall, the three-room suite that opened from the dining hall, the one-room dwelling chamber with individual entrance, or the cloister walk, taken from monastery architecture almost without any alteration, the open ornamental stairway, the garden villa or the garden terrace with pergolas, were simply arranged into a single complex. This is not surprising, since this method was generally used in medieval architecture. The basic rules of both church and secular society and traditions required architectural spaces that gave room to everyday activities as well as status display to be formed in an unchanged order – unchanged at least on a human scale.

Royal courts were parts of an international cultural tradition through relations kept alive by marriages and the visits of deputies, and there was little room for national differences. The international forms of status display and interior furnishing allowed only small local specialties to prevail, and most of these were not national but regional characteristics rooted e.g. in climate. Stylistic variations were much more pronounced than functional differences. These were also regional traits influenced by the geographical, economic and sometimes also political conditions under which the architects traveled and worked.

[&]quot;Ad Vicegradum, priscorum quondam regum arcem, in editissimo loco sitam, subiacentem regiam sic amplificavit, sic hortis, vivariis ferarum, et piscinis excoluit, ut edificiorum superbia alia quoque superare videatur." Antonio Bonfini, Decades IV.7.110; Balogh 1966, I: 225.

[&]quot;Wissegrad, quod Germani Plintenburg vocant, oppidum abest Buda occidentem versus quinque milaribus conditum ad ripam Danubii in radicibus sylvae vastissimae pardorum aliarumque ferarum altricis." Olahus 1938, 11–12.

MOLS 11207a. Hereby I would like to thank Orsolya Mészáros for finding the map.

²⁰⁷ Hereby I would like to thank István Kováts and Péter Gróf for allowing me to cite their observations.



Fig. 70. Exhibition of carved stones in the Visegrád royal palace



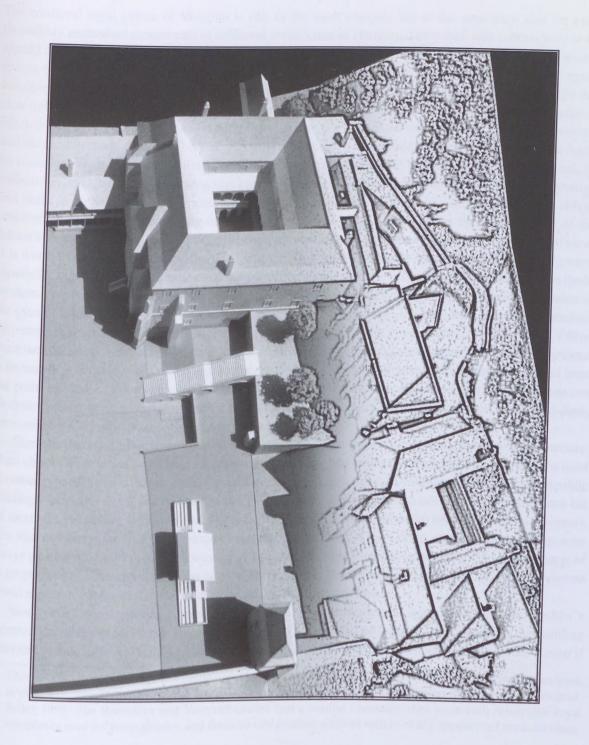


Fig. 71. Reconstructed window from the chapel oratory of the Visegrád royal palace

Fig. 72. Vestry and oratory of the Visegrád royal palace's chapel

Scientific Preparations to the Reconstruction of the Visegrád Royal Palace

GERGELY BUZÁS





Scientific Preparations to the Reconstruction of the Visegrad Royal Palace

The medieval royal palace of Visegrád is one of the most complex but at the same time also the most thoroughly researched monuments of medieval architecture in Hungary. The palace was continuously built, altered and enlarged for three hundred years, and emerged as a sophisticated complex of dwelling rooms, spaces of status display, ecclesiastical buildings, kitchens, workshops, storage buildings, gardens, loggias, balconies and fountains. Its ruination was also a long process that took three hundred years. Although this slow ruination is a sad fact that caused immeasurable damage, it also helped to preserve the traces of medieval life in the monument, which in case of buildings continuously habited are usually swept away by modern use and later architectural changes. The Visegrad palace, however, was not used by anyone after the Middle Ages. Its ruined buildings were not utilized for any other purpose, and so the later alterations were minimal. Its rediscovery, excavation and reconstruction has been a task of twentieth and twenty-first-century archaeology and heritage protection, and the monument provided an opportunity to study a medieval complex almost undisturbed. It goes without saying that scholarship has changed immensely in the past 75 years of the palace's research, and so early studies on the complex are far from satisfactory from the present point of view. It is worth to remember, nevertheless, that the excavations at the Visegrad palace served as one of the most significant steps in the development of medieval archaeology in Hungary. The work of our predecessors made modern archaeology able to revise and criticize their results – and the same will be true for our generation in the eyes of future scholars. The Visegrád excavations namely represent a special field of medieval studies: they aimed to reconstruct the built environment of medieval life. The possibilities of reconstruction follow from the special conventions of medieval architecture, and so a profound understanding of these conventions is necessary in order to evaluate reconstructing possibilities. Medieval architecture was far from unified from the point of view of the techniques and methods applied. At least four different types of architecture can be distinguished on this basis. In addition to village and town houses built of clay, wattle, wattle-and-daub, intricate timber constructions represent an independent category.

Stone and brick architecture may also be divided into two main types: masonry and carved stone architecture. Their character is well known thanks to preserved monuments and written sources. Stone carving was the most advanced type of medieval architecture, typical for churches of high standard, palaces of status display and public buildings. The main factor that differentiated it from masonry architecture was not the use of carved stone but the fact that construction works were led and organized by stone carvers (*lapicida*) instead of masons (*murator*). This also influenced the way the work was organized. In the time of the Gothic, carved stone buildings were always created by a builders' guild. It was led by a master who was a learned stone carver who was in charge of the preparation of plans and distribution of tasks. He personally participated in the creation of the most important carved elements, mostly statuettes. Other stone carvers were his employees.

Stone breakers, masons, carpenters, blacksmiths represented a lower level of the builder's organization; their leaders worked for the master, and so they had no word in the planning of the building or forming its details. Even though the mass of the buildings mainly consisted of rubble stones – even if

The description of the Bratislava castle provided by Jenő Szűcs on the basis of the castle's 1434 account book is of crucial importance also from the point of view of the building organizations that worked at Visegrád. Szűcs 1958. The Bratislava and Visegrád castles had a similar character: they were both residential royal complexes used for status display, and featured rubble stone walls as well as richly ornamented stone carvings.



Fig. 2. Reconstruction of the royal palace at the end of the Middle Ages

they were faced with ashlars –, the size, proportion and position of buildings depended on the cut stone structures; rubble masonry only served as a fill between these. This was so even when previous walls or building parts were re-used, as only walls fitting to the new plan were used.

On the other hand, creations of masonry architecture were built by guilds or builder organizations of the landlord led by masons and not by a builders' lodge. Buildings constructed this way might have had carved stone or molded brick parts but these were built separately or later. For the construction of village churches it was typical to buy and use ready-made elements (door jambs, traceries, tabernacle) created by a builders' lodge working in the vicinity;² or carvings made by an independent group of stone carvers were used by the masons who only had to put them into the sockets.³

The lion's share of medieval monuments in present-day Hungary are creations of masonry architecture: churches of villages and oppidi, countryside mansions and castles and town houses. Monuments of carved stone architecture, that is, cathedrals, city parish churches, monasteries, palaces and royal complexes, are mostly preserved only as ruins or archaeological sites, with a few exceptions. Therefore, modern Hungarian heritage studies after World War II mainly focused on the methodology of studying and documenting the remains of masonry architecture.

The southern gate of the church in Szentpéterfa testifies to this. The mason placed four elements of the roll molded gate's lancet arch (with intersecting moulds) in an incorrect order, which indicates that he was not familiar with molded brick structures and saw these meticulously planned Late Gothic elements as mere decorations. The mason who put these elements in their place was obviously not instructed by the stone carver who produced them, but these carvings were bought independently by the commissioner and given to the masons to incorporate them into the building.

The same method was observed by István Feld at the castle of Ozora. The castle was built of bricks by a group of masons, and carved stone windows of an unmatching size were inserted later into the sockets. In some cases these could only be incorporated into the walls by transforming them in a quite barbaric way. Feld – Kisfaludi – Vörös – Koppány – Gerelyes – Miklós, 1988, 263.

The few standing monuments of carved stone architecture had been reconstructed in the second half of the nineteenth and the first half of the twentieth century. Destroyed monuments, which represented a vast quantity of remains, required decades of research and archaeological excavations carried out by several generations of scholars. Documentation was limited to the usual excavation report even in lucky cases: ground plans, cross section drawings of the layers and the location where the finds were discovered. Finds of these excavations mostly consisted of stone carvings, which sometimes counted thousands of pieces. Scholars usually only cherry-picked them but no systematic research was conducted. Therefore, for a long time scholarship lacked the research method and documentation system which would have been able to merge data gained during the excavations and those collected during the analysis of stone carvings, and which would have provided evidence to interpret the past buildings.

The excavations made clear that research cannot enter a more advanced stage without creating a proper methodology for the study of carved stone architecture. The success of such a methodology lies in the clear definition of goals: the exploration and investigation of the past building and not a l'art pour l'art appreciation of fragmented pieces. Luckily, the initiation of our project coincided with the birth of the *Lapidarium Hungaricum* series, whose experienced editors provided us with their help. Combining the results gained from the analysis of stone and wall remains and data collected during the excavation, and interpreting these together was certainly a novelty. During the work we created models both for pictorial representations and descriptions which later proved to be useful for similar tasks.

The first step was the identification of stone fragments and their typological categorization. The second step, the survey and description was only possible after the proper identification of the given fragment: which part of what construction it might have been. If the scholar describing or photographing the fragment does not know the original form, function and position of the carving, he may make serious mistakes -e .g. he might mix up the upper and underside of the carving -, and thus the interpretation of the fragment on the basis of a drawing or photo might prove impossible or the chances for stylistic or functional misinterpretation will be very high. Therefore I find it most important for the scholar who eventually interprets the remains to participate in the whole procedure from the first steps. After the fragments are identified, an inventory description, a photo and a survey drawing is made. The latter is of utmost importance. Survey drawings might be made of all fragments, of course, even though there is not much point in drawing all pieces in case of an archaeological excavation, because only a part of the fragments derive from conjunctions of the past construction or display significant moldings or interesting technical details (pegs, remains of mortar or paint) which provide useful information. In order to separate significant fragments and remains of less importance, the researchers must have an idea about the past construction as a whole; pieces of moldings that look average at first sight might have influenced the form and size of the structure by their dimensions. Consequently, it is more efficient to prepare the reconstruction of the past structure first on the basis of measurements taken on the fragments, and make the survey drawings only afterwards. The original shape of the elements are usually marked with a broken line so as to differentiate it from the shape of the actual fragment. However, to depict a complemented fragment in the drawing is an important task, since edges and brims that identify a fragment are often invisible and can only be felt by hand. If the reconstruction is impossible on the basis of the pieces recovered from the past structure, but it is required to document the fragments with a survey drawing, then no other steps are necessary. In lucky cases the type of the structure may be identified but not always its dimensions. Then it is advisable to prepare an explanatory sketch in which the position of the given fragment in the past structure is shown. In an optimal case the size of the stone structure can also be estimated. Then it is required of the researcher to make a reconstruction drawing. The position of the pieces used in the structure's identification and reconstruction must be shown in the drawing. It is not needed, however, to depict all the small preserved pieces that derive from the structure but do not provide much information, as marking too many pieces would shift the emphasis away from the fragments considered most important.

What makes stone structure research special is the fact that the precision of reconstruction depends not on the quantity but the quality of the recovered pieces. A huge Gothic structure is often possible to reconstruct on the basis of five or six small and heavily fragmented pieces, while in other cases small structures might not be feasible to restore even if a large number of pieces are preserved. Another peculiarity of stone carving research lies in the inability to depict all evidence of reconstruction even on a detailed reconstruction drawing. In some cases, the size of a past construction is estimated on the grounds of other analogies and constructions with which there is structural resemblance. The height of the cloister walk's door in the Visegrad palace e.g., was estimated from the reconstructed height of the cloister walk's vault. The facade height of the fifteenth-century bay window ornamenting the palace's street front was calculated from the proportions of the pinnacles ornamenting the facade. The proportions of the latter were estimated on the basis of the smaller pinnacle pieces preserved on the same front, knowing that pinnacle proportions were considered a key issue in medieval architecture by coeval sources. 4 Such an argument can only be elaborated in a longer description, and this was the reason why a structural and typological catalogue was added to our documentation. This also provided an opportunity to list all the fragments, sometimes of considerable quantity, which were not depicted on the reconstruction drawings for the aforementioned reasons. Restoration and conservation are organic parts of the scientific analysis. The conditions in storage rooms are often unsuitable for a proper survey of heavily fragmented or imprecisely carved stones, especially due to insufficient illumination, as sometimes a difference of one or two millimeters or degrees is crucial in terms of interpretation. Therefore, a precise survey can only be performed if the fragment is put on a flat surface with strings indicating the angles of the carved stone surfaces or positioned to its original angle, e.g. by using supplements of clay. Joining the fragments in their original size, context and position precludes small mistakes and tricks which, even though not conspicuous in a drawing, might discredit the reconstruction as a whole.⁵

The next step is the reconstruction of the building. It is only performed if the building is a product of carved stone architecture, to use the terminology defined above; that is, if the building was mainly constructed by stone carvers with an extensive use of carved stone elements. The reconstruction of such a building as well as the documentation of the reconstruction process significantly differs from that of the creations of masonry architecture. The wall remains are used for the reconstruction of the ground plan and, to some degree, the floor levels. The ground plan and the wall stubs preserved of the row of rooms on the upper level of the northeastern palace of Visegrád proved enough to reconstruct the spatial forms, because the in situ preserved corbels define the height and shape of the rib vault above, through which the precise location of a window with a jamb of known size can be given, as well as the precise height of another window frame in another room. The possibilities of reconstruction do not depend on the quantity of wall remains and stone fragments. Therefore, the basis of reconstruction sometimes cannot be shown by wall supplements and the marking of preserved fragments on section drawings. These can be prepared, of course, but in some cases they are not informative; fragments of a 50-100 m long facade might appear in a drawing as scattered dots, while other aspects of reconstruction might be absolutely impossible to depict. Such drawings, therefore, are sometimes even misleading, as their means of illustration are suitable for a different type of monuments and a different reconstruction methodology. The reconstruction of carved stone architecture is far too complex a process to be depicted in a few facade sketches or section drawings. This is not only a question of printing technology. A fold depicting everything in sufficient details, from the archaeological sections to the reconstructed stone structure, including all the ground plans, facades and section sketches, together with a complicated legend, would be spectacular but hardly of any use. I consider it much more effective to have a varied documentation with a series of drawings of different scale and function, along with explanatory descriptions. In situ drawings,

⁴ Sódor 1978; Sódor 1981

The preliminary reconstruction drawings of the traceries that embellished the bay window on the palace's street front had to be altered both by scale and form, because after the original fragments were restored and completed with clay, their initial shapes were much better understood.



Fig. 3. Reconstruction of the royal palace in the age of King Sigismund

ground plans, facade surveys, stone surveys are used for documenting the process, while historical periodization and reconstruction drawings serve as an aid for interpretation. The written description is closely intertwined with the illustrations. This must contain the detailed, almost diary-like research history, the archaeological and architectural description of the structure, the analysis of walls and layers, and as an interpretation of all the above, the architectural history of the building and its architectural historical, art historical and historical analysis. We aimed to prepare such a systematic study when publications were released on the different building parts of the Visegrád palace.

At first the only goal of this scientific analysis was research. It was not until 1994 that the possibility of the monument's reconstruction was raised. In 1994 Zoltán Deák, who was commissioned to prepare the plans of the palace reconstruction, suggested that research results might be used in the reconstruction made necessary by heritage protection. Such a proposal would have seemed quite unusual in the previous three decades of heritage protection, but I welcomed this concept of reconstruction that aimed to utilize research results while taking present and future research targets into consideration as well.

This project needed a documentation much more detailed. As a first step József Vajda accomplished the ground plan and geodetic survey and leveling of the palace area. These, along with the wall surface measurements made by György Szekér, served as a basis for the survey documentation prepared by Zoltán Deák and Tamás Pintér, which contained the ground plans, wall and section drawings of the spaces to be reconstructed. A detailed documentation was made on the stone carvings, on the grounds of the material published in the second volume of the Lapidarium Hungaricum series, supplemented with architectural and conservation remarks. Zoltán Deák used this documentation and the reconstructions produced by previous research when he prepared a 1:200 scale, detailed reconstruction drawing, with separate ground plans for all floors, individual drawings for the facades and the main sections. On these grounds a reconstruction scale-model was made, which was also suitable to be transformed into a model showing the actual, physical monument reconstruction. Later, an increasing emphasis was laid on computer modeling, although before 2000 it was mainly used as an aid in preparing construction plans. In 2000, the computer model of the

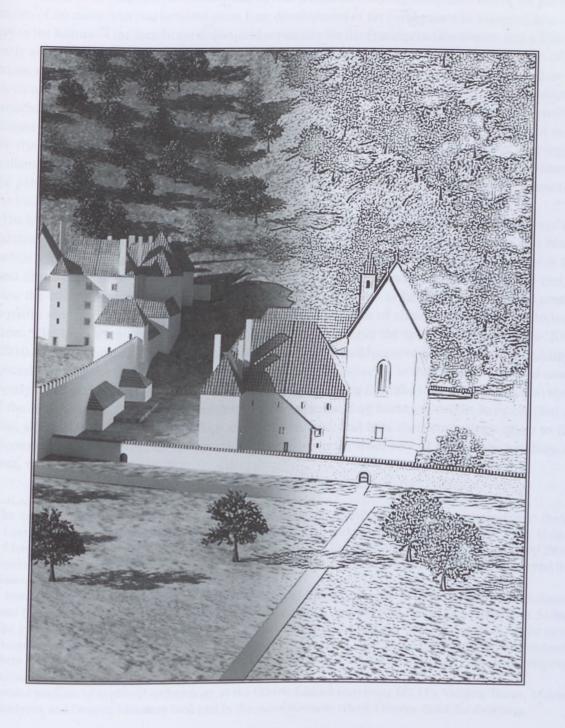
reconstructed palace was shown in exhibitions; this made the visitors able to virtually explore spaces of the palace which were not reconstructed physically. Computer-aided design went through a rapid development after the millennium, and soon it started to be utilized not only by engineers but also scholars of social sciences, and archeologists among them. This had an enormous impact on research methodology. After this point it was possible to analyze and reconstruct medieval carved stone buildings though virtual 3D images instead of two-dimensional drawings. This technology, which basically aimed to assist research, also proved useful in the communication with architects planning the physical reconstruction of the buildings as well as with the visitors of the museum.

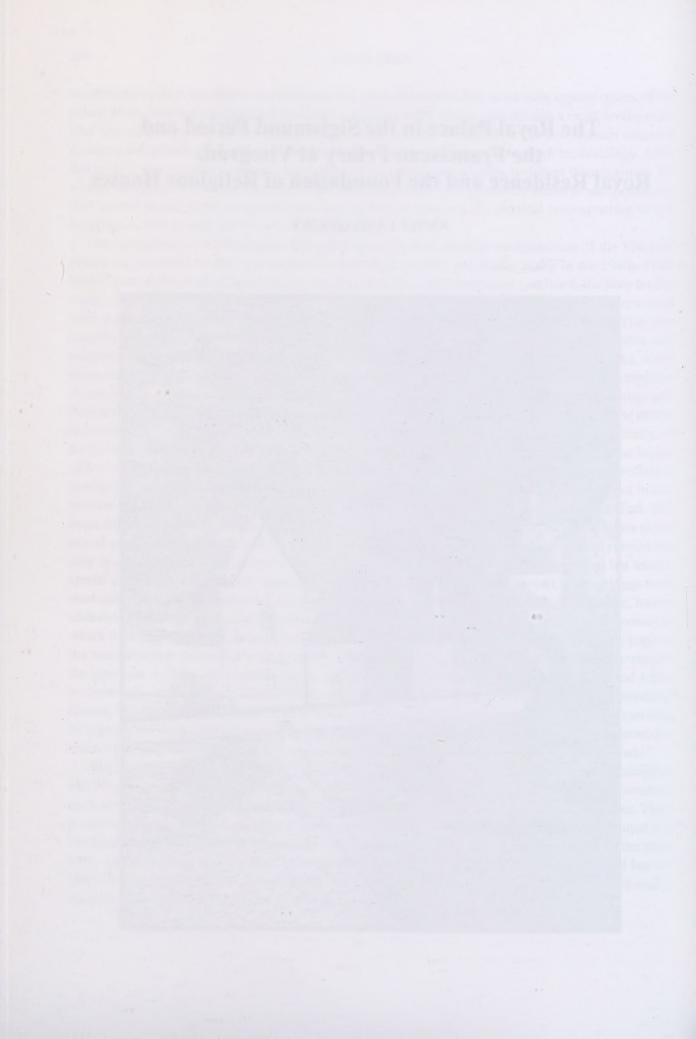
The groundwork for the planned and partly accomplished physical reconstruction of the Visegrád palace was provided by the conservation works of Kálmán Lux and Alajos Sódor in the 1950s. Parts known from in situ wall remains, that is, the cloister walk on the ornamental courtyard, the floor levels, vaults, doors and windows of the northern and southern wings and the upper level of the eastern wing were marked already at that time by partial reconstruction and the heightening of the walls. This was feasible even if the analysis of the stone carvings had not been finished. Unfortunately, the latter was postponed, and therefore a number of mistakes were made during the 1970 reconstruction works, when elements of the first reconstruction phase were modified and some stone structures were completed or incorporated. These mistakes were due to the lack of a complete survey of the stone carvings and their archaeological context. Therefore, in the recent reconstruction plans only those parts of the earlier reconstructions were preserved whose basis was correct. These were further developed specifically on the grounds of the carved stone analysis and the archaeological observations at two spots: at the loggia of the ornamental courtyard and the western wing. At other locations the new information collected during the carved stone analysis only refined the picture our predecessors gained on the basis of in situ remains. The type and precise location of a number of window and door jambs were identified. The main difference between the present reconstruction and the one made in the 1950s - in addition to the use of stone carving analysis and the data gained from the archaeological context - was expressed not only in scholarly terms but also in a more didactic view. While in the 1950 the destroyed but known spatial forms were only marked, these were fully restored during the present project, and markings were used only where the original structure might be assumed but not proven. This method, of course, had an underlying practical consideration, as the original building remains had to be conserved and protected, which made the creation of closed spaces necessary. Displaying these closed spaces as organic parts of the reconstruction and not as clearly distinguishable protecting structures also had a didactic reason: the goal was to show the original spaces. As an architectural historian, both Zoltán Deák and I find it immensely important to emphasize that the Visegrad palace, a significant creation in architectural history, was both a building and a work of art. It consisted of spaces and masses, and as such, it can only be appreciated by the general as well as a professional audience in the form of a complex of spaces and masses. Consequently, all that is known must be shown, and all that is presumed must be marked.

Besides, a reconstruction of this type offered a new research opportunity both for the researcher and the planning architect. A reconstruction of original size and position, fitted to the original remains, exclude the possibilities of interpretations that contradict the preserved monuments and structures. Thus, a number of such mistakes could be avoided already during the planning, and others were spotted and modified during the actual implementation - sometimes to the displeasure of the contractor. At the same time, spatial relations of the reborn building made a number of previously known or assumed but not properly understood phenomena intelligible. So, the physical reconstruction of the palace contributed to a deeper and more thorough scientific interpretation.

The Royal Palace in the Sigismund Period and the Franciscan Friary at Visegrád. Royal Residence and the Foundation of Religious Houses

JÓZSEF LASZLOVSZKY





The Royal Palace in the Sigismund Period and the Franciscan Friary at Visegrád. Royal Residence and the Foundation of Religious Houses

The foundation of a Franciscan monastery and its role within the building complex is one of the peculiar elements of the more than two hundred years long development of the royal palace in Visegrád. It is very rarely in the history of the mendicant orders, and especially for the Franciscan Observants, that a friary is directly attached to a royal palace both from an architectural and functional point of view. In two of my previous studies I have already discussed some elements of this phenomenon, primarily focusing on the analysis of the interplay of the palace, the royal town, and the Franciscan house. The present summary approaches the problem with a different view, as in line with the scope of the book, the problem will be discussed mainly from the perspective of the royal palace. The implied conceptual division of the areas of the friary and the palace may seem artificial, since these two zones are closely connected with regard to settlement development in the Angevin era. It is demonstrated by this study as well, that the histories of the palace and friary – from the foundation of the latter in the Sigismund period until the destruction of the buildings – were inseparable.

The interpretation of the relation of the royal palace to the Franciscan friary, the circumstances of the foundation, and the connection of the two building complexes were always dependent upon how much we actually know about the development of the royal palace. Therefore, bringing in new aspects in the present discussion can be explained in more than one way. In addition to the issues raised by earlier studies, the latest research produced a number of results, which are to be summarized. These results have partly modified, and partly challenged the established system of chronological and architectural relations. The latest excavations at the Franciscan friary – primarily the investigation during the 2009 and 2010 seasons – have clarified the early periodization of the building complex.³ Parts of the buildings – especially as regards the Eastern tract – which had been constructed in the Sigismund period could be clearly discerned from others, which represented phases dating from the time of Matthias Corvinus, or of the Jagiellonians. Observations concerning the same building historical details have clarified as to what extent did former town buildings occur in the area, and how their chronology relate to the development of the friary. In this context, it is mainly the earlier discovery of some stone buildings in the area, which is an issue.

The most important publications regarding the archaeological investigation of the Franciscan friary: Buzás – Laszlovszky – Papp – Szekér – Szőke 1994; Buzás – Laszlovszky – Papp – Szekér – Szőke 1995; Halász – Mordovin 2002. As for the relations between the friary, the town and the palace, see: Laszlovszky 2004; Laszlovszky 2009. In this latter article Fig. 12.5 had an incorrect caption. Correctly: The royal palace and the Franciscan friary in the early 16th century.

A brief summary on some aspects of the archaeological investigations is in order in the present volume, since this year is the twentieth anniversary of the field school, organized on the initiative of Mátyás Szőke, who insisted on securing an area for archaeology students near the castle, where they could learn the most relevant methods of archaeological fieldwork. On the other hand, they could practice in an environment, where they could also learn about one of the most important palaces of medieval Hungary, due to the ongoing archaeological campaigns.

Besides students of medieval archaeology at the Eötvös Loránd University (ELTE), Gergely Buzás, Maxim Mordovin, and Orsolya Mészáros took part in the excavations, to whom I hereby thank for their help.



Fig. 2. Digital reconstruction of the royal palace and the Franciscan friary at the time of Sigismund

Equally important are the results concerning the rebuilding of the palace in the time of Louis the Great of Anjou and Sigismund, which, in many points, provide a new chronological framework for the building project. The most up to date summary on these issues can be found right in the present volume, so it could have been consulted when discussing the relation of the palace to the friary. It is partly the debates that surround the chronological issues that justifies the discussion of the third set of issues. The different opinions, which were expressed in connection to the architectural history of the palace, also meant that the role and function of Visegrad during the second half of the reign of Sigismund, and following the relocation of the court to the Buda castle, has been interpreted in very different ways. A recent exhibition on Sigismund, as well as the corresponding publications suggested that following the 1410s Visegrád did not play a substantial role among Sigismund's residences. Thus, the foundation and development of the Franciscan friary in the mid-1420s might seem unreasonable. This controversy can only be explained by a detailed study on the foundations and patronage of religious houses by Sigismund, especially during his final years of reign. As an essential group of these foundations is related precisely to the Visegrad surroundings, it is worth to have another look at the area of the palace and the friary, as well as their function, with regard to the itinerary of Sigismund and the use of residential sites in his later years. A comprehensive study of all these issues may place the palace and the site into a new perspective, especially with respect to the surrounding religious institutions.

The Franciscan Friary

Based on the data provided by charters, by the results of the archaeological excavations, and by the architectural and carved fragments that have been recovered, we can now clearly reconstruct the architectural history of the Franciscan friary and trace later transformations following its foundation. The friary was built in the immediate vicinity of the palace, at its Southern side. There was only a narrow lane or courtyard separating it from the Southern precinct wall of the palace, by which the two building



Fig. 3. Excavation of a wooden house from the Angevin period in the cloister garden of the friary

complexes were directly connected. This is also suggested by the lack of the Northern range of the cloister, as well as by the two doors there that open in the direction of the palace. However the cloister had no access to the late medieval main street, the line of which is identical with the present day main street (Fő utca). This shows that the friary could have been directly accessed from the direction of the palace, but from the direction of the town only the church could have been entered. The large single nave church of the friary had a rather long apse, which was further elongated on its Eastern end by the 16th century rebuilding. During the same building campaign in the Jagiellonian period the church building received a spectacular Late Gothic vault. In case of the cloister there were also other building phases. In a previous study, it has been suggested that building histories of the palace and the friary show a number of similarities. In the light of the latest architectural periodization of the palace, as well as of the building and rebuilding projects of the friary – which are now more clearly outlined - this opinion has to be modified to a certain extent.

The first phase of the building of the friary followed on a papal permission in 1425. This building is comparable in its extent and its most important structural elements to the one, which

has been modified by later transformations, however, the Eastern and Western ranges of the cloister were substantially different from the building complex of the Jagiellonian period. These modifications have been originally interpreted as if some large earlier buildings had been built into the building of the cloister. Yet, new excavations have shown that the parting of the walls in the Eastern range is to be associated with the rebuilding of the chapterhouse and the construction of a tower in the Jagiellonian period, whereas in the Western range, the banking up of the cellar underneath the kitchen and the refectory, as well as their transformation can be accounted for the observable differences in the structure of the walls. In addition to building phases in the Sigismund and Jagiellonian periods, there was one during the reign of King Matthias, yet, its details can be identified only on the basis of carved fragments. Before the establishment of the friary in the Sigismund period, there were no substantial stone buildings in the area, but the excavation of the underlying layers have clearly demonstrated, that houses built of wood and daub are likely to occur in the area, which was part of the pre-urban settlement in the Angevin period. All this raises the question on the role of this area within the pre-urban settlement of the Angevin period, in the late 14th century, as well as in the early 15th century. In connection to this, it still has to be clarified how far to the south the area of the palace extended, and when exactly the building complex was separated by a precinct wall from other buildings of the settlement.



Fig. 4. Ground plan of the royal palace and the Franciscan friary in the Sigismund period

The Royal Palace, the Franciscan Friary and the Town

In the area of the royal palace, there were different buildings, probably as early as the late 13th century, but certainly at the beginning of the 14th century. These were timber structures with remains of stoves inside. Similar structures were found underneath the Franciscan friary, and this shows that the pre-urban settlement extended to both sites. The first study on these early features and layers underneath the friary was a result of an MA thesis of Balázs Polgár, whereby this phase was clearly identified.⁴ Based on peculiar features of the archaeological assemblage, it can be affirmed that there were buildings here even before the royal court moved to Visegrád, and they were different in character from the newly erected ones in the last third of the 14th century. The archaeological features excavated in the area of the palace demonstrate that wooden buildings were replaced by large stone buildings, arranged, in some ways, along the line of the street, whereas in the area of the friary there is no record of such buildings. There could have been some in the vicinity, as the earliest document referring to the foundation mentions not only the St George chapel, but also a house, which the Franciscans might have used - however, this is not at all certain, since the 1425 papal permission already mentions the construction of the friary. New archaeological data illustrate that the building phase of the Sigismund period has created an integrated complex of buildings. In studying the relationship of the town, the palace and the Franciscan friary, all these archaeological observations provide relevant information, comparable with data from the written records. Some results of this comparative approach have been already published in previous articles which discuss the friary; in what follows, however, new aspects will be taken into account.

The circumstances of the foundation of the Franciscan friary in Visegrád, and the significance of this new religious house can be even better perceived when looking at other religious foundations of Sigismund. In this context, I have already discussed the similarities concerning the foundations of the

⁴ Polgár 2008–2010. Also see Buzás in the present volume.

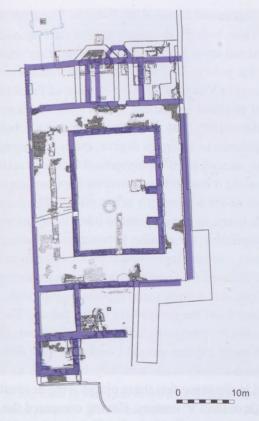


Fig. 5. Plan of the excavation of the Franciscan friary

– highlighted are the walls dating from the Sigismund
period

Visegrád friary and the St Sigismund collegiate chapter in Buda in my previous study.5 The most important of the similar features is the topographical one. In both cases, we find "transitional zones" located in the immediate foreground of the royal palaces, between the royal town and the building complexes of the palace. A common feature of these zones was that these strips of land did earlier belong to the towns, or pre-urban settlements, so they were not part of the architecturally definite areas of the palaces. There evolved a sort of pragmatic cooperation between the town and the ruler, as this was a characteristic feature of Sigismund's policy towards towns. Instead of settling conflicts by means of sheer power, relations evolved along mutual compromises, and this can be also observed in connection to the use of urban space. Attempts to expand the area of the palaces in Buda and in Visegrad alike, could only be accomplished at the expense of the towns. Sigismund, however, by establishing the St Sigismund collegiate chapel in Buda, and the Franciscan friary in Visegrád, managed to expand the palace's zone of influence into an area populated earlier by town houses, in a way, that he not only increased the area of royal authority, but also created a new religious house for the townsfolk. A characteristic type of

building in this "transitional zone" was the religious house, which served – both from topographical and functional aspects – the religious needs of the urban population, yet, it had been established with the support of the monarch and on his costs. In case of Visegrád, this interpretation is all reasonable considering the selection of the mendicant order. Franciscan houses were indispensable elements of urban settlements. In case of Buda, a Franciscan house happens to have been right the other religious institution in the above mentioned transitional zone, however, this was one of the religious institutions of the urban settlement already since the 13th century. In this case, it seems that the close location of the palace to the Franciscan friary was a result of a process different from the one in Visegrád, yet, in the first half of the 15th century the topographical situation is similar. In Buda, it was first the site of the friary that had been established, and the palace was built in its vicinity only later, whereas in Visegrád, the newly founded Franciscan friary settled next to the already established building complex of the palace. The topographical similarity in the late Middle Ages, however, seems relevant to raise further questions.

An important urban centre in medieval Hungary, similarly to the general European trends, must have had at least one mendicant convent. The Dominicans in Hungary established their houses mostly in rather significant towns, while from the 15th century on the Franciscans also settled in market towns, as well as in central places with weekly fairs, which can be barely regarded as urban. Whereas a great number of the early Franciscan foundations in Hungary were typically royal foundations right in the

Laszlovszky 2009. Besides the overview of the literatures, quoted in this essay, the problem has been briefly summarized in Feld 2006, 43–45. Further important notes can be found in an essay discussing the dynastic cult of saints in Hungary in the Sigismund period: Tóth 2005; 2008.

most important towns, by the early 15th century, when Sigismund founded his friary in Visegrád, royal foundations were quite exceptional.⁶ From this point of view, both the decisions to have the Franciscans, and to locate the site where the friary would be constructed were Sigismund's own, and they must be understood in context of the function and location of the palace. Earlier on, the Augustinians – who similarly belong to the mendicant orders – also had a house in Visegrád,⁷ but the absence of Franciscans and Dominicans must have been conspicuous in case of an urban settlement, which – for the most part of the 14th century – also functioned as the capital of the country. The character of the town – being a royal residential site – may explain this strange circumstance to a certain degree, but it also raises an interpretational problem how the affiliation of the house, as well as its topographical location⁸ relate to Sigismund's policy in context of the town and the palace. As it has been demonstrated, expansion at the expense, but also in favour of the towns was an element of the sovereign's urban policy. The example of the immediate connection between the palace and the friary, however, point to other issues as well.

Concerning the immediate and architecturally interpretable connection between royal palaces or residences, and Franciscan friaries, there is very little data - interestingly, however, it comes from very different parts of Europe. At present, it is not possible to discuss how these international examples might have served as an inspiration for Sigismund, nevertheless, mentioning some aspects may provide new information as to what exactly the new foundation meant from the perspective of his palace. There is evidence on Franciscan friaries connected to royal residences from early 15th century England, where this connection can be observed in case of a number of royal palaces around London. A very different region of Europe is medieval Bosnia, where Franciscan friaries were similarly built next to royal centres. 9 Yet, these very distant regions were connected in the sense that these places were destinations of Sigismund's travels during the first and second decade of the 15th century. Having compared the data from the royal itinerary with the sites of these monuments, we may conclude that Sigismund could have visited a number of those royal palaces where there was a Franciscan friary attached to the complex. 10 The examples from Bosnia are important from yet another aspect, since the foundation in Visegrád was incorporated not in the Hungarian province, but in the Bosnian one. This is not without example in the period, but it is certainly a peculiarity that we are talking about a convent in the middle of the country, and not about one in the southern zone of the country – it was moreover a royal foundation. As such, this situation was not entirely strange to this branch of the order, and at the same time, they could have seen the foundation of a house next to an important royal residence as an opportunity for gaining regional significance. The conditions that surround the act of foundation can be also seen in context of other important events of the Sigismund era, which are again connected to the palace. As it is widely known - and the present volume also takes up this issue, about which there have been a number of previous studies - Sigismund's travels influenced his plans in connection to building projects, as well as the outlay of these buildings. 11 This issue concerns not only the palace and the royal residence itself, but also his religious foundations. The St Sigismund chapel is an example of this, and it has been already studied, but we may assume that there were similar influences at work in case of the Franciscan friary.

⁶ F. Romhányi 2000, 126–129.

F. Romhányi 2000, 73. Concerning the problems of identification, and archaeological investigation see Buzás – Mészáros 2008.

On the problem of Visegrád, as a Residenzstadt, and on the problems concerning the topography of the settlement: Mészáros 2009.

Andelić 1983; Matić-Gavran 1984, 12 –15; OršoliĆ 1988, 37–38; Gavran 2001, 33–48.

Engel-C. Tóth 2005, as well as for the respective data: Laszlovszky 2009.

A brief overview of the relevant literatures: Laszlovszky 2009, 119. The latest literatures concerning Sigismund's journeys can be also found there.



Fig. 6. The town of Visegrád in the time of Sigismund (a. St Andrew monastery, b. Lower Castle, c. Upper Castle, d. Royal palace, e. Franciscan friary, f. St Ladislaus monastery, g. marketplace, h. Church of the Virgin Mary, i. the parish church of St Martin in Nagymaros

The Franciscan Friary and Sigismund's Late Foundations in the Area of the Royal Palace

As we have seen, the foundation of the Franciscan friary has changed the environment in the vicinity of the palace. This change was significant primarily from the viewpoint of the town; on the other hand, changes also occurred in the wider environs of Visegrád, primarily concerning ecclesiastical institutions, which in turn also affected the function and use of the palace. By surveying the late foundations of Sigismund, we intend to answer the question whether these events are associated with the use of the palace and with the significance of Visegrád in the late decades of his rule.¹²

There has been a general opinion earlier, that when the royal court moved to Buda, the palace lost its significance, and Visegrád itself was not to be seen any further as an important royal residence. This view appears in many recent summaries, which discussed Sigismund's rule and his building projects. The foundation of the Franciscan house itself seems to contradict this idea, and an even more different story enfolds itself, when looking at Sigismund's late foundations. Among them, undoubtedly the most significant is the foundation of another St Sigismund church near the palace, which preceded the foundation of the Franciscan friary, and which again underlines the peculiar features mentioned in connection to the St Sigismund chapel in Buda. A study by Peter Tóth on the significance of the cult of St Sigismund in Hungary has made it clear that there is a reference on a St Sigismund church and monastery in Verőce, which

On the medieval religious institutions of Visegrád, as well as on their archaeological remains see: Buzás–Mészáros 2008.

Takács 2006, 69–71. As for the chronological and interparational problems raised by this issue, see: Holl 2007; Feld 2006, 33–36. For the new chronological outline concerning the palace, see Gergely Buzás' study in the present volume (footnote 58). The complexity of the chronological issues, as well as problems concerning the location of the court and its legal institutions have been well illustrated in Kondor 2012.





Fig. 7–8. A fresco in the monastery of Monte Oliveto, mentioning Sigismund's foundations for the Olivetans and Paulines in Hungary

lies near Visegrad. The original version of the respective source was unknown to Hungarian scholars, so the existence of the monastery seemed to have been uncertain, based on previously published and less accurate sources.14 The source, which at last has been made accessible to the Hungarian researchers by Tóth, however, clarified the circumstances about the foundation of the monastery, and also demonstrated, that this foundation had a significant status in Sigismund's religious patronage, even this significance has been later on, and its ruins are now difficult to identify.

According to a charter issued on the 30th of June 1414, in the Swiss monastery of Agaune, the king founded a church for the memory of his father and for the veneration of St Sigismund, which he later ordered to be

associated with the Pauline order. The charter is quite precise about the location of the church: it is situated in the diocese of the bishopric of Vác, in an abandoned place, next to an island of the Danube, which is located in between the settlements of Maros and Verőce. There is another charter, dating from the 21st of July 1433 that provides further information, in which Sigismund requests permission from Pope Eugene IV to found a Pauline monastery, and to erect a St Sigismund church. Since the Paulines already appear in the 1414 charter, the one in 1433 apparently narrates a repeated foundation, or a confirmation. So the idea did not remain a simple plan, contrary to Peter Tóth's suggestion, as this is also demonstrated by the fact that in 1452 Pope Nicholas V ordered the church to be passed over to the Carmelites. This shows, in my opinion, that the monastery and the church had been built, and it is rather the Pauline affiliation which might be problematic. In all probability, the nearby Pauline monasteries of Toronyalja and Nosztra took a poor view of the foundation of a new monastery, thus the kings had to make an explicit disposal concerning how the monastery of Toronyalja would have its share from the donations.

The discussion of the problem entails the localisation of the said monastery. This is important not simply because of the history of the ecclesiastical institution, but also regarding its connection to the Visegrád palace and its environs. There have been previous suggestions, according to which the mill – that was bearing the name St Sigismund even after the monastery had been destroyed – should be located next

¹⁴ Tóth 2005, 375–380; 2008.

¹⁵ Tóth 2005, 378; 2008.

On the monasteries of Toronyalja and Nosztra, as well as on the archaeology of the area see: Miklós 1997.

to a stream up in the hills, on the lift side of the Danube river, near the village of Veroce, however, this localisation attempt is in no way correct. 17 According to the text of the charter, the location of the church was indeed between Maros and Veroce ("inter villam regalem Marus, et villam dicti Voachiensis episcopi Voarenzae vocatam"18), but it does not tell anything about the left side of the Danube. It is not possible here to give a full account on the charters as well as the archaeological topography concerning this issue, but on the basis of the published sources, it is clear-cut that the St Sigismund church has to be located at that top of the Szentendre Island, which was close to Visegrád. In the late Middle Ages, this part of the island formed a separate island, which belonged to a side-course of the Danube, on the side of Vác, or Verőce, as the main course - contrary to present conditions - was the one on the Kisoroszi side. The suggested location is supported by the wording of the text – which might seem unusual at first sight. ("in Regno Ungariae cis flumen Danubii, propter quandam Insulam insulatos vocatam, in quodam ibidem existente loco deserto"19), which we may interpret as it was on an island adjoint to an island (i.e. the Szentendre Island). This place was of prominent significance in context of the palace and residence in Visegrad. It is clear from the itinerary of King Sigismund, that the hunting area on the other side of the Danube, as well as the nearby *Hévkút (Hot-well)* played a special role for him. ²⁰ According to the itinerary, he has already been there twice in 1399.²¹ In 1411 he made at least three visits, i.e. dated his charters from here.²² The importance of Hévkút in the vicinity of the Visegrád palace is demonstrated even more clearly by another source, that dates from the period, when Buda became the centre, however it is clearly interpretable with regard to Visegrád and its environs. In the spring and summer of 1412, a couple of royal meetings took place in Buda, where Sigismund had negotiations - among others - with Vladislav Polish, and Tvrtko the Bosnian king, as well as with the Serbian despot, Stephen. According to the account of Długosz, the Polish chronicler, Vladislav visited a couple of places following the meeting.²³ It is the second part of his journey, which was relevant regarding locations around Visegrád, namely when he took a boat from Esztergom to Visegrád, where he spent a whole week, because of his illness. During this time, Sigismund visited the king, to whom he gave free run of the castle. They went together to Maros afterwards, and from there to a hunting place, - called Varprim in the chronicle - and en route to the centre, they also stopped by the Pauline monastery of Nosztra. The data of the Polish chronicler are in many aspects confirmed by those charters of Sigismund, which concern the event, or what route should the Polish king choose, and where and for how many days should he stop by. The original route plan for the Polish king was circumscribed in one of the texts, i.e. a letter written by the vice-chancellor, János Esztergomi to the archbishop of Esztergom, János Kanizsai.²⁴ According to this version, the guest king would have travelled from Esztergom to Visegrád, and following a one-day stay there, he would have proceeded to "Henkuch". "Nostre,, and "Damas". According to the text, he would have arrived to Vác after a visit to the island ("sixto die in insula"). "Nastre" and "Damas" can be identified: they referred to the Pauline monastery of Nosztra, and the castle of Ipolydamásd. Taking into account these places, the place that appears under the name "Henkuch,, might be, in point of fact, Hévkút, and the "insula", which also appears in the text, might

¹⁷ Tóth 2005, 379. With further references on the identifications.

¹⁸ Tóth 2005, 382.

¹⁹ Tóth 2005, 382.

The importance of Hévkút was pointed out to me by Gergely buzás and Mátyás Szőke, also I am grateful for the respective data. As for the archaeological investigation of Hévkút, see: Miklós 1985, 479–487; Miklós 1997, 49–50.

Engel – C.Tóth 2005, 76. The Esztergom–Visegrád–Hévkút–Buda route, and the Visegrád–Buda–Hévkút– Esztergom route.

Engel – C.Tóth 2005, 92–93. The Buda–Hévkút–Vác–Buda, Buda–Visegrád–Hévkút–Visegrád, and the Visegrád–Hévkút–Visegrád routes.

²³ A detailed discussion of the vents and sources: Iván 2004, 39.

²⁴ Iván 2004, 39.

refer to the Szentendre–Island. This all means, that in the early 1410s Hévkút – including the hunting place – could have been a preferred destination of royal journeys.

Starting from Visegrád, crossing would have been possible by the ferry Nagymaros, but there was another possible route, which is all the more important concerning the above discussed St Sigismund monastery. Departing either from the palace or from the castles in Visegrád the king could also take the ferry at Kisoroszi to cross to the Szentendre - island. From it was possible to get to the other side of the Danube by crossing the small island, which belonged to the Szentendre Island, but was a separate one at that time. This crossing place was advantageous in more than one aspect. There, only smaller sections of the Danube - lying between the islands - should have been crossed in one take. The ferry at Kisoroszi always had its significance in royal journeys, for Kisoroszi had been a settlement of royal doorkeepers since centuries. On the other hand, it was possible to go ashore



Fig. 9. Royal palaces and monasteries in the Danube bend in the time of Sigismund 1. The royal palace in Visegrád, 2. The Franciscan friary in Visegrád, 3. The St Sigismund Pauline monastery in Verőce, 4. The Olivetan monastery in Dömös, 5. The royal mansion in Hévkút, 6. The Pauline monastery in Toronyalja, 7. The Pauline monastery in Nosztra

on the other side of the Danube right at the mouth of the valley, from where the medieval road took the course to the Pauline monasteries of Toronyalja and Nosztra, and taking a small detour from this road was the easiest way to get to the royal lodge in Hévkút. Thus it was at an important point of this royal route, on a little island situated at the halfway point of the Danube crossing, where King Sigismund established a Pauline monastery, which was in this way connected to the monastery of Toronyalja not by any chance. On his Swiss journey, the route from Visegrád to Hévkút must have been a lively recollection, which also shows that the palace and its environs played an important role in his "landscape-memory". This memory is clearly manifest in the text of the charter, as the king established this monastery as a pious donation for his and his father's soul, as well as to consolidate the cult of St Sigismund, his personal patron saint.²⁵ The

Tóth 2005, 381–383. Gergely Buzás, Orsolya Mészáros, and Péter Gróf have assisted in identifying the site of the monastery. Hereby, I would like to thank them for drawing my attention to the unpublished archaeological data.

1433 charter, which confirms and partly amends the donation, demonstrates at once, that the importance of Visegrád and its environs – as to his personal memory – did not diminish, even decades later. The foundation of the Franciscan friary in 1425, in the direct vicinity of the palace is a proof for that, and also is the peculiar re-foundation of an ecclesiastical institution in the 1430s, which is similarly connected to the person of the king. This was the royal collegiate chapter of Dömös, where a new convent have been set up.

The 11th century royal collegiate chapter in Dömös is one of the most intensively researched, as well as the most debated institution in the medieval history of the Hungarian Church.²⁶ Already in the middle of the 11th century, there was a royal curia in Dömös, and in the second half of the 11th century it became one of the busiest centers in the Danube Bend. King Bela I died here, and in 1079 King Ladislaus I issued a charter here. The donation charter of Bela II in 1138 contains a detailed list of the lands and the people the institution possessed, and this clearly shows its importance significance. However, it has already lost its significance – similarly to other royal provostries – before the 14th century, to the point that a couple of times it nearly ceased to exist.

Already in 1321 Charles Robert made an attempt to arrange the future of the ruinous and abandoned provostry, so he suggested to the pope that it be merged with the collegiate chapter of Óbuda. This plan must have been unsuccessful, and by all appearances, the fate of this once important ecclesiastical institution that had a great history, was still unsettled. In 1433 Sigismund came up with an idea – entirely different from the previous one - to reform this church: he invited the Benedictine monks of the Monte Oliveto (Mountain of Olives) monastery in Siena to Dömös, in order to renovate the conventual life of the royal church.²⁷ The Olivetan monks received a growing popularity at that time in Tuscany, but neither before, nor after did they have another house outside of Italy. The Hungarian appearance of this branch of the Benedictines, whose lifestyle was closer to the eremitic ideals, is again to be accounted for the personal decision of Sigismund, king of Hungary, and Holy Roman emperor. Before this re-foundation event, the king spent a couple of months in Siena, as a part of his journeys in Italy, which was of key importance from the point of view of imperial power. During this journey, he also visited the Benedictine community of Monte Oliveto, which had than became popular - and the foundation and later history of which are in many ways closely connected to Siena -, so the appearance of the Olivetans in Dömös was the direct consequence of this journey. There has been relatively little discussion in the Hungarian research about this re-foundation, as – similarly to previous attempts – it proved to be also unsuccessful. After Sigismund's death, the Italian monks left the country, since they were not able to stay in contact with their community, which - consisting only of Tuscan monasteries - was just about to get organized as a separate branch of the Benedictines at that time. For a while, the Paulines stepped up as a solution, but this could not stop the deterioration of the provostry. Despite the short time span and unsuccessfulness of Sigismund's attempt, it is still an important piece of information for us, as it repeatedly points to Visegrád and its immediate environs, which did not seem to lose their significance for Sigismund – not even in the last decades of his rule. This shall be the case, despite that the king actually did not visit the area any more, due to his journeys and almost constant stay in abroad.

These late foundations and re-foundations of Sigismund suggest, that – as if to surround the Visegrád palace – he established monasteries and communities, which all were directly connected to the history of the dynasty, to his own course of life, and to the immediate environs of the royal residence he had very much admired before. Throughout these decades, this region was important for the king rather in a symbolic way, than as an actual residence. Taking into account the foundation dates of these religious institutions (1411–1433, 1425, 1433) it is clear, that the environs of the palace remained to be primarily important for the king all through these years. This also means, that the development and building project

²⁶ F. Romhányi 2000, 21; Koszta 2001, 203–204.

The settlement of the Olivetan Benedictine monks in Dömös have not been studied yet. The author of the present paper wishes to publish the respective sources in a separate study.

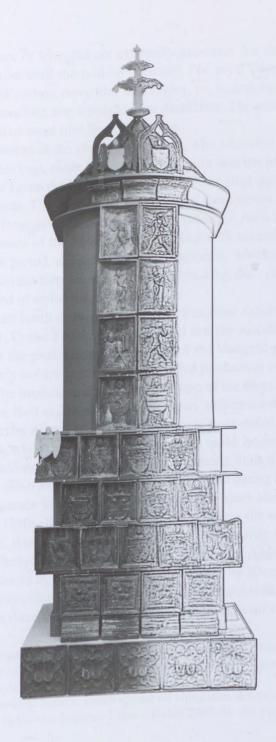


Fig. 10. Reconstruction of the royal palace and the Franciscan monastery - the Sigismund period

of the palaces offered the kings not only the possibility to stay here during his journeys in Hungary in the 1410s, and to receive guests here, but also served as a starting point for founding religious institutions during the following decades, and these – having surrounded the palace in a girdle-like way – underlined its importance. The size and topographical location of these buildings leave no doubt, that the most important foundation was the Franciscan friary next to the palace, where we may trace personal motives, as well as aspects of urban policy.

The Stoves of the Royal Palace

EDIT KOCSIS





The Stoves of the Royal Palace

Tiled stoves in the royal palace of Visegrád are extremely important for studying the development of Hungarian stove tile production until the mid-16th century. The royal court had a decisive role with regard to the appearance of the earliest stove tiles in Hungary, i.e. in making this new heating device to come into general use, and spreading new trends in their decoration. These issues are to be answered by considering the full collection of stove tiles from the palace.

The first tiled stoves appeared at the court of Charles I, who relocated his residence to Visegrád. These were stoves of a simpler kind, made of ceramic cups, built into the plastered wall of the heating chamber. During the reign of Louis the Great more representative, tiled stoves – with richly decorated structural elements – also appear. The craftsmen who produced these stoves had arrived from the West, along the Danube, and had brought a well-established knowledge. As a result of their activity, the representative and private spaces of the palace were furnished with several tiled stoves. We know of a number of stoves from this period, at least from their fragments, which were different in style and craftsmanship, however, within the forty years long reign of the king, their chronological order could be established only by the method of stylistic analysis.

In the past years, a fortunate result in numismatic research enabled a more precise dating of the early stoves of the palace. In 2001, Csaba Tóth has demonstrated that the so-called Saracen's head denar – an exclusive find with which the phases of reconstruction of the Visegrád palace in the time of Louis the Great were dated – not only occurs from 1370 onward, but production of this coin type was to start certainly as early as 1358.³ The implication of this modification of the dates for the periodization of the palace has been noted by Imre Holl in 2007.⁴ This twelve years' difference in the dating of this coin has resulted in a situation that certain deconstruction phases were to be re-dated to the middle of the period of Louis the Great, the 1360s, while earlier construction phases to the beginning of his period of reign. Since fragments of certain tiled stoves were also to be found among finds that came from the debris of buildings which were pulled down around the 1360s, a more precise dating is possible.

The most notable consequence is that a tiled stove was taken apart already during the small scale reconstruction works in the 1350s, therefore, there had been a stove tile constructed in the Visegrád palace as early as the 1340s, thus, before the court of Louis temporarily left Visegrád in 1347. The fragments found in layers in the reception court belong to Group I of the Angevin period.⁵ The lower part of the stoves at Visegrád, produced by this workshop, consisted of 20 by 20 centimeters large, rectangular tiles, depicting scenes of courtly culture, e.g. a pelican feeding its young with its own blood (Fig. 6) – the allegory of self-sacrifice – but there are others, like the ones decorated with a mounted figurine (possibly

The 2006 excavation, directed by Gergely Buzás and Mátyás Szőke, has found grey, unglazed, cup shaped tiles in the destruction layer of a stone building, dating from the period of Charles Robert, located in the area of the lower reception court of the palace.

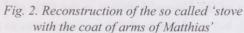
A fragment similar to the ceramic figures, which appear on Hungarian stoves in the time of Louis the Great, has been found in a cesspit in Vienna. Scharrer-Liška – Huber 2007, 36–38, Fig. 6–9.

³ Tóth 2001–2002.

⁴ Holl 2007.

⁵ Holl 1958, 215–218.





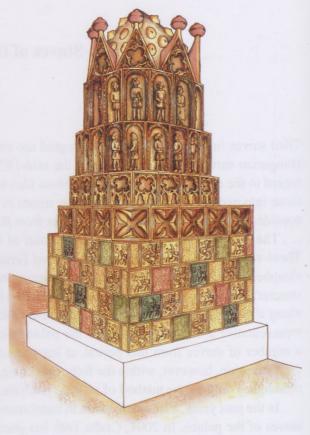


Fig. 3. Reconstruction of a so called 'Group I stove from the Angevin period'

falconer), a raven holding a ring in its beak, a girl with pigtail, or proliferate ornaments. The transitional row, right below the upper part, consisted of tiles with openwork quatrefoil tracery, and there were recessed tiles in the upper part, framed by clay relief stripes, with statuettes standing inside, which were depicting again various scenes of courtly life and hunting (Fig. 7). A fragment of a four legged animal standing at the bottom of a recessed tile, as well as another fragment of a hand holding a horn (Fig. 8–9.) might also refer to hunting. The upper part of these stoves was covered with triangular ridge tiles topped with a knob, and onion shaped tiles built into the dome (Fig. 3, Fig. 4–5).⁶

Besides those tile fragments which were definitely deposited in the 1350s, most of the fragments coming from this workshop were deposited around 1360, when the northeastern range of the palace as well as the palace chapel were constructed. This situation, and the large amount of the fragments suggest that the workshop produced a number of stoves (Fig. 10). Only one of them was demolished in the 1350s – notably the one which most probably stood in the building with a portico, where there were construction works around that time, and this explains why its fragments could have been found in the corresponding layers of the reception court.

A Group I stove from the Angevin period could have also stood in the eastern range of the northeastern palace. There, in the southeastern corner of the northern room, a 165 by 165 centimeters

⁶ A theoretical reconstruction of the stove has been prepared by Tibor Sabján. Kocsis – Sabján 1998, 7–13, Fig. 1–30.



Fig. 4. Ridge tile with an onion shaped knob



Fig. 6. Tile fragment depicting a pelican



Fig. 8. Fragment of a hand holding a horn



Fig. 5. Onion shaped tile from the dome of a stove



Fig. 7. Recessed tiles with statuette fragments



Fig. 9. Animal footprints on the bottom of a recessed tile



Fig. 10. Location of finds of Group I from the Angevin period, in the area of the palace

large brick laid stove base was recovered in 2002, which seems to have been refurbished in the 1360s. Tiles associated with the workshop have been found right below the window of this room, in the fill of the stone court. The debris was often deposited at the nearest suitable location, when pulling down stoves.

A significant part of the products of the said workshop was recovered far from here, in the area of the southern range, and of the subsequently established Franciscan friary. This suggests the presence of a similar stove in the area of the southern palace.

Two tile fragments were found in the uppermost floor of the southern palace, so there might have been yet another stove there, as well as in a later wooden a building outside of the southern precinct wall.

In the wooden house, dating from the Angevin period and excavated in 1990, traces of three subsequently built stoves could be clearly observed in the plan (Fig. 11). Later excavations suggest that this timber structure was not detached, but there were two attached stone building parts on the level of the terraces below, to the north and to the west, so there might have been a larger building complex here. The earliest stove built with ceramic cups had a horseshoe shape plan; this possibly dates from the period of Charles Robert. It was enlarged later, and the two by two meters large, square shaped, brick laid base could have already served for a tiled stove, possibly one of Group I from the Angevin period. Its fragments were found in layers – dating from later – both within the building and in the fill deposited



Fig. 11. The base of the three stoves in the wooden house dating from the Angevin period, and the opening of the heating chamber laid with cover plates from a hypocaustum



Fig. 12. Onion shaped tile from the latest stove of the wooden house

outside the eastern wall. This suggestion would be also confirmed by that the base of this stove was made of bricks, which were of the same size $-25 \times 12,5 \times 4,5$ centimeters – as the ones used for the base found in the northeastern range. In the final period, there was another stove, constructed with ceramic cups, standing on a smaller, rectangular base, of which some glazed, onion shaped tiles survived, found in the destruction layer dated with a coin of Queen Mary of Hungary (Fig. 12). Based on their material and glaze, some of these tiles might have been originally produced for the dome of a Group I stove from the Angevin period, and they were recycled here. Another remarkable fact is that floor tiles from an already unserviceable hypocaust, a heating device located on the upper floor of the southeastern palace, were also used to construct the opening of the heating chamber of this last stove in the timber building.

During large scale construction works around 1360, several earlier buildings were pulled down or incorporated in the new buildings, and several stoves, which had been set up in the years 1340 to 1350, fell victim to these alterations. Besides the workshop that produced the Group I stoves of the Angevin period, products of four more workshops could have been identified on the basis of these deconstructed stoves.

Based on the location of the debris, a stove decorated with openwork tracery of lilies (Fig. 15) could have stood either in the building with the portico, or in the eastern range. Unfortunately, the tiles could have been only partially restored, but the surviving pieces have a number of unique, experimental kind of features, which do not appear in later practice of stove construction.

The lower part of the stove consisted of frameless tiles decorated with the Angevin coat of arms with a thick, protruding cornice on the right side. The mold with which the surface of the tiles was impressed contained only the negative of the coat of arms, while the area around was decorated with hand-stamping (Fig. 17.a). Of this type, an open-work version was also produced, where the area around the coat of arms and the stripes within were open (Fig. 17.b.). These tiles were glazed in yellowish green or brown. Also in the lower part there were openwork quatrefoil tiles, the sides of which had already profiled cornices, and on certain pieces these were formed as small buttresses topped by cusps under a lean-to (Fig. 18). Slightly oblong tiles decorated with openwork lilies possibly made up the shoulder row, as a transition to the upper part (Fig. 19). Above this, there was a row of recessed tiles, with ribbons above their semicircular arches which were similarly decorated by hand-stamping, and with statuettes standing inside their niches. Based on a fragment of a statuette found in the Citadel (Fig. 13),⁷ these figures were dressed in contemporary and fashionable courtly costumes, like the ones we have seen in case of figures of Group I from the Angevin period, as well as of a stove from Diósgyőr.8 The upper part of the stove also consisted of tiles with openwork tracery and gables, and its top was sealed by a row of unusually large, 60-70 centimeters tall, topped ridge tiles, decorated with tendril ornaments. Onion shaped tiles were built into the dome, the top of which was crowned by a bell shaped piece.

Tiles were probably placed in a web-like pattern in the lower part of the stove — in accordance with the buttress like structure. There is no evidence on the design of its corners, however they were probably built from corner tiles with buttresses. This construction — despite of its visual appearance that implied sturdiness — could have been weak, since the stove, held together only by clay plastering, might easily crack. Most probably owing to this, the layout did not become a pattern later on.⁹

In the first half of Louis I's reign, there were a few other nice tiled stoves on display in the residence of the king in Visegrád, but their remains are so fragmentary that it is not yet possible to ponder on their reconstruction. Based on the location of fragments from stoves found in debris, one of the middle rooms or the southern room in the eastern range was possibly heated by a tiled stove – the one with the so called openwork helmet crest ornamented with an ostrich. This workshop, primarily using Angevin coats of arms

⁷ Kocsis 2006, 124. Fig. 1.

Boldizsár – Kocsis – Sabján 2007, 18. Fig. 29. Table XVIII.3.

The reconstruction of the stove – except for some later improvements – has been done by Tibor Sabján in 2008. For the individual types of tiles see: Kocsis – Sabján 1998, 13–15, Fig. 32–41.



Fig. 13. Fragments of statuettes from the Citadel, with hand stamped belt mounts

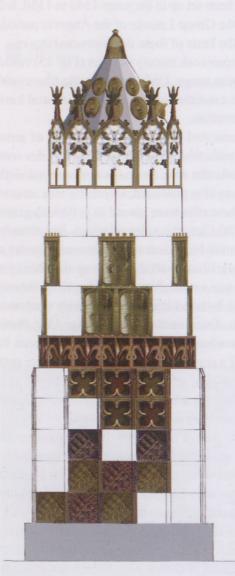


Fig. 15. Reconstruction of the so called 'stove with openwork lilies

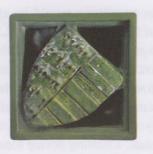






Fig. 14. Small sized tile decorated with a coat of arms from the so called 'stove with an openwork helmet crest ornamented with an ostrich'



Fig. 16. Openwork ridge tiles from the so called 'stove with coat of arms of large lilies'



Fig. 17. Tiles with coats of arms from the so called 'stove with openwork lilies'



Fig. 18. Openwork tile with buttress like cornices



Fig. 19. Tile with openwork lilies



Fig. 20. Hunting scene on a tile of a Group II Angevin stove

for decoration, can be discerned from others by the finely worked out relief design of its small tiles (Fig. 14. a–b), the deliberate selection of clay types, as well as by the extremely refined openwork.¹⁰

One of the tile fragments suggests that another stove, of the so-called group of large coat of arms with lilies, was also deposited during this period; this we know by a small, 15 by 15 centimeters large tile decorated with a coat of arms, a tile decorated with a lion in a medallion, as well as spectacular ridge tiles with openwork tracery (Fig. 16).¹¹

There was one more stove, coming from yet another workshop, which was demolished around 1360, but for some reasons this had been finished only around the 1350s. It functioned only for a short while either in the area of the northeastern palace or in the eastern room of the northwestern range, which was partly demolished during the construction of the new palace complex. This stove belonged to the so-called Group II of the Angevin period. 12

The workshop was in close contact with the Group I workshop, particularly with its stove in Buda, which was probably produced when the court was relocated to Buda in 1347. This stove was bigger and more robust than the one in Visegrád. The tiles in its lower part were not produced with the mold sets used in Visegrád, but new and bigger tiles were produced, measuring 27 by 27 centimeters, which were depicting hunting scenes. The workshop of Group II tiles from the Angevin period used smaller copies of these tiles – measuring 22 by 23 centimeters – and their tiles were less elaborate, with blurred imprints and sometimes with bad quality glaze.

Besides Buda, the Group II workshop from the Angevin period produced tiled stoves for the Visegrád palace, as well as for the archbishop's palace in Esztergom. ¹³ In Visegrád, badly glazed fragments of a tile depicting Samson fighting the lion, as well as of a tile with a lion and a tree were found. ¹⁴ In 2006 another tile was recovered, depicting a beater blowing a horn, with beagles (Fig. 20). ¹⁵ Tile fragments showing a mounted figure – possibly a falconer – and fragments of a half-tile might be also associated with this workshop. ¹⁶

The individual tiles form thematic groups. In Visegrád, the hunting scene – with the beater, the hounds, and the tree – seems to be incomplete, and the duo of the tree and the crowned lion likewise. Yet, when placed next to each other a hunting scene unfolds, told on two tiles, as if it were a set of frescoes in a church; the image of the falconer can also fit into this context. On another tile, the scene is usually interpreted as Samson's fight with the lion, which is often depicted on medieval stove tiles. In contrast to this, however, both the man and the lion wear crowns, unlike in similar scenes on other tiles. Therefore, this tile probably also fits into a set depicting a hunt, on which the last scene of bringing down the royal game can be seen.

¹⁰ Kocsis – Sabján 1998, 15–16, Fig. 42–45.

¹¹ Kocsis – Sabján 1998, 17, Fig. 52–56.

¹² Holl 1958, 218, Fig. 21.

¹³ Boldizsár 1999, 282, Fig. 8; Boldizsár 2003, 97, Table I.1.

¹⁴ Kocsis – Sabján 1998, 13, Fig. 31.

A piece depicting this scene produced by the workshop of Group I of the Angevin period was also found in Buda. See Holl 1958, 215, Fig. 8.

¹⁶ Kocsis – Sabján 1998, 16, Fig. 49, Fig. 51.

¹⁷ Holl 1958, 215, Fig. 6.



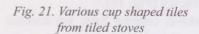




Fig. 22. Fragment of a male figure from the so called `stove with ridge tiles with devil's head'



Fig. 23. Fragment of a ridge tile with devil's head from the dome of the stove

In addition to these tiled stoves, there were stoves of various forms, built from grey, unglazed cup shaped tiles, standing in different rooms of the palace (Fig. 21). It is not certain whether they were constructed in the early period of Louis I's reign or they originate from the time of his father, Charles Robert. Destruction layers show that most of them were pulled down during the construction works around 1360.

The new palace building, completed in 1366, was furnished with new stoves, one of which could have stood in the northeastern room, on a renewed stove base. Due to deconstruction works during the Sigismund-period, it is difficult to locate the place of other stoves.

Among the active ones in this period was the workshops of the so called 'Group of small tiles with coats of arms', of which we know two types of tiles of robust thickness (Fig. 24.a-b),¹⁹ as well as the so called 'Group of summit tiles with devil's heads', the tiles of which had figural decoration and openwork tracery, yet, they are difficult to reconstruct, since we know only a few fragments (Fig. 22). The most unique tile type of the new stove was the one for the crenelation around the dome of the stove, with a stepwise form and with fan-like projections as well as corbels in the form of devil's heads (Fig. 23).²⁰

The workshop of Group III of the Angevin period was also active on this palace. Their tiles, glazed in a conspicuous variety of colors, primarily depict Angevin coats of arms, – i.e. a muster with lilies (Fig. 25), a tilted shield, a helmet crest with an ostrich holding a horseshoe in her beak; in turn, the upper part of their stove was decorated with tiles with openwork tracery.²¹ Fragments depicting the Polish eagle or double crosses were not found.

Besides representative tiled stoves with glazed tiles, there were also simpler stoves in the palace, with grey, unglazed tiles, for the construction of which cup shaped tiles, as well as relief and openwork patterns were used. Unfortunately these pieces are difficult to date – they might have been produced in the second half of the 14th century, or in the 15th century. In case of some fragments, decorated with openwork tracery and found in the palace, it was possible to point out that they had been produced with molds used by the workshop of Group III of the Angevin period, and they were deposited together with them. It seems, therefore, that this workshop also produced stoves with grey, unglazed tiles.

Stoves dating from the second half of the reign of Louis I could have stayed in use until the beginning of the 15th century. Then, King Sigismund had new ones made in the palace, as well as in the Citadel. Finds from these two sites match so well that this facilitates the reconstruction of ancient stoves.²²

¹⁸ Holl 1958, 212, Fig. 4.

¹⁹ Kocsis – Sabján 1998, 16–17, Fig. 48, Fig. 50.

²⁰ Kocsis – Sabján 1998, 17–18, Fig. 59–65.

²¹ Kocsis – Sabján 1998, 19–20, Fig. 66–73.

²² Kocsis 2006, 125–129.







Fig. 24. Angevin coat of arms from the so called 'stove with small tiles and coats of arms'

Fig. 25. Tile with lily muster from a so called Angevin Group III stove

One of the stoves from the Sigismund period, in the reconstruction of which the finds from the Citadel were of help, was made by a workshop producing large (33 by 33 centimeters, and 31 by 31 centimeters) and thick tiles with green and yellow glaze. The peculiarity about this stove is that the rectangular shaped, relief or openwork tiles, which were popular at that age, were left out. Because of this, and of the two-sized, square shaped tiles, the upper part is supposed to have also a square shaped plan, in an unusual but not unprecedented way (Fig. 26).23

The element in this stove which could be dated is a tile decorated with the coat of arms of the Order of the Dragon.²⁴ This proves that the stove was constructed later than December 1408 (the foundation date of the Order of the Dragon) - not significantly later, but probably around 1409-1412. At this time, Sigismund often resided in Visegrád, and it remained his favorite country residence even after the court and the state dignitaries had been relocated to Buda.²⁵ Some recovered fragments bear evidence of this workshop having erected stoves not only in the Citadel, but also in the palace.26

Tiles from another workshop are primarily known from fragments found in the palace. This workshop produced thinner and somewhat smaller (28 by 28 centimeters) tiles with various shades of lead glaze, and it excelled itself in producing a rich variety of rectangular tiles elaborately decorated with coats of arms and openwork tracery (Fig. 27).27

These two workshops were active roughly at the same time, and they shared molds of a tile decorated with a lion, and that with two interlocking dragons. This latter one was used by the second workshop in a shrunken size, as it was part of a corner tile built together with a 28 centimeters tall tile, whereas its original width of 31 centimeters was kept.²⁸ The second workshop operated not only in the palace, but also in the Citadel, and produced a stove for the castle of Esztergom as well.29

The reconstruction of the stove has been drawn up by Tibor Sabján in 2006. Kocsis 2006, 129, Fig. 23.

²⁴ Kocsis 2006, 127, Fig. 9.

Following the 1412 meeting of princes, the Polish king, Ladislaus II, made a visit to Visegrád, yet, due to sickness he was forced to stop there for a week. During his stay, King Sigismund visited him. For the description of his journey, based on the chronicle of Długosz, see: Iván 2004, 38-43.

Kocsis - Sabján 1998, 30, Fig. 108-111. A more precise dating: Kocsis 2006, 126. More recently, there have been fragments made with the molds of this stove found in the archbishopric palace of Esztergom as well. This has been kindly reported to me by Péter Boldizsár.

Kocsis - Sabján 1998, 22-27, Fig. 81-103.

²⁸ Kocsis - Sabján 1998, Fig. 91.

Boldizsár 2002, 165–167, Fig. 1–12.

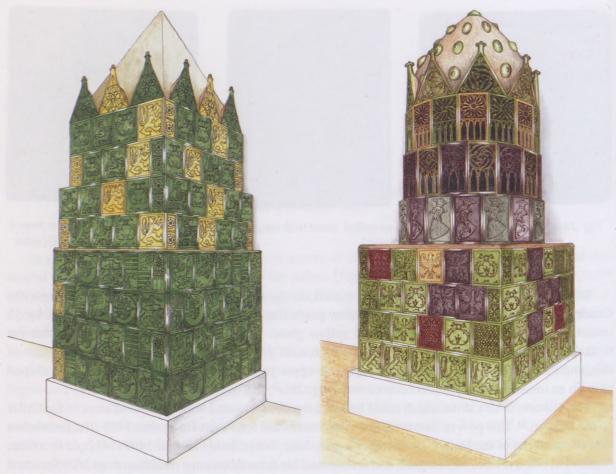


Fig. 26. A reconstruction of a stove from the Citadel with large tiles (ca 1410)

Fig. 27. A reconstruction of a stove from the palace with large tiles (ca 1410–1412)

The two above mentioned stoves, which could have stood in the northeastern range of the palace, were substituted with new ones around the end of Sigismund's reign – in the 1420s, or in the 1430s – and since there were no major constructions or changes at that time, their fragments were deposited around the area of the Lower Castle, except some which fell down in the area of the northern upper courtyard. The stoves were replaced by colorful Gothic ones, built from smaller tiles (Fig. 29),³⁰ which functioned until the 1470s, i.e. the beginning of reconstruction works in the Matthias period. Discarded tiles of a stove that functioned in the late Sigismund period were excavated in front of the facade of the northwestern range of the palace by Mátyás Szőke in 1972.³¹ This material served for a reconstruction, whereby the original tiles were used (Fig. 28).

The next generation of stoves is constituted by the ones commissioned by Matthias in the 1480s, in order to furnish the reconstructed palace. These heating devices represented a new, up-to-date style, and were produced partly by local and partly by foreign workshops. An outstanding workshop is the one of the so called 'stove with the Matthias coat-of-arms', which also produced other stoves with somewhat different structure. One of them had fallen down from the upper floor to the ground floor, and its complete debris was recovered in the west range of the northwestern palace, in 1991.³² Based on

In the late Sigismund period, craftsmen also produced such tiles, on which they applied two colors.

³¹ Kocsis – Sabján 1998, 28, Fig. 104.

For the earliest reconstruction of the stove and a study on its coats of arms, see: Buzás – Lővei 1993. A corrected version of the reconstruction has been prepared by Tibor Sabján. Kocsis – Sabján 1998, 36 –39, Fig. 152–154.



Fig. 28. Reconstruction of a stove from the Sigismund period (ca 1420–1430)



Fig. 29. A glazed tile with two colors depicting a coat of arms framed by Sigismund's symbol of the Order of the Dragon

these stove tiles, a more than four meters high reconstruction has been built, to be part of the exhibition of the interior in one of the residential rooms of the palace (Fig. 28.a-b).

The workshop that built the stove decorated with the coat of arms of Matthias produced tiles according to a new concept, where decoration was made up of relief patterns inside arched recesses. The set of coats of arms held by angels representing the royal power of King Matthias, from which the stove bears its name, appears on this type of tiles (Fig. 30–34). The tiles depicted, in part, the coats of arms of principalities which he ruled, and the coats of arms of Habsburg lands and towns – some of which rather represent claims – whilst coats of arms of some of the more prominent oligarchic families also appear.³³

The workshop of the stove with the coat of arms of Matthias introduced new motives. Rectangular tile types with Renaissance patterns play an important role in one of its stoves in Visegrád (Fig. 45),³⁴ on which the stylized floral design was perhaps inspired by patterns of Italian brocade. Stoves produced by this workshop display particular emphasis on details that had structural significance, i.e. cornices (Fig. 44.b), the articulation of edges on the lower part (Fig. 35), the decoration of the corners with coats of arms (Fig. 38), as well as the decoration of the gables and the dome (Fig. 40). These parts were emphasized by richly detailed reliefs, different colors of glaze or engobe (clay slip coating), or simply by having been left unglazed. There also appears a new type of cornice, which became really popular only in the next century: the middle cornice, separating the part of the stove around the heating chamber from the upper part, as well as binding them at the same time (Fig. 41).³⁵ The reconstructed stove, which

A copy, based on this reconstruction, was built in one of the interiors in the Corvin-suite. The original, restored tiles – having been part of many large scale exhibitions (Pannonia Regia. Művészet a Dunántúlon 100-1541. Magyar Nemzeti Galéria 1994; Hunyadi Mátyás, a király. Budapesti Történeti Múzeum, 2008. As for the latter see: Hunyadi Mátyás, 2008, 362–364. Cat. 9.22.a-1. /E. Kocsis) are now on display in the temporary exhibition in the palace, as part of reconstructed stove.

³³ Buzás – Lővei 1993, 204–209, Buzás – Lővei 2001, 27–32.

³⁴ Holl 1983, 203, Fig. 3, Kocsis – Sabján 1998, 33.

Kocsis – Sabján 1998, 34, Fig. 132. This cornice, decorated with a tendril pattern and segmented by unglazed coronets, cannot be placed anywhere else within the stove. Columns of clay supporting the coronets from behind do not enable placing tiles of the next row right behind them, but only three-four centimeters further



Fig. 30. A tile from the so called 'stove with the Matthias coat of arms', depicting a coat of arms with a hatchet



Fig. 31. A tile from the so called `stove with the Matthias coat of arms', depicting the Dalmatian coat of arms



Fig. 32. The coat of arms of Ensign Feldkirch from the so called `stove with the Matthias coat of arms'



Fig. 33. The coat of arms of Matthias with enblazoned raven from the so called 'stove with the Matthias coat of arms'



Fig. 34. The coat of arms of Gatekeeper Pordenone from the so called `stove with the Matthias coat of arms'



Fig. 35. Corner tile with corbel and baldachin







Fig. 36. Ridge tile with coat of arms supported by an angel

Fig. 37. a—b The reconstruction of the interior with the copy of the so called 'stove with the Matthias coat of arms' recovered in the northwestern range, and its exhibited version built from the original tiles



Fig. 38. The decorated corner of the stove with the small statuette of Archangel Gabriel on the edge of the corner as supporter of the coat of arms

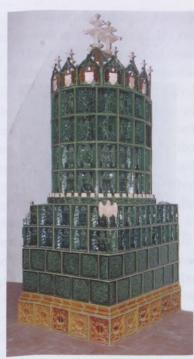


Fig. 39. A stove in the interior exhibition reproduced from tiles found in the southern range



Fig. 40. Stove dome covered with tiles and decorated with floral crosses



Fig. 41. Middle cornice on the shoulder of a stove decorated with crenellations





Fig. 44. a. Flate tile for sheathing the stove base b. A corner piece of a base tile



Fig. 42. Fragment of the statuette of David on the edge of a corner decorated with a coat of arms



Fig. 45. Renessaince tile with floral decoration



Fig. 43. Tile with the lion guarding a tree



Fig. 46. Coat of arms with prophet on a corner tile



Fig. 47. Coat of arms with swan on the so called 'Regensburg stove'



Fig. 48. Richly decorated tile with openwork tracery



Fig. 49. Ridge tile with angel holding two coats of arms

is part of the exhibition of the bedroom interior, was prepared on the basis of the finds attributed to this workshop, found in the southern range of the palace. Here as well, those types are on display which do not appear on the other reconstructed stove which had collapsed *in situ* (Fig. 39).³⁶

In order to expand on the opportunities, the workshop of the stove with the Matthias coat of arms also acquired and used – in addition to its own, modern, recessed tiles – late Gothic style, quality molds of an earlier workshop, which is associated with the so-called 'stove with the mounted knight', and combined them with its own types. On these stoves, there appeared the tile with a lion guarding a tree (Fig. 43), as well as Archangel Gabriel and King David, the figures of whom are displayed on corner tiles with coats of arms (Fig. 42),³⁷ but a type with nice Gothic tracery was also used (Fig. 48), as well as two variants of a summit tile with archangels holding coats of arms (Fig. 49), and roof tile.³⁸

backward. For a cornice, this would be troublesome, since the lower part of the summit tiles, placed backward, would seem to be overlapped when looking at eye-level. In case of a stove composed in such an elaborate way, this disturbance would not make sense. However, this type of cornice fits the purpose of gradually narrowing the size of the body by a transmission between the lower and upper parts, and this would not disturb the sight of the next row above, but rather only emphasize the segments.

The reconstruction has been made according to the drawings of Tibor Sabján.

Kocsis – Sabján 1998, 35, Fig. 140–144. Figures of archangel Gabriel and king David can also be found on a stove produced by the workshop of 'the stove with the mounted knight', found in the castle of Raholca, in Slavonia. Radić–Bojčić 2004, 257, 268. Both of these figures, as well as that of King David from Buda (Holl 1958, 252, Fig. 76.) were placed within side niches – decorated with corbels and baldachins – of tiles, which were decorated with openwork tracery on the front. On the other hand, both figures were applied in corner tiles in Visegrád, and they were situated below the coats of arms at the corners. Kocsis – Sabján 1998, 35, Fig. 140–144.

³⁸ Holl 1958, 252, 256, Fig. 73, Fig. 76, Fig. 79, Fig. 83, Holl 1971, 175–178, Fig. 150, Fig. 157, Kocsis – Sabján 1998, 35–36, Fig. 136–145.

The so called 'Regensburg stove' was produced by a foreign workshop, of which some products as well as one of its molds are known from Regensburg, Bavaria.39 These craftsmen coming from abroad used a white, grainy type of clay, different from domestic ones, and produced small and thin tiles for making green glazed stoves. In addition to Visegrad, this workshop was also active in Buda and in the castle of Tata, and it is assumed to having been sampled pieces from its mold set with great flexibility. In the Visegrad palace, for instance, rectangular types of tiles with closed forefront, such that made up the part around the heating chamber of the stove in Buda, were not used. Instead, the lower part of the Visegrád stove was built from rectangular, recessed tiles, as this is shown by a piece of a recessed tile that was built into a corner tile. The molds of tiles from Buda, decorated with inscribed ribbons and prophets, 40 were also used in Visegrad, but in a different manner: the two coats of arms at the corners were cut off from the imprints of the molds (Fig. 46).⁴¹ New motives were also applied, for example, a tile displayed a coat of arms with a swan (Fig. 47).42 The coat of arms was framed here by a profile, similar to what appears around the leaves on different variants of the type decorated with quatrefoil coats of arms (Fig. 50-51).

A workshop in the surroundings of Salzburg also delivered decorative, color glazed stoves to the Visegrad palace. Besides the brilliant application of multicolored tin and lead glaze techniques, this workshop is also characterized by a diverse set of molds. Almost every tile was made with a different mold, which makes the reconstruction of individual tiles difficult. Only a few fragments survived in Visegrad – the best to be assembled from these pieces is a plinth tile, decorated with leaves spiraling around a stick (Fig. 52). A characteristic of this workshop is that certain tiles are coated with simple green glaze, but multicolor versions of the very same types were also produced. Thus, a multicolor version of a tile depicting Saint George appears in Visegrad (Fig. 53), 43 while its green glazed counterpart is known from Buda.44 In case of another tile, which depicts a huntsman and his hounds, the situation is reverse: a green glazed version was found in Visegrád,45 and a multicolor one is known from Buda.46



Fig. 50. The reconstruction of the so called 'Regensburg stove' in the exhibition



Fig. 51. The so called 'Regensburg stove' in the exhibition

³⁹ Holl 1980, 36–38.

⁴⁰ Holl 1980, 30, Fig. 1.

A copy of this stove, as part of the interior exhibition, has been prepared also according to the drawings of Tibor Sabján. The restored originals are on display in the reconstructed stove in the archaeological exhibition.

⁴² Holl 1980, 30–31, Fig. 9–10; Kocsis – Sabján 1998, 39–40, Fig. 156.

⁴³ Kocsis – Sabján 1998, 40, Fig. 161.

⁴⁴ Írásné Melis 1986, 261–262, Fig. II.

⁴⁵ Kocsis – Sabján 1998, 40, Fig. 157.

⁴⁶ Holl 1998, 292, Fig. 6. 3.b.



Fig. 52. Base tile with mixed glaze decorated with a tendril spiraling around a stake



Fig. 53. Tile fragment with mixed glaze depicting Saint George's horse and the head of the dragon



Fig. 54. Recessed tile with a figure holding a monstrance from the so called 'stove with mixed tiles'



Fig. 55. Recessed tile with hunting scene from the so called 'stove with mixed tiles'



Fig. 56. Fragment of a corner tile with grapes and grape leaves decorating the corner edge from the so called 'stove with mixed tiles'

At last, there was a workshop working for the palace, using a mix of tiles. There is a deceptive similarity between the clay material of these fragments and the products of the workshop of the stove with the coat of arms of Matthias, but these tiles are smaller, and the molds have also a more mixed character. Several types here are copies of tiles from the so-called Regensburg stove – with alterations in the size of the quatrefoils – but there is also a copy of a tile from the stove of the so-called Three Kings in Buda (Fig. 54, Fig. 56). The workshop had also its own molds, a nice example of which is a tile depicting a shot bird falling, and a hound (Fig. 55).⁴⁷ This stove was probably erected in the final years of Matthias' rule, but it cannot be ruled out that it was built by a new workshop, since it was still required after the death of the king.

The latest stove from the royal palace is a Renaissance one, consisting of mirrored tiles,⁴⁸ possibly ordered to be built by John of Szapolya during his stay for a few months in 1538. In 1544 the palace burnt down, and with that, the era of tiled stoves ended.

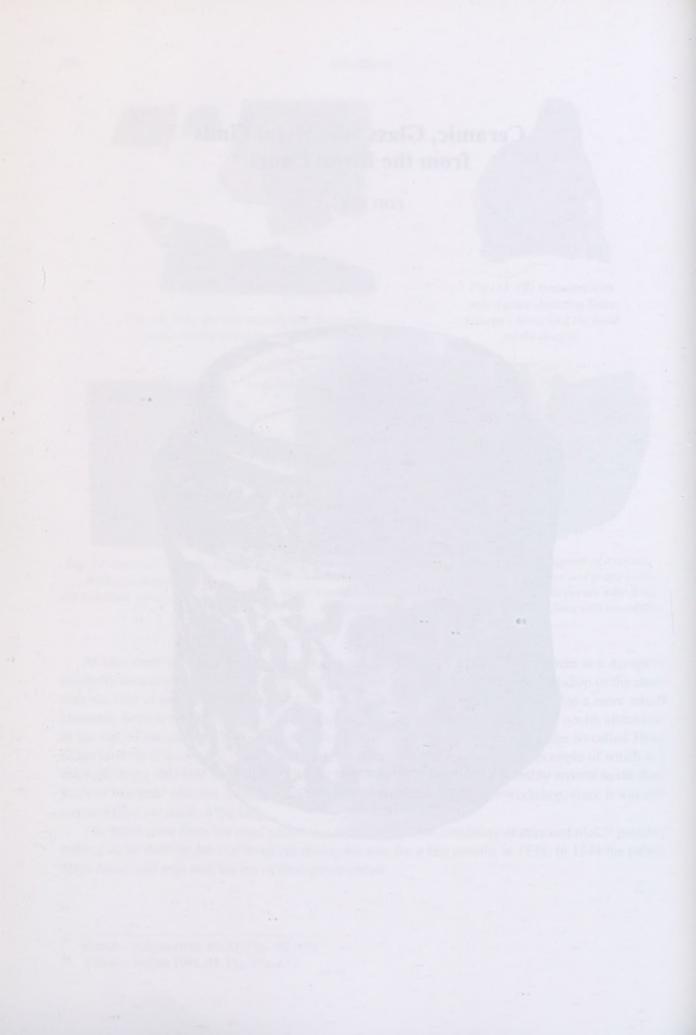
⁴⁷ Kocsis – Sabján 1998, 41–42, Fig. 168–170.

⁴⁸ Kocsis – Sabján 1998, 43, Fig. 172–173.

Ceramic, Glass and Metal Finds from the Royal Court

EDIT KOCSIS





Ceramic, Glass and Metal Finds from the Royal Court

Medieval ceramic sherds play an important role in determining the age of individual archaeological features and phenomena, since they are omnipresent; they do not disintegrate when buried, and they can be classified into well-defined groups. However, their drawback is that a certain long-standing type or form was in use for a long time – sometimes for a 100–150 years. Thus, they are not suitable for a precise enough dating. Nevertheless, if we focus not simply on individual types of pottery but on the whole assemblage which can be recovered from the individual layers, as well as on the ratio between the individual types, we may be able to draw a more accurate picture.

The Visegrád palace provides a peculiar opportunity to study certain pottery types, since there is a large amount of finds coming from well-separated layers, appropriately dated by periods of construction, destruction or deconstruction, and this material is unique in terms of its richness from the 1320s on, and in certain areas from the end of the 13th century to as late as 1544.

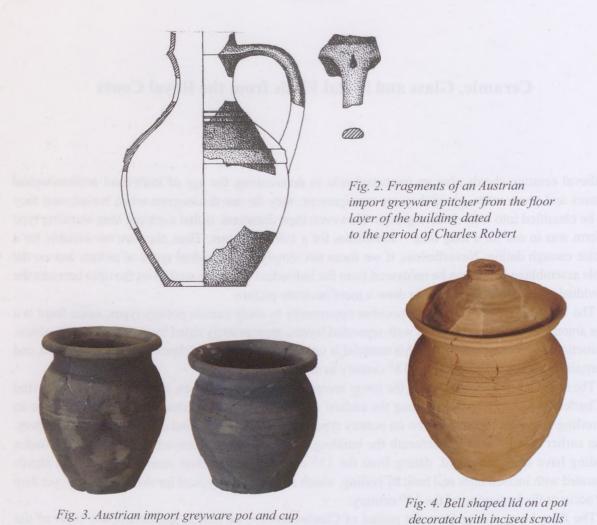
The stone building recovered in the lower reception court of the palace, and dating from the period of Charles Robert of Anjou, is among the earliest ones in the area. Its archaeological finds provide an interesting and comprehensive view on pottery types dating from the second quarter of the 14th century. In an earlier layer – partly underneath the building – traces of three decayed ovens and of a wooden building have been recovered, dating from the 13th century. Among their remains, there were sherds decorated with incised lines and built by coiling, which are primarily typical for the 13th century, yet they still occur at the beginning of the 14th century.

The floor layer, dating from the period of Charles Robert, as well as the destruction layer of the building was rich in archaeological material. The distribution of ceramic types is surprising with regard to the high ratio (at least one third) of vessel types (mainly pots, bottles, and occasionally bowls) which were made on a slow wheel, built by coiling, and had incised decoration. Previously, they were dated by archaeologists to the 13th century, primarily based on the excavations by Imre Holl in the Buda castle, however it seems that these types still live on in the time of Louis I (the Great), and they come up along with those vessels which were produced with more modern techniques. The number of vessels made with the coiling technique continuously decreased, as more decorative fast-wheel-thrown vessels gradually supplanted them. Kitchen ware, especially bigger storage pots, as well as bigger bottles for table stayed in use for the longest. In the pottery assemblage of the stone building from the period of Charles Robert at least one third of the vessels belonged to this type. If this sort of pottery occurs in such a large number in a royal center, then it might have prevailed elsewhere in the 14th century, so this must be taken into account in case of dating with these ceramic finds.

Another third of the potsherds recovered in this building is constituted by reduced-fired greyware imports from Austria – pitchers, small pots and lids. The pitchers were of a type with dark grey color, grainy texture, bellied bodies, narrow funnel necks, densely profiled rims, and coil handles decorated with either a vertical or several diagonal incisions (Fig. 2). The mouth of the pitchers were in right angles to the handles, and their bellies were decorated with protruding ridges.² The barrel shaped pots were

Holl 1963, 336–340.

² Holl 1966, 25, Fig. 25, Fig. 37. 12–13.



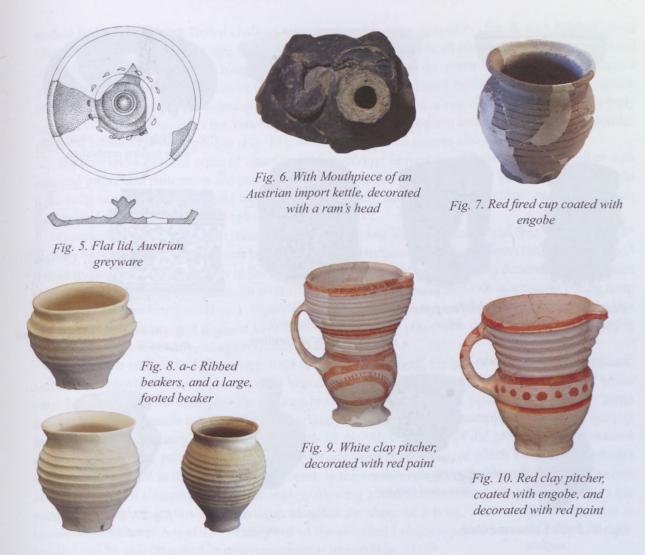
decorated with one or two grooves around their bellies, and they had rounded rims. The beakers were made of a moderate grey, finely tempered clay, their bodies were finely and evenly grooved, and they had small and rounded rims (Fig. 3. a-b). The most decorative piece among the lids was a flat one, with a centered handle, and it was decorated with ribs and incisions (Fig. 5). The other sherds were white or red fired, fast-wheel-thrown pieces — mainly fragments of tableware, i.e. beakers, bowls, or small cups. Particularly interesting is the kind of cup that was made of red fired clay, and coated with white engobe both inside and outside (Fig. 7). Also fragments of early glazed ware have been occasionally identified.

Fine Venetian glass beakers were also part of the tableware in the time of Charles Robert. Among the finds recovered from the floor layer, there is a prunted glass,³ as well as a handled-cup with a rim that was decorated with a thread of blue glass.⁴

An important and dated area of finds is the north stone court with its layers of fill, dating from the 1360s. In these layers which belong to the era of Louis the Great, there have been still some pots to be found which were decorated with incisions, and were produced on a slow wheel, though in a

A similar piece has been recovered from the small stone court on the north-eastern side. Mester 1997, 15. Fig. 58.

A similar piece has been found in the small stone court on the north-eastern side. H. Gyürky 1991, 53. Fig. 57. 2; Mester 1997, 16. Fig. 107. This type also appears to be frequent abroad, see e.g.: *Stadluft* 1992, 306.



considerably less amount, and they rather served for storage. There were some transitional types, in the decoration of which incised scrolls played a part besides uneven ribs.⁵

In the second half of the 14th century, the domestic pottery production was also dominated by fast-wheel-thrown vessels, i.e. ribbed beakers, pitchers and jugs made of white clay and decorated with red painting. On the white clay the immature technique can be clearly detected on these pieces of white pottery: the pots and footed beakers were sometimes deformed, and their rib decoration was uneven. The rims of the cooking pots were designed to fit the use of lids, and they were covered with bell shaped lids (Fig. 4). Bellied pots imported from Austria, decorated with a protruding stripe, and with rounded rims were also frequent. A grey Viennese kettle must have been a unique piece, though unfortunately only its mouthpiece remained, which was decorated with a ram's head (Fig. 6).⁶

As for the tableware, clay bottles slightly lost their significance, however tall pitchers decorated with red paint, which had a rotund shape or funnel necks, became more popular. The latter could be also made of red clay, in that case, however, they were coated with engobe to get the proper look, and they were then decorated with lines, dotted lines, and serrated semicircles in red (Fig. 10). Rotund, small cups with

⁵ Nyékhelyi 1994, 165. Fig. 14.

⁶ Similar pieces are known from Buda and Vienna: Holl 1955, 175. Fig. 49–51; Holl 1963, 342–343; *Keramische Bodenfunde* 1981, 89. 90–91. Cat.no. 115 –119.



Fig. 11. Ribbed bowl



Fig. 12. Flat bowl plate



Fig. 13. Venetian glass plate with worn golden arabesque



Fig. 14. Venetian prunted glass



Fig. 15. Venetian ribbed glass



Fig. 16. Syrian albarello with geometric decoration



Fig. 17. Syrian albarello with ornaments
– front view and section view



Fig. 18. Bottle with a smoothed

surface



Fig. 19. Cup with a smoothed surface



Fig. 20. Small bottle for seasonings



Fig. 21. Small painted spice container



Fig. 22. Fragments of a Dreihausen type stoneware beaker arranged over the pattern of a similar vessel found in Székesfehérvár



Fig. 23. A Lostice type stoneware beaker



Fig. 24. Base of a Waldenburg type stoneware beaker



Fig. 25. Pots and a plate - Austrian imports

ribbed bodies, and larger, footed chalices were produced in large quantities (Fig. 8. a-c). Ribbed bowls (Fig. 11), however, became a rare find, and a finely modeled small bowl plate, made of finely tempered white clay can also be seen as a unique object (Fig. 12). Among the ceramic finds from the palace, a peculiar, unparalleled type of object is a fine pale brown, peer shaped bottle with a smoothed surface (Fig. 18). There is only one comparable piece coming from the town: a cup with a funnel rim, and a body segmented by ribs (Fig. 19). Fine Venetian glasswares were also frequent among the tablewares. Besides the most common prunted glasses (Fig. 14), for example, ribbed glasses also occur (Fig. 15).

We also know of some types of vessels used for serving. Several small bottles decorated either with ribs and impressed patterns or red paint have been recovered, in which vinegar or spicy olive oil might have been served on the table, and there is also a small cup, decorated with red stripes and with red dots in between, which was perhaps a spice container (Fig. 21).

Outstanding pieces of import were a Venetian glass plate with gold decoration (Fig. 13),⁷ and a 14th century Syrian albarello with a squat body, and black and turquoise paint underneath the glaze (Fig. 16).⁸ These might have made their way to the court via Italy, and could have served as decorations, or to store ointments or drugs. Another albarello with the same shape was found in 2006, in a cesspit dating from the era of Matthias Corvinus (Fig. 1, Fig. 17). This one was also a Syrian import, with a blue and white ornamental decoration, and it might have been the pair of the other. The decoration, however, dating rather from the 15th century, would contradict this suggestion.⁹

Around the end of the 14th century, until the era of Sigismund, incised pottery already disappears, and solely fast-wheel-thrown pieces occur. Vessels of various shapes were produced primarily of white clay, but there are also examples for reduced-fired import wares – pots, plates, and lids. Only some decorative import vessels can be dated with certainty to this period – for example, a stoneware type cup from Saxony, Waldenburg, ¹⁰ of which only parts of the wavy foot and of the grooved body remained (Fig. 24). Even more peculiar is a stoneware type cup from Dreihasuen, of which two small fragments have been recovered in the lower reception court, in the northern range of the cloister (Fig. 22). On one of them, there is a stamped pattern of triangles, allowing a reconstruction of its shape – similarly to the one in Székesfehérvár, this decorative cup also had the shape of a boot, ¹¹ and another similar one is known from Erfurt. ¹² A mid-15th century cup of the so called Loštice type, with narrow body and three handles can be also classified as contemporaneous import (Fig. 23). ¹³

Layers dating from the period between the rebuilding project of the Matthias era and the final destruction of the palace in 1544 are also rich in archaeological finds. Besides the various white and pink fired vessels, also red fired pots, mugs, and casseroles occur, which are coated with white engobe, and their rims are decorated with green, yellow, or brown glaze (Fig. 26. a-b). The use of glazed cooking vessels might indicate a change in the consumption and variety of food. Pots and plates, of Austrian (mostly Viennese) origin, with broadening shoulders and stamped rims, which were made of graphite tempered clay, and fired in reduction, were also frequent (Fig. 25).

Among the tablewares there were various types of pitchers and jars, but the number of clay beakers is small, thus, it is more probable that glass and iron beakers were used. This is also suggested by the almost total lack of decorative pieces, although such types already came into general use in larger urban centers around this time. However, from the time of King Matthias, the palace was primarily

⁷ H.Gyürky 1991, 52. Fig. 57. 1; Mester 1997, 17–18. Fig. 102.

⁸ Holl 1990b, 249. Fig. 37.

⁹ For more details on this issue: Kocsis 2011.

¹⁰ For similar pieces, see: Holl 2006, 254 –257, Fig. 2. 2, Fig. 11. 2.

¹¹ Siklósi 1983, Fig. 5.

¹² Stephan – Gaimster 2002, Fig. 11.

¹³ Holl 1990b, 227–235; Benda 2008.



Fig. 26. a-b A pot and a bowl made of red clay, coated with engobe, and glazed on the inside



Fig. 27. Vermeil leaf broken off of a decor vessel



Fig. 28. Small sized bronze plate



Fig. 29. Copper spoon and fragments of knives and forks



Fig. 30. Large, pitcher shaped storage vessel glazed inside and outside

Fig. 31. Water pitcher



Fig. 32. Pitcher for the table with painted decoration

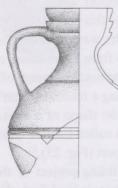


Fig. 33. Fragment of a green glazed jug

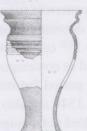


Fig. 35. Small ceramic cup



Fig. 34. Fragments of a shiny dark grey ceramic cup



Fig. 36. Footed chalice



Fig. 37. Footed cup



Fig. 39. Fragment of a glazed cup with stamped decoration



Fig. 40. Fragments of a Loštice type cup



Fig. 38. "Eggshell" cup



Fig. 41. Spice container for the table

Fig. 42. Base of a bronze candle holder and its socket with a spill holder



Fig. 43. Large green lamp

used as a summer resort or temporary residence, and the court only spent here short periods of time. The tableware, and more specifically the glass and metal vessels were transported here on occasions, therefore they did not really need less exclusive decorated ceramic beakers.

An undecorated golden plate, weighing 490 grams, which was found along the coast of the Danube in Visegrád, might have been part of the accessories of royal feasts. 14 There is also a small silver leaf, which could have broken off from a decor vessel (Fig. 27). Majolica fragments have not been recovered at all in the area of the palace: the fine dining set of Queen Beatrix possibly never made it to Visegrád. Two glazed and pitcher shaped storage vessels with opposing handles, which date possibly from an earlier period, most probably served for mixing wine during the feasts (Fig. 30).15

Based on some finds from the Lower Castle, we may have some ideas about dining customs. They have dined from bronze plates and bowls, which we may presently consider too small, as they were suited for small amounts they used to take from each course. For dining, they have used copper spoons with drop shaped heads and thin handles, as well as small knives with wooden, bone, or pearl handles decorated with small copper plates and rivets. Forks - that were a novelty at that time - have also appeared on occasions of dining (Fig. 29).

Among the vessels serving for liquids, there are large, white and red fired pitchers for water (Fig. 31), and smaller unglazed ones with red paint (Fig. 32), as well as green glazed jugs (Fig. 33). Fragments of the so called biconical glass bottles were also frequent. Besides footed glass chalices, 16 white clay beakers served for drinking. Three different sizes of clay beakers occur frequently: small unfooted ones with ribbed bodies (Fig. 35), footed chalices, which had rotund shapes (Fig. 36), and a footed type, with cylindric or oval upper part, which was of medium size (Fig. 37). These latter ones had generally a more refined finish, and thin bodies: indeed, many of them classify as so called "eggshell" beakers (Fig. 38). A tall, footed cup, with grooved body, articulated rim, and shiny dark grey surface was a rare find, as it occurs more frequently rather in Austria and Northwestern Hungary. 17

As for the decor pottery in the time of King Matthias, some fragments of the Loštice type cups can be mentioned: one or two foot fragments with shiny blistered glaze, and the upper part of a cup with six handles attached to its shoulder have been preserved (Fig. 40). A fragment of a green glazed beaker, broadening in a conical way, with an articulated rim, and stamped decoration was probably a

Hunyadi Mátyás 2008, 367. Cat. No. 9.25. (Kocsis, E.) 14

Two such fragments have been recovered from one of the cesspits in the palace during the excavation in 2006 15 (directed by Gergely Buzás and Mátyás Szőke). However, fragments of more than 137 similar vessels are known from the Citadel. See: Tóth 2006, 56-61. Fig. 141-167.

H.Gyürky 1991, 54. Fig. 58. 10; Mester 1997, 17. Fig. 135.

Polla 1979, Fig. 65-66. Table VIII; Keramische Bodenfunde 1981, 72-73. Cat. No. 80-81.



Fig. 44. Upper part of a Venetian glass lamp with golden decor



Fig. 45. Venetian chalice with overlaid decoration



Fig. 46. Venetian Renaissance chalice



Fig. 47. "Krautstrunk" beaker made of green glass

domestic product (Fig. 39),¹⁸ just like the late 15th century spice container, which had a yellow glaze, and consisted of three small plates and a foot decorated with incisions (Fig. 41).

Besides bronze candle holders, also glass lamps and chandeliers served to light up the dining halls (Fig. 42). In 2006, fragments of a chandelier that possibly came off the roof – i.e. three identical, green glass lamps – and the upper part of a Venetian uncolored glass lamp decorated with a golden leaf wreath, have been recovered during the excavation of a cesspit (Fig. 44).¹⁹

Already dating from the 16th century, some spectacular decorative vessels are known among the utensils of the palace. Though only a fragment, the piece of an Austrian, pattern impressed cup decorated with red-brown glaze and red paint is a unique find (Fig. 48).²⁰ A ceramic disc with colored glaze decorated with sgraffito (possibly a spill holder for candles) was found in the Citadel (Fig. 49. a-b).²¹ Preserved glass objects are rather to be found among the finds in the Lower Castle, i.e. a Venetian chalice with overlaid decoration (Fig. 45), and a Renaissance chalice (Fig. 46), as well as fragments of a so called "cabbage stalk" (Krautstrunk) beaker (Fig. 47). In the area of the palace, there is nevertheless a faience bowl from Asia Minor (of the Iznik type, with blue and white style)²² which was deposited before 1540, and was probably transported to Visegrád when John of Szapolya visited the palace (Fig. 50).

There are also other types of ceramic objects in the assemblage that were not used for drinking or dining. For instance, single or triple oil lamps, made of red, grey, or white clay, a candle holder made of red clay,²³ as well as small crucibles which could be used for various purposes. Among them there are pots used by goldsmiths, and graphite ones for melting iron (the latter sometimes have the stamp of the town of Tullin, Austria, at their base), as well as circular ones suitable for poundering (Fig. 51). A white colored one, with marks of red paint on the inside have been used probably when decorating the walls of the chapel (Fig. 54).

Certain toys for children were also made of ceramic material. Two headless clay dolls have been found so far in the palace area; these had long dresses. A head of a doll made of white clay was also unearthed, wearing a 14th century kruseler type of bonnet (Fig. 55. a-c) A small yellow glazed pony head, as well as a mounted figurine could be boy's toys; both had holes for attaching wooden sticks to

¹⁸ Holl 1963, 362. Fig. 59.

¹⁹ Hunyadi Mátyás 2008, 369–370. Cat. No. 9.30.a-b. (Kocsis, E.)

Holl 1955, 163. Fig. 43. A similar product has been published by Walcher von Molthein 1909, Fig. 55.

Tóth 2006, 71. Fig. 74. The pattern on one side is identical to the motive found on some semi-finished products of the majolica workshop at Pécs. See: *Pannonia Regia* 1994, 390–392. Cat. No. VIII-43. (Kárpáti, G.)

²² Pölös 2004, 418. Fig. 1.

²³ Nyékhelyi 1994, 166. Fig. 21.



Fig. 48. Fragment of a decorative cup made in Austria



Fig. 49. a-b Fragment of a ceramic disc with colored glaze and incised decoration



Fig. 50. Small faience bowl from Iznik



Fig. 51. Triangle shaped crucible for melting and circular ones for poundering







Fig. 52. a-b Mounted figurine and a small toy horse



Fig. 54. Vessel with build-up of red paint on the inside



Fig. 55. a-c Fragments of ceramic dolls



Fig. 56. Relief floor tiles from the 14th century chapel



Fig. 57. Rectangular majolica tile decorated with the blazon of King Matthias depicting a raven

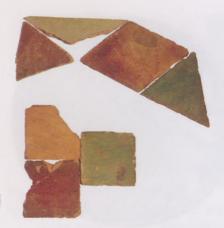


Fig. 58. a-b Rectangular floor tiles from the chancel dating from the Matthias era, and rhomboid tiles from the gallery of the Gothic cloister of the palace



from the roof of the chapel



Fig. 59. Glazed roof tiles with curved end



Fig. 60. Restored ceramic sphere Fig. 61 Fragment of a hexagonal majolica floor tile

them (Fig. 52. a-b). An Austrian import grey bird figurine, with graphite-like surface, dating from the 16th century, could also function as a toy (Fig. 53).²⁴

The ceramic building materials from the palace are spectacular as well. The floor of the chapel built in the time of Louis the Great consisted of unglazed relief tiles (Fig. 56).²⁵ In the time of King Matthias the chancel was paved with rectangular green, yellow, and brown glazed floor tiles. Similar glazed tiles, but bigger, and of rhomboid shape were used in the gallery of the Gothic cloister (Fig. 58). The roof of the chapel was covered by green, yellow, and brown glazed tiles with flat or curved ends (Fig. 59), ²⁶ thus giving it a nice harlequin appearance, and this effect was further enhanced by large ceramic spheres, as it is seen on one restored piece (Fig. 60).

There are also two majolica tiles, one of which was found in the palace, the other in the town area. Both types are related to the majolica floor of the Buda palace, dating from the Matthias era. The one is a fragment of a hexagonal tile (Fig. 61),²⁷ the other one was used to fill the interstices in an octagonal tile floor, and was decorated with an emblazoned raven (Fig. 57).²⁸ Since these floor tiles were no individual pieces, and this type of floor is closely associated with the person of the king, it may well be suggested that there must have been two majolica floors somewhere in the private apartments in the northeastern range of the palace. Before the final destruction of the palace, they could have been carefully removed and transported, as no other trace of these has remained besides these two fragments. They were probably relocated in the late 1530s, a calamitous period, when the palace alternately passed into the hands of Ferdinand I, and John of Szapolya.

²⁴ A similar piece: Keramische Bodenfunde 1981, 192. Cat. No. 362. Fig. 14.

²⁵ Holl 1954, 192-195.

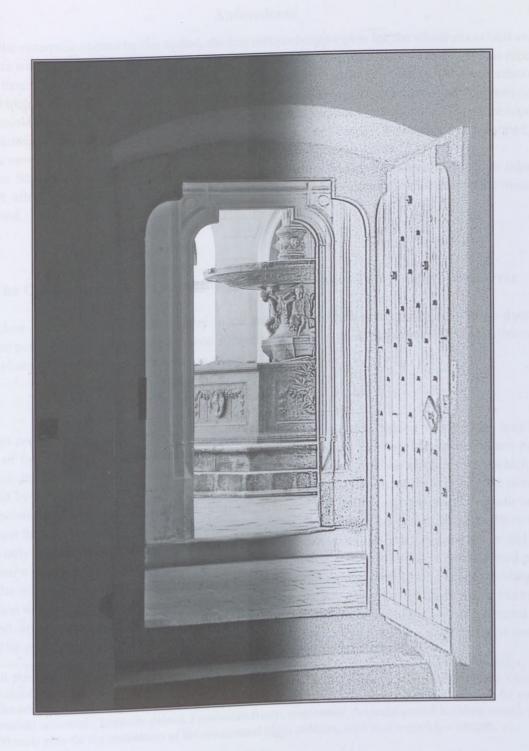
Nyékhelyi 1994, 163-164.

²⁷ Pannonia Regia 1994, 388. Cat. No. VIII-37. (Buzás, G.); Dowry of Beatrice 2008, 115. Cat. No. 2.73. (Balla, G.)

Identical pieces were found in the palace of Buda, which fit the interstices of the octagonal tile floor. Bertalanné 1952, Table LVIII. 2-3.

Reconstruction History of the Visegrád Royal Palace, 1995–2010

ZOLTÁN DEÁK



Reconstruction History of the Visegrad Royal Palace, 1995–2010

Antecedents

Before the enterprise started by the author, the last comprehensive plan for the whole excavated area of the palace was made by János Sedlmayr in 1991. Although the long discussion of the plans was repeated several times, the plan to cover almost the whole area of the complex – except for the northeastern palace which would have been left as an open air exhibition of the ruins – was never put into realization. In the second half of the 1980s the execution of the plans that had been started in the area of the southern palace slowed down, and then stopped; the condition of the half-ready constructions deteriorated, and even the newly walled parts suffered serious frost damage in the mid-1990s.

János Sedlmayr passed over the task of reconstruction planning to the author in this hopeless situation, after the work of several decades that fundamentally determined the character of the ruins was interrupted.

The Condition of the Ruins at the Time the Planning Tasks Were Taken Over

It was clear already during the first survey in the summer 1994 that after taking care of the damaged walls that posed serious danger and required immediate intervention, a long-term technical solution was needed to stop the continuous deterioration of the walls.

The Technical Condition of the Ruins

The most precise impression of the ruins' condition might be gained by taking a look at the area from the top of the reception building. The northern end of the western facade of the northeastern palace collapsed; the so-called control corridor behind the eastern corridor of the cloister walk (which was protected by a reconstructed vault) was soaking from the floor above; one of the walls of the northern wing, the southern corridor that led to the cloister walk and the heating equipment of the bath on the uppermost floor were protected by temporary slate coverings. The great cellar below the southern wing was the only roofed exhibition area in the museum; reconstructions of the Late Gothic window and door jambs and a corner of the cloister walk's loggia were exhibited here. A dwelling house situated partly above the northwestern palace building was transformed into an archaeological storage building and restoration workshop. The eastern end of this building wing was ruined, the Baroque-period vaults had collapsed, and the part of the building used for storage and a shed for storing wood was covered with slates. The excavated section of the western palace wing north of the gate tower, with its axis running

Draft plan for the reconstruction proposal of the palace complex of Visegrád, 1991. János Sedlmayr, OMF (Országos Műemléki Felügyelőség, National Office of Monument Protection; henceforth: OMF). Coverage for the northern palce wing (reception building of the museum), western wing (reception building for cultural communal activities), southern palace, Franciscan friary, grandstand, Angevin-period building (mint), and a 1:200 scale plan for the restoration of the ornamental flight of stairs, with bird's-eye view images.



Fig. 2. View from the top of the reception building, fall 1995

parallel to the Danube, was also partly covered by a roof, under which the museum's lapidarium and remains of the lower level of the bay window decorated with the coat of arms, also found protection. A dwelling house erected before the excavations stood on top of the remains of the gate tower; this served as a reception building for visitors. The western palace wing was protected with a soil layer south of the gate tower. The reconstruction was left unfinished in the southern palace, and thus its two western rooms which had been vaulted and set up as a lapidarium were only protected by tarred paper laid on the concrete vault, until it fell apart due to the weathering. The retaining wall of the eastern wing of this part of the palace, which faced the mountain side and stood 2.5–3 m high, was rebuilt after it had collapsed in the mid-1980s because it was not properly buttressed and supported. The walls of the lower level of the tower of the southern palace, that adjoined the fence wall were propped up; this floor was partly carved out of the rock face, and the condition of the supporting wooden structure made it necessary to replace it with a long-term solution as soon as possible.

The reconstruction plans submitted by János Sedlmayr in 1963 included a description of the ruins' condition, which were in a similarly deteriorating state². He emphasized that although the proper excavation and heritage protection of the Visegrád Royal Palace had already been acknowledged as a crucial project in the history of Hungarian monument protection, and had also been internationally recognized as an important enterprise, the works were interrupted and the constructions left unfinished.

Expectations of Monument Protection

The 1994 condition of the ruins, except for the damages caused by the above mentioned technical problems, corresponded to the reconstruction concept according to which only a minimal transformation and addition was allowed in the protection of the excavated ruins. These expectations resulted in compromises and barely acceptable solutions in technical matters – especially in terms of drainage – which then made it impossible to meet the protection requirements. However, this seemingly scientific concept was violated right after Word War II, when the eastern corridor section of the cloister walk was fully rebuilt in 1951. The idea of transforming the huge barrel vaulted room of the southern wing into a lapidarium was already promoted then, since the architectural magnificence of the Matthias-era complex could have been best put on display through the excavated stone carvings and the composite stone structures³. Later additions, such as the reconstucted parts of the vaulted cloister walk of the courtyard, served didactic and aesthetic rather than real monument protection purposes.

Visegrád, Matthias palace, program plan from August, 1963, general desctiption, János Sedlmayr, OMF
 János Schulek: A proposal concerning the ongoing excavations at Visegrád, June 24, 1946.

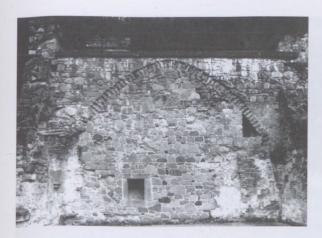


Fig. 3. The eastern wall of the first hall in the upper floor suite, with corbels and remains of the plaster



Fig. 4. The hall in the southern palace wing that was reconstructed in the 1980s, with the small glass pavilion covering the cellar entrance

The reconstruction works that lasted for several decades mainly targeted the protection and exhibition of the ruins. This was, however, limited almost exclusively to the northeastern palace. The traffic between the levels created on the rock terraces of the hill posed another problem to be solved. Elements of the medieval routes were only partially reconstructed, and their starting point was indicated. Thus, the upper loggia and the upper floor rooms could only be approached from the lower level of the ornamental courtyard from outside, through a flight of stairs created in 1943 by cutting through the outer retaining wall of the chapel terrace. The flight of stairs reached further than the upper floor entrance, so one could enter the upper floor rooms only by passing by the ruined wall of the kitchen. The proper stairs that led further from here were built only partially, terminating at an intermediate landing; from here, one could take the reinforced concrete stairs, which led through the space of one of the upper floor rooms, in order to reach the upper level courtyard (where the Fountain of the Lions stood). The bridge leading to the courtyard was built as a reconstruction, in which medieval wall pillars were also used. It is obvious that the concept, which was said to be firm and clear and to be applied consistently, was still flexible enough for the planning architect who led the reconstruction works to implement his own ideas, at least to an extent which was still justified.



Fig. 5. The eastern wall and cloister walk of the ornamental courtyard, viewed from the side of the Hercules Fountain, 1995



Fig. 6. The conserved wall remains of the chapel, with the rock face reinforced with concrete in the background, fall 1995

The monument protectors, who worked according to the guidelines of the Venice Charter, were satisfied, as the ruins of the Visegrad Palace looked exactly as they should and filled their proposed function: they awoke the image of a once magnificent complex, with original surfaces and small, inventive additions. All these additions were formulated with the intention of clearly communicating the presence of elements created for monument protection purposes only, and that the ruined palace now gained its final form, and its photos were ready enter all scientific studies, because they did not reflect any hypothetical building parts or materialized imaginary. All we see is original or "equal to it". This "language of monuments" was not only understood in academic circles, but also provided an aesthetic experience for those who looked at it. The proposal to cover most of the ruin area in 1991 was completely alien to this approach, and was not understood in the planning committee. Of course, the violation of the above mentioned concept and the introduction of new elements into the complex met strong disapproval. Unsuitable or improperly used techniques were blamed for the problems of the slowly deteriorating ruins, not mistakes inherent in the concept itself; thus, a solution in terms of practicalities instead of theories was looked for. To the directives expressed in the Venice Charter a number of other rules and concepts were added in Hungary, which, instead of broadening the horizon within which these directives shall be applied, rather narrowed it down, and sometimes even led to dogmatic principles.



Fig. 7. The closed upper garden with the reconstructed Fountain of the Lions



Fig. 8. The conserved remains of the bath in the northeastern palace, under a protecting roof

Decisions concerning simple and rather obvious engineering problems and technical solutions given to them were made not on strictly professional, but rather on ideological grounds, a practice which always interfered with monument protection considerations.

Planning Program and the Correction of Ruins that Posed a Threat to Life

In order to improve the condition of the ruins which in some cases even posed a life threat, the monument protection of the walls was started to be implemented. The project was financially aided by the Ministry of Culture and the National Tourist Office, and was based on a program plan and a statics expert's report. Weekly organized guided walks provided an opportunity to gain a profound knowledge of the complex and to discuss the plans in detail.



Fig. 9. A characteristic view of the ruins of the northeastern palace, with additions built in the 1980s, seen from the northwestern corner of the ruin area

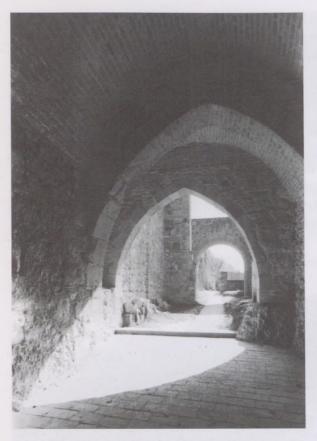


Fig. 10. The bath courtyard seen from the bath chamber

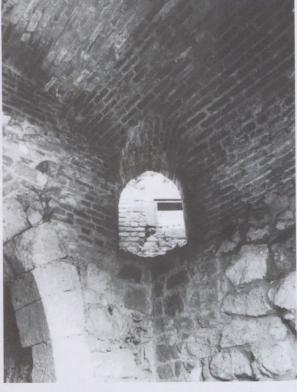


Fig. 11. In the heating chamber the space where the heating equipment was situated (under the bath) is visible through the opening

Planning Considerations

A number of factors had to be taken into consideration during the launching of the program plan. There was not much point in defining priorities between these factors, as these were not hierarchical, but rather presupposed each other and each other's necessity. Therefore, the list described here does not reflect a hierarchy of the tasks.

The physical condition of the ruined walls required a long-term solution that would once and for all protect the monuments. It is obviously not only a question of walling techniques or raw materials; even in countries with a climate much more favorable than that of Hungary, the maintenance of ruined monuments poses everpresent difficulties, and makes one think of the never ending struggle against nature's forces. It is the ruins' fate to deteriorate, and this process can only be slowed down even with the perfect



Fig. 12. The reconstructed lower part of the flight of stairs that led up from the loggia's level. The missing upper part was substituted with a concrete construction in order to make the Fountain of the Lions accessible

care and the most up-to-date scientific technologies. A roof erected above the walls – which actually gives back to the wall its main function: that it divides the exterior from the interior – also protects the building parts within the walls. Previously, these open interior spaces surrounded by walls were filled up with water in case of a rainfall, as they served as natural basins. In order to protect the monuments a drainage system had been constructed, which helped avoiding the damage by discharging the water, but this solution involved the damaging and altering of the original floors so that the water could be led off. It is worthwhile to mention here that photographs made after the excavations show walls almost fully covered with several layers of whitewashed plaster, and the floors of the rooms were also preserved, even though they were fragmented here and there due to the collapse of other parts. The protection of the walls against moisture would have helped in preserving, conserving and restoring the plastered surfaces.

The Accessibility of the Medieval Palace

As it had already been recognized during the earlier plans of reconstruction, the archaeological excavations of the palace provided reliable data based on which it would have been possible to restore the routes of medieval traffic, which would also have contributed to a better understanding of the ruins. This meant first and foremost the vertical movement between the levels, that is, the flights of stairs, which were only partially rebuilt according to their medieval traces. None of them was fully restored to match the medieval traffic routes, as such a reconstruction would have meant an artificial addition to the complex, in disagreement with the principles on which the reconstruction works were based until 1994. The upper section of both flights of stairs in the northeastern palace was missing, as their completion would have required a reconstruction of the upper floor to which they adjoined. If these additions had been built according to the dominating guidelines, that is, with a new construction conspicuously distinct from the original ruins, then a huge mass of new building parts would have appeared, significantly altering the view of the ruins. The situation was different with the huge ornamental flight of stairs leading to the chapel terrace from the lower reception court. It could have been reconstructed according to the available data (the position of the first step, the height of the whole rise, the position of the springers), and so a major route, one that served representational purposes in the Middle Ages, would have been restored. The mental reconstruction of the traffic routes presupposed a functional analysis of the floors and the making of a draft drawing showing the internal spatial relations of the palace complex. During this work, the functions of the more-or-less preserved rooms and the reconstructed halls were revealed.

The Functional Needs of the King Matthias Museum

An important factor taken into consideration during the planning was the requirement to meet the functional needs of the King Matthias Museum. Old dwelling houses left standing in the area of the palace complex have provided space for the museum's offices, study rooms, archaeological storage rooms, restoration workshops and reception buildings. The only roofed exhibition room is the lapidarium in the great cellar. Previous program plans had set out a guideline that the whole ruin complex shall be used as an exhibition area, but it was only in 1991 that a proposal for roofing the ruins was made. The building of a new exhibition hall was not an option in the earlier monument restoration program written in 1976, as this would have disturbed the harmonic landscape of the ruins. It is important to note, nevertheless, that a number of proposals had already been submitted on meeting the requirements of the museum functioning as an exhibition as well as a working area. Unfortunately, most of these proposals were only verbally discussed, and so it is impossible to say if these were taken seriously by architects and professionals of monument protection.

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The plans were developed on the grounds of the considerations the listed above. Judging from the plan drawings made in the early 1990s, the partially reconstructed, partially untouched ruins were unsuitable for the creation of a uniform view that would have woken the image of the space and mass of the past palace and would have represented the physical environment of medieval life in a form that modern man can also grasp and comprehend. The question whether the building serving the museum's needs shall be erected in an area where the ruined walls stand high or in a place where these are very poorly preserved – a solution still favored in monument protection today – was left open. After the functional analysis and theoretical reconstruction of the complex an unusual conclusion was drawn: the reconstruction of the whole building mass is necessary. The medieval complex reflected a pronounced architectural concept already before the transformations in the age of king Matthias. The most important goal of the palace's reconstruction is to put this strong character on display and help visitors to discover it.

Spatial Relations and Bulk Formation of the Medieval Complex

The perception of space is one of the most profound experiences of the human mind. Building activity turns into architecture when man starts to look for and create spatial forms that wake pleasure in the psyche. This feeling or experience helps us to understand the world and its structure by copying it. Sacral space reflects the relationship between Man and God, while secular space and space organization communicates order in the human society, culture and civilization. Man creates the concept of space, partly as an opposition to bulk, partly as something profoundly connected to himself as creator and user, and which influences him though its artistic forms.

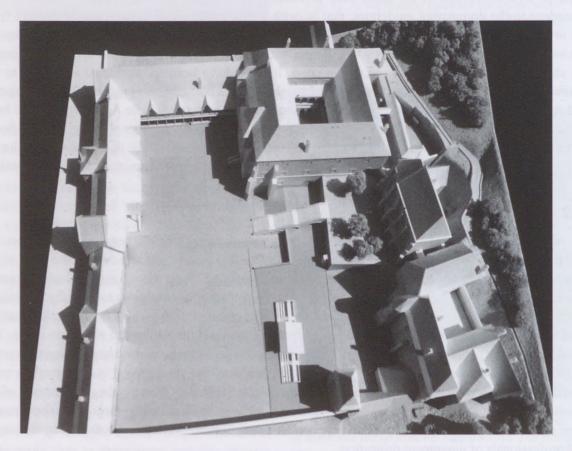


Fig. 13. The model of the palace complex shows the composition of alternating building masses and open courts







Fig. 14–16. Small lanes and intermediary spaces were formed at the meeting point of the foothill and the geometric building mass, along natural features

One of the biggest and most puzzling questions of architectural history is how much we are able to comprehend of the space formation of historical buildings, in this case, the fifteenth-century royal palace of Visegrád. Is it possible for us to understand it just as the words and sentences of an ancient text? The basis of all understanding is learning, which must include not only the analysis of the material remains but also the understanding of the culture and the spirit which created the human environment, the "second nature", out of lifeless stones. A comprehensive discussion of the entire space of the palace complex is not possible here, however a couple of typical and predominant spaces and space relations will be discussed.

As part of the planning process it was crucial to analyze the space and bulk formation of the Matthias-era complex, since it was the main aim of the reconstruction to put these on display.

As opposed to the present-day open air ruins one of the tasks was to construct closed spaces serving the manifold needs of a museum, but the reconstruction of the original spatial relations and spaces was also of equal importance. The formation of space and mass was as characteristic of the past complex as the Late Gothic and Renaissance architectural elements incorporated into the building whose ground plan was prepared predominantly in the Sigismund period. From the Danube, the complex with its 120 m long, monumental front facade and side wings must have made the impression of a closed block. The palace wings surrounded a long courtyard from three sides, while the southern side was closed by a high fence wall. The courtyard housed receptions, courtly events that attracted many people, as well as knightly tournaments. Someone who entered the gate tower in the Matthias period found himself or herself at the centerline of this courtyard. The northern, right hand side of the courtyard was bordered in an L shape by a building whose facade was enriched by a two-level row of arcades; this adjoined the closed block of the northeastern dwelling palace. The courtyard facade of the dwelling palace was equipped with a bay window and a flight of stairs that led to the upper level of the L-shaped row of arcades. Almost precisely in front of the gate tower's entrance a wide, monumental flight of stairs led to the chapel terrace where lime trees had been planted. The retaining wall of the terrace makes two turns and joins middle of the building adjoined the southern facade of the dwelling palace next to the entrance to the ornamental courtyard. The block of the southern palace which was connected to the gallery of the chapel was situated a bit farther on the hill's side, so that it bordered the southern, widening, rotund part of the courtyard from the east. The dominant principle in the arrangement of the buildings as well as in the relation of the interior spaces to each other was the addition of equal components. There is no trace for any hierarchy between parts of the complex. The halls usually opened from the outside, from

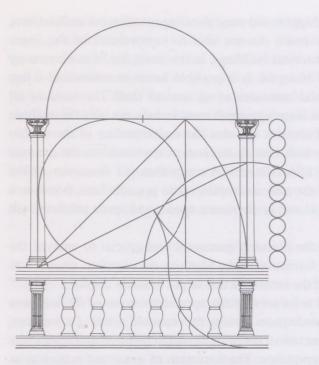


Fig. 17. When the proportions of the loggia were established the distance between two columns was taken as a basic measurement. A square's diagonal drawn on this basis gave the height of the columns, which is identical to the lower diameter of the column multiplied by 9. The height of the balustrade was calculated as the golden ratio of the columns' distance.

an arcaded corridor or a loggia. Individual rooms were only connected when their function made it necessary to approach the one directly from the other, such as in dwelling suites. Therefore, as a consequence of this arranging principle, the great hall - and halls in general - did not occupy any central place, but smoothly they fit into the ground plan. The great hall appears as part of the closed ground plan, on the western side of the ornamental courtyard in the rectangular block of the dwelling palace; in all probability, a similar arrangement was applied on the floor of the loggia too, to which also bay window was attached. Both halls could be approached through their longer side, from the corridor or the courtyard; the entrance door was located on the middle of the hall's longer side on the ground floor, while the entrance of the upper floor hall was probably closer to the hall's end. So, the space was organized around a transverse axis. It is certain that not even in case of the rooms used as space of representation was it required to have an entrance in the middle axis of the shorter side, even though this arrangement had been used in ecclesiastical architecture for a thousand years. The same is observed in case of the hall in the northwestern palace wing, even though there were possibly additional doors on the shorter side

which opened to the porch that connected the hall to the garden; nevertheless, neither the doorsteps nor the imprints of these have been preserved. Placing the entrance on the longer side of the hall is typical, and a similar arrangement is seen the medieval ground plan of the Buda Royal Palace, and in the papal palace of Avignon, but the entrance is located in the transverse axis also in Vicenza, or in the great hall with a wooden barrel vault in Padua. The placement of the great halls and their entrance described above is characteristic for the palaces of the Italian Quattrocento and Cinquecento, too. The arrangement of features along the axis appears in the palace drawings of Palladio, but here the underlying concept of space is different from the one later dominating the Baroque.

The arrangement of the dwelling palace's ornamental courtyard was particularly of interest during the study of spatial organization, especially because its re-creation provided a glimpse into medieval methods of planning. The geometric boundaries of the courtyard were determined by the walls of the already existing Sigismund-era rooms. After that the earlier arcade and the well-house had been dismantled, the master in the Matthias period had to arrange the two-level loggia in the somewhat elongated rectangular courtyard in a way that its corridors remain well-proportioned, and a row of columns with regular spacing is created on each side. Five column interspaces were planned on the longer side, while four were planned on the short side, one of which served as an exit to the courtyard on each side. The exit was placed right at the middle of the long side, making it symmetrical, while the short sides remained asymmetrical. An octagonal fountain was erected on the courtyard. The door on the short southern side was placed on the axis of the corridor that ran down the building, so that the fountain was nicely visible through all doors. The planning of the ground plan obviously aimed to create regular square-shaped

rooms; these spaces were easy to cover either with a groin vault or a barrel vault. As the ground plan was arranged around a central courtyard, and all the wings were of the same width, regular square-shaped rooms were created at the corners. which became a basic element of the whole spatial arrangement. The floor height on the level of the ornamental courtyard was mainly determined by the rise of the vaulting, which often corresponded to a regular half circle. Here the lunette vault of the Sigismund-period hall on the western side was the main factor that determined the height. Other barrel vaults created later in the Matthias period were built to fit the height of the keystone of this vault. On the level of the loggia, the shape of the groin vaults of the dwelling chambers on the eastern side follow a regular half circle positioned on the diagonal axis of the room. This main





Fig. 18–19. The balustrade of the loggia gives a view of the Hercules Fountain, and the architectural proportions and details of the ornamental courtyard are nicely revealed

principle of the planning, on the one hand, was a consequence of the building technologies: on the other hand it also made a conscious planning of the rooms' proportions possible. It is still noticeable later, even though it is not followed as strictly.

Theoretical Questions of the Reconstruction

The main goal of reconstruction coincides with the earliest aim of monument protection, which is still considered a primary target of the latter, that is, to preserve as much of the original monument as possible. The same is true for the Visegrad palace, and this protection aims not only the medieval parts of the complex but also the additions constructed during earlier phases of reconstruction. Dismantling was only an option where new kinds of building material or a newly planned construction were required for a didactic purpose, or in cases when stone jambs were exhibited in locations where their medieval existence was not proven by excavations. The earlier, didactic approach that required a clear differentiation between the original and the added was only slightly changed, in places where this would have resulted in surfaces that profoundly disturb the view. Plastering is the most suitable method, which, by skip trowel technique, can follow the irregular surface of the original stone wall, can smoothly adjoin to stone jambs, and can easily be thinned where the carved stone surfaces shall be put on display. This means that this method meets the didactic requirements but at the same time it does not disturb the unified appearance of the complex, even though professionals will be able to spot the original height of the ruined walls and the extent of the completions and alterations made in different periods. A natural, and certainly the most important precondition is a proper roof that protects the walls from moisture and the facade surfaces from the freezing. The planning and execution was scheduled accordingly: the first task was to cover the rooms for whose reconstruction all preconditions were given, such as the precise measurements of their ground plan and height, the method of vaulting, the springers, vault imprints, as well as the precise location and stone jambs of the doors and windows. In the next phase the rooms above these were scheduled for planning. Here the parameters needed for the reconstruction were known, especially in the northeastern palace, where the destruction was mainly influenced by an erosion surface parallel to the hill slope, but the outline of the rooms of the upper story and their floor level were known. The architectural character of the complex, revealed by the data collected from the 262 Zoltán Deák

monuments and combined with the knowledge of architectural history and scientific study, is of a similar historical value as the preserved physical remains: walls, floors, vault imprints, in situ and excavated stone carvings themselves. Consequently, it was not the sole need for protection, but rather the need for a high quality construction that transforms walls into a complex, that primarily influenced the way and extent of the reconstruction.

Preconditions for Planning

Monument reconstruction in present-day Hungary is overwhelmed by ideological debates, and therefore it is perhaps better not leave the ideological point of view out of the discussion of reconstruction planning. However, the most important points must be touched upon.

Theoretical and Methodological Questions of the Reconstruction

Maybe the most important principle was that the ruins were not seen as a monumental, l'art pour l'art artifact that stands in itself, but as a framework of the vivid life of the medieval court, and as remains of a consciously composed architectural work of art. The data and knowledge gained as a result of the scientific study were handled equally to the physical reality of the ruins when the main directives were agreed upon. The work of our predecessors made it clear that the everyday methods used in reconstruction will not allow us to get much better results. Therefore, right from the beginning it was one of the crucial points that our plan will probably exceed the usual concept of reconstruction, and will propose solutions similar to those applied in earlier ages when a ruin was incorporated into a building ready to use. This concept inherently targeted the preservation of a building other than the physical ruins: a building that existed in a non-material form. The scientific studies had an enormous influence not only on the ground plans and small physical details, but they also provided a vast knowledge of the medieval life lived within these walls and the functions for which the whole complex had been built and maintained. This became extremely important when the reconstruction of those rooms where scheduled in which it was planned to exhibit not only the mere architectural space but also the furniture and tools for everyday use, based on analogies and archaeological finds. The results of scientific research, a precondition for the planing work, was available in the form of publications and personal consultations alike.

Surveys and Experts' Opinions

Since the aim was not to complete the ruins or to cover them with bigger or smaller, isolated or connected roofs, a more comprehensive solution was targeted, specifically a detailed geodetic survey was conducted of the whole area. This survey was groundbreaking in monument protection, using a system combined with up-to-date computer methods⁵. The result of this survey was a grid with fixed iron survey nails, set up with geodetic precision, which was later used both in manual measurements and the actual execution of the plans. A comprehensive and detailed soil mechanical and hydrological analysis was made of

An architectural and photogrammetric documentation of the Visegrád Royal Palace, its ornamental garden, orchard, and Franciscan friary, 1995; supplements were continuously added every year until 2009, by József Vajda and Ilona Györfy.

⁴ A visegrádi királyi palota kápolnája és északkeleti épülete (The chapel and northeastern building of the palace complex of Visegrád.). In Visegrád régészeti monográfiái 1. (Archaeological Monographies on Visegrád, vol.1), 1994. ed. Gergely Buzás

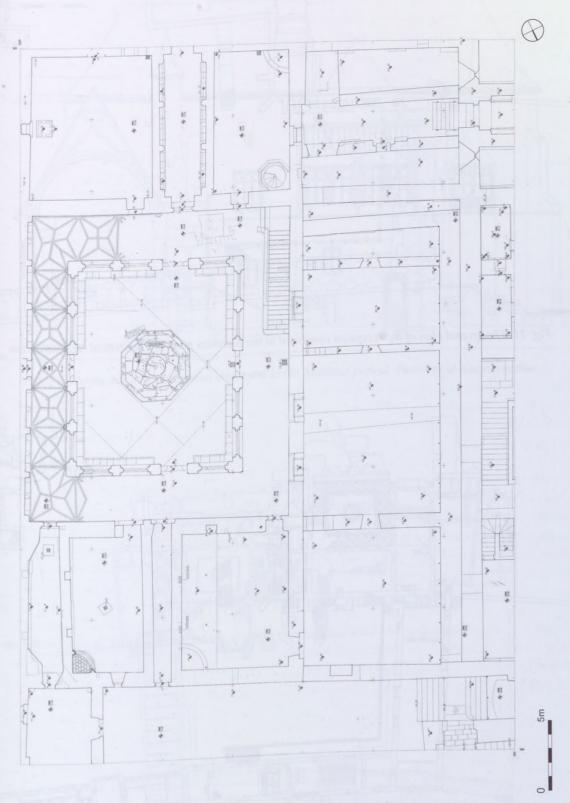


Fig. 20. One page from the documentation of the survey conducted in the palace area; The ornamental courtyard

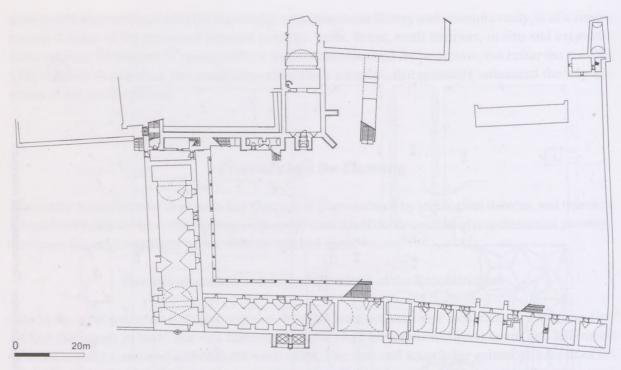


Fig. 21. The ground plan of the reception courtyard in the Matthias period; Theoretical reconstruction

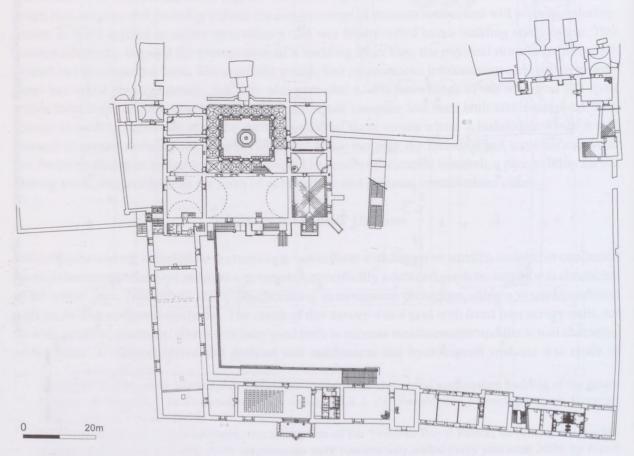


Fig. 22. The ground plan of the ornamental courtyard in the Matthias period; Theoretical reconstruction

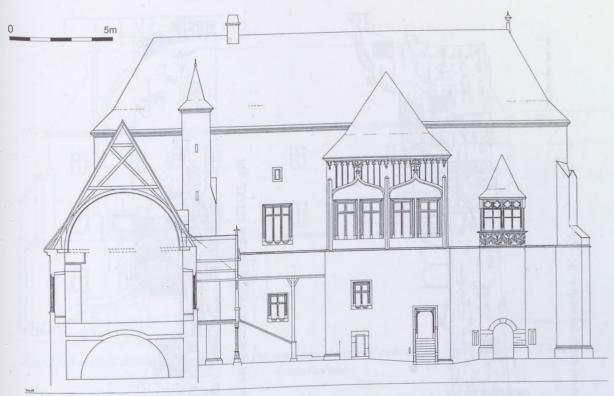


Fig. 23. The facade in the reception courtyard in the Matthias period; Theoretical reconstruction

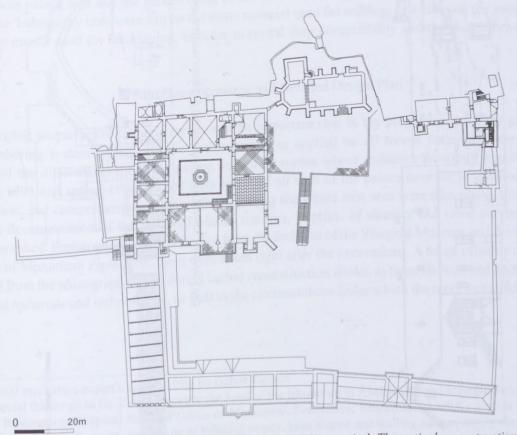


Fig. 24. The ground plan of the loggia's level in the Matthias period; Theoretical reconstruction

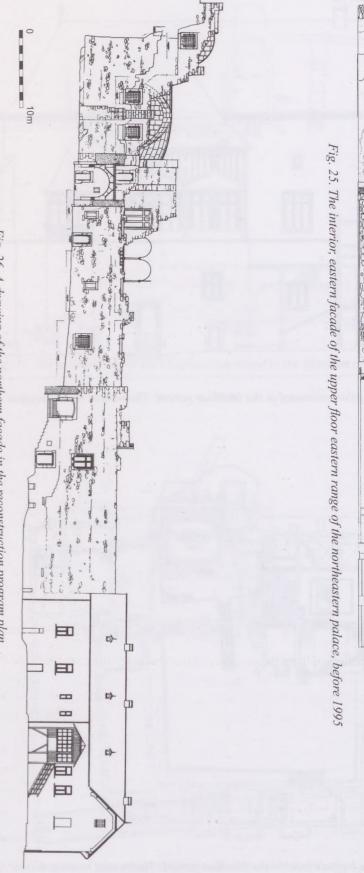


Fig. 26. A drawing of the northern facade in the reconstruction program plan

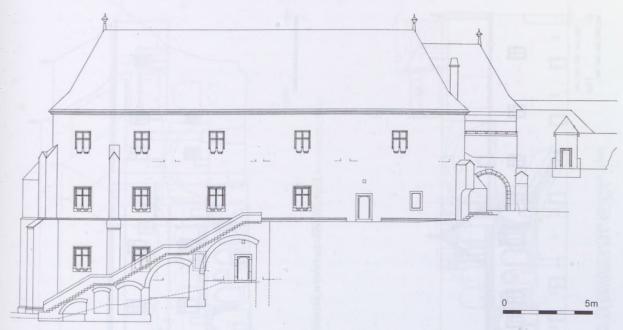


Fig. 27. A section drawing cutting through the ornamental flight of stairs in the Matthias period; Theoretical reconstruction

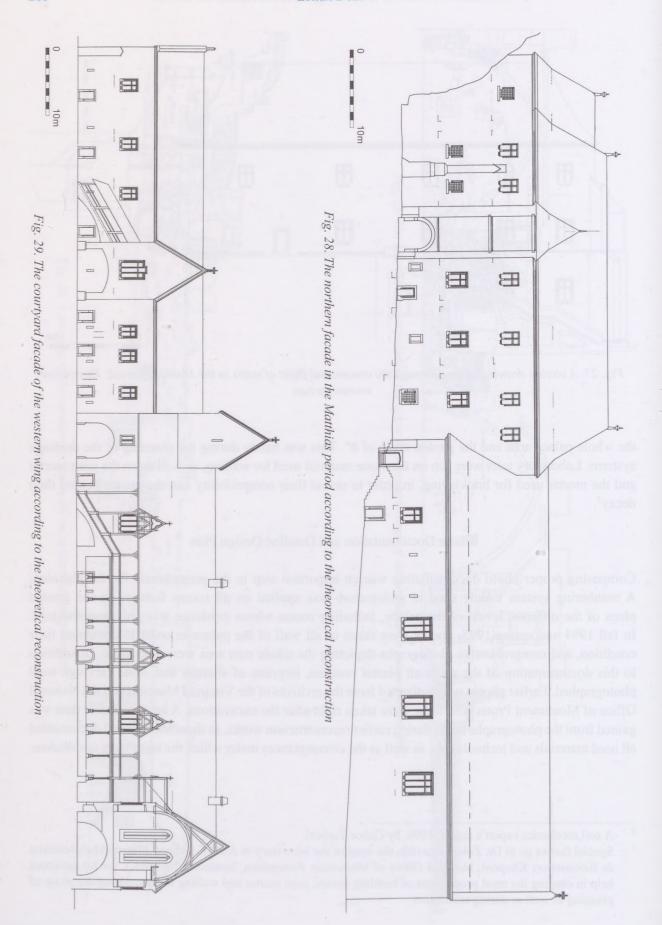
the whole palace area and the garden north of it⁶. This was handy during the planning of the drainage systems. Laboratory tests were run on the stone material used for walling, as well as on the joint mortar and the mortar used for bricklaying, in order to reveal their compatibility and the causes behind their decay⁷.

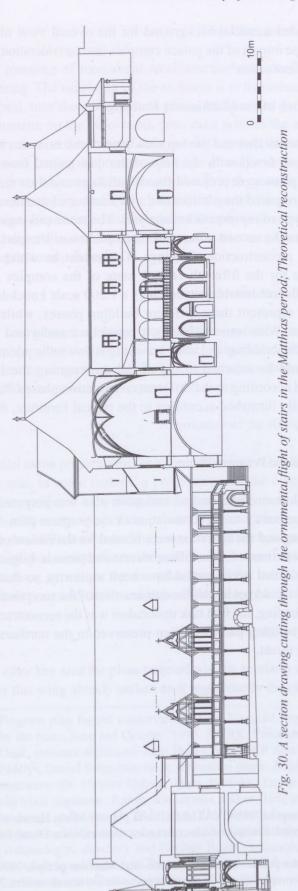
Photo Documentation and Detailed Design Plan

Composing proper photo documentation was an important step in the preparations for the planning. A numbering system widely used in architecture was applied on all rooms featured in the ground plans of the different levels of the palace, including rooms whose existence was only hypothesized. In fall 1994 and spring 1995, photos were taken of all wall of the palace in order to document their condition, and comprehensive photographs depicting the whole ruin area were also made. In addition to this documentation of the walls all plaster remains, imprints of shutters and stone carvings were photographed. Earlier photos were collected from the archives of the Visegrad Museum and the National Office of Monument Protection; these were taken right after the excavations. A lot of valuable data was gained from the photographs taken during earlier reconstruction works, as these showed and documented all used materials and technologies, as well as the circumstances under which the tasks were undertaken.

A soil mechanics expert's report, 1996, by Gábor Turóczi.

Special thanks go to Dr. Zoltán Horváth, the head of the laboratory in ÁMRK (Állami Műemlékhelyreállítási és Restaurátori Központ, National Office of Monument Restoration, henceforth: ÁMRK), for his generous help in chosing the most proper type of building stones, joint mortar and walling mortar, during the phase of planning as well as during realization.





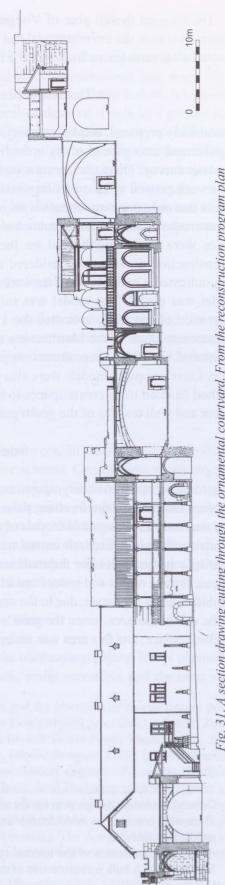


Fig. 31. A section drawing cutting through the ornamental courtyard. From the reconstruction program plan

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The detailed design plan of Visegrád provided a crucial background for the overall view of the palace. This took the environmental and landscape impact of the palace complex into consideration and ensured all preconditions for a full or a bulk reconstruction⁸.

A Theoretical Reconstruction of the Matthias-era Building

The already prepared, mostly perspective representations and the top view plan of the ruin area were transformed into ground plans according to floor levels with the help of the data gained from the geodetic survey. Thereafter, section and facade plans were prepared for all buildings and their fronts. This work proved to be quite illuminating and required the clarification of a number of problematic points that only drew our attention during this type of representation analysis. The stone carvings and reconstructed stone elements published earlier in the second volume of the Lapidarium Hungaricum series were easily highlighted on these new reconstruction drawings. The extent to which the reconstruction drawing is considered authentic for the fifteenth-century state of the complex was also indicated. On the basis of the surveys and the reconstruction drawings a 1:200 scale knockdown model was made⁹. The model was suitable to represent three different building phases, while the coloration of the walls indicated the 1995 state. With some additions it could be transformed into the reconstruction of the Matthias-era state of the building and after knocking it down the additions scheduled in the first reconstruction phase could be attached to the model representing the 1995 state. Later computer models were also prepared according to the different construction phases. 10 This method enabled us to create spaces to be virtually furnished according to the typical furniture, floor, colors and wall textiles of the given period.

Scheduling of the Program Plan

According to our preliminary agreements, an allowance plan and an execution plan was prepared for the southern wing of the dwelling palace simultaneously to the formulation of the program plan. This was necessary as presentable models of the roofing and the alteration were needed for the review of the reconstruction plans. Separate annual schedules were made for the different areas and periods. Logically, creating a proper place for the museum's institutional needs would have been a priority, so that the offices, storage rooms and restoration workshops would not hinder the construction of the reception and exhibition areas. However, due to the uncertain funding, the first task undertaken was the reconstruction of the exhibition area, since the most valuable building parts had been preserved in the northeastern dwelling palace, and this area was under a major threat.

General landscape design plan for the town of Visegrad, 1984, VATI Ltd.; chief planner Maria Havas.

The model was built by AMP Studio: architect Ferenc Kocsis and his colleagues: Csaba Csóka, Dezső Szabó, and Róbert Horváth.

A computer animation of the internal spaces of the palace in the Sigismund- and Matthias-period, 1999, by Tamás Pintér. A bulk reconstruction of the palace complex based on the most up-to-date research results, 2008, by Gergely Buzás.

The Phases of Planning

The planning of monument reconstruction considerably differs from all other types of architectural planning. The usual task of the architect is to formulate the ideas of the commissioner and, doing his or her best, turn them into ground plans, sections and facades that have never existed before. A historical monument, on the other hand, does exist prior to the architectural work, even if only as a ground plan (depending on the phase of decay), which means that creating a new ground plan is not part of the task. The work targets the preservation of the already existing parts, which might happen in a number of ways. Architects have assistant planners also in such cases, but new experts are among them: the archaeologist and art historian, and specialists in charge of the physical analysis and laboratory diagnostics of the remains. Experience has shown that the physical survey of the buildings, the proper treatment of wet and salty walls, and the right choice of conserving chemicals has a much greater impact on the remains than previously thought.

Obviating Mortal Peril Posed by the Ruins

The first plans and budget included constructions necessary to obviate mortal danger and the most urgent repair of the hiatus of the walls. 11 Observation of the protocols not specified in the plans – mainly concerning range work and the placement of stones that dive deeply into the wall – were made possible by guidance provided by experts on the spot.

Renovation of the Restoration Workshop

Parallel to the preparations for a comprehensive scheme, plans for two crucial areas started to take shape. This was, in some regards, a prerequisite for the comprehensive scheme. One of these plans targeted the renovation of a dwelling building originally built for grain storage in the Baroque period on top of the northwestern wing of the palace. The restoration workshop of the museum operated in this building from the 1970s onwards. The renovation plans accepted in December 1995 targeted the restoration of the medieval wall surfaces, the medieval floor level in the northern part of the building and the medieval cellar door, as well as the reconstruction of the cellar's collapsed Baroque vault that consisted of three vault sections and continued beyond the eastern wall of the building.¹²

Reconstruction of the Southern Wing

The other key area the plans targeted was the southern wing of the northeastern palace. It was planned to cover this wing already earlier, as it was close to the cloister walk, easily accessible, and the ruins were

Final construction plan for the repair of the restoration workshop, December 1995, ÁMRK.

Program plan for the conservation of the Visegrád Royal Palace and the obviation of mortal danger posed by the ruins, June and October, 1995, ÁMRK. Participants of the long planning procedure: architect: Zoltán Deák, assistant architects: Judit Inotay, Viktória P. Samu, Balázs Istvánfi Tamás Pintér, Tünde Tarnay, Erika Erdélyi, Dániel Schuszter; stone restoration plans: Zoltán Schütz, interior designer: Zsofia Lukács, structural engineers: Dr. Nándor Gilyén, János Parditka, Emese Olosz, mechanical engineer: Zsuzsanna Graffjódy, electrical engineers: Károly Karácsonyi, Gábor Bíró, utility engineer: Jenő Puxbaum, garden designers and landscape architects: Dr. Éva Szikra, Zita Németh. During both the planning and the realization the academic research tasks were carried out by archaeologists of the King Matthias Museum of Visegárd: Mátyás Szőke (archaeologist, director), and Gergely Buzás (archaeologist, art historian). The design of historical interiors was made by archaeologist Krisztina Orosz, while the stove tile reconstruction was advised by archaeologist Edit Kocsis and put into realization by Tibor Sabján.



Fig. 32. The southwestern corner of the northeastern palace in 1995, before the reconstruction works of the southern palace



Fig. 33. The reconstruction of the southern wing.

The timber grid of the press house in front of the wine cellar is installed



Fig. 34. The reconstruction of the southern wing. The gypsum concrete structure of the vaulted hall is prepared



Fig. 35. The exhibition installed in the press house, 2010

al made be said should provide by the destribe

suitable for a proper and authentic reconstruction of the wing. The cellar underneath, in which a Matthiasperiod lapidarium exhibiting valuable stone carvings was created, also demanded a cover. The planning of this wing was a valuable preliminary study not only for the planner but also for the members of the planning committee. The possible ways and means of reconstruction were outlined and some reactions to them were received. On the level of the reception court of the southern wing a medieval big cellar and its foreground were situated, as well as the remains of a partially destroyed nineteenth-century cellar, whose vaulting, like a bridge, made the entrance corridor leading to the ornamental courtyard approachable. When the new cellar section was built, the cellars were joined by demolishing the medieval wall that separated them in order to create a more suitable cellar space. An extension of the lapidarium was planned to accommodate an exhibition of stone carvings from earlier building phases. Of special importance was the space created by the partial reconstruction of the nineteenth-century cellar. Here a chapel sanctuary rebuilt of Angevinperiod carvings would have been exhibited along with pieces displaying different phases of the stone carving technique. An important concern with the reconstructed cellar vault was that this non-medieval element shall not to disturb the view of the reconstructed medieval building parts. The press house in front of the medieval great cellar, which could be accessed through an esplanade equipped with sedilia, was covered with a timber grid. The grid consisted of horizontal layers of timber, glued and nailed together, which transmitted the weight load to the walls through consoles. This structure resembled a medieval one only in

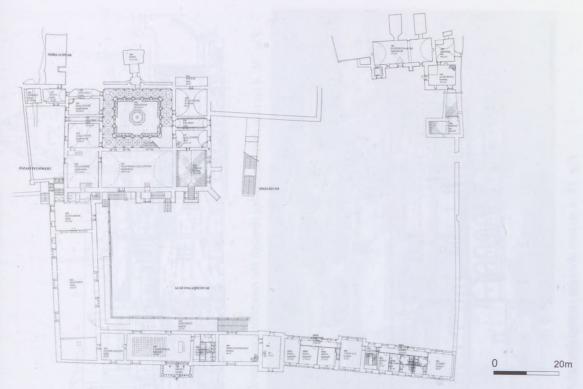


Fig. 36. The ground plan of the ornamental courtyard's level in the reconstruction program plan

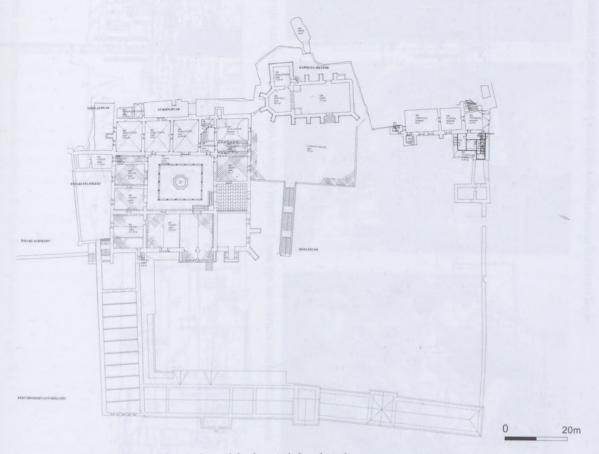


Fig. 37. The ground plan of the loggia's level in the reconstruction program plan

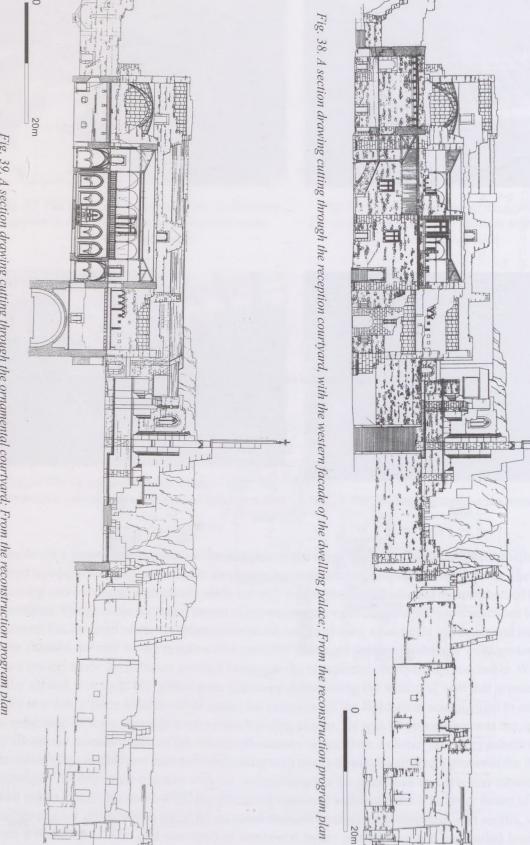
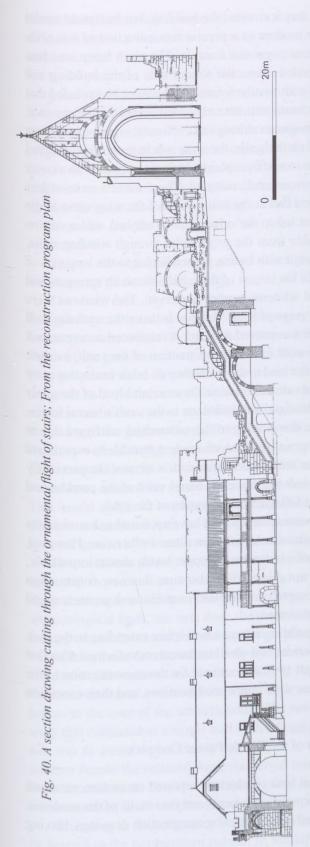
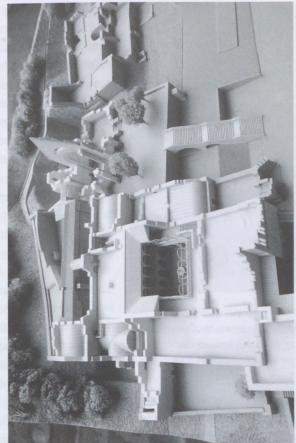


Fig. 39. A section drawing cutting through the ornamental courtyard; From the reconstruction program plan







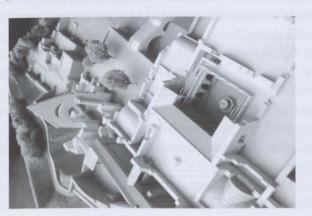


Fig. 41-43. The model used in the reconstruction program plan

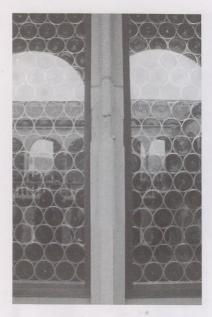


Fig. 44. A detail of the reconstructed window of the Corvinus suite

its material and the way it covered the building, but its statical model and its details were modern as a precise reconstruction of this wide span medieval structure was not feasible. The main beam structure most probably extended above the shorter side of the building and was complemented with smaller joists, but it cannot be excluded that girders of the main beam structure expanded across the longer side. The imprints of the original vaulting and the Baroque-period hatchway were left untouched on the walls; the spots where these were decayed were repaired. Three rooms were planned to get equipped with a cover on the level of the ornamental courtyard. These were: a more-or-less regular square-shaped hall at the eastern end of the wing close to the hill, the hallway that led to the ornamental courtyard, and a narrow chamber approachable from the great cellar through winding stairs. The halls were covered with beams perpendicular to the long axis of the building wing. In the largest of these halls the vault springers and spots of the original whitewash were preserved. The windows were walled in during the reign of King Matthias because the retaining wall of the chapel terrace was moved forward. A reinforced concrete shell was proposed to be used for the reconstruction of the vault, because this transmits a smaller load to the walls than do brick vaults that carry weight. This was also crucial because the structural load of the upper

levels was missing as these were not rebuilt, and so this load did not contribute to the vault's lateral forces. Brick vaulting was the most suitable in case of the corridor leading to the ornamental courtyard due to the small span, while in the third room a wooden vaulting was built which made it possible to experiment with different types of coverings. The eastern side of the wing was roofed with a terrace, the previously walled window was re-opened and used as a transom window. Above the barrel vault of the corridor and the smaller hall a covering of metal plates was made that followed the curvature of the vault.

According to the original ideas the new covering constructions would have appeared as barrel vaults covered with metal plates, and the 1994 view of the ruins would not been altered otherwise. However, this would have made the reconstruction of medieval traffic routes on the upper levels almost impossible, and so this was discarded. The idea was nevertheless not disapproved, because this new construction made of modern material resembled usual solutions accepted and applied in monument protection and thus it gained a positive response from the planning committee.

By removing the fill behind the eastern wall of the building wing a small space extending to the rock face was created. This space was used as an entrance corridor to a small technical room formed after that a flight of stairs was roofed. The plans submitted in April 1996 as a sample for the reconstruction of the whole complex was approved by the planning committee with minor modifications, and their execution could begin.¹³

Program Plans for the Reconstruction of the Whole Palace Complex

As a precondition for the planning, a thorough analysis was conducted, centered on architectural and engineering aspects and targeting the survey data, the experts' statements and the results of the academic research. The gained knowledge was mainly summarized in theoretical reconstruction drawings. Having

Restoration plan of the northeastern palace, southern wing, April 1996; final construction plan, May, 1996, ÁMRK.

the museum's functional requirements in mind, not only the usual service rooms – offices, researchers' rooms, storage rooms for the archaeological finds, restoration workshops, archive, library, rooms for social purposes – and exhibition spaces were planned, but also a conference and research center. A comprehensive bulk and space reconstruction was aimed so that the reconstructed palace complex would accommodate all the above mentioned functions. The program plan proved that there is enough and suitable room for all the above listed functions within the palace complex itself and the medieval spaces can perfectly meet these requirements. A schedule for the reconstruction of the building complex and the landscaping of the garden and the foreground of the palace was also part of the program plan.

Spaces serving different functions were grouped according to the character of the building wings.

The cash desk, the staff rooms, the café which is accessible through the courtyard, as well as the temporary exhibition hall and lapidarium were situated north of the entrance hall of the gate towers. South of the gate tower the guards' room, offices and storage rooms were proposed to be formed. The rooms on the upper floor, that is, the great hall, its foyer, and the hall with the bay window and the adjacent restrooms, were accessible through the archway (loggia)



Fig. 45. The balustrade of the flight of stairs that leads to the upper floor from the loggia level, and a reconstructed medieval window

corridor and the garden. On the first floor south of the gate tower a block of offices for rent, a conference room, as well as changing rooms and restrooms used during museum events would have been situated. The external floor level would have been lowered in the width of the building's front so that visitors would have entered the reception courtyard through the gate tower walking on the medieval floor level. This would also have emphasized the magnificent facade that faced the Danube and onto which the bay window ornamented with the coat of arms was attached. Ramps would have been built to connect the lowered section of the street with the present-day street level.

The southern palace accommodated the service rooms of the museum so that these would be separated from museum visitors. The wing on the western side of the southern palace's rectangular inner courtyard would have housed a hallway and a staircase, its lower level the storage rooms for archaeological finds, the first floor the director's office, the second floor the researchers' offices, while the uppermost floors and the mansard were planned to accommodate restoration workshops. The floors would have been connected not only by the staircase but also by an elevator in a reconstructed tower attached to the western facade of the building. A photo and document archive was planned on the level of the inner courtyard in the eastern wing, while its upper floor would have housed restoration workshops just as in the case of the western wing. The northern part of the courtyard was occupied by a building wing that consisted of a single hall with a huge fireplace in one of its corners. By restoring this hall the aim was to create a nice library space open to the museum staff and the visitors alike. In front of the western facade the restored Angevin-period mint would have resulted in an exhibition area accessible from the courtyard. This restored space could have served as an exhibition in itself but could also have accommodated small temporary exhibitions.

According to the program plan the exhibition halls on the architectural history of the complex will be housed in the northeastern palace. In the lapidarium on the reception court's level the finds would have been grouped according to the building phase they belong to. Exhibition areas would have been created on the level of the ornamental courtyard and the loggia by constructing a roof above the existing

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medieval halls. In the last room of the northern wing on the level of the ornamental courtyard and in the whole eastern wing on the level of the loggia, the plans aimed to set up spaces with reconstructed medieval interiors. There were no plans for the level of the loggia in the southern, western and northern building wings and the halls above these, even though the height of the uppermost floor was determined quite precisely (with 15-20 cm deviation) and the building height could also have been estimated. However, these sections of the facade were unknown, and therefore only few additions were planned to be made here, in accordance with usual practices in monument protection. Thus, the overall appearance of this building part would have corresponded to a usual



Fig. 46. The western facade of the northeastern palace under reconstruction, 1998

monument reconstruction. In a later reconstruction phase these still missing levels might be built. These two levels could follow the formation procedures applied in the building wing on the bank of the Danube and in the southern palace. This would result in a building part that is modern in appearance but whose small details and the materials used would resemble the medieval reconstruction, though the modern and the reconstructed would be clearly differentiated. The upper levels of the dwelling palace are separated from the castle hill by the courtyard where the bath was built. The bath was situated on top of a bridge-like substructure in the northern corner of the courtyard and could be approached from the uppermost floor of the palace. The enclosed courtyard with the Fountain of the Lions, formed on a rock terrace and connected to the block of the palace by a bridge, would have been reconstructed on this uppermost floor level. In order to channel the visitor traffic to medieval routes, the chapel's vestry and oratory were also planned to be rebuilt: the bridge that linked the enclosed courtyard to the palace would have led here, and the visitors could have reached the ground floor from the oratory through a winding staircase.

The First Phase of the Restoration of the Northeastern Palace

On the basis of the program plans a building plan of the first restoration phase was made, which was to be submitted along with the application for a building permission. This targeted the first steps of reconstruction in the northeastern, northwestern and western building wings: the eastern and southern corridors of the loggia of the ornamental courtyard, and the ground floor of the western wing north of the gate tower, on the bank of the Danube. According to the agreement of the planning committee and the building permission received, it was necessary to prepare a separate building plan and a final construction drawing for each reconstruction phase, because doubts were expressed concerning the feasibility and the possible outcome of the new approach applied. The buildings plan of the northeastern palace's restoration was finished accordingly in February 1998, and a final construction drawing was submitted in October the same year. Earlier plans prepared for the southern wing and wall drawings depicting the 1997 conditions were also attached. The restoration plans for all stone structures and stone jambs of

Restoration plan of the northeastern and northwestern palace, February, 1997, ÁMRK.

Restoration plan for the northeastern palace, February, 1998; final construction plan, October 1998, ÁMRK. László Boross, designer at of Complanex Ltd., was in the same time commissioned to prepare a separate plan with a similar time schedule for protecting the ornamental garden and the orchard from precipitation and erosion. Drainage basins were designed to collect the rainwater from the internal drainage system of the

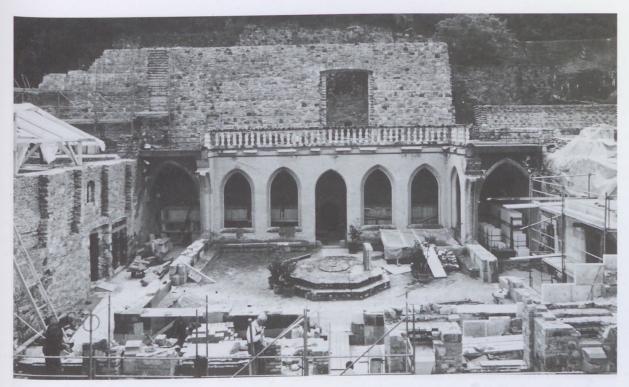


Fig. 47. The ornamental courtyard at the beginning of the reconstruction works, after the dismantlement of the foundations of the Hercules Fountain

the northeastern palace was prepared within this same framework. As the chosen methods represented an entirely new path in monument protection, valuable experience was gained from the planning of the southern wing and the first steps of its execution. This knowledge covered not only the limits of feasibility in general, but also the practicability of several details concerning the authentic reconstruction of medieval stone jamb windows and doors. The construction techniques of the reinforced concrete shell that protected the great hall also provided invaluable information: it showed that the calculated pace of the construction required the partial prefabrication of at least some of the structural elements, especially if more halls are to be covered in one phase.

The plan aimed to create the museum's exhibition area by covering the halls around the ornamental courtyard. The level of the ornamental courtyard thus consisted of two rooms in the southern wing already planned earlier (135, 137), the entrance corridor of the same wing, the lunette vaulted great hall (121), and the corner hall (122) of the western wing, as well as two halls (123, 125) and two hallways (124, 128) of the northern wing. One of the hallways (124) led to the northern upper garden, while the privy tower's foreground (127), the stone courtyard and through the former two the northern upper garden could be approached through the other hallway (128) which was situated closer to the hillside.

northeastern palace and from the garden terraces. In order to protect the garden, behind the eastern fence wall a huge trench was created to lead off the rainwater that flowed from the hillside. On the long run, the water would be directed to the Danube instead of the drainage basins. The plan had two different versions. According to plan "A", water would be led away by the force of gravitation from the areas mentioned above, while a sewage pump would be used to lead the water off from the low area in front of the palace complex. A sewer underneath the main road would then lead water to the sluice gate and into the Danube. According to plan "B" the rainwater would be led into the Danube at two spots, and thus the amount of water would be shared by the two sluice gates.

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On the upper level of the loggia a three-room suite (216, 217, 218) of the eastern wing, the flight of stairs that led to the upper level, and the kitchen that opened from the staircase (212) were planned to be reconstructed. The other halls and corridors would appear only as a terrace above these rooms, surrounded by a parapet wall. The cloister walk of the ornamental courtyard would have been fully covered, but the upper floor loggia's covering would have only been partial: a small section of the northern and southern hallways was planned to be covered with a roof. In March 1999 separate building plans and construction drawings were prepared for various alternative types of vaulting. These included plans of the formwork and the reinforcement steel elements of the main supports, the cast-in-place side supports, as well as the monolithic slabs.

On the level of the ornamental courtyard, in the hall situated at the eastern end of the northern wing (125), a stone console has been preserved *in situ* above the springers of the Matthias-period vault. This console must have supported an earlier wooden vaulting. It was decided to reconstruct this wooden vault, which harmonized with the exhibition of a Sigismund-era living room. A wooden vault was planned to be built above the staircase next to the upper floor suite as well. Glued wooden cantilevers would have been used in both cases, and for the loggia's roof nailed wooden grids were planned to be implemented.

Fragments of the brick floor have been preserved in most rooms. The reconstructed brick floors were designed in accordance with the laying pattern of the original bricks, and no other, imagined patterns were used. In the two halls at the meeting point of the western and northern wings (122, 123), the terrazzo floor from the Matthias period was partially preserved, and so a similar precast floor was designed for these exhibition areas.

Modified Plans for the First Restoration Phase

Due to the changes of the time schedule the restoration plans of the northeastern palace had to be modified and supplemented in March 1999. The great hall on the western side of the cloister walk (121) had to be transformed not into an exhibition area but an auditorium for lectures. Therefore, other equipment such as sanitary facilities, proper heating, ventilation, light current network, and an interpreter cabin had to be added, and the auditorium had to be accessible from the cloister walk. In order to further protect the building, a full reconstruction of the upper floor loggia was planned with an encompassing roof. After long debates the planning committee approved the plans for covering the loggia in April 1999, and so the building plan was complemented with a final construction drawing in the same year. The plans for the first reconstruction phase were implemented until December 2000, when the work had to be stopped due to a lack of financial resources.

The Second Restoration Phase of the Northeastern Palace

Restoration plans for further rooms of the northeastern palace were prepared in February 2002, in accordance with the building permission, so that the reconstruction could continue.¹⁷ The rebuilding of the medieval great hall's esplanade provided an opportunity to enlarge the restoration workshop and the archaeological storage rooms in the northern wing; this was a significant addition necessary for the museum's operation. The medieval cellar used to be covered by a semi-circular barrel vault. After this vault was had been demolished, a grain storage facility was created here in the Baroque period; this possessed a vault that rested on three-centered arches and a row of supporting pillars along the axis. This was situated much lower than the medieval vault, and thus it was possible to plan a floor intended

Modified building plan (April, 1999) and final construction plan (September, 1999) for the northeastern palace; ÁMRK.
 Building plan for the reconstruction of the northeastern palace, 2nd phase, February, 2002, ÁMRK.





Fig. 48–49 The vault of the vestry under construction

for storage between the restored medieval floor level and the Baroque-period cellar vaulting. The restoration plans also aimed to transform the floor of the great hall's esplanade (115) into a terrace, and the reconstruction of the flights of stairs that led here from the ornamental garden and orchard and from the northern upper garden.

On the level of the chapel terrace the chapel's sanctuary, the vestry, the bath's courtyard and the bath's substructure (221) and heating chamber were scheduled for restoration. Significant complementary additions were suggested in the bath chamber of the uppermost level of the dwelling palace (306, 307), in the chamber that opened from the enclosed upper courtyard (308), on the arcades of this courtyard, in the oratory on the gallery of the chapel's vestry (311) and the bridge that led up here. The technical equipment of the bath (that is, the floor heating of the sudatorium, the fire pit of the water heating tank, the water trough and its impression, as well as the stone slabs of the sluiced bath basin) was brought to light in such a good condition which made it more than worthwhile to put on display not only the bath chamber itself but also these equipment behind its wall and under its floor. Therefore, more suitable methods of display were necessary than a usual building reconstruction: the toolkit of a museum exhibition seemed more appropriate. Everything was complemented with glass in the separated sudatorium, and as if the visitors had entered a huge exhibition case they could see the aforementioned heating equipment through the glass walls. Part of the most commodious level of the palace was a small garden created on a rock terrace, surrounded by a high wall equipped with sedilia and wall-seats. The eastern side of the garden was embellished by a fountain carved out of red limestone, supported by recumbent lion figures. A fully functional reconstructed copy of the fountain has been exhibited here since 1959. The garden's original shape and the medieval traffic routes were aimed to be restored by rebuilding the western corridor (where the sedilia were situated) and the small bridge that led to the oratory.

The Construction Plans of the Second Restoration Phase

The preparatory work for the construction plans was broken up into several parts and stages in accordance with the available financial resources. Plans for the northwestern wing were completed first in August, 2002: this included an enlargement of the restoration workshop and the storage rooms that have operated up to the present day. These extended spaces could later be incorporated into new concepts of reconstruction.

In the next phase of planning the reconstruction of the bath and its environment was targeted; these plans were made ready in May 2003. 18 The available financial resources proved enough to cover not only the actual construction works scheduled for this phase but also the preparation of the reconstruction plans for the interiors in the Sigismund-period chamber (125) and the kitchen on the level of the

Restoration of the northeastern building, 2nd phase: the bath and its environs. Final construction plan, May, 2003, ÁMRK.

loggia (212). To these, construction drawings of the tile stoves in the upper floor suites were added. The reconstruction of furniture and objects of everyday use was mainly based on archaeological finds, analogies, and contemporary pictorial representations, beside which the quality of the wood used as raw material, the techniques of its working, surface formation and treatment, as well as the tools for wood working and the types of inert material allowed in the reconstruction process were also strictly prescribed.

Plans for the ornamental flight of stairs could be prepared after the archaeological excavations had been finished, and the basic shapes and vault impression marks had been meticulously surveyed. ¹⁹ The ornamental flight of stairs, as a symbolic and actual bridge, was built between the first and the second restoration phase while the work had to be interrupted a number of times and the contractor had to be changed.

In hope of a bigger sum to be applied for, the final construction drawings of the upper enclosed courtyard, the chapel, and the chapel terrace were prepared in October 2004. Eventually only a part of these plans was put into realization: the chapel's eastern wall close to the hill's side, the roofing of the vestry, which in 2008 accommodated the Visegrád exhibitions organized within the framework of The Year of the Renaissance, on the 550th anniversary of the enthroning of King Matthias.

The wooden grandstand that was built in the mid-90s to furnish the summer programs held in the tournament field, was in such a bad condition that it posed a threat to life and had to be demolished. This, however provided an opportunity to survey and properly excavate the Matthias-era grandstand below, covered and protected by a heap of soil. The impression marks of the carved stone blocks that accommodated the treads of the grandstand's stairs and the seats, were still clearly visible on the huge, walled base. It was revealed by the archaeological finds that the central seats in the middle were protected by a tile roof and a flight of stairs led up to these seats on both sides. Even the reconstruction of the balustrade was possible on the basis of the unearthed fragments. Nevertheless, the available funding could not cover the expenses of reconstructing the wooden structure of the roof, and thus it was never built.





Fig. 50–51. The elevator built into a buttress of the chapel terrace, and a detail of its metal cover

In order to provide accessibility to all furnished exhibition areas, a comprehensive plan was prepared for the whole dwelling palace in July 2004. The grant won was enough to make the necessary alterations in the museum itself and in the reception building, and to build an elevator serving the chapel terrace. The final construction plans finished in July 2006 included an accessible lift, a protecting roof over the western wing, the preservation of the ruins of the kitchen and its service rooms, and the protecting complementation of the flight of stairs leading to the upper floor

Restoration of the northeastern building, 2nd phase: the ornamental flight of stairs. Plan for the tender (March, 2004), final construction plan (August, 2004), ÁMRK.

loggia. The entrance of the palace area and the accessibility of the museum buildings were significantly altered in this plan by the transformation of stairs into slightly sloping ramps.

The reconstruction of the chapel was not accomplished by 2008, and so a supplement to the final construction plans was prepared in December 2009. This targeted the restoration but not the roofing of the sanctuary, in accordance with the available founding. Another reconstruction phase is needed to fully finish the restoration.

New Functions Served by the Wing on the Bank of the Danube

In 2007 an alternative plan was devised for the reconstruction of the western and northern palace wings, according to which the museum's reception area (that is, the cash desk, the left-luggage office, the cloakroom, and the souvenir shop) would have been set up in the building parts around the gate tower.²⁰ The reception area was designed to suit the needs and requirements of both summer and winter operation, and to serve conferences held in the complex – without modifying the original ground plan and the characteristic medieval spaces. This area seems the most difficult to organize.

The palace complex possesses all necessary spaces and halls to host exhibitions, lectures, receptions, and inauguration ceremonies. This setting contains all necessary room for a scientific session, including high security exhibition halls with proper technical equipment. These spaces are to be found in the western wing to which the bay window embellished with the coat of arms is attached, in the barrel vaulted great hall that occupies almost the whole northern wing, and in the esplanade which has a connection to both the northeastern palace building and the palace garden. The lecture halls, storage rooms and service rooms on the upper floor of the wing south of the gate tower will accommodate conferences and other events. On the ground floor of this wing a souvenir shop would adjoin the entrance area, and the technical and service rooms of the courtyard would be located here. In the modified second version of the plan the growing technical demands would be met by technical rooms in the mansard of the western wing, while the necessary energy supply would be provided by geothermal resources.

The Process of Realization

After the failures of the planning committee at the beginning of the 90s it seemed inevitable to develop a strategy that yields results even at the costs of accepting an imperfect architectural concept that might be enhanced and complemented only later, perhaps in several decades' time. Incorporating formal elements that dominated earlier monument protection methods was a crucial issue, because these provided an interpretative framework for those who could only imagine heritage protection within these limits. Thus, partially completed jambs and carved stone structures appeared on the facade, and the newly built constructions were clearly separated from original remains by the tin barrel vault ceilings covering them. These elements were undoubtedly alien to the original concept of reconstruction and in fact were highly criticized as "complementation gone too far", but at the same time they made the plans acceptable also for those who strongly objected all forms of rebuilding the medieval complex. It was due to these elements that after ardent debates the plans could be implemented. It was a very demanding task to introduce the idea that monument restoration might be associated with an actual construction of

Building plans and plans for the tender of reconstructing the northwestern and western palace wings, November, 2007, ÁMRK.

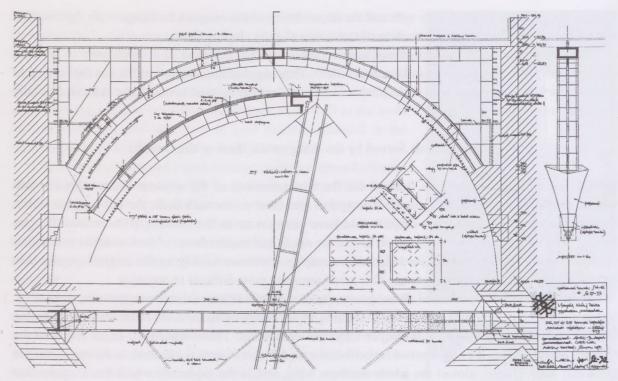


Fig. 52. The construction drawing of the gypsum concrete vault in the cross vaulted halls in the upper floor suite

monuments, that is, restoration might be followed by construction, and construction might be carried out by similar means and methods to those applied in restoration.

Thus, the reconstructed palace complex still retained its appearance as a ruin. The reason behind this was that, on the one hand, it was impossible to completely divert Hungarian monument protection from its usual path, and on the other hand, the financial resources proved to be insufficient. There was too much work to do within the field of cultural heritage protection, and it was impossible to implement all plans and programs at former royal seats, the places of uttermost importance for the history of the Hungarian state, on its millennium anniversary.

The first steps of realization aimed to restore wall parts that posed a life threat.²¹ Not only the collapsed sections were rebuilt, but complementation was implemented on the walls at all spots where the heavily weathered andesite tuff decayed to a degree which might have caused the disintegration of the wall parts above. From the 60s onwards andesite from the area of Dunabogdány, laid with concrete or portland cement mortar, was used for these completions, as the bricks formerly used usually quickly eroded. Hard stone was more resistant to weathering, but at the same time it kept moisture from evaporating, which resulted in an intensive decay of the original wall along the adjoining surfaces with salt aggregation. Conservation started in the summer 1994 on the walls of the northeastern palace, and continued in the southern palace the next year. Here the interrupted construction works made other types of tasks unavoidable. The underground wall parts of the tower attached to the southern fence wall required an urgent intervention. These reached down as deep as 4–5 m, and this floor level of the tower was impossible to save and restore for exhibition. A reinforced concrete frame was built adjoining the inner side of the tower's walls, after which the interior space was filled with gravel.

The plans were put into realization by local contractors. Márton Zellei worked on the southern palace, while Sándor Silip and József Fieszl worked in the northeastern palace, The stone restoration was assisted by László Meggyesi and György Meszárek.



Fig. 53–55 Construction phases of the gypsum concrete structure in the cross vaulted hall on the upper floor, and how it adjoins the preserved remains of the vault

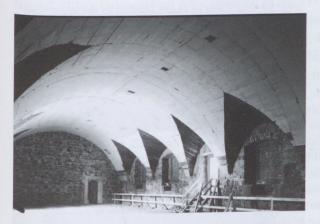


Fig. 56. The gypsum concrete vault of the great hall on the level of the ornamental courtyard, after the dismantling of the formwork



Fig. 57. The presentation hall in the reconstructed great hall

Plan drawings only depicted the spots where invention was necessary, but the details of the realization had to be finalized during site supervision. The medieval walls were built primarily of locally produced andesite tuff, even though the bricks of demolished buildings were always re-used during the transformations of the complex. The depth to which the wall surfaces were weathered varied between 5–8 and 15–20 cm. In some cases, minimal complementation had been implemented and there was a dry stone fill behind the hard surface of the wall. Parts that started to disintegrate or suffered frost damage were dismantled in all cases.

Coarse joint mortar and walling mortar, enriched with trass cement, was used for the wall complementation with flat horizontal surfaces at a distance of 50–60 cm-s; the medieval laying patterns were followed and this method befitted the preserved stone material. Andesite tuff from the Dunabogdány



Fig. 58. The reconstructed oratory of the chapel, with copies of the Renaissance corbels

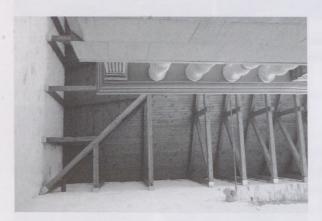


Fig. 60. The roof covering the loggia, above the flight of stairs that leads up from the ornamental courtyard



Fig. 61. The balustrade of the flight of stairs that leads to the loggia



Fig. 59. The flight of stairs leading to the upper floor from the loggia, after reconstruction



Fig. 62. A detail of the reconstructed loggia

region, laid in concrete, was used in the formation of the wall tops, in most cases above a roof or an insulated terrace. In order to prevent the walls from cracking due to movement, a hidden reinforced concrete frame was incorporated in the wall top. The latter was usually half a meter thick and separated from the lower part of the wall by insulation.

The conservation works and the restoration of the southern wing provided a firm experience used in the walling of the northeastern palace. The original wall and floor surfaces preserved from the medieval palace served as a model for the surfaces formed during reconstruction. The halls had unglazed brick floors (except for a couple of terrazzo-floor rooms on the ground floor); in most cases these were laid in a zigzag pattern, and along the walls a row of bricks leveled off the irregularities of the ground plan. In the exhibition halls equipped with electronic floor heating the original floor fragments were kept and new bricks were laid according to the aforementioned pattern. The walls were plastered and whitewashed. The medieval whitewash spots were conserved by restorers and the rest of the wall was covered with lime plaster, applied with skip trowel technique. Whitewash was widely used. The only red-and-white color reconstruction was based on the original painting preserved on the voussoirs of the ornamental courtyard's cloister walk corridor. The external facade, where the surfaces were not protected by a roof, was finished with rubbed grout and a white coating. A full bulk reconstruction was not made and thus walls that were originally internal appear as facade surfaces. In these cases the external surface was whitewashed only below the reconstructed vaults in order to picture the past internal spaces.

The vault was rebuilt with a reinforced concrete shell already tested in the southern wing. 24 In order to facilitate a smoother construction process, equally distanced pipe-like cantilever supports with regular square cross section were installed in the whole length so that these make the it easier to position the precast ribs that held the roof. Thus, arranging the formwork of 60×60 cm gypsum plates, installing the special reinforced steel elements, and casting the concrete was more manageable. The concrete was prepared according to strict specifications. This was the first time that a uniquely designed, thin (1+3+1 cm) reinforced concrete barrel vault built with precast elements was constructed by this method.

Plaster remains preserved on the walls that were left unconserved for decades, were conserved by the restorator team of ÁMRK. Conservation tasks were undertaken on the spot by Erzsébet Horváth, Péter Gedeon and Viktor Répássy under the supervision of László Bérczi in 2002.

- The use of precastable, permanent formwork elements, with proper carrying capacity, predominantly made of gypsum.
- The weight-carrying fiber-reinforced concrete or sheet metal works can be at least partially cast on the spot in the hollow surfaces of the structural elements.
- The numbed concrete technology is based on the combination of gypsum and concrete.
- The fluid concrete made of aggregates with particles are not bigger than 3 mm is numbed by the gypsum, and thus a high quality vibro-vacuum concrete is formed.
- Numbing eliminates the hydrostatic pressure on the permanent formwork.
- The vibration-proof technology enables the production of a reinforced concrete structure with millimeter precision.
- The water absorbed during numbing provides the moisture for curing the concerete.
- The relatively thin cross section of the structure, the concrete formed by fairly small pebbles, thin steel elements and the simple construction technology make it into a flexible system.
- The volumetric weight of the structure is between one fourth and one tenth of that of other silicate based systems.

The contractor chosen in the public procurement procedure was ARCHITEKTON Plc. The chief construction manager between 1998 and 2000 was Judit Madas; construction managers: Ildikó Kulcsárné Hegyi and Ákos Faragó. Between 2001 and 2005 the chief construction manager was Csilla Bánhidai; construction manager: József Kovács. The project was transacted by FŐBER Ltd, facility managers: László Vincze and István Kiss.

The structure known as fiber-reinforced concrete was invented by Béla Kiss Sámsondi in the 1930s. The structural plans of the vault reconstruction of the Visegrád palace were prepared by architects István Szövényi and Tamás Albert, and statics expert Tamás Martos. The main qualities of this building technology are:

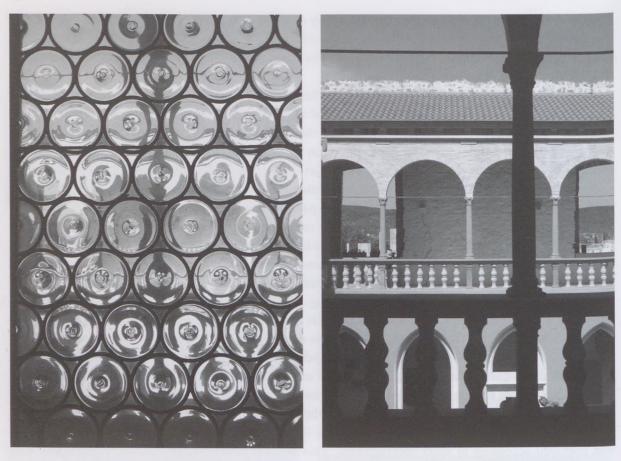


Fig. 63-64. A reconstructed window of the upper floor suite that opens to the loggia. Closed and open

There were groin vaults above the suite's almost regular square-shaped rooms on the level of the loggia. By the use of asymmetric springers, the shape of the vaulted floor space was transformed into to a regular square already in the Middle Ages. The impression marks of the vaulting and the springers on the eastern wall provided a firm enough basis to precisely devise the past vault structure. It posed a real challenge to plan the reinforced concrete shell of these vaults as their panels were joined with arrises. Here the pipe-like cantilever was positioned along the vault's diagonal axes. To prepare this cantilever a model vault was made which straddled the cantilever's downward segment; thus the formwork was easily installed and the later added vault panels could adjoin with an arris.

The bulk reconstruction did not reach the full building height and so the restored spaces were not provided with a roof. The floors of the rooms thus left open were transformed into terraces with a so-called reverse layer sequence.

Facilitating Factors and Obstacles During Realization

The planning period gave no reason for excessive optimism about the feasibility of the project. The reconstruction works that slowed down by the end of the 80s and the beginning of the 90s, and the planning that seemingly came to a dead end took a new swing when a series of programs were initiated on the 1100th anniversary of the Hungarian Conquest and the millennium anniversary of the foundation





Fig. 65-66 The northeastern palace with the ornamental flight of stairs that leads to the chapel terrace

of the Hungarian state. This festival series aimed to provide a framework not only for festivities but also for another kind of recollection of history. Historical monuments in the possession of the state, the church and local governments started to be conserved and restored, and the funding also targeted already ongoing projects.

Extensive criticism was formulated during both the planning and the realization phase, leveled at the construction plan, the extent of complementing, and the extent to which the commissioner's own ideas were reflected in the project. The spokesmen of monument protection centered their critical remarks on theoretical issues of authenticity, while the community of contemporary architects dismissed the half-finished project as something too much resembling a conventional monument reconstruction. Both parties were right from their own point of view: the reconstructed parts of the never fully restored palace complex of Visegrád represent a border zone between these two scientific fields.

Most difficulties were rooted in the discrepancy between the financial requirements of the project and the funding available to the commissioner. Therefore, the realization process was interrupted several times. The artificially generated competition between tenders — in which the cheapest solution was considered the best and professional experience was judged by certificates instead of the actual work



Fig. 67. The northeastern palace, with the reconstructed grand stand of the tournament yard in the foreground, fall 2010

of the team that would do the walling, create plaster surfaces and position stone carvings - further complicated the situation. Unfortunately, these dilemmas left their mark on the reconstruction work, and the realization was more and more simplified despite the design architect's site supervision held on a weekly basis. This manifested in the following. The finalizing of the plastered, whitewashed surfaces was not done simultaneously and with the proper carefulness a monument reconstruction would require. That's how the original glazed ceramics floor tiles (supported by archaeological evidence) were substituted with artificial stone slabs, the vaults built with a modern supporting structure were covered with plasterboard instead of real plaster, and the freeze-proof unglazed ceramics overlay of the courtyard was replaced by a low quality brick floor that suffered significant frost damage in the first winter after it was laid. The cloister walk of the ornamental courtyard was left disturbingly unfinished, because the vaulting of its new sections was never built. However, the sockets and surfaces which would have accommodated the vaulting were still present on the side wall as if it had been designed this way. In the next construction phase small corrections were made to alter this temporary state, so that the unfinished walling would not disturb the aesthetic sensibilities of the visitors. With this, however, the problems were only veiled and the imperfection justified. The quality of the realization was also negatively influenced by the financial problems that overshadowed the project, due to which the actual construction works were postponed to October, November or December and lasted until the end of the given year. The complicated tender procedures did not facilitate the project either: the fixed lead time, the regulation that posed requirements impossible to meet, and the whole routine unsuitable for monument protection tasks had their negative impact on the enterprise.

Finds of Worked Bone and Antler from the Royal Palace of Visegrád

ISTVÁN KOVÁTS





Finds of Worked Bone and Antler from the Royal Palace of Visegrád

Introduction

Different types of raw material of zoological origin, that is, bones, teeth and antler had been utilized for making tools, utensils, and decorative objects for thousands of years before the Middle Ages. These finds provide valuable data on the raw material and the techniques applied in their manufacturing techniques, revealing the technological level of the craft. These objects are the results of multiple human actions (such as choosing suitable raw material, using the ever-developing methods and tools of bone working, as well as using the worked bone object) and therefore they differ from the rest of the animal remains usually unearthed at excavation sites as kitchen refuse.¹

Excavation sites of Visegrád yielded a fair amount of medieval worked bone and antler finds. These started to be meticulously collected and interpreted as early as in the 1930s. This is testified to by a draft by János Schulek from May 30, 1948, in which he gave an overview of the finds collected up to that date. He discussed worked bones, too: "Worked bone objects were not widely needed in the Middle Ages and in the early sixteenth century, and so it came as no surprise that we found only a few of these during the excavations. Most of these are cutlery items: handles of knives and forks. The few discovered pieces were mostly made of simple cattle bones, without any elaboration or decoration. They were reinforced with red copper nails. Although they seem utterly insignificant, the so-called dice played an important role in the soldiers' life in the medieval period and the centuries after. Some of these dice were found in the area of the royal palace. They are made of bones, scarcely bigger than 10–12 mm, and very simple. However, they reveal that humans have enjoyed gambling for ages."²

In terms of the spatial distribution and discovered amount of worked bone finds, it must be mentioned that the excavations led by Miklós Héjj in 1959–1963 and by Mátyás Szőke in 1966–1969 in the lower castle area yielded many worked bones as well as workshop refuse associated with bone working.³ Bone tools excavated by János Schulek in the area of the watchtower on the riverbank ("Water Bastion") in 1937–1938 also count here. Bone and antler objects were recovered from the citadel in large amounts during the excavations of Schulek in 1933–1941, of Mátyás Szőke in 1965 and 1985, and of László Iván in 1993–1997; these count up to ca. 80 objects.⁴ A bone working workshop that operated in the second half of the fourteenth century was excavated in the medieval town area, along with its workshop debris.⁵ Excavations in the town regularly yield tools, gaming pieces etc. of bone and antler.⁶ Ivory objects always counted among the most luxurious wares; from Visegrád, only combs are known to have been made of this precious raw material. Most of them were dated to the sixteenth-seventeenth century.⁷

¹ Kováts 2008, 113.

A draft of János Schulek, May 30, 1948. Archive of the King Matthias Museum, inventory no. 1948.10.

³ Kováts 2004; Kováts 2009.

⁴ Kováts 2006a.

⁵ Gróf – Gróh 2001.

⁶ Kováts 2006b; T. Bíró 2004; Sarkadi 2010, 31–33.

Choyke – Kováts 2010. An ivory comb was also discovered in the archaeological assemblage of an eighteenth-century mill in the area of Lepence in 2008.

The excavations in the palace area that started in 1934 have brought to light considerable architectural remains and other archaeological finds, mostly from the fourteenth-sixteenth centuries. Worked bones represent only a small percentage of all finds. It is often problematic to associate the worked bones unearthed during the early excavations with archaeological layers. A few of these are dated to the period of the palace's destruction or even later. Recently, earlier phases of the palace complex have become better known, and so worked bone objects discovered in these layers are also discussed here.

Bone Artifacts from the Royal Palace

Knife and Fork Handles

1.1 This is a bone plate with a narrowing oblong shape and a semicircular cross-section. It is decorated with longitudinal grooves and perforated by three holes, presumably for attachment with rivets. On the basis of its size and thickness, this artifact was made from the diaphysis wall of a cattle (Bos taurus L. 1758) metapodium or perhaps radius. It is an interesting possibility, that the longitudinal grooving might be seen as an imitation of antler. On the basis of its stratigraphic position and associated finds, this specimen seems to date to the 15th–16th century. 11

1.2 This is the remains of a two-pronged, rod iron fork with a cylindrical stem. The two sides of the handle were decorated with incised bone plates, fastened to the fork by three rivets with large heads. In addition to these rivets, the handle is also decorated with triangular and rhomboid-shaped drilled patterns. The zoological identification of the handle's bone material is uncertain owing to the high degree of modification. On the basis of its size and shape one may again hypothesize that it was carved from the diaphysis wall of a cattle metapodium. This find, recovered on terrace 4 of the palace in a room near the baths, may be dated to the 15–16th century.¹²



1 1



1 2

⁸ Kováts 2005.

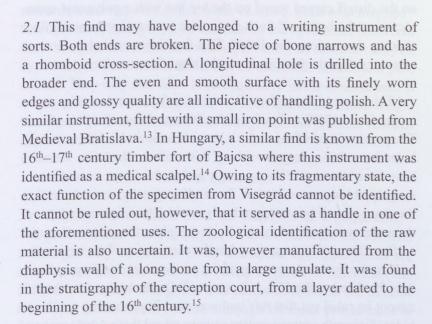
⁹ I would like to thank Mátyás Szőke, Gergely Buzás (King Matthias Museum), and László Bartosiewicz (Eötvös Loránd University, Department of Archaeology) for their help in my work.

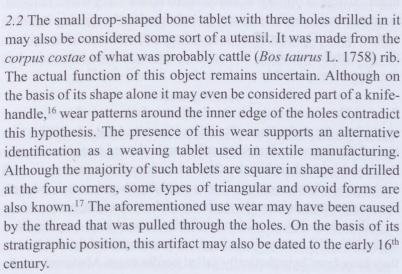
Alice Choyke, personal communication

¹¹ Buzás 1994b, 56

¹² Kocsis 1994, 160

Utensils





2.3 This bone ring fragment is characterized by a slight groove that runs around its perimeter on both sides. Thin cracks, hardly visible to the naked eye, were observed on its inner surface. It was probably carved from the distal diaphysis wall of a cattle (*Bos taurus* L. 1758) tibia. This artifact was found in the chapel of the northeastern palace. According to its stratigraphic position, this object may be approximately dated to the 14th-15th century. On the basis of







2.3

¹³ Slivka 1984, 408, Fig. 9

¹⁴ Weitschawar 2002, 189, no. 242 (L. Vándor)

¹⁵ Buzás 1994b, 64

¹⁶ Weitschawar 2002, 229, no. 339 (L. Vándor)

¹⁷ MacGregor 1985, 186

¹⁸ Buzás 1994a, 21–22

classical parallels it may be considered a distaff ring that was pulled on the distaff carved round on the top but with a polygonal cross-section at the bottom.¹⁹ Such rings were meant to prevent the fiber slipping down along the distaff. This function would also, to some extent, explain the fine cracks on the ring's inner surface.

2.4 This piece of worked antler originates from roe deer (Capreolus capreolus L. 1758) and includes the beam and tine of a young buck. The proximal end of the antler's beam is hollowed, while two small holes were drilled into the side of this artifact. The beam seems to have been cut to size using a saw and its base was carved into a roughly oblong cross-section. Proceeding distally, toward the tine, the cross-section becomes gradually ovoid. The rough outer layer of the antler was removed using a knife or a plane over the tool's entire surface. This artifact was found in the entry room of the large cellar built under the southern wing of the northeastern building and may thus, be dated to the 15th-16th century.²⁰ On the basis of its shape it cannot be ruled out that this tool was used in processing textiles or hides. Sixteenth century written sources reveal that a whole range of bone and antler artifacts were regularly used in the tanning industry of the time.²¹ The exact function of the cavity and holes, carved into the proximal end of the Visegrád specimen, remain uncertain, but the object was probably produced in an ad hoc way.²²

2.5.1–3 These cone-shaped, small objects of uncertain function were made from the antler tines of red deer (Cervus elaphus L. 1758). The tips of the tine were first sawn off, then hollowed to approximately the first third of their lengths. Several such artifacts were recovered in the palace area, mostly in the area of the chapel associated with the northeastern palace. On the basis of their stratigraphic positions as well as associations with other finds, these objects may be dated to the 14th-15th century.²³ As for the interpretation of these artifacts, they have been hypothetically called needle cases. Medieval needle cases made from bone are known from several sites.²⁴ However, they are known to have a cylindrical shape, cut straight at both ends, completely hollowed and richly decorated. This latter type is known mostly from graves, and their function is demonstrated by the evidence of the needles found within them. Similar artifacts are known, among other things, from Medieval Bratislava/Pozsony (Slovakia), where they were identified as tools used in bark weaving. 25



2.5.1 - 3

¹⁹ T. Bíró 2004, 77-78

²⁰ Buzás 1994a, 21–22

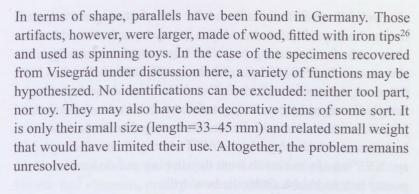
²¹ MacGregor 1999, 191

²² Bartosiewicz 2008, 32.

²³ Buzás 1994a, 15; Buzás 1994b, 57–59.

²⁴ Magyar 1981, 73, Fig. 3

²⁵ Slivka 1984, 410, 28, Fig. 32



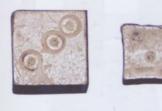
Musical Instrument

3.1 This object was made from the diaphysis of a goose ulna.²⁷ The proximal and distal epiphyses of this bone were cut off with a knife, as may be seen even by the naked eye. Bird bones are often carved into fine tubes of a variety of possible functions (Gál 2004, this volume). This goose ulna tube was found in the nave of the chapel in the Royal Palace, although its exact provenience is unknown. Therefore it may only be dated broadly to between the 14th–15th centuries. The original function of this artifact is similarly unknown. On the basis of a medieval analogy from England, it may be hypothesized that this tube was part of a composite or pan pipe.²⁸

Gaming Pieces

4.1–4 Of the numerous types of medieval toys and gaming pieces made from bone, only dice were recovered from the Visegrád palace. Their sizes vary between 8 to 10 mm. Three of them came to light during the course of excavations of the northeastern wing. Another specimen was found in the southern building block. Based primarily on their stratigraphic positions, these dice seem to date to the first half of the 15th century. The fourth die has slightly concave sides and its corners are somewhat damaged. It was found in a depression of the floor within the portico of the ornamental courtyard, accompanied by 25 denarii dated to between 1521 and 1549.²⁹ This latter find assemblage also supports coeval written documents that report on the spread of gambling with dice.³⁰ Gaming passions also ran high in the royal court. The worn edges and smooth surfaces of some of these dice bear witness to their relatively long time use life. In addition to a number of medieval pictures, the process of dye manufacturing is







4.1 - 4

²⁶ Stauch 1993, 76, Fig. 101

Identification by Erika Gál (Institute of Archaeology, Hungarian Academy of Sciences). I would like to thank her for her help.

²⁸ MaGregor 1999, 1977

²⁹ Tóth 1994, 212–213

³⁰ Petényi 1994, 58–66; Kovács 1989, 108

also well known from finds from bone manufacturing workshops.³¹ On the basis of this latter evidence it may be seen that most dice were made from the long bones of large ungulates, chiefly cattle (*Bos taurus* L. 1758) and possibly horse (*Equus caballus* L. 1758). Compact metapodia with their low meat value do not tend to be heavily damaged by butchering and seem to have been the skeletal part of choice in medieval die manufacturing. The surfaces seem to have been marked using a bow-drill. The irregular numbering of die no. XXY may be the result from the slipping and dislocation of the poorly fastened blank under the bow drill.

Clothing Accessories

5.1-4 Four strap ends made from bone belong to the find material recovered from a large stone building from the Charles Robert phase and may thus be dated to the early period of the palace. The deepest layers of the settlement were marked by the features of a settlement that could be dated to around 1300. The finds also included 13th century ceramics from Austria as well as a mid- 13th century coin from Austria.³² On the basis of these finds, the strap ends seem to date to between the end of the 13th and first half of the 14th century. All of them were carved from a single piece of bone which narrows towards its tip. Their external surfaces were decorated with various patterns formed by incised lines as well as dot-and-circle patterns. These pieces are all similar both in terms of size and the mode of manufacture. Apparently, all strap ends were cut out from cattle (Bos taurus L. 1758) metapodia. In addition to the thickness and characteristically straight shape of these bones, the anatomical identification is further supported by the remains of a slight longitudinal depression on one of the artifacts. This corresponds to the sulchus longitudinalis dorsalis, an anatomical feature separating the fused 3rd and 4th metapodium in Artiodactyls. It is still visible on the inside of the worked specimen, although the object was badly eroded during deposition. Bone strap ends manufactured in a Gothic style have already been published from a number of sites in Hungary.³³ The specimens found in Visegrad represent a less refined but carefully executed, early version of those strap ends. On the basis of their size they must have been used in decorating relatively narrow belts.

5.5 A bone belt stiffener probably belonged to a belt made of silk or canvas. This specimen from Visegrád was turned on a lathe. It therefore has a round, cylindrical cross-section with two indentations at either end. These ends terminate in a button-shaped form whose



5.5

³¹ Gróf – Gróh 2001, 281–285

³² Buzás – Lővei 2001, 14–15

³³ Szabó 1938, 69–70; Kovács 1989, 108.

diameter is identical to that of the cylindrical body. This heavily worked bone rod may equally originate from the diaphysis wall of a metapodium or the radius of a large ungulate, presumably cattle (*Bos taurus* L. 1758). This tentative identification, however, was made only on the basis of size. This artifact came to light in the proximity of a human skeleton that was found lying in an irregular position in the foundation of a corridor within the southern wing of the palace. On the basis of a 1526 coin found in the same context, the bone artifact may be dated to the first half of the 16th century. Similar belt elements, ending in semi-spherical buttons, are known from several medieval sites in Hungary.³⁴

Decorative Element for Furniture or Goldsmithry

6.1 This piece of bone carving shows a man standing in a cloak in a knee length dress that is tight on top and falls in rich folds in its lower half. Even part of the sleeve may be recognized on the intact, right arm of the figurine. This sleeve is long, extending all the way down to the hand and following the curve of the arm. A hole was drilled below the neck of the figurine which may have served in fastening it to some surface. The man holds a banner in his raised hand. The back side of the figurine is only roughly worked and therefore the remains of anatomical features may be clearly recognized. It may be established therefore, that this carving was made from the distal diaphysis wall of a cattle (Bos taurus L. 1758) metatarsus. The striking difference in the craftsmanship, seen between the front and back sides of the figurine, makes it likely that this piece was used for decorative purposes and was fastened to a hard surface on a larger object with its back side remaining invisible. On the basis of its size it may thus be concluded that this figurine was a decorative element within a composite artifact, possibly made by a goldsmith. This figurine was brought to light during excavations carried out in the southern wing of the palace. It is possible that this building was identical with the Visegrad mint, mentioned in a 1356 document.35 Beyond the find circumstances, detailed studies on the clothing of this figurine³⁶ have also dated it with in all likelihood to the first half or middle of the 14th century.



The bone artifacts recovered from the Royal Palace of Visegrád were made almost exclusively from the skeletal elements of domestic animals, especially cattle. It is probably not an accident





6.1

⁴ Tari 1989, 65, Fig. 36; Weitschawar 2002, 126, no. 57–58 (L. Vándor)

³⁵ Buzás 1992, 34

³⁶ Nagy – Nemes 1900, 1105

that medieval craftspeople used predominantly metapodia from these animals. Metacarpal and metatarsal bones and, to some extent the radius, are especially suitable for tool making. On the one hand, owing to their anatomical positions, they represent relatively small amounts of low quality meat³⁷ and as such they are less exposed to intensive butchering. Moreover, their thick and compact diaphyses offer raw materials of suitable strength and size.

No bones of wild animals could be identified among the raw materials under discussion here. In the case of the few objects made from antler it is not possible to determine whether this raw material originated from hunted animals or was procured by gathering shed antler. On the basis of these observations it may be said that the majority of bone artifacts recovered from the palace were made from consistently selected raw materials, using nearly identical methods of manufacturing. Most of these objects are of high quality, intended for extended use. These features are indicative of serial production in the case of most studied artifacts.



A monk making rosary beads. From the Hausbuch der Medelschen Zwölfbrüderstiftung, around 1425

The most typical products of the bone manufacturing workshop excavated in the hypothesized market place³⁸ of the medieval Visegrád were rosary beads and gaming dice.³⁹ Evidently, the majority of these objects were manufactured to satisfy demands by the city's burghers. It cannot be unambiguously ruled out, however, that some of the artifacts found in the palace are products from the same workshop. A finely worked, high quality bone handle made for silverware, decorated with the figurine of a small dog at the end, was found within the city, among the ruins of a stone building excavated in the proximity of the bone manufacturing workshop.⁴⁰

As has been revealed by early eighteenth-century technical descriptions, bone manufacturing workshops mostly produced needle boxes, spindles, dice, buttons, knife handles, and toys.⁴¹ Most of the bone artifacts found in the palace fall in the same category. Only a few of them (figurine, decorated fork handle) unambiguously represent the high status of 14th–15th century court culture.

In summary, bone artifacts from the late medieval royal center of Visegrád are characteristic of the general picture of $14^{th} - 15^{th}$ century industrial bone working. In most cases, this trend is evident in the selection of raw materials, the mode of manufacturing and the function of the artifacts studied.

³⁷ Kretzoi 1968

³⁸ Buzás – Kováts 2007, 13–14

³⁹ Gróf – Gróh 2001

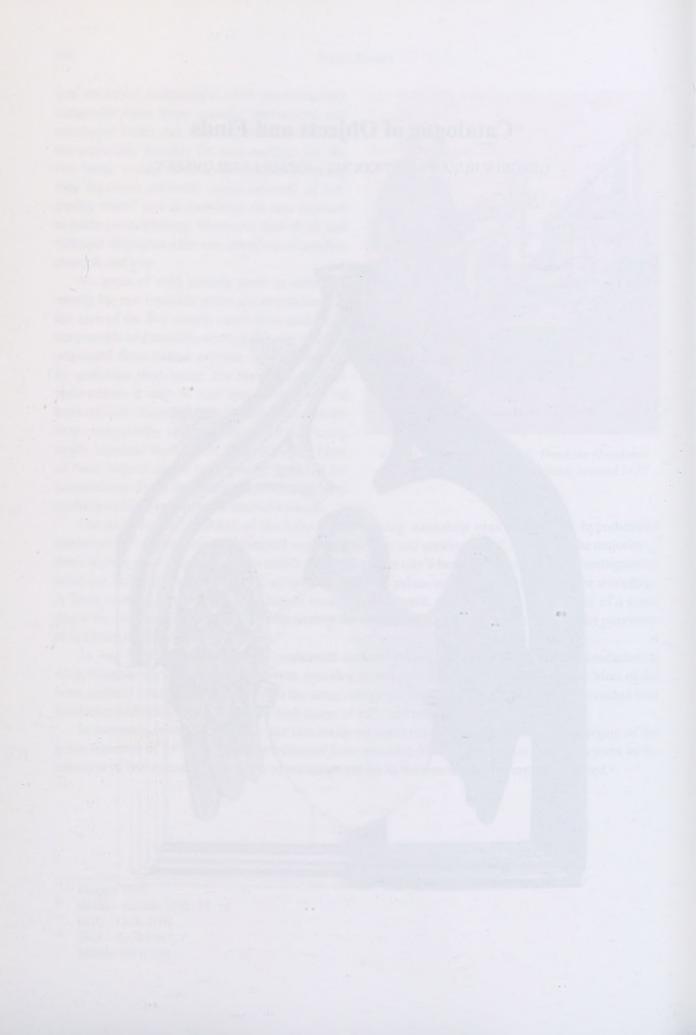
⁴⁰ Gróf - Gróh 1997, 7

⁴¹ Möller 1984, 338

Catalogue of Objects and Finds

GERGELY BUZÁS – EDIT KOCSIS – JÓZSEF LASZLOVSZKY





Catalogue of Objects and Finds

Objects and finds, date, inventory number.

Description, size, archaeological context, year of excavation, head of excavation.

Stoves from the Angevin Period

Cup shaped stove tile, the early period of Louis the Great, buried around 1360. 60.34.1

Light gray earthenware, graphite traces on the surface. Evenly widening body, cut rim. There are two grooves under the rim and one on the belly. Its bottom is slightly indented, with traces of sand dispersal.

Height: 174 mm, mouth diameter: 178 mm, bottom diameter: 110 mm.

From the small northeastern stony courtyard of the palace, layer 6b, 1952. Miklós Héjj.

Stove tile with a semi-globular top, mid-14th century, the period of Louis the Great. 60.52.1

Light gray earthenware oxidized and turned red at several spots during burning. Its top has a semi-globular, slightly conical shape, and its bottom opening is sliced. There are two parallel grooves on its belly.

Height: 175 mm, mouth diameter: 155 mm, largest diameter: 190 mm.

From the small northeastern stony courtyard of the royal palace, 1952. Miklós Héjj.

Heart-shaped stove tile, the early period of Louis the Great, buried around 1360. 60.150.1

Light gray earthenware. Circular bottom and a heart shaped mouth. Height: 155 mm, width: 160 mm, bottom diameter: 103 mm. From the small northeastern stony courtyard of the palace, layer 6b, 1952. Miklós Héjj.

















Heart shaped stove tile, the early period of Louis the Great, buried around 1360. 60.37.1.

Light gray earthenware. Circular bottom and a heart shaped mouth. Height: 162 mm, width: 160 mm, bottom diameter: 100 mm. From the small northeastern stony courtyard of the palace, layer 6b, 1952. Miklós Héjj.

Onion shaped stove tile, the early period of Louis the Great, buried around 1360, 60,57.1

Brownish red earthenware glazed in brownish yellow on the top. This glaze continues all the way down the sides. Semi-globular stove tile with a point on top; there are ribs on its slim neck to facilitate attachment. It might have formed part of a tile stove or the dome of a tiled stove.

Height: 135 mm, largest diameter: 97 mm, mouth diameter: 68 mm. From the small northeastern stony courtyard of the palace, layer 6b, 1949–1952. Miklós Héjj.

Onion shaped stove tile, mid-14th century, the period of Louis the Great. 60.62.1

Brownish red earthenware glazed in brownish yellow on the top. Onion shape, conical on the top, with ribs on its narrowing neck, the mouth is deformed to an oval shape. It might have been incorporated into a tile stove or the dome of a tiled stove.

Height: 165 mm, largest diameter: 103 mm, mouth opening: 50 × 90 mm. From the small northeastern stony courtyard of the palace, 1949–1952. Miklós Héjj.

Onion shaped stove tile, second half of the 14th century, the period of Louis the Great. 95.1.1

Light gray earthenware. Remains of the stove plastering are visible on its outer surface. Sooty inside. Its upper part has an even conical shape, and there are shallow grooves on its narrowing neck.

Height: 120 cm, largest diameter: 99 mm, mouth diameter: 77 mm, wall thickness: 13 mm.

From the stove tile found in the Angevin-period timber building south of the palace's southern bordering wall. 1990. Mátyás Szőke – Gergely Buzás.

Stove tile with a rectangular mouth, second half of the 14th century. 98.1.25

Gray earthenware. The bottom is circular, the body is long and fast-wheel-thrown, with a small, rectangular shaped mouth opening, and nibbed corners.

Height: 213 mm, length of the mouth opening: 125 mm, bottom diameter: 121 mm.

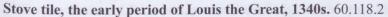
From the southeastern wing of the palace.

Stove tile fragment, the early period of Louis the Great, 1340s. 59.1.7.1

Red earthenware glazed in brownish yellow and brownish purple on the eyes of the animal figures. Rectangular tile with edges forming a flange. A pelican opening its own chest with its beak and feeding its young with its blood is depicted on the front panel, surrounded by branches of linden and oak trees and acorn. Small pierced decorative dots at the birds' eyes and the acorns' cupules enrich the motifs.

Height: 130 mm, width: 170 mm, estimated size of the tile: 200×200 mm.

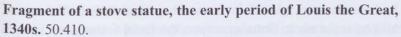
From the plot of the Franciscan friary's church (43 Fő Str.), from a lime-pit, at a depth of 1–2 m. 1956. Miklós Héjj



Red earthenware glazed in brownish yellow. Oblong tile with a central depression, and a clay vine attached to the long sides and to the top segment in a semicircular shape. There is a stove statue fragment stuck inside. Incised wavy lines on the back panel helped to attach the tile to the stove.

Height: 397 mm, width: 190 mm, depth: 97 mm.

From the small northeastern stony courtyard of the palace, 1949–1952. Miklós Héji.



Red earthenware glazed in brownish yellow, on some parts dark brown. Fragment of a stove statue: a left leg, from the ankles up to the thigh, with the lowest part of the jacket. The edge of the garment is decorated with incisions and keyhole-shaped cutting, with a brown ribbon above it. A belt with a metal buckle, a brown buckle pin and circular embossing is attached to the figurine's waist. On the side of the statue fragment the spot where it was attached to the tile is visible.

Measurable height: 150 mm, greatest width: 50 mm.

From the small stony courtyard of the palace, layers 5 and 6b, 1949. Miklós Héjj.

Stove tile, the early period of Louis the Great, 1340s. 60.118.1

Red earthenware glazed in brownish yellow. Oblong tile with a central depression. On the side and on the top a clay vine is attached to the tile, which is decorated with grapes and grape leaves, applied by a cylinder seal. In the depression the place of the statuette is left unglazed. Wavy lines on the back panel.

Height: 430 mm, width: 200 mm, depth: 105 mm; width of the decorated part: 22-25 mm.

From the small northeastern stony courtyard of the palace, 1949–52. Miklós Héjj.











Fragment of a stove statue, the early period of Louis the Great, 1340s. 67.48.3

Red earthenware glazed brownish yellow, on some parts brownish purple. Statue fragment with a hollow body; the surface for attachment is visible. The lower edge of the jacket is decorated with incisions, with a ribbon above it. A rope belt with tassels is tied to the figure's waist, and a dark brown, heart-shaped purse hangs on it, with a large, brownish yellow knob.

Measurable height: 130 mm, measurable width: 70 mm.

From the southeastern wing of the royal palace, 1958. Miklós Héjj.



Fragment of a stove statue, the early period of Louis the Great, 1340s. 67.48.2

Red earthenware glazed oil-colored brownish, on some parts dark brown. Fragment of a statue: a right hand holding a hunting horn. A textile ribbon embellished with incisions and dark brown knobs hangs from the horn. The garment's sleeve is fastened with a knob at the wrist.

Fragment size: 80 × 50 mm.

From the southeastern wing of the royal palace, 1958. Miklós Héjj.



Fragment of stove statue, the early period of Louis the Great, 1340s. 69.67.1

Red earthenware glazed in brownish yellow. Head of a statue, broken at the neck. Statuesque face, the facial features are formed with incisions, the eyebrows are emphasized with pierced dots. The hair is short on the forehead, reaches down to the shoulders on the left; the right side is missing.

Measurable height: 90 mm, measurable width: 68 mm.

Lower castle, inner castle, quadrant VIII, pit 3, at a depth of 3.5 m. 1968. Mátyás Szőke.



Stove tile, the early period of Louis the Great, 1340s. 60.120.1

Red earthenware glazed in brownish yellow. Triangular-shaped ridge tile with an openwork on the front panel, a wheel-thrown back panel, and a small projection on its upper part. On the front panel there is a circle decorated with incisions and a quatrefoil tracery inside it, with trefoil motifs in the corners.

Height: 445 mm, width: 370 mm, depth: 190 mm.

From the small northeastern stony courtyard of the palace 1949–1952. Miklós Héjj.

Decorative ridge tile of a tiled stove, the early period of Louis the Great, 1340s. 60.100.1

Red earthenware; onion-shaped, hollow, globular decoration that fits to the top of a ridge tile.

Height: 95 mm, greatest diameter: 88 mm, lower diameter: 41 mm, upper diameter: 18 mm.

From the small northeastern stony courtyard of the palace, layer 6b, 1952. Miklós Héjj.

Stove tile, the early period of Louis the Great, buried around 1360. 96.116.1.

The front panel is made of finely levigated white earthenware. Light red back panel, dark green glaze. The tile is rectangular in shape, with a bowl-shaped back part, and is embellished with openwork. It is decorated with an oblique angle representation of the Angevin coat of arms, which is attached to the frame surrounding it at three points. On the right side lilies are depicted, while there are stripes on the left side.

Tile size: 146 × 145 mm, depth: 70–80 mm.

Found on the northern lower courtyard of the palace, beside the great cistern, 1959. Miklós Héjj.

Stove tile fragments, the early period of Louis the Great, buried around 1360. 95.2.1–2.

Finely levigated white earthenware glazed in dark green. The fragment is decorated with openwork depicting the ostrich crest of the Angevins on top of leaves. There are two rings standing against the side frame beside the feathers. Flat, drawing-like representation, delicate openwork.

Measurable height: 190 mm, width of the tile: 196 mm, wall thickness: 7–15 mm.

From the small stony northern courtyard of the palace, layer 6b, 1953, and from the northern lower court, beside the cistern, 1959. Miklós Héjj.

Ridge tile fragment, the early period of Louis the Great, buried around 1360. 50.239.

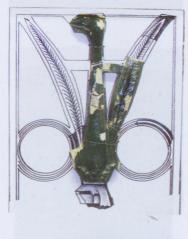
Red earthenware glazed in dark green. The top has an ogee arch shape, the sides and the upper part are decorated with floral ornaments and a finial on the top. The internal part of the tile is embellished with openworks forming a trefoil tracery.

Height: 300 mm, width: 170 mm, depth: 40 mm.

From the small northeastern stony courtyard of the palace, layer 4b, 1949. Miklós Héjj.











Stove tile, the period of Louis the Great, 1350s. 2008.13.1.1.

Red earthenware glazed in greenish brown. The tile has a rectangular shape and is framed by a molding and a groove. A hunting scene is depicted on it: a hunter wearing a hat and leaning on his staff is depicted on the right side. He wears a belt with a dagger attached. He is blowing a horn and holds a foxhound on leash. A tree with linden leaves, acorns and four small birds is depicted beside him. On the left side of the tree another foxhound is seen following up a scent.

Height: 235 mm, width: 225 mm.

From the cistern's fill in the southwestern room within the palace's northwestern wing, dated to the period of King Matthias, 2006. Mátyás Szőke and Gergely Buzás.



Stove tile, the period of Louis the Great, after 1360. 53.155.4.

Grayish brown earthenware tempered with coarse particles, glazed in dark green. The tile is square-shaped and is framed by molding. The frame surrounds an oblique angle representation of the coat of arms of the Angevins. On the right side lilies are depicted, while there are stripes on the left side, every second of which is embellished with a grid pattern.

Tile size: 142×142 mm.

Found north of the northern flight of stairs in the northeastern palace wing, 1950. Miklós Héjj and Dezső Dercsényi.



Stove tile, the period of Louis the Great, after 1360. 67.39.1.

Brown earthenware tempered with coarse particles, glazed in brownish gray. Rectangular tile framed with molding, depicting two lancet arches with pinnacles, floral ornaments and a crest. There are two coats of arms of the Angevins under the two lancet arches: a shield with lilies and stripes, a closed helm and an ostrich holding a horseshoe in its beak. Hexagrams enrich the composition on the bottom and top.

Height: 190 mm, width: 153 mm.

Found northwest of the palace, at the statue of King Matthias, 1963. Miklós Héji.



Stove tile fragment, the period of Louis the Great, after 1360. 56.11.1.

Grayish white earthenware glazed in yellow, decorated with openwork. The tile depicts a man wearing a coat that reaches down to his thigh. There are statuesque knobs on his clothing. He has an embossed belt from which a rectangular purse hangs.

Measurable height: 95 mm, measurable width: 55 mm, thickness: 25 mm.

From the palace chapel, in the nave in front of the triumphal arch, in the fill between two floors. 1952. Miklós Héjj.

Fragment of an ornamental tile from a stove's top, the period of Louis the Great, after 1360. 53.105.1.

Gray earthenware glazed in yellowish green. Fragment of big, tiered crowning decoration that curves outwards, with a fan-like protrusion, emphasized by a row of knobs, supported by a corbel in the shape of a devil's head. Under the tiers there are bent stripes with a pyramidal pattern.

Measurable size: 135 mm, measurable width: 100 mm, thickness: 10 mm.

Found north of the northern flight of stairs in the northeastern palace wing, 1950. Miklós Héjj and Dezső Dercsényi.

Stove tile, the end of the period of Louis the Great, around 1370. 53.136.1.

Reddish gray earthenware glazed in dark grayish green. Rectangular tile decorated with the lilies of the Angevins inside a molded frame. Tile size: 200×200 mm.

Visegrád, isolated find. From the excavation of János Schulek.





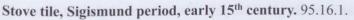
Stoves from the Period of King Sigismund

Stove tile, Sigismund period, early 15th century. 95.15.1.

Reddish yellow earthenware, reddish brown glaze. Rectangular tile decorated with an endless pattern resembling wooden carvings, inside a molded frame.

Tile size: 280×280 mm.

From the lower castle, trench 60/2 and from between trenches 61/2–19, and from the inner castle area, segments V–VI. 1960–62 and 1968. Mátyás Szőke.



Reddish yellow earthenware glazed in brownish green. Rectangular half-tile with a small back panel. The front panel is divided into two squares, with a geometric composition of floral ornaments and traceries in both.

Height: 280 mm, width: 140 mm, depth: 30 mm.

From the lower castle, external castle area, trench 60/2, at a depth of 80 cm. 1960. Mátyás Szőke.













Stove tile, Sigismund period, early 15th century, 95.17.1.

Grayish white earthenware glazed in green. Rectangular tile, the front panel is decorated with a molded openwork tracery; the back panel has a half cylinder shape. On the bottom of the front panel there are four lancet arch shaped openings with capital-like protrusions. The upper, square shaped part is filled with a *vesica piscis* ("fish bladder") pattern.

Height: 430 mm, width: 260 mm, depth: 110 mm.

Found in the lower castle, outside the castle walls, segments 68/I and II. 1968. Mátyás Szőke.

Stove tile, Sigismund period, early 15th century. 96.528.1.

Yellowish gray tile glazed in brownish green that turns dark brown on the knob. Triangular ridge tile decorated with a cone shaped knob on top and a round openwork tracery on the front panel.

Height: 430 mm, bottom width: 440 mm, depth: 160 mm, diameter of the knob: 60 mm.

From the northern upper courtyard of the palace; the external castle area of the lower castle, trench 60/2; and from outside the castle walls, segment 68/I. 1950 and 1960. Miklós Héjj. 1968. Mátyás Szőke.

Stove tile, the end of the Sigismund period, 1420s–1430s. 96.595.1.

Grayish white earthenware, dark green glaze. Square shaped tile, with the representation of a castle on its front panel. The depicted castle has towers and a portcullis.

Tile size: 240 × 232 mm, depth: 119 mm.

Found in front of the street facade of the northwestern corner of the palace, segment 72/I, from a fill dated to the period of King Matthias. 1972, Mátyás Szőke.

Stove tile, the end of the Sigismund period, 1420s–1430s. 96.781.1.

White earthenware glazed in yellow which turns light yellow on one side and dark, brownish yellow on the other. Rectangular tile, the front panel is divided into four. The first and fourth sections feature the stripes of the Árpád dynasty, while in the second and the third the eagles of Brandenburg, the animals seen on the coat of arms of Sigismund are depicted.

Tile size: 237 × 231 mm, depth: 120 mm.

From the ice pit in the southeastern wing of the palace, 1995. Mátyás Szőke.

Fragment of a stove tile, the end of the Sigismund period, 1420–1430s. 96.619.1.

Light red earthenware glazed in reddish brown. Rectangular half of a corner tile. The front panel is decorated with a molded frame and a tendril ornament from which four oak leaves and two clusters of fruit hang.

Height: 236 mm, width: 121 mm, depth: 62 mm.

From the corridor of the northern cloister walk, northwestern palace wing segment 86/IV, upper mortar layer. 1986. Mátyás Szőke.

Stove tile, the end of the Sigismund period, 1420s–1430s. 96.727.1.

Light red earthenware glazed in brownish yellow. Rectangular tile, the front panel is decorated with openwork, the back panel has a half cylindrical shape. On the front panel there are two lancet arch shaped openings and a circular tracery above them.

Height: 367 mm, width: 220 mm, depth: 140 mm.

From the northwestern corner of the cloister walk in the northwestern palace wing, segments 86/IV and 91/XV. 1986 and 1991. Mátyás Szőke and Gergely Buzás.

Stove tile, the end of the Sigismund period, 1420s-1430s. 95.29.1.

Yellow earthenware, engobe, dark brown paint on the corners and on the eagle figurines, with colorless glaze (*mezza majolica*). Rectangular tile. The front panel is decorated with the emblem of the Order of the Dragon surrounding a quarterly escutcheon with alternating stripes of the Árpáds and eagles of Brandenburg.

Tile size: 234×234 mm.

From the southwestern wing of the royal palace. 1951. Miklós Héjj.

Stove tile, the end of the Sigismund period, 1420s, 1430s. 60.156.3.1.

White earthenware glazed in light yellow. Round, bowl-shaped stove tile. On its convex front panel the representation of a girl's head with curly hair, wearing a fillet in the shape of a wavy line. The tile might have been attached to the mud dome of the stove.

Diameter: 130 mm, depth: 80 mm.

From the citadel, end of the moat, upper layer. 1933–34. János Schulek.











Fragment of a stove tile, 15th century, 96.753.1.

Light red earthenware, engobe, green glaze. Rectangular tile, decorated with a circular blind tracery above a trefoil arch with four mullions. There are traces of red plaster on the back panel, and a 30 mm wide stripe on the bottom is tainted with soot.

Measurable height: 303 mm, width: 235 mm, thickness: 18 mm. Found at the northern end of the cloister walk of the western building of the northwestern palace wing, segments 86/II and 91/XV. Mátyás Szőke and Gergely Buzás.

Stoves from the Period of King Matthias



Plinth tile, Matthias period, 1480s. 2006.2.72.1.

Yellowish red earthenware glazed in brownish yellow. Rectangular shaped plinth tile, corner piece. One of its sides is cut off in a 45 degree angle. Its front panel is decorated with alternating molds and grooves. There is a U-shaped assembly mark visible on its top.

Height: 100 mm, width: 200 mm, depth: 100 mm.

From the ice pit in the southwestern palace wing. 1995. Mátyás Szőke.



Stove tile, Matthias period, 1480s. 71.21.1.1.

Yellowish red earthenware, engobe, green glaze, Rectangular tile, decorated with a Renaissance style symmetrical floral ornament in a frame.

Size: 310 × 315 mm, depth: 12 mm

From the staircase on the middle floor of the southeastern wing of the royal palace. 1951. Miklós Héjj.



Corner tile fragment, Matthias period, 1480s. 53.100.1.

Unglazed yellowish red earthenware. Fragment of a lion figurine: head and mane. Manufactured with a mold, separated from its background, hollow inside. Its leveled bottom was attached to the corner of a stove.

Size: 109 × 80 mm, thickness: 14 mm.

From the southeastern part of the ornamental flight of stairs, in the royal palace's southern wing. 1950. Miklós Héjj.



Top tile, Matthias period, 1480s. 70.10.1.2.

Unglazed yellowish red earthenware. Triangular top tile ornamented with an openwork floral decoration and tracery. Molded, refined openwork.

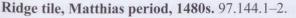
Height: 690 mm, bottom width: 290 mm, thickness: 25 mm. Isolated find from the royal palace. Miklós Héjj.

Stove tile, Matthias period, 1480s. 95.33.1.

Yellowish red earthenware, engobe, green glaze. Rectangular tile, the front panel is decorated with openwork, the back panel has niches. There are two lancet arch shaped windows above an ogee arch shaped opening. Refined details. There were no statuettes in the depressions.

Height: 290 mm, width: 230 mm, depth: 100 mm.

From the cistern on the northern side of the royal palace. Miklós Héjj.



Yellowish red earthenware, engobe, green glaze. Ridge tile with an ogee arch shaped top, a half cylinder shaped back, and decorated with leaves. On the front panel an angel is depicted above an arch, holding a shield with a fess and another with a cross.

Height: 492 mm, width: 190 mm, depth: 134 mm.

From the northern upper courtyard of the palace and outside the northern wall. 1958 and 1966. Miklós Héjj.

Stove tile, Matthias period, 1480s. 60.153.2–3.

Light red earthenware, engobe, green glaze. Recessed stove tile. A cloaked figurine wearing a hat and holding a monstrance is standing in the niche, against a background decorated with brocade pattern. Height: 235 mm, width: 190 mm, depth: 90 mm.

From the northeastern palace wing, the level of the ornamental courtyard and the eastern row of halls. 1936. János Schulek.

Stove tile fragment, Matthias period, 1480s. 50.242.

Light red earthenware, engobe, green glaze. Corner tile with a fragment of a recessed half tile representing a detail of the coat of arms of Carinthia depicting three lions. The tile came off the corner on the other side. The mold on the corner's edge is decorated with grape leaves and tendrils.

Height: 125 mm, width: 110 mm.

From a stony layer behind the palace chapel. 1949. Miklós Héjj.

Stove tile, Matthias period, 1480s. 97.243.1.

Yellowish red earthenware, engobe, green glaze. Rectangular recessed tile. There is a long necked, falling bird depicted in the niche, below which there are two foxhounds. The background is decorated with floral ornaments and tendrils.

Height: 310 mm, width: 225 mm, depth: 75 mm.

From a layer mixed with roof tiles, outside the northern wall of the northern upper courtyard of the palace. 1966. Miklós Héjj.













Plinth tile fragments, Matthias period, 1480s. 70.8.1.1. and 97.219.1–2.

The front panel is made of white earthenware tempered with mica sand, the back panel is made of red earthenware glazed in white, brownish yellow, yellow and green. Rectangular, hollow tiles, one of them is a corner piece cut off in a 45 degree angle. The front panel is decorated with a tendril ornament around a rod. The surface of the leaves is dotted.

Reconstructed height: 160–170 mm, measurable width: 235 mm. Found in front of the northeastern wing of the palace, west of the entrance of the great cellar, and at the northern end of the western wing of the northwestern palace in the corner of the cloister walk, segment 91/XV. 1991. Mátyás Szőke and Gergely Buzás.

Wall Stove Decorated by the Coat of Arms of King Matthias

5 plinth tile panels

4 plinth tiles

2 plinth corner tiles

4 tiles depicting lions

2 half tiles depicting crowns

Small tiles depicting angels holding coats of arms:

the coat of arms of Dalmatia (3 pieces

The coat of arms of Pordenone, depicting a gate

A coat of arms depicting a hatchet

The coat of arms of Krajna depicting eagles

The coat of arms of King Matthias

The coat of arms of Upper Lusatia

The coat of arms of Feldkirch

The coat of arms of the Ernuszt family

Corner tiles with pinnacles: depicting the coat of

arms of the Ernuszt family

The coat of arms of Pfirt, depicting fishes

The coat of arms of Dalmatia

The coat of arms of King Matthias

Stove corner with the statue of angel Gabriel and

the coat of arms of Dalmatia

Long stove tiles depicting angels holding coats of

arms:

The coat of arms of Bohemia with lions

Coat of arms with stripes

2 recessed tiles depicting a young man holding a coat of arms with a Gorgon's head

2 recessed tiles depicting a young man holding a sabre

2 recessed tiles depicting a young man reclining on a staff

3 pieces of a ledge

3 crown mouldings

2 ridge tiles

2 rectangular top tiles

3 triangular top tiles decorated with blind tracery

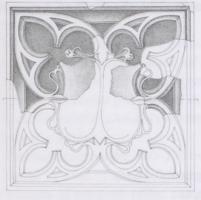
2 triangular top tiles decorated with tendril ornaments

Reconstruction of a crest

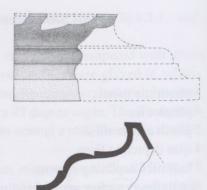




5 plinth tile panels







2 plinth corner tiles





4 tiles depicting lions





Small tiles depicting angels holding coats of arms: the coat of arms of Dalmatia 3 pieces







The coat of arms of Pordenone, depicting a gate



The coat of arms of King Matthias



The coat of arms of the Ernuszt family



The coat of arms of Pfirt, depicting fishes



A coat of arms depicting a hatchet



The coat of arms of Upper Lusatia



The coat of arms of Feldkirch



The coat of arms of Krajna

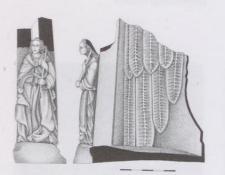


2 half tiles depicting crowns











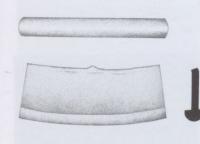
Stove corner with the statue of angel Gabriel and the coat of arms of Dalmatia



Corner tiles with pinnacles: depicting the coat of arms of the Ernuszt family



6. fülkés félcsempe és sarok baldachin



3 pieces of a ledge



The coat of arms of Hungary



The coat of arms of Bohemia



The coat of arms of the Emperor



2 recessed tiles depicting a young man reclining on a staff



2 recessed tiles depicting a young man holding a coat of arms with a Gorgon's head

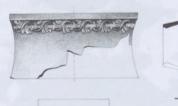


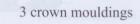
2 recessed tiles depicting a young man holding a sabre





2 rectangular top tiles



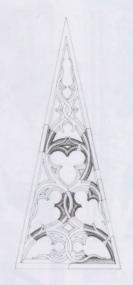






2 tiles depicting angels holding a shild





3 triangular top tiles decorated with tracery



Reconstruction of a crest

The Regensburg Wall Stove



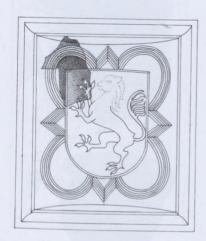
- 2 stove tiles with a coat of arms depicting a swan
- 2 stove tiles with a coat of arms depicting the panther of Styria
- 2 stove tiles with the coat of arms of Regensburg depicting keys
- 1 corner tile depicting a coat of arms
- 2 tiles with the coat of arms of Bavaria
- 2 tiles depicting grapes
- 2 tiles depicting oak leaves
- 1 tile depicting a face
- 2 tiles depicting angels holding a thurible
- 2 ridge tiles







2 stove tiles with a coat of arms depicting a swan



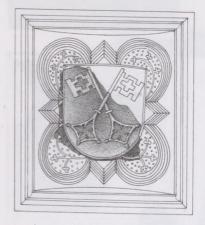
2 stove tiles with a coat of arms depicting the panther of Styria







1 corner tile depicting a coat of arms



2 stove tiles with the coat of arms of Regensburg depicting keys



2 tiles depicting angels holding a thurible







2 tiles with the coat of arms of Bavaria



tiles depicting angels holding a thurible



Kitchen Utensils for Cooking, Tableware, Articles for Personal Use

Pot, 14th century 95.14.1.

Greyware tempered with gravel. Vessel with a small base and evenly widening body, and a curved, rounded rim. Small pebbles were dispersed on the throwing wheel's head under the pot's base. A double groove runs around both the body and the shoulder of the object. Import from Austria.

Height: 193 mm, base diameter: 88 mm, body diameter: 150 mm, rim diameter: 148.

From the southeastern palace wing, 1988. Mátyás Szőke.

Lid, mid-14th century. 2008.16.1.1.

Grayware. Flat lid with a knob placed in the middle and a curved rim. The top side is decorated with two thin ribs and a ring formed of triangular impressions. The top of the slim knob is also molded. Import from Austria.

Height: 32 mm, diameter: 160 mm, knob diameter: 17 mm.

From the Angevin-period stone building in the upper reception courtyard of the palace. 1995. Mátyás Szőke – Gergely Buzás.

Mug, mid-14th century. 60.81.1.

Grayware. Rotund, short mug with a curved and smooth rim. There are fine ribs on the shoulder and body.

Height: 110 mm, base diameter: 67 mm, greatest diameter: 109 mm, rim diameter: 100 mm.

From the small stony courtyard of the northeastern palace, layers 4b-6b, 1949, 1952. Miklós Héjj.

Mug, the middle or second half of the 14th century 60.64.1.

Red earthenware with white engobe. Rotund, evenly grooved body with a curved, slightly rounded rim. The base was separated from the throwing wheel's head with a wire.

Height: 112 mm, base diameter: 57 mm, greatest diameter: 106 mm, rim diameter: 85 mm.

From the small, northern stony courtyard of the palace, 1952. Miklós Héjj.

Mug with handle, 14th century 74.223.1.

Yellowish earthenware. Rotund body with a small base and even ribs, a curved rim, and a small handle attached to the rim and the shoulder. The side opposite to the rim is sooty.

Height: 110 mm, base diameter: 58 mm, greatest diameter: 115 mm, mouth diameter: 105 mm.

Visegrád, isolated find. Miklós Héjj.













Pot, first half of the 14th century, buried around 1360. 60.75.1.

Yellowish white earthenware. Small base, the body widens to the shoulder. Curved double rim. Soot stains.

Height: 187 mm, base diameter: 80 mm, greatest diameter: 168 mm, rim diameter: 163 mm.

From the small northeastern stony courtyard of the palace, layers 5–6b, 1952. Miklós Héjj.

Lid, mid-14th century. 60.91.1.

White earthenware. Bell-shaped lid with a flat, plate-like knob and two loose ribs in the body. Sooty.

Height: 50 mm, diameter: 135 mm, knob diameter: 36 mm.

From the small northeastern stony courtyard of the palace, 1952. Miklós Héjj.

Pot, mid-14th century. 60.86.1.

Grayware pot. The body is deformed, not rotund. The body widens at the shoulder. Curved rim decorated with two grooves. The body is also embellished with grooving, and an incised wavy line on the shoulder. Local product, not imported from Austria.

Height: 192 mm, base diameter: 90 mm, greatest diameter: 180 mm, rim diameter: 145 mm.

From the small northeastern stony courtyard of the palace, 1949–52. Miklós Héjj.

Pot, mid-14th century. 60.112.1.

Red earthenware. Small base, the body strongly widens at the shoulder. Curved rim. Two incised lines decorate the shoulder. Soot stains.

Height: 263 mm, base diameter: 95 mm, greatest diameter: 235 mm, rim diameter: 228 mm.

From the small northeastern courtyard of the palace, 1949–52. Miklós Héjj.

Mug with handle, first half of the 14th century, buried around 1360. 60.102.1.

Yellowish white earthenware. Small base, round and evenly ribbed body, curved and rounded rim, and a small handle attached to the rim and shoulder. No soot stains.

Height: 113 mm, base diameter: 50 mm, greatest diameter: 110 mm, rim diameter: 93 mm.

From the small northeastern stony courtyard of the palace, layers 5–6b, 1952. Miklós Héjj.

Jug, first half or middle of the 14th century. 95.10.1.

Red earthenware with white engobe and red paint. The small body widens at the shoulder. The mouth is molded with four ribs and has a spout. A semicircular handle is attached to the shoulder and the neck under the rim. The shoulder is decorated with a dotted line between two red stripes. There is a stripe on the rim and traverse lines on the handle.

Height: 143 mm, mouth diameter: 120 mm, belly diameter: 97 mm, base diameter: 58 mm.

Isolated find from the northeastern wing of the palace, Mátyás Szőke.

Jug, 14th century. 69.72.1.

Yellowish white earthenware, dark red paint. Barrel-shaped, small body above a foot ring, and high, rotund mouth molded with ribs and a spout. The band handle is attached to the shoulder and the middle of the mouth. The body is embellished with two sawtooth semicircles between two red stripes. There are decorative red lines painted under the mouth and on top of it, and on the handle.

Height: 175 mm, mouth diameter: 122 mm, base diameter: 69 mm. Visegrád, the corner of Nagy Lajos király Street and Széchenyi Street, from the common section wall of grid squares A and B, 1966. Mátyás Szőke.

Jug spout decorated with an animal's head, 14th century. 2000.72.1.1.

Grayware with a dark surface. The spout came off a jug. It is a hand-made spout in the form of a ram's head; the eyes are incised, the applied horns curve into a semicircle shape. Imported ware from Austria.

Measurable height: 53 mm, width: 67 mm, protrusion from the vessel's body: 30 mm.

From the fill of the well in the southeastern palace wing, 1951. Miklós Héjj.

Bottle, mid-14th century, 60.94.1.

Grayish white earthenware. Large, globular body, narrow neck, cylindrical mouth molded with ribs. The shoulder and belly are decorated with incised wavy lines.

Height: 320 mm, greatest diameter: 200 mm, base diameter: 113 mm, mouth diameter: 58 mm.

From the small northeastern stony courtyard of the palace, 1949–52. Miklós Héjj.











Bottle, 14th century, 67.35.1.

Coarse red earthenware tempered with gravel. The globular body rests on a foot ring, the neck is long and narrow, the mouth is cylindrical. There are thin ribs on the neck, and a cross-shaped, embossed base stamp on the bottom.

Height: 225 mm, greatest diameter: 120 mm, foot diameter: 73 mm, mouth diameter: 52 mm.

From Visegrád town, the courtyard of the hotel, 1962. Miklós Héjj.

Bottle, first half of the 14th century, buried around 1360. 60.99.1.

Light brown earthenware finely tempered with mica sand, the surface is burnished. Small base, pear-shaped body, long neck, protruding rim. The body is embellished with grooves.

Height: 207 mm, greatest diameter: 100 mm, base diameter: 45 mm, mouth diameter: 50 mm.

From the small northeastern stony courtyard of the palace, layers 5–6b, 1952. Miklós Héjj

Stemware, 14th century, 60.109.1.

White earthenware. Rotund cup with a slim base, the body is evenly ribbed. The rim slightly curves outwards.

Height: 150 mm, greatest diameter: 115 mm, base diameter: 51 mm, mouth diameter: 90 mm.

From the small northeastern stony courtyard of the palace, layers 5–6b, 1952. Miklós Héjj.

Small cup, 14th century, the period of Louis the Great. 57.11.1.

White earthenware. Narrow at the bottom. Rotund, unevenly ribbed, small cup with a straight rim.

Height: 63 mm, greatest diameter: 77 mm, base diameter: 35 mm, mouth diameter: 65 mm.

From the small northeastern stony courtyard of the palace, layers 5–6b, 1949–53. Miklós Héjj.

Small cup, 14th century, 95.18.1.

White earthenware. Narrow at the bottom. Barrel-shaped, evenly ribbed body, slightly curved rim.

Height: 78 mm, greatest diameter: 73 mm, base diameter: 35 mm, mouth diameter: 66 mm.

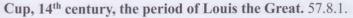
From the fill of the sewer trench beside the western wall of a vaulted chamber, at a depth of 130–170 cm, Visegrád, Fő Street, 1982. Mátyás Szőke.

Small cup, 14th century, the period of Louis the Great. 57.9.1.

White earthenware. Small base, short, rotund, ribbed body with a curved rim.

Height: 80 mm, base diameter: 39 mm, greatest diameter: 90 mm, rim diameter: 80 mm.

From the small northern stony courtyard of the palace, 1949–1953. Miklós Héjj.



White earthenware. Small base, rotund, finely ribbed body, curved rim.

Height: 81 mm, base diameter: 38 mm, greatest diameter: 70 mm, rim diameter: 66 mm.

From the small northern stony courtyard of the palace, 1949–53. Miklós Héjj.

Cup, 14th century, the period of Louis the Great. 57.15.1.

Yellowish white earthenware. Small base, barrel-shaped, finely ribbed body, curved rim.

Height: 90 mm, base diameter: 38 mm, greatest diameter: 70 mm, rim diameter: 72 mm.

From the small northern stony courtyard of the palace, 1949–53. Miklós Héjj.

Cup, 14th century. 95.57.1.

Light brown earthenware finely tempered with mica sand. The surface is burnished. Cup with a foot ring, two ribs on the body and a slightly widening rim. The base was separated from the throwing wheel's head with a wire.

Height: 71 mm, rim diameter: 91 mm, belly diameter: 83 mm, base diameter: 54 mm.

Isolated find from Visegrád.

Cup, 14th century, the period of Louis the Great. 57.6.1.

White earthenware. Narrow base, wide body, unevenly ribbed. Height: 53 mm, diameter: 104 mm, base diameter: 35 mm. From the small northeastern stony courtyard of the palace, layers 5–6b, 1949–53. Miklós Héjj.

Cup, 14th century, the period of Louis the Great. 57.7.1.

White earthenware. Small base, wide, unevenly ribbed body. Height: 50 mm, diameter: 98 mm, base diameter: 38 mm. From the small northeastern stony courtyard of the palace, layers 5–6b, 1949–53. Miklós Héjj.













Cup, 14th century. 95.19.1.

White earthenware with red paint. Narrow base, widening shoulder, rounded rim. The shoulder is decorated with two incised lines and a dotted line between two red stripes. The rim is also embellished with a red stripe.

Height: 64 mm, greatest diameter: 69 mm, base diameter: 34 mm, mouth diameter: 54 mm.

From the plot of the Franciscan friary, on the northern end and the eastern side of the excavated wall, at a depth of 50 cm, from an adobe layer. 1982. Mátyás Szőke.

Bowl, 14th century. 60.89.1.

Snow white earthenware finely tempered with mica sand. Abruptly widening body above a small base ring, with a slightly curved rim. Height: 50 mm, diameter: 140 mm, base diameter: 57 mm.

From the small northeastern stony courtyard of the palace, 1949–52. Miklós Héji.

Small bottle, 14th century. 60.96.1.

White earthenware. Small base, evenly ribbed, globular body, short neck, and wide mouth ring decorated with a groove.

Height: 120 mm, diameter: 80 mm, base diameter: 40 mm, mouth diameter: 40 mm.

From the small northeastern stony courtyard of the palace, 1949–52. Miklós Héji.

Small bottle, first half of the 14th century, buried around 1360. 60.97.1.

Light pink earthenware. Small base, ribbed, globular body, narrow neck, wide mouth ring.

Height: 115 mm, diameter: 75 mm, base diameter: 46 mm, mouth diameter: 28 mm.

From the small northeastern stony courtyard of the palace, layers 5–6b, 1952. Miklós Héjj.

Small bottle, 14th century, 60.98.1.

Grayish white earthenware. Small base, rotund body, sloping shoulder, narrow neck and small mouth ring. The foot is embellished with a ring of incised triangles, the belly with ribs, the shoulder with a pattern of skew lines applied with a cylinder seal.

Height: 130 mm, diameter: 95 mm, base diameter: 42 mm, mouth diameter: 28 mm.

From the small northeastern stony courtyard of the palace, 1949–52. Miklós Héjj.

Candle bowl, 14th century. 60.141.1.

White earthenware. Candle bowl with widening body and a nib for the wick.

Height: 30 mm, diameter: 110 mm.

From the lower reception courtyard of the palace, layer 2, 1951. Miklós Héjj.

Albarello, first half of the 14th century, buried before 1360. 70.15.1.

White earthenware tempered with gravel, painted in black and turquois, glazed inside and outside with colorless coating. Cylindrical, conical body above a foot ring, sloping shoulder, cylindrical mouth. The body is decorated with a geometrical pattern between two stripes, featuring mandorla shaped elements. The shoulder is embellished with lines, the mouth rim with a sawtooth pattern. Imported ware from Syria.

Height: 160 mm, diameter: 150 mm, base diameter: 108 mm, rim diameter: 112 mm.

From the small northeastern stony courtyard of the palace, layers 5–6b, 1952. Miklós Héjj.

Painted glass bowl, first half of the 14th century, buried around 1360, 94,579.1.

Colorless, transparent glass. The enamel paint is worn off but the spot where it was applied is still visible. Rotund bowl with a curved rim, embellished with arabesque stripes and drop shaped decorations on the body. Imported ware from Venice.

Height: 51 mm, rim diameter: 152 mm, wall thickness: 2–4 mm. From the small northeastern stony courtyard of the palace, layers 5–6b, 1952. Miklós Héjj.

Glass cup, 14th century. 70.14.1.

Colorless, transparent glass. Conical base, lacy foot rim, barrel-shaped body covered with glass drops oriented upwards. A glass fiber runs under the straight rim. Imported ware form Venice.

Height: 73 mm, diameter: 50 mm, base diameter: 48 mm, mouth diameter: 46 mm.

From the small northeastern stony courtyard of the palace, 1952. Miklós Héjj.

Glass cup fragment, 14th century. 95.12.1.

Colorless, transparent glass. Conical base, slightly widening body with vertical ribs. The ribs are somewhat curved at the top, no rim was formed. Imported ware from Venice.

Height: 83 mm, mouth diameter: 73 mm, base diameter: 59 mm. Found south of the southern wall of the palace, western side grid square 90/18, at a depth of 300–370 cm. 1990. Mátyás Szőke – Gergely Buzás.













Knife, 14th century, 2000.29.1.1.

Iron knife. The end of the blade is curved. The handle is reinforced by two iron plates that form a knob at the handle's end. The handle veneer is clasped by double copper braces.

Length: 149 mm, blade length: 65 mm, handle length: 84, blade width: 10–11 mm, handle width: 8–12 mm, blade thickness: 0.1–2 mm, handle thickness: 5–9 mm.

From the lower reception courtyard of the palace, grid square 94/3, on the eastern side of the pillar, from the brown adobe layer no.1. 1994. Mátyás Szőke – Gergely Buzás.

Albarello, 14th century - beginning of the 15th century. Buried in the Matthias period. 2006.3.1.1.

White earthenware tempered with gravel, painted in cobalt blue and glazed inside and outside with colorless coating. Cylindrical, conical body above a foot ring, sloping shoulder, cylindrical mouth. The body is decorated with tendril ornaments that connect four flowers, the shoulder is embellished with a pattern consisting of dots and lines. Imported ware from Syria.

Height: 167 mm, diameter: 147 mm, base diameter: 107 mm, mouth diameter: 110 mm.

From the northwestern palace wing, cesspool at the southern end of the western building. 2006. Mátyás Szőke – Gergely Buzás.



Stoneware cup fragment, first half of the 15th century. 62.1.52.

Yellow stoneware, dark brown glaze with light spots. Base fragment. Curving foot ring, finger pressed to form a polygonal shape. The lower part of the body is finely ribbed. Made in Waldenburg, Saxony. Measurable height: 80–85 mm, foot diameter: 65 mm.

From a small eastern lane behind the palace chapel, a foundation beside the vestry and from the well of the southern palace wing, 1952 and 1957. Miklós Héjj.



Stoneware cup fragments, first half of the 15th century. 2000.63.1.1–2.

Gray stoneware glazed in chocolate brown. Rim and shoulder fragments of a probably boot-shaped cup. The rim scarcely widens, the shoulder is rounded and embellished with impressed decorations consisting of square-shaped patterns. Two rows of triangular patterns decorate the shoulder. Made in Dreihausen, Rheinland.

Rim diameter: 57 mm, greatest diameter: 85 mm.

From the northwestern palace wing, the corner of the cloister walk, grid square 86/I. 1986. Mátyás Szőke.

Stoneware cup. First half or middle of the 15th century. 95.39.1.

Gray stoneware with purple brown, blistered glaze. High body that scarcely widens upwards. The rim is decorated with two grooves. There are three small band handles on the shoulder. The mouth is deformed. From Lositze, Moravia.

Height: 180 mm, rim diameter: 80–90 mm, greatest diameter: 94 mm.

From the southwestern palace wing, the baroque period cesspool. 1985–86. Mátyás Szőke.

Barrel spout, 15th, early 16th century. 95.28.1.

Bronze cask spout, the stopper part is missing. The part that was attached to the cask slightly narrows. The stopper moved inside an octagonal sleeve. The spout is in the form of a stylized animal's head with pointed ears and a protruding nose.

Length: 76 mm, spout diameter: 8 mm, inlet opening: 7 mm.

From the citadel, narrow alley along the eastern wall, grid square 93/ II, layer no.1, from the rock bottom. 1993. László Iván.

Pot, second half of the 15th century. 60.93.1.

Red earthenware. Small base, rotund body with evenly placed grooves; curbing, grooved rim. Soot stains.

Height: 185 mm, greatest diameter: 150 mm, base diameter: 80 mm, rim diameter: 145 mm.

From the small northeastern stony courtyard of the palace, 1949–52. Miklós Héjj.

Lid, second half of the 15th century. 50.296.

Yellowish red earthenware. Slightly conical shaped lid with a knob in the middle.

Height: 57 mm, diameter: 147 mm.

From the northern upper courtyard of the palace, 1943. János Schulek.

Pot with handle, second half of the 15th century. 50.274.

Red earthenware. The high body widens up to the shoulder. The rim is curved and finger pressed. The small handle is attached to the rim and the shoulder.

Height: 216 mm, base diameter: 113 mm, rim diameter: 170 mm. From the Water Tower of the Lower Castle, 1937. János Schulek.













Pot, second half of the 15th century, 2008.25.1.1.

Grayish yellow earthenware. Small base, the body widens up to the shoulder, the rim is curved and rounded, with a groove to accommodate the lid. The shoulder is decorated with a rib and five fine grooves below. There are soot stains on one side.

Height: 150 mm, base diameter: 78 mm, shoulder diameter: 135 mm, rim diameter: 138 mm.

From the northwestern part of the palace, the cesspool at the southern end of the western wing. 2006. Mátyás Szőke – Gergely Buzás.

Pot, second half of the 15th century. 50.384.

Gray, graphite earthenware. The pot widens at the shoulder, the widest point is the rim. There are two small ribs below the neck and two Vienna stamps on the curved and rounded rim, in an opposite position. Imported ware from Vienna.

Height: 205 mm, base diameter: 125 mm, rim diameter: 165 mm. From the northeastern wing of the palace, the cesspool of the privy tower. 1943. János Schulek.

Pot, second half of the 15th century. 60.87.1.

Gray graphite earthenware. The pot widens upwards, the widest point is the shoulder. There are two grooves under the neck and two Vienna stamps on the curved and rounded rim, in an opposite position. Imported ware from Vienna.

Height: 145 mm, rim diameter: 135 mm.

From the small northern stony courtyard of the palace, fertile soil layer. 1950. Miklós Héjj.

Pot, second half of the 15th century. 2008.18.1.1.

Dark gray earthenware. High body, the widest point is at the shoulder. The shoulder is decorated with two wide grooves. There are two star-shaped stamps on the curved and rounded rim. Imported ware from Austria.

Height: 210 mm, base diameter: 122 mm, shoulder diameter: 175 mm, rim diameter: 185 mm

From the northwestern part of the palace, the cesspool at the southern end of the western wing. 2006. Mátyás Szőke – Gergely Buzás.

Pot with handle, second half of the 15th century. 50.288.

Yellowish white earthenware. Narrow base, rotund body, wide spout on the double molded rim. Opposite to the spout there is a wide band handle decorated with two ribs. The shoulder is embellished with fine grooves. There are soot stains on the body opposite to the handle.

Height: 180 mm, base diameter: 88 mm, greatest diameter: 160 mm, rim diameter: 130 mm, handle width: 37 mm.

From the northeastern palace wing. 1938. János Schulek.

Pot with handle, second half of the 15th century. 50.376.

Red earthenware with engobe and green glaze inside and on the rim. Small base, rotund body, curved, triangular rim formed to accommodate the lid. The small handle is attached to the rim and the shoulder. The body is embellished with small grooves.

Height: 175 mm, base diameter: 78 mm, rim diameter: 135 mm. From the northeastern part of the palace, 1942. János Schulek.

Bowl, 15th century. 74.224.1.

Dark gray earthenware. Wide base, widening body, small rim with a tiny spout. The body is decorated with two grooves. Imported ware from Austria.

Height: 80 mm, base diameter: 140 mm, rim diameter: 195 mm. Visegrád, Rév Street. 1955. Miklós Héjj.

Casserole, second half of the 15th century. 50.263.

Yellow earthenware glazed in brownish yellow inside and on the rim. Convex base, steep wall, burnished rim. The casserole is supported by three stands. On the side above one of the stands there is a small protrusion to which a wooden handle could have been attached.

Height: 98 mm, bowl height: 65 mm, diameter: 168 mm, handle length: 60 mm.

From the drainage system in the northern palace area, 1943. János Schulek.

Jug, 15th century. 2003.1.28.1.

White earthenware. Large, rotund jug with a short and narrow neck and a band-like, grooved rim. There is a spout on the rim opposite to the handle. The body is evenly ribbed.

Height: 400 mm, base diameter: 130 mm, greatest diameter: 260 mm, mouth diameter: 120 mm.

From the northern lower garden of the palace, the sludgy fill of the well, 1994. András Pálóczi Horváth.

Jug, the middle or second half of the 15th century. 95.22.1.

Grayish white earthenware. Rotund water jug with a wide base, and a spout on the molded rim. The handle is decorated with an incised line and is attached to the shoulder and the rim. There are two faint incised lines on the shoulder. The base was separated from the throwing wheel's head with a wire.

Height: 190 mm, base diameter: 55 mm, greatest diameter: 117 mm, mouth diameter: 85 mm, handle width: 24 mm.

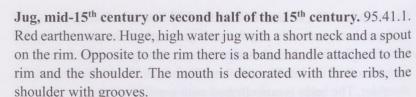
From the northern lower garden of the palace, 1994. András Pálóczi Hortváth.









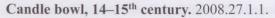


Height: 380 mm, base diameter: 131 mm, greatest diameter: 195–200 mm, mouth diameter: 110 mm, handle width: 35 mm. From the northern lower garden of the palace, 1994. András Pálóczi Horváth.

Peasant's sword, 15th century, 61.7.7.2.

Iron peasant's sword. The blade is blunt at several spots. There are three holes on the handle to accommodate nails.

Length: 493 mm, blade width: 35 mm, handle length: 115 mm. Isolated find from the palace.



Dark gray earthenware. Uneven base, short wall decorated with a rib, thick, rounded rim. The object has a small protrusion to accommodate the wick, its environs and the inside of the bowl are burnt.

Height: 30 mm, base diameter: 89 mm, rim diameter: 125 mm. Found in Visegrád, Rév Street, at the monument. 1964. Miklós Héjj.



Glazed storage jar, 15th century. 2010.8.1.1.

Yellowish red earthenware glazed in brownish yellow. Huge storage jar with two handles. The shoulder is decorated with grooves, the mouth rim with ribs. There is a spout on the rim in the middle between the two handles. Perhaps it was used to mix wine.

Height: 840 mm, base diameter: 260 mm, shoulder diameter: 430 mm, mouth diameter: 220 mm.

From the northwestern part of the palace, cesspool at the southern end of the western wing, 2006. Mátyás Szőke – Gergely Buzás.



Jug, second half of the 15th century. 61.7.9.23.

White earthenware with red paint. Narrow base, rotund body, cylindrical neck, band-like mouth. There is a small spout on the rim, on the opposite to which a band handle is attached to the rim and the belly. The rim and the handle are decorated with a red stripe, the body with two sawtooth semicircles between two stripes.

Height: 238 mm, base diameter: 87 mm, greatest diameter: 170 mm, rim diameter: 133 mm, handle width: 33 mm.

From the southeastern palace wing, middle floor, under the barrel vault. 1951. Miklós Héjj.

Stemware, 14–15th century. 95.20.1.

White earthenware. Small base. The body is narrow above the base and then widens. The rim is curved. The body is decorated with fine ribs. The object is a bit skew.

Height: 110 mm, base diameter: 43 mm, greatest diameter: 90 mm, rim diameter: 81 mm.

Isolated find from Visegrád.

Stemware, 15th century. 95.21.1.

Ivory colored, finely tempered earthenware with very thin walls ("eggshell" ceramics). A barrel shaped body is attached to the conical base. The rim curves out- and upwards. The body is embellished with six fine grooves.

Height: 113 mm, base diameter: 51 mm, greatest diameter: 75 mm, rim diameter: 74 mm, wall thickness: 3 mm.

Visegrád, 4 Széchenyi Street.

Cup, second half of the 15th century. 2008.26.1.1.

White earthenware. Small base, rotund body, curved rim, the body is decorated with ribs.

Height: 75 mm, base diameter: 35 mm, greatest diameter: 74 mm, rim diameter: 65 mm.

From the cesspool at the southern end of the western wing, northwestern palace area. 2006. Mátyás Szőke – Gergely Buzás.

Stemware, second half of the 15th century, 2008.20.1.1.

White earthenware. Small base, rotund goblet, curved rim. The body is decorated with ribs.

Height: 112 mm, base diameter: 47 mm, greatest diameter: 94 mm, rim diameter: 84 mm.

From the cesspool at the southern end of the western wing, northwestern palace area. 2006. Mátyás Szőke – Gergely Buzás.

Stemware, second half of the 15th century. 2008.23.1.1.

Yellowish white earthenware. The edge of the base is vertically cut. The stem is thin, the goblet rotund, the shoulder not emphasized. The rim is curved and rounded. The body is evenly ribbed.

Height: 135 mm, base diameter: 55 mm, greatest diameter: 100 mm, rim diameter: 85 mm.

From the cesspool at the southern end of the western wing, northwestern palace area. 2006. Mátyás Szőke – Gergely Buzás.



















Stemware, second half of the 15th century. 2008.24.1

Light pink earthenware. The edge of the base is cut at an oblique angle. The stem is short, the goblet is egg-shaped, almost cylindrical. The small mouth rim curves out- and upwards. There is one rib between two grooves under the rim. The body is evenly grooved, the grooves are wide.

Height: 122 mm, base diameter: 49 mm, greatest diameter: 71 mm, rim diameter: 67 mm.

From the cesspool at the southern end of the western wing, northwestern palace area. 2006. Mátyás Szőke – Gergely Buzás.

Stemware, second half of the 15th century. 2008.22.1.1.

Yellowish white, finely tempered earthenware. The walls are very thin ("eggshell" ceramics). The edge of the base is flattened. The stem is short, the goblet egg-shaped. The small, tin rim is curved upwards. There are two ribs under the rim and a stripe of fine grooves on the body.

Height: 128 mm, base diameter: 55 mm, greatest diameter: 80 mm, rim diameter: 71 mm, wall thickness: 1–2 mm.

From the cesspool at the southern end of the western wing, northwestern palace area. 2006. Mátyás Szőke – Gergely Buzás.

Stoneware cup fragment, the middle or second half of the 15th century. 95.40.1.

Stoneware burnt dark gray. Reddish brown glaze with huge blisters. Shoulder fragment. The shoulder is round, and six small handles are attached to it and to a ring under the rim. The straight rim is grooved on the outside. From Lositze, Moravia.

Measurable height: 112 mm, diameter: 120 mm, rim diameter: 88 mm, handle width: 17–20 mm.

Outside the southern palace wall, east of the Angevin-period timber house, from a Matthias-period layer. 1988. Mátyás Szőke.

Fragment of an ornamental cup, first half of the 16th century. 50.229.

Finely tempered red earthenware, reddish brown glaze, yellow paint. Fragment of a cup with a round shoulder and a straight rim. The cup's side was pressed with fingers into a molding decorated with lines and a small cross in the middle so that a repetitive pattern was formed around the shoulder. Yellow paint was applied on the crosses on top of the glaze. The same yellow paint decorates the rim in a wavy pattern. Ornamental vessel from Austria.

Measurable height: 40 mm, greatest diameter: 90 mm, rim diameter: 65 mm.

From the northeastern wing of the palace, 1942. János Schulek.

Bronze plate, late 15th – early 16th century. 50.264.

Turned bronze plate. The body is flat, the thin rim curves horizontally outwards. There are fine, concentric circles visible on the inside surface, and a rivet in the middle. The object is undamaged.

Height: 20 mm, diameter: 165 mm.

From the area above the southern gate of the Water Tower, Lower Castle, 1934. A donation of Ödön Zavadil.

Fragment of a bronze plate, late 15th – early 16th century. 69.44.1. Fragment of a cast bronze plate. Deep plate with a wide, curved rim, its surface is ornamented with chasing.

Height: 22 mm, diameter: 170 mm.

From the external area of the Lower Castle, northeastern corner of grid square 67/XVIII, at a depth of 0–60 cm. 1967. Mátyás Szőke.

Copper spoon, second half of the 15th century. 69.49.3.

Copper spoon with a bended, drop-shaped head. The handle stem is narrow and has a rhombus-shaped cross section. The handle's end is round.

Length: 171 mm, head width: 44 mm, head length: 57 mm, handle diameter: 3 mm.

From the Lower Castle beside the northern gate tower, grid square 68/I, at a depth of 150–190 cm, from a Matthias-period layer. 1968. Mátyás Szőke.

Fork fragment, late 15th – early 16th century. 63.34.1.

Wrought iron handle core, handle veneer made of a cattle's radius; the handle is reinforced with copper nails and tubes. The handle is flat and widens towards the end. Two tines are broken off. The bone veneer is fixed with three nails, while the small copper tubes are arranged to form a geometric design.

Measurable length: 95 mm, handle length: 61 mm, handle width: 7–12 mm, handle thickness: 12 mm.

From the bath's terrace, northeastern palace area. 1952. Miklós Héjj.

Knife fragment, late 15th – early 16th century. 95.38.1.

Wrought iron core, wooden and copper nails, plates, small tubes and a knob. Rectangular iron core; the blade is wide but broken. On the handle's veneer the copper plates and small tubes are arranged to form a geometric design, which is further embellished with wooden inlay. The latter is reinforced by four bigger nails. The handle ends in a flat knob with three holes.

Measureable length: 142 mm, handle length: 91 mm, handle width: 11–16 mm, handle thickness: 9 mm, blade width: 15 mm. Isolated find from Visegrád.



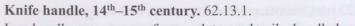


Knife handle, late 15th – early 16th century. 95.27.1.

Wrought iron core with wooden and nacre veneer, copper frame, plates and knob. Rectangular iron handle core, copper frame on both sides, and a flat knob with three holes at the end. The small copper plates form trapezoid sections into which alternating wooden and mother of pearl inlays are inserted.

Measurable length: 74 mm, width: 8–13 mm, thickness: 7 mm.

From the Citadel, internal narrow alley along the northern wall, survey trench 94/III, layer "b", at a depth of 0–120 cm. 1994. László Iván.



Iron handle core, copper frame, plates and nails, handle knob and a flat ring on the blade's side. Bone veneer. The small copper plates form trapezoid sections into which small bone plates are inserted and each one is reinforced with two nails. There is a knob at the end of the handle, with two holes, and a flat, curved copper ring on the blade's side.

Measurable length: 97 mm, handle width: 10-15 mm.

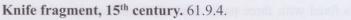
Isolated find from the Lower Castle. 1960. Miklós Héjj.

Knife handle, 15th century, 50.386.

Iron handle core, bone veneer, copper nails and handle knob. Two bone plates cover the oblong core. fixed with four copper nails. A flat, somewhat curved knob is attached to the handle's end.

Length: 75 mm, width: 10 mm.

From the northeastern palace area. 1941. János Schulek.



Iron knife, copper plates, glass paste. The blade is blunt. Eight copper plates are attached to the handle core, and parts of the green glass paste that filled the space between them have been preserved. The end of the handle and the knob has been broken off.

Length: 132 mm, width: 9 mm.

Isolated find from the Lower Castle. 1960. Miklós Héjj.

Knob of knife handle 94.640.1.

Seed-shaped copper knob attached to the end of an iron handle. It is decorated with a ridge.

Size: $16 \times 15 \times 10$ mm,

From the bath's corridor, burnt layer between the large rock face and the western wall.







Leave fragment, 15th century. 67.48.37.

Gilded silverware. Three leaves springing from a stem. The two side leaves are slightly curved backwards. Perhaps it came off an ornamental vessel.

Size: 28×23 mm.

From room D/1 of the northeastern palace wing. 1958. Miklós Héjj.

Spice bowl, late 15th century. 2009.3.1.1.

Yellowish white earthenware glazed in brownish yellow. Three flat spice bowls are combined into one, with a high, hollow handle in the middle. The handle is embellished with three incised applications; the upper end is also incised.

Height: 74 mm, width: 140 mm, height of bowls: 29 mm, diameter of bowls: 70 mm.

Found in front of the western facade of the northeastern palace wing, 1873. Mátyás Szőke.





Aquamanile fragment decorated with a king's head. First half of the 14th century. 2011.3.1.1

Snow white earthenware. The glaze is green on the inside, and yellow, green and dark brown on the outside. Hollow head- and shoulder fragment. The head is formed with incisions and applied adobe. The crown was cut out of an adobe plate, the hair is made of thin clay strings. The vessel was further embellished with stamped patterns, impressed circles, and an applied rib. The small attached to the back of the head led to the spout and supported it.

Measurable height: 160 mm, head diameter: 80–92 mm.

Found east of the chapter hall of the Franciscan friary, between the friary and the hillside, and on the northern courtyard of the friary, close to the palace wall, in a modern period fill. 1982, Mátyás Szőke, and 2008, Gergely Buzás.

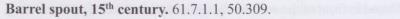




Faience bowl, second quarter of the 16th century, buried before 1540 98.1.1.

Blue and white faience, rotund bowl on a small foot ring. The bowl is embellished with a stylized flower and four tendrils with leaves, separated by wavy lines. The rim is decorated with a sawtooth pattern. Sedge leaves are painted on the lower side. Imported ware from Iznik, Asia Minor.

From the southeastern palace wing, the fill of the corridor's substructure. 1989. Mátyás Szőke.



Cast bronze barrel spout. The part that adjoins the cask is narrow. The stopper is inside the sleeve. M-shaped handle. The rectangular outlet curves downwards, with a handle-like protrusion on the upper side.

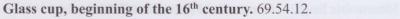
Length: 195 mm, height: 90 mm, greatest diameter: 25 mm. From the royal palace.

Barrel spout fragment, 14th–15th century. 62.1.35.

Fragment of a cast bronze spout. Square-shaped outlet with a small, handle-like protrusion on the upper side.

Length: 55 mm, width: 15 mm.

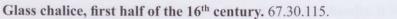
Found between two floor contexts of the palace chapel. 1952. Miklós Héjj.



Dark green glass. Barrel shaped body, lacy foot rim, the body is covered with glass drops oriented upwards. The rim is high and curves upwards.

Height: 134 mm, base diameter: 85 mm, diameter: 115 mm, rim diameter: 104 mm.

Internal lower castle, grid square II, from the well. 1968. Mátyás Szőke.



Colorless glass. Flat base, hollow, balustrade-like node with two rings below and above it. The goblet's lower part has a semi-globular shape, its walls are smooth, the rim is slightly thick.

Height: 145 mm, base diameter: 80 mm, mouth diameter: 79 mm. Lower castle, grid square 63/1, pit no.2. 1963. Miklós Héjj.





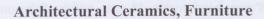


Glass chalice, around 1530. 69.45.2.

Colorless glass with applied white glass fibers. Flat base, node on the stem. The chalice widens in a cone shape. The lower part is embellished with applied glass fibers; there is another glass fiber below the rim. Imported ware from Venice.

Height: 172 mm, base diameter: 77 mm, node diameter: 42 mm, mouth diameter: 95 mm.

From the external lower castle, grid square 67/XVIII, pit "A", 1967. Mátyás Szőke.



Floor brick, 1360s. 50.253.

Red earthenware. Square shaped floor brick with obliquely cut edges. Decorated with a relief pattern that is impressed in the middle: an eagle spreading wings and wearing a crown, surrounded by a ring. From the floor of the palace chapel.

Size: 185 × 185 mm, thickness: 30 mm.

Found in the middle of the palace chapel, above the floor. 1948. János Schulek.

Floor brick, 1360s. 64.1.308.

Red earthenware. Square shaped floor brick with oblique edges. Decorated with a relief pattern that is impressed in the middle: a walking deer surrounded by a ring. From the floor of the palace chapel.

Size: 180 × 180 mm, thickness: 28 mm. From the palace chapel. Miklós Héjj.

Floor brick, 1360s. 64.1.316.

Red earthenware. Square shaped floor brick with oblique edges. Decorated with a relief pattern that is impressed in the middle: a rearing lion surrounded by a ring. From the floor of the palace chapel. Size: 175 × 175 mm, thickness: 28 mm.

From the palace chapel. Miklós Héjj.

Floor brick, 1360s. 64.1.381.

Red earthenware. Square shaped floor brick with oblique edges. Decorated with a relief pattern that is impressed in the middle: a blind tracery surrounded by a triple ring. From the floor of the palace chapel.

Size: 180 × 180 mm, thickness: 30 mm. From the palace chapel. Miklós Héjj.













Door ironwork, 15th century. 2000.29.1.1.

Wrought ironwork. One end forms a ring and is attached to the hinge, the rest is flat. The object is widest at the hinge and narrows towards the end. There are three holes at the hinge and four others on the rest of the object that serve fixing.

Length: 678 mm, width: 45–69 mm, hinge diameter: 59 mm. Isolated find from Visegrád.

Door ironwork fragment, 14th century. 2000.40.1.1.

The onion-shaped end of a wrought iron door band with a hole for fixing at the middle.

Length: 128 mm, band width: 48 mm, width of the onion shaped part: 80 mm.

From the northern cloister walk of the northwestern palace wing, grid square 91/XV, from the fill below the Matthias-period floor level. 1991. Mátyás Szőke – Gergely Buzás.

Door ironwork, 14th century, 2000.40.2.1.

The onion-shaped end of a wrought iron door band with a hole for fixing at the middle. The rest is broken off.

Length: 91 mm, width: 97 mm.

From the northern cloister walk of the northwestern palace wing, grid square 91/XV, from the fill below the Matthias-period floor level. 1991. Mátyás Szőke – Gergely Buzás.

Window ironwork, 14th–15th century. 2000.56.1.1.

Wrought ironwork. One end forms a ring as if it had been part of a hinge. The object is widest at the ring, and narrows toward the other end which broke off. On the wide part there are three, on the narrower end one hole for fixing.

Length: 280 mm, width: 68 mm, hinge diameter: 27 mm.

Found in front of the western facade of the palace, grid squares 88/XI–XII. 1988. Mátyás Szőke

Door latch, 15th century. 2000.58.1.1.

Wrought iron rod to which a flat band is attached in the middle. There is a rectangular hole on the band's end which probably accommodated the lock.

Size: 317 × 152 mm.

From the northwestern palace wing. 1986. Mátyás Szőke.

Circular window glass panels, late 15th century. 94.14.1, 94.21.1, 94.143.1, 94.161.1, 94.284.1.

Circular, glass panels blown in form with thin, curved edges. Diameter: 85–80 mm.

From the ornamental courtyard, the chapel and the lane behind the chapel, and from the Lower Castle.

Window glass panel, late 15th century. 94.9.1.

Circular window glass panel blown in form, with a relief decoration formed spokewise.

Size: 57×51 mm.

From the Royal Palace.

Triangular window glass panel, late 15th century. 94.3.1.

Concave glass triangles that filled the space between circular glass panels of a window.

Size: 53 × 32 mm.

From the Royal Palace.

Painted window glass fragments, late 15th century. 94.322. – 94.331.

Ten fragments of a lead glass window. Colorful glass with black paint. From the upper northern flight of stairs and north of the wall.

Casing of a lead glass window panel, late 15th – early 16thcentury. 50.207.1–4.

Deformed fragments of the lead casing of a window that consisted of circular panels.

Size: 60×58 mm.

From the northeastern palace wing, 1943. János Schulek.

Casing of a lead glass window panel, late 15th – early 16thcentury. 62.1.8.

Lead casing with a groove, strongly deformed.

Length: 50 mm.

From a burnt layer above the floor of the palace chapel. 1948. Miklós Héjj.

Casing of a lead glass window panel, late 15th – early 16thcentury. 62.1.9.

Lead casing with a groove, strongly deformed.

Length: 48 mm.

From a burnt layer above the floor of the palace chapel. 1948. Miklós Héij.

Ceramic water pipes, 15th century. 2007.1.1.1. 2007.1.2.1.

Wheel-thrown earthenware pipes, tempered with gravel and burnt pink. They are wide at one end and narrow towards the other, flat end. On one of the pipes there is an incised depiction of a bird with spread wings and another, abstract figure.

Length: 450 and 477 mm, diameter of the narrow end: 160–170 mm, diameter of the wide end: 230 mm.

From the water pipes above the southern palace wing. 1987. Mátyás Szőke.





Lead water pipe, Matthias period. 2007.2.1.1.

Part of a lead water pipe with even diameter. The pipe was soldered, and 20 cm from the soldering spot the pipe narrows: it must have adjoined another piece at this point. The other end is damaged and twisted.

Length: 1150 mm, diameter: 50–55 mm, thickness: 5–7 mm.

From the ornamental courtyard, the southern side of the Hercules Fountain's foundation. 1954. Miklós Héjj.



Copper water pipe, Matthias period. 62.1.80.

Copper pipe with even diameter. Narrows at one end. There is an abstract figure incised on the narrow end.

Length: 660 mm, diameter: 65 mm, diameter of the narrow end: 48 mm.

From the Royal Palace.



Bands of a water pipe with wooden remains, 15th century. 62.1.83.2.3.

Wrought iron bands for reinforcing wooden water pipes, with remains of wood.

Diameter: 175 mm, width: 33 mm.

From the corridor between the southeastern palace wing and the chapel. 1953. Miklós Héjj.



Fragment of a majolica floor brick, Matthias period, 1480s. 50.287.

Red earthenware, blue and yellow paint and colorless glaze. Fragment of a hexagonal majolica floor brick decorated with tendrils, flowers and berries. The edge is ornamented with a meander motif.

Measurable length: 75 mm, width: 105 mm, thickness: 30 mm. From the ornamental courtyard. 1941. János Schulek.



Fragment of a majolica floor brick, Matthias period, 1480s. 2008.70.1.1.

Red earthenware, blue and white paint and colorless glaze. The glaze is blistered. Half of a square-shaped floor brick from a majolica floor, decorated with the coat of arms of King Matthias, depicting a raven sitting on a branch, holding a ring in its beak. The coat of arms is surrounded with blue and yellow lines.

Size: 79 × 79 mm, measurable width: 51 mm, thickness: 23 mm. Visegrád, 4 Rév Street, grid square 2006/4, stony layer with brick fragments. 2007. István Kováts.



Decorated, glazed floor brick, Matthias period, 1480s. 60.14.1.2. Red earthenware, engobe, green glaze. Rhombus shaped floor brick, the upper surface is glazed except for a cross-shaped area.

Measurable length: 160 mm, width: 140 mm, thickness: 35 mm. From the level of the palace chapel. 1935. János Schulek.

Glazed floor brick, Matthias period, 1480s. 60.11.1.

Red earthenware, yellow glaze. Square shaped floor brick.

Size: 115 × 115 mm, thickness: 20 mm.

From the level of the palace chapel. 1935. János Schulek.

Glazed floor brick, Matthias period, 1480s. 67.48.44.

Red earthenware, golden brown glaze. Square shaped floor brick.

Size: 115 × 115 mm, thickness: 25 mm.

From the lower reception court of the palace. 1957. Miklós Héjj.

Glazed floor brick, Matthias period, 1480s. 67.48.46.

Red earthenware, green glaze. Square shaped floor brick.

Size: 110 × 110 mm, thickness: 20 mm.

From the lower reception court, between two pillars. 1956. Miklós

Héjj.

Glazed floor brick, Matthias period, 1480s. 70.25.1.6.

Red earthenware, brownish yellow glaze. Rhombus shaped floor brick, from the floor of the upper cloister walk of the ornamental courtvard.

Size: 370 × 195 mm, thickness: 35 mm.

From the ornamental courtyard in the northeastern palace wing.

Glazed floor brick, Matthias period, 1480s. 2007.71.1.1.

Red earthenware, engobe and apple green glaze. Triangular floor brick, identical in shape and size to the rhombus shaped floor brick longitudinally cut in half. From the floor of the upper cloister walk of the ornamental courtyard.

Length: 374 mm, width: 95 mm, thickness: 35 mm.

From the ornamental courtyard in the northeastern palace wing.

Glazed floor brick, Matthias period, 1480s. 70.25.3.5.

Red earthenware, dark green glaze. Triangular floor brick, identical in shape and size to the rhombus shaped floor brick transversally cut in two. From the floor of the upper cloister walk in ornamental courtyard.

Size: 200 × 245 mm, thickness: 35 mm.

From the ornamental courtyard in the northeastern palace wing.





Glazed roof tiles, Matthias period, 1480s. 60.19.1–5.

Red earthenware, glazed in white, yellow, green, brown and dark brown on the lower part of the tiles. Rectangular roof tiles, with sharp lower edges.

Width: 200 mm, measurable length: 115.205 mm, thickness: 17–20 mm.

From the northeastern palace area, 1935. János Schulek.



Glazed roof tiles, Matthias period, 1480s. 60.18.1. 50.18.3-4.

Red earthenware, glazed in dark green, brown and white on the lower part of the tiles. Cogged tiles with sharp, bent lower edges. Width: 200 mm, measurable length: 145–270 mm, thickness: 20 mm. From the area of the palace chapel, 1935. János Schulek.



Ornamental roof sphere, Matthias period. 70.10.2.1–5.

Red earthenware, dark green glaze. Wheel-thrown ornamental roof sphere that consists of three parts. The lower part resembles a tube and narrows upwards. The middle element, the sphere itself rests on the latter's upper edge. The sphere is decorated with a protruding rib. The upper part is conical in shape and ends in an onion-like knob. The object ornamented the palace chapel's roof.

Height of the lower element: 700 mm, diameter: 240–280 mm, height of the sphere: 600 mm diameter: 720 mm, height of the uppermost part: 470 mm, diameter of the base: 250 mm, wall thickness: 5–40 mm.

From the Royal Palace.



Lock, 15th century. 60.28.1.

Wrought iron. Trapezoid lock plate with a key hole around which a V-shaped, graven applied ornament is arranged, further embellished with traceries. The lock is on the back side, and there are holes for fixing at the edges.

Length: 335 mm, width: 170-220 mm.

From the bath corridor of the palace, 1942. János Schulek.



Lock, 15th century. 61.7.4.3.

Wrought iron. Trapezoid lock plate with holes for fixing on the edges, and a lock on the back side.

Size: 140 × 170 mm.

From the lower reception court of the palace, in front of the great cellar's entrance. 1956. Miklós Héji.

Lock, 15th century. 95.37.1.

Wrought iron locking box with a key hole, and another hole on the plate. Oblong object with rectangular cross section, with a hollow structure on the back side.

Size of the lock plate: 54×28 mm, length of the back part: 63 mm, diameter of the back part: 17×19 mm.

From an upper humus layer in the small northeastern stony courtyard of the palace. 1951. Miklós Héjj.

Keyhole curtain plate, 15th century. 50.94.

Wrought iron. Shield shaped plate with a keyhole in the middle and applied ornaments arranged in V shape around it.

Height: 120 mm, width: 91 mm.

From the great cellar of the palace. 1943. János Schulek.

Lock plate, 15th century. 2000.61.1.1.

Lock plate in the shape of a coat of arms, copper plate. There are three nail holes for fixing in the corners. There are two bend shaped openings on both sides of the plate.

Height: 70 mm, width: 61 mm.

From the northwestern palace wing, at the northern end of the western wing, grid square 91/XV, in front of the southeastern pillar, brown layer, at a depth of 380 cm. 1991. Mátyás Szőke – Gergely Buzás.

Lights

Candle holder, 15th century. 67.48.40. 70.11.1–2.

Cast bronze ring to which three curved, tongue-shaped protrusions are attached. There is a hole at the end of each protrusion. A turned candle stick decorated with ribs is inserted into two of these holes. Measurable height: 85 mm, width: 180 mm.

Isolated find from the Royal palace. János Schulek.

Base of a candle holder, 15th, early 16th century. 69.34.2.

Base and spill holder of a turned bronze candle holder. The base is slightly bell-shaped and decorated with grooves. The stem is short and thick. The spill holder resembles a bowl and is ornamented with grooves. Its edge is damaged. The stem's lower part is bell-shaped, the upper part broke off. There is a hole in the stem.

Height: 63 mm, base diameter: 135 mm, spill holder diameter: 115 mm. From the inner castle area of the Lower Castle, grid square XVII, pit no.1. 1967. Mátyás Szőke.

















Candle holder fragment, 15th, early 16th century. 61.7.4.5.

Arm of a multi-armed bronze candle holder. The stem has a square cross section. The spill holder supports a ring to which a hexagonal candle holder decorated with openwork is attached.

Height: 85 mm, spill holder diameter: 60 mm, candle holder diameter: 25 mm From the lower reception court of the palace, in front of the great cellar, at a depth of 140–170 cm. 1956. Miklós Héjj.

Candle snuffer, late 15th – early 16th century. 50.55.

One arm of a brass candle snuffer. Its stem is partly twisted, partly straight, rectangular. At the end there is a hole for the nail with which the two parts were joined. The snuffer is trapezoid, its bottom is depressed along the edges, and its external side is ornamented with three recessed concentric rings.

Length: 92 mm, snuffer width: 17 mm, stem diameter: 2 mm. From the ornamental courtyard of the palace. 1942. János Schulek.

Candle ring fragment, Matthias period. 2007.7.1.1.

Red earthenware, white engobe, yellow, green and brown glaze. Fragments of a flat ring, with different geometrical, incised sgraffito ornamentation on the two sides, colored with different kinds of lead glaze.

Thickness: 16 mm, external diameter: 110 mm, internal diameter: 36 mm.

From the Citadel, internal narrow alley along the northern wall, grid square 96/I. 1996. László Iván.

Glass lamp, Matthias period. 2007.3.1.1.

Transparent, green glass oil lamp blown in form. The lower part has thick walls, and the traces left by the blowpipe are still visible. Above this part the walls widen and become thinner. The upper part is slightly rotund on the bottom. The inside of the cylindrical rim is worn by the plate to which the wick was attached. It might have been part of a chandelier because it was brought to light along with two similar lamp fragments.

Height: 153 mm, diameter: 133 mm, rim diameter: 123 mm, wall thickness: 1–6 mm.

From the cesspool in the southern room of the western range, northwestern palace wing. 2006. Mátyás Szőke – Gergely Buzás.

Fragment of a glass lamp, Matthias period. 2007.4.1.1.

The upper part of a colorless glass oil lamp blown in form. The upper part is high and cylindrical, it narrows suddenly to the bottom which broke off. It is decorated with gilded floral ornaments on one side under the rim, in a "U" shape turned upside down. Manufactured in Venice.

Measurable height: 133 mm, diameter: 94 mm, lower diameter: 34 mm, wall thickness: 9–12 mm.

From the cesspool in the southern room of the western range, northwestern palace wing. 2006. Mátyás Szőke – Gergely Buzás.



Tools

Melting pot, 14th-15th century. 62.1.41.

Gray earthenware mixed with graphite. Melting pot with thick walls, a triangular mouth, and a rounded rim.

Height: 98 mm, bottom diameter: 68 mm.

From the eastern lane behind the palace chapel, beside a circular foundation, at a depth of 70 cm. 1952. Miklós Héjj.

Melting pot, 14th-15th century. 50.250.

Gray earthenware mixed with graphite. Melting pot with thin walls, a circular base, a triangular mouth and a curved, rounded rim.

Height: 60 mm, base diameter: 25 mm, thickness: 3 mm.

Isolated find from the northeastern palace area. 1949. Miklós Héji.

Pot. 14th-15th century. 95.24.1.

Gray earthenware. Circular pot that widens in a slight cone shape upwards, with a thick, rounded rim. The object might have been used for crumbling material.

Height: 67 mm, base diameter: 38 mm, rim diameter: 90 mm. Isolated find from Visegrád.

Pot. 14th-15th century. 95.25.1.

Brownish red earthenware. Circular pot that widens in a slight cone shape upwards, with a thick, rounded rim. The object might have been used for crumbling material.

Height: 70 mm, base diameter: 48 mm, rim diameter: 96 mm. Isolated find from Visegrád.





Rasp, 14th century. 2000.43.1.1.

Wrought iron rasp. The head is rectangular, the handle narrows towards the end and is slightly thicker than the head.

Length: 158 mm, head: $9 \times 15 \times 4$ mm, handle: $66 \times 10 \times 6$ mm. From the lower reception courtyard of the palace, north of the Angevin-period house, grid square 96/5, layer above green rubble. 1996. Mátyás Szőke – Gergely Buzás.

Pointer, Sigismund period. 2000.44.1.1.

Wrought iron. The object's cross section is rectangular but the corners are chamfered. The point is very narrow, the other end is wide.

Length: 98 mm, diameter: 10-11 mm, point diameter: 3 mm.

From the northwestern palace area, at the northern end of the western wing, grid square 91/XV, below the Matthias-period floor level. 1991. Mátyás Szőke – Gergely Buzás.

Refuse from the mint, 1440–1444. 94.690.1.–94.696.6.

Six counterfeit denars of Vladislaus I (CNH. II.146A) minted of copper. Small, unminted copper plates and rectangular, cylindrical pieces of copper.

From a post hole below the brick floor in the chamber equipped with a hypocaust, on the lower floor of the southern palace wing 1989. Mátyás Szőke.

Melted lead, Matthias period. 2000.73.1.1.

An approximately triangular piece of melted lead. Other materials also adhered to its surface.

Size: $170 \times 165 \times 30$ mm.

From the lower reception courtyard of the palace, grid square 92/XVI. 1992. Mátyás Szőke – Gergely Buzás.

Drill. Late 15th – early 16th century. 94.654.1.

Wrought iron. The cross section is circular, the head is twisted, the other end is flat and ends in a small hook.

Length: 200 mm, diameter: 13 mm.

From the small northern stony courtyard of the palace, upper humus layer. 1950. Miklós Héjj.

Carpenter's axe, 15th–16th century. 95.70.1.

Iron axe with a trapezoid, wide blade and a claw. There are two heart-shaped maker's marks on the blade's narrowing neck. The axe's butt is thick and asymmetrical. Remains of the wooden handle were found in the axe's perforation.

Width: 173 mm, length: 122 mm, blade length: 150 mm.

From the Danube's bed.

Carpenter's hammer, 14th-15th century, 95.23.1.

Iron hammer with a perforation in the middle to accommodate the handle. One side is formed as a rectangular hammer, the other as a flat, bipartite claw.

Length: 128 mm, greatest width: 34 mm, handle perforation diameter: 14×22 mm.

Found in front of the northern wing of the northwestern palace area, in the cloister walk, grid square 86/III, at a depth of 230 cm. 1986. Mátyás Szőke.

Pickaxe for stone carving, 15th century. 2008.73.1.1.

Iron pickaxe. It was forged by folding a malleable iron piece; the two ends were forged into rectangular heads, while a hole was left in the middle to accommodate the handle.

Length: 330 mm, head size: $260 \times 24 \times 12$ mm, internal diameter of the handle perforation: 48 mm.

From the lower reception courtyard of the palace, grid square 95/I, building debris layer, at a depth of 20–50 cm. 1995. Mátyás Szőke – Gergely Buzás.

Wedge for stone carving, 15th century. 2008.74.1.1.

Rectangular iron tool. Its cross section is also rectangular and narrows towards one end. One end is flat, the other end is roughly formed. There are deep, incised parallel lines and X-shaped incisions on one side of the wedge.

Length: 92 mm, width: 25 mm, thickness: 3-9 mm.

From the lower reception courtyard of the palace, inside the Angevin-period building, grid square 96/II, green rubble layer. 1996. Mátyás Szőke – Gergely Buzás.

Hammers for stone carving, 14th-15th century. 2008.75.1.1. 2008.76.1.1.

Triangular iron hammer heads with pronounced edges and sharp ends. The handle perforation is rectangular but irregular, roughly shaped. Length: 79–83 mm, width: 25–27 mm, length of the point: 52–56 mm. From the lower reception court of the palace, grid square 94/3, on the eastern side of the pillar, brown adobe layer no.1, and grid square 95/5, light brown layer under a roof tile. 1994–95. Mátyás Szőke – Gergely Buzás.

Chisel for stone carving, 15th century. 2008.77.1.1.

Iron chisel. The stem is octagonal, the narrowing end is hammered from two sides and forms a pronounced edge. The wider end of the stem is rounded.

Length: 218 mm, diameter: 11–13 mm, edge length: 23 mm, edge width: 13 mm.

From the lower reception court of the palace, grid square 96/3, green rubble layer. 1996. Mátyás Szőke – Gergely Buzás.





Leaded iron pole for fixing a stone, 14th-15th century. 2008.78.1.1.

Iron rod. The cross section is square shaped on one side and rectangular on the other. Both ends are filled with lead. A part of the lead is also square shaped, while the other is irregular in its cross section. Between them the lead formed a puddle.

Height: 101 mm, diameter of the square shaped part: 24 mm, diameter of the irregular part: 32 mm.

From the small northeastern stony courtyard of the palace, 1948. Miklós Héjj.



Leaded window corner brace, 14th century. 2008.79.1.1.

"L" shaped corner brace with rectangular cross section. One part of the "L" is flat, this part is surrounded with an irregular cuboid lead fill.

Length: 135 mm, width: 108 mm, corner brace size: $55 \times 85 \times 20$ mm. From the eastern part of the lower reception courtyard of the palace, grid square 93/7, from the layer above the Angevin-period floor level. 1993. Mátyás Szőke – Gergely Buzás.



Door socket, 15th century, 1.1.1.1.

Iron door socket, round head, narrowing stem, and rectangular cross section. The bottom is flat. There is a drop-shaped depression on the top in which the door hinge notated.

Height: 32 mm, length: 209 mm, width: 50 mm, depression: $54 \times 27 \times 14$ mm.

From the southeastern palace area, around the cellar.



Blacksmith's hammer, second half of the 15th, first half of the 16th century. 2008.81.1.1.

Iron hammer with a rectangular cross section, the edges are chamfered, the edge is obtuse. The perforation that accommodates the handle is oval shaped. The other end of the hammer is wide with a flat head surface.

Length: 217 mm, width: 77 mm, thickness: 59 mm, edge: 53×24 mm, butt: 71×71 mm, handle perforation: 42×32 mm.

From the lower reception courtyard of the palace, grid square 96/1, upper layer. Mátyás Szőke – Gergely Buzás.



Paint pot, 15th century, 50.269.

White earthenware. Small base, short stem, the body is ribbed, the rim curves upwards. The external surface is heavily sooty, and there are traces of red paint inside the pot.

Height: 85 mm, diameter: 95 mm, base diameter: 49 mm, rim diameter: 87 mm.

From a cesspool in the northeastern palace area. 1943. János Schulek.

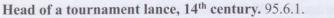
Utensils, Weapons, Clothing Accessories, Toys

Embossings of a plate ornamented with a coat of arms, the period of Louis the Great. 67.15.1.1–23, 95.85.1.

Metal fragments of a plate featuring the coat of arms of Louis the Great. Copper pieces, some of them (the white parts of the decoration) are covered with tin. Fragments of a Fleur de Lys, tinned wavy stripes, fragments of a crown, an eagle's beak and an ostrich head, the letters L and I, curved stripes, and rivets with globular heads.

Currently the fragments are installed on a plate to form the coat of arms. The diameter of the plate is 173 cm.

Lower Castle, grid square 59/2. 1962. Miklós Héjj.



Head of a tournament lance, with three tips and a small socket. The tips have rhomboid cross sections.

Length: 75 mm, width: 34 mm, tip length: 28 mm, socket diameter: 42 mm.

From the lower reception courtyard of the palace, grid square 94/4, from the surface of a pebble layer. 1994. Mátyás Szőke – Gergely Buzás.

End of a javelin pole, the period of Charles Robert. 2000.32.1.1.

Triangular iron end, conical, with a pronounced tip. The tip is thick in general but thin at the end, and there is a small circular hole on it. The object helped to stick the javelin into the ground.

Length: 141 mm, diameter: 6-40 mm.

From the lower reception courtyard, below the first floor level of the building from the period of Charles I, mortar accumulation. 1996. Mátyás Szőke – Gergely Buzás.

Sword, 14th-15th century, 73.1.1.1.3.

Double edged sword with an inlaid maker's mark. The cross guard has a rectangular cross section. The ambidextrous grip is flat, its iron core narrows towards the end, and there is a large, flattened iron pommel at its end.

Length: 123 cm, handle length. 245 mm, blade width: 56 mm, cross guard: 185 mm, pommel: 65 × 40 mm.

From the river bed of the Danube. 1973.

Horseshoe, 14th century, 95.9.1.

Iron horseshoe, with two circular and two rectangular holes, on both sides. Both ends are bent backwards.

Length: 160 mm, diameter: 137 mm.

From the eastern half of the lower reception courtyard, grid square 94/3, at the northwestern corner of the pillar, from a stony, brown adobe surface. 1994. Mátyás Szőke – Gergely Buzás.



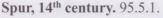












Iron spur for the left foot. The stem has a triangular cross section. The part where it was fastened to the foot is hammered flat and curves a bit upwards. There are two holes in it for fastening. The rowel is small, with five spikes.

Length: 135 mm, width: 83 mm, rowel diameter: 40 mm.

From the northern courtyard of the palace. 1950. Miklós Héjj.



Axe with a wooden handle, 14th century, 2008.82.1.1.

Small iron axe with a small head and an edge that widens to a semicircular shape; its lower part is broken off. The handle is flat, has a socket and a rectangular cross section. A small fragment of the wooden handle is still in place.

Height: 215 mm, width: 117 mm, blade length: 69 mm, measurable length of the handle: 195 mm.

From the lower reception court of the palace, the debris layer of the building that dates to the period of Charles Robert, grid square 95/7. 1995. Mátyás Szőke – Gergely Buzás.



Copper plate of a balance scale, second quarter of the 14th century. 2000.33.1.1.

Circular plate, the middle has a plate-like concave shape, the rim is straight, its edge is curved backwards. There are three holes for fixing on the edge. A reddish yellow coating is applied on the front panel.

Diameter: 90 mm, depth: 15 mm.

From the lower reception courtyard, the gray adobe floor level of the building dated to the period of Charles Robert, grid square 96/2. 1996. Mátyás Szőke – Gergely Buzás.



Silver embossing, 14th–15th century, 56.2.1.

Rectangular silver plate with rhomboid background decoration and incisions on the edges. A cast silver lion figurine is fastened in the middle. The animal is sitting and looking on the left.

Height: 25 mm, width: 35 mm, size of the lion figurine: 15×13 mm. From the northern upper courtyard of the palace, at the flight of stairs. 1951. Miklós Héjj.



Decorative plate for clothes, Angevin period. 2000.34.1.1.

Rectangular copper plate, with a hole for fastening at each corner. The plate is decorated with the relief of a huge ring.

Size: 44×43 mm, thickness: 4 mm.

From the eastern part of the lower reception court, grid square 93/3, above the yellowish adobe layer. 1993. Mátyás Szőke – Gergely Buzás.

Cloak buckle, Angevin period. 2000.35.1.1.

Circular iron buckle, with a pin that narrow towards its end. It might have been used for fastening a cloak.

Diameter: 38 mm, pin width: 3–7 mm, thickness: 5 mm.

From the eastern part of the lower reception court of the palace, grid square 92/3. 1992. Mátyás Szőke – Gergely Buzás.

Strap fastener, Charles Robert period. 2000.36.1.1.

Copper strap fastener that consists of two trapezoid plates connected by two rivets. The upper plate has lacy edges, and is further embellished by a small sphere in the middle. The other half is broken off.

Length: 33 mm, width: 17-22 mm, thickness: 3-8 mm.

From the lower reception courtyard, the lowermost floor level in the southeastern corner of the building dated to the period of Charles Robert, grid square 96/4. 1996. Mátyás Szőke – Gergely Buzás.

Scissors, second quarter of the 14th century. 2000.38.1.1.

Scissors made of two iron plates attached to each other with an iron rivet. The handles are thin, bent and broken.

Length: 138 mm, width: 19-29 mm.

From the lower reception court of the palace, floor level of the building dated to the period of Charles Robert, survey trench 94/1. 1994. Mátyás Szőke – Gergely Buzás.

Scissors, second quarter of the 14th century. 2000.37.1.1.

Scissors made of two iron plates attached to each other with an iron rivet. The handles have a rectangular cross section; both the handles and the blades are broken.

Length: 160 mm, width: 22-43 mm.

From the lower reception court of the palace, floor level of the building dated to the period of Charles Robert, grid square 96/2. 1996. Mátyás Szőke – Gergely Buzás.

Ring, first half of the 14th century. 2008.38.1.1.

Ring manufactured from a bent and soldered copper band. It is ornamented with a relief text written with Gothic letters: the names of the Three Kings. However, the two ends are missing, and so the text reads "SPARmELChIORBAL".

Diameter: 17–19 mm, height: 4 mm, thickness: 0.5 mm.

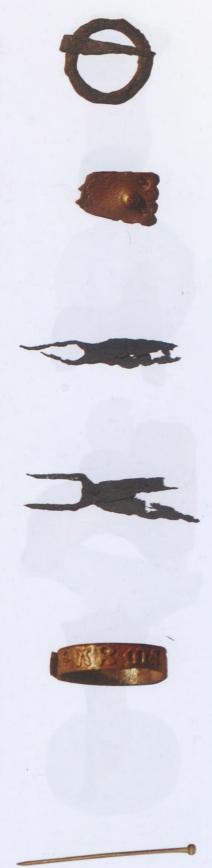
From the western corner of the northern cloister walk of the northwestern palace wing, grid square 96/IV, from a mortar surface below the 14th century floor level. 1986. Mátyás Szőke.

Pin, Middle Ages. 50.96.

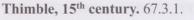
Bronze pin with a flattened spherical head. The pin is curved and the end broke off.

Length: 50 mm.

From the Lower Castle, at the water tower. 1937. János Schulek.







Cast bronze thimble with a cylindrical body and a semi-sphere shaped upper part. The whole body is decorated with small impressions.

Height: 13 mm, diameter: 16 mm.

From the lower Castle, at the water tower. 1937. János Schulek.



Thimble, 15th century, 67.5.2.

Cast iron thimble. The body narrows upwards, the top is open. There are impressions with small holes arranged into five rows around the body.

Height: 16 mm, lower diameter: 23 mm, upper diameter: 20 mm. Visegrád, Rév Street. 1960. Miklós Héjj.



Toy horse, 14th–15th century. 95.3.1.

Light red earthenware glazed in yellow, formed without a mold. Its head and one leg broke off. Parts of the other three legs and the tail are also missing. There is a hole on the belly so that the figurine could be placed on a stick.

Height: 51 mm, length: 42 mm, width: 22 mm.
Isolated find from Visegrád.



Mounted figurine, toy, 15th–16th century. 68.18.2.

Light red earthenware glazed in yellow, formed without a mold. The horse's head and legs are broken. The rider's upper body is also missing. His legs are schematic. The breast strap and the breeching are represented by small incised lines on the horse figurine. There is a small hole between the two front legs of the horse so that the figurine could be placed on a stick.

Height: 65 mm, length: 65 mm, width: 35 mm.

From the internal area of the Lower Castle, grid square I, pit no. 1. 1967. Miklós Héjj – Mátyás Szőke.



Doll, 14th-15th century, 61.6.9.

Light red earthenware, manufactured without a mold. The head broke off, the body is solid, the skirt is hollow and partly broken. The figurine wears clothing that closes with a row of knobs on the front side. The clothing is padded at the shoulders, the skirt has long wrinkles. The bottom of the skirt serves as the figurine's base.

Height: 82 mm, diameter: 37 mm.

Isolated find from Visegrád.

Doll, 14th century. 67.47.1.

Fragment of a yellowish pink earthenware doll manufactured without a mold. The head broke off. The skirt is conical shaped and hollow inside, it is also broken. The figurine wears clothing that closes with a row of knobs on the front side. A ribbon runs along the décolleté of the clothing. The clothing is padded at the shoulders, the skirt has long wrinkles.

Height: 100 mm, diameter: 60 mm.

Found at Visegrád, Rév Street, at the monument. 1964. Miklós Héjj.

Doll's head, 14th century. 95.4.1.

Finely tempered snow white earthenware, head of a doll manufactured without a mold. The nicely shaped face is encompassed by a "kruseler" type of bonnet. The back side is flat. The object is broken at the neck.

Size: 50×48 mm, thickness: 11-19 mm.

From the northern part of the western wing of the northwestern palace area, grid square 91/XV, from the 14th century floor level. 1991. Mátyás Szőke – Gergely Buzás.

Woman's head, ceramic figurine, 14th century. 60.10.1.

White earthenware, statuesque woman's head and upper torso, manufactured with a pressing mold. The back side is flat. The face is nicely detailed. There is a headgear on the head.

Height: 36 mm, width: 22 mm, thickness: 10 mm.

Found in the palace during heritage protection works, behind the retaining wall of the chapel terrace. 1959.

Bird figurine, 14th century. 62.1.69.

Gray earthenware with a graphited surface. Fragment of a bird's body (perhaps a raven?), manufactured without a mold. The tail broke off. There is a hole on the figurine's bottom. It might have been a children's toy. Imported ware from Austria.

Length: 116 mm, diameter: 42 mm.

From the northeastern palace area.

Metal gaming piece, 14th early 15th century. 2000.39.1.1.

Gaming piece made of electrum. One side is ornamented with a trefoil crown inside a hexafoil frame whose end is embellished with lilies, while the other side is decorated with a "Fleur de Lys" lily relief encompassed by a dotted line. The embossings are in an asymmetrical position in relation to each other.

Diameter: 13 mm, thickness: 3.5 mm.

From the room west of the corridor in the northern part of the northeastern palace wing, from a rift in the early brick floor. 2000. Mátyás Szőke – Gergely Buzás.



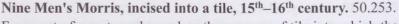








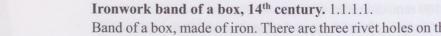




Fragment of a rectangular, red earthenware roof tile into which the gaming board of the Nine Men's Morris game was incised.

Size: 120×160 mm, thickness: 23 mm.

From the northeastern palace area. 1949.

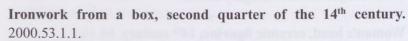


Band of a box, made of iron. There are three rivet holes on the wider part of the object's trapezoid shaped side, while the other, narrow part ends in two round pivots that are bent back and hammered flat. An iron rod was inserted into the pivot and its ends hammered. The

narrower band also adjoins the rod with another pivot. There is one rivet hole on the rectangular band.

Length of the two bands: 177 mm, narrow band: 58×27 mm, trapezoid shaped band: 88×70 mm.

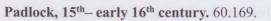
From the lower reception courtyard, grid square 94/2, brown layer. 1994. Mátyás Szőke – Gergely Buzás.



Narrowing iron band that ends in an onion shaped plate. There are rectangular holes for fastening in the middle of the onion shaped part as well as on the other, broken end.

Length: 147 mm, band width: 17–26 mm, width of the onion shaped part: 35 mm.

From the lower reception court of the palace, from a yellow fill between two floor levels of the building dated to the period of Charles Robert, grid square 96/1. 1996. Mátyás Szőke – Gergely Buzás.



Rectangular shaped, wrought iron lock with a cylindrical, protruding keyhole and a semicircular shackle.

Height: 44 mm, width: 49 mm, thickness: 15 mm.

From the northern lower courtyard of the palace, 1942. János Schulek.

Padlock key, second half of the 14th century. 2000.31.1.1.

Wrought iron padlock key, with a flattened shaft. The thicker half has a truncated conical shape and a ring is attached to its end. On the thinner end there is a round bit with a cross shaped hole, small incisions and V-shaped grooves.

Length: 134 mm, key diameter: 33 mm, ring diameter: 20 mm. From the lower reception courtyard of the palace, purple fill between two floor levels of the building dated to the period of Charles Robert, grid square 96/1. 1996. Mátyás Szőke – Gergely Buzás.







Padlock key, 15th-16th century. 2000.59.1.1.

Wrought iron. The bit consists of an oval disk to which a rectangular iron plate is fastened. Two other metal plates were attached perpendicular to the latter. There is a polygonal iron knob on the other side of the oval disk.

Size: $46 \times 16 \times 10$ mm, bit length: 38 mm, knob diameter: 12 mm. From the lower reception courtyard of the palace, grid square 92/XVIII. 1992. Mátyás Szőke – Gergely Buzás.

Key, 15th century. 2000.42.1.1.

Iron key. The bow is in the shape of a ring with a rectangular cross section. The shaft was made of a flat piece curved into a cylinder. The blade is formed from the same iron piece as the shaft. The rectangular blade at the shaft's end has one incision on each of the three sides.

Length: 162 mm, bow diameter: 54 mm, shaft length: 110 mm, blade size: 37×30 mm.

From the lower reception courtyard, grid square 96/2, green rubber layer. 1996. Mátyás Szőke – Gergely Buzás.

Rattle, 15th century. 50.304.

Spherical rattle made of copper. There is a longitudinal opening on the bottom that widens and forms a circular shape at both ends. A rectangular handle was attached to the top for fastening. There is a small rattle inside the copper body.

Diameter: 30 mm.

Northern palace wing, upper cellar. 1941. János Schulek.

Button with shank, 15th-16th century. 2000.45.1.1.

A button made of two soldered, convex copper disks. The object resembles a pressed sphere in shape. One side is cut off and a copper shank is attached to it. Traces of gilding are visible on the object's surface.

Size: 17×14 mm, shank: 7×5 mm.

From the lower courtyard of the palace, grid square 92/XVIII, 1993. Mátyás Szőke – Gergely Buzás.

Belt embossing, 15th century, 2000.46.1.1.

Square shaped, thin copper plate, with a circular relief in the middle. It was fastened by four rivets at each corner, two of these are still in place, and a third hole is preserved. The object has a green patina coating.

Size: 33 × 30 mm.

From the lower reception court, grid square 96/1, from the layer above the roof tile, at a depth of 100–130 cm. 1996. Mátyás Szőke – Gergely Buzás.

























Belt embossing, 15th century. 2000.47.1.1.

Square shaped, thin copper plate, with a circular relief in the middle. It was fastened by four rivets at each corner, all of them are missing. The object is bent in two.

Size: 35×35 mm.

Isolated find from the Royal Palace. 1993.

Belt buckle, 15th century. 67.40.2.

Strap fastener copper plate of a belt buckle, with leather remains. It is held together by three rivets. The buckle's bar and a part of the prong are also preserved. An impressed geometric design embellishes the plate.

Size: $32 \times 32 \times 4$ mm.

Isolated find from Visegrád, 79 Fő Street. 1956. Miklós Héjj.

Belt buckle, 15th century. 62.1.20.

8-shaped cast bronze buckle. A prong and a narrowing strap fastener plate are attached to it. There is a large rivet at one end.

Length: 40 mm, width: 25 mm.

From the chapel terrace. 1949. Miklós Héjj.

Signet ring, 14th–15th century. 67.48.29.

Bronze signet ring, with a V-shaped incision next to the head. The oval head is ornamented with a double cross in a small frame.

Diameter: 22 mm, head diameter: 10 mm.

From the well of the southern palace wing. 1962. Miklós Héjj.

Engraved copper plate, 15th century, 50.228.

Copper stripe, both ends broke off. On one side there is an engraved ornamentation.

Measurable length: 55 mm, width: 16 mm.

From the northeastern palace wing. 1943. János Schulek.

Engraved copper plate, 15th century. 95.26.1.

Copper stripe, both ends broke off. On one side there is an engraved ornamentation that is very similar to the piece no. 50.228.

Measurable length: 87 mm, width: 16 mm.

From the Citadel, internal narrow alley along the eastern wall, grid square 93/II, layer no. 2.

Embossing, second half of the 14th century, 2003.4.6.1.

Cast bronze embossing in the shape of the majuscule "P". The lower end of the P is curved and continues in a leaf ornament. On the two ends and in the middle of the shaft there are three holes for fastening. Remains of some rusty material were found on the back plate.

Length: 47 mm, width: 32 mm, thickness: 2 mm.

From the Angevin-period well of the northern lower garden of the palace. 1997. András Pálóczi Horváth.

Shoe, second half of the 14th century. 2003.4.9.1.

Pieces of a shoe quarter, vamp and outsole. The quarter and vamp form one piece. It was closed by a strap. Repaired at two spots. It is made of calf leather.

Length of the upper part: 323 mm, width: 138 mm, length of the outsole: 185 mm, width: 80 mm.

From the Angevin-period well of the northern lower garden of the palace. 1997. András Pálóczi Horváth.

Spur, 13th–14th century. 83.96.1.

Wrought iron. The heel band if V-shaped and bent, and have a rectangular and an 8-shaped opening at the end, to which an oval plate is attached. It has a rotating rowel with 6 spikes.

Length: 130 mm, width: 80 mm, rowel diameter: 30 mm.

Visegrád, Sibrik Hill. 1977. Mátyás Szőke.

Spur, 14th–15th century. 67.41.1.

Wrought iron spur. The heel band is first oriented downwards and then turns sharply upwards. The ends are circular with a hole for fastening. It has a rotating rowel with 6 spikes.

Length: 120 mm, width: 78 mm, rowel diameter: 40 mm.

Visegrád, Széchenyi Street. 1960.

Sword, 15th century. 77.1.15.

Wrought iron double edged sword. The cross guard is slight S-shaped. The grip's iron core has a rectangular cross section, and a rectangular pommel is attached to its end.

Length: 110 cm, grip length: 218 mm, blade width: 52 mm, cross guard: 22.5 mm, pommel: $52 \times 48 \times 28$ mm.

From the bed of the Danube.

Amber rosary, 14th-15th century. 62.1.3.

A rosary made of 44 pierced, yellowish brown amber beads, the size of a pea.

Bead diameter: 5–6 mm.

From the southwestern corner of the palace chapel, under the floor level, at a depth of 60 cm. 1948. Miklós Héjj.

Toiletry item, second half of the 14th, first half of the 15th century. 2000.48.1.1.

A toiletry item consisting of two copper wires twined together. One end is hammered flat and shaped into a spoon-like tool, while on the other end one wire is cut off and the other is bent back to form a hook.

Length: 43 mm, spoon size: 5 × 4 mm, shaft diameter: 2 mm.

From the chamber west of the corridor in the northern part of the northeastern palace wing, from a rift in the early brick floor. 2000. Mátyás Szőke – Gergely Buzás.















Tweezers, 15th century. 2000.49.1.1.

Tweezers made of an iron piece with a rectangular cross section. The head is round, the arms narrow towards the end.

Length: 130 mm, head diameter: 24 mm.

From the lower reception courtyard, grid square 95/6, brown adobe layer. 1995. Mátyás Szőke – Gergely Buzás.



Scissors, 15th century. 2000.50.1.1.

Small scissors made of iron. The blades are trapezoid, the edges are thin. The two blades were fixed together by a rivet. The handles are curved and have a round cross shape, their ends broken off.

Length: 93 mm, width: 26-32 mm.

Isolated find from the northeastern palace wing. 1992.



Pin, early 16th century. 2000.67.1.1.

Bronze pin with a round head. The pin is thin and bent. Length: 45 mm, head diameter: 3 mm.



Bridle bit, 15th century, 62.1.68.

A wrought iron bit consisting of two shanks, rings and a mouthpiece of two adjoining bars. Traces of a tin coating were observed.

Width: 145 mm, height: 133 mm.

From the eastern lane behind the palace chapel, in front of the wine cellar. 1956. Miklós Héjj.



Spur, 15th, early 16th century. 61.7.4.6.

Curved wrought iron spur. There are holes at both ends of the heel band for fastening. The neck is long, and accommodates a rotating rowel.

Length: 150 mm, width: 95 mm, rowel diameter: 57 mm.

From the lower reception courtyard of the palace, in front of the great cellar's entrance, between two pillars. 1956. Miklós Héjj.



Spear head, late 15th, early 16th century. 50.39.

Oblong leaf-shaped, wrought iron double edged spear head. The middle ridge is pronounced, the shaft is short and has a socket. There is a copper ring at the tip, decorated with oblique lines.

Length: 163 mm, width: 23 mm.

From the ornamental courtyard. 1941. János Schulek.

Peasant's sword, 15th century. 2000.74.1.1.

Straight iron sword with one blade. It has a fuller. There is a maker's mark on the blade: two animals sitting on their hunkers, facing each other. There is a small iron peg with a disk-like head where the blade and the cross guard meet. Both ends of the cross guard are decorated with stylized animal heads with their mouths open and ears back. The pommel is a bit curved to one side, the grip's wooden veneer was fixed with seven rivets.

Length: 103.9 cm, blade size: 776×49 mm, cross guard width: 110 mm.

From the Sigismund-period well in the northern garden of the palace, at a depth of 330–400 cm. 1994. András Pálóczi Horváth.

Sword, 15th century. 74.101.1.

Double edged wrought iron sword. The cross guard is slightly S-shaped. There is an octagonal pommel at the end of the long grip. The blade is broken.

Length: 910 mm.

From the bed of the Danube.

Copper embossing, 15th–16th century, 95.35.1.

Circular copper embossing with a hole for fastening in the middle. The edge is decorated with a relief ring with 26 relief dots. The rim is curved back.

Diameter: 30 mm.

From the Citadel, internal narrow alley along the northern wall, grid square 94/1, layer "d". 1994. László Iván.

Copper embossing, 15th-16th century. 95.35.2.

Rectangular copper embossing. There is one whole on each short side. The piece is decorated with a framed image featuring the representation of an animal looking backwards against a background of tendril ornaments. The background was decorated with punching. Size: 33×19 mm.

From the Citadel, internal narrow alley along the northern wall, grid square 94/1, layer "d". 1994. László Iván.

Copper embossing, 15th-16th century. 95.34.1.

Fragment of a rectangular copper plate with punched tendril ornaments and geometric designs. The plate's rims are folded back, perhaps because it was fastened to a more solid piece. There are three drilled holes on the object.

Size: 40×40 mm.

From the Citadel, internal narrow alley along the northern wall, grid square 94/1, layer "d". 1994. László Iván.





Copper embossing, 15th century. 50.304.

Fragment of a rectangular copper plate decorated with a relief text. Only the last letter, an "m" minuscule is preserved.

Height: 25 mm, measurable width: 26 mm.

Isolated find from the Royal Palace, 1936. János Schulek.

Copper embossing, 15th century. 2003.5.1.1.

Trapezoid cast bronze embossing. The sides have a concave curve. A drop-shaped ornament decorates the object. A stylized tower is depicted on the embossing, with incised decorative stripes. The majuscule "M" is depicted at the bottom against an obliquely striped background. A small rivet is preserved at the top of the tower, with a small washer plate.

Length: 52 mm, width: 23 mm, thickness: 2 mm.

From the northern lower garden of the palace, 1998. András Pálóczi Horváth.

Copper embossing, 14th century. 70.16.1.

Rectangular copper plate with a drilled hole at one corner and at one edge. The rest is fragmented. One side is decorated with a punched, finely composed Gothic leaf ornament in a frame.

Size: 53 × 50 mm, thickness: 1 mm.

From the small northern stony courtyard of the palace, 1949. Miklós Héjj.

Copper clothing ornament, 15th, early 16th century. 50–304.

Hexafoil copper plate with a hole in the middle. The foils are separated with incised lines as if to represent the petals of a flower. There are three rivet holes for fastening along the edges.

Diameter: 25 mm.

From the northeastern palace area, 1943. János Schulek.

Copper clothing ornament, early 14th century. 2000.68.1.1.-2.

Clothing ornament manufactured from a rectangular copper plate. There are four circle reliefs in the middle, a row of incisions along the longer edges, and circles in the corners. Two rivet holes were drilled along the short edges. The pattern is somewhat asymmetrical. Size: 41×15 mm.

From the northeastern palace wing, the western room of the southern side. 1958. Miklós Héjj.

Copper clothing ornament, early 16th century. 2000.69.1.

Leaf-shaped clothing ornament manufactured of a copper plate. The contours and veins of the oak leaf camber.

Size: 27 × 11 mm.

From the northeastern palace wing, the western room of the southern side. 1958. Miklós Héji.

Belt buckle, 15th, early 16th century. 95.36.1.

Trapezoid iron buckle with a round cross section. One side of the frame has a concave curve. The prong moves freely on the short side.

Size: 65×63 mm.

Isolated find from the Royal Palace. 1951. Miklós Héjj.

Belt buckle, 14th–15th century. 61.9.2.

Rectangular, ornamented bronze buckle with a prong, and a rectangular, punched strap fastener decorated with geometric floral, tracery ornaments. Both edges of the latter are lacy.

Buckle size: 57×26 mm, strap fastener size: 45×27 mm.

From the Lower Castle, found during the heritage protection works. 1958.

Belt buckle, late 15th, early 16th century. 62.1.5.

Trapezoid cast iron bronze buckle with a frame. The prong is missing. Size: 25×16 mm.

From the Royal Palace, 1948. Miklós Héjj.

Belt buckle, late 15th-early 16th century. 2000.62.1.1.

Iron belt buckle composed of three parts. Trapezoid belt, the longer side is decorated with incisions. The prong and the two bands of the onion shaped strap fastener are fixed on the shorter side.

Length: 55 mm, width: 33 mm.

From the lower reception courtyard, grid square 92/XVIII. 1992. Mátyás Szőke – Gergely Buzás.

Belt buckle. 14th-15th century. 67.40.2.

Strap fastener made of a bronze plate, fixed with three rivets. The buckle itself is missing. The plate's edges are lacy, its surface is punched, decorated with a stylized floral ornament of circles cutting each other.

Size: 53×33 mm.

Isolated find, Visegrád, 79 Fő Street. 1965. Miklós Héjj.

Buckle frames, 15th, early 16th century. 50.71. 50.72.

Red copper rings, the front surface is gilded. Two small holes on two sides served for fastening.

Diameter: 26 mm, internal diameter: 9 mm.

From the ornamental courtyard of the palace, 1943. János Schulek.

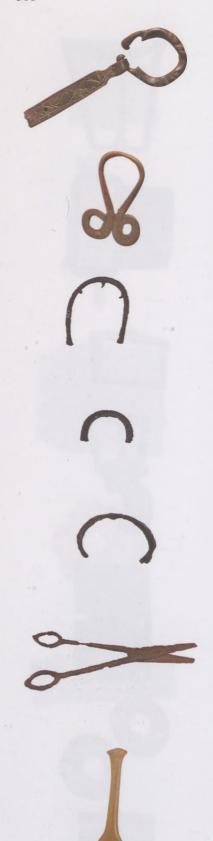
Strap fastener plate, 15th, early 16th century. 62.1.19.

Rectangular strap fastener plate folded in two. The spots where the buckle and the prong were connected are still visible on one side. There are three rivet holes on the other edge.

Size: 38×29 mm.

From the chapel terrace. 1943. Miklós Héjj.





Strap distributor, 15th century, 67.16.3.

Bronze strap distributor with a horseshoe-shaped element and an oblong, punched band decorated with tendril ornaments.

Plate length: 50 mm, plate width: 7 mm, ring diameter: 25 mm.

From the Lower Castle, trench 62/1, 1962. Miklós Héjj.

Hook and eye clasp, 15th, early 16th century. 50.66.

Eye of a copper clasp: a drop-shaped copper wire with the ends curved backwards and flattened.

Size: 28 × 13 mm.

Isolated find from the northeastern palace area. 1936. János Schulek.

Iron heel cap of a shoe, late 15th, early 16th century. 50.162.

Narrow, U-shaped iron reinforcement of the heel cap. It was attached to the sole with small hooks.

Size: 90×70 mm.

From the northeastern palace area. 1941. János Schulek.

Iron heel cap of a shoe, late 15th, early 16th century. 50.167.

Wide, semicircular iron reinforcement of the heel cap. It was attached to the sole with small hooks.

Size: 60×43 mm.

From the northeastern palace area. 1941. János Schulek.

Iron heel cap of a shoe, late 15th, early 16th century. 61.7.2.20.

Narrow, C-shaped iron reinforcement of the heel cap. It was attached to the sole with small hooks.

Width: 85 mm.

From the reception courtyard. 1950. Miklós Héjj.

Scissors, 16th century, 50.33.

Iron scissors. The blades are attached to each other with a rivet. The handles have a rhomboid shape.

Length: 160 mm.

From the landing of the northern back flight of stairs of the palace. 1950. Miklós Héji.

Perfume vial, late 15th century, 2008.36.2.1.

Greenish yellow, transparent glass vial blown in form. The drop shaped body is flattened, the neck is very long and narrow, the rim is uneven. The bottom wall is somewhat thicker.

Height: 83 mm, width: 22 mm, neck length: 53 mm, neck diameter: 7 mm, rim diameter: 10–14 mm.

From the cesspool above the furrow that runs along the northern wall of the northwestern palace area. Before 1981. Miklós Héjj.

Perfume vial, late 15th century. 2008.37.1.1.

Colorless or very light green perfume vial made of blown glass. The flat, a bit conical bottom preserved the trace left by the blowpipe. The body is cylindrical, the shoulder narrow. The neck is also cylindrical in shape, the rim is smooth and rounded. There is an incised line at the meeting point of the shoulder and the body.

Height: 37 mm, bottom diameter: 19 mm, shoulder diameter: 17 mm, rim diameter: 14 mm.

From the cesspool above the furrow that runs along the northern wall of the northwestern palace area. Before 1981. Miklós Héjj.

S-shaped clasp, 15th-16th century. 69.32.5.

Cast bronze decoration. A thick S-shaped element attached to a thin ring, with a stylized man's head on one end.

Size: 45×20 mm.

From the internal part of the Lower Castle, grid square XXV, pit no. 1. 1967. Mátyás Szőke.

S-shaped clasp, 15th-16th century. 67.25.2.

Cast bronze decoration. A thick S-shaped element attached to a thin ring, with decoration on one end.

Size: 35×17 mm.

From the Lower Castle, grid square 62/II. 1962. Miklós Héjj.

Lead embossings (two pieces), late 15th, early 16th century. 50.101.

Fragments of a grid-like cast lead ornament. The pattern consists of grid squares with quatrefoil ornaments inside.

Size: 30×30 mm.

From the northeastern palace area. 1943. János Schulek.

Ornamental bronzework of a book, late 15th century. 95.54.1.

Deltoid shaped ornamental bronzework to decorate a book's corners. The shorter edges are bent so that they cling to the book corner. Two small holes served for fixing both on the shorter and on the longer sides. The longer side is decorated with openwork. A large, knoblike ornament is placed in the middle.

Height: 85 mm, width: 80 mm, knob diameter: 15 mm, depth: 10 mm.

Isolated find from Visegrád.

Book clasp, late 15th-early 16th century. 50.310.

Red copper book clasp. Rectangular plate that widens at one end. The edges form wavy lines. The other end narrows and is folded back.

Length: 60 mm, width: 16-22 mm.

From the upper cellar of the palace. 1941. János Schulek.





Mouth harp, late 15th, early 16th century. 61.7.2.80.

Musical instrument made of iron. Its cross section is rectangular. The frame narrows towards the end, its head is curved back. One side of the frame broke off.

Length: 78 mm.

From the lower reception courtyard.

Key, late 15th, early 16th century. 50.85.

Red copper key. The oval bow forms a small tip at the end. There is a deeper incision on the bottom and two smaller on the side of the rectangular bit .

Length: 108 mm.

From the ornamental courtyard, 1941. János Schulek.

Ironwork of a box, late 15th, early 16th century. 50.212.

Oblong ironwork made of wrought iron. It consists of two bands joined by a pivot. There are large rivets in both bands. One of the bands narrows towards the onion-shaped end. There is a rivet hole in the middle of the onion shaped part.

Length: 248 mm, width: 31 mm.

From the cellar. 1947. János Schulek.

Padlock, 15th-16th century. 78.61.1.

Wrought iron construction with a slide. Its surface is decorated with intersecting wave-like patterns, made with copper wire.

Length: 60 mm, width: 64 mm, height: 335 mm.

From the bed of the Danube.

Padlock, 15th-16th century, 1.1.1.

Wrought iron construction with a slide. The cylindrical body is decorated and reinforced by parallel red copper ribs.

Length: 38 mm, width: 25 mm, height: 42 mm.

Isolated find from Visegrád – Lepence, collected from the surface beside the excavated Roman cemetery. 1983.

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Abbreviations

- ActaArchHung Acta Archaeologica Academiae Scientiarum Hungaricae (Budapest)

 ActaHAHung Acta Historiae Artium Academiae Scientiarum Hungaricae (Budapest)

 ArchÉrt Achaeologiai Értesítő [Archaeological Communications] (Budapest)
 - ÁMRK Állami Műemlékhelyreállítási és Restaurálási Központ, National Office of Monument
 - Restoration (Budapest)
 BnF Bibliothèque nationale de France (Paris)
 - BTM Budapesti Történeti Múzeum, Budapest History Museum (Budapest)
- BudRég Budapest Régiségei [Antiquities of Budapest] (Budapest)
 CommArchHung Communicationes Archaeologicae Hungariae (Budapest)
 - ELTE BTK Eötvös Loránd Tudományegyetem Böcsészettudományi Kar [Eötvös Loránd University, Faculty of Humanities]
 - EMÉ Az Egri Múzeum Évkönyve [Annuals of the Eger Museum] (Eger)
 - FolArch Folia Archaeologica (Budapest)
 - IMM Iparművészeti Múzeum [The Museum of Applied Arts] (Budapest)
- MFMÉ StudArch A Móra Ferenc Múzeum Évkönyve Studia Archaeologica [Annuals of the Móra Ferenc Museum Studia Archaeologica] (Szeged)
 - MittArchInst Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften (Budapest)
 - MKM Mátyás Király Múzeum [King Matthias Museum] (Visegrád)
 - MNG Magyar Nemzeti Galéria [Hungarian National Gallery] (Budapest)
 MNM Magyar Nemzeti Múzeum [Hungarian National Museum] (Budapest)
 - MOL DL Magyar Országos Levéltár, Diplomatkai Levéltár [Hungarian National Archive, Diplomatic Archive] (Budapest)
 - MS Manuscript
 - MűvÉrt Művészettörténeti Értesítő [Art Historical Communications] (Budapest)
 - NM Néprajzi Múzeum [Museum of Ethnography]
 - OMF Országos Műemléki Felügyelőség [National Office of Monument Protection] (Budapest)
 - VÁTI Városépítési Tudományos és Tervező Intézet [Office of Scientific Urban Planning] (Budapest)
 - VMMK A Veszprém Megyei Múzeumok Közleményei [Communications of the Museums in Visegrád County] (Veszprém)

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- Fig. 40. Reconstructed section drawing of the bath in the palace of Visegrád, with the bath basin and the heating equipments
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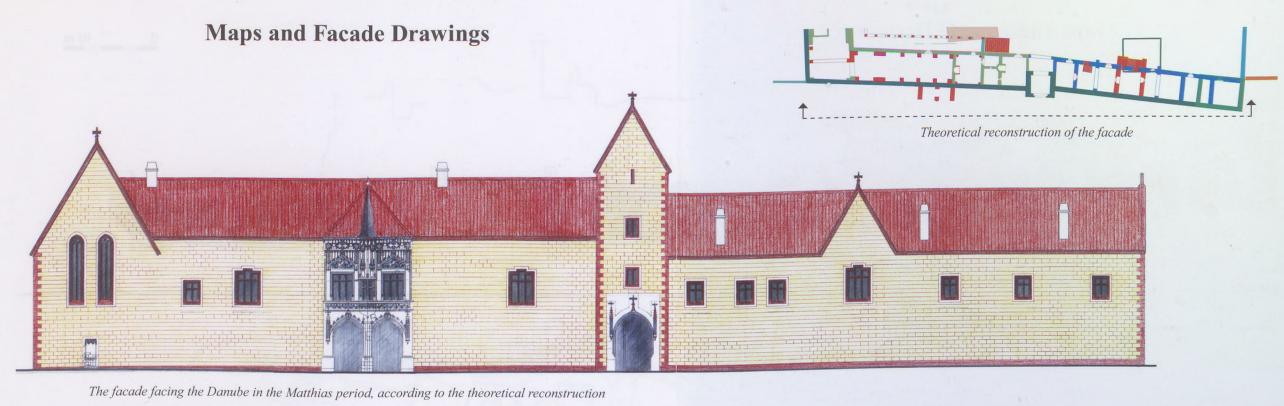
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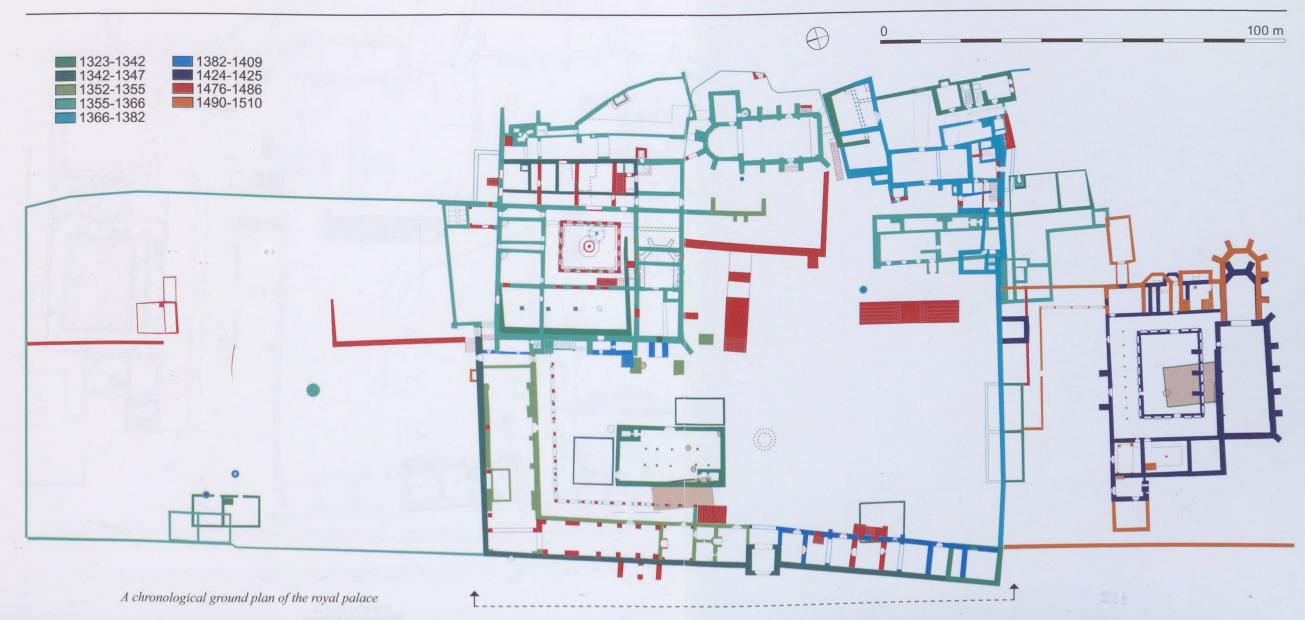
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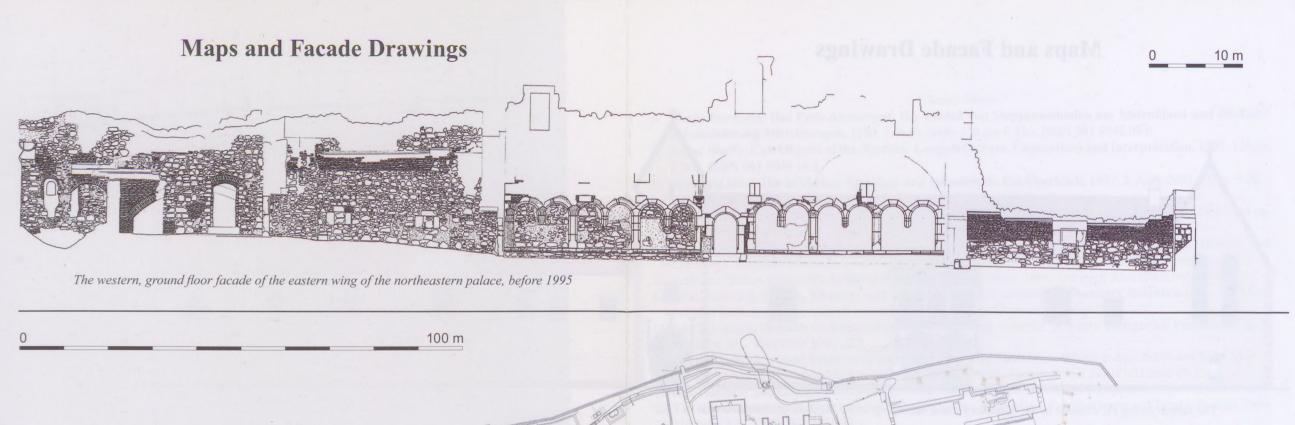
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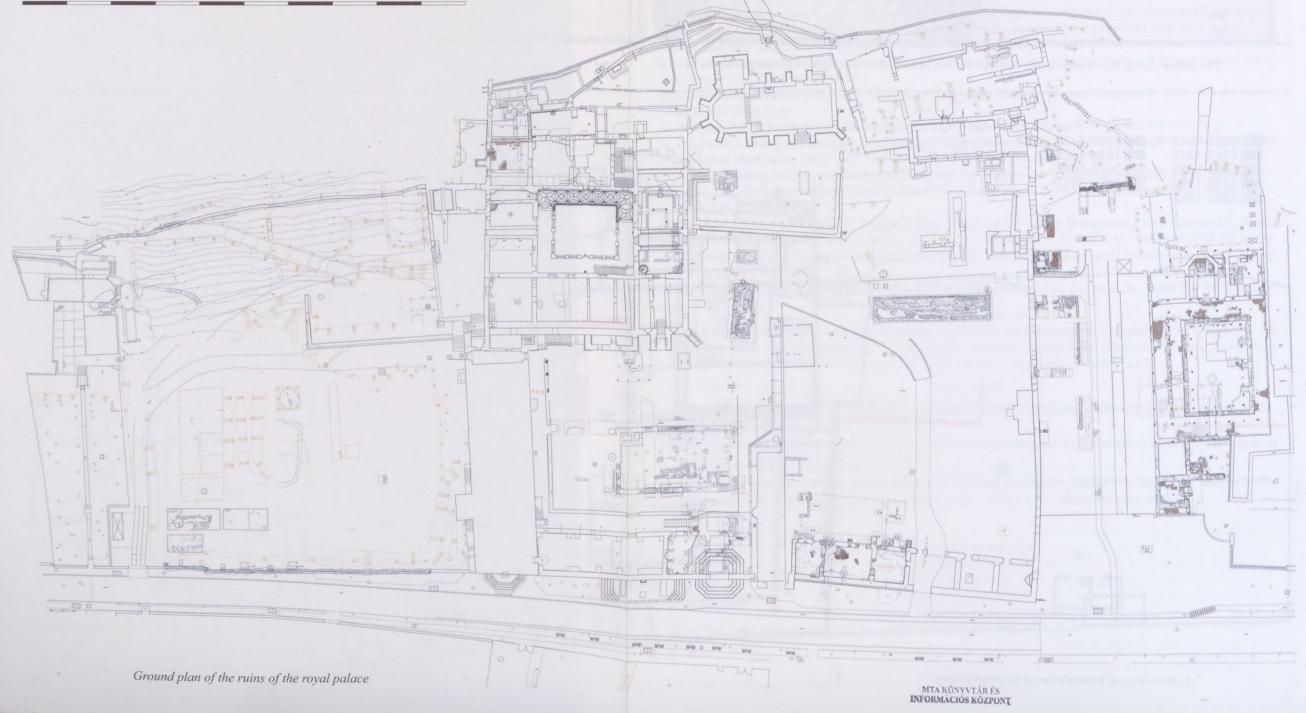
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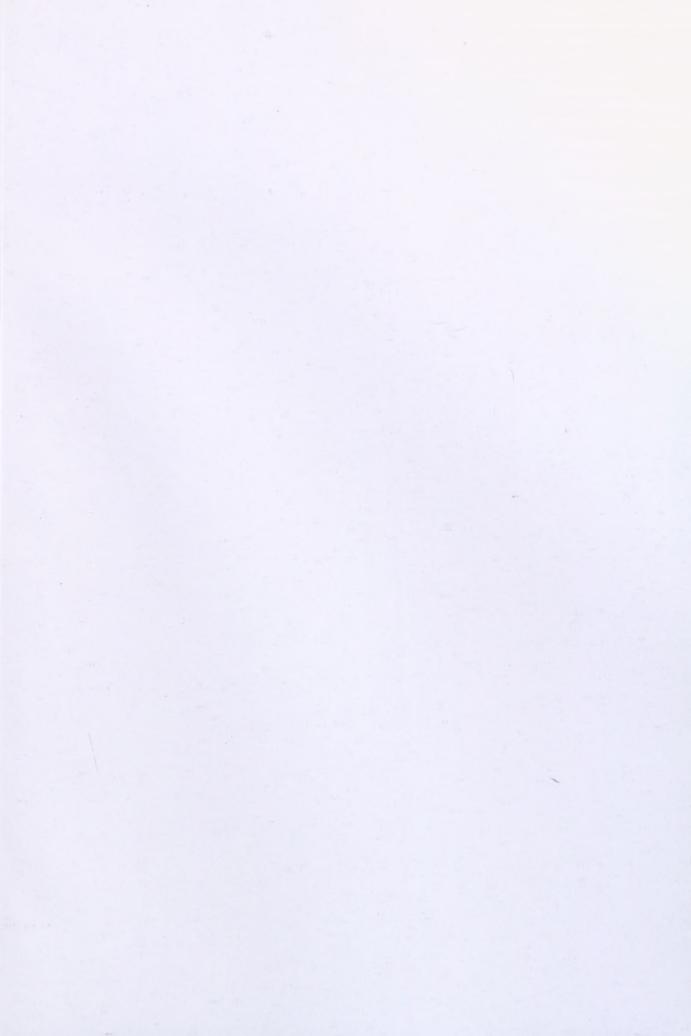
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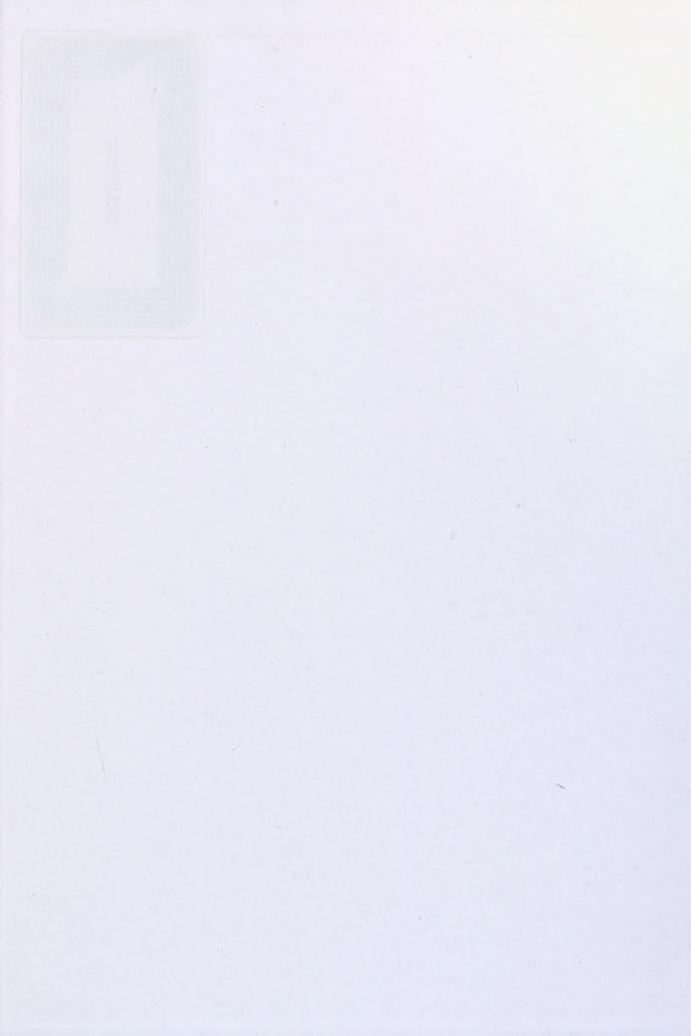








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MEDIEVAL VISEGRÁD

Volume 1



The royal palace of Visegrád is one of the most complex and thoroughly researched monuments of medieval architecture in Hungary. It is an outstanding site for the courtly culture, royal patronage and art production in the medieval Kingdom of Hungary. During its two hundred years of habitation, it was subject to continuous alteration and expansion. The palace was a sophisticated complex that encompassed everything from great displays of status and prestige to mundane realities of daily life: ecclesiastical buildings (including a royal chapel and a Franciscan friary), loggias, balconies, fountains, gardens, kitchens, workshops, and storage. The Late Gothic architectural elements and the Renaissance carved stone material (fountains, reliefs, etc.) belonged

to the highest level of artistic production in Central Europe and to the group of exceptional pieces of the earliest Renaissance period outside of Italy. The Visegrád palace, however, was not used by anyone after the Middle Ages. Its ruined buildings were not utilized for any other purpose, and so the later alterations were minimal. Despite suffering immeasurable damage from being abandoned and unused after the Middle Ages, Visegrad is almost free from later alterations, making it a unique survival. The size and the complexity of the palace would in itself ensure that the Visegrád royal residence became one of the principal sites of Hungarian medieval archaeology. Thus, the excavations at the Visegrad palace also served as one of the most significant steps in the development of medieval archaeology in Hungary. Since its rediscovery in 1934, the palace of Visegrad has been the focus of detailed study, and is central to understanding twentieth and twenty-first century archaeological research and heritage protection in Hungary. This volume, the first English language monograph concerned with the site, records the previous excavations and reconstructions while newly placing Visegrád within its European archaeological and art historical context. It offers a summary of the previous and recent excavations since 1934 and the interpretation of the palace from the point of view of medieval royal residences. It also contains the functional analysis of the palace complex and the discussion of the interactions between the residence and the Franciscan friary. The material culture of the palace complex is also treated in an explicit way, chapters focus on the most important group of finds (pottery, stove tiles, worked bone material, etc.) along with their detailed catalogue of objects.



