

Gergely Szoboszlay

The Role of Private Towers in the Thirteenth-century Urban Transition

MA Thesis in Late Antique, Medieval and Early Modern Studies



Central European University

Budapest

June 2020

Figure 1.: The seal of Thamen
Turmhofer (Mollay,
"Háztörténet, Várostarténet")

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(Hungary)

Thesis submitted to the Department of Medieval Studies,
Central European University, Budapest, in partial fulfillment of the requirements
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Accepted in conformance with the standards of the CEU.

Chair, Examination Committee

Thesis Supervisor

Examiner

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

Budapest, 01 June 2020

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Abstract

As edifices found all over Europe Medieval urban private towers are often mentioned but those in the Central-European region have not been analysed comprehensively to date. These buildings are still frequently discussed from a romantic angle as classic donjons connected to the system of feudal lordship within urban settlements. To address this hiatus and romantic perspective, the main research of this dissertation is focusing on the Medieval Hungary, Bohemia, Lower Austria, Silesia and Lesser Poland with a regional outlook regarding the urban private towers.

This dissertation motivated by two research questions: How did private towers appeared and shaped their urban surroundings during the thirteenth century's urban development? And based on the towers structural and topographical remains what kind of functional role can be attached to them? To answer these questions, I examined the architectural and archeological remains, the topographical distributions and the social background of this building type. This comparative analysis surveyed forty-nine towers and fifty-one mentions of private towers in detail.

With the help of comprehensive and comparable data, the towers materialize as a complex urban form with distinctive functional aspects, and the findings also underpin that their main role was the representation of their possessors' wealth and influence in the city. This symbolic value is traceable both in their foundation at the most prominent locations of the towns in the early phases of urban development and in their formal aspects. As the social stratum that had originally commissioned them gradually disappeared from the urban fabric, private towers lost their significance by the late fourteenth century. However, the present thesis shows that this emblematic structure continued to represent power in a different context, shifting from the individual toward the communal.

Acknowledgements

First of all I would like to thank my two thesis supervisors Professor Katalin Szende and Professor József Laszlovszky of the Department of Medieval Studies at the Central European University. Their was always open, even in this troubled few monthes, whenever I ran into a trouble spot or had a question about my research or writing.

I would also like to thank those schollars who helped me out with the so needed literature during the COVID 19 lockdown and the absence of the libraries: Dr. Judit Majorossy, Research Professor Robert Šimůnek, Prf.Dr. Rafał Eysymontt, Prf.Dr. Ferdinand Opll and Paul Mitchell. Without their help and Katalin Szende's connections and mediation, my research could not have been successfully conducted.

I would also like to acknowledge Dr. Zsuzsa Reed of the as the second reader of this thesis, and I am gratefully indebted to her for her very valuable comments on this thesis.

Table of Contents

1. Introduction.....	1
1.1. Private Towers and their Researched Context	1
1.2. Historiographical Framework.....	5
1.3 Terminological Issues	8
1.4. Methodology and Structure.....	12
2. The Towers and their Urban Context.....	15
1.1 The Emergence of the Towers	15
1.1.1. The Towers of Prague and Vienna in the Twelfth Century.....	16
1.1.2 Emerge of the Private Towers in the Kingdom of Hungary and Poland in the Thirteenth Century	18
1.1.3 Tower Construction in Thirteenth-Century in Bohemia and Austria.....	23
1.2 Topography of the Towers and the Plots Around Them	26
1.3 Additional and Auxiliary Buildings on the Plots	35
1.4 The Tower of the <i>Agendorfer</i> Family in Sopron	38
3. Form and Function	51
3.1. Structural Overview	54
3.1.1 Romanesque Houses in Prague	55
3.1.2 General Characteristics of Further Urban Towers in the Region	56
3.2. Ground Floors and Storage Function.....	60
3.3. Residential Functions	63
3.3.1. Linked-windows, Blockwerkkammern, and Heating Systems.....	67
3.3.3. Spatial Division.....	74
3.4. The Question of the Defensive Function.....	78
4. The Owners and their Personal Display of Prestige	85

4.1. The Owners of the Towers.....	85
4.1.1. Urban Nobility in the Light of the Urban Private Towers in Bohemia and Lower Austria.....	86
3.1.2. The Social Layer of the “Comes” in Urban Context and their Towers in the Kingdom of Hungary	92
3.1.3. Colonization and Urban-Towers in Lesser Poland.....	97
3.1.4. A Marginal Group of Owners: The Knightly Orders	99
3.1.5. Owners with the Name of “Tower” and their Symbols.....	102
3.1.6. Urban Towers in the Context of the Fourteenth-century Social Transition	105
3.1.6.1. Jews as Owners of Private Towers.....	107
3.2. Display of Prestige	110
3.3. New Functions and New Level of Symbolism: Rebuilding into Town Halls	116
4. Conclusion	127
5. Bibliography	132
5.1.: Primary Sources	132
5.2.: Secondary Sources.....	132
6. Appendices an Illustrations.....	144
6.1. List of Illustrations	144
6.2.: Gazeteer	149
6.3.: Structural Database and Illustrations	153

List of Figures

1

Figure 2.: Distribution of the researched private towers according their source materials in Lower Austria __ 4

*Figure 3.: Distribution of the researched private towers according their source materials in Bohemia, Silesia
and Lesser Poland* _____ 4

*Figure 4.: Distribution of the researched private towers according their source materials in the Kingdom of
Hungary* _____ 5

Figure 5.: List of the comes-es of Sopron and their further titles between 1242 and 1268 _____ 47

¹ NB.: The Figure 1 and 6-9 is missing from this list due to a system error, further data in the List of Illustrations

1. Introduction

1.1. Private Towers and their Researched Context

In 1278, Petrus Agendorfer, the former castellan of Sopron was beheaded in front of the noble congregation of the Sopron County, by order of the palatine of the Kingdom of Hungary, Matheus Csák. More than twenty years before his execution, Petrus served as one of the most important officers of the county castle, and he received for his service several donations from King Béla IV, including a private tower within the walls of Sopron.² However, Petrus soon turned out to be a traitor. After changing sides several times, in 1272 he opened the gates of Sopron to the conqueror Bohemian king Otokar II Přemysl, meanwhile he executed those who protested against his disloyalty.³ But Petrus fell even before Otokar's fatal defeat at the battle Dürnkrut.⁴ Before the battle, the palatine recaptured Sopron and in a year he sentenced Petrus to death, confiscating all his possessions.⁵ All his wealth devolved to a certain royal retainer, Belud son of Belud from the Osl kindred, who saved the palatine's life in the battle.⁶ Meanwhile Petrus's descendants litigated for the confiscated properties, including his private tower, even in the late fourteenth century.⁷

What did this tower mean for Petrus and his offspring? It is clear from several sources that it was not the only such building in Sopron; moreover, towers like this were a common phenomenon in most medieval European towns. The aim of my research is to examine the role of these urban private towers in the thirteenth-century urban development in the medieval kingdoms of Hungary and Bohemia, and the duchies of Lower Austria, Silesia and

² Mollay, „Névtudomány és várostörténet Dágtól Ágfalváig (1195-1416) [Etymology and Urban History, from Dág to Ágfalva (1195-1416)]”, 19, 21.

³ Szende, „Fidelitas és politika. Kihez és miért volt hűséges Sopron városa a középkorban [Fidelity and Politics. Who and Where They were Loyal. The City of Sopron in the Middle Ages]”, 345.

⁴ Kristó, *Az Árpád-kor háborúi [The wars of the Árpádian-Period]*, 144.

⁵ Szende, „Fidelitas és politika. Kihez és miért volt hűséges Sopron városa a középkorban [Fidelity and Politics. Who and Where They were Loyal. The City of Sopron in the Middle Ages]”, 346.

⁶ Mollay, „Névtudomány és várostörténet Dágtól Ágfalváig (1195-1416) [Etymology and Urban History, from Dág to Ágfalva (1195-1416)]”, 23.

⁷ Mollay, 29.

Lesser Poland. The main focus will be on how these private towers shaped urban space and society. The central theme will be approached through two sets of questions: First, how do the towers appear and fit into the urbanization process of the Central European states, and how do these buildings shape the topography of the emerging cities and towns and their use of space? Second, what social stratum did the owners of the towers come from, and how did these social groups contribute to social stratification within the settlements?

During my research I examined all those towns in this region where private towers have survived in the building fabric, or written or visual information has come down to us: Vienna, Wiener Neustadt, Eggenburg, Krems, Bruck an der Leitha and St. Pölten from Lower Austria (although at this time Wiener Neustadt belonged to Styria). From the Kingdom of Hungary: Buda, Sopron, Bratislava, Győr, Székesfehérvár and Zagreb, furthermore I refer to the towers of Sibiu too, although the dating of the tower buildings in this Transylvanian town is dubious. From the Kingdom of Bohemia I consider Prague and Brno, while from Silesia and Lesser Poland, Wrocław and Kraków. (See.Tab.: 1) This well defined region and its towns are convenient for a comparative analysis for many reasons. The connections and bilateral communication between the towns, their economic contacts and several events, like the Mongol Invasion or the expansive politics of Otokar II, created a framework which led to similar development processes even on the level of the private towers. Within this frame their structural and social aspects display a certain level of similarity, which differs from the patterns of building urban towers in other parts of Europe.

It may sound tempting to include towers found in Dalmatian towns as well. One can indeed find private towers in Split and Trogir too, but their structural, social and political backgrounds differ from their northern counterparts.⁸ In Dalmatia the direct impact of the Italian tower architecture is more dominant, which blended with surviving late antique

⁸ Jakus, „Privately Owned Towers in Dalmatian Towns during the High and Central Middle Ages”.

elements.⁹ The omission of Dalmatia indicates that I am mostly using analogies from the Holy Roman Empire in my thesis, although I will examine some structural elements from Italian cities too.

Parallel to the various urban private towers I also take into account a second architectural group, the contemporaneous rural secular tower structures. These are the “tower castles” from the twelfth and thirteenth centuries with the addition of *tvrz* and *festes haus* structures. At the same time it is important to clarify that the motivation to build and the context of these structures are different from those of the urban towers, whether they were erected as a part of a castle or a manor house. Nevertheless, some parallels can be detected concerning their architectural form and use of space.

Apart from these analogies my thesis will discuss 46 urban private towers that have any kind of structural remains. In addition, there are further 42 towers that have not survived, but visual or written sources are available regarding their location or structure. Besides this, there are 9 more tower buildings that were only mentioned, but their setup or topography is yet unknown.

⁹ Jakus, 273–93. Brothers, „Diocletian’s Palace at Split”. 279.

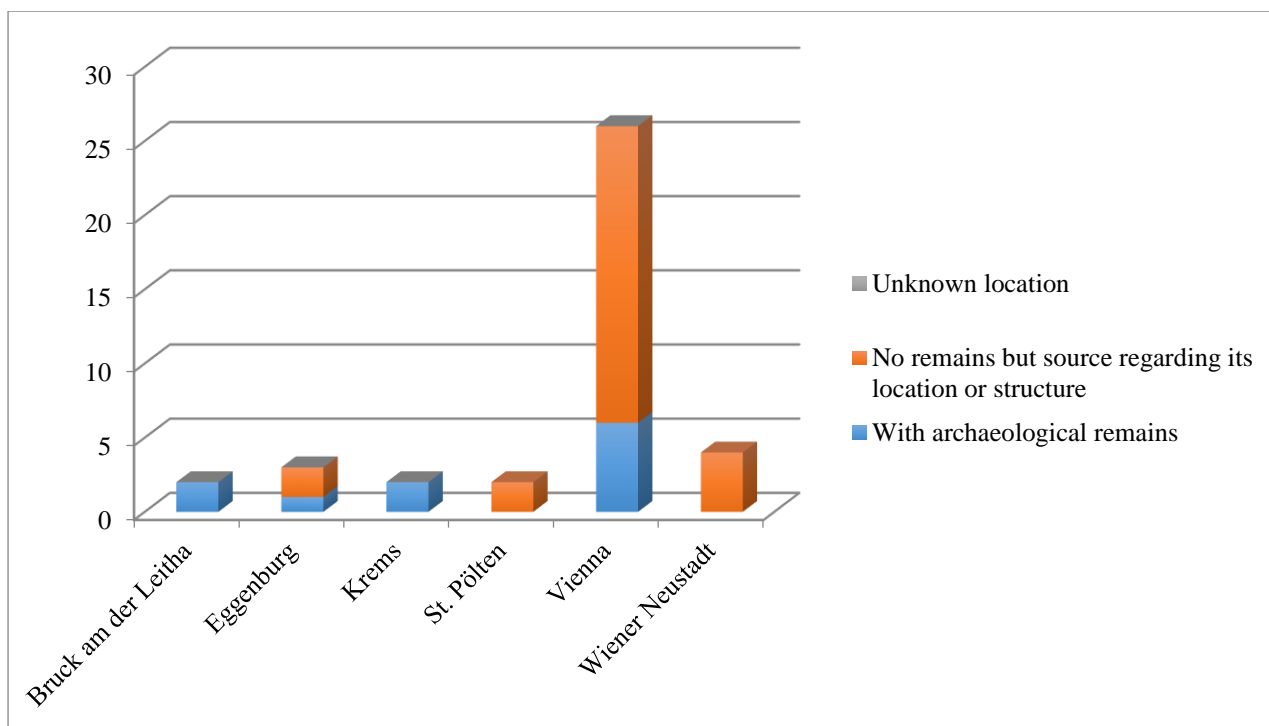


Figure 2.: Distribution of the researched private towers according their source materials in Lower Austria

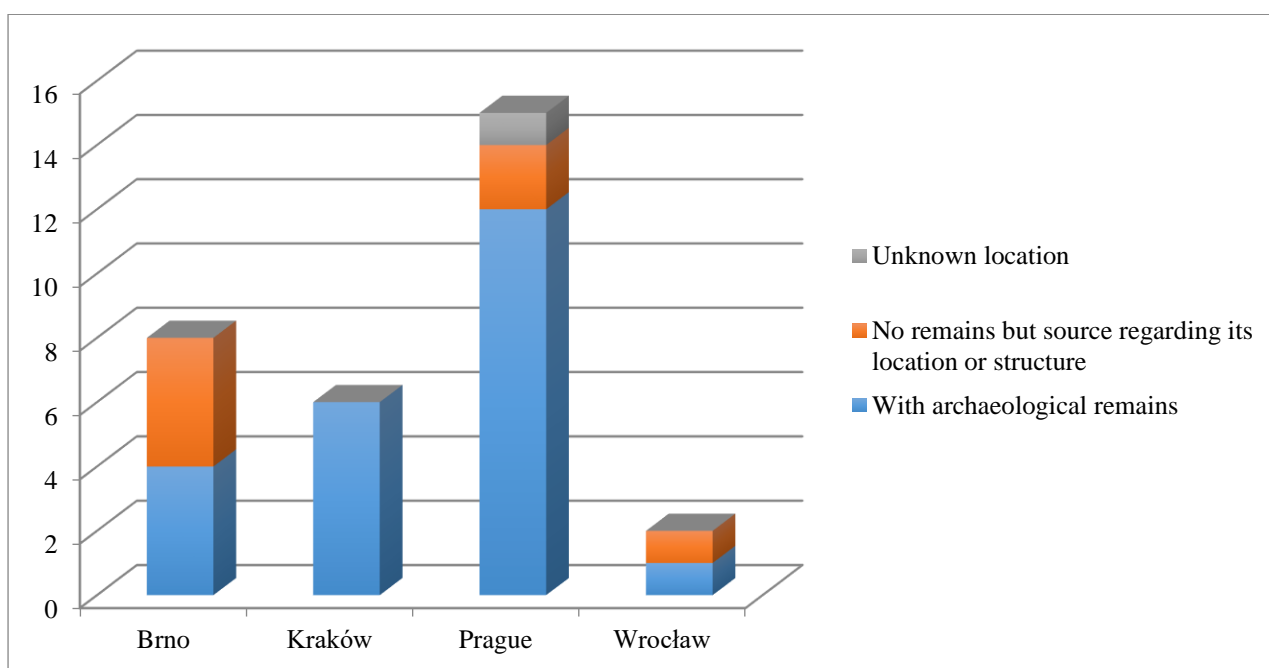


Figure 3.: Distribution of the researched private towers according their source materials in Bohemia, Silesia and Lesser Poland

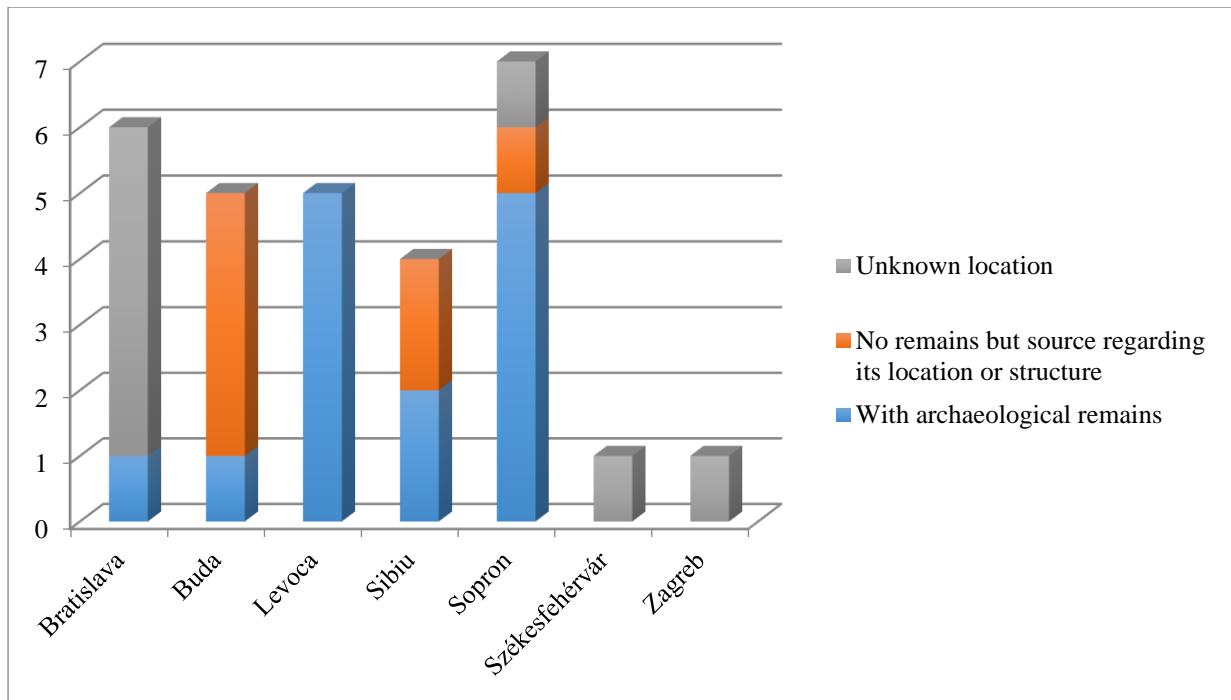


Figure 4.: Distribution of the researched private towers according their source materials in the Kingdom of Hungary

1.2. Historiographical Framework

Although the private towers in the studied region are frequently mentioned in scholarship, they have not been subject to a comprehensive analysis to date. In the region but also in the former territory of the Holy Roman Empire most of them are mentioned separately, mainly through the publications connected to urban archeological and wall surveys. Due to this, their interpretations and terminology is anything but coherent, and most of these publications only offer a basic picture beyond the detailed structural description. The excavation of significant towers created the need for a more comprehensive analysis.

This turning point in Hungary emerged as a result of the overall survey of historic buildings in Sopron after World War II.¹⁰ The methodology of building architecture in Hungary materialized through these researches in Sopron, which led to possibility to create complex building history from the fragmented sources. Thus not only the research but the

¹⁰ These systematic works started in 1959 with the guidance of Ferenc Dávid and Sándor Tóth after 1963. During this period they set up the survey of the key horizon of the town, which highlighted several towers, that are divided from the later stratigraphic layers and foundations. Dercsényi, „A soproni műemlékvédelem három évtizede (1945-1975) [The three decades of monumental protections in Sopron (1945-1975)]”, 7–8.

restauration of the buildings become possible.¹¹ Architect János Sedlmayr identified five freestanding tower structures in the center of Sopron that he tried to interpret in a historical framework. Beyond his own observations,¹² his study was based on the surveys of art historians and architects who worked in the town, first and foremost Ferenc Dávid.¹³ Later, the publication of Sedlmayr was taken as theoretical background for other studies, and some of the newly excavated urban towers, for example the much-debated tower in the town of Páztó, were interpreted following his work.¹⁴

The same historiographical pattern emerged in several other towns, for example, in connection with the excavation of the tower at Ulicka Bracka 5 in Kraków¹⁵ Although the topographical and social importance of the such buildings are addressed in the historiography of Kraków, the need of their reevaluation only emerged with the newly found archeological data, which further increased by the further excavations around the Rynek.¹⁶ In Prague, the turning point was connected to the excavation of the so-called Romanesque ashlar houses in the 1960s, mostly by Rudolf Hlubinka. Zdeněk Dragoun contextualized them first, and his work still serves as the theoretical background for the interpretation of these buildings.¹⁷ Building archeology, too, served as a background in these cases, as most of the towers are impossible to detect with traditional archeological methods.

In Vienna, this process took place in a reverse order. Here the archeological and architectural discoveries were preceded by the historiographical works of Richard Perger, who started his research with the mapping of the social and financial background of the

¹¹ Lővei, „A falkutatási módszer vázlatos története Magyarországon [The Short History of Building Archaeological Methodology in Hungary]”, 11-51.

¹² Sedlmayr, „Sopron koragótikus lakótornya [The Early-Gothic Residential Towers of Sopron]”.

¹³ Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”.

¹⁴ Valter, „Középkori lakótorony Páztó központjában [Medieval Residential Tower in the Center of Páztó]”. 257. The assumed tower was excavated by Ilona Valter in 1967, but according to the structure and the layout of the building, it was most probably built as a basement rather than a tower.

¹⁵ Komorowski és Łukacz, „Bursa węgierska w Krakowie w okresie średniowiecza i renesansu [Hungarian dormitory in Krakow in the Middle Ages and the Renaissance]”, 175–76.

¹⁶ Janusz, „The Towers of Cracow”, 153.

¹⁷ Dragoun, „Románské kvádríkové domy v Praze [Romanesque Ashlar Houses in Prague]”. 300-304.

knightly citizens of the town.¹⁸ During this work he observed that private towers emerged as part of the real estate owned by this knightly layer. At this point Karl Gutkas,¹⁹ Friedrich Kozak²⁰ and Ludwig Brunner,²¹ managed to identify several towers from St. Pölten, Wiener Neustadt, and Eggenburg based on sources which showed similarities to Perger's results. Perger collected altogether twenty Viennese towers in his publication in 1992, which allowed him to formulate conclusions on the owners' social background.²² However, at that point no archeological data was available on these towers, except the surviving tower at Griechengasse 7, but no building survey had been carried out. The first tangible results appeared as late as the early 2000s, resulting from the wall surveys of Gerhard Seebach, Doris Schön, Paul Mitchell and Günther Buchinger.²³ These results with the new excavations in the city refined the hypothesis that Perger created a decade earlier.

Due to the works of Tivadar Ortvas in Bratislava,²⁴ references to private towers were likewise firstly identified in the written evidence, while the Czechoslovak monument research only found them later in the twentieth century. From the territory of the Kingdom of Hungary, art historian Géza Entz tried to collect the urban towers by searching for the term *turris* in urban documentary sources, as a supplement and contextualization to Sedlmayr's abovementioned article.²⁵

Despite local research, and the cross-referencing in terms of the excavated structures, the systematic comparison of the private towers in the region is still wanting. Likewise, only

¹⁸ Perger, „Die Grundherren im mittelalterlichen Wien. II. Teil. Bürgerliche und adelige Grundherrschaften”.

¹⁹ Gutkas, „Stadttürme in St. Pölten”.

²⁰ Kozak, „Zur Baugeschichte der Wohnburgen von Wiener Neustadt”.

²¹ Brunner, *Eggenburg. Geschichte einer Niederösterreichischen Stadt*.

²² Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”.

²³ Buchinger, Mitchell, és Schön, „Katalog des Projektes zur Hausforschung in der Wiener Innenstadt im Jahr 2002”; Buchinger és Schön, „Das Haus Stampa - Zur Baugeschichte eines renaissancezeitlichen Bürgerhauses in Wien”; Gaisbauer, Mitchell, és Schön, „Forschungen zum mittelalterlichen Wien. Neuansätze und verpflichtungen zum weiterdenken”.

²⁴ Entz, „Városi lakótornyok a középkori Magyarországon [Urban Residential Towers in the Medieval Hungary]”, 47.

²⁵ Entz, „Városi lakótornyok a középkori Magyarországon [Urban Residential Towers in the Medieval Hungary]”.

a few overviews have been published regarding other European regions. In most cases comprehensive studies mostly focus on urban residential architecture including private towers, but the towers do not appear as a separate phenomenon. For example, Malgorzata Chorowska touches upon the topic in her article about civic architecture in Lesser Poland and Silesia.²⁶ The first author to create an overall framework for the topic was Anita Wiedenau,²⁷ but her article focuses on Romanesque urban architecture so the towers were not her main consideration. The same applies to Günter Fehring's publication.²⁸ The first article exclusively focusing on urban private towers was written by Polish archeologist Jerzy Piekalski in 2006.²⁹ Systematically presenting towers built in the Holy Roman Empire, he argues for the Italian origin of the towers.³⁰ He also addresses towers in the eastern part of the empire with the addition of Poland, but his main argument concerns the towns of the Rhineland and the southern part of the Empire.³¹ In this aspect the present work is the conclusion and re-evaluation of this hypothesis.

1.3 Terminological Issues

Due to the fragmented nature of the sources and the lack of comprehensive studies, as well as the structural and topographical diversity of the urban towers, their terminological context is ambiguous, too. Towers were mostly discussed in a romantic perspective, as classic donjons or more in their social context, that they are urban reflection of the feudal system.³² At the same time, the large number and the topographic position of these buildings suggests a more nuanced picture. Even their formal definition is problematic, not to mention their diverse

²⁶ Chorowska, *Sredniowieczna kamienica mieszczańska we Wrocławiu [Medieval Town Houses in Wrocław]*.

²⁷ Wiedenau, „men westdeutschen Städten und Siedlungen (ohne Goslar und Regensburg)”.

²⁸ Fehring, „Städtischer Hausbau des Hochmittelalters in Mitteleuropa’ Siedlungsforschung”.

²⁹ Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa. [The Role of Residential Towers in the Development of Urban Space in Central Europe in the 12th and 13th Century]”.

³⁰ Piekalski, 174–84.

³¹ Piekalski, 186–94.

³² Wiedenau, „men westdeutschen Städten und Siedlungen (ohne Goslar und Regensburg)”, 80; Buško, „Budynki wieżowe w krajobrazie średniowiecznego miasta [Tower Buildings in the Medieval Landscape]”, 68.

inner spaces, outer features, or their situation within the plots. This aspect is also influenced by the fact that in many cases only the foundation walls have remained, in which case one can infer that the building was, in fact a tower from the thickness of the wall or the shape of the ground plan, but most of the time it remains a mere hypothesis. For example, structures that can be identified as towers can also be a *Kemenate*-type of urban building, widespread in German, Bohemian or Polish medieval urban architecture.³³

In light of the fragmentary survival of tangible remains, a terminology based on contemporary sources would be useful. However, the medieval names of these urban towers are too generic to be used in the categorization of the tower structures. The variations of the *turris* words appear in the highest number. Anita Wiedenau also highlighted the use of *arces* or in a few cases *curtis* in the southern German regions as terms referring to urban towers.³⁴ But all of these terms are definitions too broad, and without additional evidence none of them are sufficient to define the towers. In Győr a document mentions a tower of Bernát son of Imre from Gycz in 1499 as a house that was built like a *turris*, possibly a residential tower.³⁵ Medieval terms like this were also common in other cases, like churches built in the form of monasteries, or residences built like castles. To add to the terminological confusion, in Bratislava several mentions of towers refer to staircase towers.³⁶

Parallel with the diversity of the sources, historiography is divided on the possible terminology of the urban towers. Wiedenau used the terms *turris*, *arces* and *curtis* which she tried to correlate with different formal aspects. Jerzy Piekalski also followed this terminology.³⁷ Martin Melicherčík writes about defensive residential towers in the case of

³³ Piekalski, *Public and Private Space at the Time of Medieval Transition*, 131.

³⁴ Wiedenau, „men westdeutschen Städten und Siedlungen (ohne Goslar und Regensburg)”, 80.

³⁵ DL-DF 46508. Chapter at Vasvár 1499.11.16

³⁶ Entz, „Városi lakótoronyok a középkori Magyarországon [Urban Residential Towers in the Medieval Hungary]”, 47.

³⁷ Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa. [The Role of Residential Towers in the Development of Urban Space in Central Europe in the 12th and 13th Century]”, 174.

Bratislava,³⁸ while Ceřary Buřko defines the towers in Silesia and Lesser Poland as residential tower, tower house or house with tower.³⁹ Klaus Trabag, similarly to Wiedenau, classifies urban private towers in a systematic order, adding buildings of Italy to the German and other examples.⁴⁰ His first category is the *Geschlechterturm* / *torri gentilizie*, which he supposed to have been a purely defensive structure attached to a residential building.⁴¹ In the next group, *Wohnturm* / *torre d'abitazione*, he assigned those towers, which still had a defensive aspect, supplemented with a residential role.⁴² The category of *Turmhaus* / *casa-torre* referred to those burgher houses that are not towers proper, but were built with a thin and tall structure.⁴³

Along with Trabag's and Wiedenau's categorization, the term favored by most researchers is "residential tower." This term appears as a modern *terminus technicus* in Jerzy Piekalski's study along the term *turris* and *acres*,⁴⁴ and its German equivalent *Wohnturm* in the Richard Perger's Viennese source collection.⁴⁵ The Polish, Hungarian and the Czech terminologies are more or less similar, using various equivalents of the term "residential tower". For example in Hungarian "lakótorony", means living tower, similar to the Czech "obytná věř" although they more frequently use the variations for donjon, like: donřon. In Polish, the term is "wieřa rycerska" which means "knight's tower."

The term "residential tower" is a specific and complex notion, uniting several functions. First of all, as their name suggests, the towers should provide their owners with

³⁸ Melicharčık, „Nové poznatky o vzniku a vývoji býv. Hlavného námestia v Bratislave (výskumy stredovekých veřo-vých domov) [New Data about the Origin and Development of the Former Town Hall on the Main Square in Bratislava (Research of Medieval Tower Houses)]."

³⁹ Buřko, „Budynki wieřowe w krajobrazie řredniowieczne-go miasta [Tower Buildings in the Medieval Landscape]".

⁴⁰ Trabag, *Vom Geschlechterturm zum Stadthaus. Studien zu Herkunft, Typologie und städtebaulichen Aspekten des mittelalterlichen Wohnbaus in der Toskana (um 1100 bis 1350)*.

⁴¹ Trabag, 322.

⁴² Trabag, 324.

⁴³ Trabag, 325.

⁴⁴ Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa. [The Role of Residential Towers in the Developement of Urban Space in Central Europe in the 12th and 13th Century]", 173–74.

⁴⁵ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]", 103.

well-equipped residential spaces, complemented by economic and storage functions. In this way, the tower also becomes a sort of well-guarded safe deposit box. This second factor in itself indicates the third role, which is the defensive function of the building, protecting the owner and his valuables. A combination of these three elements would be complemented by the fourth purpose, the power display of the owner, which carries important messages beyond the tower's mere formal appearance. This aspect is also discussed in the context of castles, where residential towers (donjons) are defined as different from *Bergfried* ("öregtorony" the "old tower" in Hungarian), which are more like *refugium* type towers in castles.

In view of this complexity, due to the fragmentation of the sources I will avoid using the term "residential tower" unless it is possible to attach all four functions to the buildings. Two examples out of the buildings to be analysed in the present thesis can illustrate the controversial nature of this term: in Prague the Stone Bell House's most accentuated part is the frontal tower building on the façade, facing the market square. However, the tower only served symbolic functions, while the palace building attached to it from the rear was the residential part. Compared to this building, the tower of Gozzoburg in Krems was clearly built with a residential role, but all the other functions were spread in the entire complex surrounding the tower.

Therefore, in my thesis I will discuss the buildings as towers, that is buildings which have longer dimensions than horizontal, even if they are shorter than the buildings in their vicinity. Furthermore, I also consider structures that merged into other buildings, but were significantly taller than them. Consequently, I shall avoid the term "residential tower", and refer to these as private towers. The term private tower in itself does not determine the exact function of the building while referring to its ownership and legal status.

1.4. Methodology and Structure

Based on this terminological framework I shall examine the urban private towers from three methodological aspects. Since the most numerous data is provided by architectural and archeological remains, even if fragmented, it is important to collect them before further examination so I use a database on the towers of the Kingdom of Hungary created as part of my bachelor's thesis,⁴⁶ which I expanded here with all the available structural elements from the broader Central European area. This information allows me to analyze the various structural aspects. Beyond the mere shape of the tower, the assessment of the architectural remains enabled me to attempt the hypothetical reconstruction of the inner spaces, their possible function and use. Key elements of this reconstruction include the structures of the ground floor with their openings and vault covering, as well as various elements from the upper levels, like the assumed outer staircases or heating devices. I examine the questions of storage, habitability and defensive roles based on these factors. I examined the structural aspects and urban context of fifty private tower buildings, mostly based on the findings of local researchers except in Sopron, where I used my own measurements, complemented by the various house and wall surveys of Ferenc Dávid and András Nemes, and their documentation. Although mostly focusing on defensive aspects, Denys Pringle⁴⁷ and Balázs Major⁴⁸ used the same methodology in their interpretation of the crusader and Arab rural towers in the Latin east. Following this framework, I also analyze the use of space and access patterns, adapting John Schofield's and Alan Vince's system used for burgher houses in London,⁴⁹ and Paul Mitchell's access analysis at the Gozzoburg in Krems.⁵⁰

⁴⁶ Szoboszlai, „Sopron városi lakótornyai [The Urban Residential Towers of Sopron]”.

⁴⁷ Pringle, *Fortification and Settlement in Crusader Palestine*; Pringle, „Group of Medieval Towers in Tuscania”.

⁴⁸ Major, „Muslim Towers in the Medieval Syrian Countryside”; Major, „Burj Arab - A Crusader Tower in the County of Tripoli. A Preliminary Report After the First Survey”.

⁴⁹ Schofield és Vince, *Medieval Towns*, 94–96.

⁵⁰ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 234.

Parallel with the quantitative and analytical research of the architectural elements of the towers I created a topographical database based on a system of town plans, where I projected the towers. This made it possible to examine the context and connections of the urban private towers with the major topographic points of the towns. In order to do this I highlighted several key buildings around the towers such as churches, town halls, walls and squares. Here I used the data in the secondary literature, which refer mostly to towers with standing remains. For Vienna, I reused locations in Richard Perger's map which was created using only documentary evidence,⁵¹ while for Wrocław I relied on a 1562 townscape by Barthel Weiner. It is important that the accuracy of visual sources is uneven and as such they are unfit to be used as primary sources, but they are informative to complement other sources. For the base-maps I updated the maps of the Town Atlas series for those towns where such atlases are available.

In addition to the tangible and visual sources, the social background of the private towers were built on results in the secondary literature. For example, the knightly citizens of Vienna, the so-called *comes* layer in Hungarian towns, or the Jewish inhabitants of the towns in the region is well researched, only their connection with the private towers needed to be clarified. Where possible, I complemented the secondary literature with documentary evidence and with archontological analysis, especially in the case of Petrus Agendorfer's tower in Sopron.

This thesis is separated into three major chapters, more or less following the abovementioned methodological considerations. In the first chapter I summarize and study the main urban context of the towers, mostly in the light of archeological and topographical materials. I also discuss the dating of the buildings, their locations, connections, and position within their plots. The second chapter is based on the structural database regarding the form

⁵¹ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 115.

and space of the towers, following the logic of the methodology outlined above. Although the symbolism of the towers belongs to this discussion thematically, it remains to be discussed in the context to the social background of the buildings in the third and last chapter. The transformation of the social layers associated with the buildings also highlights the marginalization and the afterlife of private towers.

Each main chapter entails one case study that examines methodological questions that extend the context of the private towers. In the first chapter I analyze Petrus Agendorfer's tower, which may have been built before the castellan received it as a royal donation. The next case study focuses on the issue of the linked-window groups and their assumed importance in the use of space within the towers. The last block examines the transformation of some towers into town halls, which can highlight the changes in the social background and symbolic use of these once private properties.

2. The Towers and their Urban Context

1.1 The Emergence of the Towers

Previous research typically associates the emergence of urban private towers with the northern part of Italy and Tuscany.⁵² According to Bodo Ebhard,⁵³ Anita Wiedenau⁵⁴ and Cezary Buśko⁵⁵ theory, this form of urban architecture emerged in the region as early as the eleventh century due to the weakening of the Holy-Roman Empire's administration over Italy, and the perceived or real anarchy that was associated with it. The towers as the most typical architectural form of the newly strengthened stratum of urban patricians spread from this core area. As a result of this transmission, private towers are thought to have arrived north of the Alps within the next two centuries, with a bit of a delay. According to this theory, they first appeared in German-speaking territories, primarily Regensburg and Mainz, from where they continued to spread through other parts of the empire. Here, between the two sides of the Alps, the North-Italian long-distance merchants are thought to have been the mediators who carried the concept of their ideal residence type.⁵⁶

In contrast to this, other research slowly emerged suggesting that several separately erected tower-type structures in Europe were built more or less in parallel to each other. In Zürich some towers are dated to the eighth or ninth century,⁵⁷ even earlier than their Italian counterparts. All together, urban private-towers only began to appear as a widespread architectural phenomenon/innovation at the beginning of the eleventh century, while in larger

⁵²Piekalski, "Die Rolle Der Wohntürme Bei Der Entwicklung Städtischen Wohnens Im 12. Und 13. Jahrhundert Im Mitteleuropa," 174.

⁵³Ebhard, *Der Wehrbau Europas im Mittelalter*, 92.

⁵⁴Wiedenau, „Form, Funktion und Bedeutung romanischer Wohnhäuser in Köln und im Rheinland”.

⁵⁵ Buśko, „Budynki wieżowe w krajobrazie średniowiecznego miasta [Tower Buildings in the Medieval Landscape]”.

⁵⁶Piekalski, "Die Rolle Der Wohntürme Bei Der Entwicklung Städtischen Wohnens Im 12. Und 13. Jahrhundert Im Mitteleuropa," 174.

⁵⁷ At Strohengasse 5 the tower was built in the Carolingian period. Schneider, "Das Hochmittelalterliche Steinhaus in Zürich: Ein Beitrag Zur Monumentenarchäologie in Der Zürcher Altstadt," 175.

numbers from the turn of the eleventh century onwards.⁵⁸ The most accurate data were determined from dendrochronological samples, taken from wooden auxiliary buildings surrounding urban towers that were built approximately in the same period as the towers themselves. In Zürich, for example, this dating procedure showed that most of the towers were built in the eleventh century.⁵⁹ Furthermore, especially in the German areas, there was a second wave of private tower building from the second part of the thirteenth century, and a third one from the beginning of the fourteenth century onwards.⁶⁰ As a result of this so-called “Gothic” period, the famous towers were built in Nürnberg,⁶¹ Regensburg⁶² and Mainz, which were introduced previously as the forerunners of urban private tower architecture in the Holy Roman Empire.

At the same time, broken down into individual cities, the towers should be interpreted in the light of the internal chronology of the settlement and regional influences. On the one hand it would be tempting to say that the eastern part of the empire was lagging behind with respect to private towers, because it did not follow the development seen in the western parts of the empire. But this statement is only partially true. In the cities of Poland and the Kingdom of Hungary, the first reliable data only appear in the thirteenth century, while urbanized settlements in Bohemia and parts of Lower Austria, for example, Krems, showed signs of private tower building from the twelfth century onwards.

1.1.1. The Towers of Prague and Vienna in the Twelfth Century

The earliest urban towers discussed in detail in this thesis are from Prague. Although in the absence of suitable dendochronological finds they still await exact archaeological dating, they

⁵⁸Fehring, „Städtischer Hausbau des Hochmittelalters in Mitteleuropa’ Siedlungsforschung”, 46.

⁵⁹Fehring, 46.

⁶⁰Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa”, 174.

⁶¹Bergner, *Handbuch der Bürgerlichen Kunstaltertümer in Deutschland*, 121.

⁶²Uwe, *Der Adelssitz im Mittelalter*, 64.

can be dated to the second half of the twelfth century on the basis of their construction techniques.⁶³ However, not only private towers appear in this group. A total of eighty-two monuments were listed and categorized by Zdeněk Dragoun, who uniformly named them as “Romanesque ashlar houses.”⁶⁴ These are stylistically homogeneous structures, along with the towers, multi-division houses and urban palaces with central-courts, scattered over the area of the Staroměstské Náměstí, and from there, to the banks of the Vltava.⁶⁵

In Vienna, earlier research has accepted the eleventh-twelfth century dating of the towers. This was based on two factors. On the one hand, it is based the projection of the topography of the purported suburbs outside the old Roman camp wall onto today’s street network,⁶⁶ and on the other hand, on Richard Perger’s work who identified and described twenty towers.⁶⁷ Based on this hypothesis, the theory of dual development was established. According to this, early private tower buildings were first erected in the early phase of the city’s urbanization mostly around the Babenberg residence and the Hoher Markt in the eleventh century. Meanwhile, towers owned by nobles connected to the duke’s court were built in the suburban areas which mostly formed near major trade routes, such as the settlement hub in the nuclei of present-day Lugeck.⁶⁸

This hypothesis, however, needs to be revised from several aspects. Based on the archeological small-finds and stratigraphic conditions found during the urban excavations of the early 2000s, no developed or homogeneous suburban settlement can be traced outside the Roman walls until the construction of the new defensive system in the 1200s, which

⁶³Dragoun, „Románské kvádřikové domy v Praze [Romanesque Ashlar Houses in Prague]”.

⁶⁴Dragoun, 299–300.

⁶⁵Havrdá, Semerád, és Musilek, „K proměně předlokačního osídlení prahy v raně gotické město na příkladu románského domu v objektu čp. 309 v Bartolomějské ulici [Romanesque House in No. 309 in Prague. On the Transformation of a Pre-locational Settlement into an Early Gothic City]”; Dragoun, *Romanesque Houses in Prague*.

⁶⁶Csendes és Oppl, *Wien. Geschichte einer Stadt*, 69–78; Oppl, *Wien*.

⁶⁷Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”.

⁶⁸Perger.

encompassed these formerly extramural areas too.⁶⁹ In addition, Perger's early dating is not supported by sufficient evidence. Only the tower at Griechengasse 4 was possible to date slightly before the thirteenth century based on the surveys of Gerhard Seebach.⁷⁰ The same is not detectable in the case of the other examined buildings. It is also important to note that in Perger's collection of written sources the earliest mentions of towers or indications of the presence of private towers come from 1239 and 1277.⁷¹ Nonetheless, while at present there is no certifiable data for private-tower building before the thirteenth century, it cannot be ruled out that such structures were indeed built as a result of the economic and topographical recovery brought on by the settling of the Babenberg dynasty in the city.

1.1.2 Emerge of the Private Towers in the Kingdom of Hungary and Poland in the Thirteenth Century

In parallel with the thirteenth-century tower-building wave in cities of the Holy Roman Empire, private towers also began to appear in the two kingdoms east of it. In this region, however, scholarship does not explain the construction of the towers with the activity German or Italian long-distance merchants or the artistic and architectural influences from the Apennine Peninsula. In both states, the Mongol invasion is thought to be the main catalyst. Both in Hungary and Poland, the construction of the towers as a "hybrid defensive building" was interpreted as the urban or proto-urban communities' direct response to the invasion.⁷² The emergence of urban private towers in this role would have been the result of a central will. Since, in Hungary this had happened in 1242, scholarship believed to discover the

⁶⁹Gaisbauer, Mitchell, és Schön, „Forschungen zum mittelalterlichen wien. Neuansätze und verpflichtungen zum weiterdenken“, 130.

⁷⁰Seebach, „Bazhistorische Analyse und neue Fassadengestaltung am Haus Wien 1, Griechengasse 4 (Steyerhof)“, 454, 460.

⁷¹Hoher Markt 1. and Graben 29; Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]“, 105.

⁷²Gömöri, *Castrum Supron*; Sedlmayr, „Sopron koragótikus lakótoronyai [Sopron's Early Gothic Residential Towers]“, 323–24.

imprint of the tower constructions from the newly built castles in a special urbanized surroundings in the form of the urban private-towers. In the Polish territories these were dated to the second half of the thirteenth century due to the Mongol attacks around the 1240s.⁷³ There the towers in question appeared in connection with the foundation and reconstruction of cities at the end of the century.

However, despite of the trauma caused by the Mongol invasion as a watershed, it helps accurately dating the buildings only in a few cases. Also in a few examples, such as the case of the *Agendorfer* tower in Sopron—which I will present later—and of Wrocław, it may appear that some of the buildings already stood there before the Mongol invasion.

In Hungary, two written sources may suggest earlier dating, although their wording is ambiguous and their reliability is questionable, at least in one case. The earlier written one is about the city of Sopron in Muhammad Al-Idrisi's geographical book, *Geographicum*, commissioned by Roger II King of Sicily in 1154.⁷⁴ Idrisi devoted several lines to the city in the western part of Hungary, where he mentions the 'tall houses of the city'.⁷⁵ The wording itself is vague: it can refer to the towers as well as almost anything else. The translation of the text is also problematic: "The city of Sopron is a beautiful city, big one, with many waters and gardens, with populated markets and big streets, its courts / walls / households are tall, and houses well-erected." The word *diyar*, translated here as "house," refers to the typical Middle Eastern residence type with a central courtyard surrounded by an encircling wall.⁷⁶ It seems justifiable to suggest that in Sopron, this description may correspond to a private tower surrounded by walls, but this is merely a hypothesis. This argument is further weakened by the fact that Idrisi did not personally visit the area but relied on the narrative of contemporary

⁷³ Komorowski and Opalinski, "O Wieży Wójta Krakowskiego Raz Jeszcze. Komunikat [Once Again About the Tower of Krakow's Major. Statement]," 199–128.

⁷⁴ al-Idrisi, „Climat VI.", 861. Line 1-5.

⁷⁵ Kristó, *A vármegyék kialakulása Magyarországon [The Emerge of the Medieval Counties in Hungary]*, 269.

⁷⁶ Thanks to Mykhaylo Yakubovych for the translation and the commentaries.

travelers such as Ibn Khordadbeh, Ibn Hawkal and Al-Jayhani to describe the Eastern European regions.⁷⁷

The other source that may suggest a dating earlier than 1242 is not much clearer than Idrisi's description. In his *Carmen Miserabile*, a narrative account of the Mongol invasion, Rogerius painted in vivid detail both the Mongol siege and the castle of Esztergom. Here he describes that when the attackers broke through the walls of the city, the defending inhabitants set their wooden houses on fire, and retreated to the stone palaces of the nobility where they defended themselves for some time until they were driven from there as well.⁷⁸ Rogerius, like Idrisi, does not mention towers, but the term "palace" *palatial civitatis* differs significantly from the description of other wooden building *domos ligneas* and this difference is further underpinned by the suggested defensive value of the buildings.

In the case of the other cities, the situation is a little less vague than the texts of Idrisi and Rogerius. In these places, construction began after the Mongol invasion as a result of Béla IV's defense policy, and his effort to settle the population within well-protected places. Thus, he built the new walled city on the *Novus Mons Pestiensis*.⁷⁹ For some time, the inhabitants of Esztergom were also moved in the castle, while the inhabitants around Székesfehérvár were settled in the area of the (probably) fortified royal center well-protected by its marshy surroundings.⁸⁰

Unsurprisingly, the earliest source that actually mentions a tower is from Sopron. Two charters were created here in 1250 and 1256. The first charter issued in 1250 is of a donation, here the king gave a tower and a house to the Hospitallers. From the documents issued to settle the issues, it is clear that there were several other towers in the castle at that time

⁷⁷Zimonyi, „Idriszi”.

⁷⁸ During the siege the Mongols occupied the city, but they were unable to capture the castle itself. Magister Rogerii, *Anonymus and Master Roger; Epistola in Miserabile carmen super destructione regni Hungariae par tataros facta* [Epistle to the Sorrowful Lament upon the Destruction of Hungary by the Tatars], 216.

⁷⁹ The current Castle Hill in Buda. Végh, *Buda. Part I. to 1686*, 12.

⁸⁰ Szűcs, *Az utolsó Árpádok* [The Last of the Árpadians], 84–85.

belong to the inhabitants of the castle, the so-called *burgenses*.⁸¹ This is strengthened by the second source, in which King Béla IV confiscated a previously donated tower along with a house from Petrus *Agendorfer*, the castellan of the county castle, because of his misdemeanors.⁸² These structures were probably built as a result of the social and topographical transformation that followed the Mongol invasion and the settling of the new inhabitants in the castle. However, the process must have been very quick, because the first such tower was mentioned within eight years after the invasion. It is also important to note that the tower of the *Agendorfer* family may have been built as early as its supposed donation date, as I will explain in more detail later in the chapter.

In Buda and in the other towns with urban towers, the towers can be dated using the pattern observed in the case of Sopron. But in a few cases some archeological evidence is available too. For example, it is possible to date the tower at *Úri utca 37* in Buda to the middle of the thirteenth century based on pottery finds.⁸³ In Bratislava, the construction of the tower can be dated to the second half of the thirteenth century based on stylistic and urban development trends.⁸⁴ Relying on the process of the urban development in the country, however, it is possible to draw a chronological border to establish a dating framework. This framework can be used for towers from Székesfehérvár and Zagreb, despite the fact that documented mentions of them date from 1339 and 1480.

Similar to Hungary, the Mongol invasion played a decisive role in the history of the urban towers of Lesser Poland and Silesia. Here, the attack of 1241 was particularly important because, among other things, in Wrocław urbanization process began as early as the beginning of the thirteenth century, whereby the settlement was fitted within a stricter

⁸¹Mollay, „A Szélmalom utcai vám 1217-1564 [The Toll at Szélmalom utca from 1217 to 1564]”, 4.

⁸²Mollay, „Névtudomány és várostörténet Dágtól Ágfalváig (1195-1416) [Etymology and Urban History, from Dág to Ágfalva (1195-1416)]”, 119, 121.

⁸³Lócsy, „A Budapesti Történeti Múzeum régészeti feltárásai [The Archeological Excavations of the Budapest History Museum]”.

⁸⁴Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”, 239.

topographical framework, merging the former suburbia and surrounding villages and placing them in a new context.⁸⁵ This is also indicated by the fact that the *Rynek* with its large rectangular plan was completed by 1237. The marketplace itself already suggests a regular street network, reminiscent of an grid plan.⁸⁶ The tower visible in the 1562 panorama image by Barthel Weiner,⁸⁷ was adapted to the regular street layout on the corner of a block of buildings, and the street it is on (now Wita Stwosza) ran from the *Rynek* as an east-west axis. The Mongol attack almost completely destroyed the settlement in 1241 and the reconstruction only began in 1261 but several stone structures survived the attacks and were incorporated within the newly rebuilt system. It is not unlikely that the same happened with the urban towers—especially because several ashlar buildings were excavated around the *Rynek* that show direct stylistic connection with twelve-century Romanesque houses in Prague.⁸⁸

A similar process may have taken place in Kraków, although a systematic pre-Mongol urban structure probably did not exist there. After a series of Mongol attacks, Boleslaw the Chaste issued a charter in 1257 granting Magdeburg rights to the community and laying the foundations of a new city center, specifying the size and location of the main square to be established north of the Wavel Castle's *suburbium*, the *Okół*.⁸⁹ It is probable that urban towers existed at this time as well. According to the excavations at Ulicka Bracka 5, the tower found there may have been the first civic stone structure in the city, directly adapting to the last destruction layer and burnt wooden houses associated with the raids.⁹⁰ This can be supported by the fact that the towers were standing by the fourteenth century: in 1312 the rebellion of Henrich Voit and Albert was crushed by the duke of Kraków and the urban

⁸⁵ Czaja, „Polish Town Plans as Expressions of Political and Economic Power”, 239.

⁸⁶ Rădvan, *At Europe's Borders. Medueval Towns in the Romanian Principalities*, 47.

⁸⁷ Piekalski, *Public and Private Space at the Time of Medieval Transition*, 122.

⁸⁸ Piekalski, *Public and Private Space at the Time of Medieval Transition*, 120.

⁸⁹ Zinkiewicz, “Új Város Születik. Krakkó Alapítása [A New City Born. The Foundation of Kraków],” 88. Rădvan, *At Europe's Borders. Medueval Towns in the Romanian Principalities*, 47.

⁹⁰ Janusz, „The Towers of Cracow”, 153.

towers of the participants, including the building owned by Voit's brother, were confiscated.⁹¹

Thus, most of the Polish and Hungarian towers can be dated to the second half of the thirteenth century. However, as it will be shown later, the shape and topography of the buildings differ from contemporaneous structures in Vienna and Prague, and in many respects they follow the design of other towers that emerged in the early state of the urbanization of their cities. Thus, the towers follow an internal developmental curve within the settlements rather than being uniformly built following an overall plan. Within the chapter, this question will be mainly addressed concerning the position of the towers within the plots and their ownership. Before the destruction of the Mongols, the continuity of built environment can only be proven in Wrocław and Sopron.

1.1.3 Tower Construction in Thirteenth-Century in Bohemia and Austria

Similarly to the previous examples, in contrast with the towers built in the last decades of the thirteenth century, in the Kingdom of Bohemia and in Lower Austria the tower buildings were associated with the foundation or a more advanced stage of the urbanization process of the settlement. Also in comparison with the later tower structures, the earlier ones were mostly characterized by their position within the plot, which affected their connection and communication with the emerging cities to a great extent.

An example for this phenomenon is Prague, where the second major wave of constructions date back to the first decades of the thirteenth century. With the large-scale urbanization by the Přemysl dynasty around 1230, the so-called Gallus Market—now Havelská—was established in an empty corner of the Old Town, but still within the

⁹¹Zinkiewicz, „Új város születik. Krakkó alapítása [A New City Born. The Foundation of Kraków]”, 91–92.

protection of the city wall.⁹² Around the market square, especially on its eastern side, several towers were built nearly at the same time as the square itself.⁹³ Although the exact architectural dating of these towers is problematic, both the development of the quarter and the appearance of its buildings in written evidence which was multiplying by the second half of the thirteenth century provide a framework for the dating. In addition, towers were built in the Old Town too, but they are more difficult to place chronologically. For several family towers, only *ante quem* dating is possible. For example, the tower of the *Velflovice* family in the vicinity of the Main Square, which served as the residence of the head of the family, the so-called *Velfl*, is first mentioned in a source dated to 1264, before the family split into four branches around 1300.⁹⁴ However, the exact location of the tower is hitherto unknown.

The tower of St. Pölten can also be interpreted within the framework of a similar urban development. Here, in 1256, Otto von Lonsdorf was instructed by the bishop of Passau to build a two-storey tower in the city within two years, which Karl Gutkas connects with another charter and convincingly locates in the newly created main square.⁹⁵ It is important to clarify that at that time the town was already established but its broader topographic extension—such as the development of the Rathausplatz square and the building of the walls—only took place in the 1250s.⁹⁶

In Bruck an der Leitha, unlike the two examples above, the tower can be linked to the as early as the creation of the town. To the east of the former village-type settlement, a homogeneous urban core began to be built around 1200. In 1239, Duke Frederick II referred

⁹² Richter és Smetánka, „Archäologische Untersuchungen zum städtischen Wohnhaus des Mittelalters in Böhmen, unter besonderer Berücksichtigung von Prag [Archaeological Research on the Medieval Town Houses in Bohemia, with Special Emphasis on Prague]”, 79.

⁹³ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”.

⁹⁴ Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”, 2–3.

⁹⁵ Gutkas, „Stadttürme in St.Pölten”.

⁹⁶ Gutkas.

to Bruck as *civitas nostra*.⁹⁷ Even though the final topography was determined by the completion of the main square in 1299, its carved stone elements suggest that the private tower next to it can be dated to the end of the 1230s. The similar late Romanesque stone corbels found both in the ground floor of the tower and in the castle indicate that the tower itself must have been built approximately at the same time, in the first half of the thirteenth century, as the castle in the northeastern corner of the city.⁹⁸

The dating of the towers in Eggenburg, Brno and Wiener Neustadt is uncertain. The earliest mention of the private towers in Brno comes from 1297, and archeological evidence also suggests that the towers can be dated to the second half of the thirteenth century. David Merta and Marek Pesca point out that most tower buildings can be attributed to the time when the urban topography was already established but the plot system was still undefined and most of the burgher houses were still predominantly made of wood.⁹⁹ Like Brno, the building date of the private towers in Eggenburg and Wiener Neustadt are speculative. In Eggenburg, the ownership of the building can be linked to Mayor Heinrich Gurrit, who held his office from 1300 onwards.¹⁰⁰ Considering the topographical development of the town, since Kremserstrasse and its surroundings where the tower stood were laid out around 1300, the tower could not have been built much sooner.¹⁰¹ Out of these cases, the least amount of data is available for Wiener Neustadt. Duke Leopold V founded the town in 1194 and the basic layout of the town was finished by his successor Leopold VI paid out if the ransom of Richard the Lionheart in 1198.¹⁰² In spite of the early dating of the town the first clue regarding a private tower dates back to 1325 in the name *Wernhard in Turri*.¹⁰³ The next

⁹⁷ Opll és Pils, *Bruck an der Leitha*.

⁹⁸ Schicht, *Österreichs Kastellburgen*, 40.

⁹⁹ Merta és Pesca, „Brněnské domy s věží [Brno Houses with Towers]”, 205.

¹⁰⁰ Brunner, *Eggenburg. Geschichte einer Niederösterreichischen Stadt*, 84–85.

¹⁰¹ Czeike és mtsai., *Eggenburg*.

¹⁰² Opll, *Wiener Neustadt*.

¹⁰³ Kozak, „Zur Baugeschichte der Wohnburgen von Wiener Neustadt”, 99.

mention is from 1442 referring to the tower at Herzog-Leopold Strasse 28.¹⁰⁴ The topography of the planned street network and main square, as well as the close connection of the towers to this space, are tempting to date buildings to the early thirteenth century, but in the absence of more precise written and archaeological sources this remains highly speculative.

1.2 Topography of the Towers and the Plots Around Them

The urban private towers examined in the present study occupied some key locations in the surrounding urban fabric. Their presence was aligned with the main arteries of urban communication, thus dominating the channels of civic space and network. At the same time, the connection between the towers and the space surrounding them can by no means be called open in all cases. Overall, two practices emerge regardless of the topography of the building. In some cases, the construction of boundaries is more prevalent, while the other examples are characterized by a significant openness. The transition of the two types is well illustrated by Prague, highlighting a chronological change as well.

As noted above, most of the towers were organized around the main topographic focal points of the settlement. However, there is a difference depending on the date of construction of the buildings. Notably, the twelfth-century private towers of Prague were built somewhat more scattered than their later counterparts, although the existence of a guiding principle is detectable. These early tower buildings were mostly built in the part of the Old Town between Vltava River and the Staroměstské Náměstí but even here a few the buildings were located directly next to the central square, especially on the southern side. This arrangement is also typical for the other “Romanesque houses” of the twelfth century.¹⁰⁵ Eighty-five identified buildings stood out of the predominantly wooden architecture of the old town with

¹⁰⁴Kozák, 100.

¹⁰⁵Havrda, Semerád, és Musilek, „K proměně předlokačního osídlení prahy v raně gotické město na příkladu románského domu v objektu čp. 309 v Bartolomějské ulici [Romanesque House in No. 309 in Prague. On the Transformation of a Pre-locational Settlement into an Early Gothic City]”, 66.

their mere appearance, which has been further increased by the large plot sizes attached to them.¹⁰⁶ Moreover, here, mostly depending on the size of the plot, a much looser arrangement is probable, which justifies their fragmented situation.

Although in Prague most of the towers were first concentrated in modern Staroměstské Náměstí, over time the narrowing of the Old Town's topographic structure meant that they became more and more concentrated in the key areas, for example, seven towers were built around the emerging Gallus Market. In light of later sources, it is conspicuous that St. Havel Church, built in the market square, also became particularly important for the families who owned the towers through the burials and confraternities they made here.¹⁰⁷ A similar motivation is perceptible in the Staroměstské Náměstí, north of the Gallus Market. Here the residences of the urban elite were mostly built between the churches of Tyn and St. Nicholas, as well as the residence and tower of the *Velflovice* family next to the latter.¹⁰⁸ (See.Tab.: 9) In addition, it can also be seen that while the early towers were built in isolation inside the plots, the thirteenth-century buildings are characterized by more open structure. For example compared to the "Romanesque" towers, the building on the Havelska 403 / I plot, which can be connected to *Mikulas de Turri*, was built right on the corner of the plot, where the market square and the south-east street between Staroměstské Náměstí and the Svatohavelska gate merge.¹⁰⁹

Prague was not at all unique in this respect. During the thirteenth century there was an almost uniform concentration of towers in the main squares, in which two major groups can be distinguished. Firstly the towers that were built next to the most prominent square of the

¹⁰⁶Dragoun, „Románské kvádríkové domy v Praze [Romanesque Ashlar Houses in Prague]”.

¹⁰⁷Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague's Old Town]”, 339.

¹⁰⁸Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”, 2–3.

¹⁰⁹Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague's Old Town]”, 334.

city, and secondly those that were connected to a major road. Of course, there are exceptions, as well as less central locations. Perhaps Vienna should be highlighted here, where private towers seem more scattered than in other cities, somewhat reminiscent of the distribution of the early towers in Prague.¹¹⁰ In Vienna, the largest number of private towers were built within the walls of the old legionary *castrum*. While the Hoher Markt became the most highlighted building location,¹¹¹ there were also several towers in the vicinity of the Jewish Quarter,¹¹² close to the former Babenberg residence that once stood at the Am Hof.¹¹³ The other focal point is the northeastern half of Vienna, which was encircled with the newly built city walls after 1200,¹¹⁴ along the streets now known as Bäckerstrasse and Lugeck, both attached to the trade route to Hungary.¹¹⁵ Richard Perger locates the towers in the squares, for example the one on the modern Graben or at Stephansplatz, which were created during the thirteenth-century urbanization of the city.¹¹⁶ (See.Tab.: 5, 10,11)

In newly founded or expanded cities, the topographic features are similar to the patterns found in Prague and Vienna, but strictly adhering to the more systematic arrangement of the thirteenth-century private towers of Prague. In Kraków, Bruck an der Leitha, St. Pölten, and Bratislava, all the towers were built around the main square of the city. (See.Tab.: 2, 3, 4, 8) ¹¹⁷ One of the towers in Wiener Neustadt, Krems and Sopron can also be added here.¹¹⁸ (See.Tab.: 3, 6) In Kraków, the main square is almost completely surrounded by towers,¹¹⁹ while in the other examples they are restricted to one specific part.

¹¹⁰ To complicate the situation, most of the Viennese towers are only known from written sources, so their exact dating and locating is tenuous.

¹¹¹ Perger, "Wohntürme Im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]," 105–106.

¹¹² Gaisbauer, Mitchell, és Schön, „Forschungen zum mittelalterlichen wien. Neuansätze und verpflichtungen zum weiterdenken", 131.

¹¹³ Oppl, *Wien*.

¹¹⁴ Oppl.

¹¹⁵ Mitchell, „Early Stone Houses in Vienna", 23.

¹¹⁶ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]", 104, 107.

¹¹⁷ For St. Pölten see Gutkas, „Stadttürme in St.Pöltens", 316–17.

¹¹⁸ Hauptplatz 3 (Wiener N.); *Gozzoburg* (Krems); *Agendorfer tower* (Sopron)

¹¹⁹ Marek, „Sredniowieczne domy lokacyjnego Krakowa [Medieval Houses of Kraków in its Incorporation Period]", 81.

But these are usually all important corners and junctions where major roads led to the square, for example Wiener Gasse in Bruck an der Leitha or Heßstraße in St. Pölten. Similar to the location of the tower at Havelská 403 in Prague, in both cases the roads connected the central square and one of the gates of the city.¹²⁰ The tower of Henrich Voit, the first mayor of Kraków, was also located in a similar junction point on the Rynek.¹²¹ (See.Tab.: 8)

Unsurprisingly, the other topographic group—Eggenburg and St. Pölten, as well as towers in Wiener Neustadt—is also tied to these major routes, connecting the marketplace and one of the city gates, which usually continued outside of the walls in the form of a major highway.¹²² Wrocław is an outlier because here the Wita Stwosza road where the tower was built, does not run straight out of town after leaving the Rynek. The explanation for this is to be found primarily in the geography formed by the river Odera and its islands, but the street itself, nevertheless, was one of the main east-west axis of the planned city starting on the main square. (See.Tab.: 3, 8)

Sopron and Buda towers are also connected to the topographic system formed by the main roads. These, however, are not found along exit roads, but along the streets defining the main central axis of the spindle-like city plans. In Buda, Mindszent utca its section on the *Fischmarkt* and the Olasz utca appear in this way,¹²³ and there is also written reference to a tower at the *szombat hely* [Saturday market] which was the market square in the northern part of the walled city.¹²⁴ In Sopron, the situation is similar, but in a special way. All but two private towers were built in the block of houses between the main axis, Új utca, and Kolostor utca which runs parallel to it. The two endpoints of this axis formed by Új utca are defined by

¹²⁰Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”, 344.

¹²¹Komorowski és Opalinski, „O wieży wójty Krakowskiego raz jeszcze. Komunikat [Once Again About the Tower of Krakow’s Major. Statement]”.

¹²² At Eggenburg the Kremserstraße between the gate and the market square, in St.Pölten the Wienerstraße while in Wiener N. the Herzog-Leopold Straße

¹²³ Now the Úri utca and Országház utca

¹²⁴Végh, *Buda város középkori helyrajza II. [The Medieval Topography of Buda II.]*, 144, 190, 240, 259, 288.

Fő tér (main square) at the *Előkapu* ('front', i.e. northern gate) and the Franciscan Friary in the north, and Orsolya tér and the *Hátsókapu* (back gate) in the southeast.¹²⁵ These locations perfectly framed all the topographic points that highlighted the other urban towers. (See.Tab.: 6)

The towers themselves, as anchor points, became active agents of the urban space and the topographic network that developed around them. The Gozzoburg at Krems consciously occupies the edge of the cliff that separates the Hoher Markt of the Upper Town from the Danube, so from the direction of the gates and the Lower Town, visitors could only approach the square under the foot of the cliffs and the buildings that rose above them.¹²⁶ In addition, the square itself could be only entered by bypassing the building itself. The Bratislava City Hall on the Hlavné Namnésti occupies a similar position. (See.Tab.: 2, 4) The private tower and the walls adjoining it filled the corner of the square exactly where the space was accessible coming from the direction of the Mihály and Lőrinc gates and from the Franciscan friary. Albert Voit's tower and its surroundings occupied the only diagonal plot around the Rynek, where the city's south-facing main street joined the square from the direction of the Wavel Castle, while the Church of St. Mary was built facing the tower diagonally across the square.¹²⁷

This topographic setup can be contextualized by the plot sizes, albeit with much greater variability. In cases where the original plot sizes can be reconstructed, the range is wide. The private towers built on the edge of Prague's Staroměstské Náměstí or on Havelská, follow one another closely.¹²⁸ The situation is similar in Sopron.¹²⁹ Here, the buildings adapt

¹²⁵Jankó, Kücsán, és Szende, *Sopron*, 1:13–14.

¹²⁶Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”, 25.

¹²⁷Komorowski és Opalinski, „O wieży wójta Krakowskiego raz jeszcze. Komunikat [Once Again About the Tower of Krakow's Major. Statement]”; Rădvan, *At Europe's Borders. Medueval Towns in the Romanian Principalities*, 45.

¹²⁸Dragoun, *Romanesque Houses in Prague*.

¹²⁹Holl, „Középkori városi élet - városi építészet [Medieval Urban Life - The Urban Architecture]”.

their street facades to the average plot size of “10 ropes”, but in terms of the depth of the plots, they are twice as big as later medieval plot sizes. This can be well observed in the case of the tower at Szent György utca 14 / Új utca 9, as it is located halfway between the two streets at today’s inner plot boundary. However, the openings in the tower suggest that the plot was originally able to fill the entire section between the two streets.¹³⁰ The location of the other towers in the city, which were built on an almost straight line between Új utca and Kolostor utca on the late medieval plot border, also reinforces this. In addition, even larger plots can be found in Sopron. The tower at Kolostor utca 11 covered an area of “2x10 ropes.”¹³¹

Large plot sizes can be found in the case of several other private towers built at major topographic points. Gozzoburg in Krems, for example, occupied the entire northern side of the Hoher Markt.¹³² In Bratislava, the plot of the Old Town Hall stretched inwards from the Hlavné Námestí extending to the depth of an entire block of buildings. In addition to all this, one can also find a plot in Vienna with a tower next to the Hoher Markt, with its 1500 m² plot, which far exceeds the average plot sizes of its surroundings ranging from 400 to 800 m².¹³³

The larger plots and the prominent topographic situation indicate a two-way communication between the building and the urban community through the openness of the towers and their central location in terms of the surrounding public space, as was the case of the Gozzoburg in Krems.¹³⁴ However, this is not detectable in every case. As previously mentioned, some of the towers were built deep inside the plot, isolated from the outside

¹³⁰Szoboszlai, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”.

¹³¹Holl, „Középkori városi élet - városi építészet [Medieval Urban Life - The Urban Architecture]”.

¹³²Mitchell, „Raum und Repräsentation in der Gozzoburg”.

¹³³Gaisbauer, Mitchell, és Schön, „Forschungen zum mittelalterlichen wien. Neuansätze und verpflichtungen zum weiterdenken”, 132.

¹³⁴Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”, 25–36.

world, sometimes utilizing the full length of the plots as in Sopron, where the towers were built at approximately the same distance from both streets. This trend primarily characterizes towers built at an early stage of the topographical development of the city. In addition to Sopron, this can be seen in Kraków, Levoča, Bruck an der Leitha, and at the early tower buildings in Prague. Also in Buda, where the tower on Űri utca 37 was situated in the centre of the plot,¹³⁵ and the tower of the *Herzoghof* in Krems, which was built deep inside the plot, in the twelfth century.¹³⁶

This recessed and closed position is further enhanced by a peculiar stone wall built around the towers. In Bratislava, for example, a massive wall, as high as the first floor, encircled the plot surrounding the tower of the Old Town Hall. Similar constructions can be identified in Sopron, where the remains of a wall can be detected around three towers.¹³⁷ At Űj utca 4 and Kolostor utca 13 the towers were built on the longitudinal, inner plot boundary and were integrated into the wall that ran around the plot.¹³⁸ Although no tower was found in the Rathausgasse 2 plot or at the so-called Műnichhof in Eggenburg, but a massive stone-wall was constructed there, dating back to the beginning of the thirteenth century.¹³⁹ The same can be found in several other parts of the city, which, as in the case of Bratislava and Sopron, later became the main supporting walls of the houses built around the plot over time.¹⁴⁰

Walls like the ones in Sopron or Bratislava are not uncommon around urban private-towers of the Holy Roman Empire. In Braunschweig, the pattern is quite similar to that in Sopron. Here, too, the towers were built along the inner, longitudinal plot boundary, and

¹³⁵Lócsy, „A Budapesti Történeti Műzeum régészeti feltárásai [The Archeological Excavations of the Budapest History Museum]”.

¹³⁶Hollensteiner, *Der ehemalige Palast des Herzoghofes in Krems an der Donau*, 12.

¹³⁷Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”.

¹³⁸Dávid, „Kutatási dokumentáció - Sopron Kolostor utca 13. [Research Documentation - Sopron Kolostor utca 13]”; Scőnerné Pusztai, „Helyreállítási terv - Sopron Űj utca 4 [Reconstruction Survey - Sopron Űj utca 4]”.

¹³⁹Brunner, *Eggenburg. Geschichte einer Niederösterreichischen Stadt*, 84–85.

¹⁴⁰Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”, 112; Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”, 229–42.

stone-walls with the same thickness as the walls of the tower were built around them reaching the height of the first floor.¹⁴¹ In other examples, for example at the Schneidergasse 12-14 in Basel, a separate gatehouse was built into the wall next to the private-tower, while in Luzern there was also a palisade, a ditch and a draw-bridge. The *Sachsenspiegel* also mentions that an urban building with a fence / hedge / wall higher than a rider on a horse can only be built with the permission of the local judge.¹⁴² Similar to the towers of the examined region, in the territory of the empire these surrounding walls appear almost exclusively in cases where the tower building was built among the first permanent stone structures in the city. This can also be seen in the analogies in Basel and Luzern. At the same time, all these towers, with the exception of Bratislava, were built at the centre of the plot, so the isolation resulting from their position is further increased by the presence of these structures.

The question arises whether these walls could have served the explicit purpose of protection? Especially since, according to traditional historical research, the towers are vestiges of an early, “anarchic” period of urban development.¹⁴³ However, in addition to the issue of defense, it is important to note that such walls almost completely exclude towers from the use of and communication with the surrounding urban space. This is particularly striking because all the mentioned towers with the walls were built on important central locations. The private-tower in Bratislava on the Main Square as well as the fact that it was later converted into a town hall demonstrate the importance of this position perfectly. Prior to this, however, the tower completely filled and closed the corner of the square with the adjoining wall, from which direction the two main roads entered the square. Although the tower itself was built in the corner of the plot, the ground floor and first floor entrances

¹⁴¹Uwe, *Der Adelssitz im Mittelalter*, 58.

¹⁴² Dobozy, *The Saxon Mirror. A Sachsenspiegel of the Forteenth Century*, III/65-66§.

¹⁴³ I will address this question at the end of the next chapter after presenting further defensive aspects of the towers.

opened to the inside of the walled-off area, so the building had no a direct connection with the street in this way either.

In contrast to this retracted location, several later towers were built in a much more open position. The towers of Havelská in Prague were built at the same time as the other towers of the region, but at a later stage of the urban development of their city. The tower of the 403/I plot, still standing today, for instance, was built on the street façade like the other tower buildings in the square. In contrast, their twelfth-century predecessors in the Old Town area were still situated at the centre of the plots, far from the street. To some extent the same process can also be traced in Brno, where in the second half of the thirteenth century almost all of the towers were connected to the streets.¹⁴⁴ Eggenburg, where Mayor Gurrit's tower constitutes the street facade of Kremserstrasse, can also be mentioned here, even though there is no trace of a fence around the plot.¹⁴⁵

This chronological distinction attached to the positioning of urban private towers within the plots can also be observed in the western parts of the Holy Roman Empire, albeit projected over a longer period. Some of the early towers of Zürich, Basel, and Regensburg, were all situated deep—up to 25-30 meters—into the plot, with further auxiliary structures to increase their isolation from the city's public spaces. In Regensburg, however, the later elite towers, built from the middle of the thirteenth century, were almost all placed on the street front. This change of location is analogous with the expansion of Regensburg's civic autonomy. They elected their first mayor in 1244, and the first council members in 1259. However, these measures were preceded by the 1201 election of the first *Hansgrafen* to manage the markets and guilds. Meanwhile the guild members and merchants were gaining political foothold, and began to build new types of towers representing the growing weight of

¹⁴⁴ Except the towers at Náměstí Svobody 17. (the so-called Schwanz Palace) and the tower at Janska 4/6; Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”.

¹⁴⁵ Brunner, *Eggenburg. Geschichte einer Niederösterreichischen Stadt*, 84–85.

their legal and political status.¹⁴⁶ A similar process took place in Nuremberg, where the private tower of the so-called *Nassauer Haus* is still found front of the St. Lorenz Church. However, the towers in Nürnberg were no longer inhabited by the urban merchant elite but by members of the imperial ministerial strata. A similar social layer can be linked to the towers around the Gallus Market in Prague, such as the Velflovice and Domazlice families, who, in addition to their commercial and courtly functions, were also permanent members of the city council;¹⁴⁷ as well as mayor Heinrich Gurrit, the owner of tower in Kremserstrasse, Eggenburg,¹⁴⁸ or Mikulas de Turri, owner of a street-front tower in what is now the Dominican Square in Brno.

1.3 Additional and Auxiliary Buildings on the Plots

Analysis of the written data clearly show that the towers did not stand alone in the centre of the plots. As will be shown in the next chapter, the towers themselves, as central buildings, had an extremely tight interior. Due to their vertical structure and relatively small floor plan, they were only suitable for a limited number of functions, which is why additional buildings were necessary to complement the main building.

It is not surprising, then, that there is a large number of such features around towers, most notably found in sources discussing the sale and purchase of towers. First, a brief overview of the auxiliary structures that surrounded the towers is in order. In the Hungarian kingdom, the most abundant data are known from the city of Zagreb in connection with the tower purchase of the Pauline monks from the Gradec Hill. In the charter, the plot above the tower included a cellar, a stable and a herb garden; *hortolum*.¹⁴⁹ The situation of

¹⁴⁶Uwe, *Der Adelssitz im Mittelalter*, 64.

¹⁴⁷Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”.

¹⁴⁸Brunner, *Eggenburg. Geschichte einer Niederösterreichischen Stadt*, 85.

¹⁴⁹DI. 34 532. Entz, „Városi lakótoronyok a középkori Magyarországon [Urban Residential Towers in the Medieval Hungary]”, 47.

the tower on the Havelka 403 / I site in Prague is similar. Its fourteenth-century sale describes the associated cellar and stable as attached to the main building.¹⁵⁰ No archaeological data has been found for similar buildings constructed next to the towers under scrutiny here, but examples can be found in other parts of Europe. Examples include the Schwerturm at Zürich's Weinerplatz 9, which is known to have had a kitchen separate from the yard;¹⁵¹ or the semicircular auxiliary building and stable at Zürich's Grimmerturm also built against the wall surrounding the tower.¹⁵² Similar structures were also found in Regensburg and Basel, especially the latter at Schneidergasse towers 12-14, where a building was excavated, which could have served as accommodation for the staff.¹⁵³

In addition to auxiliary structures, a group of other buildings presumably of higher prestige stands out, which are typically called *domus* or *domus lapidea* in the charters. Such sources are known from Sopron, Buda and Székesfehérvár, in which a *domus* is mentioned in addition to the tower. Petrus Agendorfer *comes* and the Hospitallers also received such a donation in addition to the tower, which indicates that in Sopron both the *domus* and the tower was considered as one unit.¹⁵⁴ An abundance of sources attests to such buildings Vienna. Among others, for instance, in 1374 Niklas Dratlauf sold a quarter of his house "with its tower"; in 1277 "the tower and house" of Otto von HohenMarkt are mentioned; and at HoherMarkt 5 the Teutonic Knights bought a tower and five other houses on a plot, and one of these, according to a mention in 1470, was merged with the tower.¹⁵⁵

To define these structures, their archaeological remains are the obvious source.

However, in many cases it can be assumed that these are the houses that overgrown and

¹⁵⁰ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague's Old Town]”, 333–34.

¹⁵¹ Schneider, Wyss, és Hansser, „Das Haus »Zum Schwert« in Zürich: vom Wohnturm zur Standes- und Nobelherberge am Limmatbrückenkopf”, 4.

¹⁵² Andreas és Werner, „Städtischer Hausbau in der Nordostschweiz bis 1350 (ohne Kanton Schaffhausen)”, 83.

¹⁵³ Strobel, „Forschungsprobleme des mittelalterlichen Wohnbaus in Regensburg”, 162.

¹⁵⁴ Szende, „Ispáni vártól a királyi városig [From a Bailiff Castle to the Royal Town]”, 127. Nagy és mtsai., *Codex diplomaticus patrius I.*, 32.

¹⁵⁵ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 104–7.

enclosed the towers over time. Moreover, in cases where the towers were the single stone building on the plots, little data was left about these further wooden structures due to the density of modern structures. János Gömöri excavated several wooden buildings and other objects and houses in Sopron.¹⁵⁶ The stratigraphic data of these structures are in principle the same as the layers of towers in the city, but it cannot be ruled out that these buildings belonged to an earlier period of the castle, and, importantly, none of the archaeological objects came from a plot with a tower. The situation is more fortunate in Kraków than in Sopron, because a large number of wooden remains and foundations were found in the towers built around the Rynek.¹⁵⁷ (See.Tab.: 16/3) In Prague, stacked houses were excavated next to some Romanesque houses.¹⁵⁸

Three of the towers discussed in this thesis, the *Herzoghof* and the *Gozzoburg* in Krems, and the Stone Bell house in Prague, had stone houses constructed near them that survived and were built on the plot in the same period as the tower.¹⁵⁹ (See.Tab.: 27) At the same time, no building can be superimposed with the average city towers. In the case of *Gozzoburg*, the tower was built as a tract of the city palace of Gozzo.¹⁶⁰ The situation is similar in Prague where the tower closes the western tract of a city palace. Although the tower stands on its own at the *Herzoghof*, and the chapel and a stone building is built next to it, it was originally a royal building so it cannot be treated on the same level as the other towers.¹⁶¹ Nevertheless, the presence of a stone house and its known warehouse and toll collector function may suggest the criteria which a site must meet to fulfil a more complex function and the level of infrastructure required. This is important in light of the fact that the

¹⁵⁶ Gömöri, *Castrum Supron*, 120–40.

¹⁵⁷ Piekalski, *Public and Private Space at the Time of Medieval Transition*, 134.

¹⁵⁸ Havrda, Semerád, és Musilek, „K proměně předlokačního osídlení Prahy v raně gotické město na příkladu románského domu v objektu čp. 309 v Bartolomějské ulici [Romanesque House in No. 309 in Prague. On the Transformation of a Pre-locational Settlement into an Early Gothic City]”, 70.

¹⁵⁹ Vlček, *Staré Město, Josefov. Umělecké památky Prahy*, 405–10.

¹⁶⁰ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 229.

¹⁶¹ Hollensteiner, *Der ehemalige Palast des Herzoghofes in Krems an der Donau*.

tower itself has the same dimensions as its counterparts, thus the same spatial limitations apply regardless its royal affiliation.

1.4 The Tower of the Agendorfer Family in Sopron

In addition to the topographical and chronological factors outlined above, the afterlife of former private towers in the urban environment gives important insights into their use. An example for such continuity in Europe is the Torre de Conti, was built from the ruins of the Forum of Nerva, and after multiple bouts of reconstruction in the late twelfth century it was transformed into a private tower for the family of Pope Innocent III, the Contis.¹⁶² The Herzoghof and Gozzoburg in Krems and the Agendorfer family's tower in Sopron are, however, examples more pertinent to the present discussion. This subchapter will present the latter in more detail because its role, topography and social relevance in the city were in many ways the same as other private towers. At the same time, in Sopron the transition from county castle to becoming one of the free royal towns in the kingdom is also germane here, since, in many ways, it correlates with the urbanization process in which private-towers began to appear in other cities in the discussed region during the thirteenth century.

The Agendorfer tower in Sopron is unique in several ways both within the town and among the urban private towers of the Kingdom of Hungary. Its exact location is unknown, as the building and the medieval town hall around it were demolished at the end of the nineteenth century to replace it with an eclectic-style new building next to the *Előkapu* (front gate) on Fő tér. However, the history of the tower can be traced back to the 1250s in various written sources as a building privately owned until 1497, when it became part of the new town hall. With the help of these written data, Károly Mollay and János Sedlmayr successfully located the tower, which, unlike the other private towers examined in the present

¹⁶²Poretta, „L'invenzione di una Torra medievale”.

thesis, was built as part of the city wall east of the *Előkapu*.¹⁶³ In addition, the building appears in one of the earliest references to towers in Sopron and Hungary, dating back to 1256 when King Béla IV confiscated the tower with a stone house and with the village of Agendorf from the castle's castellan, Petrus Agendorfer.¹⁶⁴ However, based on the donation's royal origin, the specific topographical location of the tower, the position of the recipient, and regional analogies, it is reasonable to assume that the tower would have been part of the county castle before, presumably as the residence of the *comes*.¹⁶⁵

The first written source that carried any topographical information about the tower, dated to 1497, mentions it as the third plot east of the Tűztorony ('fire tower', the tower above the northern town gate) from the Előkapu, which belonged to the Agendorfer family and began to function as the new town hall in the same year.¹⁶⁶ From this period more precise information is available about the appearance of the tower building in a total of four charter sources, each mentioning some formal features of the tower. First, the plot of the tower stretched to the city wall, from which a tower rose similarly to the house at Főtér 7. Second, before it was transformed into the new town hall, the previous owner István Zenkel repaired the palisade of the tower and filled its surroundings with earth, although after 1440 the structure was already fortified with bricks so it would be suitable for carrying cannons shooting stone projectiles. Finally, the city wall was accessible through an iron door from one of the floors of the tower.¹⁶⁷ From this information it is clear that at that point the tower functioned as a fortification of the city, which is understandable due to its position on the

¹⁶³Mollay, "A Három Középkori Városháza [The Three Medieval Town Halls]"; Sedlmayr, „Sopron koragótikus lakótoronyai [Sopron's Early Gothic Residential Towers]", 324. Wagner, *Urkundenbuch des Burgenlandes. Herausgegeben im Auftrage der Burgenländischen Landesregierung. I. Die Urkunden von 808 bis 1270*, 249.

¹⁶⁴Mollay, „Névtudomány és várostörténet Dágtól Ágfalváig (1195-1416) [Etymology and Urban History, from Dág to Ágfalva (1195-1416)]", 119, 121.

¹⁶⁵Jankó, Kücsán, és Szende, *Sopron*, 1:13–14.

¹⁶⁶Mollay, „A három középkori városháza [The Three Medieval Town Halls]", 55.

¹⁶⁷Mollay, 55.

wall and its location next-to the gate. At the same time, a more complex role than a mere defensive function emerges from previous sources.

Petrus, the ancestor of the Agendorfer family, probably received the highest status non-ecclesial building in Sopron from the ruler that was confiscated in 1256. Petrus *comes* himself is the first castellan of the castle who is known by name. But soon after the donation of the tower, house, and village, the king dispossessed him from his newly gained properties on account of his misdemeanors. In the 1256 document the properties were donated to another prominent official from the village Babot, a certain Judge Frics, and to his brother Pál, as well as to Sonuk and his sons András and Adorján. But from 1265, Petrus *comes* became castellan of the castle again, and he successfully regained all of his estates.¹⁶⁸ He also appeared as a castellan when Přemysl Otakar II, who at that time as the sovereign of Lower Austria as a contender for the Babenberg's realm, marched under Sopron in 1272. Having executed three protesters on the Main Square but in agreement with the lords of the border area Petrus, opened the gates to the attackers. After the Bohemian occupation he remained in position until 1277, when Sopron was recaptured, after the battle of Dürnkrut in 1278, the palatine, II Matheus Csák, sentenced and executed Petrus during the noble *congregatio* of Sopron County.¹⁶⁹ After the execution the palatine gave all the estates of the castellan to Dénes, son of Beled of the Osl kindred.¹⁷⁰

Comparing the Agendorfer tower to the other private towers examined in this thesis, the early history and topography—known through charter evidence from Petrus and his successors, as well as the tower's later owner, István Zenkel—had more significance than the position and the assumed functions of the other private towers. The tower's location in

¹⁶⁸Mollay, „Névtudomány és várostörténet Dágtól Ágfalváig (1195-1416) [Etymology and Urban History, from Dág to Ágfalva (1195-1416)]”, 122.

¹⁶⁹Szende, „Fidelitas és politika. Kihez és miért volt hűséges Sopron városa a középkorban [Fidelity and Politics. Who and Where They were Loyal. The City of Sopron in the Middle Ages]”, 346.

¹⁷⁰Mollay, „Névtudomány és várostörténet Dágtól Ágfalváig (1195-1416) [Etymology and Urban History, from Dág to Ágfalva (1195-1416)]”, 122.

relation to the city walls and other fortifications stands out among all the other urban private towers, although, there are occasional examples otherwise: it is assumed that Tamás Váli's tower in Buda stood on the city wall,¹⁷¹ the Herzoghof in Krems became part of the wall,¹⁷² as was the tower of the Altemberger Palace in Sibiu.¹⁷³ However, similar to the Herzoghof, originally the tower in Sopron was not built in connection with the walls. The construction of Sopron's characteristic two-zwinger fortifications began only in 1291 and, according to charter data, was still not completed in 1340, although the city's delegates to King Charles I in Visegrád reported that the fortification system was almost ready, except for the moat.¹⁷⁴ Thus, the tower, already standing in 1250, could not have been connected to the inner wall but was connected to it afterwards.

According to the excavations of Imre Holl, a stone wall may have stood on top of the ramparts of the castle before the 1291 construction, which was 1-1.5 m thick and stretched at a 40 cm average distance, running parallel with the Roman wall.¹⁷⁵ Imre Holl discovered the structure in the back plot of Templom utca 14, and traced it in several other places throughout the city. Holl dated this fortification to between 1200 and 1275.¹⁷⁶ His theory also seems to be supported by two pieces of information from the documentary evidence. In 1277, King

¹⁷¹Végh, *Buda város középkori helyrajza II. [The Medieval Topography of Buda II.]*, 288.

¹⁷²The wall only completed in the first third of the 13th century around the Lower Town. See.: Czeike, Banik-Schweitzer, és Opll, *Krems-Stein*.

¹⁷³Hermann, *Hermannstadt, Porträt einer Stadt in Siebenburgen*.

¹⁷⁴Házi, *Sopron szabad királyi város története I.rész 1.kötet, Oklevelek 1162-től 1406-ig [The History of the Free Royal City of Sopron I.part 1.book. Charters from 1162 to 1406]*, 76.

¹⁷⁵The wall system of Sopron was built on the foundation of the late antique fortifications of Colonia Scarabantia. In the Árpadian period the Roman wall served as support for the earth and wooden rampart. Later this rampart served as the base of the medieval wall system. From the thirteenth century onward a triple wall system built on this. The inner wall stood on the top of the rampart, the middle was erected on the roman remains with the reusing of its towers, while the outer wall layed at the edge of the moat as the shortest and thinnest structure in the system. Jankó, Kücsán, és Szende, *Sopron. Mordovin, várszervezet kialakulása a középkori Magyarországon, Csehországban és Lengyelországban a 10-12. században [The Emergence of the Castle Organisation in the Medieval Hungary, Bohemia and Poland in the 10th-12th Centuries]*. Gömöri, *Castrum Supron*.

¹⁷⁶Holl, „Sopron középkori városfalai III. [The Medieval Walls of Sopron]”, 26; Feld, „Korai eredetű ispánsági váraink a 12-13. században. [Our Early Bailiff Castles in the 12-13th Century]”, 697.

Ladislas IV mentioned the “wear and fragmentation of castrum’s defenses.”¹⁷⁷ In 1297, Andrew III, after ordering the construction of the new wall system, but presumably still in connection with the earlier walls, stated that “...we have seen the deterioration of the city walls due to their old age and the old age of the work itself.”¹⁷⁸ The wall followed the line of the former inner city wall, so it is conceivable that the Agendorfer Tower was built on this. However, it is also possible that the wall was built right at the foot of the tower, roughly bypassed it.

In Sopron, there was another tower was built in a very similar situation at the Fő tér 7 plot. The tower, currently standing on the inner wall, was built opposite the castellan’s tower, considering the Előkapu and the Tűztorony as an axis of symmetry. Thus, its position on the wall is nearly identical with the position of the Agendorfer tower. Unsurprisingly, the tower at Fő tér 7 was interpreted by János Sedlmayr as a private tower, too.¹⁷⁹ However, the two towers differ from each other in several aspects. The Fő tér 7 building was clearly integrated into the inner city wall and was built in conjunction with it, and although the exact structure of the other building is unknown, based on the closed structure of the tower in the Főtér, it is clearly built with a primarily defensive role overlooking the entrance of the Előkapu.¹⁸⁰

In its architectural context, the environment of the Agendorfer tower further indicates its prominent role besides its possible early dating. The other defining point in the topography of the building is the above mentioned *Előkapu* that was built next to it, which at that time

¹⁷⁷Házi, *Sopron szabad királyi város története I.rész 1.kötet, Oklevelek 1162-től 1406-ig [The History of the Free Royal City of Sopron I.part 1.book. Charters from 1162 to 1406]*, 7.

¹⁷⁸Fejér, *Codex diplomaticus Hungariae ecclesiasticus ac civilis*, 375. Lindeck-Pozza, *Urkundenbuch des Burgenlandes. Herausgegeben im Auftrage der Burgenländischen Landesregierung. II. Die Urkunden von 1271 bis 1301*, 95, 305.

¹⁷⁹Sedlmayr, „Sopron koragótikus lakótornyai [Sopron’s Early Githic Residetial Towers]”.

¹⁸⁰ The tower only have one small ground floor door. Above that the only opennings are just loopholes overlooking the zwinger. While the thickness of the wall is more than 2 m. There are no heating system in it and the upper level was only accesibble from the ground floor. Its upper level entrance is a secondary opening, and due to its intact western walls, through the walls it could have been only accesed from the direction of the *Előkapu*.

did not yet have its massive tower, the so-called *Tűztorony*.¹⁸¹ The *Előkapu* served as the primary northern gate for the fortifications since the Roman period. The main road which bisected Sopron—following the Roman Amber Road—entered the town through this gate, and (at least parts of it) served as one of the main trading routes from the south to the north already in the Árpadian era, although after the foundation of Wiener Neustadt it lost much of its significance. Under the tower, outside the moat, this route bypassed the castle, so the market place was formed at the “forecourt” of the Agendorfer tower by the road. Another prominent square in Sopron, which later became the Main Square, bordered the tower inside the castle area in the south.¹⁸² Due to this space within the walls, the tower building was also separated from the strict and clearly planned street network and plot system that developed from the middle of the thirteenth century and defined the topography of Sopron.¹⁸³ On the one hand, the disruption caused by the tower in the street network may also indicate that the tower and any additional buildings near it had already existed before the construction of the street network. On the other hand, the large empty space around the tower may indicate a larger complex.

It is also important to note that two important churches were established on either side of the tower. Although the town’s parish, the Church of St. Michael, was built a little further away, nearly 600 meters from the *Előkapu*, the Church of the Virgin Mary stood on the hill opposite—on the market square just below the tower, outside the Roman and medieval town walls. In the eleventh and twelfth centuries, this duality of churches can often be observed in county castles in the Kingdom of Hungary. Péter Németh interprets the churches dedicated to St. Michael as the parish of the inhabitants of the castle and its surroundings, and—based on their location either within the walls or at their foot—suggests that those dedicated to the

¹⁸¹ It only built at the second half of the 13th or in the first third of the 14th century parallel with the wall constructions. Sedlmayr, „Az Előkapu tornya és védművei [The Tower and the Defences of the Előkapu]”.

¹⁸² Jankó, Kücsán, és Szende, *Sopron*, 1:14.

¹⁸³ Szende, „Ispáni vártól szabad királyi városig [From a Bailiff Castle to a Free Royal City]”, 137.

Virgin Mary were Dean churches.¹⁸⁴ On the whole, Maxim Mordovin accepts Németh's argument, but rejects the diaconal or archidiaconal role of the Virgin Mary churches, on the grounds that the decal network was not yet established at the time of these churches' construction. Mordovin suggests that the location of the buildings suggests that these churches served as chapels of the *comes* or the castellan.¹⁸⁵ Identifying the Church of the Virgin Mary as a chapel, due to its topography, may further strengthen the possible origin of the Agendorfer Tower as a tower connected to the *comes*'s seat and residence. In addition to the Church of the Virgin Mary, the Franciscan friary was established in close proximity to the tower, but within the fortified walls of the county castle that later transformed into town walls. Although the date of and details about the construction of the church are not clear, the building probably dates back to the mid-thirteenth century.¹⁸⁶ Its donor is unknown, but its proximity to the possible residence of the *comes* at the Előkapu also suggest his involvement.

A number of topographical features of the Agendorfer tower can be detected the residential sections of the Bohemian, Polish and Hungarian county castles. These include its location close to the gate, to the main road and the market, and to churches—in this case, buildings probably built as a chapel and a noble donation—as well as its position exactly on the corner of the castle's defense system, which is then circumvented by the street network inside. All these can be detected, for example, in the castles of Budec, Olomouc—complete with a stone-wall and a large tower—and Přerov. The residential area in Gdańsk, although the castle was built on an island, has an analogous relationship with the gate and the road as in Sopron, and similar elements can also be discovered in Wrocław and Giecz, too.¹⁸⁷

¹⁸⁴Németh, "Civitas at Suburbium (Adatok Sopron Korai Várostörténetéhez) [Civitas et Suburbium (Data to the Early Urban History of Sopron)], 56, 58."

¹⁸⁵Mordovin, *várszervezet kialakulása a középkori Magyarországon, Csehországban és Lengyelországban a 10-12. században* [The Emergence of the Castle Organisation in the Medieval Hungary, Bohemia and Poland in the 10th-12th Centuries], 111–14.

¹⁸⁶Jankó, Kücsán, és Szende, *Sopron*, 1:14.

¹⁸⁷Mordovin, *várszervezet kialakulása a középkori Magyarországon, Csehországban és Lengyelországban a 10-12. században* [The Emergence of the Castle Organisation in the Medieval Hungary, Bohemia and Poland in the 10th-12th Centuries], 281,303,320,329,360,363,433.

In addition to these examples, residential towers in the Kingdom of Hungary also share these elements, a couple of which can also be connected to the *comes*. Such a tower, supplemented by the castle wall, a network of roads, and an ensemble of churches, can be found at the *comes* castle in Visegrád-Sibrik hill.¹⁸⁸ In Trenčín (quote),¹⁸⁹ a rotunda has been excavated next to the residential tower, which could serve the same purpose as the church bellow the Agendorfer tower in Sopron. Furthermore a *comes* tower is also suspected in Šintava,¹⁹⁰ Zalavár,¹⁹¹ and Timisoara.¹⁹² In Sátoraljaújhely, according to a charter from 1262, a *comes* family received a half-finished tower from Stephen the Younger King in the county castle.¹⁹³ This, in many ways, is in line with the example of Sopron. While of the analogies listed above, the examples from Visegrád and Győr are the closest to Sopron in terms of their form, although oppositely to Sopron by the thirteenth century the county castle of Visegrád lost its role as a county seat. The Herzoghoff in Krems can also supplement these examples, which is the subject of more detailed analysis below.

The Agendorfer tower appears in the sources several times after 1250, although its owners did not hold the rank of *comes*. The donation to Petrus in 1250 does not preclude its possible origin as a former comital seat. Among the Polish and Bohemian examples, castellan residences include Zatec, Libice, Budec and Kourim, especially Budec where the residence was originally a ducal palace, but was later donated to the castellan in the twelfth century.¹⁹⁴ A similar process as in Budec, is supported by a thirteenth-century list of the *comites* of Sopron. (See Fig.4.) It convincingly shows that from 1242 onwards, the *comes* also held

¹⁸⁸Buzás és mtsai., „Régészeti kutatások a visegrádi Sibrik-dombon”.

¹⁸⁹ Feld, „Korai eredetű ispánsági váraink a 12-13. században. [Our Early Bailiff Castles in the 12-13th Century]”.

¹⁹⁰Feld, 704.

¹⁹¹Ritoók, „Zalavár-Vársziget Árpád-kori »tornya« [The »Tower« of Zalavár-Vársziget" from the Arpadian-Period]”.

¹⁹²Feld, „Korai eredetű ispánsági váraink a 12-13. században. [Our Early Bailiff Castles in the 12-13th Century]”, 704.

¹⁹³Détshy, „Hol állt a középkori sárospatai vár? [Where Stood the Medieval Castle of Sárospatak?]”.

¹⁹⁴Mordovin, *várszervezet kialakulása a középkori Magyarországon, Csehországban és Lengyelországban a 10-12. században [The Emergence of the Castle Organisation in the Medieval Hungary, Bohemia and Poland in the 10th-12th Centuries]*, 175.

baronial offices and titles throughout the whole century. In several cases they are also recorded as *Magister pincenarum* [master of the cupbearers], *Agasonum regalium magister* [stable master], and *Dapiferorum regalium magister* [master of the stewards], but out of the twenty *comes* appointed after 1242, ten also held the title of palatine. It is also a common phenomenon that the title of the *comes* of Pozsony, Moson, Vas and Somogy were attached with the *comes* of Sopron, probably with the collective role of border protection. Therefore in the county further border castles were established as a complex system, like the fortification at Locsomád.¹⁹⁵ Based on all this, it is likely that the *comes* did not stay in Sopron permanently, so his residence may have been delegated to his local deputy, in this case to *Petrus comes*. After all, as a castellan, *Petrus* performed the same functions as the *comes* in his absence.

Name	Date	Other-Offices	Event – data
<i>Matheus from the Csák kindred</i>	1242	Master of treasury [<i>Magister tavarnicorum</i>]	Mongol invasion (1241-1242) Recapture of Sopron (1242)
<i>Arnold son of Arnold from the Hahót kindred</i>	1243	-	
<i>Roland son of Domonkos from the Rátót kindred.</i>	1242-1245	Master of treasury [<i>Magister tavarnicorum</i>]	
<i>Csák son of Buzát from the Hahót kindred</i>	1247-1254	Stable master [<i>Agasonum regalium magister</i>], Master of treasury [<i>Magister tavarnicorum</i>]	
<i>Roland son of Domonkos from the Rátót kindred</i>	1255	Palatine (1248-1260) Pozsonyi ispán (1248-1260)	
<i>Lőrinc son of Péter from the Aba kindred</i>	1257-1269	Master of the stewards [<i>Dapiferorum regalium magister</i>]	
<i>Mojs son of Mojs</i>	1270-1272	Palatine, Bailiff of	Otokar captured

¹⁹⁵ Zsoldos, „Confinium és marchia. (Az Árpád-kori határvédelem néhány intézményéről) [Confinium end Marchia. Some Establishments of the Árpadian Border Defense]”, 115.

		<i>Szeben</i> , Ban of Slavonia	Sopron (1272)
<i>István</i> <i>Voytanus</i> <i>Gyerca</i>	1272	Deputy bailiffs	
<i>Lőrinc son of</i> <i>Kemény</i>	1272-1273	Palatine, Bailiff of <i>Orbász</i> and <i>Baranya</i>	
<i>Henrik son János</i> <i>from the Héder</i> <i>kindred</i>	1273-1274	-	
<i>Péter son of Máté</i> <i>from the Csák</i> <i>kindred</i>	1274-1275	Bailiff of <i>Somogy</i>	
<i>Miklós son of</i> <i>Héder from the</i> <i>Héder kindred</i>	1275	Palatine	
<i>Péter son of Máté</i> <i>from the Csák g.</i>	1275-1276	Palatine, Bailiff of <i>Nyitra</i> and <i>Somogy</i>	
<i>Miklós son of</i> <i>Héder from the</i> <i>Héder kindred</i>	1276-1277	Palatine, Bailiff of <i>Moson</i>	
<i>II Máté from the</i> <i>Csák kindred</i>	1277-1279	Palatine, Bailiff of <i>Moson</i> , <i>Vas</i> , <i>Bánya</i> and <i>Somogy</i>	Battle of <i>Dürnkrut</i> (1278)
<i>István</i>	1280	-	
<i>Finta son of Dávid</i> <i>from the Aba</i> <i>kindred</i>	1280	Palatine, Bailiff of <i>Somogy</i>	
<i>II Matheus from the</i> <i>Csák kindred</i>	1282	Palatine, Bailiff of <i>Pozsony</i> and <i>Somogy</i>	
<i>László the son of</i> <i>Beled from the Osl</i> <i>kindred</i>	1283	-	
<i>Majkán son of</i> <i>Bökény from the</i> <i>Aba kindred</i>	1286	Palatine, Bailiff of <i>Moson</i> and <i>Somogy</i>	

Figure 5.: List of the comes-es of Sopron and their further titles between 1242 and 1268¹⁹⁶

The list also suggests the absence of the bailiffs in Sopron. From 1242 only four bailiffs had no any other duties or titles, so these four were the ones who could reside in

¹⁹⁶ The table and its data based on: Zsoldos, *Magyarország világi archontológiája I. (1000-1301)* [Archontology of Medieval Hungary vol. I. (1000-1301)].

Sopron permanently.¹⁹⁷ On the other hand, these cases must be interpreted in their context. The period from 1243 to 1273-1274 was a turbulent time in the history of Sopron. In 1243, the city was freshly liberated from the Austrian occupation following the Mongol invasion, while in 1273-74 Otakar II occupied the city with the help of Péter *comes*. The confusion within the Hungarian administration caused by the latter event is well illustrated by the fact that no bailiff was appointed after the occupation in 1272: the charters only referred to a certain István, Voytanus, and Gyerca as deputy bailiffs. The person of László, son of Beled of the Osl Kindred, is particularly interesting here. The Osl family had significant positions in Sopron, Moson and Vas counties. Several towers around Sopron are known to have been in the hands of various members of the kindred, for instance, in Hidegség, they had a tower under construction in 1281.¹⁹⁸ Mihály, son of Osl, also had a tower at Széplak, near Csorna.¹⁹⁹ Importantly, at one point all the properties and possessions of Petrus Agendorfer, including the village of Dág near Sopron and the urban tower in Sopron, were transferred to Dénes of the Osl Kindred.

The person of Petrus *comes* and his role in the city bear many resemblances to another contemporary, Gozzo of Krems, who also possessed a private-tower and a residence attached to it. His building complex consists of several tracts, a large hall, a chapel, and a residential tower.²⁰⁰ As previously noted, the location of this structure in the Hoher Markt, as well as its connection with the roads, squares and churches or chapels, are in many ways parallel with the Agendorfer tower. Although Gozzo himself did not hold a military position, he played more or less the same administrative role in Krems as Petrus did in Sopron, while becoming richest citizen of the city as head of the local toll office and then as a judge. After 1270, he

¹⁹⁷ 1243: Arnold, son of Arnold of the Hahót Kindred; 1273-1274: Henrik, son of János of the Héder Kindred; 1280: István; 1283: László, son of Beled of the Osl Kindred.

¹⁹⁸ Gömöri, „Fertő-Hanság Nemzeti Park, a Fertő D-i partszakaszának régészeti lelőhelyei (2012-ig) [The Fertő-Hanság National Park, the Archaeological Sites at the Southern Shore of the Fertő-Lake]”, 17.

¹⁹⁹ Pór, „Az Osl nemzetség története a XIII. és a XIV. században [The History of the Osl Kindred in the XIII and the XIV Century]”, 185.

²⁰⁰ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 229.

was also involved in the administration created by Otakar II, although presumably at a higher level than Petrus *comes*. From 1273 he was appointed as *officialis domini Regis Bohemiae in Anaso, Kammergraf*, and *rector officiorum per Austriam*, a quasi governor of Lower Austria on behalf of Otakar.²⁰¹ Gozzo's personal representation in his community accordingly: the hall of his residence was richly decorated with heraldic symbols, for example, the main wall above his chair featured Otakar's and his own coats of arms and below them those of the nobles and cities of Lower Austria painted in several rows.²⁰² Although without hard evidence, it is presumable that Petrus may have held a similar position to Gozzo in the Sopron area. At the same time, in addition to the position held due to the regime of Otakar II, the two persons are also connected by the topography and character of their residence and the dominant tower buildings that appear there.

In addition to Gozzo's residence, there is another tower building in Krems which in many ways bears a resemblance to our example in Sopron. The construction of Herzoghof, on the bank of the Danube and on the border of the later Lower Town, may have been motivated by similar factors as the Gozzoburg and the Agendorfer Tower in Sopron. Firstly, neither of the three towers were privately founded: both the Gozzoburg and the Herzoghof were originally built as urban castles, serving as two out of the three fortifications in the town, before they became private properties.²⁰³ The whole Herzoghof complex was built in the second half of the twelfth century when the city had not yet assumed its later layout, but already had a prominent economic role due to its location along the Danube. The tower was erected near the border of the town directly next to the place where the market square would develop later. It was next to the main routes and the crossing of the Aluanbach Creek.

²⁰¹ Bábinszki, „Ein Herrscherprogramm im Stadtrichterpalast? Die Wandmalereien im Turmzimmer der Gozzoburg in Krems”, 63.

²⁰² Mitchell, „Raum und Repräsentation in der Gozzoburg”, 231.; Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”, 28.

²⁰³ Czeike, Banik-Scweitzer, és Oppl, *Krems-Stein*.

Besides serving as one of the three city castles that protected Krems, the Herzoghof functioned simultaneously as a warehouse, toll office, mint and the local residence of the Babenberg family.²⁰⁴ Originally, it had no serious fortifications, but its tower was built in a prominent position at the mouth of the Aluanbach to the Danube. Its originally open structure was later closed—not by independent fortification but by being incorporated into the city wall just like in Sopron.²⁰⁵ Finally, another similarity between the Agendorfer tower and the Herzoghof was that one of the main gates of Krems, the Steinertor, was built in the vicinity of the tower, at the crossing over the Aluanbach. Thus, the Herzoghof's position on the wall developed very similarly to that of the Agendorfer tower near the Előkapu.

²⁰⁴Hollensteiner, *Der ehemalige Palast des Herzoghofes in Krems an der Donau*.

²⁰⁵Czeike, Banik-Scweitzer, és Oppl, *Krems-Stein*.

3. Form and Function

In the following, I will examine the structure of urban private towers in terms of their function. For this, available archaeological and architectural elements are examined in detail, although all available materials are extremely fragmented. The handful of surviving written sources are not included in the database because they do not explain the use of space, architectural details or the function of the towers.²⁰⁶ In spite of this fragmentation of sources, both urban and rural towers have been linked to a highly complex functional system that, in multiple layers, shaped the role of a residential tower. Contemporary sources refer to them as *turris* in most cases, but *fortalicium* and *arx* is common too—but none of them describes the exact role of these architectural elements.²⁰⁷ In scholarship, different terms, such as residential tower, are used to distinguish between the various tower structures. Based on this basic hypothesis, previous studies connected four well-defined tasks to these buildings. First, as their name suggests, the towers should provide a well-equipped residential space to its owner, which is complemented by an economic and storage role. In this way, the tower becomes a sort of well-guarded safe deposit box too. This second function in itself indicates the third role, which is the defensive function of the building, protecting the owner and their valuables. A combination of these three elements would be extended/ complemented by the fourth purpose, the power representation of the possessor person or community, which carries important messages beyond the tower's mere formal appearance.

²⁰⁶ I only find three case so far except of minor details. One of the source is from Wien, which mentioned that the tower at Rottenturmstrasse had seven floors. While the other sources are from Sopron. One is detailing the tower under Kolostor utca 13, and its reparable pyramidal roof, and iron door. While the other is mentioned a stone battlement at the tower at the former Town Hall. Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”, 229–42.

²⁰⁷ Feld, “A magánvárak építésének kezdetei a középkori Magyarországon a régészeti források tükrében I.” [The beginnings of the construction of private castles in medieval Hungary in the light of archeological sources I.]; Wiedenau, “Katalog Der Romanischen Wohnbauten in Westdeutschen Städten Und Siedlungen (Ohne Goslar Und Regensburg)” [Catalogue of Romanesque residential buildings in West German cities and settlements (Excluding Goslar and Regensburg)].

Earlier research treats the combination of these four functional layers as evidence, as it can be seen in János Sedlmayr's article on the urban towers of Sopron, and Lukas Högl's categorization in terms of Swiss residential towers.²⁰⁸ However, this academic approach has roots in medieval perspective. Lambert of Ardes in 1203 in his work about the life of Baldwin III, count of Guines, describes the power and influence of his lord through the symbolism of his tower-like residence, the Castle of Boulonnais, while emphasizing its functional division.²⁰⁹ (See in the paragraph) Lambert's work is also remarkable because vertical projection appears here foremost, mixed with interior symbolism, which is embodied by the power of the tower and the feudal lord. The lowest level is shown here as warehouse, barn and shed. The second level is the entrance area where the chambers, guest rooms and halls are situated. The third level crowned the structure as a chapel and the place of the guards. Lambert's symbolic structure, while not reflecting reality in all its elements, highlights the distribution of functions of the residential towers that prevails in the modern research of towers, either in a castle or a city.

"Arnold constructed (...) a wooden house (...) that surpassed the houses built of the same material in all of Flanders at that time. (...) And he made and created an inescapable labyrinth of it; he attached room to room, chamber to chamber, and compartment to compartment, and joined the granaries or storerooms to the cellars; he built the chapel above in a very suitable place on high in the eastern part of the house.

Then he built the three-storey structure (...) long way from the ground as if in the air. The first storey, where there were cellars and granaries, also great chests, kegs, and

²⁰⁸ Gerő, *Magyar várak [Hungarian Castles]*; Sedlmayr, "Sopron koragótikus lakótornya" [The early-Gothic residential towers of Sopron]; Piper, *Österreichische Burgen 1-2 [Castles in Austria]*; Högl, "Vier Hauptfunktionen des Wohnturms: Bauarchäologische Thesen zu einer Leitform des Burgenbaus in der Schweiz [Four main functions of residential tower: Archaeological theses on a key castle structure in Switzerland]."

²⁰⁹ Lampert of Ardes, *The History of the Counts of Guines and the Lords of Ardes*, 127 chapter.

vats, and other implements of the house, was on ground level. Then the common living and work spaces of the inhabitants were on the second floor, (...) Over here was the great chamber of the lord and his wife, in which they slept; the side chamber was contiguous to this, that is, the chamber or dormitory of the attendants and children. Here in a more private part of the great chamber there was a private alcove, where they used to make a fire at full dawn or at dusk or during an illness, or for letting blood or for warming the attendants or the weaned children. (...) On the lower level, they put pigs that were to be fattened up over here, over there the geese to be fed, and over there capons and other fowl that were being prepared to be killed and eaten. (...)"²¹⁰

Although functional division can be traced back to some of the large residential towers, for example, the royal Castle of Karlštejn in the Czech Republic and the hunting residence of Charles V, the castle of Vincennes near Paris, it is not necessarily applicable to smaller counterparts.²¹¹ Based on their formal features, several questions can be raised about the architecture of the towers of thirteenth-century lower nobility. On the one hand, in most cases only the corpus or the foundation level of these towers survived, which precludes any interpretation of their interior or their higher structures. Also, due to the size difference between the above-mentioned examples and other towers, as well as the fact that their owners had higher social or economic standing than the builders of urban private towers, it is not possible to make a clear equation. This ambiguity mixed with generalization also appears on the terminological level in research.

In an urban context, this issue is even more confusing. Here the towers were built in a much narrower environment, and although there were the plots around them, their further expansion was rather limited compared to a residential tower in a castle. Accordingly, urban

²¹⁰ Lampert of Ardres, Chapter 127.

²¹¹ Whiteley, "Le Grosse tour de Vincennes, résidence de Charles V." [The great tower of Vincennes, the residence of Charles V.]; Dvůráková and Menclová, *Karlštejn [The Castle of Karlštejn]*.

private towers necessarily had a more compact form, while fulfilling all the above-mentioned functional elements. Also in a urban environment the architectural fragments were available in a limited quantity; although they can help determine the function of the buildings. On the other hand, there is no other source material available for the interpretation of the towers. Therefore, in the next section, I will present in detail each of these architectural remnants separately, examining to what extent is it possible to connect them to an exact function, and on what level do they correspond to the functional division of a residential tower.

To examine my topic in this chapter, where possible, I take into consideration the rural towers and the fortified manor houses built in the same period in Austria, the Kingdom of Hungary and in the Kingdom of Bohemia. This is justified by the fact that these buildings had many common features in Central Europe in the middle of the thirteenth century. Firstly, the castle constructions in the Kingdom of Hungary after the Mongol Invasion of 1241/42 are based on the traditions of the country's western neighbors in many ways.²¹² In addition to this, the wave of residence buildings by King Otokar II Přemysl, which had a great impact on the Czech nobility, also strongly influenced Austria through the king's expansionist policy.²¹³

...

3.1. Structural Overview

The tower buildings selected for the present thesis can be divided into two formal categories: early Romanesque houses in Prague and a more general group of towers that dominate the region, including the Kingdom of Bohemia. Thus, after a brief introduction of the Bohemian examples, I will present the other towers in general terms, only highlighting regional characteristics where they deviate from the overall picture.

²¹² Kühtreiber és Gerhard, „Der spätmittelalterliche Burgenbau in Oberösterreich”; Feld, „A magánvárak építésének kezdetei a középkori Magyarországon a régészeti források tükrében I. [The Beginnings of the Construction of Private Castles in Medieval Hungary in the Light of Archeological Sources I.]”; Fügedi, *Vár és társadalom a 13-14. századi Magyarországon [Castle and Society in the 13-14th Century Hungary]*.

²¹³ Menclová and První, *Ceské Hradý [Czech castles]*.

3.1.1 Romanesque Houses in Prague

In Prague, this group of Romanesque Houses contains five buildings with a tower form.²¹⁴ (See.Tab.: 15) They are typically built using massive ashlar masonry on a 7x5 meter foundation. As opposed to other houses in the city they do not have a cellar but their vaulted ground floor was lowered as semi-basement. To connect this lowered section to the plot, a staircase led to it from the courtyard. With one exception, a wall divided all these lower spaces, and their floor plans were projected to the higher storeys, too. The higher floors were accessible by external stairs, which is proven by imprints found on the outer walls. The buildings' height is uncertain, but Zdeněk Dragoun assumes that they had two to three levels. At the same time, he does not consider these specific buildings as towers, which is also the opinion of the Polish archaeologist Jerzy Piekalski.²¹⁵ However, both their layout, and the fact that they are taller than they are wide, justify considering these edifices as towers. While their high-quality Romanesque decorations and their sturdy structure did indeed exceed those of the towers described below, all of them were built according to the same principles and their structural subdivision corresponds to that formulated the basic hypothesis regarding to the functional division of the towers. In architectural terms, these buldings are close to the Romanesque city palaces of Prague, and they clearly influenced the early burgher houses in Lesser Poland and Silesia, especially the ones in Wrocław.²¹⁶ There is a relationship between the towers and some other urban towers, mainly in the Rhineland, for example, the *Frankenturmin* Trier which has Romanesque design and structural features, although it is significantly bigger than the ones in Prague.²¹⁷

²¹⁴ The buildings are situated in Jilská 449., Jilská 451., Karlova 146/I., U Radnice 16/I., Malé náměstí 459/I., in downtown Prague. Dragoun, *Romanesque Houses in Prague.*:

²¹⁵ Piekalski, *Prague, Wrocław and Krakow: Public and Private Space at the Time of the Medieval Transition*, 111.

²¹⁶ Piekalski, 120.

²¹⁷ Knöchel, „Befestigte Wohnanlagen im mittelalterlichen [Fortified Residential Buildings in the Middle-Ages]”, 89.

3.1.2 General Characteristics of Further Urban Towers in the Region

While the above described group of Romanesque buildings in Prague is set apart mainly by the time of building and use, a more miscellaneous corpus of tower buildings in Lower Austria, Hungary and Southern Poland are particularly relevant here because of their structural similarity. These towers, which are distinct from the Prague group in chronological terms, show a much more general picture in terms of their architectural design. All in all were built on the same principles. This is true not only for their size, but also for their architectural features. The types of openings, vaults and other carvings have many similar elements, most obviously in the use of linked-windows, as well as the rib and stone bracket design of the ground-floor cross vaults. Contrary to the examples from Prague, the predominant building material is rubble stone masonry, ashlar were only used in accentuated parts such as the exterior corners of the buildings. Bricks were used mostly in auxiliary functions, especially around openings or in the filling of linked-windows. Notably, moving northward the proportion of materials gradually shifts, for example, in Poland, it is more likely to find brick towers complemented by ashlar stones at the key points.²¹⁸

The existence of medieval wooden towers is not entirely out of question but it is difficult to detect them in a present-day urban environment. This type of building is mainly found in the Baltic, such as in the city of Riga, Szczecin, Toruń or Visby.²¹⁹ The use of wood as an complementary building material in some towers is not unthinkable. Wood was most certainly used for horizontal ceilings, roof structures and stairs, and it is probable in the no longer extant upper structures as well. Fachwerk structures may be found here, as in the case

²¹⁸ Piekalski, *Prague, Wroclaw and Krakow: Public and Private Space at the Time of the Medieval Transition*, 118.

²¹⁹ Fehring, "Städtischer Hausbau Des Hochmittelalters in Mitteleuropa' Siedlungsforschung" [Urban House Architecture in the High Middle Ages in Central-Europe ' ' A Settlement Research], 64–65.

of some *tvrze*,²²⁰ or *Festes Häuser*, but in Tuscany in Italy, there are three urban towers with harrow structure.²²¹ Although a far analogy, the early thirteenth-century wooden extension of the tower of Stokesay Castle (Shropshire, England) is comparable on the structural level. Here, the tower functions as the northern closure of the residential wing. Its two lower floors are made of stone, while the second floor is a timber-framed structure. The extension, supported by eight beam brackets, protrudes from the façade significantly.²²² In Switzerland, Lukas Högl dedicates a separate sub-group to residential towers with wooden extensions, for example, the Silenen tower in the canton of Uri.²²³ No similar structure is known among Central European private towers, which is probably due to the fragmented archaeological material.

Most towers were built on a relatively small plot of land, with a regular square or an approximately rectangular floor plan. The date, no urban tower buildings with circular plan have been discovered. The external walls of the buildings varied between 4.2 and 11.5 m. (See.Tab.: 29) These attributes are particularly important because the spatial patterns of the use of the towers relied on a vertically built system. Also, it is not negligible that the dimensions of their ground plans are smaller than those of residential towers or tower-palaces in the castle architecture of the region. The internal dimension on the ground level of the urban towers is between 14m² and 82m²—around 25m² on average—which is comparable with the interior plan of most castle towers, especially twelfth- and thirteenth-century tower-castles. The difference lies in the average wall thickness, which can be surprisingly thin in urban towers, even as thin as 75 cm, that is one-third of the 2 m wall thickness found in some

²²⁰ Tomas, „Fortification in the Medieval Villages of Bohemia”.

²²¹ Pringle, „Group of Medieval Towers in Tuscania”, 190.

²²² Higham és Barker, *Timber Castles*, 181–84.

²²³ Placek and Bóna, *Encyklopédia Slovenských Hradov [Encyclopedia of Slovakian Castles]*, 162, 281, 306, 308.

residential towers in the castles.²²⁴ (See.Tab.: 26, 27, 28, 29) It is noticeable that in many castles, the builders decreased the thickness of the walls on the higher levels, to increase the size of usable spaces,²²⁵ which brings urban and castle towers closer. However, in our urban examples, due to the already reduced wall thickness, the usable space remains almost the same on each level. There is no big difference between the wall thickness of burgher buildings and that of urban towers. The thin walls of these towers make it even harder to identify them in an urban context, especially when only the ground level survived.

The most problematic point in interpreting the remains of the towers is their height. In most cases, only the ground floor survived, in some fortunate cases, the remains of the first floor, too. It is assumed that the thickness of the walls indicates the number of floors, but at least a reasonable minimum. However, two factors make such calculations difficult. Firstly, we do not know how often the builders added lightweight extensions, and what size they were. Secondly, the urban tower with the narrowest wall in my thesis is the structure under Kolostor utca 11 in Sopron,²²⁶ which has a 75 cm thick wall also happens to have the highest number of still standing floors in the city out of all the towers, totaling three levels. In Central Europe the dimensions of the 60-meter tall towers of Regensburg or the 92-meter tall *Asinelli* Tower in Bologna are unheard of.²²⁷ The towers in Vienna at Bäckerstrasse and 2 Griechengasse—far taller than the Central European average—had seven and four levels, respectively.²²⁸ (See.Tab.: 16/1) The tower of the Bratislava Old Town Hall is comparable, although this is questionable because of the later rebuilds, a situation similar to the

²²⁴ The interior size of the residential tower Šariš castle is 4,2x4,2 m with 2,5 m wall thickness, in Krásna Hôrka 5,7x5,5 m with 2,5 m wall thickness, in Podhradie 5x4 m with 2,5 m thickness while in Trenčín 4x4 m with 2 m thickness. Placek és Bóna, *Encyklopédia slovenských hradov [Encyclopedia of Slovakian Castles]*, 162, 281, 306, 308. (See Tab.:27)

²²⁵ Trenčín Placek és Bóna, 308.

²²⁶ Szoboszlai, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”, 152–53.

²²⁷ Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa”, 180; Costa, *Le torri raccontano*.

²²⁸ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 107; *Dehio-Handbuch Wien. I. Bezirk – Innere Stadt*.

Herzoghof's tower in Krems and tower building at Úri utca 37 in Buda.²²⁹ Although taphonomic loss may be the reason why there are no more levels in these cases, in smaller towns, for example, in Levoča and Sopron, towers seem to be more modest, usually of two levels. The average height of the medieval burgher houses in the cities examined must be taken into consideration, because the height of the towers had to exceed theirs. In Sopron only single-storey houses are known before the fifteenth century, while in Buda there is only one building recorded, which surpassed this height. There are much taller examples in Vienna, for instance two houses had four floors in Griechengasse 4 and in Bäckerstrasse 7.²³⁰

Despite the significant fragmentation, a large number of architectural elements survived in the context of the towers, although in most cases in an uneven condition. As mentioned above, in stylistic terms the influence of both castles and urban architecture of the region on tower architecture is noteworthy. Fortunately, with the help of the surviving elements, complemented by the main attributes and relationships of the remaining spaces, storage or residence functions can be connected to specific parts of the buildings and revealing how they related to each other. Taking into consideration factors such as accessibility, direction of openings, lighting, wall coverings, fireplaces as well as further architectural elements such as vaults or outer staircases, in the following, I examine the economic and storage capacity of the ground floors, and the accessibility and internal structures of the upper levels.

²²⁹ Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”, 238; Lócsy, „A Budapesti Történeti Múzeum régészeti feltárásai [The Excavations of the Budapest History Museum]”, 145; Hollensteiner, *Der ehemalige Palast des Herzoghofes in Krems an der Donau*, 17.

²³⁰ Buchinger és Schön, „Das Haus Stampa - Zur Baugeschichte eines renaissancezeitlichen Bürgerhauses in Wien”, 500; Seebach, „Bauhistorische Analyse und neue Fassadengestaltung am Haus Wien 1, Griechengasse 4 (Steyerhof)”, 458–60.

3.2. Ground Floors and Storage Function

One of the cornerstones of the basic set of criteria for private towers is that the ground floor of the towers—with their fire-proof vaulted ceiling, and limited access either from the courtyard or from the ground floor level—was used for storage or economic functions. The aforementioned chronicle of Lampert of Ardes also points out that the lower level of the residence contains barns, barrels, warehouses and other storage areas.²³¹ This can be observed in several thirteenth-century noble tower castles, even in places where no upper structure survived. Some Hungarian examples include the ground-floor terrazzo flooring suggesting an economic-storage function at the castle of Dombóvár-Szigeterdő; a grain storage pit at the tower of Kács castle, the lined well found in the main tower of Nyitrasimonyi, and the walled storage pit at Mátraszőlős-Kisvár castle. The fact that hill castles in Nógrád have no ground level created may also indicate the same function.²³² (Fig 6)

Although the architectural features present at almost every urban tower in the region support the hypothesis, the economic storage function of the lower floors cannot be used for overarching generalizations. Nevertheless, it is clear that without substantial illumination residential function can be excluded. Most of the windows at this level are narrow slots, if any. With one exception, the ground floor in the towers in Sopron, Bruck an der Leitha, and Prague was completely windowless.²³³ In Brno and Kraków, only small loophole-sized windows were placed on the ground floor. Remarkably, in the tower at Ulica Bracka 5 in

²³¹ Lampert of Ardes, *The History of the Counts of Guines and the Lords of Ardes*, 26.

²³² Miklós, *Tolna megye várai [The Castles of Tola County]*, 184; Parádi, „Kács középkori lakótornya [The Medieval Residential Tower of Kács]”, 9, 121; Feld, „A magánvárok építésének kezdetei a középkori Magyarországon a régészeti források tükrében I. [The Beginnings of the Construction of Private Castles in Medieval Hungary in the Light of Archeological Sources I.]”, 342.

²³³ Gröninger, *Bauhistorische Untersuchung Der Stadtbefestigung von Bruck a. d. Leitha [Architectural and Historical Investigation of Bruck a. d. Leitha]*, 5; Szoboszlai, “Toronyiránt. Sopron Városi Lakótornyai” [As the Crow Flies. Urban Residential Towers of Sopron]; Libal and Muk, *Staré Město Pražské: Architektonický a Urbanistický Vývoj [The Old Town of Prague. Architectural and Urban Development]*, 46–64.

Kraków small wall niches were created for candles to alleviate the darkness.²³⁴ Importantly: none of these openings were large enough to illuminate a living area.

The access to the ground floor in these towers further increased their isolation. There were two types of access: from the yard or from the floor above. In case of the early Prague buildings, for example, the sunken ground floor was accessible by external stairs from the courtyard. A barrel vault, presumably for fire protection reasons, closed these rooms from above.²³⁵ A similar trend emerges in several other urban towers. At Ulica Bracka 5 in Kraków, a semi-circular, late Romanesque door led to the ground floor via a couple of steps inside.²³⁶ The same can be found at the tower of the Bratislava City Hall,²³⁷ and two towers in Sopron²³⁸ like in Új utca 4 and at Szent György utca 14.²³⁹ In other places where doors of the ground floor access have not been found, their existence can be assumed from the ceiling vault which makes direct communication with the upstairs rooms impossible. In Sopron, at Kolostor utca 13 and 7, there are intact cross vaults, as in case of the tower at Bruck an der Leitha and at the Old Town Square in Prague.²⁴⁰ Also a complex vault system covered the ground level of the so-called Royal House in Brno.²⁴¹ (See.Tab.: 17)

The closed-off ground floor is not a new phenomenon in Europe. The royal fortification of the *Salamon-Tower* in Visegrád was also built with a vault and a doorway on

²³⁴ Komorowski and Opalinski, “O Wiezy Wójta Krakowskiego Raz Jeszcze: Komunikat [Once Again About the Tower of Krakow’s Major: Statement]”; Piekalski, *Prague, Wroclaw and Krakow: Public and Private Space at the Time of the Medieval Transition*, 133.

²³⁵ Libal és Muk, *Staré Město pražské. Architektonický a urbanistický vývoj [The Old Town of Prague. Architectural and Urban Development]*, 46–64.

²³⁶ Piekalski, *Prague, Wroclaw and Krakow: Public and Private Space at the Time of the Medieval Transition*, 133.

²³⁷ Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”, 239.

²³⁸ Szoboszlay, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”; Sedlmayr, „Sopron koragótikus lakótornya [The Early-Gothic Residential Towers of Sopron]”.

²³⁹ Scőnérné Pusztai, „Helyreállítási terv - Sopron Új utca 4 [Reconstruction Survey - Sopron Új utca 4]”; Dávid, „Kutatási dokumentáció - Szent György utca 14 [Research Documentation - Szent György utca 14]”.

²⁴⁰ Szoboszlay, „Toronyiránt. Sopron Városi Lakótornyai” [As the Crow Flies. Urban Residential Towers of Sopron]; Gröninger, *Bauhistorische Untersuchung Der Stadtbefestigung von Bruck a. d. Leitha* [Architectural and Historical Investigation of Bruck a. d. Leitha]; Libal and Muk, *Staré Město Pražské. Architektonický a Urbanistický Vývoj* [The Old Town of Prague. Architectural and Urban Development].

²⁴¹ Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 208.

the ground floor,²⁴² and the same can be found in the later castles of Karlštejn,²⁴³ and Nagyvázsony as well.²⁴⁴ In terms of both size and chronology, Šariš Castle²⁴⁵ may be a closer analogy, although there is a wall corridor beside the vault here, but Podhradie,²⁴⁶ and Kozi Hrádek also have a closed-off structure.²⁴⁷ In addition to the castles, the openings in the Kraków example and the ground-floor vault of the Kolostor utca 13 tower in Sopron have features similar to another analogous group, namely the the urban press-houses in the cities of the Hungarian-Austrian border area. In case of press-houses, separate doors and narrow slit windows appear in the foreground of a vaulted space that occupies either the ground floor or the semi-basement used for wine production and storage.²⁴⁸ Although these press-houses opened to the street and were also connected to the gates, the slit windows, the ground-floor entrance, the vaulting system and other illuminators of towers at Új utca 9 / Szent György utca 14 in Sopron,²⁴⁹ are clearly related.

The second type of ground floor access suggests an even more isolated space. This is the case in Brno, where only the foundations of the tower survived but it is still possible to infer the outline of the ground floor. Here, the space is completely enclosed, only slit windows break the masonry, and there is no trace of a door. Access must have been provided from the first floor through stairs or a ladder, rendering the ground floor into a closed-off cellar. This kind of spatial organization is not without precedent either. In the Czech lands,

²⁴² Bozóki, “Lakótornyok És Lakópaloták: A Visegrádi Salamon Torony És Fellegvár 14. Századi Szerepének Kérdéséhez. [Residential Towers and Palaces. To the Question of the Function of the Salamon Tower and the Citadel in Visegrád].”

²⁴³ Dvoráková és Menclová, *Karlštejn [The Castle of Karlštejn]*.

²⁴⁴ Szavth, „Adatok a nagyvázsonyi vár 1954-1960 között végzett régészeti kutatásához [Data Regarding to the Excavation in Nagyvázsony Between 1954-1960]”.

²⁴⁵ Placek és Bóna, *Encyklopédia slovenských hradov [Encyclopedia of Slovakian Castles]*, 288.

²⁴⁶ Placek és Bóna, 306.

²⁴⁷ Menclová and První, *Ceské Hradý [Czech Castles]*, 428.

²⁴⁸ Press houses

²⁴⁹ Szoboszlai, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”, 156–57.

the residential towers of Rabštejn, Landstejn or Pajrek castles from the same period have the same type of access to their ground floor.²⁵⁰

In all, based on their closed-off space, narrow openings, and impenetrable vaults, the above mentioned structures almost certainly had some sort of storage function. Of course, more archaeological data is necessary to answer further questions. For example, the details of the ground floor design of several towers in Vienna, Eggenburg or Sankt Pölten are missing, and the examples from Levoča and Buda are still too fragmented. Other urban private towers in Europe, such as *Palazzo Isodor* in Perugia,²⁵¹ and *Nassauer Haus* in Nürnberg,²⁵² have either an entrance hall in the ground floor or a workshop or shop with direct street connections. At the same time, especially in the light of the upper-level layouts described below, it is clear that the two functions were separated from each other, emphasizing not only a positional but functional subordination of the ground floor.

3.3. Residential Functions

The question of the habitation is crucial in the study of urban private towers. It may seem obvious that the higher floors of the towers could be used for residential purposes but this statement is more nuanced in the light of the architectural elements of these buildings. Some factors are essential for residential use, such as adequate lighting, water supply, sufficient interior space, latrines, and heating facilities. Also one has to take into consideration that the surviving remains on these levels are at least as fragmented like in case of the ground floor levels.

²⁵⁰ Menclová és První, *Ceské Hrady [Checz Castles]*, 325, 428.

²⁵¹ Fehér, "A Perugiai Palazzo Isidori Allegorikus Freskóciklusáról a Legújabb Kutatások És Restaurálások Fényében" [About the Wall Paintings of the Palazzo Isodor in Perugia in the Light of the Newest Researches].

²⁵² Wiedenau, "Katalog Der Romanischen Wohnbauten in Westdeutschen Städten Und Siedlungen (Ohne Goslar Und Regensburg)" [Catalogue of Romanesque Residential Buildings in West German Cities and Settlements (Excluding Goslar and Regensburg)], 189.

An important feature of private urban towers is the functional and therefore architectural separation of the ground floor and the higher levels. An exterior door to the upper floors, would be accessible by a staircase or ladder outside the façade. Such a separate elevated entrance could both emphasize the economic-storage role of the ground floor and enhance the tower's supposed defensive potential. There are many examples for this type of entrance in Europe, for instance, the *Frankenturm* in Trier, where each floor could be reached separately by external wooden stairs.²⁵³ Although the upper structures survived in but a handful of towers and residential towers, the elevated doorframes can still be seen in many cases. From the territory of the Hungarian kingdom in the castles of Mâlâiesti, Câlnic, Trenčín and Podhradie,²⁵⁴ as well as the Lipnice or Pajrek castles in the Kingdom of Bohemia all had similar entryways.²⁵⁵ (See Tab.: 26-27) Similar designs can also be seen in various stylized tower depictions, such as on the panel painting of Bernhard von Seyboldsdorf from 1494, where a separate wooden balcony appears at the top of the stairs. (See Tab.: 14) Although these stairs or ladders have not survived, but the doorways on the upper floors may indicate their presence, as can the vaulted ground floors, because, as noted before, intact vaulting excludes the former presence of any kind of opening between the two floors. Three elevated doors were found in Sopron, at Kolostor utca 11, Kolostor utca 13, and Új utca 9./ Szent György utca 14.,²⁵⁶ and the imprint of the joinery work of a staircase was preserved in Prague in the wall of some towers, for example at Karlova 146/I.²⁵⁷ Based on the design of

²⁵³ Knöchel, "Befestigte Wohnanlagen Im Mittelalterlichen" [Fortified Residential Buildings in the Middle Ages], 89.

²⁵⁴ Halaváts, „Kelnek vára [The Castle of Kelnek (Câlnic)]”, 42; Karczag és Szabó, *Erdély, Partium és a Bánság erődített helyei, Várak, várkastélyok, városfalak, templomvárak, barlangvárak, sáncok és erődítmények a 19. század végéig* [The Fortified Places Transylvania, Partium and Banat. Castles, City Walls, Church Castles, Cave Castles, Ditches and Fortifications Until the End of the 19th Century], 232; Placek és Bóna, *Encyklopédia slovenských hradov* [Encyclopedia of Slovakian Castles], 306, 308.

²⁵⁵ Menclová és První, *Ceské Hrady* [Czech Castles], 325.

²⁵⁶ Szoboszlai, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”; Sedlmayr, „Sopron koragótikus lakótornya [The Early-Gothic Residential Towers of Sopron]”.

²⁵⁷ Piekalski, *Prague, Wroclaw and Krakow: Public and Private Space at the Time of the Medieval Transition*, 111.

the ground floor spaces, similar entrances are presumable in towers in nearly every city discussed here. (See.Tab.: 18)

In contrast to the large vaults on the ground floor, first floors almost always have wooden ceilings, which raises several questions. The internal connection with additional levels is easier to realize through wooden ceilings, which means that the probable existence and function of further spaces must be examined. In what way the interiors were connected is an interesting question. In castles it was common to construct wall corridors with staircases but this was impossible for urban towers due to the thin walls mentioned earlier. Firstly, a connection is possible via internal wooden stairs or ladders. On the other hand, external stairs may have been used, and there are several examples of such stairs from Western Europe. For example, in the tower at Weinerplatz 9 in Zürich,²⁵⁸ and the *Frankenturm* in Trier,²⁵⁹ the corridor is moved from the wall to the façade to connect the upper storeys. At the same time, since no similar structure survived in Central Europe, having internal stairs is more likely in these cases. It is, however, uncertain how much of the usable space a staircase occupied.

In all, we can say that the size of interior spaces on the upper floors made them suitable for living, although their comfort level is questionable. It is important to note that these upper floors in their present form are undivided, which may be explained by their limited internal dimensions. Although there are but a few cases with internal separation among the European urban towers, it was common to divide the various functions on different levels. In Italy, the *Torre d'abitazione* structures are sometimes divided into large units from the fourteenth century onwards;²⁶⁰ similarly, the interior of the *Rehböckl* tower in

²⁵⁸ Matt és Jaggi, „Basel: Bauen bis zum Erdbeben — die Stadt als Baustelle”, 41.

²⁵⁹ Knöchel, „Befestigte Wohnanlagen im mittelalterlichen [Fortified Residential Buildings in the Middle-Ages]”, 89.

²⁶⁰ Trabag, *Vom Geschlechterturm zum Stadthaus. Studien zu Herkunft, Typologie und städtebaulichen Aspekten des mittelalterlichen Wohnbaus in der Toskana (um 1100 bis 1350)*, 324.

Zürich, built after the 1310s, was split into smaller rooms.²⁶¹ Interestingly, Bohemian *tvrze* have the opposite arrangement: these are generally rectangular buildings with a double internal division. (See.Tab.: 26) A short staircase led from the entrance to a hallway, which served as a subordinate space. From there the inner room becomes accessible that occupied the mere half of the interior as a private space.²⁶² However, this rear room was also subdivided with wooden partitions into an inner chamber and a larger room in front. This kind of division is not traceable in towers, at least not in the form of stone partitions. However, wooden separators may have been used, which will be discussed in more detail below in the context of *blockwerkammern*.

Latrines can be clear indicators of residential function (although the use of chamber pots circumvents their necessity), too, but there are surprisingly few signs of them in urban towers. They are also rare in the rest of Europe. In Tuscania, one of the towers built on the hill of Sant Pietro Basilica seems to have had a latrine based on its openings and stone brackets.²⁶³ But there is no trace of anything similar in the previously mentioned towers. Only a fragmented doorframe may suggest a latrine at one of the towers in Sopron at Új utca 9./Szent György utca 14., but it is just a mere assumption. In light of this, the privy may have been located somewhere outside around the towers, but this can only be ascertained by further archaeological research.

In comparison with the features above, the largest amount of data survives about the windows on the upper floors, which present a great variety of design across the sources. From Bratislava tracery-decorated pointed windows are known, and also from Új utca 9./Szent

²⁶¹ Piekalski, "Die Rolle Der Wohntürme Bei Der Entwicklung Städtischen Wohnens Im 12. Und 13. Jahrhundert Im Mitteleuropa" [The Role of Residential Towers in the Development of Urban Life in Central-Europe in the 12th and 13th Centuries], 174.

²⁶² Rykl, "Die Raumanordnung Im Wohnbereich Der Feste in Böhmen (14.-16.Jh.)" [The Room Arrangement in the Living Space in the Manors in Bohemia (14th - 16th Centuries)]; Menclová and První, *České Hradby* [Czech Castles], 426–33.

²⁶³ Pringle, "Group of Medieval Towers in Tuscania".

György utca 14. (See.Tab.: 18/3) A Sopron tower has big window niches with benches.²⁶⁴ Several large Gothic windows were built in in Krems in the tower of the Herzoghof.²⁶⁵ Also in Krems, the Gozzoburg also had a special system of openings/windows. Here, large window niches with benches looked out to the lower town, and a smaller one to the courtyard overlooking the gate tower.²⁶⁶ These windows have many other functions beyond their primary role in lighting. First, their direction may be informative about the context of the building. Windows are the only interior design element that communicate the function and position of the private space behind to the outside world, so their representative role is important. In addition, one of the primary considerations related to windows was to keep the room warm.

Window features can be used to reveal the nature of the interior. For example, windows with benches can indicate that the room was used for longer periods on a daily basis. In addition, is that, several sources attest that bench seats were often used as temporary beds, depending on the season or the number of guests.²⁶⁷

3.3.1. Linked-windows, Blockwerkkammern, and Heating Systems

The question of heatable spaces within the towers and their possible extensions merits a separate section. An overview of the questions and appearance of the so-called linked-windows and *blockwerkkammern* may help to determine residential areas or at least indicate an enclosed space with heating. Like many of the above-mentioned architectural elements, linked-windows were identified in several building groups. They were first collected by Otto

²⁶⁴ Szoboszlay, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”; Piekalski, *Prague, Wrocław and Krakow: Public and Private Space at the Time of the Medieval Transition*, 111; Fiala, „A pozsonyi régi városháza [The Old Town-Hall of Bratislava]”, 265.

²⁶⁵ Hollensteiner, *Der ehemalige Palast des Herzoghofes in Krems an der Donau*.

²⁶⁶ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 321.

²⁶⁷ Rykl, „Die Raumanordnung im Wohnbereich der Feste in Böhmen (14.-16.Jh.)”, 247.

Piper at the castles of Styria, Carinthia and of the Mura Valley.²⁶⁸ Czech art historian Dobroslava Menclová continued his research and data collection with the examples of Lower Austria and Czech-Moravian residential buildings.²⁶⁹ In addition to these castles, there is a large number of linked-windows in different cities throughout the region, such as Buda, Sopron, Székesfehérvár or Bratislava,²⁷⁰ as well as Hainburg, Tulln, Vienna, Krems or Perchtoldsdorf.²⁷¹ This list can be further broadened with windows in some Polish and Hungarian castles.²⁷² Expanding the researched geographical circle, similar architectural elements found in German cities along the Danube and the Rhine, too. In the view of this widespread it is highly important that some urban towers also featured the linked windows.

Formal analysis of linked-windows reveals a detectable chronological even in the relatively limited sample by Piper and Menclová. The base of these window groups is comprised of at least two rows of windows, arranged in a recessed, semicircular or segmentally closed mirror on the facade of the building. Larger windows, but still smaller than the average, constitute the lower row of openings in the early examples, with a pyramidal or pointed arches for finials. However, this framed base varies many ways. One of the most common variations is the different ways in which the openings were recessed into the wall within their frames. In twelfth-century Austrian castles, for example, only the main frame was sunken into the façade, which did not change much as evidenced by later

²⁶⁸ Piper, *Österreichische Burgen 1-2*.

²⁶⁹ Menclová, "Blockwerkkammer in Burgpälsten Und Bürgerhäusern [Blockwerkkammern in Castles an Burgher Houses]."

²⁷⁰ Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”; Scőnerné Pusztai és Dávid, „Pozsonyi út 3. sz. ház kutatása és helyreállítása [The Research and Reconstruction of the House Under Pozsonyi Street 3]”; Czagány, „A budavári Úri utca 31. sz. gótikus palota tudományos vizsgálata és rekonstrukciós helyreállítása [The Scientific Research and Reconstruction of the Gothic Palace in Buda at Úri Street 31]”.

²⁷¹ Schön, „Weiner Bürgerhausarchitektur de 13. Und 14. Jahrhundert [Burgher House Architecture in Wien Between the 13th and 14th Centuries]”; Scőnerné Pusztai and Dávid, „Pozsonyi Út 3. Sz. Ház Kutatása És Helyreállítása [The Research and Reconstruction of the House Under Pozsonyi Street 3].” Seebach, „Bazhistorische Analyse und neue Fassadengestaltung am Haus Wien 1, Griechengasse 4 (Steyerhof)”, 451–61.

²⁷² Like castle of Biestrzykow or Várpalota: Małgorzata, *Rezydencje średniowieczne na Śląsku [Medieval Residencies in Silesia]*; László, „A várpalotai 14. századi »palota« [The 14th Century »Palace« of Várpalota]”.

examples. The second row, on the other hand, is mostly made up of tiny illuminators, though there are exceptions. In urban setting, complex structures of steepening can be found. Finally, groups of windows can be further decorated with tiny jetties or canopy solutions, or even with stone traceries like at Hainburg or Bratislava.²⁷³ This diversity is clearly traceable on the western façade of the Griechengasse in Vienna, where four different sets of linked-windows can be identified over a fifty-meter long façade.²⁷⁴ Based on the high variety of forms, Ferenc Dávid created a chronological grouping of the window-groups in Sopron.²⁷⁵ (See.Tab.: 21)

Despite their distinctive form, it is difficult to define the exact function of the linked-windows. In the early twentieth century, Piper first interpreted them as a balcony and then either as a loopholes or machicolations. Finally, he explained them as a group of windows representing the Holy Trinity in a supposed castle chapel.²⁷⁶ The same assumption appeared in Hungarian research: both János Sedlmayr and András Gergelyffy suggest that the linked-window group of the Kőszeg castle was a chapel window,²⁷⁷ while János Czagány considered an example from Buda to have close connections with north Italian monastic architecture.²⁷⁸ Returning to Piper's early suggestion, J. Möcker thought that the linked-window frame on the palace building of Karlštejn was a balcony.²⁷⁹ Finally, Dobroslava Menclová offered a complex functional explanation regarding the windows. The grounds for her observations was that similar windows are found in the palace buildings of both Premysl Otokar II and Charles IV of Luxemburg, specifically in rooms that were interpreted as living quarters.²⁸⁰

²⁷³ Fiala, „A pozsonyi régi városháza [The Old Town-Hall of Bratislava]”.

²⁷⁴ Seebach, „Bauhistorische Analyse und neue Fassadengestaltung am Haus Wien 1, Griechengasse 4 (Steyerhof)”, 454–61.

²⁷⁵ Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”.

²⁷⁶ Piper, *Österreichische Burgen 1-2*.

²⁷⁷ Holl, „Kőszeg vára a 13. században [The Castle of Kőszeg in 13th Century]”.

²⁷⁸ Czagány, „A budavári Úri utca 31. sz. gótikus palota tudományos vizsgálata és rekonstrukciós helyreállítása [The Scientific Research and Reconstruction of the Gothic Palace in Buda at Úri Street 31]”.

²⁷⁹ Dvoráková és Menclová, *Karlštejn [The Castle of Karlštejn]*, 14.

²⁸⁰ Menclová, „Blockwerkkammer in Burgpälasten und Bürgerhäusern”, 246–50.

According to Mencilová, specific rooms can be connected to each window group. In Karlštejn Castle the traces of wooden cladding was preserved in the room with the linked-windows, elsewhere, for example in Radyně Castle, the interior was a vaulted, brick covered space.²⁸¹ In most of the cases the vault of the room was running all the way to the frontal wall, where the arch of the vault formed the interior frame of the linked-window group. Inside, fireplaces and stoves that had been uncovered in several places heated the wood or brick-covered space, while the cladding helped to keep the heat inside. The relatively small openings of the linked-windows were designed to enhance the efficiency of the heating system. On the one hand, the small size of the windows minimized heat loss; meanwhile, by arranging the windows in multiple rows, the beaming light illuminated the room in layers; thereby they were able to brighten a larger space. (See.Tab.: 20)

These wood-covered spaces, called *Blockwerkkammern* in German scholarly literature, were found not only in the castles mentioned above. In Sopron, archaeological wall-surveys unearthed burgher houses with such rooms on several occasions, with slight differences compared to the previous examples.²⁸² Here, the vault of the chamber was made of wood while and the line of the vaulting continued downwards on the frontal wall. The same design may have existed in Prague: in an image in the *Velislav Bible*, depicting the city of Sodom, the arch of the harrow vault showed as the outer frame of the window group. Linked window groups can be also found in several late-medieval paintings and codex illustrations, such as those in the Hartmann Schedel *World Chronicle*, or in the cityscapes in the background of illustrations in the *Babenberg-Stammbaum*, showing the widespread of this architectural form in an urban context. (See.Tab.: 19)

Window-groups and *Blockwerkkammern* can be found in but a few cases and only fragmentarily. Out of urban towers situated to the west of the region examined here,

²⁸¹ Mencilová, 255.

²⁸² Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”; Holl, „Mittelalterarchäologie IV. - Stadtarchäologie”.

Regensburg has similar openings on the facades of buildings. For example, the front façade of the Baumburger Tower features such a group. Although Sigrfrid Fäber interprets it as a balcony, its form clearly refers to a linked-window group. He argues that the arch of the balcony was later filled in by bricks and the openings were made there after that, but as was the case in Sopron, this was a common method to construct these window-groups.²⁸³ They left the archway free and only filled it in with brick later.²⁸⁴ Using this method, the front of the *Blockwerkkammer* constructed out of bricks had a higher heat-retention capacity than the stone masonry parts of the building. The Baumburger Tower was not the only tower in Regensburg that had linked-window group. A nearly identical structure can be found in the former private tower that is now the tower of the town hall. In Switzerland, although no window group survives, *Blockwerkkammern* are found in various places, including the Glentnerturm in Zürich.²⁸⁵

Only a few examples of this window group can be identified in urban towers in Central Europe, despite the fact that it was still common amongst urban architecture..²⁸⁶ The lack of data in the region can be attributed to the significant destruction of architectural material and the overhaul of architecture styles. It is justifiable to suggest that the windows on the first floor of the tower at Új utca 4 in Sopron may have belonged to a linked-window group, although only one small rhombus-shaped window and two other window frames remain, which were later expanded.²⁸⁷ But according to the wall-surveys the room behind this group was covered with wood. Similar element can be assumed behind the linked window group in the case of a depicted tower in Bratislava on the town scape in the Civitas

²⁸³ Fäber, *Regensburg ehemals, gestern und heute. Das Bild der Stadt im Wandel der letzten 125 Jahre*, 41.

²⁸⁴ Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”; Holl, „Mittelalterarchäologie IV. - Stadtarchäologie”.

²⁸⁵ Schneider, „Das hochmittelalterliche Steinhaus in Zürich: ein Beitrag zur Monumentenarchäologie in der Zürcher Altstadt”, 270.

²⁸⁶ Scőnerné Pusztai és Dávid, „Pozsonyi út 3. sz. ház kutatása és helyreállítása [The Research and Reconstruction of the House Under Pozsonyi Street 3]”, 125–45.

²⁸⁷ Scőnerné Pusztai, „Helyreállítási terv - Sopron Új utca 4 [Reconstruction Survey - Sopron Új utca 4]”.

Orbis Terrarum in 1588. Although this tower couldn't be identified, but according to the source collection of Géza Entz several such buildings could be in the town.²⁸⁸ Despite the few remaining traces, these two elements can play a key role in determining the functions of the upper floor levels of the towers. (See.Tab.: 19)

The presence of a *Blockwerkkammer* in itself suggests a heated space with a possible residential function. The linked-window does not always indicate this, just as in case of the Bratislava Town Hall where a similar window-group was built for purely decorative purposes.²⁸⁹ Here, the opening, which was built when the the building was transformed into a town hall, was unable to fulfill its original function due to its loose structure. In contrast, the Bratislava and Sopron examples do indeed suggest the existence of private spaces behind these windows. This is clear when compared with the tall and wide windows of the Bratislava Town Hall, which was designed to let the highest amount of light in and to represent the wealth of the city, rather than preserve the heat inside. The small openings in Sopron tend to refer to the original function, combined with wood-paneled spaces. Thomas Kühtreiber, on the basis of the residential tower of Ruttenstein Castle, reconstructed a *Blockwerkkammer*, which is almost identical in ground plan and size to the examples from Sopron.²⁹⁰ (See.Tab.: 20)

The towers, whether from an urban or rural context, were clearly designed for a vertical use of space. But with their wooden walls, *Blockwerkkammern* were able to divide the inner space horizontally, separating private zones.²⁹¹ In itself, this type of interior division is not typical for residential towers. It is noticeable that even the royal residential tower in

²⁸⁸ Entz, „Városi lakótornyok a középkori Magyarországon [Urban Residential Towers in the Medieval Hungary]”, 47.

²⁸⁹ Fiala, „A pozsonyi régi városháza [The Old Town-Hall of Bratislava]”, 266.

²⁹⁰ Kühtreiber és Reichhalter, „Die Rekonstruktion einer Blockwerkkammer aus der Burg Ruttenstein, Oberösterreich”.

²⁹¹ However we are lack of sources in this term. Most of the wall surveys only discovered the imprint of the wooden paneling just in small surfaces, so their original size is only a mere hypothesis. Scőnerné Pusztai, „Helyreállítási terv - Sopron Új utca 4 [Reconstruction Survey - Sopron Új utca 4]”.

Visegrád, the so-called Salamon-Tower, was built with big open spaces on each level in the thirteenth century, while separation walls were only erected much later in the fourteenth century.²⁹² In case of smaller castles, this type of separation was realized vertically by creating wall corridors connecting the different levels, so that it was possible to move without entering the premises on each floor. However, as mentioned above, due to its thinner walls, this was not possible in towers in urban contexts. The wooden walls of the *Blockwerkkammern*, however, could be reasonably combined with the existence of the internal staircases, so they could separate the private space like a wooden box. In the tower studied by Kühtreiber, the *Blockwerkkammer* was built right next to the first floor entrance of the residential tower and, although there was no stone partition, it could separate the inner private space, it could block the outer movements.²⁹³ (See.Tab.: 20)

The issue of heating is also an important factor in terms of the internal division and livability of the upper levels of the towers. *Blockwerkkammer* as a term in itself assumes that the chamber was smoke-free as it was heated from the outside. Of course, a room did not need wood paneling to be warm. The so-called *caminus* or *kemenata*, a heated interior space which may have been used as a living area is traceable from the eleventh century onwards in Austrian and Swiss castles. There are hundreds of examples for this type of architecture, such as the Lobenstein Castle with its fireplace, or the heated upper floor of the Grosse Wohnturm in Burg-Salzburg. The residential tower of Trenčín Castle is also similar to these.²⁹⁴ Here the fireplace is in a room of approximately 16 m², as an example that confirms that the fireplace in a tower could be placed beside the benched windows. (See.Tab.: 20/1) These benches are

²⁹² Bozóki, „Lakótornyok és lakópaloták. A visegrádi Salamon torony és fellegvár 14. századi szerepének kérdéséhez. [Residential Towers and Palaces. To the Question of the Function of the Salamon Tower and the Citadel in Visegrád]”.

²⁹³ Kühtreiber és Reichhalter, „Die Rekonstruktion einer Blockwerkkammer aus der Burg Ruttenstein, Oberösterreich”, 270.

²⁹⁴ Feld, „Zur Frage der Beheizung auf mittelalterlichen Burgen. (Schwerpunkt Ungarn)”, 100–103.

similar to the ones in the urban towers of Krems or Sopron;²⁹⁵ suggesting that the inhabitants did use the room for longer periods of time on a daily basis. Though the fireplace itself is not the most efficient heating solution because it only heats things in front of it, their heating radius is large. For the heating system, chimneys in the walls or furnace foundations are also telling, although tiled stoves only spread east of Austria as late as the fourteenth century. Unfortunately, traces of such heating equipment are rarely seen in urban towers. In Gozzoburg, the kitchen was situated below the first floor,²⁹⁶ so it was able to heat the living areas above.²⁹⁷ Compared to this in Sopron only a small fragment of a stove was found in the Kolostor utca 13 tower,²⁹⁸ while a regular fireplace is only known from the Town Hall tower in Bratislava, where a full sized *caminus* was built on the first floor.²⁹⁹

3.3.3. Spatial Division

Where the tower is part of a larger complex, such as the Gozzoburg or Herzoghof, it can be seen that the towers, although fulfilling the basic ‘requirements’ of the classical functional distribution of a residential tower, nevertheless expand their spaces into other structures on the site, thereby relativizing the role of the tower itself. In the case of Gozzoburg, the size of the infrastructure that surrounds the building, and its complex features extend far beyond the usual urban towers, so it is not surprising that the Habsburg family took it over after the death of the builder, Gozzo.³⁰⁰

²⁹⁵ Mitchell, „Raum und Repräsentation in der Gozzoburg”; Szoboszlay, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”, 156–57.

²⁹⁶ This is the only known example where the kitchen is situated in the ground floor, while in the case of the other urban towers in this dissertation there is not even a sign for that.

²⁹⁷ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 288.

²⁹⁸ Szoboszlay, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”, 155.

²⁹⁹ Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”.

³⁰⁰ Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”, 26–27.

In Gozzoburg, however, a peculiar element stands out in the arrangement of its space. An additional room is connected to the tower from the western side, which opens directly from the upstairs living space. Paul Mitchell hypothesizes that this might have been a chamber.³⁰¹ (See.Tab.: 28) These chambers appear in large numbers in the contemporary Czech and Austrian residential architecture, especially in some *tvrze*. (See.Tab.: 24) Here they always opened from a larger room that was already part of the personal space, but the smaller chamber itself was used for storing property and as a place of rest.³⁰² Perhaps this was the arrangement in Gozzoburg too. Meanwhile the Szent György utca tower had a similar horizontal separation. Here the visitor arrived into a smaller room through the elevated outer door, and from here a smaller and a bigger room opened in a circular order. Although this division was created during the second phase of the tower, the internal space of the tower was already separated prior to this arrangement, whereby a wall closed the room in front of the large windows facing the courtyard.³⁰³ (See.Tab.: 29)

Where the tower does not have such a horizontal addition but has several floors, presumably entrance level fulfilled this ante-room function and the level above was the private space of the chamber. This may be the case in the supposed tower at Bratislava, (See.Tab.: 12/2) where a purported linked-window was also built on the third floor, suggesting an area for private use. Here a tripartite division of space could be reconstructed that is common in the residential architecture of the era, with a subordinate space and two personal spaces.³⁰⁴ Even where the tower is assumed to have had residential room on its first

³⁰¹ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 288.

³⁰² Rykl, „Die Raumanordnung im Wohnbereich der Feste in Böhmen (14.-16.Jh.)”; Handzel, Schichta, és Schmid, „RaumOrdnungen - Raumfunktionen und Ausstattungsmuster auf Adelssitzen im 14. bis 16. Jahrhundert”.

³⁰³ Dávid, „Kutatási dokumentáció - Szent György utca 14 [Research Documentation - Szent György utca 14]”.

³⁰⁴ Handzel, Schichta, és Schmid, „RaumOrdnungen - Raumfunktionen und Ausstattungsmuster auf Adelssitzen im 14. bis 16. Jahrhundert”; Högl, „Vier Hauptfunktionen des Wohnturms. Bauarchäologische Thesen zu einer Leitform des Burgenbaus in der Schweiz”.

floor, like the tower at Új utca 4 in Sopron, this arrangement is likely albeit in a narrower space, where the wooden wall of the *Blockwerkkammer* served as horizontal partition.

The comparison of the towers and the burgher houses of Sopron reveals that their functions and spatial arrangement have multiple similarities. Most of the burgher houses from the late thirteenth century also had a subordinated ground floor with an economic function.³⁰⁵ The role of the first floor is significantly different from the functions below it. Here, in most cases, a hall was created parallel with the street behind the main façade. While the hall functioned as a quasi-communal space for the owner and his or her household or visitors, the interior room next to the hall was a more private area. The linked-windows on the facades of these rooms and the *Blockwerkkammern* built behind them suggest the same.³⁰⁶ From the fifteenth century the private character of these rooms is also reflected in data from last wills. Tables, beds, and chests were placed in these rooms, which were used to store most of the valuables of the household and also fur in high quantity.³⁰⁷ In addition to the box-like private spaces, further rooms were added above the courtyard wing, allowing to expand the household and creating a space that could be rented out.³⁰⁸

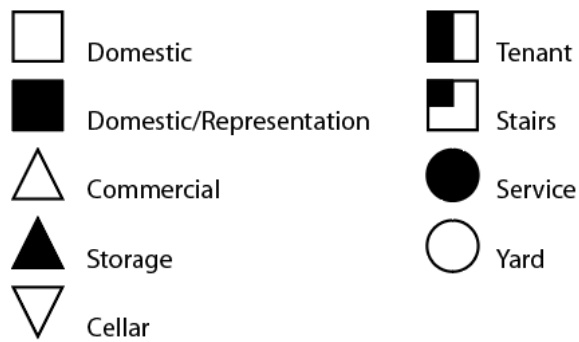
Concerning the spatial arrangement, the towers followed the same layout as the burgher houses described above, only the vertical division and organization of space is more pronounced. However, the residential function of the floors is still questionable, as the *Blockwerkkammer* and the few traces of stoves provide only fragmentary data.

³⁰⁵ See: Templom utca 9, Kolostor utca 5, Új utca 18; Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”, 97, 98.

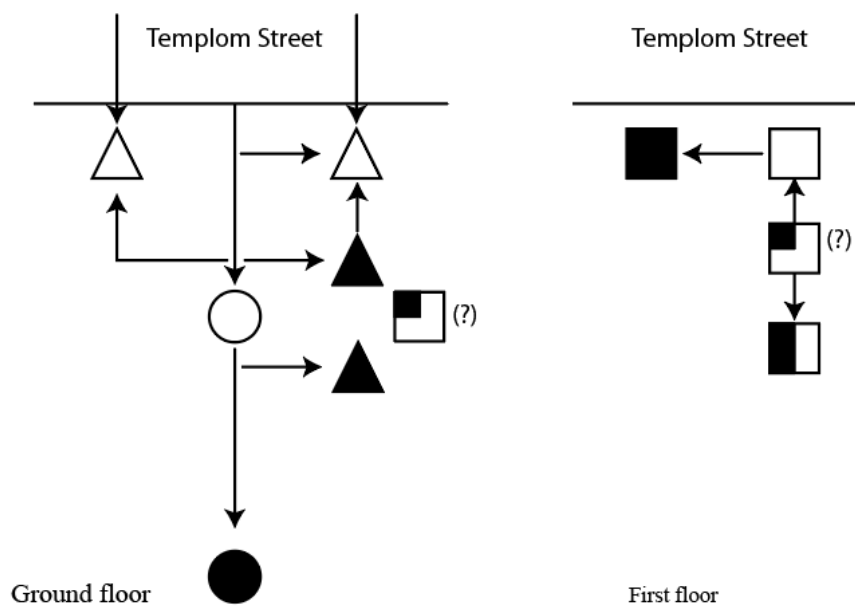
³⁰⁶ Feld, „Buda és Sopron - a magyar középkori városi lakóházak kutatásának mérföldkövei [Buda and Sopron - The Mile Stones of the Medieval Burgher House Researches in Hungary]”; Scőnerné Pusztai és Dávid, „Pozsonyi út 3. sz. ház kutatása és helyreállítása [The Research and Reconstruction of the House Under Pozsonyi Street 3]”.

³⁰⁷ Házi, *Sopron szabad királyi város története. II.rész, 1 kötet. Végrendeletek és egyéb feljegyzések 1390-1524 [The History of the Free Royal City of Sopron. II. part, 1. book. Testaments and Further Charters]*, 19.

³⁰⁸ Holl, „Középkori városi élet - városi építészet [Medieval Urban Life - The Urban Architecture]”. 59.



Burgher house from the thirteenth century (Templom utca 5)



Urban private towers (Kolostor utca 13, Kolostor utca 11) - vertical view

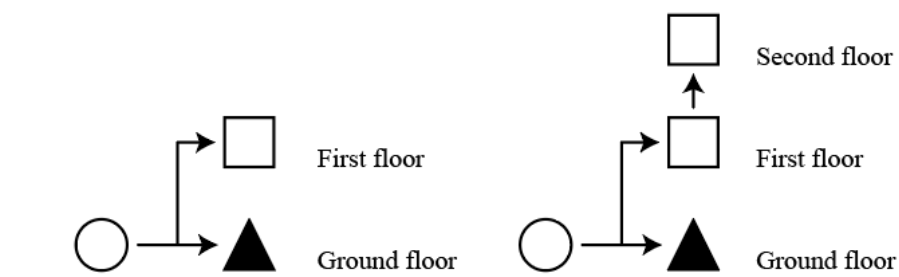


Figure 6.: The access analysis and the comparison of the private towers and burgher houses in Sopron (Based on.: Dávid, "Gótikus lakóházak", and the symbols used by Schofield and Vince, "Medieval Towns")

3.4. The Question of the Defensive Function

The third function that a “proper” residential tower had to serve was the defensive role. The degree and quality of defense functions have been long debated in scholarship. In Hungary, the residential tower as a purely military structure was first articulated by architect László Gerő,³⁰⁹ whose basically military architectural typology categorized residential towers as a chronological phase in castle architecture. Later researchers such as historian Erik Fügedi and archaeologist István Feld refined this argument on several points.³¹⁰ The on-going debate on this issue among other European researchers features prominently in the monograph of Robert Liddiard.³¹¹ Discussing the Norman keeps, the author rejects the defensive role of these buildings, and emphasizes their residential functions and their role in the liturgy of power.³¹² His thesis has been refuted, for example by Richard Hulme, who re-contextualized these buildings.³¹³

To what extent are these debates about the large-scale, in many cases royal residential towers relevant for the defensive interpretation of the small urban private towers that were built in completely different surroundings? According to traditional interpretation, urban towers were built primarily as defensive structures in the early “anarchic” period of urbanization or during the later political struggles such as the Guelph vs Ghibbelline struggle in Italy or the Mongol threat in Hungary or Poland.³¹⁴ In the Holy Roman Empire, the frequently attacked Jewish communities built similar inner defensive structures as protection

³⁰⁹ Gerő, *Magyar várak [Hungarian Castles]*, 17–22.

³¹⁰ Fügedi, *Castle and Society in the Medieval Hungary (1000-1437)*. Feld, „A magánvárak építésének kezdetei a középkori Magyarországon a régészeti források tükrében II. [The Beginnings of the Construction of Private Castles in Medieval Hungary in the Light of Archeological Sources II.]”; Feld, „A magánvárak építésének kezdetei a középkori Magyarországon a régészeti források tükrében I. [The Beginnings of the Construction of Private Castles in Medieval Hungary in the Light of Archeological Sources I.]”.

³¹¹ Liddiard, *Castles in Context*.

³¹² Liddiard, 48.

³¹³ Hulme, „Twelfth Century Great Towers - The Case for the Defence”, 210.

³¹⁴ Chorowska, *Sredniowieczna kamienica mieszczańska we Wrocławiu [Medieval Town Houses in Wrocław]*, 17; Sedlmayr, „Sopron koragótikus lakótornya [The Early-Gothic Residential Towers of Sopron]”, 323; Kozak, „Zur Baugeschichte der Wohnburgen von Wiener Neustadt”, 98.

against pogroms. Adapting to this situation they or the urban authorities frequently built walls and gates around their quarters, and their houses were constructed in an enclave-like closed structure.³¹⁵

Regarding the private towers, however collective defense could hardly have been the case, though this idea was often articulated in previous research. Waldemar Komorowski, for example, assumes that the towers in Kraków and Wrocław were built against the Mongol invasion as a collective means of defense until the city walls were finished in the 1280s.³¹⁶ In Prague a similar hypothesis was put forward, suggesting that the towers around Havelska were built before the city wall surrounded the area, although it was later proven that the towers were built after the construction of the fortifications.³¹⁷ Based on the interpretation of documents and on the surviving structure of the tower at Fő tér 7 in Sopron, János Sedlmayr proposed this role as well.³¹⁸ In 1277, King Ladislaus IV confirmed the grant of King Béla IV who had allowed the citizens to build towers for the protection of the town, and he also granted the community half of the income from the toll at Lake *Fertheu* (Neusiedler See) for this purpose.³¹⁹ In 1297, King Andrew III issued a charter which changed the toll specified in Béla IV's grant stipulating that the citizens had to use these incomes to strengthen the town walls rather than their own towers.³²⁰

Based on charter evidence, Sedlmayr presumed that every plot that reached the town walls had a tower at the back, built on the inner town wall, and that these were also the

³¹⁵ Haverkamp, *Jews in the Medieval German Kingdom*, 29–30; Doležalová, *Juden in der Mittelalterlichen Stadt*, 20. See examples in Vienna, although here only gate towers were built, but proper walls were erected in Trier and Regensburg too.

³¹⁶ Komorowski és Opaliński, „O wieży wójta Krakowskiego raz jeszcze. Komunikat [Once More About the Tower Belonging to the Voght of Kraków. Announcement]”, 127.

³¹⁷ Musilek, „In Novo foro residentis. Sociotopografická analýza Havelského tržiště ve 14. století [A socio-topographic analysis of Gallus Marketplace in the 14th century]”, 68.

³¹⁸ Sedlmayr, „Sopron koragótikus lakótornya [The Early-Gothic Residential Towers of Sopron]”, 328–39.

³¹⁹ Házi, *Sopron szabad királyi város története I.rész I.kötet, Oklevelek 1162-től 1406-ig [The History of the Free Royal City of Sopron I.part I.book. Charters from 1162 to 1406]*, 7.

³²⁰ Házi, 15.

residences of the burgher families and the primary defensive features of the city.³²¹ On the other hand, the structure of the tower at Fő tér 7 drastically differs from the other towers within the walls. It has only defensive elements while the storage or the possible residential space is missing.³²² Based on this, it is justifiable to suggest that the royal charter of King Ladislaus referred to this type of defensive towers, while Béla donated the toll income to the tower owners, rather than to build residential towers along the ramparts. Furthermore, according to Imre Holl, an earlier stone wall stood on the rampart of the city before the construction of the threefold wall system in 1297.³²³ It is possible that the tower at Fő tér 7 was built in connection with this early wall, primarily because the later system did not use such towers since its towers were built along the line of the antique Roman walls and not on top of the rampart.³²⁴ The fact that the later owners incorporated this tower into the burgher house on the plot also shows that it was a remain of an earlier defensive concept.³²⁵ (See.Tab.: 22/1) This situation is not unique in Hungary. Similarly to the tower at Fő tér 7 in Sopron, in Buda, a wall tower stood next to St. John's Gate connected with the plot. The building in Buda was a military structure and the owners of the plot could only use it in terms of a yearly lease, but they had to maintain the structure of the tower and in the case of a siege they had to provide free access for the defending soldiers.³²⁶

Other objections can be raised against assuming a collective defensive role of urban private towers. For example, the towers were usually built at key locations of the city, far from the town walls. This topographical arrangement expressed the power of the owners rather than contributing to the defense of the settlement. Furthermore, this spatial distribution makes it impossible to handle them in a collective way. Thus, if the private towers ever held

³²¹ Sedlmayr, „Sopron koragótikus lakótornya [The Early-Gothic Residential Towers of Sopron]”, 35.

³²² Szoboszlai, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”, 159.

³²³ Holl, „Sopron középkori városfalai III. [The Medieval Walls of Sopron]”, 229.

³²⁴ Gömöri, „A soproni vár [The Castle of Sopron]”, 139.

³²⁵ Gergelyffy, „Kutatási dokumentáció - Tábornok ház [Research Documentation - Tábornok House]”.

³²⁶ Végh, *Buda város középkori helyrajza I. [The Medieval Topography of Buda I.]*, 144.

any defensive function at all, it must be narrowed down to the protection of the owner and his valuables as a kind of a *refugium*, and cannot be interpreted as a complex system of military architecture for the whole community and for the defense of the town.

The *refugium* function is obvious in most of the European medieval residential towers, whether they were royal buildings or parts of the small, so-called tower castles of the thirteenth-century. This defensive capacity is well documented everywhere in Europe. Although created in different political and topographic milieus, these various sources demonstrate the *refugium* function of these more or less similarly built structures. A good example for this is the siege of the Castle of Devizes in England during the war between Empress Maud and King Stephen in 1140. Here Maud's mercenaries climbed the walls in the cover of the night and stormed the defenders, but a few soldiers of Stephen managed to retreat to one of the towers and held out for a few days.³²⁷ To understand the urban towers' capacity as *refugia*, it is worthwhile to examine scattered architectural evidence of the structures and interpretations of stone towers and their possible defensive roles in the military architecture of other areas. For example, Balázs Major and Denys Pringle examined the towers of the crusader Levant.³²⁸ They were able to clarify this aspect by examining the system of the openings, the thickness of the walls and the presence of further defensive accessories. Their approach can also be used in the context of urban towers, and similar architectural details can be seen as indicators for the defensive functions.

Only fragments of these elements survived in the case of urban private towers. Among towers that were built in the earlier phase of the urban development of their surroundings, there are some narrow and relatively closed structures, like in Buda or Sopron, but no traces of loopholes were discovered in these cases. Furthermore, these towers' windows were gradually enlarged later on. Similarly, there is no sign of the machicolations

³²⁷ Hulme, „Twelfth Century Great Towers - The Case for the Defence”, 215.

³²⁸ Major, „Muslim Towers in the Medieval Syrian Countryside”; Major; Pringle, *Fortification and Settlement in Crusader Palestine*.

over the gates, typical amongst the crusader towers as defensive structures.³²⁹ These elements only appear in some towers in Italy, designated by Klaus Trabag as *torre gentilizie*.³³⁰

Parallel to this, an architectural element more frequently used in the examined region was the first floor entrance of the towers. These openings not only separated the different functional spaces of the building, but could also serve as a temporary defensive device by dismantling the wooden stairs attached to them to hamper access. Thus, it is not surprising that this architectural form is so frequent amongst towers in both rural or urban contexts. This kind of upper level isolation was complemented by the stone vaulting of the ground floor, which, besides its structural purpose, served as fire protection. These vaults were designed not only to stop the inner spread of the fire, but also protected the valuables stored on the ground floor from external fire hazard.

Taken all these considerations into account, the idea of an overall defensive purpose is untenable. The most obvious negative evidence is the differences of wall thickness, varying from 50 cm to 2 m. The ashlar facing masonry on the corners of the towers—observable in all but one tower in Sopron,³³¹ Buda,³³² Bratislava³³³ and Kraków³³⁴—is a similarly strong counterargument. Although they were capable to strengthen the structure of a tower, but in this urban context, combined with the thin walls they represented the symbolic power of the building rather than structurally supporting the building.

Finally, a military building would need various accessories to provide active defense. Besides openings and loopholes, the defenders would need platforms for fighting potential attackers, such as the *chemin de rondes*. Such defensive elements were built in Regensburg at

³²⁹ Major, „Crusader Towers of the Terre de Calife”, 217.

³³⁰ Trabag, *Vom Geschlechterturm zum Stadthaus. Studien zu Herkunft, Typologie und städtebaulichen Aspekten des mittelalterlichen Wohnbaus in der Toskana (um 1100 bis 1350)*, 322.

³³¹ Sedlmayr, „Sopron koragótikus lakótornya [The Early-Gothic Residential Towers of Sopron]”, 325.

³³² Lócsy, „A Budapesti Történeti Múzeum régészeti feltárásai [The Archeological Excavations of the Budapest History Museum]”.

³³³ Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”, 239.

³³⁴ Piekalski, *Prague, Wroclaw and Krakow: Public and Private Space at the Time of the Medieval Transition*, 133–34.

the top of the Goliath turm and the Kastenmeyerhaus,³³⁵ but also in Nuremberg on the Main Square.³³⁶ In the region examined here, however, this feature is supported by the least surviving data. According to its account book, the tower at Kolostor utca 11—as part of the town hall—was covered with a gabled roof.³³⁷ For other towers, like that in Eggenburg, only visual sources survived. (See.Tab.: 22/5), Based on these early modern town views, battlements protected the roof of some of the towers of Brno³³⁸ and Vienna (See.Tab.: 11/1,4,9), but the reliability of these sources is questionable. This uncertainty is perfectly shown by Piotr Opalinski's attempts to reconstruct the tower at Ulicka Bracka 5 in Kraków. Opalinski proposes four different versions, two with battlements, one with a *chemin de rondes*, and one with a gable roof.³³⁹ The only known archeological evidence for a battlement is from Bratislava, where such a structure covered the tower and its surrounding walls too.³⁴⁰ (See.Tab.: 22)

Combining all these above-mentioned elements with the walls surrounding the plots, they were probably capable of defensive roles to a degree but not more than the level of security of a *refugium*. Even the smaller, remote rural towers were mostly built to uphold smaller attacks and raids, or to hold off the attackers for a short period, but not for surviving sieges.³⁴¹ In the urban context, the absence of certain defensive elements suggests that defensibility is likely to have been a secondary function: the appearance of military strength was meant to accentuate the status of the owner. This difference strikingly emerges in comparison between the early towers in Switzerland and thirteenth-century structures in Regensburg. In Zürich and Basel multiple small towers were built with thick walls,

³³⁵ Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa. [The Role of Residential Towers in the Development of Urban Space in Central Europe in the 12th and 13th Century]”, 179–80.

³³⁶ Fehring, „Städtischer Hausbau des Hochmittelalters in Mitteleuropa' Siedlungsforschung”, 48.

³³⁷ Mollay, „A három középkori városháza [The Three Medieval Town Halls]”, 47–48.

³³⁸ Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 208.

³³⁹ Komorowski és Opaliński, „O wieży wójta Krakowskiego raz jeszcze. Komunikat [Once More About the Tower Belonging to the Voght of Kraków. Announcement]”, 127.

³⁴⁰ Holcik, „Nové nálezy v Starej radnici [New Findings in the Old Town Hall]”, 239.

³⁴¹ Major, „Crusader Towers of the Terre de Calife”. 217.

loopholes, battlements, surrounding walls, drawbridges, external guard towers, gate houses and even ditches around them like proper urban castles.³⁴² Although the later towers in Regensburg also had some defensive elements such as battlements, ashlar covered corners, and loopholes, these elements appeared as stylized symbols.³⁴³ The best example for this is the battlements of the Goliath turm, twenty meters above street level—perfectly useless in the urban context of a densely built street and neighboring buildings.³⁴⁴ (See.Tab.: 2264) Careful interpretation of surviving evidence, as well as understanding the significance of negative evidence, show that the defensive role of the towers was not suitable for the communal protection of the towns. While could serve as a temporary protection for the owner in the event of city riots, arson, robbery, or attack, the apparent defensive features primarily served to strengthen the symbolic message of the buildings.

³⁴² Andreas és Werner, „Städtischer Hausbau in der Nordostschweiz bis 1350 (ohne Kanton Schaffhausen)“, 90; Matt és Jaggi, „Basel: Bauen bis zum Erdbeben — die Stadt als Baustelle“; Schneider, Wyss, és Hansser, „Das Haus »Zum Schwert« in Zürich : vom Wohnturm zur Standes- und Nobelherberge am Limmatbrückenkopf“, 4; Schneider, „Das hochmittelalterliche Steinhaus in Zürich: ein Beitrag zur Monumentenarchäologie in der Zürcher Altstadt“, 270.

³⁴³ Strobel, „Forschungsprobleme des mittelalterlichen Wohnbaus in Regensburg“, 362; Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa. [The Role of Residential Towers in the Developement of Urban Space in Central Europe in the 12th and 13th Century]“, 179–80.

³⁴⁴ Piekalski, „Die Rolle der Wohntürme bei der Entwicklung städtischen Wohnens im 12. und 13. Jahrhundert im Mitteleuropa. [The Role of Residential Towers in the Developement of Urban Space in Central Europe in the 12th and 13th Century]“, 179–80.

4. The Owners and their Personal Display of Prestige

4.1. The Owners of the Towers

In all four examined countries, the owners and possible builders of private towers seems come from a unique and distinct social group. In the Kingdom of Bohemia, the Duchy of Austria and in the Kingdom of Hungary, it is a layer of noblemen, often with military experience that entered the urban fabric and formed the early elite of the settlements. The political status of tower owners is similar in Lesser Poland, but here it is not the urban nobility, but presumably German settlers who settled in the area during the thirteenth century who brought the habit of building private towers to the region. But the homogeneity of this phenomenon is questionable, partly because of the scattered sources related to the towers, thus it is not possible to generalize.

These social groups owned the structures for a short period between the thirteenth– and the middle of the fourteenth century. By that time they have integrated into urban society, losing their economic and political superiority. Meanwhile new groups emerged who had the financial and political background and desired the level of self-display that a private tower could provide. Among these citizens one can find the strengthened burgher elite and also some Jewish inhabitants. But this second period of ownership did not last long, mostly because of the structural, functional and symbolical obsolescence of the towers, which led to the dismantling or the integrating of the buildings into the surrounding structures by the end of the fourteenth century.

4.1.1. Urban Nobility in the Light of the Urban Private Towers in Bohemia and Lower Austria

Among the four discussed countries, the earliest possible “tower-building layer” appeared in Lower Austria; this region was followed by Prague in the early thirteenth-century. In both cases, it is a particular layer of the nobility who moved into the city, retaining their interests in the countryside and their networks based on their estates and possessions. In Vienna, this trend persisted to some extent throughout the whole Middle Ages. Noble houses, which were mostly used by their inhabitants during the winter, were commonly situated in the town, while in the summer they rented out their urban properties and stayed in their rural estates.³⁴⁵ At the same time, in addition to the nobility in the city or around the royal court, from the end of the twelfth century to the beginning of the fourteenth, a noble layer emerged that defined themselves as *miles et civis*, as a quasi-knightly citizen, combining the symbolism and benefits of the burghers and the rural nobility.³⁴⁶

In his survey of urban private towers in the early thirteenth century, Richard Perger was able to tie three of six towers to these knightly citizens, while the same number could be tied to the high clergy and to the canons.³⁴⁷ In 1278, Rudolf I allowed the burghers of Vienna to own towers as well as further possessions, however, this decree at that time did not yet significantly affect the composition of the ownership of the towers. The previous proportion was basically maintained, although the urban merchant elite, the Teutonic Order, and Jewish owners replaced the clergy. Nonetheless, the decree of 1278 did not only apply to towers, but

³⁴⁵ Csendes és Oppl, *Wien. Geschichte einer Stadt*, 209; Goda, „A soproni városvezető réteg a 15-16. században a polgármesteri és városbírói tisztség összehasonlító igazgatás- és társadalomtörténete [The Leading Urban Elite Of Sopron In The 15–16th Centuries The Comparative Institutional And Social History Of The Mayors And Town Judges]”, 52.

³⁴⁶ Csendes és Oppl, *Wien. Geschichte einer Stadt*, 209.

³⁴⁷ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 103.

Rudolf also allowed the citizens to be able maintain possessions in a similar way as the knightly citizens.³⁴⁸

Based on Perger's collection, in Vienna the Tirna, Haimonen, Poll and the Paltrame kindred, but also a certain Otto von Hohen Markt and Niklas Wuffel can be mentioned as tower owners from this knightly layer.³⁴⁹ The political and economic influence of this group of urban nobles is suggested by the decree of Rudolf in 1278. In addition, their rural estates, family relations, and their role in Vienna's political elite further emphasize their prestige.³⁵⁰ This is also indicated by the fact that in the first half of the thirteenth century most of the population of the town was subordinated to them rather than to the ruler.³⁵¹ However, their political role was not limited to the urban community, which is not surprising in light of their appearance in the emerging Babenberg court in Vienna. A certain Gottfried, who first appears in 1187, was the chamberlain of Frederick II.³⁵² *Dietrich von Reiche* served as the head of minting, in addition, he was the judge several times, and owned a house on the Wiltmarkt.³⁵³

What makes this social layer particularly important here, is the kind of self-display and image which is perfectly described by the *miles et cives Wiennensis* attribute of a certain Konrad Scwab die Piper in 1208.³⁵⁴ In the emerging urban environment, they tried to portray themselves as part of a knightly culture that completely interweaves their political and economic roles. In this way, these knightly citizens emerge as donors or founders of almshouses and xenodochia. Chapels were built in their residences, as in the case of the Haimones and Paltram kindred.³⁵⁵ The aforementioned *Gottfried* received the patronage of

³⁴⁸ Perger, 103; Csendes és Oppl, *Wien. Geschichte einer Stadt*, 209.

³⁴⁹ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 104–8.

³⁵⁰ Goda, „A soproni városvezető réteg a 15-16. században a polgármesteri és városbírói tisztség összehasonlító igazgatás- és társadalomtörténete [The Leading Urban Elite Of Sopron In The 15–16th Centuries The Comparative Institutional And Social History Of The Mayors And Town Judges]”, 57.

³⁵¹ Perger, „Die Grundherren im mittelalterlichen Wien. II. Teil. Bürgerliche und adelige Grundherrschaften”, 7.

³⁵² Perger, 8.

³⁵³ Perger, 10.

³⁵⁴ Perger, 13.

³⁵⁵ Perger, 19, 28.

the Church of the Holy Trinity from Friedrich II, which was also founded by him.³⁵⁶ Meanwhile Paltram III was a benefactor of the Cistercian monastery in Vienna.³⁵⁷ Castles also appear as their possessions, like the Haimones' fortress called Gereut near Vienna, and the Paltrames' Castle of Karlstein at Reichenhall.³⁵⁸ In addition to the villages connected to the castles, or to the other mainly agricultural estates, vineyards appear in high numbers, while within Vienna, in addition to their tenement houses, they owned many bath houses too.³⁵⁹

A perfect model for the consciousness of this layer's identity is displayed by Paltram III from the Paltrame kindred. He held the office of bailiff, mayor, and chamber count. In addition, during the power struggle in the mid-thirteenth century, he supported and represented Premysl Otokar II in Vienna. However, after the fall of Otokar, he had to flee the city, but his son Pilgrim, who first appeared in his testament, later became a judge in Vienna. Paltram himself did not return to the city but joined the Crusades, traveled to the Holy Land, where he died in Acre at the end of 1288.³⁶⁰ Though no urban towers can be certifiably connected to the Paltrams, three private towers surrounded their main residence on Hoher Markt 4.³⁶¹ It is also known that on this plot, Paltram II am Hohen Markt founded the chapel of St. Margaret in the 1230s. Furthermore, by marrying Paltram II's daughter, Cunigunde, the family was related to Otto von Hohen Markt from the Greifen kindred, who was the owner of the tower at Hoher Markt 1.³⁶²

³⁵⁶ Perger, 8.

³⁵⁷ Perger, 27.

³⁵⁸ Perger, 19, 23.

³⁵⁹ Csendes és Opll, *Wien. Geschichte einer Stadt*, 209; Perger, „Die Grundherren im mittelalterlichen Wien. II. Teil. Bürgerliche und adelige Grundherrschaften”, 46.

³⁶⁰ Perger, „Die Grundherren Im Mittelalterlichen Wien. II. Teil. Bürgerliche Und Adelige Grundherrschaften,” 23.

³⁶¹ Hoher Markt 1, 5, 8/9; Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 105, 106.

³⁶² Perger, „Die Grundherren im mittelalterlichen Wien. II. Teil. Bürgerliche und adelige Grundherrschaften”, 55; Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 105.

A later example for the connection of the towers with the *ritterbürgers* is the von Tirna family. Around the Lugeck they owned two private towers. In 1368 the elder von Tirna brother sold his tower to his brother Jakob, while he already had another tower in the family residence in the Federlhof.³⁶³ Also the neighbor of the Tirnas, Leupold don Plotz, who served as the mayor of Vienna in 1355 and between 1358 and 1359, had an own private tower in his plot.³⁶⁴ The relation between the three towers presents a short of rivalry, as it is possible that Leupold built his tower due to the influence of his neighbor. On the whole, this situation is reminiscent of the Hungarian thirteenth century tower castles, where the presence of a castle inclined the local kindreds to built their on castles to.³⁶⁵

Although in other Lower Austrian towns the knightly citizens do not appear in such large numbers as in Vienna, one can nevertheless find them in several places, even the families from Vienna. Pilgrim, son of Paltram III, settled in Bruck an der Leitha for a time.³⁶⁶ The city of Steyr was ruled by this knightly layer until the early fourteenth century.³⁶⁷ Significant political connections can also be discovered between the inhabitants of the settlements in the area. For example, a number of them were amongst the supporters of Otokar including the Paltrame and the Greifen kindred, similar to Gozzo of Krems.³⁶⁸ Gozzo not only had a similar political allegiance, both Otto von Hohen Markt, who was Otokar's treasurer, and Paltram III held similar titles as Gozzo in the second half of the century. Although, unlike the building of Gozzo, the structure of the residences of the two Viennese

³⁶³ Buchinger és Schön, „Das Haus Stampa - Zur Baugeschichte eines renaissancezeitlichen Bürgerhauses in Wien”, 500–502.

³⁶⁴ Buchinger és Schön, 508.

³⁶⁵ Feld, „A magánvárak építésének kezdetei a középkori Magyarországon a régészeti források tükrében I. [The Beginnings of the Construction of Private Castles in Medieval Hungary in the Light of Archeological Sources I.]”, 360–61.

³⁶⁶ Perger, „Die Grundherren im mittelalterlichen Wien. II. Teil. Bürgerliche und adelige Grundherrschaften”, 23.

³⁶⁷ Goda, „A soproni városvezető réteg a 15-16. században a polgármesteri és városbírói tisztség összehasonlító igazgatás- és társadalomtörténete [The Leading Urban Elite Of Sopron In The 15–16th Centuries The Comparative Institutional And Social History Of The Mayors And Town Judges]”, 53.

³⁶⁸ Perger, „Die Grundherren im mittelalterlichen Wien. II. Teil. Bürgerliche und adelige Grundherrschaften”, 23, 55; Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”, 25.

knights are unknown, their rural castles, private chapels, residencies located in important topographic position and their military roles suggest the same level of prestige as the in the case of the mayor of Krems.

The social composition of the owners of the towers in Prague is very similar to Vienna and Lower Austria. Here, too, we find a noble layer with rural estates and close connections with the royal court at Prague, although their appearance can be traced back to a slightly later point in the topographical development of the town. As previously mentioned, two focal points can be highlighted, the Old Town Square and the Gallus Market, now known as Havelská, founded by *ministerialis* Eberhard.³⁶⁹ With the topographical transformation represented by the new market place, nobles who moved to Prague settled around this area.³⁷⁰ They mostly bore German names: according to the names mentioned in Petr Žitavský's

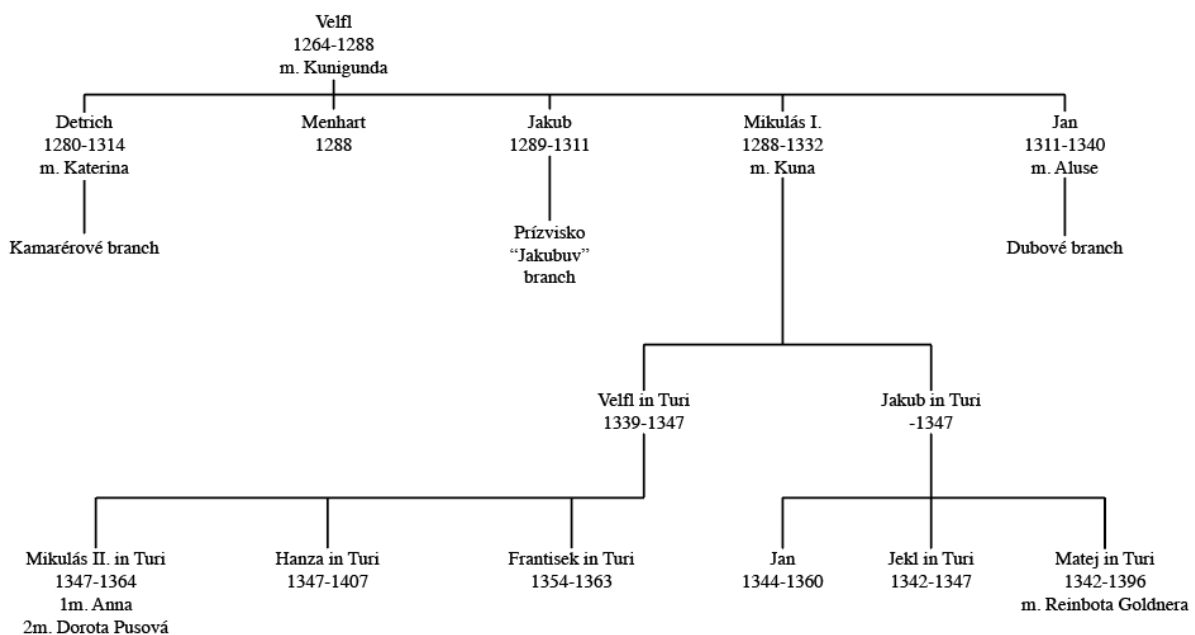


Figure 7.: The family tree of the Veflovice kindred and Mikuláš in Turi (based on Musilek 2013, 4, 5.)

³⁶⁹ Richter és Smetánka, „Archäologische Untersuchungen zum städtischen Wohnhaus des Mittelalters in Böhmen, unter besonderer Berücksichtigung von Prag [Archaeological Research on the Medieval Town Houses in Bohemia, with Special Emphasis on Prague]”, 72.

³⁷⁰ Richter és Smetánka, 72.

chronicle in 1311, 45% of the population had German names, only 13% were Czech, 3% had ecclesial names, while the rest 39% is indefinable.³⁷¹ This does not mean that these individuals can be immediately linked to a certain ethnicity. The nobility in Prague was bilingual, and originally Czech names were very often Germanized.³⁷²

The settling families, such as the abovementioned Veflovice family as well as the Junos, Olbramovic and Domazlice kindred,³⁷³ who also had towers, all held the same political position within the city as their counterparts in Vienna. All four children of Velf, the father of the Velflovice kindred, Dietrich, Jakub, Mikulas and Jan, were members of the council.³⁷⁴ Mikulas had such close ties to the royal court that in 1310 Queen Anna, wife King Henry of Bohemia, lived in his tower at Havelská for a while.³⁷⁵

But it is not only their political relations that shows parallel traits with the Austrian knightly citizens. In Prague, similar to the nobility in the other parts of the Holy Roman Empire, they had various privileges. In a war they were allowed to fight on horseback and marched under their own banners with their own men-at-arms. Consequently, the conspicuous display of identity on the coat of arms and other symbols was also associated with these families. These symbols first appeared on various seals in the urban context, but the same coats of arms have also been displayed in the town hall and the council spaces.³⁷⁶

³⁷¹ Musilek, „In Novo foro residentis. Sociotopografická analýza Havelského tržiště ve 14. století [A socio-topographic analysis of Gallus Marketplace in the 14th century]”, 46–47.

³⁷² Musilek, 49.

³⁷³ Musilek, 64; Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”, 333, 336.

³⁷⁴ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”, 336.

³⁷⁵ Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”, 4.

³⁷⁶ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”, 336.

Similarly to Vienna, marriages between kindreds were common in order to maintain their influence, so the extensive network of their properties overlapped at several points.³⁷⁷

The Bohemian and Austrian examples are well reflected in the social hierarchy linked to urban towers in the rest of the Empire, although both the urban elite of Prague and the knightly citizens of Vienna appeared with a slight delay. In general, in the towns the towers emerged mostly—at least in the early stages of their construction—as typical buildings of the nobility that gathered around different power centers in the emerging cities and towns. Thus, it is not surprising that Emperor Frederick Barbarossa in 1180 prescribed that in the cities of Basel, Zürich, and Regensburg only the bishop and his vassals could build towers.³⁷⁸ In Trier, too, the bishop and the upper clergy and their close vassals owned these structures. For example here, Albero de Montreul, the bishop of the city expropriated the *Jerusalemturn* in 1147 to convert it into a suitable residence for Pope Eugene III who visited the city.³⁷⁹ East of Trier, in Nuremberg, the towers were no longer bound to the clergy. The construction of the buildings can be linked to a ministerial layer connected to the imperial court.³⁸⁰

3.1.2. The Social Layer of the “Comes” in Urban Context and their Towers in the Kingdom of Hungary

Due to the different scale of social development and urbanization, the pattern identified in Vienna is not fully applicable to the Kingdom of Hungary. Nevertheless, mostly in the western border zone, but also in Buda, a type of urban nobility similar to knightly citizens appeared on the other side of the border. Practically all the owners of urban private towers in the thirteenth century, identify themselves as *comes*. This tendency appears in all of

³⁷⁷ Musilek, 336.

³⁷⁸ Schneider, „Das hochmittelalterliche Steinhaus in Zürich: ein Beitrag zur Monumentenarchäologie in der Zürcher Altstadt“, 270.

³⁷⁹ Knöchel, „Befestigte Wohnanlagen im mittelalterlichen [Fortified Residential Buildings in the Middle-Ages]“, 92.

³⁸⁰ Fehring, „Städtischer Hausbau des Hochmittelalters in Mitteleuropa’ Siedlungsforschung“, 48.

the Hungarian towns examined in this thesis, at least in the thirteenth and fourteenth centuries.

The *comes* as a social group appeared during the thirteenth century in the emerging towns as a noble layer, distinct from other burghers, although their particular position was based on custom rather than legal regulation. Their origins, on the one hand, connected them to the developing county nobility that emerged with the transformation of the county system from the castle folks of the Árpadian county castles.³⁸¹ On the other hand, they included a certain group of merchant-knightly landowners, mostly from the southern German areas. Persons marked as *comes* appeared in Pest before the Mongol Invasion, but they settled in towns in larger numbers only with the changing royal urban policy after 1242, as in the case of Buda.³⁸² In the aftermath of the Mongol invasion the inhabitants of certain areas were moved into fortified, well-protected places. During these events, the residents of Esztergom and Fehérvár were relocated.³⁸³ At that time, the castle estates that used to belong to the former *castrum* Sopron, like the village of *villa Luer* was finally attached to the forming town, while its inhabitants, the *sagittarii*, i.e. castle folks who were equipped with arrows and bows, were moved to the castle.³⁸⁴

These castle folks were able to gain social distinction primarily through royal donations from the former castle lands. This was the case of Petrus Agendorfer too, who received the property of Dag, and *comes* Jacobus, the son of Deprecht, the judge of Bratislava, and his family, who received partly the villages of Pruk, Vödrich, Lamacs, Hét, and received as donation the full village of Misérd from the ruler. His fourteenth-century successor, the former judge, Jacobus son of Ulrich, was also given significant castle estates

³⁸¹ Szende, „Von der Gespanschaftsburg zur Stadt: Warum, wie – oder Warum nicht? Ein möglicher Weg der Stadtentwicklung im mittelalterlichen Ungarn”, 388; Szűcs, *Az utolsó Árpádok [The Last of the Árpadians]*, 55.

³⁸² Szűcs, *Az utolsó Árpádok [The Last of the Árpadians]*, 55.

³⁸³ Szűcs, 84–85.

³⁸⁴ Zolnay, „»Opus castri Budensi« A XIII. századi budai vár kialakulása [»Opus Castri Budensi« The Development of the Buda Castle in the XIII. Century]”, 53. [Budensis lenne a helyes alak – hogy van a címben?]

by King Ladislaus IV. But he not only benefited from the former castle lands, but also in the center of the town in the form of two tower donations.

This layer of the newly formed nobility not only adapted to the noble way of life by adopting the *comes* title but, similarly to their counterparts in Austria and Bohemia, they also took part in military conflicts. Such is the case of Dionisius, son of Belud from Osl kindred, who, after the beheading of Petrus Agendorfer *comes*, gained his possessions in 1278 after saving the life of the palatine Matheus Csák, who was trampled under his wounded horse in the battle of Dürnkrut.³⁸⁵ In addition, the *comes* layer soon became part of the system of noble retainers. Thus, the Sopron branch of the Osl kindred joined the baronial family of Kőszegi and fought against King Charles Robert in the first half of the fourteenth century.

³⁸⁵ Mollay, „Névtudomány és várostörténet Dágtól Ágfalváig (1195-1416) [Etymology and Urban History, from Dág to Ágfalva (1195-1416)]”, 23.

To what extent is it possible to tie urban private towers to this group in the early period of the Hungarian urbanization? Both the towers and the *comes* layer appeared almost simultaneously within the kingdom; furthermore, in the thirteenth century, no other group is known have possessed towers except for the Knight Hospitallers in Sopron. In Sopron, one can associate private towers to the Agendorfer and to the Osl kindreds and also to a certain Andreas de Zynk, grandson of a former castle warrior Szonuk. Henrich Gaissel *comes* also emerged as the owner of the tower at Kolostor utca 11. His grandfather was mentioned in

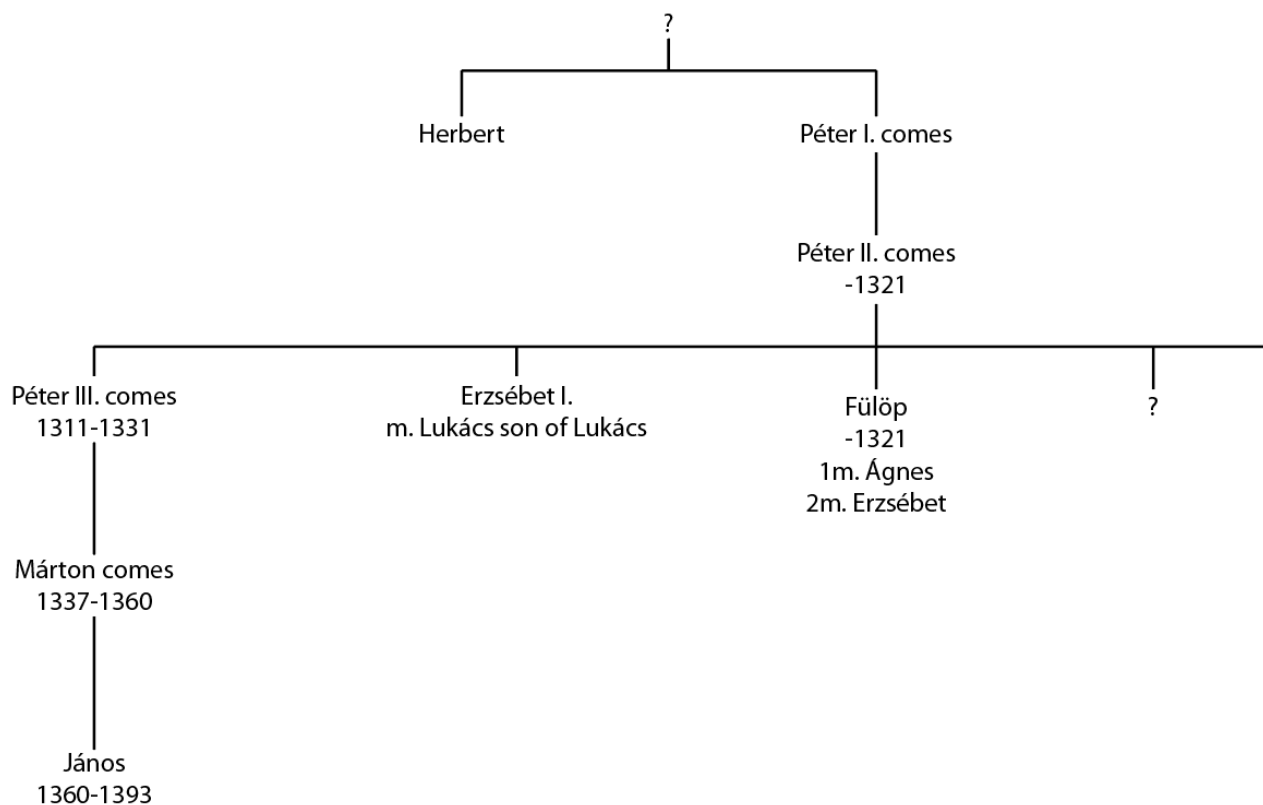


Figure 8.: The Agendorfer family tree (based on Mollay 1961, 25-26)

1318 as a certain Guchul, also known as Geuchul *comes*, as the founder of the family's wealth.³⁸⁶

In Bratislava, towers can be linked to both of the abovementioned judges. Although the two towers of Jacobus, son of Ulrich, are unknown, the tower of Jacobus, son of Deprecht, which was used by his sons; Paulus and Stephanus, for a while is still standing on the Main Square. In Buda no towers are mentioned in the thirteenth century. The first such data comes from 1352, in the contract of land sale of Imre Váli and his son, but they did not use the *comes* title.³⁸⁷ However, significant buildings can be connected to the *comes* group in Buda as well, scattered throughout the *castrum*. Werner *comes*'s palace built on the southern side of St. John's Gate, while the palace of the daughter of a certain Has son of Heinz was on the Saturday Market [Szombathely, Szombatpiac], where their neighbor was Andreas son of Merklin *comes* in familiar relation with them. Also in the square stood the palace of the daughter of Lőrinc Nyitrai *comes*.³⁸⁸ At Székesfehérvár the situation is quite similar. Here Miklós son of Moch, the owner of a tower was not mentioned as a *comes* in 1329, but the other half of his plot, where the palace stood, belonged to the widow of a certain Nekek *comes*.

In addition to the towers in urban context, rural towers and castles can be connected to persons using the *comes* title in several cases. The tower of Petrus Agagus [Agyagos] from the Osl kindred, is mentioned on the Torun hill [Tower Hill] in at Hidegség, near Sopron in 1281.³⁸⁹ Between 1288 and 1296, the castle and tower of the aforementioned Werner

³⁸⁶ Házi, „A soproni ferences templom jótevője [The Benefactor of the Franciscan Friary in Sopron]”, 20–21.

³⁸⁷ Végh, *Buda város középkori helyrajza II. [The Medieval Topography of Buda II.]*, 288.

³⁸⁸ Végh, *Buda város középkori helyrajza I. [The Medieval Topography of Buda I.]*, 329.

³⁸⁹ Gömöri, „Fertő-Hanság Nemzeti Park, a Fertő D-i partszakaszának régészeti lelőhelyei (2012-ig) [The Fertő-Hanság National Park, the Archaeological Sites at the Southern Shore of the Fertő-Lake]”, 17.

comes—who officiated as the *rector* of Buda—was identified at Albertfalva.³⁹⁰ A charter of King Béla IV, written in 1255, authorizes Dés *comes* to finish his tower in Villa Körmend.³⁹¹

With their significant estates, their appearance as noble retainers, and their military status, the members of urban nobility soon became the leading stratum of the early Hungarian towns. It is no coincidence that both Jacobus *comites* from Bratislava held judicial functions in the late thirteenth and early fourteenth centuries. In addition, the sons of the other Jacobus, Stephanus and Paulus, also bore this title. Relying on the data found in the Bratislava *Satzbücher*, Ferenc Kovács shows that the judges of the town, titled as *comes*, rented their estates, thus whole rows of streets provided them income in the thirteenth and fourteenth century.³⁹² Other details underpin the social significance of urban nobility, too. Ulving *comes* from Buda, for example, founded the Chapel of St. Ladislaus in 1334 near the Church of Our Lady.³⁹³ Descendants of Petrus *comes* in Sopron, Petrus III and his son Martinus *comes*, were city councilors, while their successor, János, held the office of city judge for ten times, became the mayor in 1369, and royal commissioner and *iudex Iudeorum* in 1374.

3.1.3. Colonization and Urban-Towers in Lesser Poland

In Lesser Poland, compared to Austria, Bohemia or the Kingdom of Hungary, there is no sign of the urban nobility being involved in tower building. Based on the surviving sources in Kraków, we can presume that these buildings were commissioned by an elite group of burghers hailing from the *hospites* who gained significant political and economic power after the legal and topographical re-establishment of the city in 1257.³⁹⁴ However, there are not

³⁹⁰ Terei, „Az albertfalvai vár lokalizálása [The Localization of the Castle of Albertfalva]”, 633–63.

³⁹¹ Bándi, *Körmend a Középkorban [Körmend in the Middle Ages]*.

³⁹² Kubinyi, *Tanulmányok Budapest középkori történetéről [Studies from the Medieval History of Budapest]*, 95.

³⁹³ Kubinyi, 65.

³⁹⁴ Zinkiewicz, „Új város születik. Krakkó alapítása [A New City Born. The Foundation of Kraków]”, 90–92.

enough sources available to apply this pattern neither to all the Polish duchies nor to Wrocław. Even in Kraków it is only possible to connect these settlers to only two out of the identified seven towers.³⁹⁵

During the thirteenth century, increasing numbers of French, German and Walloon settlers arrived to the Polish duchies. By the end of the fourteenth century, 250,000 *hospites* arrived from the Holy Roman Empire alone. In Kraków the *hospites* already had a settlement next to the *Okol suburbium*.³⁹⁶ In 1257, Boleslaw the Chaste's charter granted Magdeburg rights and he outlined a newly extended settlement north of the *suburbium* under the Wawel, which drastically changed the topographical and social setup of the city.³⁹⁷ Based on German and Swiss examples, although in these cases we can not talk about Magdeburg rights, the granting of rights was accompanied by the outlining of a new topographic system, and the settlers occupied the designated plots at the same time as the administration was established. But, in spite of the predetermined topography, the new arrivals had the opportunity to shape their plots according to their own initiatives, as it happened in Bern.³⁹⁸

As highlighted earlier, only two of the seven towers can be connected to any individuals, namely to the aforementioned brothers Heinrich and Albert. They both belonged to the German group of *hospites*, also they became part of the forming political elite of the settlement too. Albert held the rank of mayor, while Heinrich served as the urban *advocatus* of the ducal court.³⁹⁹ Their titles suggest that both of them actively participated in the political life of the town, which culminated in the uprisings of 1311-12. The main motivation for the rebellion was to invite the Bohemian Luxemburg family, and later the Silesian prince

³⁹⁵ Janusz, „The Towers of Cracow”, 153.

³⁹⁶ Rădvan, *At Europe's Borders. Medieval Towns in the Romanian Principalities*, 33.

³⁹⁷ Zinkiewicz, „Új város születik. Krakkó alapítása [A New City Born. The Foundation of Kraków]”, 87.

³⁹⁸ Stercken, „Town Planning in the Twelfth and Thirteenth Centuries: Symbolic Meaning and Pragmatic Process”, 209, 211.

³⁹⁹ Piekalski, *Public and Private Space at the Time of Medieval Transition*, 130.

Opol, to the princely title in Kraków. However, their movement was crushed and as a result of it, towers of the brothers and other participants were confiscated.⁴⁰⁰

Parallel to the two towers of Albert and Heinrich, who could be the possible builders of the other towers around the Rynek Marek Lukacz claims that they belonged to a social class outside of the burghers. He suggested that these further buildings were owned as knightly estates as they mix residential and defensive functions.⁴⁰¹ Strengthening this argument it is proven that after the crushing of the rebellion of the brothers, the prince donated their towers to the castellan of the Wawel.⁴⁰² However, there is no other information about further noble owners of the towers, especially from the period before the uprising. But based on their topographic location around the Rynek, and their emergence right after the re-foundation of the town in 1257, more or less at the same time when the towers were built, it is most probable that they were built at the initiative of the settling and developing burgher elite. One can also assume that the settlers brought this prestigious civic architectural form from their homelands, and in the new context, they built it as a sign of their newly gained political power. Notably, these settlers originated from the lower-German regions, a territory especially rich in urban private towers.⁴⁰³

3.1.4. A Marginal Group of Owners: The Knightly Orders

In addition to the secular elite of the emerging towns—even if in a significantly smaller number—knightly orders were also present among the owners of the urban private towers. Within the area studied here, some towers are known to have belonged to the Knight

⁴⁰⁰ Walas, „A vereség. Krakkó a mongol támadás kereszttüzében 1241-ben [The Deafeat. Kraków in the Crossfire of the Mongol Attacks in 1241]”, 91–92.

⁴⁰¹ Łukacz, „Zabudowa pierzei Rynku Głównego w Krakowie w okresie średniowiecza [Buildings along the Frontages on the Main Market Square in Kraków in the Middle Ages]”, 85–87.

⁴⁰² Piekalski, *Public and Private Space at the Time of Medieval Transition*, 130.

⁴⁰³ Piekalski, 132.

Hospitallers, the Teutonic Order and the Order of St. George. In some cases, these tower buildings were acquired and taken over directly from private ownership, but in most of the examples the previous history of the towers is unknown, thus, in my opinion, these cases should be separated from the towers of the urban citizenship as they have to fit to different requirements both in functional terms and concerning the display of prestige. Not to mention that in the case of a knightly order, the motivation of building or possessing a tower goes far beyond the level of individual initiative. On the other hand, there are examples when not the order but its member bought a tower as his own property.

In Sopron, through donations made by King Béla IV, a conflict broke out between the inhabitants of the castle, the “*burgenses*” and the Knight Hospitallers over a tower property within the walls of the urban centre. This plot was presumably taken over by the knights in 1250, to whom it was made available by the castellan Petrus Agendorfer. At the same time, the inhabitants of the castle protested against the decision, fearing the knights’ excessive rise in power. Finally, Csák, the master of the treasury representing the ruler’s will, decided in favor of the Hospitallers.⁴⁰⁴ This decision was later confirmed by the king on July 22, 1250, in a charter issued to the Hospitaller Chapter Masters of Croatia, Slavonia and Hungary.⁴⁰⁵ Based on this, “the said castle dwellers in the castle handed over a tower in the castle with the land and buildings belonging to it to the Knight Hospitallers by common agreement, with the same terms and incomes as the other towers that are handed over to the citizens in the said castle.”⁴⁰⁶

Through the dispute between the castle dwellers and knights, the tower of the Hospitallers presumably may have looked the same as the other towers in Sopron that were found during monument research. A similar situation emerged in Vienna. Here the

⁴⁰⁴ Mollay, „A Szélmalom utcai vám 1217-1564 [The Toll at Szélmalom utca from 1217 to 1564]”, 4.

⁴⁰⁵ Wagner, *Urkundenbuch des Burgenlandes. Herausgegeben im Auftrage der Burgenländischen Landesregierung. I. Die Urkunden von 808 bis 1270*, 227–28.

⁴⁰⁶ Szende, „Von der Gspanschaftsburg zur Stadt: Warum, wie – oder Warum nicht? Ein möglicher Weg der Stadtentwicklung im mittelalterlichen Ungarn”, 400.

Hospitallers and the Teutonic order appeared during the thirteenth-century urban expansion. The convent of the Teutonic Knights was built at Singerstraße 7, but they soon expanded beyond that location.⁴⁰⁷ In 1325, they bought five houses under Hoher Markt 5, one of which was a tower. No previous information about the building is available, but in 1470 its owner was a certain Hans Marchart who attached an additional house to the tower.⁴⁰⁸ Thus, the building at Hoher Markt—even if only for a period—was in private hands and the knights presumably only took advantage of the opportunities offered by the purchased plot.

In contrast to Sopron and Vienna, the knightly orders in Wiener Neustadt appeared somewhat differently in relation to urban private towers. The Teutonic Order settled in the town in 1245 where they immediately built their convent north of the castle, attached to the city wall. There is no mention of its tower, but from this point it was referred as a separate castle, which together with the southern urban castle could protect the walls from Hungary.⁴⁰⁹ From this data, it is already clear that a stronghold like that had to perform more important tasks than most of the private towers in the town. Another private tower of Wiener Neustadt was related to a representative of a military order in a different way. Namely, Reinprecht and Albrecht von Eberstorff sold their tower at Herzog-Leopold Straße 28 to Knight Hans Sibenhierter, the Grand Master of the Order of St. George, in 1454.⁴¹⁰ However, in this case, the plot became the property of the Grand Master himself, and thus it remained in private ownership.

⁴⁰⁷ Opll, *Wien*. [bővebb rövid hivatkozás kellene, Opll annyi mindent írt Bécsről plusz oldalszám]

⁴⁰⁸ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 105.

⁴⁰⁹ Opll, *Wiener Neustadt*.

⁴¹⁰ Kozak, „Zur Baugeschichte der Wohnburgen von Wiener Neustadt”, 99.

3.1.5. Owners with the Name of “Tower” and their Symbols

Within the studied region, a certain member of the urban elite can be associated with private towers through their names, which contained the word “tower.” They inherited these names or adopted them as an attribute. According to Martin Musilek,⁴¹¹ this practice emerged primarily in Prague on a larger scale, but Brno, Wiener Neustadt and Sopron also had citizens with similar names. Furthermore, their names, possessions, social status, and personal symbolism can demonstrate the level of personal prestige that an urban tower could provide.

In Bohemia and Moravia, as highlighted by Musilek, there are three distinct persons bearing the name Mikulas de Turri, all in leading positions in their towns.⁴¹² The most prominent of these is Mikulas from Prague, who was a descendant of the Velflovice family, which owned a tower on the main square. As a result, he originally appeared under the name of his family until the family split into four branches. From 1310, Mikulas presumably owned the tower on Havelská 403 / I with his brother Jan, which later became his own property, and—although Mikulas had several houses in Prague—the chronicle of František Pražský reveals that he originally lived in the building on the Havelská.⁴¹³ From that point, the name *de Turri* was connected to Mikulas, presumably as an attribute, which then ran along the branch of the Velflovice family attached to him. As a result, his two sons Jan and Matej, as well as his grandson Mikulas II were also called *de turri*.⁴¹⁴

⁴¹¹ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”; Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”.

⁴¹² Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”.

⁴¹³ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”, 338.

⁴¹⁴ Musilek, 340.

At the turn of the thirteenth century Mikulas de Turri was not the only citizen named after a tower in Prague. In 1287, Lupold de Turri appeared as the son of a knight named Lambin, who was a retainer of King Wenceslas I. Although it is not possible to connect Lupold with a particular tower, he was mentioned in the same charter with a Mikulas de Turri who, despite his identical name, is not the same as Mikulas from the Velflovice family. Lupold's son, Gotfridus de Turri's name and style of coat of arms with the split shields, and their names suggest that the kindred originated from Brabant.⁴¹⁵ The name *de Turri* appears in connection with burghers of Brno, too. Interestingly, there were two individuals nearly at the same time who bear the name Mikulas with the *de Turri* attribute. One of them came from Tišnov, as a member of the Tišnov family.⁴¹⁶ In his case, the *de Turri* name may refer to the castle of the family near the town of Tišnov. On the other hand, the other Mikulas, as the

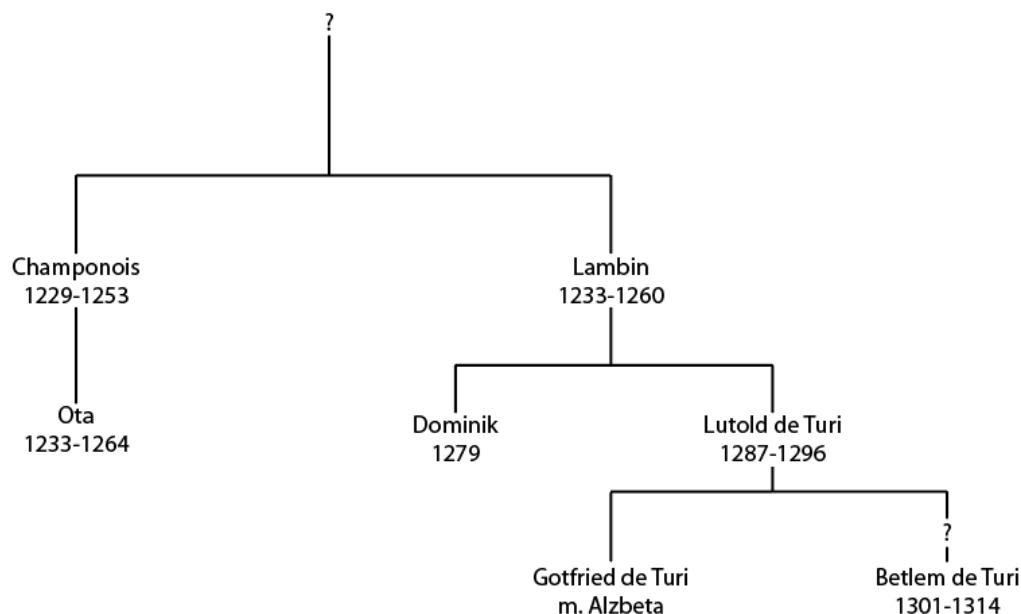


Figure 9.: The family tree of Lupold de Turi (based on Musilek 2013, 4.)

⁴¹⁵ Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”, 6–7.

⁴¹⁶ Musilek, 10.

rychtář of Brno owned the tower next to the Cistercian monastery of Brno.⁴¹⁷

The widespread use of *de Turri* as a name or an adjective in urban environments is shown by the fact that, in addition to the Bohemian and Moravian cities, this appellation also emerges in Sopron and Wiener Neustadt. Wernhard in Turri appears there between 1325 and 1337.⁴¹⁸ Little information is known about Wernhard compared to Thaman Turnhofer from Sopron. The origin of the name of Turnhofer, one of the richest and most prestigious citizens of the city, is unclear. Károly Mollay tried to connect him hypothetically to a medieval village in Lower Austria called Turnhof,⁴¹⁹ while Jenő Házi associated Turnhofer with the tower of the Előkapu gate [Tűztorony or Fire Tower]. Meanwhile Imre Holl raised the possibility that he might have taken the name Turnhofer as a representative forename, similar to the words *turm*, *turris*, because of his probable ownership of a or towers.⁴²⁰ Even if Holl's assumption remains a mere hypothesis, it should definitely be emphasized that Thaman Turnhofer was a descendant of the Agendorfer family, and thus connected to castellan Petrus whom I discussed in the second chapter. It is also important that, in addition to his several urban properties, Turnhofer also owned the house at Új utca 4,⁴²¹ a plot where an urban private tower was found by architectural research.⁴²²

The adjectival use of the word “tower” does not appear only in the name of these citizens. It frequently appears on their other symbols like coats of arms and seals. Turnhofer's seal, for example, is decorated with a tower (See.Tab.: 24/3),⁴²³ In addition to Turnhofer, each of the Mikulas de Turri in Brno used similar motifs. The tower image on the *rychtář*'s

⁴¹⁷ Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 208–9.

⁴¹⁸ Kozak, „Zur Baugeschichte der Wohnburgen von Wiener Neustadt”, 98–99.

⁴¹⁹ Mollay, „Háztörténet és várostörténet. A Szent György utca 3-as szám [Urban and House History. The Szent György utca 3 Building]”, 4.

⁴²⁰ Holl, „A középkori Sopron, piacterek és városházák [The Medieval Sopron, Market Places and Town Halls]”, 77.

⁴²¹ Holl, 77.

⁴²² At least according to the source which mentioned that while he was the mayor of Sopron, the council gathered in his dining hall at Szent György utca 3 in 1418; Majorossy, “From the Judge's House to the Town's House – Town Halls in the Medieval Hungary,” 161.

⁴²³ Mollay, „Háztörténet és várostörténet. A Szent György utca 3-as szám [Urban and House History. The Szent György utca 3 Building]”, 6.

seal (See.Tab.: 24/2) shows almost exactly the same image as the coat of arms of the *de Turri* family in Salzburg, so the question of the possible kinship between the two families also arose. This in itself may be conceivable, as under the rule of Otokar II there were strong connections between the officials of the Bohemian and Austrian towns.⁴²⁴ In addition to his seal in Brno, Mikulas from the Tišnov family shows the image of the tower on his coat of arms.⁴²⁵

3.1.6. Urban Towers in the Context of the Fourteenth-century Social Transition

In Austria, Bohemia and the Kingdom of Hungary, the aforementioned layers of urban nobility merged into the tightening frame of their urban context by the middle of the fourteenth century. Over the century, the *comes* and knightly burgers were pushed out of their previous leading positions to give way to the merchant citizenship with a stable economic background. This process resulted in the transformation of the social stratum that had owned the towers. The same trend may be observed in several cities and towns of the empire. It is perfectly illustrated by Regensburg in terms of the private tower buildings—as described in detail on page 31 where the newly emerging guild/merchant burgher elite took over the towers and also began to construct new, more open buildings from the middle of the thirteenth century.⁴²⁶

In Sopron, this process can be traced through the career of Thaman Turnhofer, although he was still related to the Agendorfer family. In Vienna the first signs of major social transformations were introduced by the decree of Rudolf in 1278, the first attempt to equalize the social setup of the city. In this charter Rudolf allowed the burghers to obtain possessions like the noble citizens. This process culminated in 1360 with the regulations of

⁴²⁴ Musilek, „Příběh tří Mikulášů od Věže. Příspěvek k otázce jejich totožnosti [The Story of Three Men named Nicolas of the Tower. A Contribution to the Question of their Identity]”, 9.

⁴²⁵ Musilek, 11.

⁴²⁶ Uwe, *Der Adelssitz im Mittelalter*, 64.

Rudolf IV,⁴²⁷ when according to some scholars, the demolition of the towers was also ordered.⁴²⁸ In reality this did not happen, or at least not on a full scale, considering the tower mentions from the fifteenth century or the towers that stand out in the skyline of Houfnagel in 1609.⁴²⁹ Also in the charter sources there are still *ritterbürgers* as possessors but their numbers is significantly fewer than in the thirteenth century. For example Jakob von Tirna had to sold his tower in 1396 because of his financial difficulties.⁴³⁰

In Prague, no similar legal acts are known that could be connected to the history of towers. Most probably a spontaneous process took place there, whereby the social stratigraphy of the Havelska and its surroundings were profoundly transformed. The urban nobility sold their buildings and permanently moved to their rural estates. A good example of this is Matej in Turi, a descendant of Mikulas de Turri from the Velflovice kindred, who sold the tower of his ancestors in the 1360s. *Matej* inherited the building from Mikulas II, the grandson of Mikulas I, in 1364. At that time Matej was still a councilor, but by the end of the decade he moved to his rural estate, selling all his properties in town.⁴³¹ Seventeen nobles left Prague between 1300 and 1316 because of financial reasons, and the trend continued until the end of the century.⁴³² The houses were mostly taken over by artisans, but unlike in Regensburg, they did not keep the towers. Most of them were dismantled, with the exception of the tower of the Velflovice family, during a restoration process aimed to homogenize the street façade at the end of the fourteenth century.⁴³³

⁴²⁷ Csendes és Opll, *Wien. Geschichte einer Stadt*, 209.

⁴²⁸ Oettinger, *Das Werden Wiens*, 112.

⁴²⁹ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 103.

⁴³⁰ Buchinger és Schön, „Das Haus Stampa - Zur Baugeschichte eines renaissancezeitlichen Bürgerhauses in Wien”, 502.

⁴³¹ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/I [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague's Old Town]”, 333, 340.

⁴³² Musilek, „In Novo foro residentis. Sociotopografická analýza Havelského tržiště ve 14. století [A socio-topographic analysis of Gallus Marketplace in the 14th century]”, 69.

⁴³³ Musilek, 69.

3.1.6.1. Jews as Owners of Private Towers

Parallel with the social transformation, Jews appear among the owners of private towers from the fourteenth century onwards, even if for a short time. They did not appear as builders, but rather as owners and beneficiaries, of private towers. In the examined towns, we can find towers in Jewish ownership in the two border towns of the Kingdom of Hungary, Bratislava and Sopron, and likewise in Austria, in Wiener Neustadt and Vienna. These owners appeared primarily in connection with the sale of the properties, but in addition to this, a specific topographic factor is also worth highlighting.

In Vienna two towers can be located within the Jewish quarter found inside the former Roman *castrum*. Viennese Jews appeared in sources and archeological data as early as the end of the twelfth century, when they probably had a quarter in the area of the modern Seitenstettengasse.⁴³⁴ Although this block was destroyed in the pogroms connected with the crusader movements in 1196, during the thirteenth century a new community and quarter emerged north of the Babenberg residence Am Hof. As noted in the chapter about the topography of the towers, several private towers were built around the Am Hof, two of which also coincide with the area of the Jewish quarter.⁴³⁵ The dating of the towers is uncertain so their exact relation with the quarter is unknown. According to the traditional view, the quarter itself developed only after the abandonment of the residence around 1280, so the towers could have been easily built even before the quarter was there. However, the archaeological dating of the synagogue excavated at Judenplatz significantly changes this picture.⁴³⁶

Based on the new results, the synagogue itself may have been established in 1236,⁴³⁷ which seems to be confirmed by the privileges granted to the Jewish community of Vienna

⁴³⁴ Mitchell, „Synagoge und Jüdisches Viertel im mittelalterlichen Wien“, 139.

⁴³⁵ Csendes és Opll, *Wien. Geschichte einer Stadt*, 266.

⁴³⁶ Mitchell, „Synagoge und Jüdisches Viertel im mittelalterlichen Wien“, 140.

⁴³⁷ Mitchell, 140.

by Duke Frederick II in 1244.⁴³⁸ On the other hand, the dating of the towers is still problematic, so their original relationship with the quarter cannot be ascertained. It is easily possible that they have been built in the area before the middle of the thirteenth century and it is also certain that at some point a Jewish person owned at least one of the towers. This is the tower at Wipplingerstraße 14 that was bought by a Jew named Esra in 1357 and later it was mentioned as the property of another Jew, a certain Tröstel until 1421.⁴³⁹

The Jewish Quarter in Vienna was not completely closed. It was surrounded by a total of 10 gates, but it was not encircled by walls.⁴⁴⁰ Furthermore, presumably due to its central location and the intertwining of Jewish and Christian properties, the area was not homogeneous.⁴⁴¹ Examining the other Jewish quarters in the Holy Roman Empire reveals a similar picture.⁴⁴² They were centrally located in Regensburg,⁴⁴³ and in Trier where the quarter was on the northern side of Haupt Platz. Due to their prominent topography, Jewish Quarters also extended to those streets where towers were built. This was the case in Trier, where a total of three private towers were built on the immediate border of the quarter, including the *Jerusalemurm* and the *Frankenturm*.⁴⁴⁴ In Vienna, this overlap is also shown by the fact that Esra bought the tower at Wipplingerstraße from a knightly citizen named Jans Greif.

Overall, it cannot be completely ruled out that certain towers were commissioned a Jewish owner. From thirteenth century onwards, Jews were allowed to carry weapons in the empire for self-defense, and their quarters were also fortified to be able to defend themselves during a possible pogrom. In addition, the enclave-like, inward-facing houses arranged around central courtyards, such as those in Donauwörth, are not far from the assumed or real

⁴³⁸ Mitchell, 140; Csendes és Oppl, *Wien. Geschichte einer Stadt*, 265.

⁴³⁹ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 106.

⁴⁴⁰ Mitchell, „Synagoge und Jüdisches Viertel im mittelalterlichen Wien”, 145–46.

⁴⁴¹ Csendes és Oppl, *Wien. Geschichte einer Stadt*, 267.

⁴⁴² Haverkamp, *Jews in the Medieval German Kingdom*, 29.

⁴⁴³ Keay, „Toleration and Persecution: The Jewish Community of Medieval Regensburg”, 26.

⁴⁴⁴ Doležalová, *Juden in der Mittelalterlichen Stadt*, 19.

defense value of a private tower.⁴⁴⁵ In Vienna, a certain Teka is known from the beginning of the thirteenth century, whose lifestyle, in addition to owning a town house, was fully comparable to the knightly citizens of the town. And as a sign of this, he even occupied a castle called *Pinka* with his men.⁴⁴⁶ Based on architectural and topographic data, it was not only in Vienna where a potential Jewish builder emerged.

The Jewish quarter of Sopron was even more open than in Vienna. The Sopron Jews inhabited mostly the southern part of Új utca, originally known as Judengaße. Both the private and the larger community synagogue and their mikveh were built there. The Jewish community counted around 200 people at its peak, in the fifteenth century.⁴⁴⁷ Thus, it is not surprising that Jewish ownership may arise in the case of the towers built along Új utca. It is possible to attach the building at Kolostor utca 11 to a Jewish owner by name. Here in 1379 Henrik Geissel was forced to flee the city because of a murder he committed, and his tower was bought by a certain Jew called Oswald from Wiener Neustadt. Later a Viennese Jew, Wolf, purchased the property from Oswald. Wolf himself presumably died during the Viennese pogrom in 1420, so King Sigismund donated his house to the town council in 1422.

448

The story of Wolf's house in spite of the intervening criminal act illustrates the social transformation in which the social layer calling themselves *comes*, gradually merged into the consolidating urban system by the fourteenth century. The fourteenth-century owner of the plot, Heinrich Geissel, came from one of the oldest *comes* families in Sopron. He lost his plot as a result of his criminal act in 1367, when together with three of his men and four

⁴⁴⁵ Doležalová, 18.

⁴⁴⁶ Csendes és Opll, *Wien. Geschichte einer Stadt*, 265.

⁴⁴⁷ Jankó, Kücsán, és Szende, *Sopron*, 1:19–20.

⁴⁴⁸ Mollay, „A három középkori városháza [The Three Medieval Town Halls]”, 47. Dávid, „A soproni Kolostor u. 11. - Új u. 14. sz. ház tulajdonosai 1379-től a 20. századig [The Owners of the Kolostor u. 11. - Új u. 14. House from 1379 to the 20th Century]”, 47. Házi, *Sopron szabad királyi város története. II.rész, 1 kötet. Végrendeletek és egyéb feljegyzések 1390-1524 [The History of the Free Royal City of Sopron. II. part, 1. book. Testaments and Further Charters]*, 233–34.

Austrians, stormed the urban house of a certain noble called János son of István Bűki, whom they killed so they had to flee the town.⁴⁴⁹ In Bratislava in 1378, after the death of Jacobus judge, also a *comes*, his sons sold their father's tower to a Jew named Isaac because of their financial difficulties.⁴⁵⁰

Through the purchase, Isaac thus acquired the most privileged plot in the town, together with the significant tower building. At the same time the reaction of the town and the council shows similar attitudes in various cities. While in Sopron the settlement acquired Wolf's tower through King Sigismund, in Bratislava in 1378 the local government bought the house and the tower from Isaac for 447 gold forints.⁴⁵¹ In Wiener Neustadt, towers were sold by their Jewish owners in 1442. A certain Kopphel sold his house and tower Herzog-Leopold straÙe 28 to Sigmund Eberstroffer. After the Jews' expulsion from Styria in 1496, the acquisition of their urban property was allowed. Thus, in 1498, the other Herzog-Leopold StraÙe tower, under number 21 which stood in the Jewish quarter, became the property of Wilhalm Auer von Herrenkirchen.⁴⁵²

...

3.2. Display of Prestige

According to the structural principles and the topography of urban private towers, the self- and power display as a factor was increasingly emphatic. This element is already reflected in the basic formal character of the structures: towers are one of the building types that are particularly suited for the display of power. This is already echoed in the above-quoted manuscript of Lambert d'Ardres where he presented the power of his overlord as the metaphor of his tower, addressing its economic, military, and in some respects sacral

⁴⁴⁹ HÁZI, „A soproni ferences templom jÓtevője [The Benefactor of the Franciscan Friary in Sopron]”, 20–21.

⁴⁵⁰ FIALA, „A pozsonyi (Bratislava) régi városháza [The Old Town Hall of Pozsony (Bratislava)]”, 261.

⁴⁵¹ FIALA, 261.

⁴⁵² KOZAK, „Zur Baugeschichte der Wohnburgen von Wiener Neustadt”, 99–100.

attributes.⁴⁵³ This perception is framed in the practice of various residential and other castle towers of different levels. Despite the diverse and contrasting context of these buildings, the most basic intent of communicating power and influence is obvious in every case.

Bergfrids appearing in the castle architecture of the German-speaking countries, Bohemia, and Hungary, often dominate the view of the castle attached to the residential wing.⁴⁵⁴ This position and the tall structure of the towers together underpin the message formulated by Lambert beyond the mere defensive function of the towers. This kind of transmission is also observable in nearly all of the tower constructions associated with the aristocracy. These towers, for example, the Salamon Tower in Visegrád and the fourteenth-century tower palaces of the French monarchs, retained their symbolic value even after the relatively short period of their residential use. This is well reflected by the outrage that followed the demolition of the Louvre's residential tower in 1528.⁴⁵⁵ The towers in themselves become one of the symbols of the castle and the power surrounding it, as can be seen in the symbolism of the *Porta Speciosa* in Esztergom.⁴⁵⁶ A similar symbolic system emerges in the case of secular towers within the urban communities. Towers appear here, often standing alone, on municipal coats of arms and seals behind the walls or above open gates, highlighting the richness and power of the community.⁴⁵⁷ In the Kingdom of Hungary in the seal of Buda, Székesfehérvár, Komárom, Sopron, Bratislava, Cluj and Zagreb, as the

⁴⁵³ Lampert of Ardres, *The History of the Counts of Guines and the Lords of Ardes*, 160.

⁴⁵⁴ Magyar, „Adatok a budai István-torony kérdésköréhez [Additions to the Dating of the István-Tower in Buda]”, 21–24.

⁴⁵⁵ Bozóki, „Lakótornyok és lakópaloták. A visegrádi Salamon torony és fellegrvár 14. századi szerepének kérdéséhez. [Residential Towers and Palaces. To the Question of the Function of the Salamon Tower and the Citadel in Visegrád]”, 20.

⁴⁵⁶ Here King Béla III placed on the right side of the lintel of the late-Romanesque gate. Behind the ruler a double-towered structure appeared as the attribute of his secular power, while the figure in front of him, Job, archbishop of Esztergom, placed in the same posture as the king with exception that behind him a clearly ecclesial building is pictured.

⁴⁵⁷ In Hungary such coat of arms is the three towered symbol of Székesfehérvár from the middle of the thirteenth-century, after that in chronological order came the similar seal of Buda and Sopron from 1430; Marosi, *Magyarország művészete 1300-1470 körül. I. kötet [The Art of Hungary between 1300-1470. I. Book]*, 163.

most prominent element, three towers were placed above a stylized wall and gate. As András Kubinyi pointed out, all these cities once were county castles or fortifications.⁴⁵⁸

A similar communication and message can be reckoned with in the case of urban private towers too, although their social and topographical context is fundamentally different from the tower architecture of the aristocracy. Nevertheless, this type of power display is also suggested by the formal and topographical elements of the buildings within their urban environment. Similarly, it is also necessary to consider the factors related to the use of space, or the instruments of personal display of prestige, which appear on the towers as a system of symbols above its structure. Such factor is the previously highlighted topographic position of the towers. They are commonly found together with the most prestigious houses in the city, as for instance around the main square of Prague. This kind of display is also facilitated where the towers were built directly facing the street. It is no coincidence that in such examples, especially in Regensburg,⁴⁵⁹ or the ground floor of the Stone Bell House in Prague,⁴⁶⁰ but also in some Italian towers, there are large reception halls or even semi-public chapels on the ground level opening to the street.⁴⁶¹

The situation is somewhat different when the towers were built far inside the plot. Most of these towers were built in the earlier phase of the town's development and perhaps reflect a different concept of prestige display. It cannot be excluded that in this case the isolation carried its own demonstrative value. Martin Hansson presented this in his monograph about the medieval rural manor houses throughout Europe. The manors were often built relatively further away from the settlement to create boundaries with the illusion

⁴⁵⁸ Kubinyi, „Buda város pecsétaszímlátának kialakulása [The Development of the Seal Using of the City of Buda]”, 117.

⁴⁵⁹ E.g.: *Kastenmeyerhaus*; Strobel, „Forschungsprobleme des mittelalterlichen Wohnbaus in Regensburg”, 364.

⁴⁶⁰ Vlček, *Staré Město, Josefov. Umělecké památky Prahy*, 406–10.

⁴⁶¹ Like the Palazzo Isidor in Perugia where the reception hall merged together with the private chapel of the tower which was decorated with the scene of the Annunciation; Fehér, „A perugiai Palazzo Isidori allegorikus freskóciklusáról a legújabb kutatások és restaurálások fényében [About the Wall Paintings of the Palazzo Isidor in Perugia in the Light of the Newest Researches]”, 92–93.

of seclusion due to their location and distinctive defensive structures, while still trying to stay close to the parish of the settlement.⁴⁶² This approach is also reflected in the twelfth- and thirteenth-century tower castles of the examined region and, in my opinion, it is echoed by drawing the borders between the private space and the settlement within this urban context too.⁴⁶³

The creation of this kind of boundary sheds new light on the walls surrounding the towers as well as to the individual defensive elements. At Gozzoburg in Krems, military motifs were added to the building such as the battlement facing the lower town, though the practical function of these elements is questionable, mainly due to the open structure of the complex. Ashlar facing masonry reinforcement of the corner of the buildings, which appears in many cases, emphasized the massive and impenetrable structure of the tower. On the other hand, especially in the case of Sopron, it is striking that the masonry of the walls of the towers has practically the same wall thickness as the other residential buildings in the town, thus its pure defensive role is not convincing.⁴⁶⁴

Besides its shape and its position in town, the openings of the tower were also able to communicate with the settlement. The main body of the building, however, is a surprisingly closed form in most of the towers, at least in light of the surviving architectural remains. One may encounter larger windows in only a few examples. In Sopron, the tower at Szent György utca 14 / Új utca 9, has larger, articulated openings, while the possible linked-windows cannot be neglected.⁴⁶⁵ In Bratislava, there is a tracery decoration on certain windows,⁴⁶⁶ but the most flourished and opened tower building is the Stone Bell House in Prague.⁴⁶⁷ Here, six

⁴⁶² Hansson, *Aristocratic Landscape. The Spatial Ideology of the Medieval Aristocracy*, 106–8.

⁴⁶³ Like in Hungary through the location of specific castles compared to the settlements with three main categories; within, in the vicinity or further away in a hardly reachable position; Miklós, *Tolna megye várai [The Castles of Tola County]*, 433–34.

⁴⁶⁴ Szoboszlay, „Toronyiránt. Sopron városi lakótornyai [As the Crow Flies. Urban Residential Towers of Sopron]”, 155.

⁴⁶⁵ Szoboszlay, 156–57.

⁴⁶⁶ Fiala, „A pozsonyi (Bratislava) régi városháza [The Old Town Hall of Pozsony (Bratislava)]”, 161.

⁴⁶⁷ Vlček, *Staré Město, Josefov. Umělecké památky Prahy*, 407.

large windows were arranged in two rows on the facade, separated by two ledges, and a statue niche between every window. A coronation ledge supported by a line of stone brackets closed this sequence. But in this sense the Stone Bell House is not unique, according to an early modern depiction of the Herzoghof in Krems it's had a similar decoration. (See.Tab.: 23)

In addition to the windows, the tower's use of space use and the resulting functional factors can also emphasize the representative dimension of the buildings. The separate ground floor, the first storey only accessible from the outside, and the space opening from here highlight and visibly mark the private space, regardless of its real residential function. At the same time, the this seclusion becomes more pronounced within the plot itself. The most complex use of space of use can be seen at Gozzoburg located on a cliff at the main square, with its gate and accessibility controlled by a corridor along the courtyard, as well as the row of arcades surrounding it. The tower itself appears in the far end of the patio, rendering the personal space palpable but also making the gate visible from the tower as well. While the visitors evaded the tower through the corridor, they arrived to the main hall through a semi-public area along the tower and the courtyard from the market square.⁴⁶⁸

Besides the location and structural features, the status and power of the owner were also indicated by personal symbols in some elements. Although the statues of the Stone Bell House are no longer known the owner and his family appear in the form of coats of arms at various places in or on the buildings.⁴⁶⁹ Gozzo of Krems's complex mural in the form of several crests and vivid battle scenes is without parallel in the examined region,⁴⁷⁰ (See.Tab.: 24/5) although paintings in the interior of the towers was not unprecedented within the empire, for example, the painted cross vaulting and walls as well as mimicking ashlar

⁴⁶⁸ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 229; Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”, 25–26.

⁴⁶⁹ Vlček, *Staré Město, Josefov. Umělecké památky Prahy*, 406–10.

⁴⁷⁰ Mitchell, „Raum und Repräsentation in der Gozzoburg”, 232.

masonry in the Kolostor utca 7 tower in Sopron.⁴⁷¹ A more prominent painting was found during the dismantling of the Royal House in Brno in 1878. Here several coats of arms decorated the walls of the first floor of the tower along with the Great Moravian Eagle.⁴⁷² Furthermore, the family crest of the Altenbergers is displayed on the facade of their tower in Sibiu,⁴⁷³ and other personal symbols of Jacobus son of Dietrich on the walls of his chapel attached to his tower in Bratislava.⁴⁷⁴ The chapel itself is a phenomenon associated with urban private towers such as the one in Bratislava. The chapel on the first floor of the town hall tower in Brno was built similarly, although in this case it is questionable whether the original owner of the plot or the city built it after buying the property for the City Hall.⁴⁷⁵ Similar structures appear at both of the towers at Krems,⁴⁷⁶ albeit at different locations within the plot, separated from the towers. In contrast, at the Stone Bell House in Prague, the space for personal devotion was situated on the first floor of the tower.⁴⁷⁷ (See.Tab.: 23/2)

The motivation to build these structures despite their narrow internal structure, cumbersome use of space, and constraints due to their shape suggests their owner's needs of displaying their prestige. This function is underpinned by these symbolic elements and the intuitively representational effect of the towers, and becomes even more evident observing the towers in the context of their urban and social environment or their personal attributes. Furthermore, the various buildings built around them on the plots sheds light on a secondary but still symbolic use of most of these private towers.

⁴⁷¹ Dávid, „Gótikus lakóházak Sopronban [Gothic Town Houses in Sopron]”, 102.

⁴⁷² Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 208.

⁴⁷³ Entz, *Erdély építészete a 14-16. században [The Architecture of Transylvania from the Fourteenth to the Sixteenth Century]*, 175.

⁴⁷⁴ Sedivy, „Mittelalterliche Rathäuser im mittleren Donaugbiet. Von Räumen der örtlichen Eliten zu Symbolen der städtischen Massen”, 194.

⁴⁷⁵ Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 209–10.

⁴⁷⁶ Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”; Hollensteiner, *Der ehemalige Palast des Herzoghofes in Krems an der Donau*.

⁴⁷⁷ Vlček, *Staré Město, Josefov. Umělecké památky Prahy*, 406–10.

3.3. New Functions and New Level of Symbolism: Rebuilding into Town Halls

From the middle of the fourteenth century, the towers gradually lost their prominent role as symbols of the urban elite. In addition to the transformation of the circle of their owners and the loss of their independent structure as freestanding buildings, discussed in more detail above, they began to appear in a new legal frame with a drastically different ownership as the section of the newly built town halls. Although as parts of the emerging town halls, the towers have lost their primary character as private property, they kept their structural characteristics as a means of power display in their new milieu. The town halls symbolized not only the community but also the influence and the wealth of the urban elite.⁴⁷⁸ Thus, although the towers were partially able to retain their old function in this new medium. In the Holy Roman Empire, independent town halls first appeared in the Bavarian territories, for example in Regensburg in 1244 and then in Nuremberg in 1255.⁴⁷⁹ In the examined region the first buildings for this purpose were built later, the first of which can be identified architecturally in 1316.⁴⁸⁰

The character of private towers were able to provide the newly required level of status display for the town and its community. In addition to their structural presence, their topographic features also played a prominent role in this transformation. As we have seen, a significant part of the urban private towers were built along the main arteries of urban communication, as in the case of Wiener Neustadt, Sopron, Eggenburg or Brno, among others. And, what is perhaps more important, they had direct connection to the central squares themselves. From the thirteenth century onwards, the towers were more frequently

⁴⁷⁸ Gerßhöner, „Rathausbau im späten Mittelalter. Repräsentation und Raumbedarf-Forschungsüberblick und Bibliographie”, 53.

⁴⁷⁹ Sedivy, „Mittelalterliche Rathäuser im mittleren Donaugbiet. Von Räumen der örtlichen Eliten zu Symbolen der städtischen Massen”, 170.

⁴⁸⁰ The first town hall mentioning from Central Europe is from 1284, when the archbishop of Esztergom donated a parcel to the citizens to build a “*domus iudicialis civitatis*” but there is no architectural trace of this structure. Meanwhile the next town hall only established nearly a hundred years later in Bratislava; Sedivy, 170.

situated on the street façade, for example, in Bratislava, which made it easier to communicate with the town's most important public space.

The “recycling” of these structures in itself not only affected the private towers. In the light of the topographic characteristics, almost any type of secular towers that met these criteria could be transformed into a town hall. In Sibiu and Sighisoara, for example, the first town halls were developed from gate towers. In Sibiu the tower itself did not occupy a large area in terms of its floor plan, but it stood directly on the edge of the main square.⁴⁸¹ In Sighisoara, these dimensions were adequate, although here the tower did not open directly to the square, but was situated on the city wall above the town's most important transport route between the small and the big market.⁴⁸² These topographical aspects also prevailed in Brasov, where a bridgehead tower was converted for this purpose.⁴⁸³ In the latter examples, the gates under the towers, that all three buildings had due to their original function, also played a prominent role. In addition to the symbolism of dominating and shaping the public space, due to their topographic situation, they could also function as toll collection points, so they could play several roles at the same time.⁴⁸⁴

With the recycling of previous structures, it is possible that the process was based on a conscious decision, and the town magistrates chose for their new town hall a building that already had a tower. This is probable in the cases listed above. However, in case of some private towers—although obviously there is a conscious decision to be made here as well—the towns may have acquired them by coincidence.

A significant part of the towns in the region under scrutiny here did not have an independent town hall until the late fourteenth century. As Judit Majorossy points out, in these cases, according to the established practice, the town council met in the house of the

⁴⁸¹ Fabini és Fabini, *Hermannstadt, Porträt einer Stadt in Siebenbürgen*, 61.

⁴⁸² Entz, *Erdély építészete a 14-16. században [The Architecture of Transylvania from the Fourteenth to the Sixteenth Century]*, 67.

⁴⁸³ Majorossy, „From the Judge's House to the Town's House – Town Halls in the Medieval Hungary”, 172.

⁴⁸⁴ Bocchi, „The Topography of the Power in the Towns of Medieval Italy”, 74–75.

judge or the mayor, and the public affairs of the city were discussed there too.⁴⁸⁵ Over time, with the consolidation of urban self-government in the second half of the fourteenth century, these buildings became the first permanent town halls as the municipality acquired them through inheritance or donation.⁴⁸⁶ In addition, as seen above, a good number of the council members came from the elite families who owned private towers. As a result, it often happened that the private houses that became town halls, also had towers due to the social status of their former owners.

Looking at the buildings of judges and mayors, this process is discernible although these structures did not always become town halls. In Bratislava, the private tower of Judge Jacobus is still standing,⁴⁸⁷ in Brno Mikulas in Turi, the *rychtář* of the town was mentioned as the owner of the tower next to the Cistercian monastery.⁴⁸⁸ In Eggenburg Hienrich Gurrit, mayor of the settlement from 1300 to 1312, is known to have owned a tower.⁴⁸⁹ In the nearby Krems, a tower stood at the residence of Gozzo of Krems, who was the governor not only of the town but also of Lower Austria under the rule of Otokar II.⁴⁹⁰ In Prague, most members of the Velflovice family sat in the city council, as did the Domazlice family, who also owned towers.⁴⁹¹ In Wiener Neustadt, the tower of Judge Peter Vinkh was part of his house.⁴⁹² Out of these cases, only the tower at Bratislava—as I will discuss it later—was transformed into a town hall.

It is not an unknown phenomenon throughout the region that the town hall was transformed from the house or property of a previous judge, major or council member. The

⁴⁸⁵ Majorossy, „From the Judge’s House to the Town’s House – Town Halls in the Medieval Hungary”.

⁴⁸⁶ Majorossy, 158.

⁴⁸⁷ Fiala, „A pozsonyi (Bratislava) régi városháza [The Old Town Hall of Pozsony (Bratislava)]”, 161.

⁴⁸⁸ Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 209.

⁴⁸⁹ Brunner, *Eggenburg. Geschichte einer Niederösterreichischen Stadt*, 85.

⁴⁹⁰ Mitchell, „The Gozzoburg in Krems and the Hofburg in Vienna: Their Relevance to the Study of the Social Space in Medieval Architecture”, 25.

⁴⁹¹ Musilek, „Rodina od věže a její městské rezidence. Příspěvek k dějinám staroměstského domu čp. 403/1 [The Family „de Turri“ (of the Tower) and its urban residences. A look at the history of house No. 403/I in Prague’s Old Town]”, 333.

⁴⁹² Kozak, „Zur Baugeschichte der Wohnburgen von Wiener Neustadt”, 99.

same happened in Moravia, mostly in smaller towns, where these houses were often fortified, like in: Mělník, Písek, Běla pod Bezdězem, or Ústí nad Orlicí.⁴⁹³ Although no separate private towers are known in either of these cases, the presence of such towers may be surmised from the basic structure of these former private properties. The town hall in Prague was also transformed from a private house, which was bought by king Wenceslas I for the community, though only King John of Luxemburg allowed the town to build a town hall there.⁴⁹⁴

In the case of Kraków, the development of town halls and private towers was somewhat different. Here, the mayor, Albert Voit, and his brother also owned a tower. Waldemar Komorowski and Marek Lukacz suggest that after the construction of the main square and the new town center in the late thirteenth century, the tower Albert's tower was used as town hall.⁴⁹⁵ However, due to their uprising, the building under Ulicka Bracka 5 lost its position in the urban administration. Later the town planning practices of the Polish regions differ in many respects from the other cities that we examine. As it can be seen in the case of Kraków, Wrocław, Lublin or even in Tarnów, the town hall occupied the center of the rectangular Rynek. And this topographical situation precludes the construction of new town halls by incorporating the towers of individuals.⁴⁹⁶ At the same time, they often erected towers for new town halls. In some cases, for instance in Kraków, these new towers even

⁴⁹³ Sedivy, „Mittelalterliche Rathäuser im mittleren Donaugbeit. Von Räumen der örtlichen Eliten zu Symbolen der städtischen Massen”, 188.

⁴⁹⁴ Sedivy, 174.

⁴⁹⁵ Komorowski és Opaliński, „O wieży wójta Krakowskiego raz jeszcze. Komunikat [Once More About the Tower Belonging to the Voght of Kraków. Announcement]”. Marek, „Sredniowieczne domy lokacyjnego Krakowa [Medieval Houses of Kraków in its Incorporation Period]”, 82.

⁴⁹⁶ In Bohemia, Austria and in the Kingdom of Hungary this trend of centrally located town halls only emerged in the later examples, after the middle of fifteenth-century as it is in the case of Weitra or Bradejov [Bártfa]; Sedivy, „Mittelalterliche Rathäuser im mittleren Donaugbeit. Von Räumen der örtlichen Eliten zu Symbolen der städtischen Massen”, 188–89.

served as the most important part of the town hall incorporating the council hall and other symbolic spaces.⁴⁹⁷

As opposed to Kraków, the transition from private tower to town hall can be reconstructed in other settlements. In Vienna, the town hall of Salvatorgasse 7, built in 1316, was established on the plot of the *Ritterbürger* Otto and Haimo.⁴⁹⁸ The tower of the town hall was first mentioned as the location of the municipal archives in 1435, but based on the connection between the *Ritterbürger* of Vienna and the private towers, it is possible that the archives of the municipal building was originally a private structure.⁴⁹⁹ In Brno, the town hall was also established on a private plot in 1373. As in Vienna, there is no information whether the site originally had a tower, although Bohumil Samek suggests that it is possible.⁵⁰⁰ Several points can support this statement. Firstly, the gate that cuts through the ground floor of the tower, which was so common in retrospect in such town hall structures, was built later, probably at the same time as the wings that flanked the tower from the street façade. In addition, the main entrance of the tower is on the first floor—in its present form from the loggia of the town hall—although due to the redesigned ground-floor structure it is not certain whether this was the original entrance of the tower or not. Also, the tower was raised by at least two levels, presumably parallel with the construction of the side wings.⁵⁰¹ The tower was not located on the main square, the Zelný thr, but in its close vicinity.

The process assumed in Brno can be traced in Sibiu and Sopron as well. In Sibiu, after the aforementioned gate tower, the council moved to the house of Thomas Gulden in 1470.⁵⁰² The building stood on the main square and although it was later destroyed, a document

⁴⁹⁷ Walczak, „The Tower of the Medieval Town Hall in Cracow. Remarks on the Reception of ‘Parlerian’ Influences in the Architecture and Stone Sculpture of Lesser Poland”, 364.

⁴⁹⁸ In Vienna Otto and Haimo, like the Heinrich and Albert in Krakow, also participated in an uprising. As a result of this their property was confiscated and later donated to the town, which built the first town hall there in 1341; Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 106.

⁴⁹⁹ Perger, 106.

⁵⁰⁰ Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 209.

⁵⁰¹ Merta és Peska, 209.

⁵⁰² Majorossy, „From the Judge’s House to the Town’s House – Town Halls in the Medieval Hungary”, 171.

mentioned a tower on its façade as *Priesterturm*.⁵⁰³ From here the town hall moved in 1545 to the palace of the former city judge, Thomas Altemberger, west of the main square, and thus the former judge's tower at the western corner of his palace became part of the town hall.⁵⁰⁴ The town inherited the building after Altemberger's death. The council was presumably aware of the building's infrastructure which was adequate for its new function.⁵⁰⁵ (See.Tab.: 25)

This process was similar in Sopron. Before a permanent town hall was established, the council met in the current mayor's house, such as the house of Thoman Turnhofer in 1418, then in 1420 that of Mathes Schadendorfer, where the members were seated in the dining room.⁵⁰⁶ Peter Szekeles, Schadendorfer's successor as mayor, appealed to King Sigismund in 1420 for a permanent town hall. In a letter dated December 10, 1422, from Bratislava, the king finally, donated *pro domus consulii* the former house of a Jew called Wolf, who had presumably died during the 1420 Viennese pogrom.⁵⁰⁷ From this point on, the connection between the three subsequent Sopron town halls and private towers can be traced. Wolf's building at Kolostor utca 11 had a substantial tower. From here, in 1459, the council moved to Fő tér 7,⁵⁰⁸ where—as I mentioned in the first chapter—a tower stood in connection with the town wall, but it was originally a defensive and not a private building. Finally, this property was abandoned in 1497, and the town hall moved to its final location, to the former Agendorfer House on the other side of the main square. Here they moved in the already existing building that they only renovated but did not alter.⁵⁰⁹ Here, the previous ownership of the Agendorfer family affected the decision of the council.

⁵⁰³ This building could be similar to the also disappeared [demolished] tower of the Lutsch-house on the main square

⁵⁰⁴ Majorossy, „From the Judge's House to the Town's House – Town Halls in the Medieval Hungary”, 171.

⁵⁰⁵ Fabini and Fabini, *Hermannstadt, Porträt Einer Stadt in Siebenburgen*, 67.

⁵⁰⁶ Marosi, *Magyarország művészete 1300-1470 körül. I. kötet [The Art of Hungary between 1300-1470. I. Book]*, 86.

⁵⁰⁷ Házi, „A soproni ferences templom jótevője [The Benefactor of the Franciscan Friary in Sopron]”, 21.

⁵⁰⁸ Majorossy, „From the Judge's House to the Town's House – Town Halls in the Medieval Hungary”, 161.

⁵⁰⁹ Mollay, „A három középkori városháza [The Three Medieval Town Halls]”, 275.

Unlike the examples in Sopron and Sibiu, Bratislava did not receive the first town hall building as an inheritance or a donation. The tower of the medieval town hall and the plot originally belonged to Jakob judge, which, after his death in 1387, was transferred to a certain Jew named Isaac, but in the same year the council bought the plot for 447 golden florins with their second and third town halls. Later, in 1421, the council extended this building by buying the adjacent parts of the house used by Jakob's descendants until that time.⁵¹⁰

However, the towers in themselves were not sufficient to perform all the functions of a town hall, even with the auxiliary buildings around them, so construction began almost immediately after the acquisition of the buildings. This is recorded in Bratislava after 1387 and 1421,⁵¹¹ but there are also data from Sopron both from Kolostor utca 11 and Fő tér 7.⁵¹² In these cases, the magistrates first transformed the access to the towers to adapt better to the newly created semi-public space. On the other hand, their symbolic elements and internal layout were significantly altered too, which in its smaller details carry more information about the new functions of the building.

Undoubtedly, the most spectacular transformation took place in terms of the accessibility of the buildings. The large gates and gateways that provide a direct connection between the street and the inner courtyard, became a regular feature. This can be observed in the example of Bratislava and Brno too. Although in Bratislava the gateway did not go through the tower, but opened a passage from the square next to it, the ground floor of the tower was opened as a quasi-gatehouse from this passage.⁵¹³ A similar principle prevailed in Sibiu too, although here the tower stood at the back of the plot and the entrance function was taken over by an individual gatehouse tower from the street.⁵¹⁴ The duality of the gate and

⁵¹⁰ Fiala, „A pozsonyi (Bratislava) régi városháza [The Old Town Hall of Pozsony (Bratislava)]”, 261.

⁵¹¹ Fiala, 261.

⁵¹² Mollay, „A három középkori városháza [The Three Medieval Town Halls]”, 47, 50.

⁵¹³ Fiala, „A pozsonyi (Bratislava) régi városháza [The Old Town Hall of Pozsony (Bratislava)]”, 261.

⁵¹⁴ Entz, *Erdély építészete a 14-16. században [The Architecture of Transylvania from the Fourteenth to the Sixteenth Century]*, 61, 175.

tower separated the main square of the town from the semi-public area behind the walls in the form of the courtyard with its newly built arcades and loggias. This border and the allegorical “town within the town” behind the tower and the gate symbolized the legal, economic and political power of the municipality.⁵¹⁵ The gate connecting this space with the street could be closed and the presence of the tower above it still indicated the privileged nature of this space.

The implements of this new level of power display were added to this transformed space, for example, the town’s banners that could be hung on the towers or the coats of arms of the community.⁵¹⁶ Most probably the crest became the primary instrument showing a mixture of personal and communal representation. For example, in Osnabruck certain council members paid twelve and a half Marks to place their own crests on the façade of their town hall.⁵¹⁷ It is interesting to observe how the coats of arms of the previous owners were kept, as in the case of the Altemberger Palace. (See.Tab.: 25/3) In Sibiu, next to the old symbols of the former mayor, numerous coats of arms of the community as well as inscribed bells were placed on the building.⁵¹⁸ A similar process took place in Brno where the town’s coat of arms, featuring an eagle flanked by the statues of Roland and the Virgin Mary, was placed in the center of the ornate gate on the façade. Passing through this gate, the other coats of arms of the settlement and the council members were placed on the ledge of the semi-closed balcony in the inner courtyard, along with a shield depicting a tower. During the alterations of the town hall in Bratislava, the chapel of previous owner, Jacobus judge, dated to around 1350,

⁵¹⁵ Bocchi, „The Topography of the Power in the Towns of Medieval Italy”, 74.

⁵¹⁶ Sedivy, „Mittelalterliche Rathäuser im mittleren Donaugbeir. Von Räumen der örtlichen Eliten zu Symbolen der städtischen Massen”, 194.

⁵¹⁷ Gerßhöner, „Rathausbau im späten Mittelalter. Repräsentation und Raumbederf-Forschungsüberblick und Bibliographie”, 66.

⁵¹⁸ Entz, *Erdély építészete a 14-16. században [The Architecture of Transylvania from the Fourteenth to the Sixteenth Century]*, 175.

was retained, completely losing the character of a space for personal devotion, but retaining its decoration and its entire architectural system beyond its vault.⁵¹⁹ (See.Tab.: 25)

The other external element frequently added to the towers are the tower clocks. The clock changed the relation of townspeople and work. Installing these mechanical devices on the towers clearly signaled the influence of the municipality over everyday life, and they also quasi-secularized the concept of time.⁵²⁰ Clocks were placed on the towers in Bratislava, Brno and Sibiu,⁵²¹ as well as Eggenburg and St. Pölten, although none of them became town halls. (See.Tab.: 25/1, Tab.: 12/1,5) In Sopron, the first clock data is from 1422, when János horologist was given the task of repairing the clock of the town hall tower.⁵²² The clock itself could also be a sign of the settlement's wealth as a source from Bardejov suggests, stating that the town clock's mechanical structure was more expensive than a burgher house on the main square.⁵²³

In addition to the clock, a watchman was usually placed on top of the tower as a permanent feature, as it is mentioned several times in Eggenburg and Sopron. In Sopron, an inventory detailed the tower guard's heated room at Kolostor utca 11 whose job was to proclaim the time, albeit not from the tower but at several points of the town, such as the Új utca.⁵²⁴ In Bratislava, the tower was still owned by Jacobus judge, when he allowed to station a guard there permanently to monitor possible fires.⁵²⁵ The clock and the guard, with the structure of the tower, connected the close privacy of the town halls' inner spaces and the public.⁵²⁶ Aiding this function, large windows, loggias and balconies were created, for

⁵¹⁹ Sedivy, „Mittelalterliche Rathäuser im mittleren Donaugbeit. Von Räumen der örtlichen Eliten zu Symbolen der städtischen Massen”, 194.

⁵²⁰ Bocchi, „The Topography of the Power in the Towns of Medieval Italy”, 75.

⁵²¹ Takács, „A toronyórák története [The History of the Tower-Clocks]”, 354.

⁵²² Csukovits, „Órahasználat a Középkori Magyarországon [Clock Usage in the Medieval Hungary],” 157-158.

⁵²³ Takács, „A toronyórák története [The History of the Tower-Clocks]”, 353.

⁵²⁴ Csukovits, „Órahasználat a Középkori Magyarországon [Clock Usage in the Medieval Hungary],” 158-159.

⁵²⁵ Sedivy, „Mittelalterliche Rathäuser im mittleren Donaugbeit. Von Räumen der örtlichen Eliten zu Symbolen der städtischen Massen”, 194.

⁵²⁶ Sedivy, 189.

example the balcony in Bratislava right next to the tower, above the gate, and the a similar addition in Brno.⁵²⁷

Besides the external alterations, the towers underwent internal construction, too. In Bratislava, in addition to the renovation of the palace wings around the tower, a new kitchen was built next to it with a salt chamber and a dungeon, and an armory was opened through a narrow door from the tower. Mentions of iron doors are a recurring feature.⁵²⁸ In Bratislava and in Brno, an iron door connected the chapel with the tower. An iron door was also mentioned in Sopron both at Kolostor utca 11 and in the tower of the third town hall, the former Agendorfer House. The proximity of the chapel with the fireproof structure of the tower and iron doors mark the location of the municipal archives in several sources. The towers of Bratislava,⁵²⁹ Vienna,⁵³⁰ St. Pölten⁵³¹ and Brno were also home to such function.⁵³²

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The structural disadvantages of the urban private towers, such as the small entrances and narrow inner spaces, appear in a new light in context of their owners social background. From the late twelfth to the mid-fourteenth century these buildings were always owned by the leading strata of the cities and towns—knightly or noble burghers—in Bohemia, Hungary and Austria alike. Even in Lesser Poland, where the owners came from the burgher layer, all the documented owners held leading offices in their towns. For this social layer the towers became one of their attributes besides their coats of arms, rural estates and castles, knightly way of life, and their participation in high politics. The towers as stand-alone structures in prominent urban context were part of this complex self-fashioning.

⁵²⁷ Sedivy, 194.

⁵²⁸ Trupl, *Turmhauser in Bratislava*, 102–4.

⁵²⁹ Majorosy, „From the Judge’s House to the Town’s House – Town Halls in the Medieval Hungary”, 179.

⁵³⁰ Perger, „Wohntürme im Mittelalterlichen Wien [Residential Towers in the Medieval Vienna]”, 106–7.

⁵³¹ Gutkas, „Stadttürme in St.Pöltens”, 314.

⁵³² Merta és Peska, „Brněnské domy s věží [Brno Houses with Towers]”, 209.

Prestige display was adapted to the changing urban context. This took place not just in terms of the primary surroundings of the towers, but amongst their owners too. As a new urban elite emerged, replacing the *comites* or *Ritterbürgers*, the towers were transformed to meet new needs. In the region discussed here, the slight chronological delay meant that these developments took place on a lesser a scale than, for example, in Regensburg, where a drastically new form of private towers emerged with the new ownership patterns. Here most of the towers lost their significance and prestige, as in Prague when the street-line of the Havelka was moved at the end of the fourteenth century.

In the course of this transitional period a new group of owners appeared, namely the Jewish inhabitants of these towns. But their ownership did not last long, although this short period also reflects the loss of prestige of the tower structures. The towers, which in terms of their functional capacity and power-display value became outdated for personal use, turned out to be a perfect fit for the community in some cases. Due to the prominence of the towers, they were suitable for the use of the whole community. This transition is also reflected in the person of the mayors and council members who, as members of the urban elite, became the mediators in this process, especially when the private towers that were remodeled into town halls were formerly their own property. Changes in the urban elite, thus, also marked a change for some of the towers, turning from a means of display of personal power and prestige into that of a community.

4. Conclusion

This thesis offers a comparative analysis of urban private towers in the context of the thirteenth-century urban transition in the medieval kingdoms of Hungary and Bohemia, as well as the duchies of Lesser Poland, Silesia and Lower Austria. This research was based on various architectural and topographical sources from selected territories of Central Europe. My main aim was to present the thirteenth-century urban transition in Central Europe through the example of the towers, and to summarize the scattered scholarship and findings about the urban private towers in a unified discourse.

The examination of the urban private towers' context, dating and location within the settlement, clarified their connection between each other and their surroundings. The earliest data for the private towers date back to the second half of the twelfth century, their bulk, however, comes from the first decades of the thirteenth century. These chronological foci coincide with two distinct stages of the urbanization process and the legal or topographical development of the settlements, namely the end of the twelfth century and the beginning of the thirteenth century, and to the last decades of the thirteenth and the first half of the fourteenth century. This tendency also existed in the Holy Roman Empire, but it stretched across a significantly longer period. In the researched area of East Central Europe, building urban private towers was confined to a period between the mid-twelfth and the mid-thirteenth century. The second phase of this period is more or less simultaneous with the last wave of urban private tower constructions in the southern towns of the empire.

Topographically, the towers emerged in the most exposed areas of the towns, often as the first civic stone buildings. Where the towers were erected on already existing structures, they developed in line with the urbanization process at these premium locations. Thus it is not surprising that in both cases they are near the market areas or along the main communication

arteries of the towns, often in the vicinity of the parish churches or power centers such as ducal residences. This choice of location can be explained by the prestige of these locations.

The relation of the tower structures and the plots containing them also reflects this situation. Most of the earlier towers were built remotely within the plots in spite of their exposed locations in the urban context. Clear borders were marked around them, which were further emphasized by the surrounding walls identified in several cases in this thesis. This remoteness, or at least this illusion of separation began to change by the second phase of tower-building. From second third of the thirteenth century, the private towers were more often built on the street façade of their plots. This change was most probably connected with the changing of the tower's symbolism or its real or presumed defensive value, along with the denser fabric of the towns. For instance, at the Havelská in Prague, the towers were built in a much more densely built-up area than their counterparts in the recently (1257) re-founded Kraków. At the same time, the private towers kept their prominent position and followed the expansion of the urban network. Thus the towers, whether built in the earliest phase or in a more developed period of urban growth, may be seen as one of the civic indicators of urbanization.

Apart from the central position of the urban private towers, their structural aspects are not homogenous. As implied by the usual term used for these structures, "residential towers," the buildings should be able to perform four separate yet unified functions; namely the residential, defensive, storage or economic and prestige display roles. These four purposes constituted the functional backbone of an ideal residential tower, whether built in a rural or urban context. Yet the architectural frame of this functional requirement is too fragmented to be able to clarify the exact role of the buildings. Nevertheless, they share some architectural factors, for instance, the frequently separated ground floors, the vaulting of these spaces, the elevated upper-level doors, or the ashlar-facing masonry on the corners. Based on these

elements it is partly possible to reconstruct the role of the towers, but many crucial structures are missing or did not survive in sufficient number to allow a firm judgment on this question. Here the most essential elements would be the openings, latrines and heating system. Without evidence for the presence or absence of these, the functional reconstruction of the buildings could only be hypothetical, even with the use of various analogies.

Even if it is possible to recreate the concept of a “perfect” residential tower based on the totality of the surviving architectural components, the fragmentation of the remains makes generalization impossible. Even within the same city or town, there are differences between the towers depending on their date and context. In terms of the functional role of the buildings, if one excludes the power display and symbolical aspects, I propose calling them “livable” but not residential towers. This conclusion also corresponds to various fourteenth-century *tvrz* buildings, where the towers were livable but their primary residential function is questionable, especially considering the residential wings attached to them.

Their limited habitability is even more obvious in view of the plots of the towers. Although there is only scattered information available, it is beyond doubt that there were further auxiliary buildings around the towers. Obviously in complex structures like the Stone Bell House in Prague or the Gozzoburg in Krems, the towers were built as part of building ensembles where the various functional spaces were placed in a horizontal system. Even if in their earliest phase the examined towers were built separately, based on their narrow and limited spaces and the multiple mentions of *curiae*, *domus* or other *edificia*, several buildings surrounded the towers, many of which were presumably more suitable for living.

The function of the buildings, their early dating and their position in the urban fabric, only makes considering the social background of the towers. Mostly in the early phase of building, the towers appeared parallel with a newly emerging, urban elite close to the nobility in its prestige and lifestyle. The owners of these towers, in addition to their role as members

of the highest political strata in the cities and towns, shaped the urban topography to their own preferences as was the case of the Gozzoburg or the Old Town hall in Bratislava. Due to the ownership of such distinguished persons, towers appeared as prominent sites in the social spaces of the towns. As a sign of this prominence the towers in some cases served as temporary town halls while their owners held the title of judge or major.

The quest of this knightly elite to display their power in the form of urban private towers, as well as their social background could make up for the architectural deficiencies of the towers. Their complex symbolism and their prestige remained attributes of their owners as late as the fourteenth century. The towers appeared as symbols on coats of arms or on seals, and in some cases even as parts of their owners' name, which perfectly mirrors their influence on thirteenth-century urban society. This impact attracted both the knightly orders who appeared as a marginal group of owners, and Jews who bought them in the second half of the fourteenth century, relieving the financial need of the tower's previous owners.

The Jewish ownership of the towers, on the other hand, also marked the changing prestige and social value of the buildings. By that time the former knightly elite either merged into the new social context of the settlements, or already left the towns. Meanwhile the tower buildings became parts of the newly erected permanent town halls, which meant that they kept their power displaying role, but as the symbol for the whole community rather than an individual. In line with their symbolic value, the towers were capable of carrying this new level of symbolism as attributes of the town and their municipal autonomy.

Unlike previous claims in scholarship, I do not think the emergence of these towers can be seen as to be the influence of various urban private towers from the South German episcopal cities, or of Northern Italy. Such connection is only tenable in the case of Kraków where some of the settlers originated from these regions. Firstly, the urban private towers are not new or unique phenomena; they can be found from England to the Latin East. This

pattern is even traceable within the empire where urban private towers began to appear independently more or less at the same time, in different social and topographical settings. Secondly, the similarities between the towers are mostly due to the relative simplicity of the structure itself. Furthermore, their uniformity may be traced back to the same requirements and symbolic roots: similar needs generate similar forms.

At the same time, the regional connections are not negligible. The communication and links between the towns, within the same kingdoms but also across the borders, for example between Western-Hungary and Lower Austria, must be considered. There are further overlaps in terms of the Hungarian *comes* layer and the German knightly merchants, while the social bonds between Austria and Bohemia were particularly strong under the regime of Otokar II. exemplified by the supposed relation of the *de Turi* family of Brno and Salzburg.

Evidence collated and analyzed in this thesis demonstrates that within a century and a half, the complex structure, topography and symbolic background of urban private towers fulfilled the newly formed urban elite's need for self-representation and, thus, the towers became one of the cornerstones of this social process.

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6. Appendices an Illustrations

6.1. List of Illustrations

1/1	The map of the discussed region with the urban towers mentioned in the chapter	Base map: Donald, „Atlas of Medieval Europe” Hungary and Central Europe in the Thirteenth century.
2/1	The map of Krems	Base map: Czeike, „Krems-Stein”
2/2	Map of Bruck an der Leitha	Base map: Oppl, „Bruck an der Leitha”
3/1	Map of Eggenburg	Base map: Czeike, „Eggenburg”
3/2	Map of Wiener Neustadt	Base map: Oppl, „Wiener Neustadt”
4/1	Map of St. Pölten	Base map: Oppl, „St. Pölten”
4/2	Map of Bratislava	Base map: Majorossy, „Foglalkozás topográfiája” 124.
5/1	Map of Vienna	Base map: Oppl, „Wien”
6/1	Map of Sopron	Base map: Jankó, „Sopron”
6/2	Map of Buda	Base map: Végh, „Buda város 2.” 322.
7/1	Map of Brno	Base map: Merta, „Brněnské domy s věží”
7/2	Map of Levoča	Base map: Marosi, „Művészet 1” 52.
8/1	Map of Wroclaw	Base map: Piekalski, „Prague, Wroclaw and Krakow” 54, 61.
8/2	Map of Kraków	Base map: Piekalski, „Prague, Wroclaw and Krakow” 65.
9/1	Map of Prague	Base map: Piekalski, „Prague, Wroclaw and Krakow” 27.
10/1	Assumably identifiable private towers and their topographic distribution on the skyline of Vienna	Georg Hoefnagel, Skyline of Vienna, 1609.
11/1	Possible Viennese private tower depictions from the skyline of Georg Hoefnagel, based in the identification of Richard Perger	Georg Hoefnagel, Skyline of Vienna, 1609.
	1 – Stephansplatz 7	
	2 – Graben 29	
	3 – Petersplatz 12	
	4 – Marc-Aurel-Strasse 2	
	5 - -	
	6 - -	
	7 - -	
	8 - -	
	9 – Griechengasse 7	

	10 – Salvatargasse 7	
12/1	The tower of the town hall of Bratislava	Braun and Hogenberg, „Civitas Orbis Terrarum IV.” 1588.
12/2	A possible private tower in Bratislava	Braun and Hogenberg, „Civitas Orbis Terrarum IV.” 1588.
12/3	The Herzoghof in Krems	Friedrich B. Werner, the townscape of Krems and Stein, 1750.
12/4	The southern facade of the Gozzoburg	Friedrich B. Werner, the townscape of Krems and Stein, 1750.
12/5	Tower at Kremserstrasse in Eggenburg	Tyssil, oil on canvas, c.1730.
12/6	The Gozzoburg from the South	Martin Zeiller, „Topographia Germaniae” 1679.
13/1	The tower of the town hall of Bratislava	Braun and Hogenberg, „Civitas Orbis Terrarum IV.” 1588.
13/2	A possible private tower in Bratislava	Braun and Hogenberg, „Civitas Orbis Terrarum IV.” 1588.
13/3	The Herzoghof in Krems	Friedrich B. Werner, the townscape of Krems and Stein, 1750.
13/4	The southern facade of the Gozzoburg	Friedrich B. Werner, the townscape of Krems and Stein, 1750.
13/5	Tower at Kremserstrasse in Eggenburg	Tyssil, oil on canvas, c.1730.
13/6	The Gozzoburg from the South	Martin Zeiller, „Topographia Germaniae” 1679.
14/1	Rescue of a child, who has been fallen into a well	Bernhard von Seyboldsdorf, Upper Austria, 1499. Panel painting
15/1	Architectural elements from the Trier Frankenturm	Fehring, “Städtischer Hausbau des Hochmittelalters” 52.
15/2	The Frankenturm	(Net source: https://upload.wikimedia.org/wikipedia/commons/c/c4/9_Trier_Frankenturm.JPG)
15/3	The ground plan of the tower at Malé Namesti 459/I	Piekalski, „Prague, Wroclaw and Krakow” 114.
15/4	The cross-section of the reconstructed tower at U Radnice, No 16/I	Piekalski, „Prague, Wroclaw and Krakow” 112.
15/5	The ground floor of the tower at U Radnice, No 16/I	(Net source: https://upload.wikimedia.org/wikipedia/commons/b/b1/Andelska_kolej_2.jpg)
16/1	Vienna, Griechengasse 14.	Own photo
16/2	Krems, Herzoghof ; 3.: Reconstruction of the Ulica Bracka 3/5. tower in Cracow by Pictor Opalinski	Komorowski, „O wieży wójta Krakowskiego” 126.

16/3	The tower of the Old Town Hall in Bratislava	Own photo
16/4	Buda, Úri utca 27.	Lócsy, „A Budapesti Történeti Múzeum”
17/1	Cross vault in Bruck an der Leitha, Hauptplatz 4.	Gröninger, „Bauhistorische Untersuchung” 6.
17/2	Cross vault in Bruck an der Leitha, Hauptplatz 4.	Gröninger, „Bauhistorische Untersuchung” 6.
17/3	Cross vault in Sopron Kolostor utca 13.	Own photo
17/4	Cross vault in Prague Old Town Square 478	Own photo
17/5	Cross-section and ground floor entrance at Cracow Ulica Bracka 3/5	Komorowski, „O wiezy wójta Krakowskiego” 120.
17/6	Cross section with the cross vault in Sopron, Kolostor utca 13.	Based on the survey of Ferenc Dávid
18/1	Cross-section of the tower at Hauptplatz 1. in Nürnberg	Wiedeau, „Katalog der romanischen Wohnbauten” 72.
18/2	Window niche with benches at Sopron, Új utca 9./Szent György utca 14.	Own photo
18/3	First floor entrance at Sopron, Kolostor utca 13.	Own photo
18/4-5	Survey of the first floor door and its frame at Sopron, Kolostor utca 11.	Own drawing and photo
19/1	Siege of Vienna	Historia Friderici et Maximiliani (1513-1514)
19/2	The burn of Sodoma	Velisav Bible (c.1367)
19/3	The abbey of Melk	Babenberg-stammbaum – Victory of Albert (1489-1492)
19/4	The view of Vienna	Liber Chronicarum (1493)
20/1	The caminus of the residential tower of Trenčín	Feld, „Zur Frage der Beheizung” 111.
20/2	The Blockwerkkammer of the Castle of Radyne	Menclova, „Blockwerkkammer in Burgpälsten” 254.
20/3	The Blockwerkkammer and its reconstruction from the Castle of Ruttenstein	Kühtriber, „Die Rekonstruktion einer Blockwerkkammer” 218-219
20/4	The Blockwerkkammer and its reconstruction from the Castle of	Kühtriber, „Die Rekonstruktion einer Blockwerkkammer” 218-219

	Ruttenstein	
20/5	The Blockwerkkammer and its reconstruction from the Castle of Ruttenstein	Kühtriber, "Die Rekonstruktion einer Blockwerkkammer" 218-219
21/1	Linked-window from the Castle of Thernberg	net source: burgenseite.com/thernberg_txt.htm
21/2	The linked-window of the Fő tér 3. house in Sopron	Based on: Dávid, "Gótikus lakóházak"
21/3	Linked-windows from burgher houses from Sopron	Based on: Dávid, "Gótikus lakóházak"
21/4	The tower at Új utca 4. in Sopron and its possible linked-window	Szoboszlay, "Toronyiránt" 160.
21/5	The facade of Griechengasse in Vienna, with its urban tower in the right hand side	net source: burgenseite.com/unknown/griechengasse_ar_3.jpg
22/1	Cross section of the tower in Fő tér 7 in Sopron	Based on the surveys of Gergelyffy 1973 and Sedlmayr 1973
22/2	Ashlar corner covering at Új utca 4, Sopron	Own photo
22/3	A tower with an ashlar corner covering behind the Roterturm	Babenberg-stammbaum, Vienna, the death of Friedrich II
22/4	The tower at Gesandtenstraße 2 in Regensburg	Piekalski, „Die Rolle der Wohntürme” 170.
22/5	Reconstruction variants of Piotr Opaliński	Komorowski and Opaliński, „O wiezy wójta” 127.
23/1	Window niche with benches in the Old Town Hall in Bratislava	Own photo
23/2	The chapel in the floor of the Stone Bell House in Prague	Vlček, „Staré Město, Josefov.” 409.
23/3	Decorated facade of the Herzoghof in Krems	Hollensteiner, „Der ehemalige Palast des Herzoghofes” 18.
23/4	Mural in the hall of the Gozzoburg in Krems	Mitchell, „Raum und Repräsentation in der Gozzoburg” 232.
23/5	The decorated facade with the sculpture niches of the Stone Bell House in Prague	Own photo
24/1	Crest with tower on the Town Hall tower in Brno; 2.: The seal of Mikuláš in Turri of Brno	Own photo

24/2	The seal of Thaman Turnhofer	Musilek, „Příběh tří Mikulášů od Věže.” 10.
24/3	The seal of Thaman Turnhofer	Mollay, „Háztörténet és várostörténet” 6.
24/4	The crest of the Agendorfer family on the vault of the Franciscan friarie’s chapter hall in Sopron	Own photo
24/5	The main hall of the Gozzoburg	Mitchell, „Raum und Repräsentation in der Gozzoburg” 231.
24/1	The tower of the town hall in Brno	Own photo
24/2	The tower of the Altemberger Palace in Sibiu	Own photo
24/3	The crest of Thomas Altemberger	Munteanu, „Primăria veche din Sibiu.” 40.
24/4	The eastern facade of the Altembeger Palace	Entz, „Városi lakótornyok” 409.
25	Various residential towers from castles from the Kingdom of Bohemia	Based on: Menclová, „Ceské Hrady”
26	Various residential towers from castles from the Kingdom of Hungary	Based on: Parádi 1982, 12; Dodnár et Cabello 1989, 183; Feld 1994, 200; Feld 2014, 382, 381; Feld 2015, 375; Feld 2007, 156, 150; Simon 989, 215; Bóna 127, 2010; Bóna 2003, 67; Bóna 2004, 149; Karczag-Szabó 2010, 181, 232;
27/1	Prague Stone Bell house	Vlček; „Staré Město, Josefov.” 408.
27/2	Sibiu, Altemberger palace	Entz, „Erdély” 409.
27/3	Bratislava, Old Town Hall	Holcik, „Nové nálezy v Starej radnici” 240.
27/4	Gozzoburg, Krems	Mitchell, „The Gozzoburg in Krems” 26.
28/4	Sopron Kolostor utca 7	Based on: Dávid, „Gótikus lakóházak”
28/5	Krems Herzoghof	Based on: Hollensteiner, „Der ehemalige Palast” 6.
28/6	Prague Staroměstské náměstí 478	Based on: Piekalski, „Prague, Wroclaw and Krakow” 73.
28/7	Prague; Jilská ulická 449	Based on: Piekalski, „Prague, Wroclaw and Krakow” 73.
28/8	Prague; Jilská ulická 451	Based on: Piekalski, „Prague, Wroclaw and Krakow” 73.
28/9	Sopron; Kolostor utca 13	Based on the survey of Ferenc Dávid, 1981
28/10	Sopron; Új utca 4	Based on the survey of Scőnerné Pusztai Ilona, 1991

Fig.1	The seal of Thamen Turmhofer	Mollay, "Háztörténet, Városhörténet" 6.
Fig.2	Distribution of the researched private towers according their source materials in Lower Austria	Own survey
Fig.3	Distribution of the researched private towers according their source materials in the Kingdom of Hungary	Own survey
Fig.4	Distribution of the researched private towers according their source materials in the Kingdom of Hungary	Own survey
Fig.5.	List of the comes-es of Sopron and their further titles between 1242 and 126	Based on: Zsoldos, "Archantológia"
Fig.6.	The access analysis and the comparison of the private towers and burgher houses in Sopron	Based on: Dávid, "Gótikus lakóházak" 95.; Schofield and Vince, "Medieval Towns" 96.
Fig.7.	The family tree of the Veflovice kindred and Mikuláš in Turi	Based on Musilek, "Příběh tří Mikulášů" 4, 5
Fig.8.	The Agendorfer family tree	Based on Mollay, „Névtudomány és várostörténet" 25-26
Fig.9.	Figure 9.: The family tree of Lupold de Turi	Based on Musilek, "Příběh tří Mikulášů" 4, 5

6.2.: Gazeteer

Albertfalva		97
Bardejov	<i>Bártfa, Bartfeld</i>	124
Basel		32
Běla pod Bezdězem	<i>Weißwasser</i>	119
Bern		98
Bologna		58

Brasov	<i>Brassó, Kronstadt</i>	117
Bratislava	<i>Pressburg, Pozsony</i>	2, 5, 7, 9, 21, 28, 30, 31, 32, 33, 58, 61, 66, 68, 69, 71, 72, 74, 75, 82, 83, 93, 96, 97, 107, 110, 111, 113, 115, 117, 118, 121, 122, 123, 124, 125, 130
Braunschweig		
Brno	<i>Brünn</i>	2, 4, 25, 34, 35, 60, 61, 62, 83, 102, 103, 104, 105, 115, 116, 118, 120, 122, 123, 124, 125
Bruck an der Leitha		2, 4, 24, 25, 28, 29, 32, 60, 61, 89, 123
Buda	<i>Budapest, Ofen</i>	2, 5, 21, 29, 32, 36, 41, 59, 63, 68, 69, 80, 81, 82
Budec		44, 45
Câlnic	<i>Kelnek</i>	64
Cluj	<i>Kolozsvár, Klausenburg</i>	111
Csorna		48
Dág	<i>Ágfalva, Agendorf</i>	48
Devizes		
Dombóvár		60
Donauwörth		108
Dürnkurt	<i>Morvamező</i>	1, 40, 47, 94
Eggenburg,		2, 4, 7, 25, 29, 32, 34, 35, 63, 83, 116, 118, 124,
Esztergom	<i>Gran</i>	20, 93, 111, 116
Fertheu	<i>Neusiedler See, Fertő tó</i>	79
Gdańsk	<i>Danzig</i>	44
Giecz		44
Győr	<i>Raab</i>	2, 9, 45
Hainburg		68, 69
Hét		93
Hidegség	<i>Kleinandrä</i>	48, 96
Kács		60
Karlstein		88
Karlštejn	<i>Burg Karlstejn</i>	53, 62, 69, 70
Komárom	<i>Komárno, Komorn</i>	111
Kourim		45
Kozi Hrádek		62
Kőszeg	<i>Güns</i>	69
Kraków	<i>Krakow, Cracow</i>	2, 4, 6, 22, 28, 29, 32, 37,

		60, 61, 62, 79, 82, 83, 98, 99, 119, 120, 128, 130
Krems	<i>Krems an der Donau</i>	2, 4, 11, 12, 16, 25, 28, 30, 31, 32, 34, 37, 38, 41, 45, 48, 49, 50, 59, 67, 68, 74, 89, 90, 113, 114, 115, 118, 93
Lamacs		63
Landštejn		63
Levoča	<i>Nagyszeben, Leutschau</i>	2, 5, 59, 63
Libice		45
Lipnice	<i>Lipnitz an der Sasau</i>	64
Lublin		119
Luzern		33, 34, 36, 83, 92,
Mainz		15, 16
Mâlâiesti	<i>Malajesd</i>	64
Mátraszőlős		60
Mělník	<i>Melnik</i>	119
Misérd		93
Nagyvázsony		62
Nurnberg	<i>Nuremberg</i>	16, 35, 63
Nyitrašimonyi		60
Olomouc	<i>Olmütz</i>	44
Pajrek		63
Perchtoldsdorf		68
Perugia		63
Pinka	<i>Pinkaóvár, Burg</i>	109
Písek	<i>Pisek</i>	119
Podhradie	<i>Tapolcsány-Kővárhegy</i>	62, 64
Prague	<i>Praha, Prag</i>	2, 4, 6, 11, 16, 17, 22, 23, 26, 27, 28, 29, 30, 32, 34, 35, 36, 37, 54, 55, 56, 60, 61, 64, 70, 79, 86, 90, 91, 92, 102, 103, 106, 112, 113, 114, 118, 119, 126, 128, 129
Přerov	<i>Prerau</i>	44
Pruk		93
Rabštejn	<i>Rabenstein</i>	63
Radyně	<i>Karlskrone</i>	70
Regensburg		15, 16, 34, 36, 58, 71, 82, 83, 84, 92, 105, 106, 108, 112, 116, 126,
Riga	<i>Rīga</i>	56

Ruttenstein		72
Salzburg		73, 105, 131
Šariš	<i>Sáros</i>	62
Sátoraljaújhely		45
Sibiu	<i>Hermannstadt, Nagyszeben</i>	2, 5, 41, 115, 117, 120, 122, 124,
Sighisoara	<i>Segesvár, Schäßburg</i>	117
Silenen		57
Šintava	<i>Sempte</i>	45
Sopron	<i>Ödenburg, Scarabantia</i>	1, 2, 5, 6, 12, 13, 18, 19, 20, 21, 23, 28, 29, 30, 31, 32, 36, 37, 38, 40-50, 52, 58, 59, 60, 61, 62, 64, 67, 68, 69, 70, 71, 72, 74, 76, 78, 79, 80, 81, 82, 86, 87, 89, 93, 94, 95, 96, 100, 101, 102, 104, 105, 106, 108, 109, 110, 111, 113, 115, 116, 120, 121, 122, 124, 125,
Split	<i>Spalato</i>	2
St. Pölten		2, 4, 7, 24, 28, 29, 124, 125
Stokesay		57
Szczecin	<i>Stettin</i>	56
Székesfehérvár	<i>Fehérvár, Alba Regia, Stuhlweißenburg</i>	2, 5, 20, 21, 36, 68, 93, 96, 111
Széplak		48
Tarnów	<i>Tarnow</i>	119
Timisoara	<i>Temesvár</i>	45
Toruń	<i>Thorn</i>	56
Trenčín	<i>Trencsény</i>	64, 73
Trier		33
Trogir	<i>Trau</i>	2
Tulln		68
Ústí nad Orlicí	<i>Wildenschwert</i>	119
Vienna	<i>Wien</i>	2, 4, 6, 13, 16, 17, 23, 28, 31, 36, 58, 59, 63, 68, 69, 83, 86, 87, 89, 90, 91, 92, 100, 101, 105, 107, 108, 109, 120, 125,
Vincennes		58
Visby		56

Visegrád		41, 45, 61, 73, 111
Vödrich		93
Wiener Neustadt		2, 4, 7, 25, 28, 43, 101, 102, 104, 107, 109, 110, 116, 118,
Wrocław	<i>Breslau</i>	2, 4, 13, 19, 21, 23, 29, 44, 55, 79, 98, 119,
Zagreb	<i>Zágráb, Agram</i>	2, 5, 21, 35, 111
Zalavár	<i>Mosaburg</i>	45
Zatec		45
Zürich		15, 16, 34, 36, 65, 66, 71, 83, 92

6.3.: Structural Database and Illustrations

Structural overview of the Central-European urban towers mentioned in the chapter

Kingdom of Bohemia										
Prague										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Jilská 449.	App. 3 m, in current state just the ground floor	-	6,3x6,9 m	Within the plot	Sunked ground floor with barrel vaulting. An other staircase connecting to the tower. in the ground floor two separate spaces	Ground floor is closed, accessible from the first floor through the staircase	-	12th century	-	-
Old Town Square 478	5 m, in current state just the ground floor	-	5x5,5	Within the plot	Ground floor is closed, accessible from the first floor through the staircase	-	-	13th century	-	-
Karlova 146/I	In current state just the ground floor and the remains of the first storey	CEU eTD Collection'	-	Within the plot	Ground floor closed with barrel vaulting and two rooms there, the same structure in	Ground floor is accessible through a staircase from the yard, the upper floor via an outer staircase	-	12th century	-	-

					the upper level too					
Havelska 407	At least three levels	-	-	Within the plot	-	-	-	13th century	-	-
U Radnice 16/I	10 m, at least three levels	1,5	9x6 m	Within the plot	Ground floor closed with a vaulting based on a central pillar, also two rooms there, the same structure in the upper level too	Ground floor is accessible through a staircase from the yard, the upper floor presumably via an outer staircase	-	12th century	-	-
Jilská 451	At least two levels	1 m	6x6 m	Within the plot	Ground floor closed with barrel vaulting and two rooms placed there	The sunken ground floor is accessible through a staircase from the yard.	-	12th century	-	-
Malé náměstí 459/I	At least two levels	1,8 m	11x6 m	Within the plot	Ground floor closed with barrel vaulting and two rooms placed there	The sunken ground floor is accessible through a staircase from the yard.	-	12th century	-	
Havelská 404	-	Collection of the QBU	-	Street front	-	-	-	13th century	-	-
Havelská 403	-		-	Street front	-	-	-	13th century	-	-
Havelská 402	-		-	Street front	-	-	-	13th century	-	-
Havelská 401	-		-	Street front	-	-	-	13th century	-	-

Havelská 400	-	-	-	Street front	-	-	-	13th century	-	-
Havelská 398	-	-	-	Street front	-	-	-	13th century	-	-

Brno										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Dominikánské náměstí 2 - Royal Chapel	At least two levels	1,4 m	14x7,8 m	Street front	Partition walls at both levels	-	-	First mention 1287	-	Mikuláš di Turri than King John of Luxemburg
Náměstí Svobody 18	Four floors			Corner of the plot	Ground level closed with crossed vault	-	-	Late 13th century	Battlement on the top. Medieval coats of arms and the Moravian Eagle painted in the inner wall	Tomáš Anshelm in 1348
Radnická 8, Old Town Hall	Originally two floors. It was extended to four.	1,4 m	14x14 m	Street front	Ground floor destroyed because of the gate of the town hall	Ground floor unknown. First floor is from the balcony of the town hall	-	Late 13th century/early 14th century. Town hall from 1373	A chapel attached to it	
Jakubské nám. 2 - Rašínova 4 Corner	-	1,7	Rectangular ground plan, full size unknown	At the corner of the plot	-	-	-	13th century	-	-

Kingdom of Poland										
Wroclaw										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
No 33 Rynek	-	-	-	-	-	-	-	13th century	Square shaped brick structure on the Main Market-square	-
Corner of Wita Stwosza/ul Sw Wita	-	Above one meter	-	-	-	-	-	13th century	Square shaped brick structure	-
Cracow										
Ulicka Bracka 3-5.	At least two levels	1,2 m	9x9 m	Within the plot	Barrel vaulted ground floor what is slightly sunken	Separated entrances to the ground and to the higher floors. The higher entrance is accesible via an outer wooden stair	-	13th century	At the Market Square	German hospeses, until 1312 Henrick Voight bought it
Corner ai Rynek 23/Ulica Sweska 2	5 m, at least two levels	1,6 m	9x11,5 m	Within the plot	-	-	-	13th century	19 m from the Market Square	Headman Albert, father of

										Henrick Voight
Rynek Główny 35	At least two levels	1,1 m	9,1x9,1 m	Within the plot	-	-	-	13th century	-	-
Rynek Główny 36	-	-	9x9 m	-	-	-	-	13th century	-	-
Rynek Główny 41-42	-	1,8 m	-	-	-	-	-	13th century	-	-
Nos 7	-	-	-	-	-	-	-	13th century	-	-
Rynek Główny 51	-	-	-	-	-	-	-	13th century	-	-

Kingdom of Hungary										
Buda										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Úri utca 37	3 floors	-	7x10 m	Within the plot	-	-	-	13th century	Some narrow windows at the upper floors, ashlar masonry on the corners	
Bratislava										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the	Division of levels	Entrances	Heating system	Dating	Further details	Owners

	levels			plot						
Old Town Hall	12 m, 3 floors	Less than 1 m	8x8 m	In the corner of the plot, facing the Market Square	Ground floor closed with vaulting	Entrance to the ground floor from the street. The upper floors are accessible from the yard through the first floor	A fireplace in the second floor	13th century, first mention from 1314	Plaster decoration on the facade, window niches with benches. Tracery decoration on some windows	Jacob judge's family, later a jewish marchant Isaac
Levoca										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Hviezdoslavova ulica 22.	2 levels in current form	-	6x7 m	Within the plot at the longitude inner border of it	-	-	A fireplace in the first floor	13th century (?)	Different stone building material than the brick that they used in the case of the later houses	-
Sopron										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Kolostor utca 7.	Just the ground floor		4,2x4,3 m (inner space size)	Within the plot at the longitude inner border	Ground floor is closed with a rib vault	Survived entrance on the ground floor,	-	13th century	Traces of a wall on the street front	-

				of it		presumably different entrance on the higher floors				
Kolostor utca 11.	3 levels	60-75 cm	5x5 m	Within the plot	-	Survived doorframe on the second floor	-	13th century	Ashlar masonry on the corners. Later town hall	-
Kolostor utca 13	2 levels in current form	90 cm	6x6 m	Within the plot at the longitude inner border of it	Ground floor is closed with a rib vault	Possibly a different entrance to the ground floor on the destroyed southern wall. Small outer door on the first floor	A stove in the first floor - later rebuilt in the 15th century	13th century	Built together with the wall of the plot. Ashlar facing masonry on the corners.	-
Új utca 4	2 levels and the remaining foundation of the 2 floor CEU eTD Collection	1,2 m	8x8 m	Within the plot at the longitude inner border of it	Ground floor covered with barrel vault	Both the ground and the first floor was accessible separately from the court	-	13th	Ashlar facing masonry on the northern corner. Possible trace of a linked-window, inner wooden cladding	-
Új utca 18	-	-	6x5,7	Within the	-	Both the	-	13th	-	-

				plot at the longitude inner border of it		ground and the first floor was accessible separately from the court		century		
Szent György utca 14/Új utca 9	2 levels and the remaining foundation of the 3rd level	45 cm	10x11 m	Within the plot at the longitude inner border of it	Originally the ground floor was covered with a flat roofing and luminated by narrow windiws from the courtyard	To the ground floor a large semicircular closed door. To the first floor an other door from the northern side of the tower	-	14th century(?)	The first floor is separated to different rooms with large windows with niches with benches. Ashlar facing masonry on the northern corner	-
Former tower of the Town Hall	-	-	-	The far end of the plot	-	A door from the city wall	-	13th century – before 1250	A stone house built on the plot before 1250. Later merged into the city wall	The Agendorfer family

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Austria										
Vienna										
Name/Adress	Actual height	Wall thickness	Ground plan	Position within	Division of levels	Entrances	Heating system	Dating	Further details	Owners

	and levels		size	the plot						
Bäckerstraße 2	3 floors in current form	-	-	Within the plot	All the floors were divided with barrel vaulting	-	-	13-14th century	Mentioned that had a pyramidal roof	
Bäckerstraße 7	2 floors in current form	-	-	Within the plot	-	-	-	After 1368	Built as an extension of the original residence on the plot	Jakob von Tirna
Bäckerstraße 14	At least 2 levels in current form	-	-	Within the plot, but close to the street	Assumed from the openings the ground floor and the higher levels were divided	Separate early gothic doorframe with two small openings on its both sides. A further outer door in the first floor	-	13th century	-	-
Rabensteig 3	4 storey in current form	90 cm	6x5 m	Within the plot but close to the street	Closed ground floor with a vaulting. The vault is supported by a central pillar	-	-	15th century	-	-
Corner of Griechengasse and Rotenturmstrasse	4 storey in current form	-	5x5 m	On the corner of the street	-	-	-	13th century	A possible linked-window group on the	-

	form			junction					third level	
Corner of Lugeck 7 and Rottenturmstrasse 6	7 storeys	-	-	On the corner of the street junction	-	-	-	12/13th century - second tower in the 14th century	An earlier tower from the Babenberg period, while a new one in its place from the 14th century - it was dismantled in 1845	Knightly family of the von Tirna. Jans von Tirna was the builder of the new tower
Eggenburg										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Kremserstrasse 15	-	-	-	Street front	-	-	-	13th century/1300	-	Town judge Heinrich der Gurrit
Krems										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Gozzoburg	2 storeys CEU eTD Collection	1 m	7x8 m	Within the, at its southern edge	On the ground floor kitchen and latrines. It is closed with a cross vaulting. First floor is the	Ground floor is accesable through a separate door, while the first floor via from the balcony of the	The owen of the kitchen is heating the residential area	1249-1288	A whole representative palace with a hall and chapel is attached to it. The tower is overlooking the entrance and the courtyard in the	The town judge Gozzo

					residential are also with vaulting and with an auxiliary room attached - possible chamber	courtyard			direction of the market square	
Herzoghof	16 m, 4 storeys	1,5 m	9x6 m	Within the plot	Closed ground floor	-	-	Middle of the 12th century	Built as a part of a royal residence and toll collector station. Two palace buildings and a chapel is on the plot too	Duke Babenberg Hienrich II. was the builder, than it become the private property of two burghers
Bruck an der Leitha										
Name/Adress	Actual height and levels	Wall thickness	Ground plan size	Position within the plot	Division of levels	Entrances	Heating system	Dating	Further details	Owners
Hauptplatz 4	2 levels in current form	-	-	Within the plot	Ground floor is closed with a cross vaulting	Separate doors to the ground floor and to the first storey	-	13th century, before 1250	-	-
Hauptplatz 5	-	-	-	-	-	-	-	13th century, before 1250	-	-
Eggenburg										
Name/Adress	Actual height	Wall thickness	Ground plan	Position within	Division of levels	Entrances	Heating system	Dating	Further details	Owners

	and levels		size	the plot						
Kremserstrasse 15	-	-	-	Street front	-	-	-	13th century/1300	-	Town judge Heinrich der Gurrit

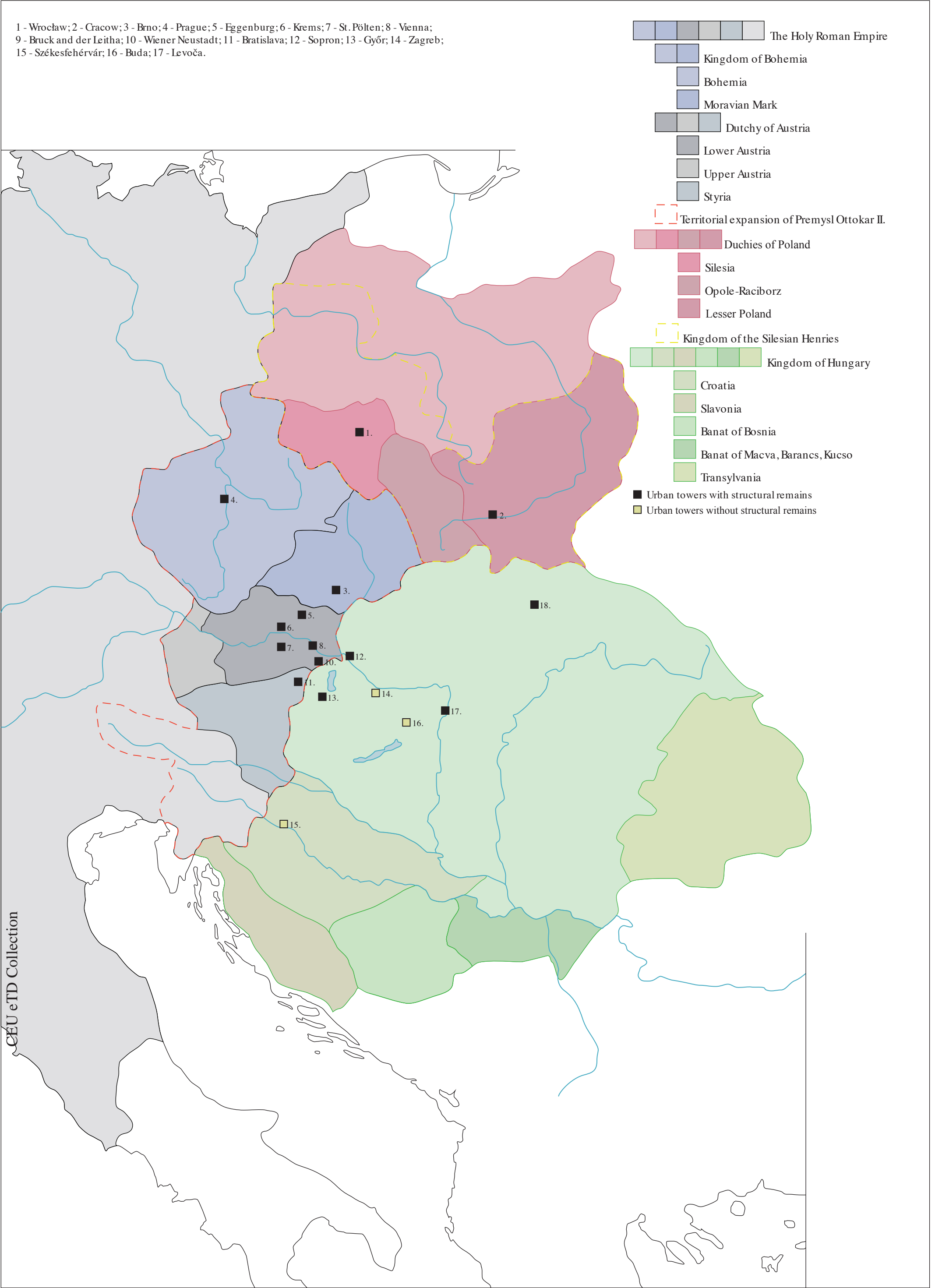


Table 1.: The map of the discussed region with the urban towers mentioned in the chapter



Table.2.: Krems and Bruck an der Leitha

- Fortifications
- Ecclesial buildings
- Ditches
- Cemetery
- Commercial/economic building
- Residence/urban castle
- Town Hall
- Synagogue
- Tower



0 200 m

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Table.3.: Eggenburg and Wiener Neustadt

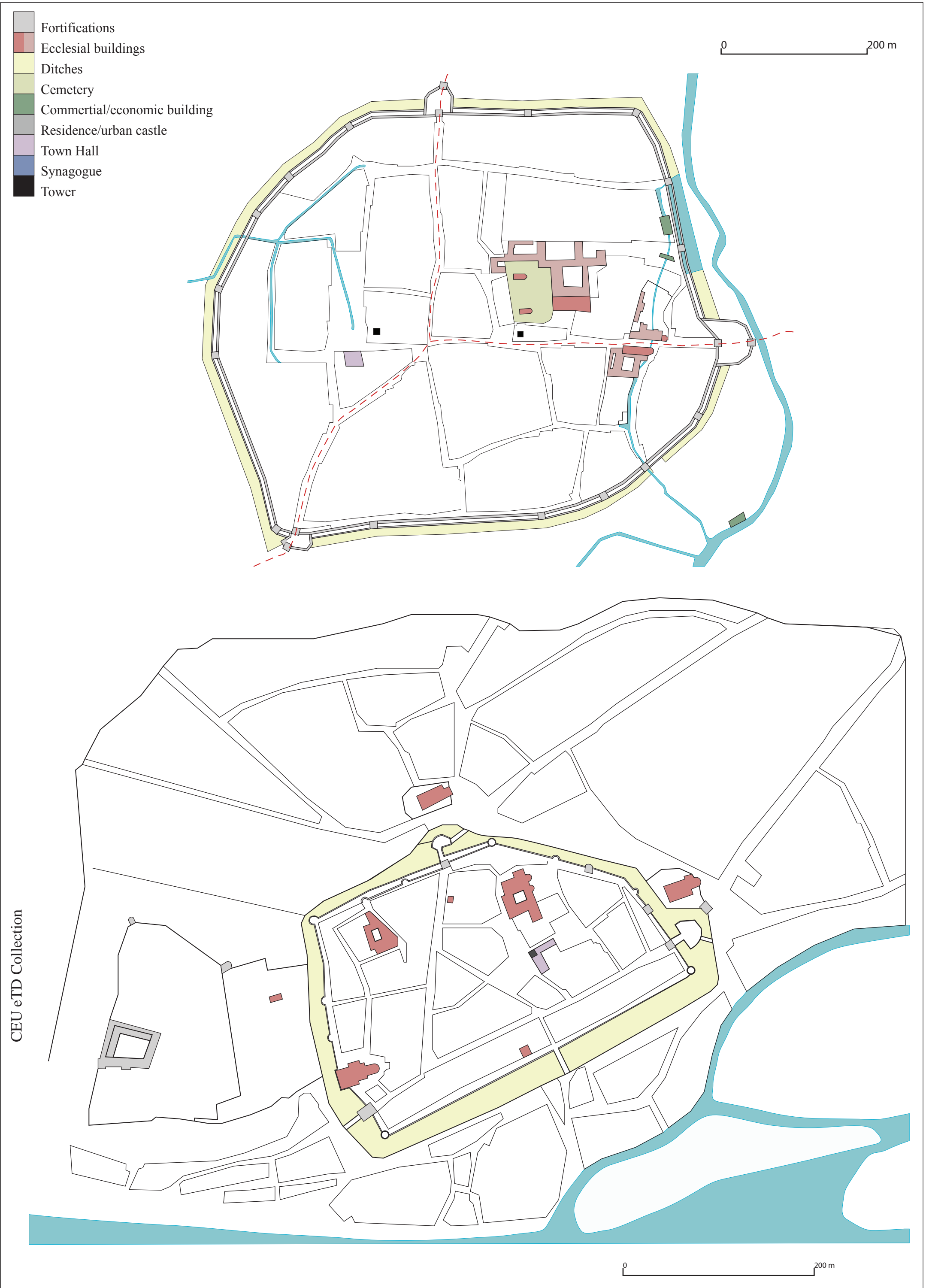


Table.4.: St. Pölten and Bratislava

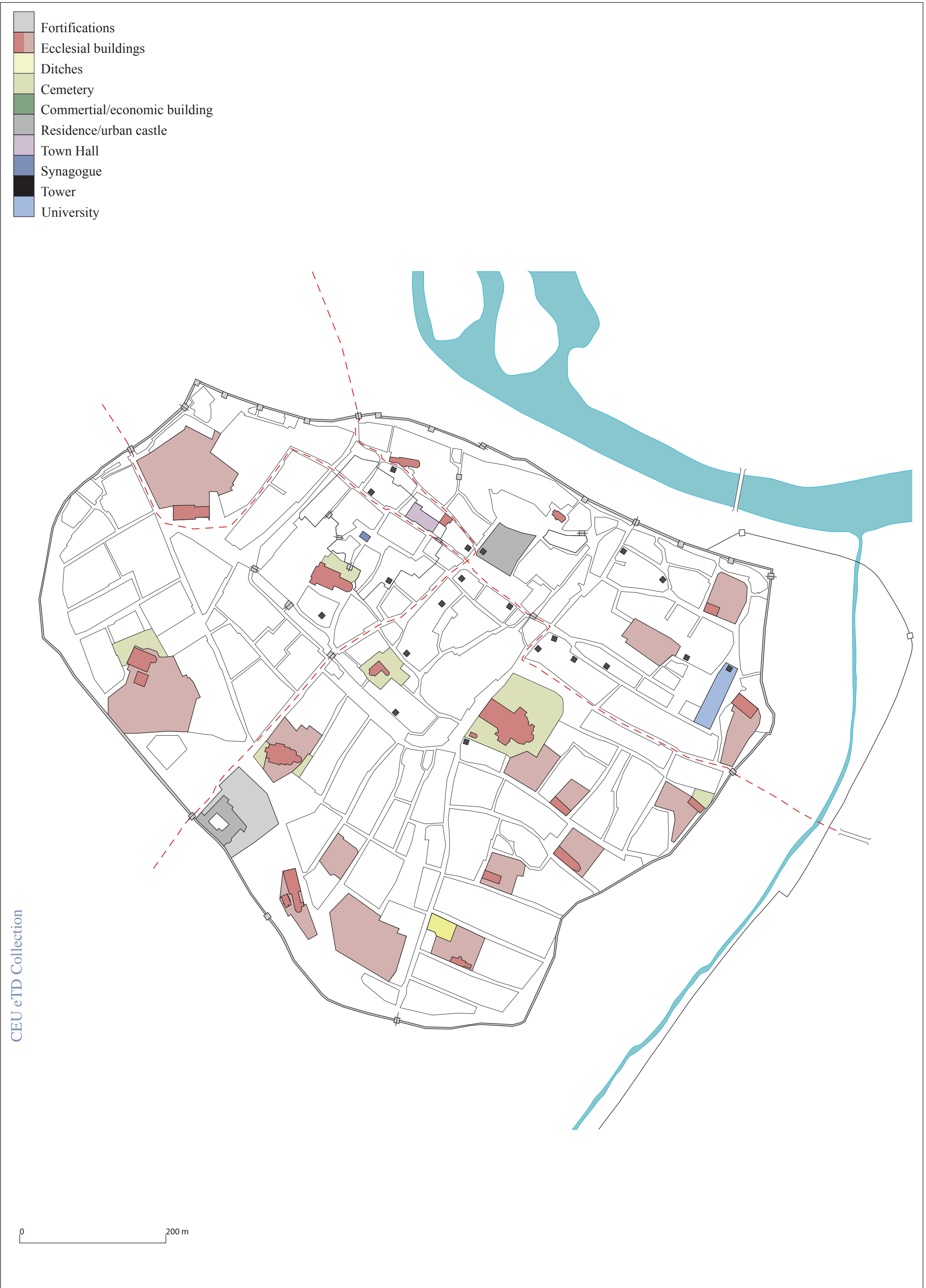


Table 5.: Vienna



Table 6.: Buda and Sopron



Table 7.: Brno and Levoca



Table 8.: Wrocław and Kraków



Table 9.: Prague Old Town and New Town

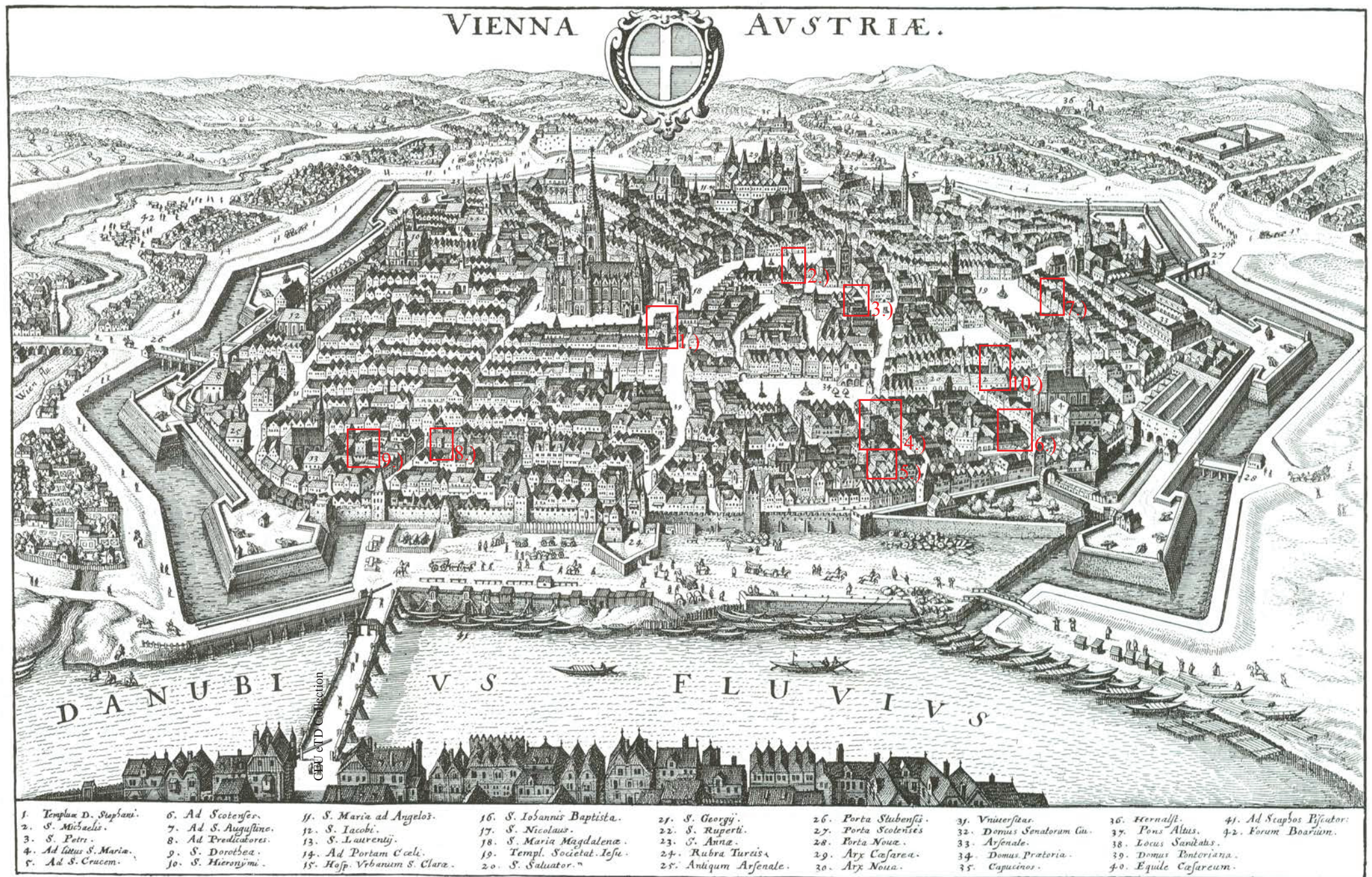
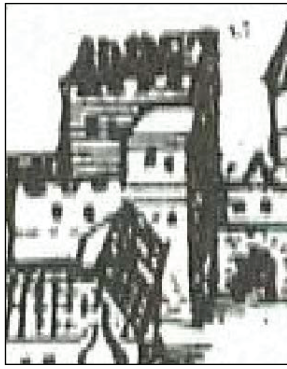


Table 10.: Presumably identifiable towers and their topographic distribution on the bird's-eye view by Hoefnagel from 1609 on Richard Perger's study. See individual towers highlighted on Table 11.



1.)



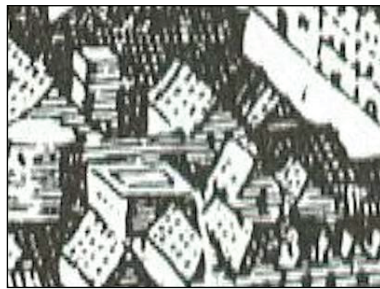
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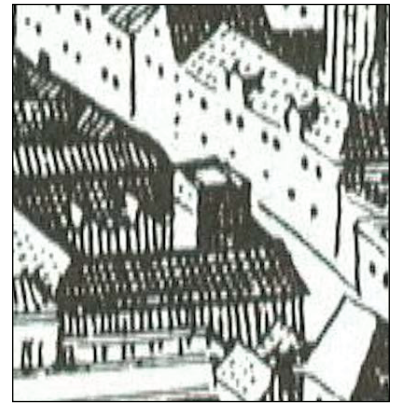
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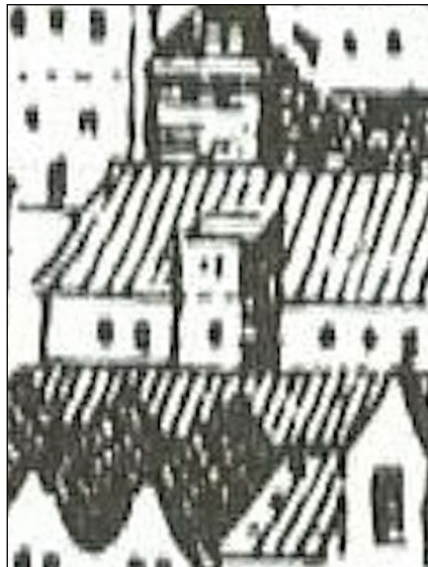
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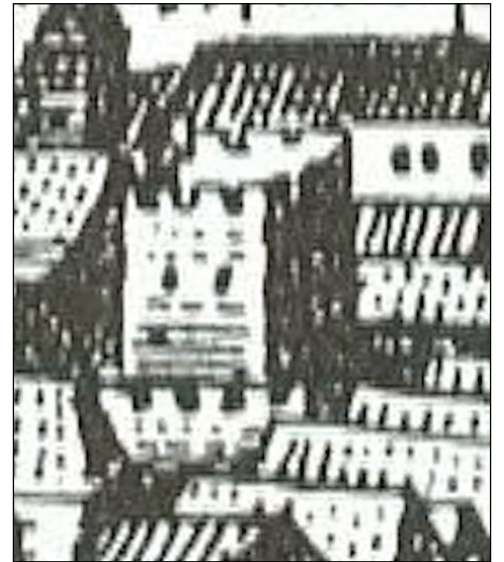
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10.)

Table 11.: Possible Viennese private tower depictions from the bird's-eye view of Georg Hoefnagel

Towers from Table 10-11. (5, 6, 7, 8 are unidentifiable)

- 1 – Stephansplatz 7.
- 2 – Graben 29
- 3 – Petersplatz 12
- 4 – Marc-Aurel-Strasse 2
- 5 --
- 6 --
- 7 --
- 8 --
- 9 – Griechengasse 7
- 10 – Salvatergasse 7



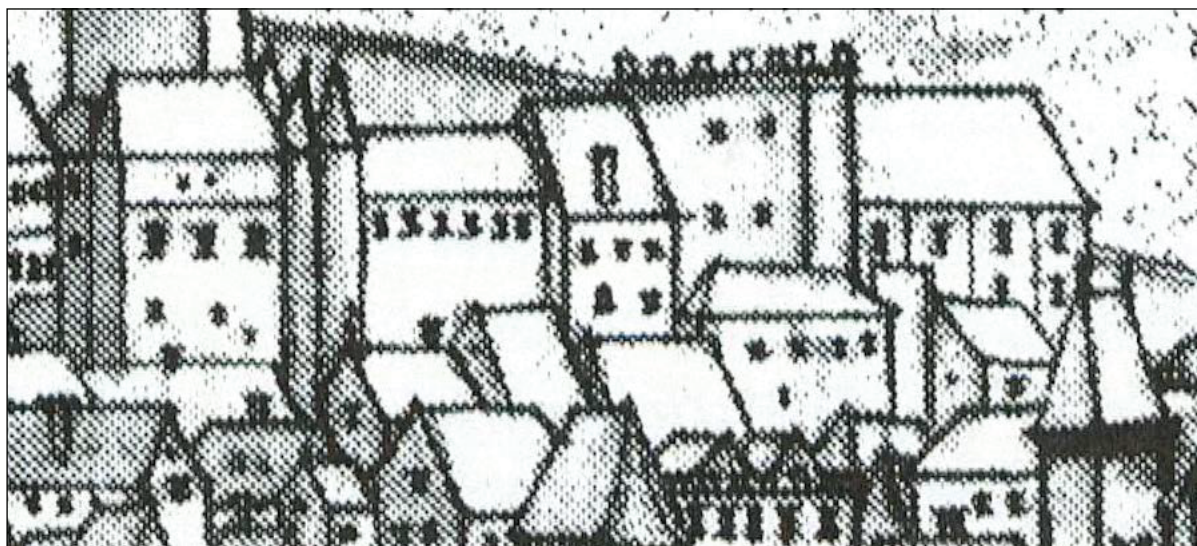
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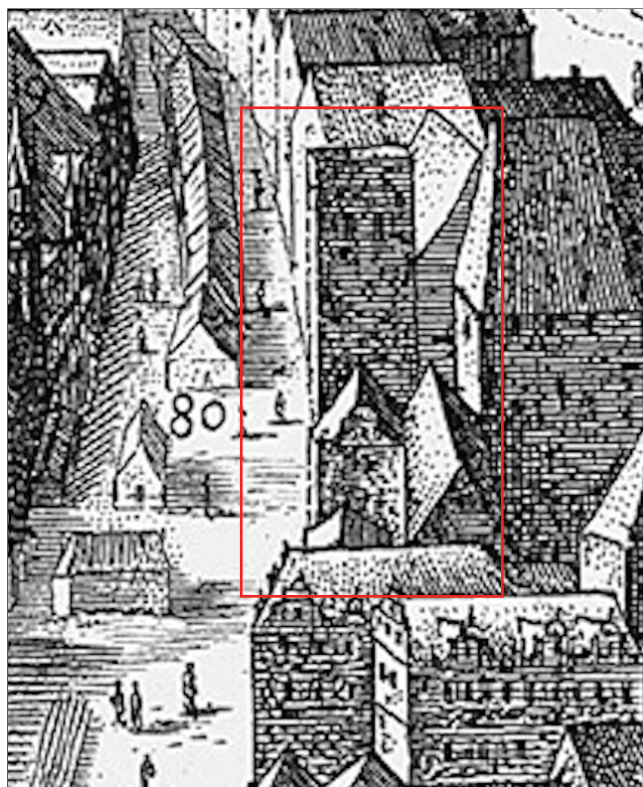


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Table 12.: 1-2.: The tower of the town hall of Bratislava and a further possible private tower ;
3-4: The tower of the Herzoghof and the southern facade of the Gozzoburg; 5.: Tower at Kremserstrasse
in Eggenburg; 6.: The Gozzoburg from the South.



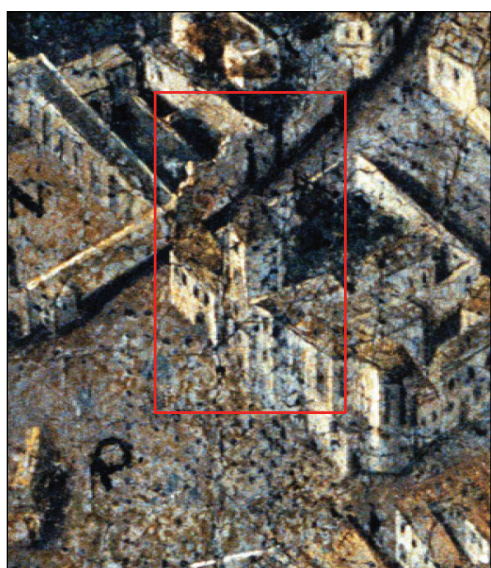
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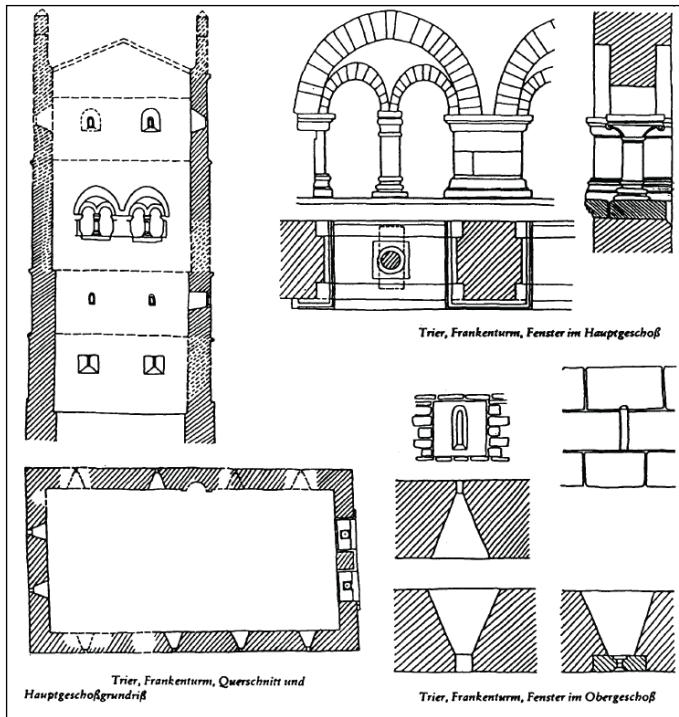


5.)

Table 13.: Private tower depictions; 1-2.: The Stone Bell House at the Tyn and the 403/I tower at Havelská; 3.: Wrocław, tower at Wita Stwosza; 4.: The assumed tower of Mikulas de Turi in Brno; 5.: The enlarged tower of the town hall of Brno.

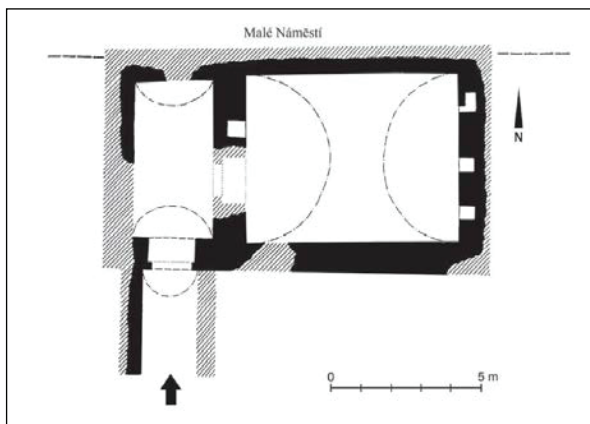


Table 14.: Bernhard von Seyboltsdorf: Rescue of a child, who has fallen into a wall. Upper Austria, 1499

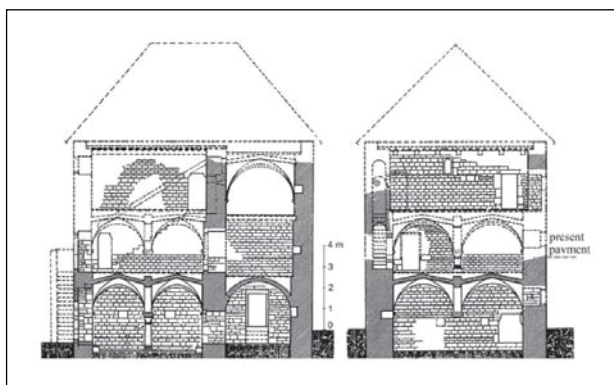


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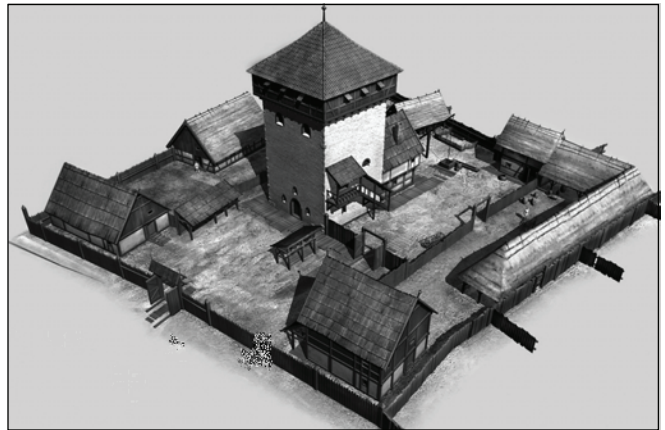
Table 14.: Trier and various Romanesque houses from Prague; 1.: Architectural elements from the Trier Frankenturm (Fehring, 1987, 52.); 2.: The Frankenturm (Net source: https://upload.wikimedia.org/wikipedia/commons/c/c4/9_Trier_Frankenturm.JPG); 3.: The ground plan of the tower at Malé Namesti 459/I (Piekalski 2014, 114.) 4.: The cross-section of the reconstructed tower at U Radnice, No 16/I (Piekalski 2014, 112.); 5.: The ground floor of the tower at U Radnice, No 16/I (Net source: https://upload.wikimedia.org/wikipedia/commons/b/b1/Andelska_kolej_2.jpg).



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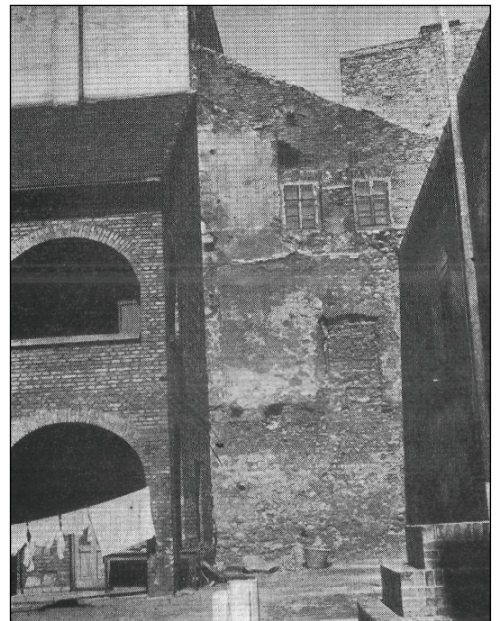
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Table 16.: Various urban private towers; 1.: Vienna, Griechengasse 14. ; 2.: Krems, Herzoghof ;
3.: Reconstruction of the Ulica Bracka 3/5. tower in Kraków by Piotr Opalinski;
4.: The tower of the Old Town Hall in Bratislava ; 5.: Buda, Űri utca 27.



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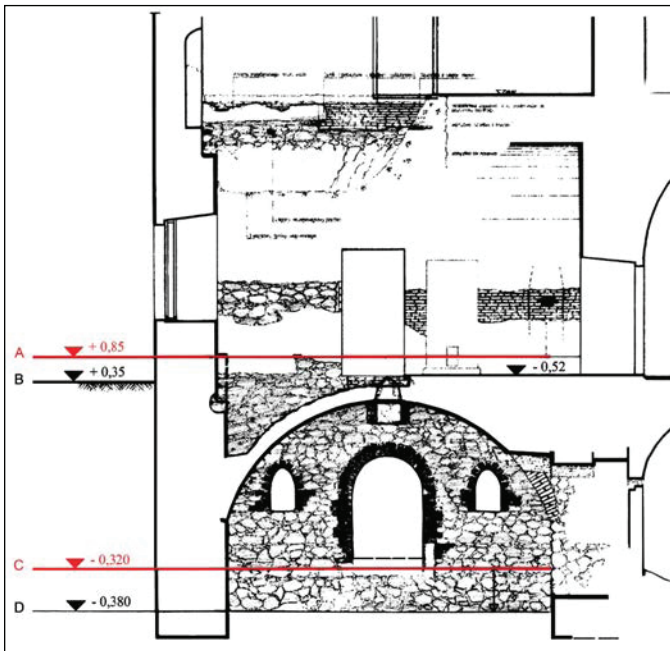
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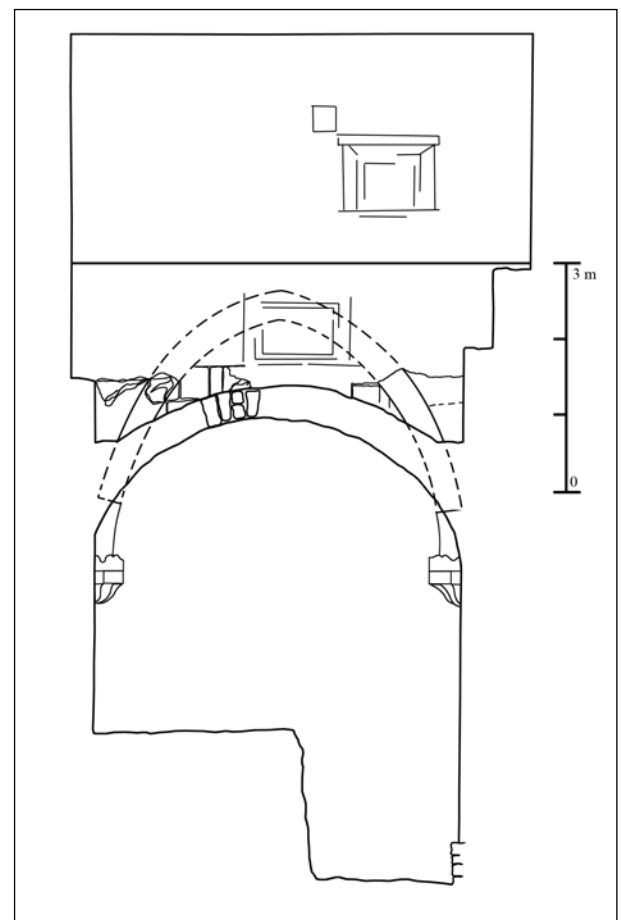
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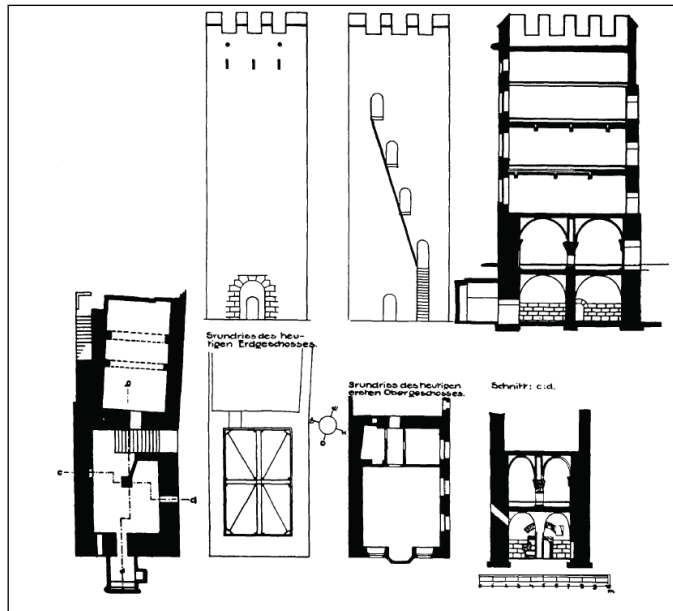


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Table 17.: Ground floor ceilings and entrances in different urban private towers; 1-2.: Cross vault in Bruck an der Leitha, Hauptplatz 4.; 3.: Cross vault in Sopron Kolostor utca 13.; 4.: Cross vault in Prague Old Town Square 478.; 5.: Cross-section and ground floor entrance at Cracow Ulica Bracka 3/5.; 6.: Cross section with the cross vault in Sopron, Kolostor utca 13.



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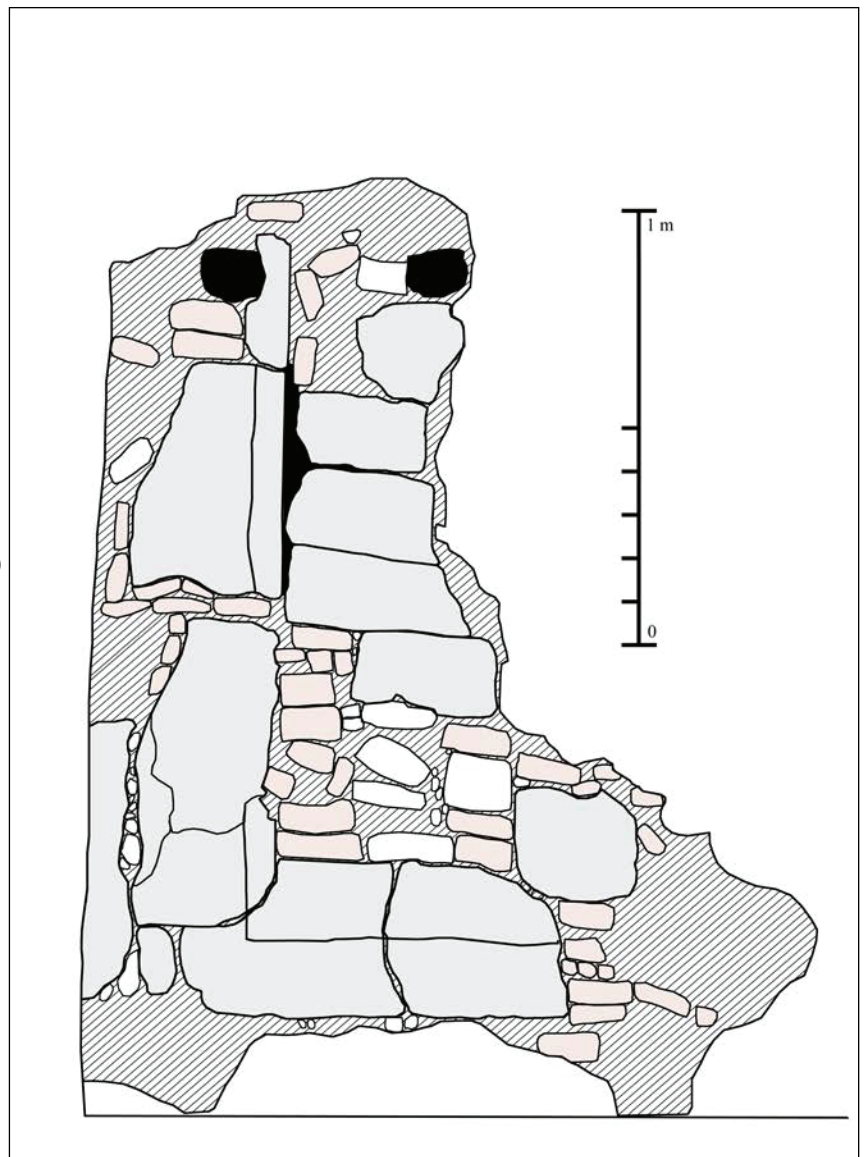
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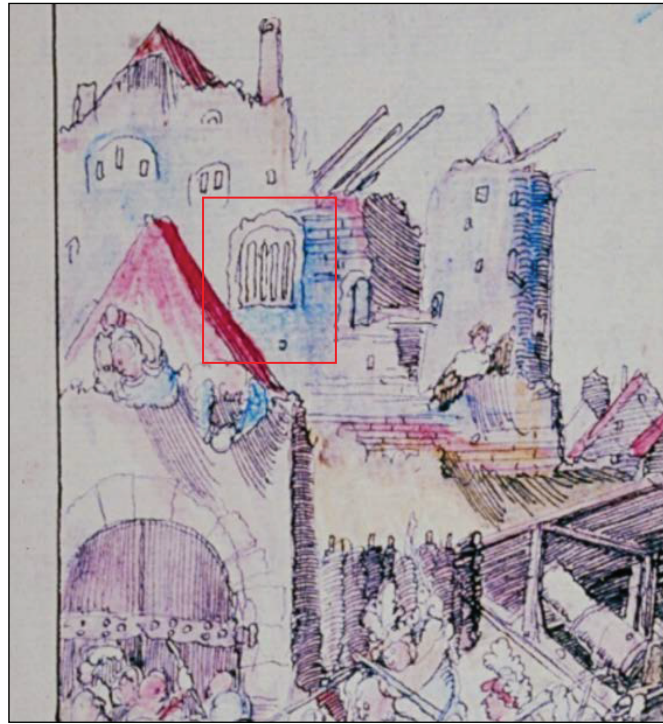


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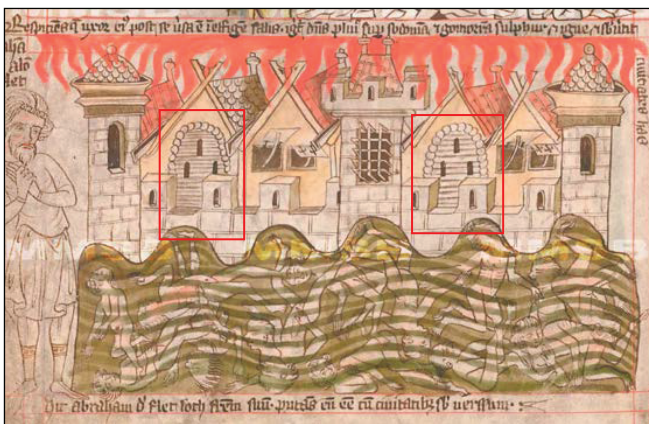


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Table 18.: Architectural elements from the upper floors; 1.: Cross-section of the tower at Hauptplatz 1. in Nürnberg ; 2.: Window niche with benches at Sopron, Új utca 9./Szent György utca 14.; 3.: First floor entrance at Sopron, Kolostor utca 13.; 4-5.: Survey of the first floor door and its frame at Sopron, Kolostor utca 11.



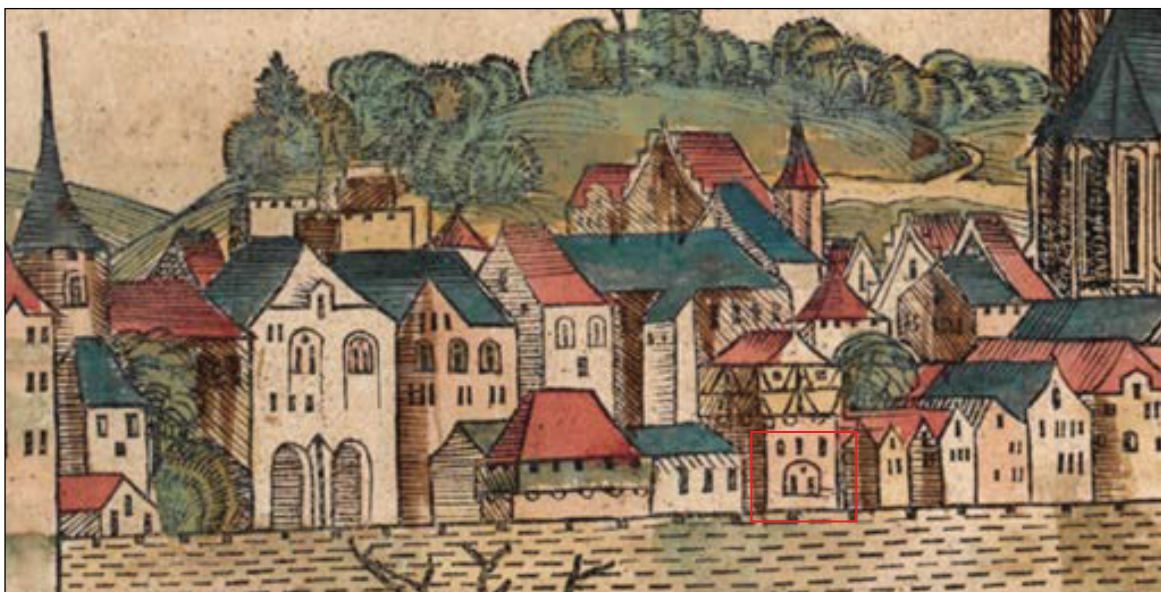
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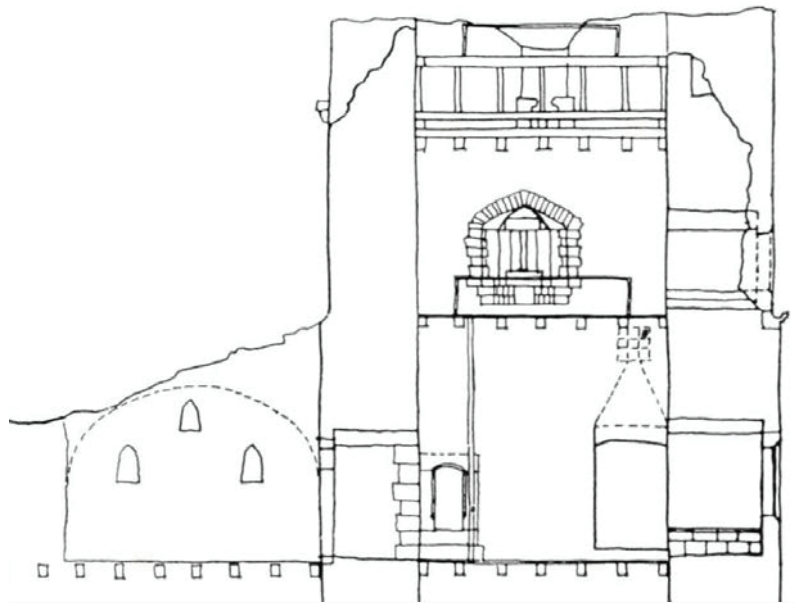


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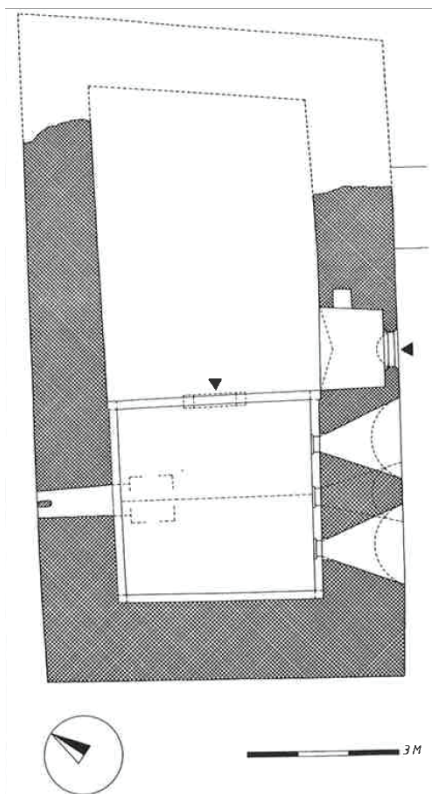
Table 19.: Linked-window groups (framed red) ; 1.: Siege of Vienna, *Historia Friderici et Maximiliani* (1513-1514); 2.: The burn of Sodom, *Velisav Bible* (c.1367); 3.: The abbey of Melk, *Babenberg-Stammbaum – Victory of Albert* (1489-1492); 4.: The view of Vienna, *Hartmann Schedel: Liber Chronicarum* (1493)



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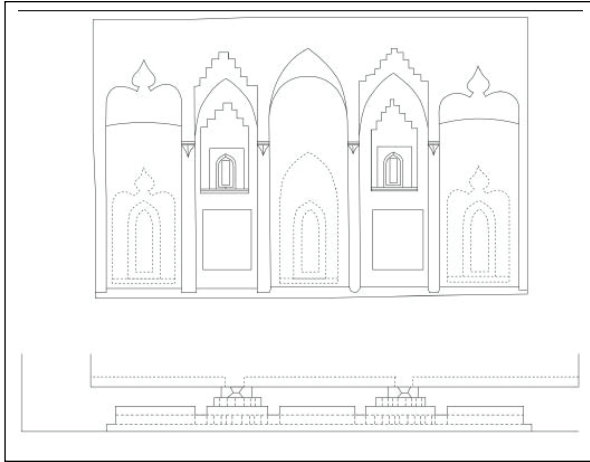


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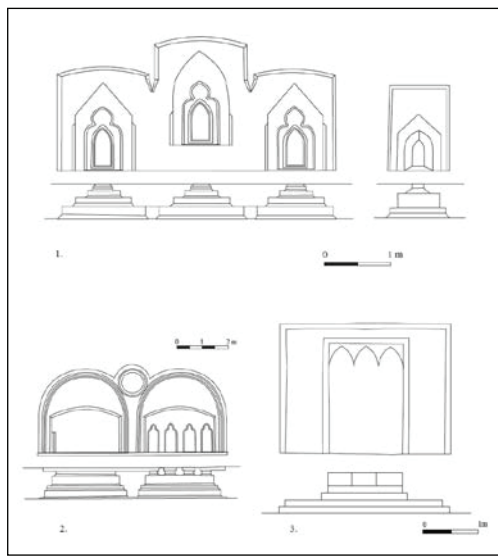
Table 20.: Caminus and Blockwerkkammers; 1.: The caminus of the residential tower of Trenčín (Trencsény); 2.: The Blockwerkkammer of the Castle of Radyne; 3-5.: The Blockwerkkammer and its reconstruction from the Castle of Rutenstein.



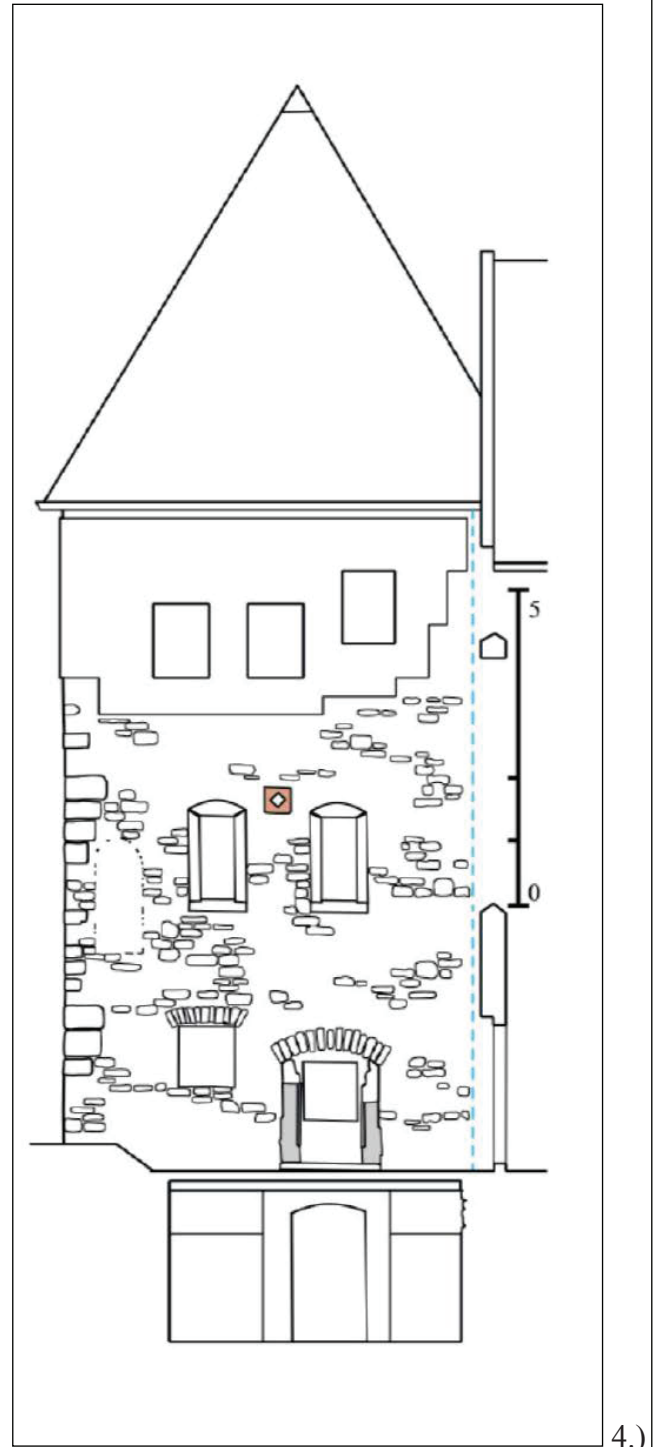
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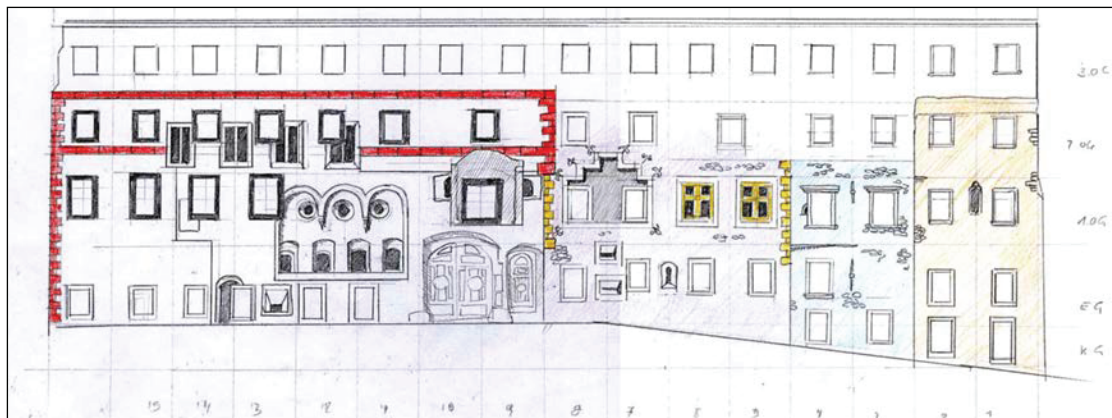
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Table 21.: Various linked-window groups; 1.: Linked-window from the Castle of Thernberg; 2.: The linked-window of the Fő tér 3. house in Sopron ; 3.: Linked-windows from burgher houses from Sopron (Fő tér 2., Szent György utca 3., Templom utca 4.); 4.: The tower at Új utca 4. in Sopron and its possible linked-window; 5.: The facade of Griechengasse in Vienna, with its urban tower in the right hand side.

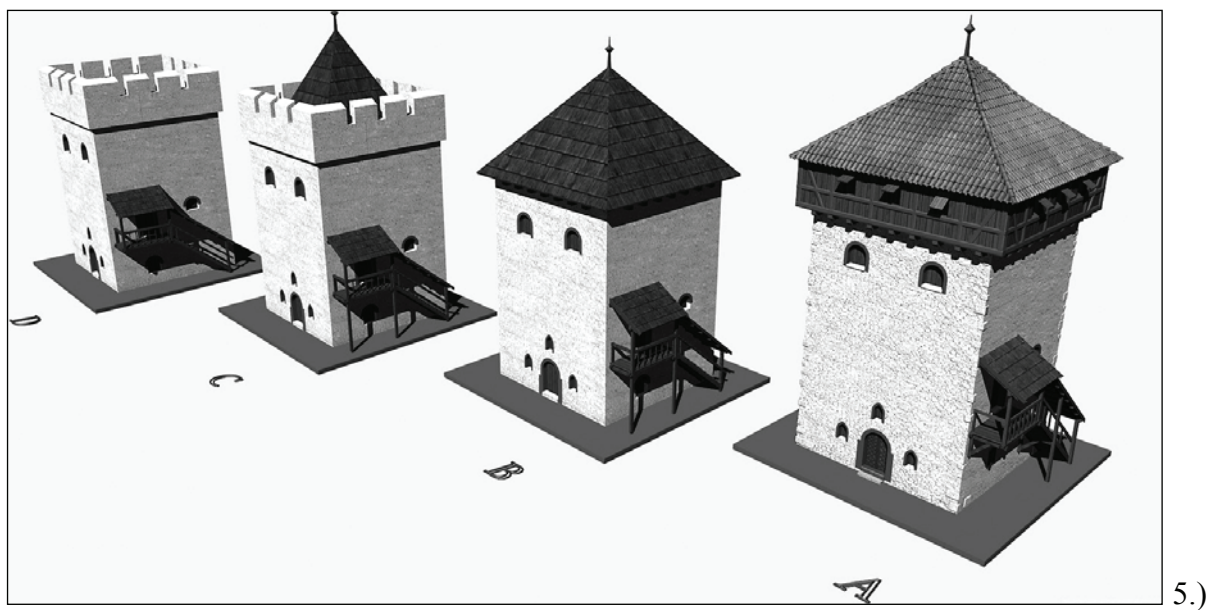
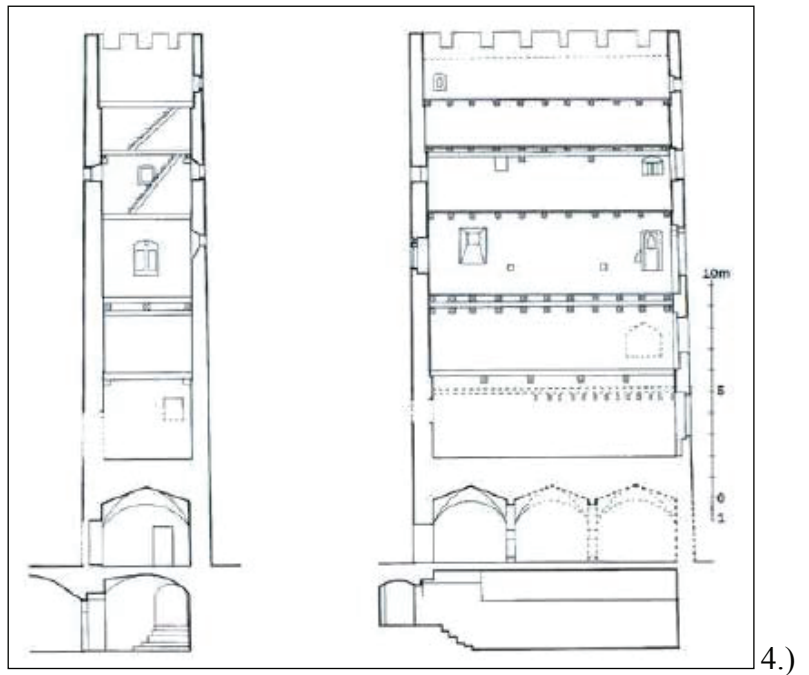
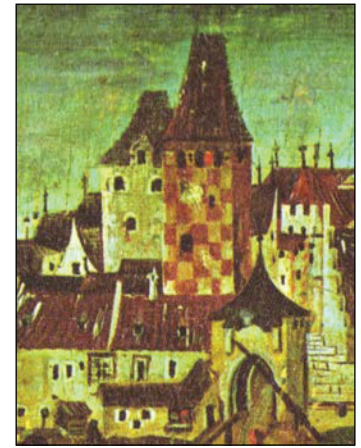
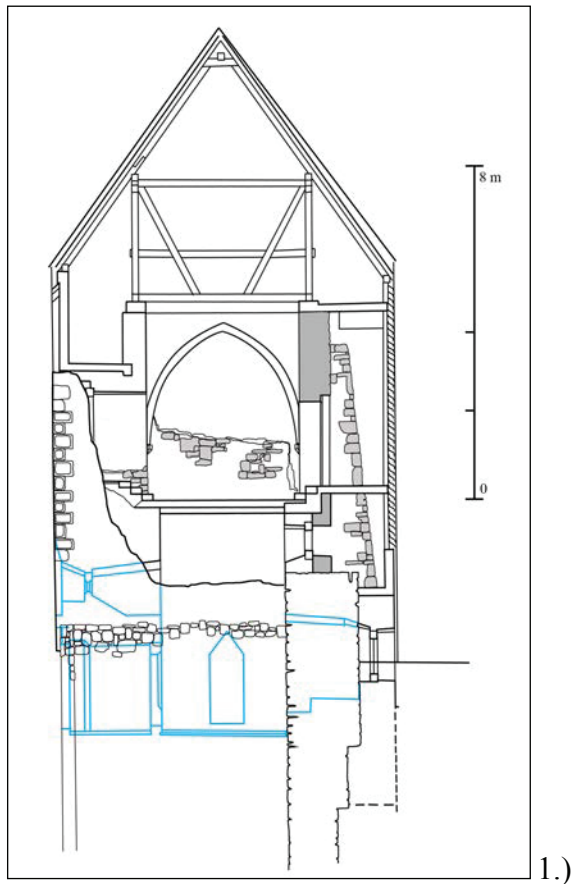


Table 22.: Defensive elements; 1.: Cross section of the tower in Fő tér 7 in Sopron; 2.: Ashlar corner covering at Új utca 4, Sopron; 3.: A tower with an ashlar corner covering behind the Roterturm in Vienna; 4.: The tower at Gesandtenstraße 2 in Regensburg; 5.: Reconstruction variants of Piotr Opaliński.



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Table 23.: Elements of displaying power; 1.: Window niche with benches in the Old Town Hall in Bratislava; 2.: The chapel in the floor of the Stone Bell House in Prague; 3.: Decorated facade of the Herzoghof in Krems; 4.: Mural in the hall of the Gozzoburg in Krems; 5.: The decorated facade with the sculpture niches of the Stone Bell House in Prague.



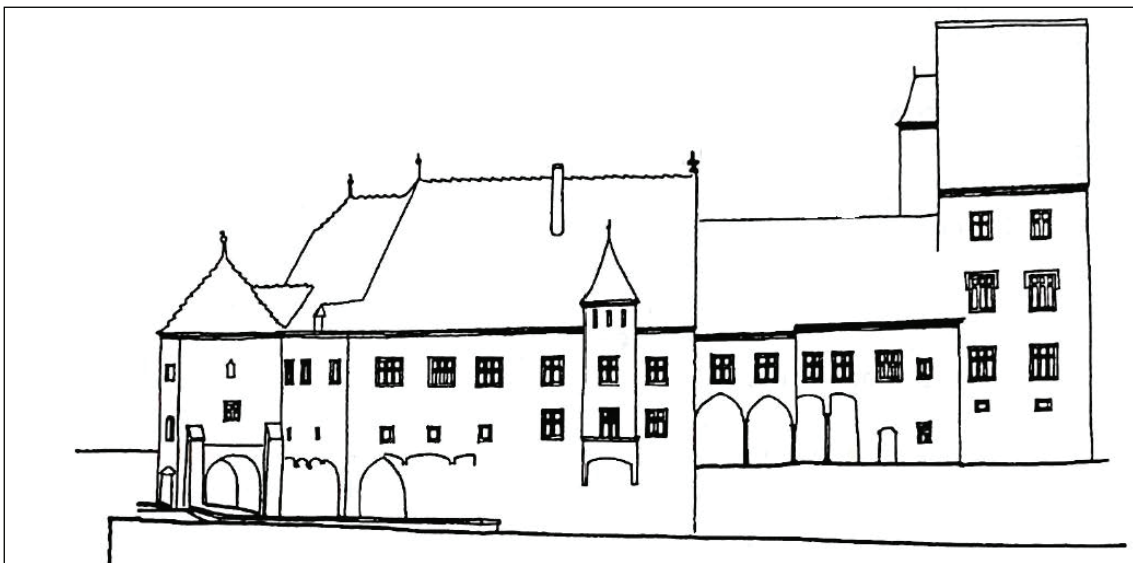
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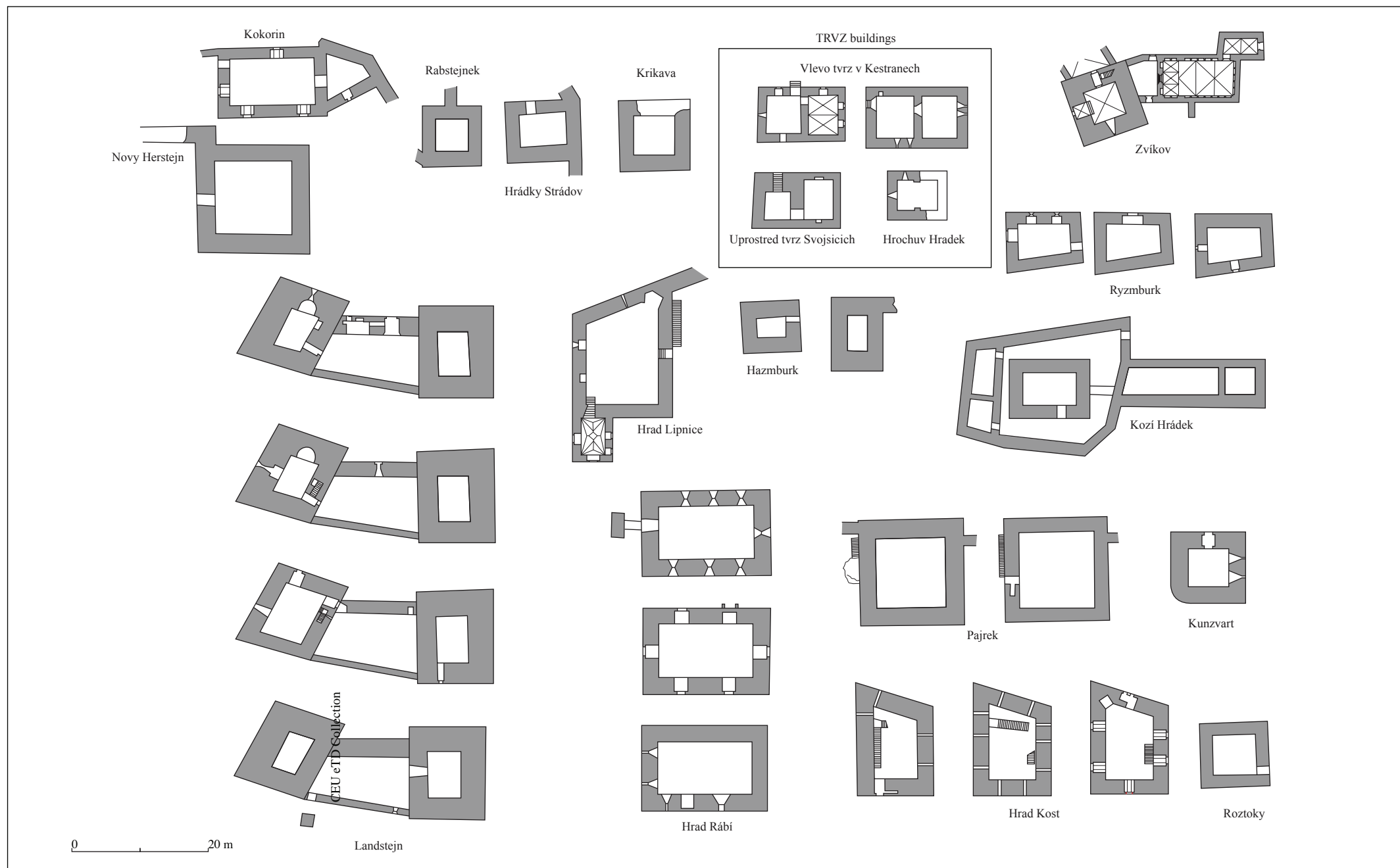


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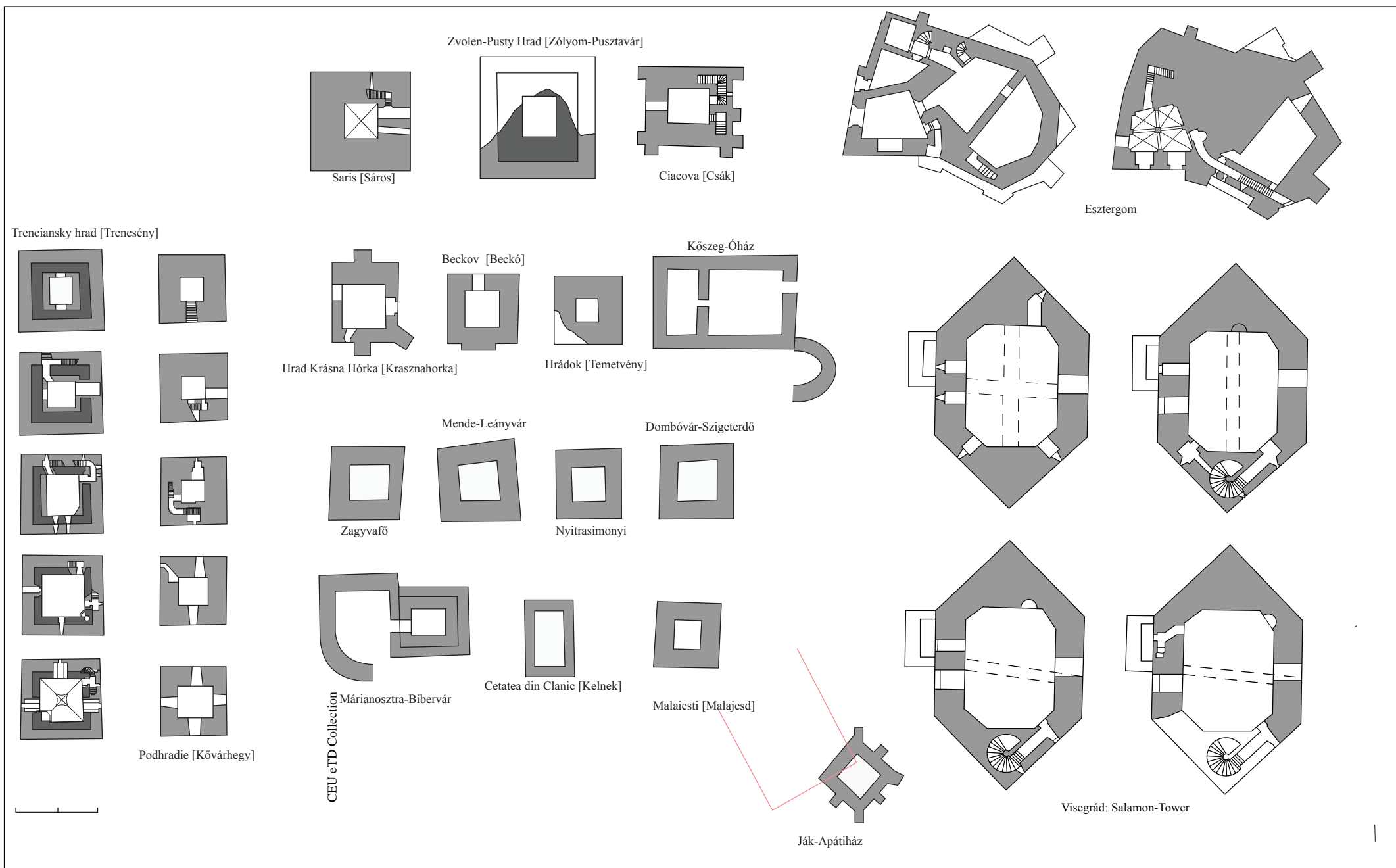


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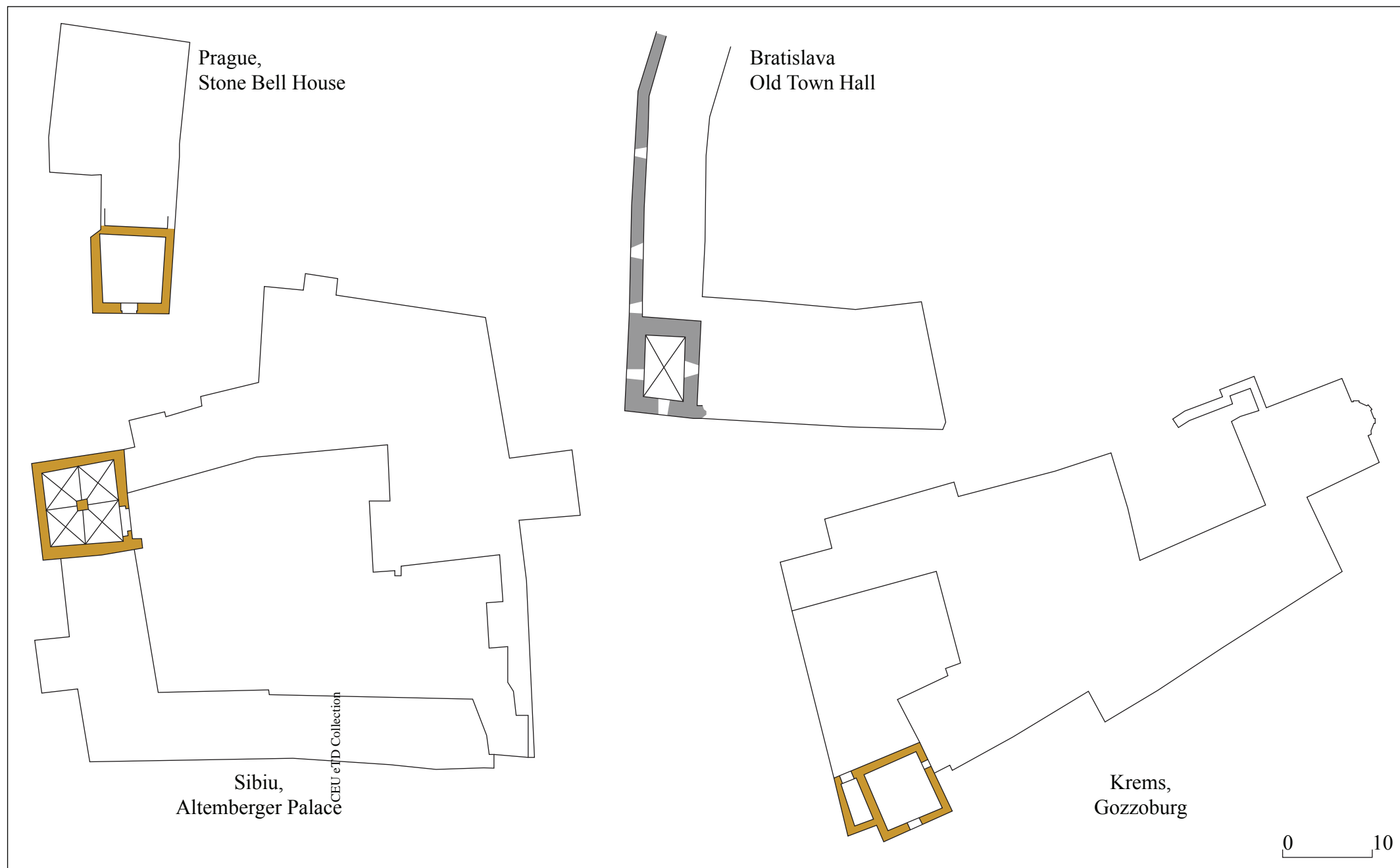
Table 25.: Private towers that were into town halls; 1.: The tower of the town hall in Brno; 2.: The tower of the Altemberger Palace in Sibiu; 3.: The crest of Thomas Altemberger; 4.: The eastern facade of the Altemberger Palace.



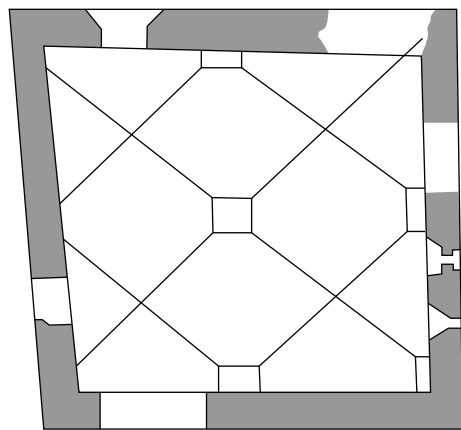
26. table: Various residential towers from castles and tvrz-es from the Kingdom of Bohemia



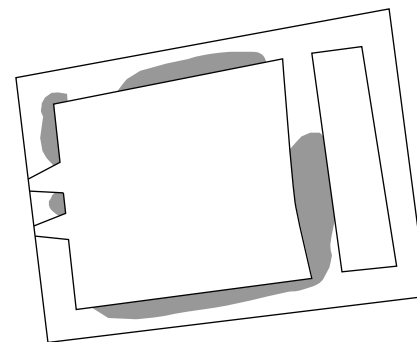
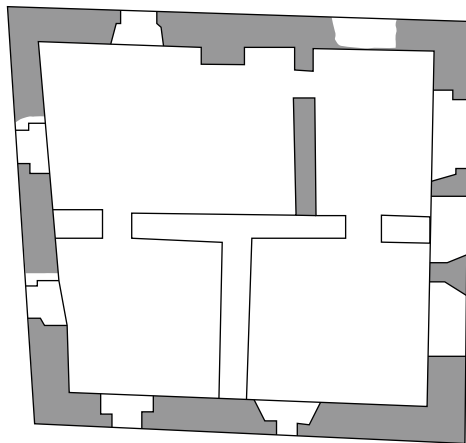
27. table: Various residential towers from castles from the Kingdom of Hungary



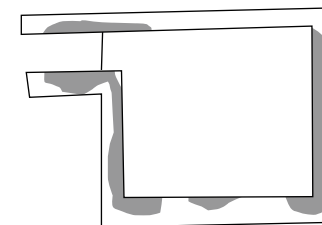
28. table: Private towers from the researched area
(orange color just for highlight)



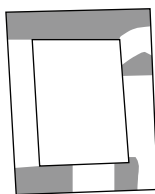
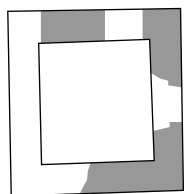
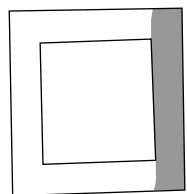
Sopron; Szent György utca 14 / Új utca 9



Prague; Jilská ulická 449

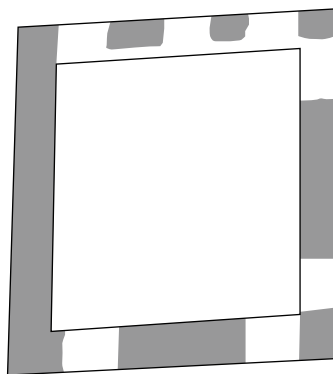


Prague; Jilská ulická 451

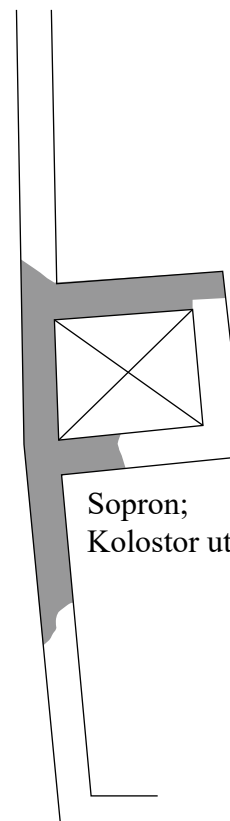
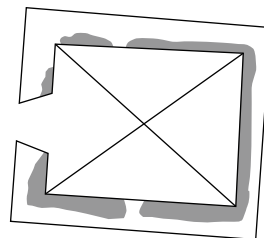


Sopron; Kolostor utca 11

Krems; Herzoghof

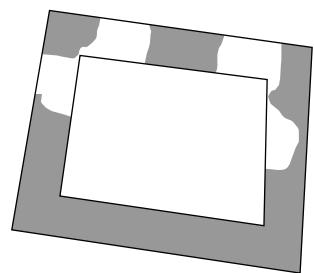
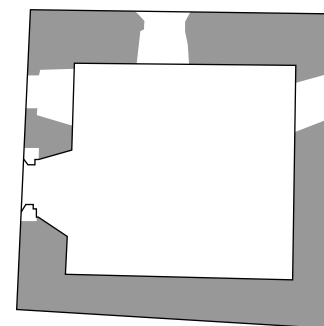
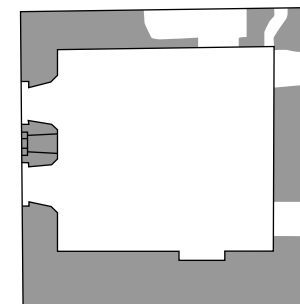


Prague; Staroměstské náměstí 478

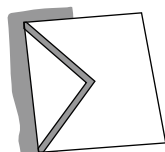


Sopron;
Kolostor utca 13

Sopron; Új utca 4



Buda;
Úri utca 37



Sopron;
Kolostor utca 7

0 10 m

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29. table: Private towers from the researched area