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SPATIAL, URBAN AND ARCHITECTURAL FEATURES OF THE CENTRAL ISTRIA - RESEARCH IN THE AREA OF THE HISTORIC PAZIN COUNTY

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ABSTRACT

The study analyses factors of identity of medieval Istrian settlements in central and north-eastern Istria, or areas of historical Pazin County. Spatial, urban and architectural settlement features are analysed by observing the structure, shape and appearance of the settlement, its streets, squares and urban development. The research aims to use the perceived urban and architectural features and other types of research results to evaluate the current state of architectural heritage and the environment in the investigated area in order to improve their condition.

Keywords: central Istria, Pazin County, urban history, settlement identity

CARATTERISTICHE URBANE, ARCHITETTONICHE E PAESAGGISTICHE DEGLI INSEDIAMENTI DELL'ISTRIA CENTRALE – ANALISI SPAZIALE DEL TERRITORIO DELLA STORICA CONTEA DI PISINO

SINTESI

La ricerca analizza i fattori d'identità dei borghi medievali nell'area centrale e nord-orientale della penisola istriana, cioè nel territorio della storica Contea di Pisino. Le caratteristiche architettoniche, urbane e paesaggistiche di questi insediamenti vengono studiate attraverso un'analisi approfondita del loro sviluppo urbano e della loro struttura e organizzazione spaziale (la forma e il tessuto urbano, le strade, le piazze). A partire dal riconoscimento delle caratteristiche architettoniche e dello spazio urbano, scopo della ricerca è valutare le attuali condizioni del patrimonio architettonico e paesaggistico, con il fine ultimo di poterlo così promuovere e valorizzare

Parole chiave: Istria centrale, Contea di Pisino, storia urbana, fattori d'identità spaziale

INTRODUCTION

Subject of the research

Urban and architectural forms of medieval settlements in Istria were created by mixing characteristics of two different cultural traditions or two different cultural circles (Central European and Venetian). Settlements in central Istria, in historic Pazin County, still retain their medieval character and scope.¹

This paper is part of the research that looks at the development of Istrian settlements in an area of similar geographical and architectural features. In this case study, using the example of settlements of Pazin County, factors of identity of medieval Istrian settlements are analysed.² The study considers the area of central and north-eastern Istria, in the historical context of the area of Pazin County.³

Previous research

Development of settlements in Istria was analysed in a number of master's theses as well as within a research project of the Institute of Art History in Zagreb and conservation studies used I retainedral features,for drafting spatial plans. For example, Maja Štrk-Snoj wrote about the development of Boljun in a series of articles in *Lupoglavski zbornik* (Štrk-Snoj,1982; Štrk-Snoj, 2001, 101-129; Štrk-Snoj, 2003, 147-159). These articles were based on her master's thesis. In the scope of the research project "scope of the research project „Border fortresses and cities in north-eastern Istria (former Rašpor captaincy)", the Institute of Art History dealt with the historical development and problems of revitalization of these settlements (***Buzet, 1983).⁴ The conservation study for the town of Pazin in 1994 by Boris Vučić and Attilije Krizmanić adopted the methodology of pted thethe Institute of Art History (applied in the already mentioned research project) and addedned research project) and adds information about the preservation of buildings and desirable construction interventions. A similar methodology was applied in the master's

thesis of Jadranka Drempetić (Krizmanić, Vučić, 1997; Drempetić, 1997.).

It should be noted that Marijan Bradanović, in addition to analysing settlements and evaluating castles in the regional framework, deals in his articles with the analysis of archival sources and collections which he used in his research. His research is important for documenting the conservation interventions on historic buildings, the methods used and the reasons for undertaking these interventions (Bradanović, 2004; Bradanović, 2006, 183-193; Bradanović, 2007; Bradanović, 2009a, 1-20; Bradanović, 2009b; Bradanović, 2009c; Bradanović, 2010; Bradanović, 2013).

The majority of the researched settlements are mentioned in a number of articles addressing the development of wall paintings and sacral architecture. A valuable source of information for determining the time of construction of buildings and certain historical events are copies of the graffiti made by Academician Branko Fučić.

Sources used in the research

Archival sources are primarily related to cadastral maps from the 19th century in the scale of 1: 2280, the cadastral survey of Francis I of 1820 and the cadastral survey of 1874.⁵

Cartographic sources refer to the detailed topographic map (DTK25) in scale 1: 25000, Croatian Base Map (HOK) at the scale of 1: 5000, digital orthophoto maps (DOF) in the scale of 1: 5000 and a cadastral map at a scale of 1: 2000.⁶

Method of research

Spatial, urban and architectural features of settlements are analyzed by observing the housing and urban structure, shape and appearance of a settlement, its streets, squares and urban development. The analysis included thirty-two medieval settlements in Pazin County. The survey was conducted by field visits and by examining historical and contemporary survey maps.

1 Throughout different historical periods the Istrian peninsula was under the influence of two strong cultural traditions. The western part of Istria and coastal towns were under the influence of the Venetian cultural circle, while central and eastern Istria was more strongly influenced by the Central European cultural circle owing to their feudal owners.

2 This research is part of the scientific project *Heritage Urbanism (HERU) - Urban and Spatial Models for Revival and Enhancement of Cultural Heritage* financially supported by the Croatian Science Foundation (HRZZ-2032), which is being carried out at the Faculty of Architecture University of Zagreb, under the project leadership of Prof. Mladen Obad Šćitaroci, Ph.D., F.C.A.

3 North-eastern Istria, the Pazin area, is the geographical and historical name of the central part of Istria around the river Pazinčica and its abyss, with the centre in Pazin. In the historical context, Pazin area almost completely overlaps with a section of Pazin County borders from the 14th to the 18th century, except for the areas of Motovun and Karojba.

4 Buzet was researched from 1981 to 1983. The aim of the project was to determine its historical development and current condition, and to provide guidelines for the use of architectural heritage of such historic centres.

5 The first extensive survey on the Istrian soil was conducted in 1785 as part of Joseph II Land Survey of the Habsburg Monarchy. The first systematic survey of Istria was carried out as part of the cadastral survey of the Habsburg Monarchy from 1817 to 1822. That survey produced first cadastral maps at a scale of 1: 1440 and 1: 2880 for the whole area and the corresponding cadastral studies.

6 The use of all cadastral contributions was granted by the State Geodetic Administration and the Regional Cadastral Office Pazin (www.dgu.hr).

Numerous data were collected by overlapping cartographic documents and literature available from archival sources (historical data from *urbar* and other historical documents such as correspondence between fiefs and rulers, in which modernization of the castle was often demanded). By overlapping cadastral maps from 1820 with the modern cadastre, reliable recognition of the construction after 1820 was enabled, and thus also a clearer insight into the historical matrix of settlements.

Within the boundaries of the historical core⁷ of each settlement field research of smaller urban units (blocks, streets, squares) was carried out with an inventory of all historic buildings recorded in the cadastre of the early 19th century, available earlier graphics and plans (especially Valvasor graphics) (Lipovac, 1994; Tosco, 2003, 133; Valvasor, 1689).⁸

Buildings important for the development of settlements were also analysed. Determining an approximate or exact year of construction of these buildings was applied in the analysis of the development of settlements while the comparison of stylistic features assisted in determining the time of construction of other buildings in the settlement.

After an analysis of archival and historical documentation, architectural drawings of the current condition⁹ were checked for evidence of historical structures and their subsequent development using the archaeological method of stratigraphic analysis.¹⁰

For each settlement the research analyzed its topographic and traffic position, urban structures and buildings.

The application of the methodology of research, including the archaeological method of stratigraphic analysis, enabled more detailed information on the development of buildings in a settlement, and thus a clearer insight into the urban development of the whole settlement.

The aim of the research

The research aims to use the perceived urban and architectural features, identified types and other research results to evaluate the current condition of architectural heritage and its landscape in the observed scope of the research and possible guidelines for the protec-

tion, conservation and sustainable development of the cultural heritage, by finding a way of directing modern transformation of space in these settlements, respecting architectural, artistic and intangible heritage. Although most of the material refers to the late Middle Ages, the research encompassed the period between the 10th and 18th century.

PAZIN COUNTY – PHYSICAL AND HISTORICAL CHARACTERISTICS

The decisive factors for the intensive colonization of Istria were its natural conditions, geological background and climate. Significant changes in the development of towns and town construction in Europe, including our region, occurred at the time of the final collapse of the Western Roman Empire, during great migrations. After the fall of the Roman Empire, the Lombard state and the advent of peace between the Byzantine Empire and the Frankish state in 810, Istria officially became part of the Frankish state. As part of the Frankish state a special Margraviate of Istria was formed in 1040. Feudal relations penetrated Istria with the arrival of Frankish rule in the 8th century.

With the gradual decay of the Margraviate and the creation of Venetian and Habsburg holdings in Istria from 1251 to 1420, for the centuries to come Istria was divided into two parts, and coastal towns separated from their hinterlands. The border between the Venetian and Habsburg Istria was also the border between two economic systems. Colonate dominated in the Venetian part. Pazin County, a Habsburg holding, was closer to the classic feudal system with serfs as land cultivators, tenants, and a land lord as the main organizer and public authority holder. Serfs' obligations were established in *urbars*.

In 1508 the War of the League of Cambrai against Venice began. Counter-attacking the Austrian Istria, Venice occupied its larger part and destroyed many settlements. From the 16th to the 18th century conflicts over undivided land plots along the Venetian-Austrian border were frequent, causing further destruction as well as further fortification of castles.

Pazin County was the area under the management authority of the captain of Pazin (count) which was

7 The Law on the Protection and Preservation of Cultural Goods (OG 69/99, OG 151/03, OG 157/03, Correction, NN 87/09, NN 88/10). The term "historic core" is a settlement or part of the settlement, which has historically recognizable structures that testify to the human presence in space.

8 Field work on the inventory of buildings was conducted during the research for a doctoral thesis during 2013-2014. It included Barban, Beram, Boljun, Brseč, Draguč, Grdoselo, Gračišće, Gologorica, Gradinje, Kašćerga, Lupoglav, Letaj, Kršan, Lindar, Rakalj, Vranja, Paz, Pazin, Pićan, Momjan, Žminj, Posert, Račice, Sovinjak, Šumber, Tinjan, Završje, Trviž and Vrh.

9 Architectural drawings of the current condition in Pazin County were mainly carried out within the Faculty of Architecture, University of Zagreb, under the leadership of Professor Vladimir Bedenko from 1979 to 2000.

10 The application of the archaeological method of stratigraphic analysis consists of applying stratigraphic analysis on walls of a building and stacking observed stratigraphic units. The goal is to determine changes in the structure of walls and putting them in chronological order. From the first half of the 1980s the possibility of applying this method to the study of surviving architectural parts of the building has been observed. Soon after, the 1990s method was named *Archeologia dell'architettura* and is increasingly applied in the analysis of historical buildings (see: Broglio, 1988, 1996, 1997; Broglio, Gelichi, 1996).



Fig. 1: The position of Pazin County in Istria in the 15th century, author: I. Huic.

registered in his cadastral register - *urbar*. The political concept covers the entire territory of the Austrian Istria (Istrian County), a group of "hereditary countries", small fiefs and possessions.

After the War of Uskoks, Habsburgs' intention was to sell the Pazin holding to settle debts. During the 16th and 17th century it passed from one tenant to another. The County changed owners. Pazin County ceased to exist with the collapse of the Venetian Republic in 1797, when the whole region came under Austrian rule.¹¹

The church division of the County did not overlap with the political one. The territory of Pazin County was divided between four dioceses: Pula, Trieste, Pićan and Poreč.

The geographical position of the interior of Istria and the Pazin County did not have high traffic importance in the Middle Ages. All larger Istrian towns can be found at the coast, along *Via Flavia* that connected Aquileia via Trieste and Poreč to Pula, and continue to *Nesactium*, Plomin, Labin and Kastav. The main roads passed north of the peninsula, and because of the mountains Učka and Čičarija on the northern and eastern side, traffic was mainly concentrated on the west side (Trieste, Kranjska) and the seaways¹² (Fig. 1).

Settlements and castles in Pazin County were located along traffic routes that branched off from main roads to local roads in the interior of Istria, at strategic points for their defence.¹³

In most central Istrian settlements the historical core is protected as a cultural monument, with individually protected buildings within settlements. The investigated settlements are faced with an increasing depopulation. The main challenge regarding the reconstruction of historical centres that local authorities are now facing is a balance between the development of traditional forms and functions and the preservation of the unique identity of their settlements. Spatial plans do not address the development of settlements respecting their unique characteristics. The only settlements that were developed on the model of entrepreneurial development are the ones in the so-called central development area which comprises the urban agglomeration of Pazin and a larger part of the county of Rovinj, Kanfanar and Sv. Petar u Šumi (**Istarska županija, 2002; ***Master, 2003; Huić, Šćitaroci, 2015b).

FACTORS OF IDENTITY OF PAZIN COUNTY

Case study selection

Settlements were selected after a review of archival and historical sources, the oldest existing Pazin County *urbar* from 1498 and Pietro Coppo's map from 1525.¹⁴ The analysis included thirty-two medieval settlements in Pazin County.

Three main criteria used in the selection of settlements were:

- physical existence of a castle or parts of fortifications in the settlement,
- preserved medieval fabric and

11 In Croatian historiography, the name Pazin Shire was used first (a direct translation of the Italian and German term), and the term Pazin County was accepted later on, as recorded in *Istarski razvod*.

Istarski razvod is a Croatian Glagolitic monument which describes and regulates the boundaries between individual Istrian municipalities, their feudal owners and the Venetian Republic.

12 Security of maritime communications in northern Adriatic, between northern Italy, southern Adriatic, Dalmatia, Greece and further east was important in antiquity.

13 Posert and his counterparts Gradinje, Paz and Letaj guarded the passage toward Pazin. Vranja, Kožljak, Čepić, Kršan and Boljun are located along the eastern extension of the *Via Flavia* and monitored Rasa valley. Gračiče, Tinjan, Lindar and Pićan protected the approach to Pazin from the west.

14 The map of Istria, by cartographer Pietro Coppo from 1525, prepared for printing in the *Theatrum Orbis Terrarum* Abraham Ortelius, Antwerp, 1573.

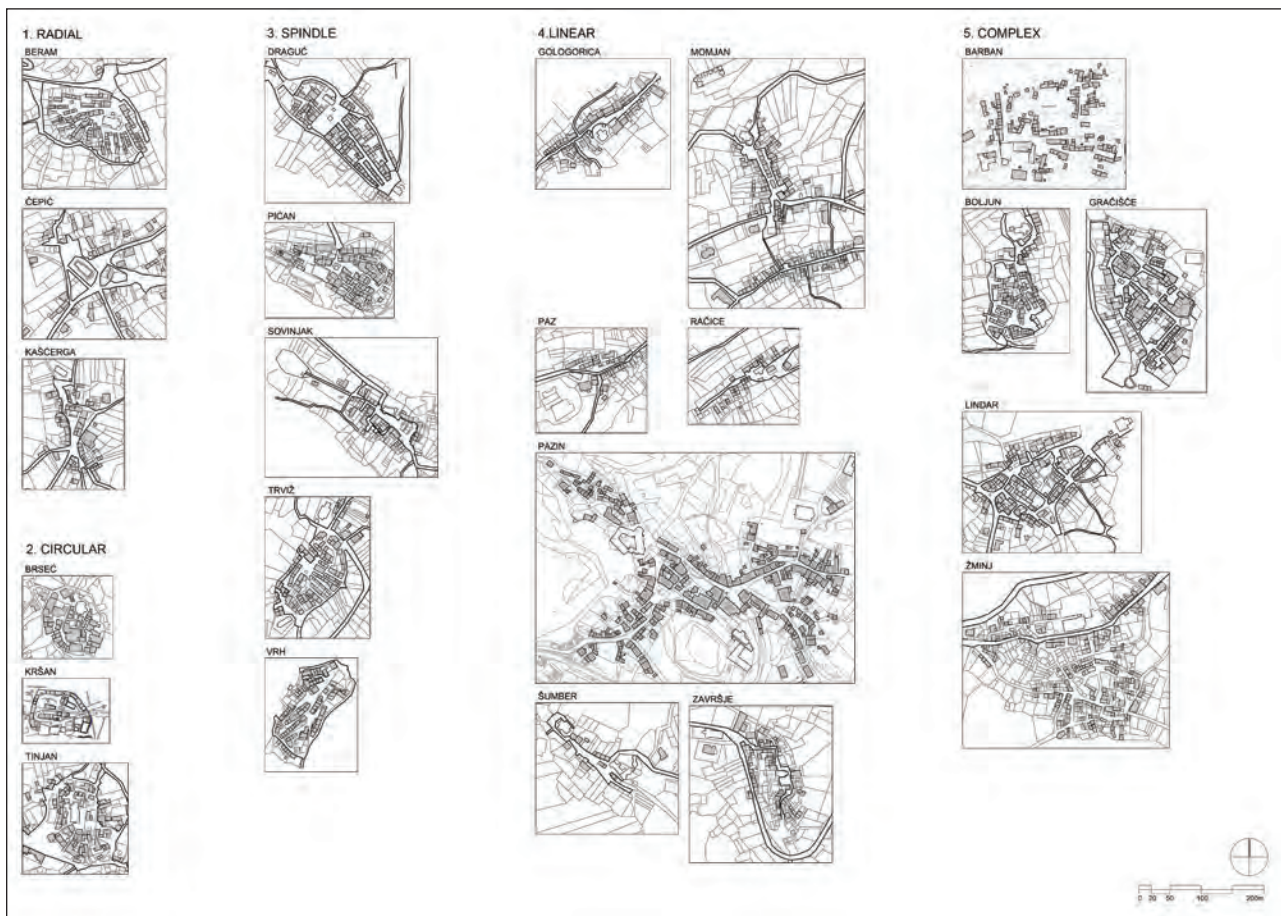


Fig. 2: The layout of settlements, author: I. Huic.

- historical importance of the settlement in the region (see note 9).

In the context of research of urban features, the object of the study are other settlements in the wider region that have a similar historical situation and can provide insight into the historical context of changes in Istrian settlements and castles, but also contribute to their evaluation.¹⁵

Defining factors of identity

The emergence of unique characteristics of medieval settlements is conditioned by the scale of the town and the medieval way of life that involved intimate relations in everyday life more so than it does today. A medieval town was supposed to meet three primary purposes, which also constitute its initial attributes: traffic and trade (determined by the topographic position and the structure of a settlement), culture (dominant spaces and buildings) and political (defensive framework, dominant spaces and buildings).

Factors of identity to be considered are:

- topographic position of settlements
- the layout and the silhouette of settlements
- the core of medieval settlements
- tissue of settlements
- features of urban elements of the settlement (dominant spaces and buildings) in the historic core of the settlement – town square, public buildings
- defensive framework of the settlement.

Identifying unique features of a settlement will allow for the planning of new interventions in the urban part of the settlement, preserving the fundamental identity of the historical centre of each settlement, but also the cultural landscape of central Istria in general.

Topographic position of settlements

The location of settlements and castles in the landscape of the Istrian peninsula is directly linked to their strategic and traffic importance on the border between

¹⁵ Researched settlements are: Gorica, Štanjel, Prem, Socerb, Conegliano, Vittorio Veneto (Seravalle and Ceneda), Portobuffole and Portogruaro.



Fig. 3: The silhouette of settlements (Barban, Draguč, Račice, Završje, Gračišće, Sovinjak), photo: I. Huic.

Pazin County and the Venetian part of Istria. The study of 32 settlements has observed the following types of location:

1. location on a hill or the knoll of a hill – 7 settlements (21.8%) (Beram, Brseč, Grdoselo, Momjan, Završje, Pićan, Boljun)
2. location on a ridge or saddle – 14 settlements (43.75%) (Draguč, Gologorica, Gradinje, Kašćerga, Letaj, Paz, Pazin, Posert, Račice, Sovinjak, Šumber, Tinjan, Trviž, Vrh)
3. location a plateau, in a valley or at the foot of a slope – 9 settlements (28.1%) (Barban, Gračišće, Kršan, Lindar, Rakalj, Vranja, Žminj, Čepić, Belaj)
4. location on a slope – 2 settlements (6.25%) (Lupoglav, Kožljak)

The location of castles and settlements on a hill or a knoll of a hill rising above the surrounding terrain was used for seven settlements. Two castles were built on the slopes of Čičarija: Kožljak and Lupoglav. The castle or the country house Belaj was built at the foot of the slopes of the Posert castle. In the Čepić field in the valley, there was only one settlement, Čepić.

The layout and the silhouette of settlements (Fig. 2)

The layout of settlements, explored during field visits and by examining historical and contemporary survey maps, largely depends on the topographic location, historical circumstances and its urban development. The

analysis of the layout considered the organization of space in the settlement through certain periods and its characteristics.

The analysis of settlements in Pazin County showed that the layout depends primarily on topographic accommodation. Settlements can be divided into:

1. radial layout – 3 settlements (13.04%)
2. circular layout – 3 settlements (13.04%)
3. spindle layout – 5 settlements (21.74%)
4. linear layout – 7 settlements (30.44%)
5. complex layout – 5 settlements (2.74%)

Settlements of circular and radial layout are usually located on the knoll of a hill. In addition, these settlements were, most of the time, hill forts and owe their shape to the shape of the prehistoric settlement. Typical examples of circular and radial settlements are Brseč and Beram.¹⁶ The largest number of analysed settlements (13) has a spindle or linear shape. The layout of the settlement follows the topographic shape of the crest of a ridge, a hill or a pass, stringing buildings parallel to the terrain. Linear settlements follow ridges in one line, while spindle settlements are larger and have several parallel streets that follow the contours of the terrain.¹⁷

Linear settlements like Pazin, Momjan or Gologorica, regardless of their size, have only one street/communication with a string of houses that follows the ridge and forms a settlement.

Settlements with a complex layout are located on a plateau or in a valley. These are all larger settlements with more than one interconnected but smaller cores.

¹⁶ Brseč, a village of circular shape, has a concentric street that climbs to the highest point of the settlement. Village side walls are also walls of houses built into the walls. Beram has a radial grid of streets laid out perpendicular to contour lines of the hill whose centre is the highest point of the village, with a church and a guard tower. In Žminj, the medieval castle was built on prehistoric ruins. The settlement developed around the castle, following the street network perpendicular to contour lines, radially distributed with the castle in the centre and along the communication that passes transversely between the castle and part of the settlement with a radial street network.

¹⁷ Pićan is situated on top of a hill and spindle-shaped. The shape of the village forms a series of streets parallel to the terrain. In Trviž and Sovinjak, also spindle-shaped settlements, row houses which form the settlement do not run parallel to the terrain, but are placed perpendicular to the main communication that runs along the ridge on which the village is located.

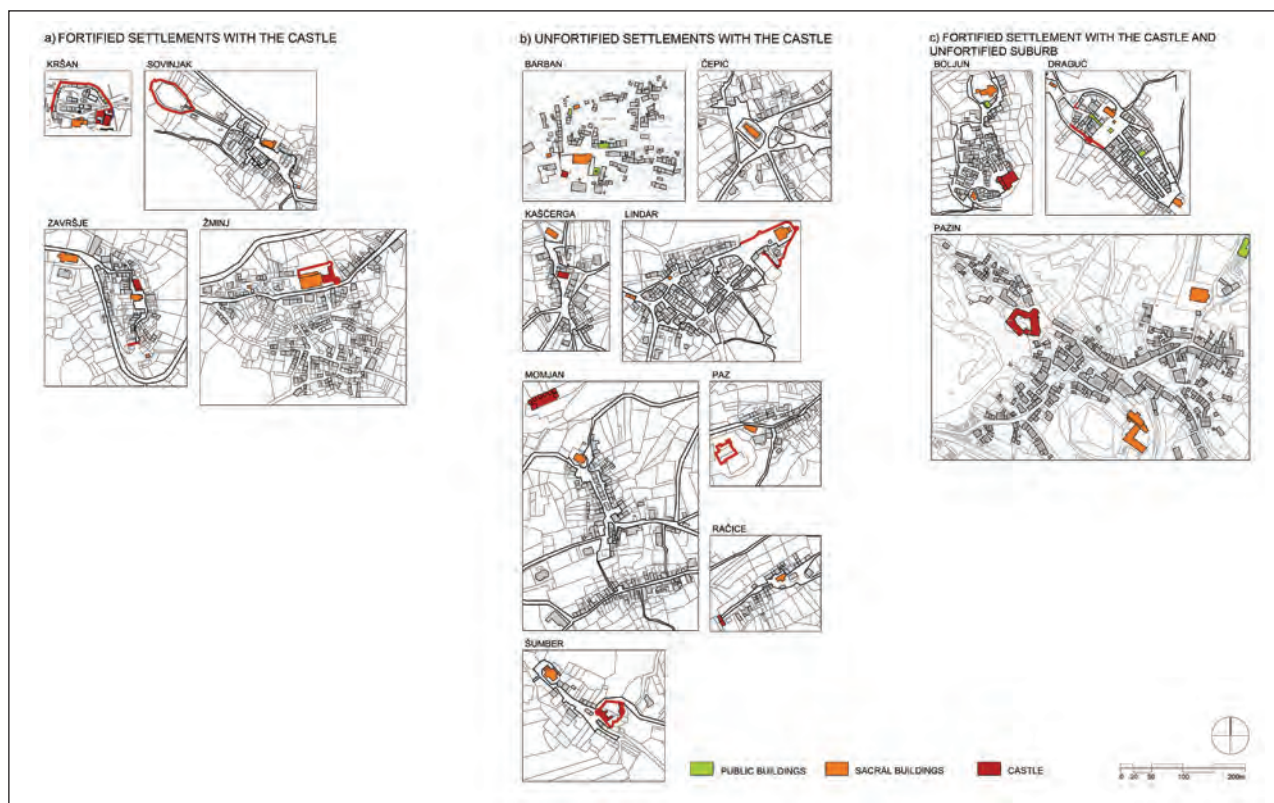


Fig. 4: The core of medieval settlements – settlements with a castle, author: I. Huic.

Regardless of the settlement shape, in Pazin County, as in the rest of Istria, settlement silhouettes are dominated by vertical bell towers located in the centre of the village (Fig. 3).

In the 19th century settlement silhouettes changed greatly due to the demolition of a part of fortifications, so the analysis of the silhouette is possible from the Valvasor's prints and sketches. Considering the historical silhouette of the settlement, there are:

1. settlements with a castle or/and a guard tower
2. settlements without a castle.

In settlements with a castle and/or a guard tower, the competitor to the vertical of the bell tower is the vertical of the guard tower, and the centre of the settlement has a castle that dominates the settlement.

In settlements without castles, the silhouette is still dominated by a bell tower as a vertical that rises from the compact mass of defensive walls and towers. In the Middle Ages, the today's silhouette with small residential and commercial buildings around a central vertical was hidden by the settlement's defensive walls.¹⁸

The core of medieval settlements

After the analyses of topographic positions and forms of settlements, analysis focused on the position of the core in the settlement and what was the core around which the settlement was organized.

In the researched settlements of Pazin County which have a castle, the castle is the core of the settlement. The settlement developed according to the position of the castle in the settlement. The area of social life, the town square, is oriented toward the castle and has formed in relation to the castle.

The analysis of settlements of Pazin County shows that following types of settlements with respect to the position of the castle:

1. settlements with a castle – 13 settlements (40.46%) (Kršan, Sovinjak, Završje, Žminj, Draguč, Pazin, Barban, Čepić, Lindar, Momjan, Paz, Račice, Šumber)

- fortified settlements – 4 settlements
- unfortified settlements – 7 settlements

¹⁸ In Pazin, the main defence tower of the castle was higher than the Romanesque bell tower of the church of St. Nicholas and dominates with the large mass of the castle in the silhouette of the town. In Barban, the main tower was also higher than the Romanesque bell tower of the parish church, dominating in the silhouette of the village.

In Valvasor's graphics of Beram and Trviž, the silhouette of the village is dominated by the defensive tower in its centre. The silhouette of Kršana is still dominated by the defensive tower as the tallest structure in the village until the construction of the bell tower at the end of the 19th century.

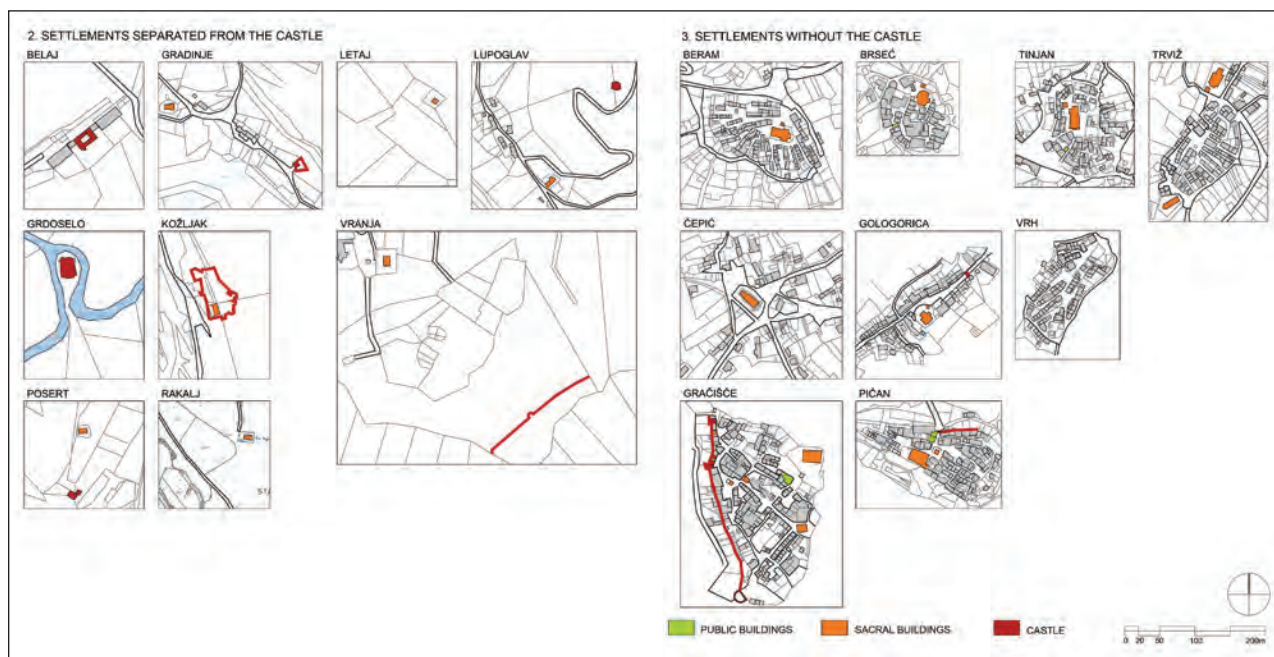


Fig. 5: The core of medieval settlements – settlements without a castle, author: I. Huic.

- fortified settlements with a castle and an unfortified suburb – 2 settlements
- 2. settlements separated from a castle – 9 settlements (28.12%) (Belaj, Gradinje, Grdoselo, Kožljak, Letaj, Lupoglav, Posert, Rakalj, Vranja)
- 3. settlements without a castle – 8 settlements (25%) (Beram, Brseč, Gologorica, Gračišće, Pićan, Tinjan, Trviž, Vrh)

A castle and/or a defensive building within a settlement have been preserved in ten settlements (Barban, Boljun, Draguč, Kršan, Lindar, Pazin, Račice, Šumber, Završje and Žminj). In three settlements (Beram, Čepić and Trviž) the defensive structure was torn down in the meantime. For six settlements there is no data about a castle in the settlement (Brseč, Pazin, Gologorica, Pićan, Tinjan and Vrh). In another three settlements the castle is separated from the settlement at an easily defensible position (Paz, Momjan and Sovinjak). The remaining ten castles (Gradinje, Grdoselo, Kašćerga, Kožljak, Letaj, Lupoglav, Posert, Rakalj and Vranja) were built in an inaccessible location so that settlements could not develop around them. After the demolition of the castle in Kašćerga, Lupoglav, Posert (new Belaj Castle) and Rakalj, new residences were built on a more accessible location, and the settlement developed subsequently.

1. Settlements with castles (Fig. 4)

Most of the settlements in Pazin County have a castle as an integral part of the settlement. In the Middle Ages, in the region of Istria that was not part of the Venetian

Republic, with the development of the feudal system, owners of fiefs built castles as administrative centres of their possessions. Around these castles small settlements - suburbs developed. The settlements have no administrative status.

Settlements which developed around castles can be divided into:

- a) fortified settlements with a castle
A small settlement grew around the castle and was also fortified. The settlement generally served as the first line of defence of the castle.
- b) unfortified settlements with a castle
In addition to fortified settlements with a castle as their core, a growing number of settlements were built along the access road and around the castle, which were not fortified. Such settlements are small in volume and simpler in structure.
- c) fortified settlements with a castle and an unfortified suburb

Several settlements in Pazin County were formed by merging separate cores. The first core of the settlement developed around the castle and this settlement is always fortified. Due to favourable economic conditions, a new unfortified residential area developed on the approach to the fortified settlement with a castle.

2. Settlements separated from the castle (Fig. 5)

Several settlements in Pazin County had castles which were the core of nearby settlements due to their

Table 1: Spatial and architectural development of the settlements.

NO.	SETTLEMENT	COMUN/ OPĆINA	13. CENTURY, THE BEGINNING OF THE 14. CENTURY						END OF THE 15. CENTURY, THE BEGINNING OF THE 16. CENTURY						THE BEGINNING OF THE 17. CENTURY					
			CASTEL/ WALL	LOGGIA	KAŠĆA	MUNICIPAL BUILDING	PARISH	CHURCH CONFATER.	CASTEL/ WALL	LOGGIA	KAŠĆA	MUNICIPAL BUILDING	PARISH	CHURCH CONFATER.	CASTEL/ WALL	LOGGIA	KAŠĆA	MUNICIPAL BUILDING	PARISH	CHURCH CONFATER.
1	BARBAN	X	X				X		X	X				X	X					
2	BELAJ														X					
3	BERAM		X										X							
4	BOLJUN	X	X				X		X	X	X				X					
5	BRSEČ	X																		
6	ČEPIĆ		X				X													
7	DRAGUĆ		X					X	X					X	X		X			X
8	GOLOGORICA								X					X						
9	GRADIŠĆE	X	X				X	X	X	X		X		X					X	
10	GRADINJE						X		X				X							
11	GRDOSELO		X				X													
12	KAŠĆERGA		X				X								X				X	
13	KOŽIJAK		X						X				X		X					
14	KRŠAN		X				X		X	X					X				X	
15	LETAJ		X																	
16	LINDAR		X						X					X	X	X				
17	LUPOGLAV		X						X						X				X	
18	MOMIAN		X						X						X				X	
19	PAZ		X						X				X	X	X					
20	PAZIN		X				X	X	X				X	X	X				X	
21	PIČAN	X	X				X								X					
22	POSERT								X											
23	RAČICE		X										X						X	
24	RAKALJ								X				X	X					X	
25	SOVINJAK		X						X				X	X	X		X	X		
26	ŠUMBER								X						X				X	
27	TINJAN	X							X	X			X		X					
28	TRVIŽ							X												
29	VRANJA		X						X						X					
30	VRH						X		X				X		X					
31	ZAVRŠJE		X						X						X				X	
32	ŽMINJ	X	X						X				X	X	X				X	X
UKUPNO			7	22	0	0	0	5	22	5	2	2	16	10	20	1	2	2	12	2

size, the strategic importance (defence of the pass, roads and control of the territory), the size of fife and the importance of the owner, although they never lied within the settlement. The position of the castle provided good defence, but was unfavourable for the development of settlements around the castle.

At the foot of the hill on which the castle was built emerged smaller hamlets with a few houses. Castles separated from settlements due to topographic features but located in the immediate vicinity of the settlement can be considered the core of the settlement.

After the Uskok War in the early 17th century, severely damaged castles were abandoned and new houses or residences built on a more accessible terrain.

3. Settlements without a castle (Fig. 5)

The last type of settlements that occurred in Pazin County is a settlement without a castle as the core. In the centre of such settlements lies a local square. This type of settlements has an administrative status of communes. All such settlements were fortified. In settlements that have a hill fort as the foundation, the local square is at the highest point in the settlement.

The tissue of settlements

Within the limits of historic cores of the selected settlements field research of the preserved historic settlement tissue – micro urban units (blocks, streets, squares) was conducted. It included an inventory of all historic buildings recorded in the cadastre of the early 19th century, available graphics and/or previous plans.¹⁹

No housing blocks were found in analyzed settlements. The earliest urban structure of settlements in Pazin County were row houses. Row houses consist of small, single-housing units lining the longer side of a street, with a maximum carrying range of up to six meters. Any subsequent house rationally exploits the wall of the adjacent house. These houses have a ground floor, the first floor and an attic/loft. A row of houses is separated from the parallel series of outbuildings by a narrow street. A row of houses establishes a street in the settlement, while outbuildings are in the second row.²⁰

Rows and plots that form them make up a relatively rigid part of the urban fabric. Readjustments of plots, es-

tablishment of new streets or extension and rectification of older ones are rare. Former street directions (control lines), as well as parts of the town, which they have essentially formed, especially in the centre of the settlement, are the result of a continuity in building - a new house was built on plot of the earlier medieval house.

The oldest examples, built in the 13th century, are streets with row houses placed perpendicular to terrain contour lines. The best preserved examples of such structures are visible in Draguč, a fortified settlement by a castle, and in Boljun, in rows perpendicular to the castle (Corsini, 1997, 35-38).²¹

Row houses built between the 14th and the 17th centuries were laid parallel to the terrain, but retained the separation of houses and outbuildings. In the unfortified suburb of Draguč, in the 15th century, the main street follows the crest of the ridge with the row of houses and a parallel row of outbuildings. In Boljun, in the 15th century, the main street was formed, connecting the castle with the church of St. George. The street comprises of a row of residential buildings with many farm buildings in the second row.

In smaller settlements, formed by stringing buildings along the road leading to the castle, there is a similar organization, though not so clearly separated into rows of outbuildings and houses.

Beginning with the 18th century, enclosed rural complexes (enclosed blocks of buildings with inner courtyard) were being built on the edge of settlements. Residential buildings in the block are set on the edge of the block, oriented toward the street in the settlement, while outbuildings/farm buildings close off the block towards the edge of the settlement.²²

Streets in settlements

Streets in settlements in Pazin County can be divided into two types:

1. housing streets (primary streets)
2. outbuildings streets (secondary streets).

Division of streets depends on the function of buildings that make up the street. Streets formed by houses are primary streets, where the settlement maintains its daily communication. Secondary streets are comprised of outbuildings (farm buildings) and used for everyday economic activity; they are in the second row and can

19 It was not possible to define separate parts of the settlement using the parcel boundary because the structure of the settlement and the development of the settlement were not based on the housing blocks organization, but on the solid position of the castle whose physical position was not subjected to change.

20 Residential house as part of the settlement tissue is much more flexible than the land ownership on which it was built, and any change in the plot was carried out with the appropriate legal regulations and possessory documents. The structure of plots and ownership relations between owners and users has not changed in Istria, regardless of the political situation and the war.

21 The described method of formation of row houses in Pazin County and the region can simultaneously be followed in Italy in much larger cities from the 13th to the 19th century. In these cities the Roman *domus* was divided into smaller, single-units, the so-called *casa in linea*.

22 In Boljun, in the 18th century, a block of buildings was created within the settlement. The block developed from two separate rows of houses. The street between the rows became an inner courtyard. Similarly to Boljun, in Sovinjak, also in the 18th century, two residential rows were combined into one block. The street between the rows became an interior courtyard and a new building was built toward the main square. In Barban, small hamlets were built on the northern edge of the village in the 19th century.



Fig. 6: *Gračišće, a view of the secondary street, photo: I. Huic.*

be considered as part of the farm yard (Fig. 6). Until the end of the 17th century, there was no distinction between the main and side streets in any of the settlement (Huić, Ščitaroci, 2015c, 212-215).²³

With the construction of larger houses and palaces in the late 17th and 18th centuries settlements began to articulate main axes (Huić, 2015a, 68).²⁴

The shape and forming of the square (Fig. 7)

In front of the city gates or the entrance to the castle, in the open space within the settlement, the local square and the traditional space “under the hackberry tree” was formed, together with the stone table and benches. The

main square in Istrian settlements became, over the centuries, a prominent spatial sign, an important landmark for trade and meetings. Located on the square was the town loggia, a church with a bell tower and a well.²⁵

In larger settlements, historical communes such as Gračišće, Tinjan or Barban, the main square is the centre of life. It is located in the centre, surrounded by public buildings.

In smaller towns such as Račice, Sovinjak or Gologorica, the main square is an expansion of the road leading to the castle.

The development of the square in Barban, located in front of the castle and the church, was completed in the 18th century with the construction of the Loredan

²³ In Gračišće, one of the largest settlements in the County, it is impossible to distinguish between the main and the side streets as all residential (primary) streets are the same width. Pod Fumu street is the same width as the street connecting the main square with the church of St. Pancras or as the street connecting the church of St. Euphemia with the church of St. Pancras. In Pazin, in the fortified citadel, it is too impossible to distinguish between the main and the side streets. All of them can be considered residential streets.

²⁴ In Barban, in the 18th century, with the building of new houses, such as the Stankovic Palace, the formation of the main axis connecting the eastern and western town gates was completed. In Pazin, in the 19th century, by building larger town houses in the suburbs the main street of the town was formed, connecting the castle (citadel), Buraj and suburbs. In the region, similar processes occurred several centuries before. The best example is Contrada Grande street in Conegliano. Building larger noble (civic) houses during the 16th century in the area between the eastern and western town gates articulated the new main city axis which became the new centre of the town.

²⁵ The tradition of meeting “under the hackberry tree” was not entirely replaced with the building of the town loggia. The main square in Tinjan is in front of the parish church while the tradition of meeting “under the hackberry tree”, preserved until the present day, took place in a separate space in front of the former town gate.

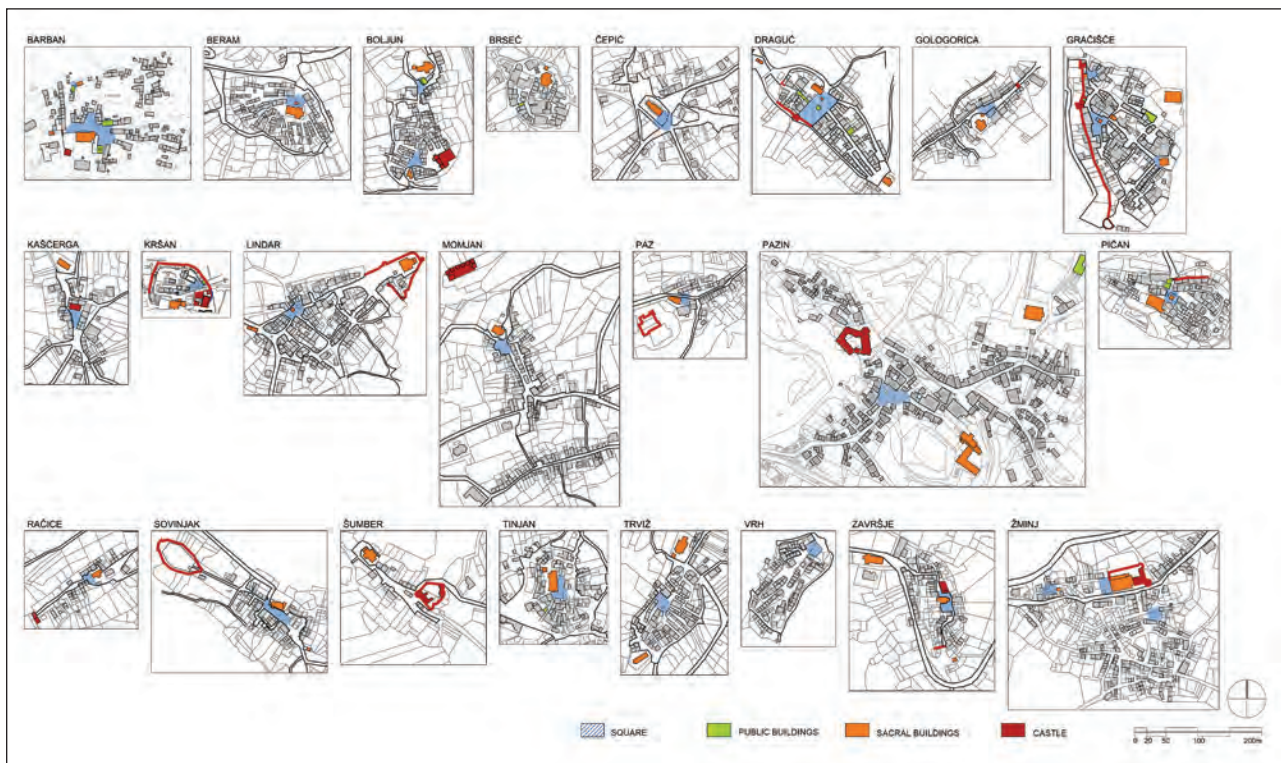


Fig. 7: Squares in settlements, author: I. Huic.

palace. On the square, next to the castle and the parish church, from the 16th century there is also a standard measure of trade, urban reservoirs and the loggia.

An interesting case in Draguč, where the today's main square was formed at the junction of the fortified and the un fortified suburb, in front of the fortified part of the settlement with a castle. The church tower, built in the 19 century, and the reservoir were later additions (Huić, Ščitaroci, 2012, 334).

In larger towns such as Barban, Tinjan and Gračišće, in front of the fraternity churches small squares were formed, creating a separate centre within the settlement. These squares are surrounded by residential buildings. In Gračišće, in front of the church of St. Euphemia and the church of St. Pancras small squares were formed, connected by streets with rows of houses. In Barban, in front of the fraternity church of St. James and the hospice in the northern part of the settlement, a small square was formed (Huić, 2015a, 66-69, 133).

Public buildings (Fig. 8)

Buildings important for the development of settlements, such as the church, municipal buildings (water

reservoirs, wells and the like.), the castle, walls and gates were analysed. Determining the year of construction of these buildings is important because the comparison of stylistic features contributed to determining the time of construction of other buildings in the settlement, and thus to the development of the settlement.²⁶

The most common public building in the settlements is the parish church which was built in 24 settlements. In addition to the parish church, in larger settlements, smaller fraternity churches were built (7 settlements). The town loggia was built in 8 villages, a granary with a loggia in 4. Town reservoirs/wells and the captain's office (town hall) were built in 2 settlements, both from the 16th century during the Venetian Republic. In Gračišće and Pićan there is the Bishop's Palace. Feudal lords or stewards of the fiefdoms and fraternities in Pazin, Barban and Gračišće built a hospice.

a) Sacral buildings

The parish church is usually positioned in the centre of the settlement, on the square. Some parish churches were surrounded by a cemetery. In addition to the parish church, fraternity churches were also built.

²⁶ The chronology of construction is connected with the chronology of construction of the castle. Connecting the chronology of castle construction with the chronology of constructing the most important buildings in the settlement gives new information about the dynamics of the spread of residential areas in the settlement.

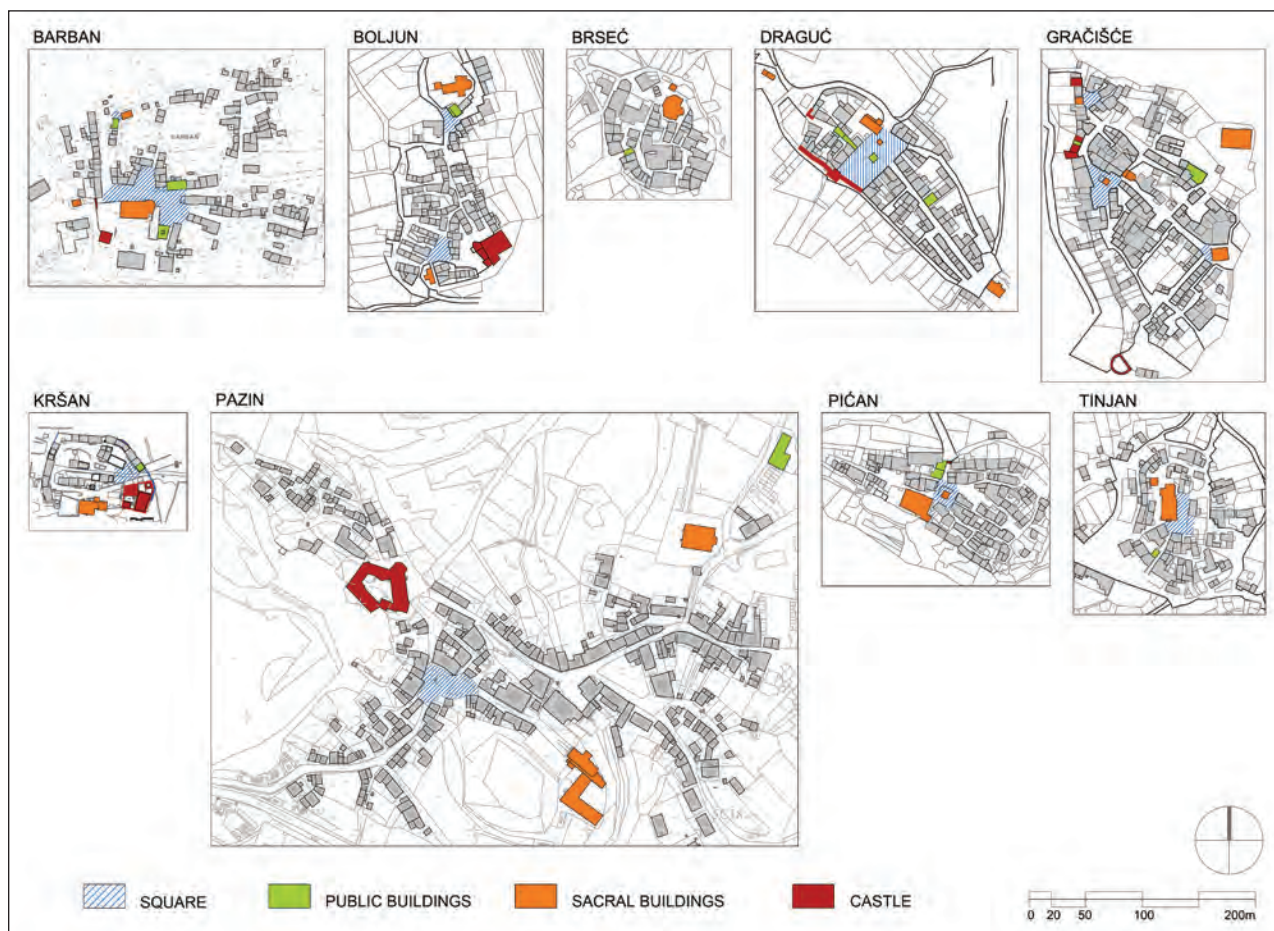


Fig. 8: Public buildings in settlements, author: I. Huic.

Exceptions to placing the parish church in the centre of the settlement, on the main square, are found in Lindar, Gračišće and Vrh. The parish church in Vrh was built at the entrance to the village. Around the church was a small graveyard. The parish church in Gračišće was built on the northern edge of the village. It also has a cemetery.

Besides churches, monasteries also had an important role in the urban and the development of areas in which they were founded. In Pazin County only one monastery was built, the Franciscan monastery in Pazin. In front of the monastery a smaller settlement Buraj developed.²⁷

b) The town loggia

There are 7 loggias in Pazin County. The loggias in Boljun, Kršan and Tinjan, according to their architectural features, can be placed in the 16th century (Bradanović, 2008, 12; Huić, 2015a, 176). The loggia in Kršan was built in the 16th century as part of the major renovation

of walls and the settlement (Fig. 9). Loggias in Gračišće and Brseč are located within town gates and are in fact just stone benches against the wall.

Loggias in Rakalj and Barban, along with other communal buildings, were built also in the 16th century, but only after both settlements came into the possession of the Venetian Republic following the war in the early 16th century (Huić, 2015a, 65; Klen, 1964, 23-26).

c) The municipal building

Generally speaking, municipal buildings are not common in settlements in Pazin County. The captain's office or the municipal palace was built in settlements after the 16th century, when some settlements came under the rule of the Venetian Republic.

In Barban and Rakalj the captain's office was built in the 16th century, in Draguč the municipal building was built in the 17th century and in Sovinjak, in the mid-

²⁷ There were two monasteries in Pazin County, one in Sv. Petar u Šumi and another one on Lake Čepić. These monasteries, since they were not built within a village, were not considered in this study.



Fig. 9: Loggia in Tinjan, Kršan and Boljun, photo: I. Huic.

dle of the village, the communal palace was built in the 18th century.

In places with a lesser degree of communal freedom, such as Beram, Draguč or Završje, there were gastalds' houses.

A special case is that of Pićan, which was the seat of the diocese. There is the Bishop's Palace in the village, which is also the seat of administrative power. The bishop had another palace in Gračišće, his summer residence, but Gračišće as a commune had autonomy.

Defensive framework of the settlement (Fig. 10)

Of the 32 settlements in the County, it can be argued that 15 were fortified, and 17 villages had some kind of a defensive structure – a tower or a castle. Other settlements were not fortified.

The following types of defensive structures can be found:

1. castle or tower - 17 settlements (53.12%) (Barban, Beram, Boljun, Čepić, Draguč, Kašćerga, Kršan, Lindar, Momjan, Paz, Pazin, Račice, Sovinjak, Šumber, Trviž, Završje, Žminj)
2. walls around the settlement with towers - 15 settlements (46.87%) (Beram, Boljun, Brseč, Draguč, Golgorica, Gračišće, Kršan, Pazin, Pićan, Sovinjak, Tinjan, Trviž, Vrh, Završje, Žminj)
3. city gates - 12 villages (37.5%)
 - a) fortified entrance "on key" - 4 settlements (12.5%) (Draguč, Gračišće, Pazin, Pićan)
 - b) entrance tower - 3 settlements (9.37%) (Brseč, Tinjan, Žminj)
 - c) unfortified entrance - 5 settlements (15.62%).

a) Town walls

Walls follow the layout of settlements and are strongly associated with the network of streets in settlements,

following the terrain on which towns developed. On the majority of preserved walls and castles, as well as on Valvasor's graphics from the late 17th century, it is evident that town walls and castles had towers with merlones, sometimes Ghibelline, rarely machicolations and other additional elements for the defence. The oldest known town walls can be dated to the period from the 12th to the 14th century, and their remains are preserved in Gračišće and Boljun (Huić, 2015a, 76-77; Huić, Ščitaroci, 2015c, 212).²⁸

Most of the defensive walls and city gates were demolished during the 19th and early 20th centuries because they were obstructing traffic (Huić, 2015a, 85,70, 146-148).²⁹

b) Entrance to the settlement

The majority of settlements do not have a preserved city gate or an entrance to the settlement. Analysis of the cadastre, Valvasor's graphics, the remaining surviving examples and historical data confirm that most of the settlements had an entrance through *propugnaculum* and "turnkey". Entrance to the settlement through an entrance tower is only represented on historical prints. Gates built after the 16th century were mostly symbolic in nature, marking the entrance to the settlement.

c) The tower

As with walls, most of the information regarding the appearance of towers within town walls and castles comes from Valvasor's graphics. Parts of the oldest preserved tower are found in Gračišće and Pićan.

There are two preserved towers in Gračišće: one with a town gate (nowadays within the Salamon palace) and one in the north-west corner of the town.³⁰

28 The west line of town walls in Gračišće, built into houses, is preserved. The walls were built starting from the 12th century and encircled the entire settlement. They are visible in Valvasor's graphics and the model of Gračišće from the 16th century. The walls had battlements with merlones, and the most exposed parts were reinforced by defence towers.

29 The town gate in Boljun was demolished after World War II. In Barban, Tinjan and Pazin walls were torn down in mid 19th century.

30 In the tower in the north-western corner of the village, on cadastral parcel * 1 and 105/2, a loophole is evident on the ground floor of a residential building whose features correspond with loopholes from the 12th to the 14th century. In the wider region similar loopholes can be found in Kobdilj, Piran, Završje, Momjan and Pietro Pelosa castle.

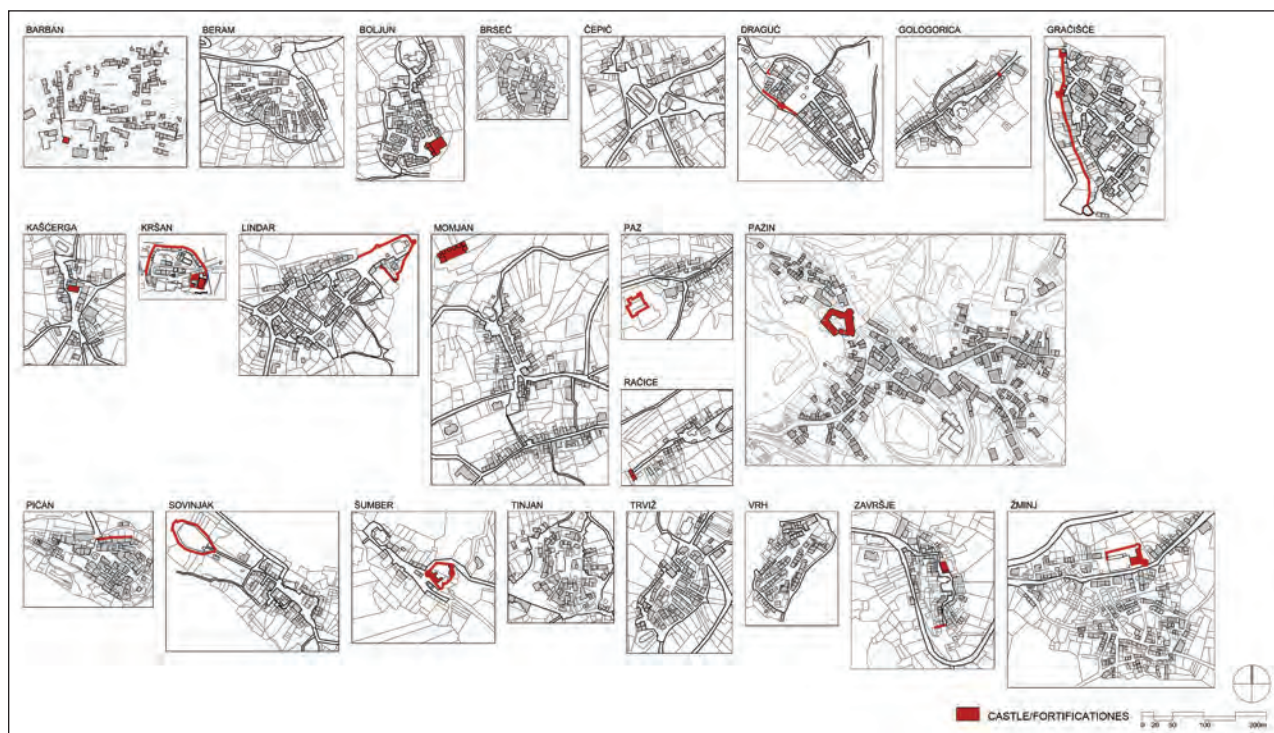


Fig. 10: Defense buildings in settlements, author: I. Huic.

d) Castles

Generally speaking, castles built in Pazin County in the Middle Ages, as in the wider region, were generally subordinated to the defence of the fife and the borders. They have a simple rectangular floor plan with a prominent guard tower in one corner. The oldest castle remains from the 12th and 13th centuries have been preserved in Boljun, Barban, Kršan and Pazin. From the 13th century onwards, palaces were built next to the guard tower. The construction of a palace in Istrian castles was concurrent with the construction of palaces in castles in Friuli (Piuze, 2001; Višnjić, 2008, 62-63).³¹

Of the 32 settlements, in areas which previously had a hill fort 9 settlements with castles were built whereas a brand new castle with or without a settlement was built in the other 23 locations. A guard tower existed in ten castles and two settlements, and sixteen of the castles had a palace. The most fervent construction of castles was in the 12th and 13th century, at the time when the fiefdom of Gorizia was the former in Istria.

According to current data, the castles were built:

A) on the hill fort location - 9 settlements and / or castles (28.12%) (Barban, Beram, Brseč, Boljun, Draguč, Gračišće, Pičan, Tinjan, Žminj)

B) newly built castles and / or settlements - 23 villages and / or castles (71.87%) - Belaj, Čepić, Gologorica, Gradinje, Grdoselo, Kašćerga, Kožljak, Kršan, Letaj, Lindar, Lupoglav, Momjan, Paz, Pazin, Posert, Račice, Rakalj, Sovinjak, Šumber, Trviž, Vranja, Vrh, Završje.

Construction date of the castle: a total of 23 castles

- 1) 10th century – 1 castle (4.34%) (Pazin)
- 2) 12th century – 6 castles (26.08%) (Barban, Boljun, Draguč, Rakalj, Sovinjak, Vranja)
- 3) 13th century - 12 castles (52.17%) (Čepić, Grdoselo, Kašćerga, Kožljak, Kršan, Letaj, Lindar, Lupoglav, Momjan, Paz, Završje, Žminj)
- 4) 14th century – 1 castle (4.34%) (Račice)
- 5) 15th century – 3 castles (13.04%) (Gradinje, Posert, Šumber)

COMPARISON OF SETTLEMENTS IN PAZIN COUNTY WITH SETTLEMENTS IN THE WIDER REGION

Review of urban and architectural features of identity of fortified towns and castles in the wider region offers the possibility of understanding both unique and common features associated with settlements in Pazin County (Šćitaroci, Huić, 2015a, 301-317; Marušić, 1999;

³¹ In Friuli, first buildings of such function emerged in the 12th century, as shown in a research of the Solimbergo castle and archival sources about the castle of San Daniele. In a document from 1203, two inhabitants of the castle of San Daniele described the castle and wrote that there was a palace in the castle. Palas in Solimbergo was built along the peripheral wall of the castle.

Schonfeld, 1855; Geromet, Alberti, 2011; Čeč, Darovec, 2009; Perbellini, 2011; Sanuto, 1509).

The wider region around Istria covers the area north and west of Istria, in northern Italy and southern Slovenia. Historically, these are parts of the province of Friuli and Kranjska (lat. Carniola; Germ. Krain). Feudal owners of the majority of possessions in the region were the counts of Gorizia and the Patriarch of Aquileia, while part of the territory was under the administrative authority of the Venetian Republic.

The research included settlements in the Venetian Istria (Svetvinčenat and Motovun), Kranjska and Gorica (Gorica, Prem, Štanjel and Socerb) and the settlements of Friuli (Conegliano, Portogruaro, Portobuffole, Seravalle and Ceneda).

The selected settlements for case study are located in strategic positions along the border with the Venetian Republic and along major transport routes. They were selected because there is a castle in the settlement, because of their narrow geographical location, their administrative status and the same feudal lords who have holdings in Pazin County.

Traffic position

The traffic position of Kranjska, Friuli and Gorizia is far more important than the traffic position of Pazin County. Important roads connecting Italy with Pannonia and the rest of Europe passed through Friuli, Kranjska and Gorizia.

Topographic position

Topographic position of settlements in the region, as well as in Pazin County, follows the relief characteristics of the terrain (river, ridge or knoll) on which each settlement spread.

In the Venetian part of Istria, in Svetvinčenat, the form of settlements adapts to the characteristics of the relief (sinkholes) with a street network that expands radially from the main square and the castle in the centre of the village. In Kranjska and Gorica the settlements of Prem and Štanjel also adapt to the terrain around their respective castles. In Štanjel the settlement envelopes the hill and the driveway to the castle. Prem spreads along the ridge and the pass between the parish church and the castle.

The layout of the settlement

The layout of a settlement depends entirely on the settlement's topographic position. Since the road network follows relief characteristics, settlements mostly have a linear or a complex layout. It should be noted that in set-

tlements of Roman origin the street network and the layout are still typical Roman and do not adapt to the terrain.

Seravalle, in Veneto, adapts its shape to the pass; streets follow the shape of the pass and the road that runs through it. Fortifications on opposite hills protect the passage. Urban organization of Portogruaro follows the course of the river with the main and side streets. Portobuffole, situated by the river, has a Roman street grid, but it does not adjust its course.

The core of the settlement

Settlements with castles

When Pazin County is compared with the wider region, most of the settlements in Kranjska and Gorica developed by the road leading to the castle. These are mostly villages of artisans and merchants with the local inhabitants who lived next to the castle because they worked in the castle and for their protection.

The owners of the castle in Svetvinčenat organized a new centre of the settlement around the castle by designing and building a square in front of the castle with public buildings around it (the city loggia, the cistern and the church). The existing small settlement was oriented towards the newly built square. The main communication passes through the village, west of the new square.

In Motovun, a row of houses wraps around the hill, following the access road to the castle. As the settlement grew, new rings of fortification were built.

Around the Prem castle a settlement of merchants and craftsmen developed in front of its entrance. The settlement spread along the ridge during the 16th and 17th century.

In Štanjel a settlement, similar to the one in Motovun, developed on the slopes of the hill. When the construction of the new castle began in the 15th century, it was built inside the now fortified settlement, respecting the columnar structure of the settlement.

In the wider region, the town of Gorizia, as the centre of the Gorizia estate, developed by merging several separate cores formed around the castle into one. Around the castle, as in Pazin, a settlement of ministerials (so called citadel) developed. The unfortified medieval suburb of merchants and artisans developed near the fortified "upper" settlement. The suburb merged with the ancient village of Slocan and continued to spread, following the construction of the monastery. What makes it different from Pazin is the early unification of both settlements, fortified and unfortified suburbs, into one administrative unit with municipal rights. The administrative status of the new settlement, Gorizia, encouraged further development.³²

Conegliano also developed next to the castle as a settlement in the citadel and the suburb at the foot of

³² The suburb of Pazin did not receive such administrative status until the 19th century, which caused delays in urban and architectural development of the town.

the hill. Owners of the fife very early started to join the defence systems of the citadel and the suburb.

Settlements without a castle

Among the analysed examples in the region, only Portogruaro is not fortified and does not have a castle. Portogruaro is a newly established settlement, from the 12th century, and was established by a feudal owner who wanted to increase his revenues from trade. The centre of the village consists of two town squares: one is the commercial (secular) and the other one the ecclesiastical centre of the town. As the settlement was not built at a strategically important location, but to be a trading centre, there was no need to build a castle.

The structure of settlements

In Gorica and Kranjska row houses also form the structure of settlements. Row houses are formed by the road leading to the castle and, unlike in Pazin County, primary/residential streets cannot be distinguished from secondary streets.

Row houses in Štanjel follow the road to the castle, while in Prem they follow the artery between the parish church and the castle.

Socerb in Gorizia is not surrounded by row houses, but by small family hamlets (farms with a residential building and other farm buildings enclose an inner courtyard) grouped to form a settlement at the foot of the castle.

In Portogruaro and Ceneda, unlike in Pazin County, Gorica and Kranjska, the settlement structure is made of blocks of buildings. The two settlements owe this block division, fragmented in the Middle Ages, to their Roman origin.

Form and genesis of squares

The examples analysed in Kranjska and Gorica show that squares are formed in front of the castle, as is the case in Prem and Štanjel. Squares in Gorica were created in front of the church and the monastery. Regardless of the fact that there is a settlement in the citadel and a suburb, a square was not created in Gorica at the junction of two settlements as it is the case in Pazin.

Examples in the Veneto and Friuli region show that the centre of the town is comprised of a square that developed on the crossroads of trade routes. The main square in Seravalle is in the middle of the pass, on the crossroads of trade routes. In Ceneda and Portobuffole, both settlements of Roman roots, squares are planned together with the grid of town blocks.

Portogruaro has two equally important squares, of which the first is the ecclesiastical centre and the second the trading centre of the town. This is not the case in Pazin County.

In the immediate vicinity of Barban, in the Venetian part of Istria, the main square in Svetvinčenat was built simultaneously with the reconstruction of the castle, the construction of the church, the water cistern and the town loggia. The owners of the fife, aside from the project of public buildings, designed a series of residential houses for rent that enclose the south side of the square.

Public buildings

Considering the development of settlements and factors of identity in relation to important buildings in the settlement, a number of common features with Pazin County can be seen.

Religious buildings

Construction of the parish church and smaller fraternity churches is essential for the development of settlements and their identity, regardless of the size of the settlement. The role of the construction of the monastery in the development of settlements is more evident in major towns in the region. In Gorica, the construction of the monastery prompted the establishment of large urban districts. In Conegliano, the construction of the monastery encouraged the spread of houses along the access road to the fortress and the monastery.

The town loggia / The building of the municipal administration

The construction of the town loggia and/or town administration buildings is related to the administrative status of a settlement. Similarly to Pazin County, if a settlement did not have an administrative status, there was no loggia in it. Settlements such as Socerb or Prem do not have any of these buildings.

In contrast, settlements bordering the Veneto and Friuli region, after being conquered by the Venetian Republic, gained greater municipal freedom, and similar happened in places along the Venetian border in Istria (Draguč, Barban, Rakalj or Sovinjak), where public and other communal buildings, such as a water tank or a granary, were constructed.

Defensive structures

Settlements in the region were mostly fortified, built next to the castle in the strategic position. Villages were used as the first line of defence of a castle (Štanjel, Gorica). Settlements built in a valley (Portogruaro, Seravalle), with the purpose to be trading centres, were not fortified.

Town walls

In the region, the remains of town walls of Novigrad and Piran can be compared with the examples from

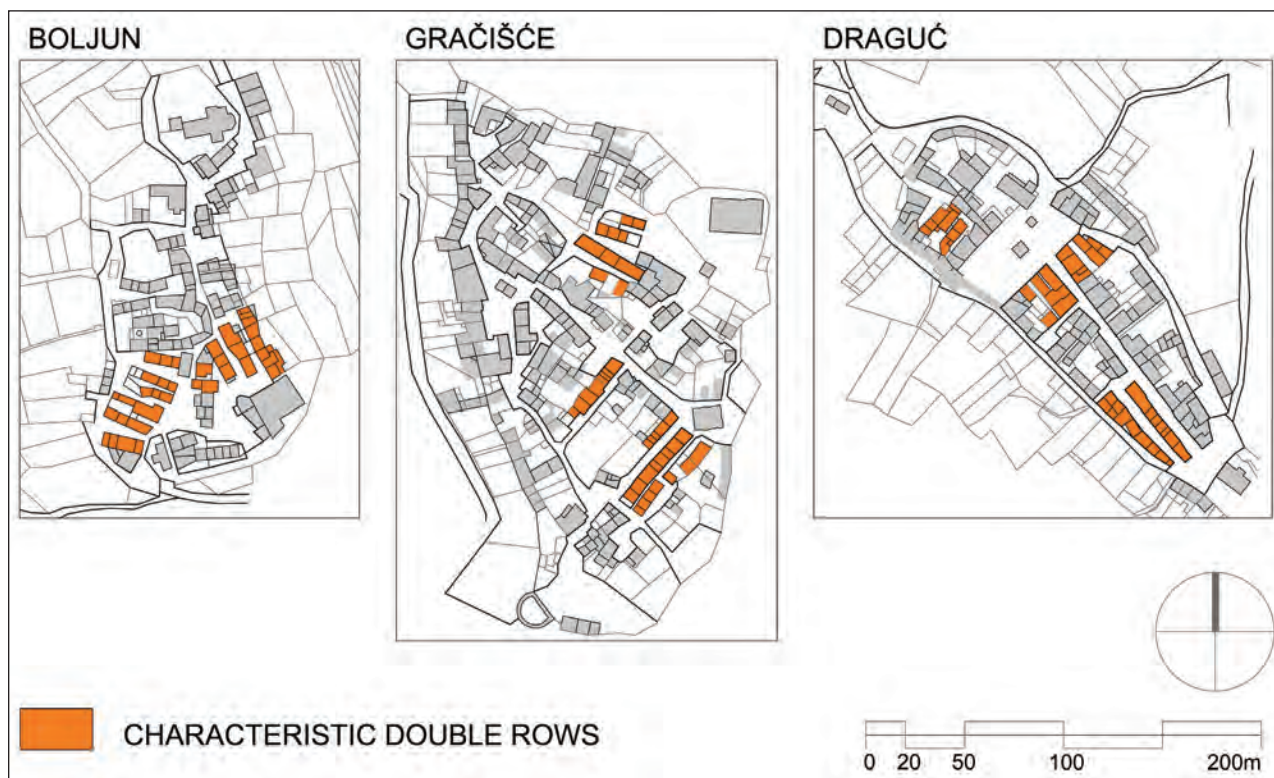


Fig. 11: Tissue and urban structure in Gračišće, Draguč and Boljun, author: I. Huic.

Pazin County. Novigrad and Piran town walls were built in the second half of the 15th century and early 16th century (1470-1533). The walls had two rows of loopholes and a path behind the battlements. Walls in Novigrad, as well as walls in Boljun, Kršan and Barban, have a battlement with a series of Ghibelline merlons that are not only decorative. Ghibelline merlons are mostly used to accentuate the entrance to the castle or tower. The best examples are the battlements in Piran, the battlement on the bell tower in Završje and the battlement on the walls at the entrance of Štanjel (Bradanić, 2010, 11-15).

Entrance to the settlement

The organization of the entrance to a settlement or a castle in the region, directed by the logic of defence, does not differ from the examples in Pazin County.

From the surviving *propugnaculum* beyond the borders of Pazin County, an interesting example is the entrance to Hum. It was constructed in 1562, as confirmed by the inscription imbedded over the door. The same type of entrance, together with two lateral towers, is preserved in Mutvoran. Above the entrance gate to the castle in Hrastovlje, Slovenia, consoles from the bretaske have been preserved, with same dimensions as similar consoles from Kršan.

Castel

An important position on trade routes, especially of Friuli, then Kranjska and Gorica, initiated the construction of castles since the 3rd century. Fortifications were built along the north-western border with the Venetian Republic, and as in Pazin County, on easily defendable positions.

The appearance and features of fortresses and castles in the region are similar to those in Pazin County (although advanced solutions were imported with the delay). The application of advanced solutions depended on the financial strength of the owner. In the Pazin castle, the biggest castle in the County, the palace was built in the 13th century, at the same time when first palaces in Friuli were built (Piuze, 2001; Višnjić, 2008, 62-63).

CONCLUSION

Analysis of settlements and their historical development has exposed the factors of architectural and urban identity. The most important features of settlements are defensive walls and towers, their topographic position with the vertical of the bell tower at the highest point and the tissue and urban structure.

The tissue and urban structure are important identity factors of settlements in Pazin County. Similar struc-

ture is found in settlements of the Venetian part of Istria, but not in the wider region. In several settlements, like Gračišće, Draguč and Boljun, the medieval fabric of the settlement with characteristic double rows of residential and outbuildings and parcelling of the land are well preserved and today make up one of the distinguishing features of the historic centre (Fig. 11).

The walls with entrance towers and main gates (including *propugnaculum*) were also factors of urban identity of these settlements. In all historical graphics (e.g. Valvasor and Petronio's prints from the 17th century), defensive walls and gates together with churches are the most visible factors of identity of settlements. Today, settlements are still dominated by the parish church, but most of the walls have been demolished.

Other public buildings were not factors of urban identity of settlements. Their construction and/or demolition affected urban development, but not the identity of the settlement.

The contribution of this study is the comparison of settlement organization, the dynamics of their development and characteristics of urban elements of settlement in Pazin County with similar settlements in the region, in order to evaluate the development of Istrian towns in the area of similar geographical and architectural features. The medieval town of inland Istria, which had for centuries been an intuitive process of development outside the Roman urban model, developed the organic urban morphology to the extent that this recognizable Istrian example became synonymous with the medieval urbanism in the region. It is believed that in Istria medieval urban structure is almost completely preserved.

An additional contribution to the analysis of settlements and factors of identity, which was conducted

by the described method, is an insight into the current condition and extent of preservation of the medieval structure of settlements in central Istria. In protected historic centres of Istrian settlements urban and architectural heritage is generally not explored. This statement is particularly true of medieval villages in the interior of Istria.

The analysis showed that settlements which are considered to be paradigmatic examples of well-preserved medieval towns, such as Draguč, for the most part were built in the 19th and 20th centuries. At the same time, analysis has shown that some settlements, like Barban, Gračišće or Kršan, are preserved to a greater extent, with a larger number of preserved medieval buildings than previously thought (Ivančević, 1966; Huić, Šćitaroci 2012, 336-337; Huić, Šćitaroci, 2015a; Krizmanić, 1999).³³

The newly discovered data allows for a new evaluation and provides the initial guidance for the protection, preservation and sustainable development of architectural heritage of these settlements.

The issue of the administrative status of settlements and its link to the development of settlements in Pazin County was not fully confirmed. Historical communes (municipalities) such as Barban, Gračišće or Tinjan did preserve their status. When historical communes in the County are compared with settlements without an administrative status, it is evident that historical communes are bigger, stronger and better developed.

The impetus for further research involves comparing the structure of settlements, the dynamics of their development and characteristics of urban elements in settlements in Pazin County with settlements in the Venetian Istria and in the region.³⁴

33 Analysis has shown that most of the settlement in Draguč was significantly altered in the 19th century. The most interesting results of the Draguč suburb analysis showed that what was preserved from the historic medieval building tissue were three residential rows in the centre of the village. The rest of the suburb was significantly altered during the construction modifications in the 19th century. In contrast to Draguč, settlements such as Barban, Kršana or Gračišće preserved large parts of the settlement's medieval structure from the 14th and 15th century. Owing to the houses on the main square with engraved years of construction from the 16th century onward, and because of Pod Fumu street, Gračišće is considered to be a settlement from the 16th century. There is a house in Pod Fumu with the year of construction from mid 15th century. The analysis of houses in the street parallel to Pod Fumu (the street that runs toward the church of St. Vid) and a stratigraphic analysis of the structure of walls show there are houses built no later than the 14th century. The church of St. Pancras and St. Euphemia and parts of town walls were built in the 13th century. Gračišće, within the scope of town walls, has preserved large parts of the village from the 13th, 14th and 15th century. In Barban, following the completion of the stratigraphic analysis, buildings located in the centre of the settlement, around the main square, can be dated to the 15th century. Previous research considered Barban to be a settlement from the 19th century with parts of the preserved architecture from the 16th century.

34 This research is part of the scientific project *Heritage Urbanism (HERU) - Urban and Spatial Models for Revival and Enhancement of Cultural Heritage* financed by Croatian Science Foundation (HRZZ-2032), which is being carried out at the Faculty of Architecture University of Zagreb, under the project leadership of Prof. Mladen Obad Šćitaroci, Ph.D., F.C.A.

PROSTORSKI, URBANI IN ARHITEKTURNI ELEMENTI CENTRALNE ISTRE – PRIMER ZGODOVINSKE REGIJE PAZINSKE KNEŽEVINE

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POVZETEK

Naselja osrednje Istre, zgodovinsko območje Pazinske kneževine, so še vedno ohranila svoj srednjeveški značaj in obseg. To delo je del raziskave, ki proučuje razvoj istrskih naselij na območju podobnih zemljepisnih in arhitekturnih značilnosti. Obravnavani dejavniki identitete so topografski položaj naselij, tkivo in struktura naselij, obrambni okvir mest in značilnosti mestotvornih elementov naselij (prevladujočih prostorov in objektov) znotraj zgodovinskih središč naselij. V analizo je vključeno dvaintrideset srednjeveških naselij v Pazinski kneževini. Cilj raziskave je na podlagi zaznanih urbanističnih in arhitekturnih značilnosti, stavbne tipologije in drugih raziskovalnih rezultatov ovrednotiti obstoječe stanje na področju arhitekturne dediščine in okolja na opazovanem območju, z namenom izboljšanja stanja obravnavanih naselij in pokrajine. Najpomembnejše značilnosti srednjeveških naselij Pazinske kneževine so obrambna obzidja in stolpi, njihova topografska nastanitev z navpičnimi zvoniki v najvišjih točkah naselij ter značilne strukture in tkiva naselja. Srednjeveška tkiva in strukture naselij so, kot stoletni intuitiven proces razvoja naselij zunaj starodavnega mestnega modela, razvila organsko urbano morfologijo do te mere, da lahko prepoznaven istrski primer jemljemo kot sinonim za srednjeveški urbanizem regije. Podobno strukturo naselij najdemo v beneških delih Istre, ne pa tudi v širši regiji.

Ključne besede: Osrednja Istra, Pazinska kneževina, zgodovina urbanizma, dejavniki poselitvene identitete

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