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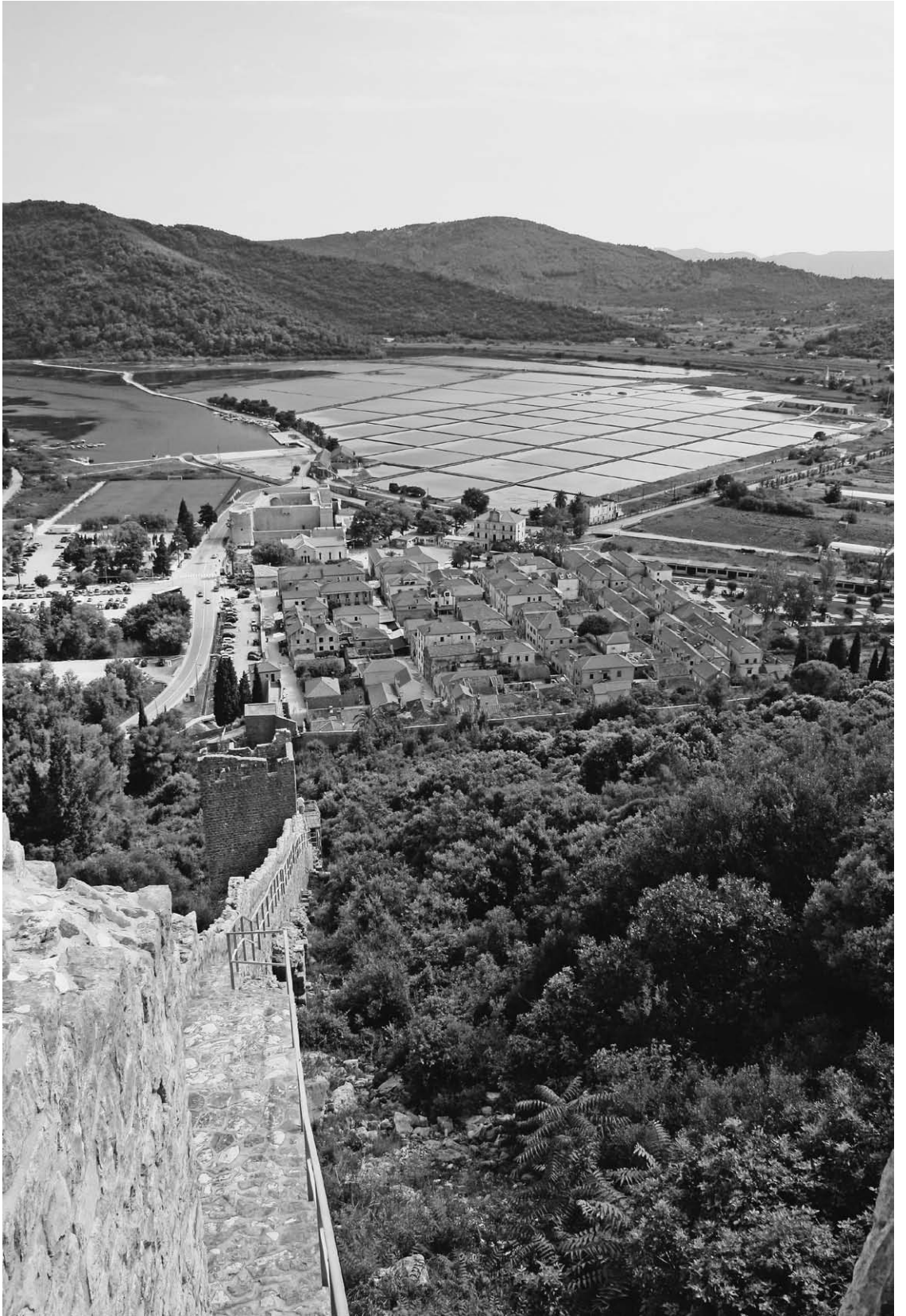
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Fig. 1 Ston, photo: Ana Sopina
Sl. 1. Ston, foto: Ana Sopina

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Landscape Areas within Fortified Medieval-Renaissance Towns
Typology, Valorisation and Enhancement

Pejsažne površine unutar utvrđenih srednjovjekovno-renesansnih gradova
Tipologija, vrjednovanje i unaprijeđenje

medieval-Renaissance towns
fortified town
landscape areas
approaches and enhancement models
renovation of historic landscape areas

srednjovjekovno-renesansni gradovi
utvrđeni grad
pejsažne površine
pristupi i modeli poboljšanja
obnova povijesnih pejsažnih površina

The research was focused on determining the types of landscape areas within the fortifications of medieval-Renaissance towns based on the use and the criteria for their valorisation and enhancement. Twenty-six Mediterranean and west European towns were analysed. Nine types of landscape areas and seven valorisation criteria have been determined. Three current approaches to the use of landscape areas within the town walls have been recognised.

Istraživani su tipovi pejsažnih površina prema namjeni (korištenju) i kriteriji za njihovo vrjednovanje. Na temelju dostupnih kartografskih izvora istraženo je 26 europskih gradova na području Mediterana i zapadne Europe. Utvrđeno je devet tipova pejsažnih površina i sedam kriterija za njihovo vrjednovanje. Prepoznata su tri postojeća modela korištenja pejsažnih površina unutar povijesnih jezgri gradova.

INTRODUCTION

UVOD

This paper is part of extensive research into landscape areas of fortified medieval-Renaissance towns.[1] It deals with typological categorisation of landscape areas within the walls of historic medieval-Renaissance towns, the criteria for their valorisation and enhancement.[2]

In this paper, landscape areas imply unbuilt regulated or unregulated spaces created by planning, cultivation or natural succession of vegetation. There was some difficulty with terminological determination, as "green space" is a term that covers different types of these areas, so in this article the term landscape area was chosen as more appropriate, as it is a general term which covers various types of landscape areas, from natural landscapes to cultivated landscapes and gardens. Those spaces were used in different ways in the past.[3]

Landscape areas in 26 European medieval-Renaissance towns have been analysed. The reason for choosing this topic were three Croatian examples – the medieval bicentric town of Ston (Veliki and Mali Ston) in which the proportion of landscape areas is 40% of the total town area within the fortification, the Roman-medieval town of Nin (Aenona) with 52% of landscape areas and Roman-Renaissance town of Cavtat (Epidaurum) with 63% of landscape areas within the fortification (Figs. 1-3).

Three research questions have been addressed: 1) which types (purposes) of landscape areas appear within the medieval-Renaissance parts of towns, 2) how to determine the criteria for their valorisation and 3) which are the current approaches to the use of landscape areas in historic parts of towns.

These questions arise in the context of considering the enhancement and use of cultural heritage. The research can have practical application in the field of preservation, restoration and revitalisation of cultural heritage, especially in relation to landscape areas in historic parts of towns.

Three hypotheses have been put forward based on the research questions and research aims:

1) Although they are spatially limited/small, fortified historic towns have various types of landscape areas which differ based on their purpose and form/design.

2) It is possible to determine general/common criteria for the valorisation of landscape areas of historic towns, as a starting point for their use, enhancement and/or regulation/design, regardless of the differences in the time of their formation, geographic and spatial determinants as well as stylistic and urban characteristics.

3) It is possible to identify several different approaches to the use of landscape areas based on the analysis of the examples.

THEORETICAL FRAMEWORK AND METHODOLOGY

TEORETSKI OKVIR I METODOLOGIJA

The research was conducted by using the *Heritage Urbanism* approach, which represents a scientific platform through which revitalisation and enhancement of heritage in the spatial, urban and landscape context are considered.[4] From the *Heritage Urbanism*

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1 This research is part of the *Heritage Urbanism* [*HERU*] scientific project – *Urban and Spatial Models for Revival and Enhancement of Cultural Heritage* [HERU-2032], financed by the Croatian Science Foundation and carried out from 2014 to 2018 at the Faculty of Architecture, University of Zagreb.

2 The results of extensive research into landscape areas within the fortified medieval-Renaissance towns are presented in two more papers. The first paper has been published and it deals with general features of fortified towns and landscape areas as an introduction into the research. See in more detail: Obad Šćitaroci, Marić, 2015. The second paper has been published in the "Urban Morphology" journal and it presents the results of research into morphological features of fortified medieval and Renaissance towns. See in more detail: Obad Šćitaroci, Marić, 2019.

3 Landscape areas have always been an integral part of fortified towns. One of the first known towns, the town of Mari (old Assyrian period, 3rd millennium BC), had two rows of circular defensive walls with palm trees gardens between them that protected the vegetables under the trees from excessive evapotranspiration.

4 Obad Šćitaroci, 2015, 2017; Obad Šćitaroci, Bojanić Obad Šćitaroci, 2019

Fig. 2 Nin, photo: Ivo Pervan
Sl. 2. Nin, foto: Ivo Pervan

Fig. 3 Cavtat
Sl. 3. Cavtat

point of view, it is necessary to achieve balance between the preservation of heritage identity, enhancement of town space, economic success, social justice and preservation of the environment.[5]

The *Heritage Urbanism* approach presumes three main steps: 1) determining the identity factors, factors of effect and value factors; 2) defining the evaluation criteria, enhancement criteria and criteria for new interventions; 3) defining the cultural heritage revival and enhancement models.[6]

Vacant unbuilt landscape areas which represent the unbuilt space of a town, as well as the built ones, are considered as an interdependent entity – historic urban landscape.[7]

A lot of research focuses on the problem of methodological principles for the historic urban fabric enhancement.[8] There is a relatively large amount of research into the morphology of the historic town and in that context of fringe belts of the fortified town (urban fringe-belt concept) containing the majority of vacant landscape areas.[9]

In scientific studies on significantly degraded fortified towns landscape areas were recognised as a potential cohesive cityscape element.[10] A large number of scientific papers in Croatia deal with the transformation of baroque bastions into public town spaces.[11] Recent Croatian research into the urban development of historic fortified Istrian towns has been focused on the historic town as a whole and has also studied town identity factors.[12]

One of the important starting points, agreed upon by all professions when it comes to town landscape areas, is that, as public spaces in the historic town, they are key components in building and protecting the town's collective identity.[13] Researchers of different profiles likewise believe that valuable inherited features of these areas must be preserved during the transformation of landscape areas.[14] It is for this reason that this research began by establishing the status of landscape areas throughout history, their position, shape and purpose.[15]

In the context of the 'revitalising the historic town' phrase, especially the spaces without a use among which we can also consider landscape areas (since they are rarely the subject of individual research), there is a danger of "turistification" of space.[16] Consequently, the need for implementing well-thought-out plans for managing historic fortified towns is more and more emphasised, as it calls for facing the challenge both before the community and the stakeholders due to the sensitivity of conservation and presentation of urban fabric.[17]

Theoretical rethinking of models and criteria for the enhancement of exclusively landscape areas, as a separate space category within the fortified medieval-Renaissance town, is poorly represented in scientific papers from the ur-

5   More details about the Heritage Urbanism approach: *** 2017
6   Obad Šćitaroci, 2018; Obad Šćitaroci, Bojanic Obad Šćitaroci, 2019
7   Vienna Memorandum, 2005.
8   Larkham, 1996; Fairclough, 2003
9   Conzen, 1975; Whitehand, 1998, 2001, 2007; Whitehand, Kai, 2010; Kubat, 1997; Hazar, Kubat, 2015; Ünlü, 2013
10   Oktay, Conteh, 2007; Doratli, 2005; Walsh, Coureas, Edbury, 2012; Hazar, Kubat, 2015; Tettamanzi, 2007; Ünlü, 2013; Ducom, 2005
11   Krajnik, Obad Šćitaroci, Bojanić, 2008; Krajnik, Obad Šćitaroci, Šmit, 2008; Krajnik, 2011
12   Obad Šćitaroci, Huić, 2015a; Obad Šćitaroci, Huić, 2015b
13   Claval, 2012: 85
14   Roca, Claval, Agnew, 2011; Dicks, 2000; Huber, 2014; Tülek, Atik, 2014; Bruce, Creighton, 2006; Rocca, 2009
15   Obad Šćitaroci, Marić, 2015, 2019
16   Arboleda, 2014
17   Bruce, Creighton, 2006; Smith, 2006: 76; Creighton, 2007; Fernandes, Carvalho, 2007

ban-landscape point of view.[18] Lack of literature on this topic was therefore one of the incentives for this research.

The research was conducted on 26 European towns (Figs. 4 and 5), mostly on the Mediterranean (Italy, Croatia, Spain, Greece, Montenegro, Cyprus). Continental European towns were also included to a smaller extent (Germany, Switzerland, Great Britain, Belgium, The Netherlands). The chosen towns are those whose historic cores have been well-preserved since the medieval-Renaissance period and those that have well-preserved or still visible remains of town walls and fortifications. The chosen towns have similar formation periods and physical/morphological features, but are distinct in the cultural, historical, geographic and climatic context. This was done in order to determine whether there are any significant differences due to those distinctions or the town features with regard to landscape areas are similar.

The bulk of the research was identifying the types of landscape areas based on their purpose (use) in the 26 analysed towns and calculating their area. The data shown in the tables was obtained based on the available cartographic data – orthophoto maps and master plans.[19]

The data has enabled a comparison of the towns and reaching the conclusion about the proportion and diversity of use of landscape areas in historic towns.

The second part of the research was based on identifying the historical and contemporary models of utilisation of landscape areas. The aim was to encourage scientifically grounded further research into improvement and enhancement of the condition of landscape areas, especially those without a use.

TYPOLOGICAL CATEGORISATION OF LANDSCAPE AREAS WITHIN FORTIFIED TOWNS

TIPOLOŠKA KATEGORIZACIJA PEJSAŽNIH POVRŠINA UNUTAR UTVRĐENIH GRADOVA

Based on the utilisation criteria, nine types of landscape areas within the historic defensive/fortification walls of the 26 analysed towns have been identified in the research. They are labelled with letters A to I in Tables I and II.

The results are grouped according to town size for easier comparison. There are three groups of towns: small (up to 50 ha), medium-sized (50-250 ha), and large (more 250 ha).[20] Small towns are the most represented (15)[21], whereas there are nine medium-sized[22] and two large towns (Ferrara, Bruges). With respect to

the proportion of landscape areas, the analysed towns can be divided into three groups: towns with a large proportion of landscape areas (≥ 35%), with a medium proportion (15-35%) and a small proportion of landscape areas within town fortifications (≤15).

In the small towns group, the towns with the largest proportion of landscape areas (more than one third) include Cavtat (63%), Nin (52%), and Ston (40%). These towns do not have all types of the analysed landscape areas. But in recent time, landscape areas in these croatian towns have been very much enhanced, also through projects financed through EU funds. The other towns have less than one third of landscape areas (from 13% Binche to 33% San Gimignano). In the medium-sized and large towns group, Bergamo, Assisi, Siena and Famagusta have more than one third of landscape areas (from 36 to 47%). Other medium-sized and large towns have less than one third of landscape areas.

Public landscape areas are a characteristic of every town. With their content, form/design, location and name they are a recognisable factor of town identity. If they are large in area or connected into a system, landscape areas can have a strong formative role which means that they form the town in a recognisable way. Nine types of landscape areas have been identified: public gardens, gardens of residential buildings, walkways, agricultural areas, archaeological sites, unregulated landscape areas, natural landscape, sports grounds and car parks.

None of the towns has all nine types of landscape areas. In the small towns group only Rhodes has eight types, and in the large towns group Ferrara has seven types of landscape areas. In the small-sized towns group Kotor and Grosseto have the fewest types of landscape areas (3), while in the medium to large towns group it is Bruges (4).

• Public gardens – Public gardens (A; Tables I and II) are an intentionally formed open town space with emphasised aesthetic features and a large proportion of shrubbery/vegetation. It can be a separate space, but in the historic town it was often a decorative private garden directly connected to the building/palace. Such gardens have often become publicly available in time. Only four out of the

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18   Gaudoin, 2007

19   Typological categorisation of landscape areas was conducted for each town, but it is not graphically presented due to limited space. The tables show the proportion of a certain type of landscape area in every analysed town. The proportion of a certain type/kind of landscape area is approximate, depending on how detailed the used graphic backgrounds were. It was not possible to provide the exact overview regarding the level of regulation/design and a more detailed structure of landscape areas for all 26

26 towns have no public gardens (Cavtat, Kotor, Grosseto and Famagusta). Compared to other types of landscape areas of the analysed towns, public gardens with their total area constitute a large proportion of the town area. Among the medium-sized towns, the total area of public gardens is between approximately 1 ha (Zierikzee and Noerdlingen) and 10 ha (Siena and Pisa). Large towns have the biggest areas of public gardens – Ferrara 14 ha and Bruges 35 ha. Among small towns, there are six public gardens under 1 ha, five of them have the area between 1 and 2.9 ha and the largest public garden is in Corfu (9 ha). The percentage of public gardens in relation to the area of the medieval-Renaissance town spans between 5% (Nin) and more than 60% (Corfu and Neubrandenburg).

Although Cavtat has the largest proportion of landscape areas, it does not have a public garden as one of the important formative social-communal spaces in the town. The function of gathering people is taken over by the square and seafront. Famagusta is the only town in the medium-sized and large towns group that does not have a public garden, which is the consequence of several decades of urban degradation.

Among public gardens it is important to single out botanical gardens. Botanical gardens inside historic cores can be considered as public gardens with limited and controlled access. They can be found in Lucca (1820), Ferrara (1771), Pisa (1543), Siena (the end of the 17th cent.), Bruges (1850, at the location of a former Franciscan monastery) and Bergamo (1972). Based on the time of formation, we can trace them back to the end of the 15th cent., since they have come out of primary medicinal gardens next to monastery complexes and medical institutions. Such is, for example, the botanical garden in Pisa. Only the botanical garden in the historic part of Bergamo was created in the second half of the 20th cent., with the purpose of presenting plants characteristic of the area of Alpine Italy. Its formation helped to preserve the space from construction and to create an area with multiple benefits for the citizens of Bergamo.

• Gardens of residential buildings – Private gardens of residential buildings (B; Tables I and II) refer to gardens of family houses as well as apartment buildings, used by the oc-cupants of those buildings. They provide privacy and vary in size. Gardens of residential buildings can be found in almost all the towns. Among the small towns, Bad Radkersburg, Binche, Portoferraio, Rhodes and Nin have the largest proportion of private gardens (more than one third, between 36 and 50%). Among the medium-sized towns, Zierikzee, Noerdlingen and Pisa have the most gardens (57-67%) and among the large towns, Ferrara has 50% of gardens in the town area within the historic walls. Morella has the smallest proportion of gardens among the small towns (4%, due to indented topography), Siena among the medium-sized towns (7%) and Bruges among the large towns (12%). Large gardens between blocks of apartment buildings (Zierikzee and Ferrara) were created during later town transformations.

• Walkways – Walkways (C; Tables I and II) are defined as a public linear pedestrian town space with a significant proportion of vegetation next to it. The paper singles out spaces of larger walkways which could be identified based on the orthophoto presentation and which it was possible to outline and quantify. All the analysed towns have walkways/promenades in the form of streets or paths with tree avenues. There is a relatively large proportion of walkways in the historic urban fabric. The town of Grosseto, whose continuous space along the line of the town wall was turned into a walkway with various contents, has the largest area of walkways (85%). The Spanish town of Morella has the smallest proportion of walkways in landscape areas (less than 2%). Lucca, Bad Radkersburg, Portoferraio, Bruges and Bern have a high proportion of walkways (40-57%).

Originally, medieval-Renaissance towns did not have any tree avenues within the town walls. They were planted later, mostly in the 19th and the first half of the 20th century. Walkways are most often situated at the places of former town fortifications (Cavtat, Neubrandenburg, Grosseto). They can also be found within the urban fabric which has experienced transformation during the introduction of traffic in the town (Corfu, Madrigal de las Altas Torres). The examples of tree avenues planted within the existing historic street are rare (Morella). The towns in the plain (Lucca, Bruges, Bern) have formed walkways along or on the town fortifications relatively easily, but in later urban stages of town development. In the towns with indented topography and big differences in altitude (Siena) it is difficult to form walkways so they are scarce.

• Agricultural areas – The main characteristic of agricultural areas (D; Tables I and II) is that they are cultivated by agricultural plants (vegetables and fruit trees). These are most often original areas of the historic town, located between the last row of houses and the

0   500   1500   3000 meters

N

Cavtat

Nin

Ston

San Gimignano

Corfu

Bad Radkersburg

Kotor

Neubrandenburg

Grosseto

Madrigal de las Altas Torres

Morella
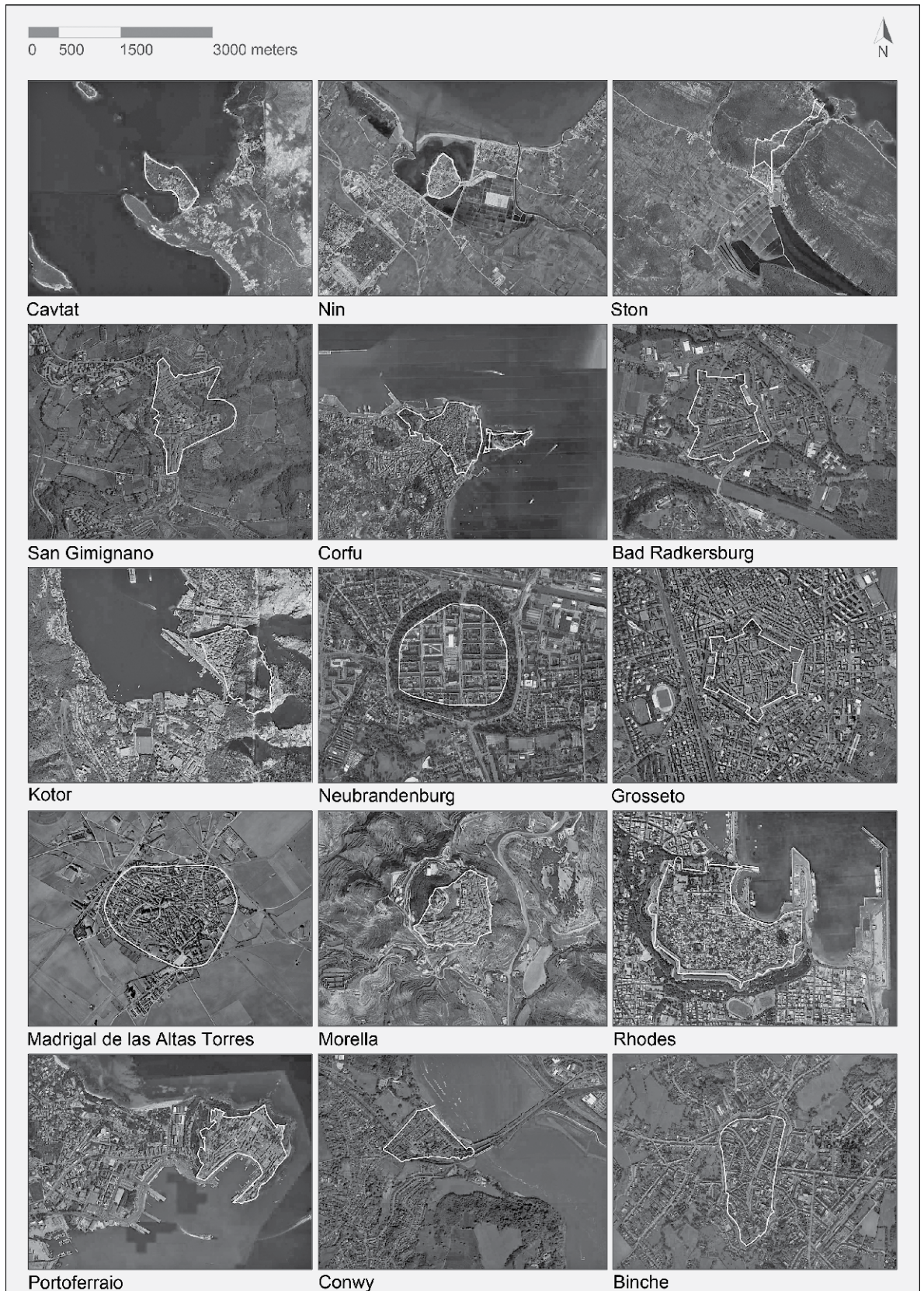
Rhodes

Portoferraio

Conwy

Binche

Table I Types of landscape areas in small towns (up to 50 ha) by current use – proportion of landscape areas in descending order
Tabl. I. Tipologija pejsažnih površina prema postojećoj namjeni u okviru malih gradova (do 50 ha) – udio pejsažnih površina od većih prema manjima

TOWN	Landscape areas (hectares) / percentage of land.sp. in the total area of the historic city*	TYPES OF LANDSCAPE AREAS : HECTARES / PERCENTAGE OF THE TOTAL LANDSCAPE AREAS								
		A. Public gardens	B. Gardens of residential buildings	C. Walkways	D. Agricultural areas	E. Archaeological sites	F. Unregulated landscape areas	G. Natural landscape	H. Sports grounds	I. Car parks**
1. CAVTAT 20.47 ha	12.90 ha 63.01%	–	1.39 ha 10.77%	0.85 ha 6.59%	1.99 ha 15.43%	***	1.24 ha 9.61%	7.38 ha 57.21%	0.05 ha 0.39%	–
2. NIN 15.66 ha	8.17 ha 52.17%	0.42 ha 5.14%	3.06 ha 37.45%	–	1.98 ha 24.24%	0.51 ha 6.24%	2.08 ha 25.46%	–	0.12 ha 1.47%	+
3. STON 5.7 ha	2.80 ha 40%	0.59 ha 21.07%	0.31 ha 11.07%	0.31 ha 11.07%	–	–	1.59 ha 56.79%	–	–	–
Glacis	11.16							11.16 ha		
4. SAN GIMIGNANO 21.35 ha	7.05 ha 33.02%	1.00 ha 14.18%	2.18 ha 30.92%	1.45 ha 20.57%	1.52 ha 21.56%	–	0.77 ha 10.92%	–	0.13 ha 1.84%	–
5. CORFU 44.57 ha	13.25 ha 29.72%	9.22 ha 69.58%	0.78 ha 5.89%	2.29 ha 17.28%	–	–	–	–	– –	0.96 ha 7.25%
6. BAD RADKERSBURG 19.74 ha	5.57 ha 28.22%	0.18 ha 3.23%	2.83 ha 50.81%	2.56 ha 45.96%	–	–	–	–	–	+
7. KOTOR 8 ha	2.07 ha 25.87%	–	0.28 ha 3.53%	0.16 ha 7.73%	–	–	–	1.63 ha 78.74%	– –	– –
Glacis	7.76*							7.76 ha		
8. NEUBRANDENBURG 40.29 ha	10.07 ha 24.99%	6.67 ha 66.24%	–	1.51 ha 14.99%	–	–	–	–	0.41 ha 4.07%	1.48 ha 14.70%
9. GROSSETO 21.78 ha	5.00 ha 22.96%	–	0.71 ha 14.20%	4.29 ha 85.80%	–	–	–	–	–	+
10. MADRIGAL DE LAS ALTAS TORRES 42.79 ha	8.97 ha 20.96%	0.82 ha 9.14%	2.78 ha 30.99%	1.01 ha 11.26%	0.35 ha 3.90%	–	4.01 ha 44.70%	–	–	+
11. MORELLA 17.96 ha	3.65 ha 20.32%	0.14 ha 3.84%	0.15 ha 4.11%	0.07 ha 1.92%	–	0.03 ha 0.82%	–	3.26 ha 89.31%	–	+
12. RHODES 47.68 ha	9.38 ha 19.67%	1.83 ha 19.51%	3.96 ha 42.22%	2.38 ha 25.37%	0.10 ha 1.07%	0.09 ha 0.96%	0.93 ha 9.91%	–	0.09 ha 0.96%	+
13. PORTOFERRAIO 17.94 ha	2.98 ha 16.61%	0.39 ha 13.09%	1.33 ha 44.63%	1.26 ha 42.28%	–	–	–	–	–	+
14. CONWY 9.68 ha	1.49 ha 15.39%	0.57 ha 38.26%	0.54 ha 36.24%	0.38 ha 25.50%	–	–	–	–	–	+
15. BINCHE 22.59 ha	3.14 ha 13.90%	1.17 ha 37.26%	1.58 ha 50.32%	0.39 ha 12.42%	–	–	–	–	–	+

* percentage number does not include glacis areas; ** includes only large areas designated for car parks; *** not included due to dispersion of locations

town fortification. In some towns (Valencia), these areas are located on a glacis, as the consequence of later conversions of use of the glacis when it lost its original defensive purpose. Agricultural areas used to be the most common original type of landscape areas of the fortified town. Today they can be found in nine towns only, seven of which are Mediterranean. Most often they are orchards and olive groves, which are simple to maintain. Agricultural areas give a rural character to a town, which is in accordance with its historic, original look. Among the small towns, Nin, San Gimignano and Cavtat have the largest proportion of agricultural areas (15-24%).[23] In the past, Ston had a large proportion of agricultural areas on the steep slope of the town, which were left to natural succession and transformation into Mediterranean shrubland and partly forest during the time. Among the medium-sized towns, Siena (50%) and Assisi (45%) have a large proportion of olive groves and orchards on the slopes on the outskirts of the town because of the terrain which is difficult to reach due to differences in altitude. The towns in the plain, such as Ferrara and Zierikzee, have a very small proportion of agricultural areas because the terrain was convenient for town expansion.

• Archaeological sites – Archaeological sites (E; Tables I and II) refer to landscape areas with archaeological remains of historic buildings or areas with presented spolia. Only large archaeological areas are presented in this research. Archaeological sites, in the sense of wider zones, can be found in only five towns – three among the small towns: Nin (6%), Rhodes (1%) and Morella (0,8%), and two among the medium-sized towns:

23 Big gardens in Nin are the consequence of demolishing the ancient-medieval urban fabric. In the case of Cavtat, the Renaissance town plan was not implemented due to the lack of citizens.

0 500 2000 4000 meters

N

Bergamo

Asissi

Sienna

Famagusta

Lucca

Zierikzee

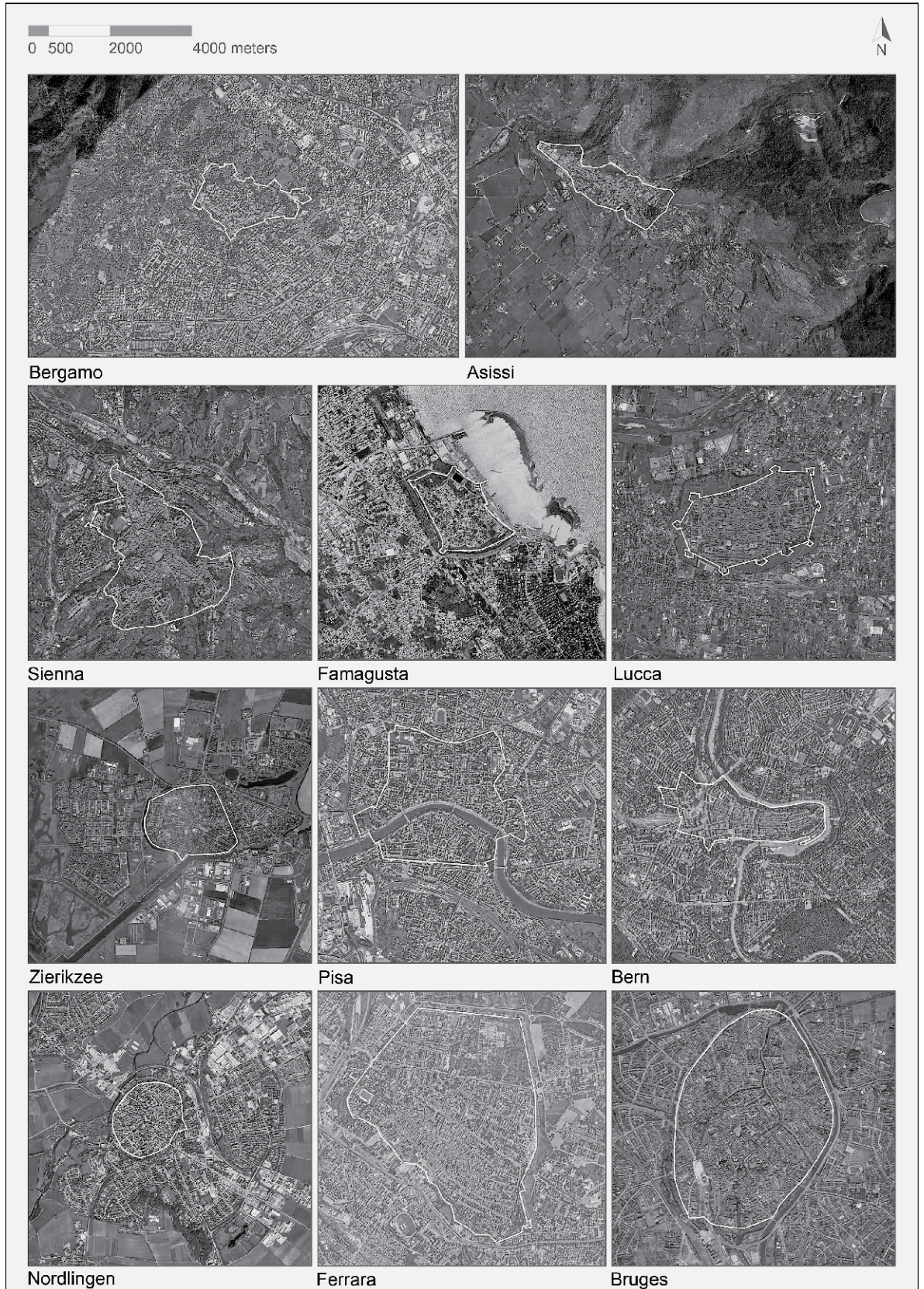Pisa

Bern

Nordlingen

Ferrara

Bruges

Table II Types of landscape areas in medium-sized (50-250 ha) and large towns (250-500 ha) by current use – proportion of landscape areas in descending order
Tabl. II. Tipovi pejsažnih površina prema postojećoj namjeni kod srednje velikih (50-250 ha) i velikih gradova (250-500 ha) – udio pejsažnih površina od većih prema manjima

TOWN	Landscape areas (hectares) / percentage of land. sp. in the total area of the historic city*	TYPES OF LANDSCAPE AREAS : HECTARES / PERCENTAGE OF THE TOTAL LANDSCAPE AREAS								
		A. Public gardens	B. Gardens of residential buildings	C. Walkways	D. Agricultural areas	E. Archaeological sites	F. Unregulated landscape areas	G. Natural landscape	H. Sports grounds	I. Car parks**
MEDIUM-SIZED TOWNS										
1. BERGAMO 59.48 ha	28.20 ha 47.41%	13.90 ha 49.29 %	8.00 ha 28.37%	1.33 ha 4.72%	–	–	–	4.80 ha 17.02%	0.17 ha 0.60 %	+
2. ASSISI 70.15 ha	31.47 ha 44.86%	1.23 ha 3.91%	7.06 ha 22.43%	3.37 ha 10.71%	14.12 ha 44.87%	–	0.60 ha 1.91%	5.09 ha 16.17%	–	+
3. SIENA 173.53 ha	63.66 ha 36.70%	10.01 ha 15.72%	4.64 ha 7.29%	3.06 ha 4.80%	32.23 ha 50.60 %	–	–	11.13 ha 17.48%	2.62 ha 4.11%	–
4. FAMAGUSTA 58.00 ha	21.09 ha 36.36%	–	3.79 ha 17.97%	1.03 ha 4.88%	–	1.73 ha 8.20%	13.65 ha 64.72%	–	0.89 ha 4.22%	+
5. LUCCA 130.91 ha	33.76 ha 25.79%	5.03 ha 14.90%	8.65 ha 25.62%	19.29 ha 57.14%	–	–	0.66 ha 1.95%	–	0.13 ha 0.39%	+
6. ZIERIKZEE 66.67 ha	16.62 ha 24.93%	1.05 ha 6.32%	11.16 ha 67.15%	3.19 ha 19.19%	0.34 ha 2.05%	–	–	–	–	0.88 ha 5.29%
7. PISA 204.02 ha	38.50 ha 18.87%	9.33 ha 24.23%	22.05 ha 57.27%	2.06 ha 5.35%	–	4.40 ha 11.43%	–	–	–	0.66 ha 1.71%
8. BERN 93.27 ha	13.81 ha 14.81%	3.25 ha 23.53%	4.67 ha 33.82%	5.55 ha 40.19%	–	–	–	–	0.20 ha 1.45%	0.14 ha 1.01%
9. NOERLINDGEN 53.30 ha	4.96 ha 9.30%	1.21 ha 24.40%	3.17 ha 63.91%	0.53 ha 10.68%	–	–	–	–	0.05 ha 1.01%	+
LARGE TOWNS										
1. FERRARA 447.61 ha	132.07 ha 29.50%	14.66 ha 11.10%	67.40 ha 51.03%	34.57 ha 26.18%	5.92 ha 4.48%	–	3.51 ha 2.66%	–	3.86 ha 2.92%	2.15 ha 1.63%
2. BRUGES 386.41 ha	74.35 ha 19.24%	35.38 ha 47.59%	8.99 ha 12.09%	29.98 ha 40.32%	–	–	–	–	–	+

* percentage number does not include glacis areas; ** includes only large areas designated for car parks

Pisa (11%) and Famagusta (8%). There are significant archaeological sites in the historic Cavtat. These are mostly archaeological sites with archaeological artefacts presented *in situ*. Recently, *shared landscapes*[24] have been mentioned in the sense of utilisation, which implies that an archaeological site can at the same time be a landscape area used for rest and spending time together, but with a clearly defined utilisation regime.

• Unregulated landscape areas – Unregulated landscape areas (F; Tables I and II) imply areas without a use, neglected, on which vegetation is the result of natural succession (weed or ruderal vegetation). Unregulated landscape areas have been identified in 10 towns – in six small towns and in four medium-sized and large towns, mostly in the Mediterranean area. Famagusta (64%), Ston (56%), Madrigal de las Altas Torres (44%) and Nin (25%) have a significant proportion of unregulated areas in the total landscape area. Three towns have 9-10% (San Gimignano, Rhodes, Cavtat), while Assisi, Lucca, and Ferrara have only 1-2% of unregulated landscape areas. The large amount of unregulated landscape areas in Famagusta is not surprising considering the big number of degraded spaces within the historic core which

are the consequence of the Turkish-Greek war in the 1970s, which Famagusta has still not recovered from.

• Natural landscape – Natural landscape (G; Tables I and II) implies areas in which the natural stand of forest vegetation characteristic of that area is significantly represented. Natural landscapes have been identified in seven towns. Among the small towns, Morella (88%), Kotor (78%) and Cavtat (57%) have a significant proportion of natural landscapes. All those spaces are covered with forest vegetation and are located on the slope on the outskirts of the town. The areas on the glacis are exempted from the analysis. Among the medium-sized towns, Siena and Assisi have 16-17% of natural landscapes out of the total landscape areas.

• Sports grounds – Sports grounds (H; Tables I and II) imply planned spaces for a certain kind of sport and recreation. There are twelve towns with sports grounds – five among the small towns, six among the medium-sized towns and one in Ferrara as an example of a large town. Cavtat (0.4%, tennis courts) has the fewest sports grounds, while Famagusta, Siena and Neubrandenbug have the most (around 4%).

• Car parks – Car parks (I; Tables I and II) refer to car parks of larger areas which it was possible to single out from the orthophoto

24 Harrison, 2004

representation. The paper does not cover all the linear car parks (along the streets). Traffic is not allowed in five towns only and there are no car parks within the fortified historic core. These are the small towns of Cavtat, Ston, San Gimignano, Kotor and the medium-sized town of Siena. Larger car park areas have been identified in Neubrandenburg (15%), Corfu (7%) and Zierikzee (5%). The medium-sized towns have experienced greater transformation of urban fabric than the smaller fortified historic towns.

Typological categorisation conclusion – By analysing the results obtained from the typological categorisation of landscape areas within the fortifications of medieval-Renaissance towns, from the aspect of urbanity and diversity of public landscape areas of different contents and functions, we can conclude that public gardens and walkways are among the most important town spaces because they have a formative role (they form the town and its experiential image in an urban way) and they enable social activities and integration of citizens. All the analysed towns have a walkway, only four towns have no public garden but most often the towns have both the public garden and the walkway. A large representation of walkways (streets with tree avenues) indicates a high level of infrastructural facilities in towns, which ensures better quality of life in the town for its citizens. The level of their regulation, the types of content and the standard of regulation and design considerably affect the level of the formative role of landscape areas. Their mere existence is a value and potential for the future.

The Mediterranean towns have the largest proportion of gardens of residential buildings, mostly due to a favourable climate which is why each free space is designed for spending time outside. Gardens of residential buildings, as well as landscape areas between apartment buildings, are an indicator of the level of 'comfort' of living in the town. Their existence is the result of historic condition or later reconstructions. Today they represent a value for the town citizens and they should not be subjected to the conversion of use for the purpose of new construction.

Agricultural areas are a special value of the historic fortified town. They have been preserved in only one third of the analysed towns. They are located between the last row of houses and the town fortification. If they are located in the central part of the town, it indicates that they are the consequence of demolishing the medieval layer of the town. Agricultural areas were present in all the historic towns. Their role in the medieval pro-

duction of food was big, especially at the time of town sieges.

Archaeological sites as wider zones[25] experienced as landscape areas within the historic town are present in a small number of towns. Such spaces contribute to identity features and they are a great cultural and urban value. As such, they should be exempted from new construction.

Unregulated landscape areas without content and specific purpose are the biggest potential of fortified historic towns for contemporary use and meaningful design. They are common in historic towns, which is why they should be wisely used and appropriately regulated in order to contribute to the enhancement of historic towns.

Natural landscapes (natural landscape areas) have an ecological and recreational role, especially in fortified towns with dense urban fabric. Aesthetically, they often have the function of a counterpoint to the town core built in stone. Such spaces should be exempted from the conversion of use.

Sports grounds do not take up large areas and they are not found in all the towns, but they are an important content in the function of sustainability of living in the historic town cores. Considering their historical formative context, the proportion of such spaces in the urban fabric, their location and design have to be thought out and integrated with high vegetation. For example, the tennis court in Cavtat is hidden within a dense pine wood and it is not in conflict with the historic urban fabric.

It can be derived from the analysis of the towns' fabric that the level of preservation of the urban fabric conditions the possibility of making a sports ground one of the contemporary purposes of public landscape areas. The more preserved the historic urban core is, the lower is the possibility of balanced interpolation of the sports ground, which has certain prescribed dimensions and form that can be mitigated only to a smaller extent by designing a higher proportion of vegetation. Another factor is the size of the historic town. The smaller the historic town with the preserved historic fabric is, the harder it is to fit in such purpose conditioned by shape, size and orientation. Larger historic fortified towns in that sense have a greater possibility for balanced integration of a purpose with a defined shape and size.

Car parks do not belong within the historic fortified town. This is especially true for small towns, which need to preserve their original character.

Valorisation of Landscape Areas within Fortified Towns

Vrjednovanje pejsažnih površina unutar utvrđenih gradova

The conducted research has enabled the identification of kinds/types of landscape areas within the historic cores of towns and determining their identity features. From the *Heritage Urbanism* point of view, such results will be the starting points for the enhancement of landscape areas in fortified towns. Towns are living organisms so it is not possible only to preserve landscape areas the way they currently are, but rather it is necessary to enhance them – restore them, sometimes revitalise, modernise and integrate into contemporary life, just as those landscape areas were originally intended for some purpose. The first step towards the enhancement and improvement is valuation of certain landscape areas as a part of cultural heritage.[26]

Valorisation implies assessment of certain features by differentiating between general and specific values of landscape areas. The aim is to identify the specificity and uniqueness of certain types and certain landscape areas. Depending on that, the criteria for preservation and new interventions in such spaces are set – on a general or specific level of the landscape areas we research, thus preparing urban or design steps for current or future intervention in those spaces. The conducted analyses of landscape areas of historic towns provide us with the criteria important for preservation and enhancement of landscape areas, and thus the improvement of the towns themselves.

In the analysis of landscape areas within the fortified medieval-Renaissance towns we have determined generalised valorisation criteria, which are applicable in the valorisation of all landscape areas in historic towns, especially those which affect the social and spatial connection of town areas.

The first criterion is the *criterion of preservation/authenticity* of the original urban fabric and the original landscape area with regard to its purpose, area and form/design. The more those spaces are preserved and closer to the original features, the greater their value is, so contemporary interventions in them are less sensitive and less probable. In that case, the criterion/condition of preserving the historic matrix is set, which implies the

use of conservation and restoration of landscape areas.

The *criterion of urban coherence* implies the balance of architectural structures and landscape areas with regard to purpose (use), design and infrastructural facilities. The balance comes from acknowledging the identity features and values of landscape areas and a comprehensive and multidisciplinary consideration of a town. Functional use by domicile citizens, and not only by visitors (tourists), is important for public landscape areas in historic parts of towns

The *criterion of creation* takes into consideration contribution to the creation of the system of urban fabric together with other landscape areas in the sense of physical and spatial connectivity, as well as content complementation. Public landscape areas can be formative (have the urban planning power) only by creating a system of public spaces and a system of 'soft' fabric in the historic town centres.

The *ecological criterion* will be applicable in cases with predominantly high vegetation (groves and trees) which contribute to the hygienic-sanitary function of a town. Although such areas are relatively small compared to the town as a whole, they are important within the historic urban fabric because they enable ecological continuity from the landscape surroundings of the town to its historic centre.

The *aesthetic criterion* implies a high level of creative (artistic) reach which will contribute to the quality of public space in the historic urban fabric. This criterion will have its application in regulating landscape areas, connecting them with the town, introducing new content and urban facilities into especially valuable historic town parts.

The *criterion of cultural importance* implies acknowledging the historicity of landscape areas in the sense of former (historic) events connected with them, as well as the use of historic elements in the (re)design of space. This can contribute to cultural enrichment of space and strengthening its identity, as well as to connectivity to the historic town in which that space was created and originally used.

The *criterion of identity* is a sort of a compendium of all the criteria. In cases of landscape areas with a high level of identity values which stem from historicity, interesting contents and design attractiveness, that criterion can be set above all the other previously stated criteria. This criterion has in itself a predominantly historic character of landscape area if that character significantly identifies the landscape area and connects it to the historic town.

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25 In this paper it was neither possible nor necessary to look at singular positions of archaeological sites within the historic fortified town. Larger archaeological zones have the potential for the town's open public space.

26 Obad Šćitaroci, 2015a, 2017

Regarding the valorisation of landscape areas in the context of the historic town, in conclusion we can emphasise the relationship between valorisation and contemporary interventions in landscape areas. The more authentic and valuable the features of landscape areas are, the more restrictive the approach regarding new or different use of landscape areas will be, especially in the case of new construction and contemporary interventions. The restriction may require a complete ban of the conversion of use and intensive use of landscape areas in the historic urban fabric.

Enhancement of Landscape Areas within Fortified Towns

Unaprijeđenje pejsažnih površina unutar utvrđenih gradova

Determining the identity features and then valorising landscape areas is a prerequisite for a scientifically grounded and professionally relevant consideration of enhancement of landscape areas in the historic town, which are considered as cultural heritage. Although landscape areas do not necessarily need to be registered cultural heritage as separate spaces, they belong to the cultural-historic totality of a town and they are an inseparable part of the historic town core. That is why the criteria and models of restoration, revitalisation and enhancement of historic parts of towns are also applicable to the landscape areas in a town, whether they are public or private landscape areas.

More extensive research, under which this paper was also created, is directed towards finding spatial and urban models for the revitalisation and enhancement of cultural heritage which is contained in the *Heritage Urbanism* method. Researching the models for revitalisation, enhancement and sustainable use of cultural heritage on historic and contemporary examples of diverse types of heritage has led to 17 models divided into three groups: universal heritage models[27], basic heritage models[28] and thematic models of the heritage approach.[29] Landscape areas are one of the topics of the research. Spatial and urban models for the enhancement of landscape areas, especially historical gardens and parks, were one of the research questions.[30] That research is compatible with the issues of enhancement of landscape areas within the fortifications of medieval-Renaissance towns, which is the topic of this paper.

The 17 above-mentioned models can be applied to landscape heritage too, as well as to landscape areas within fortified medieval towns. Universal models are applicable in all cases of heritage revitalisation. Basic models arise from spatial and urban consideration of heritage in its context and are often related to conversion/transformation of heritage. Thematic models arise from the multidisciplinary and transdisciplinary view, which encourages new ideas and different patterns in the revitalisation of heritage. Their application is especially suitable for heritage revitalisation projects.

In all nine identified types of landscape areas presented in this paper it is possible to apply the criteria and models for the enhancement of cultural heritage in the context of *Heritage Urbanism*.

The aim of the research in this paper was not to check the application of the 17 mentioned models. The aim was to identify the groups of common features of landscape areas among 26 (31)[31] towns among which it is possible

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27 Protection and conservation model, Heritage revitalisation model, Heritage enhancement model, Heritage re-use models, Economic heritage model (model of economic sustainability), Legal heritage model

28 Urban/spatial heritage model, Heritage transformation model, Heritage integration model, Heritage interaction model (multidisciplinary approach), Heritage sustainable development model

29 System model, Architectural and design model, Cultural tourism model, Experiential model, Ambient authenticity model, Landscape-ecological model

30 Marić, Obad Šćitaroci, 2017; Obad Šćitaroci, Bojanić, Radić Knežević, 2017; Vahtar-Jurković, Obad Šćitaroci, Bojanić, 2017

31 Nine types of landscape areas have been identified in 31 towns – five new towns were added to the 26 studied towns listed in the tables: Istanbul/Turkey, Jerusalem/Israel, Palma de Mallorca/Spain, Cascais/Portugal, Cagliari/Italy

32 We have studied contemporary interventions in open landscape areas, inside the fortification wall and within the outer fortification line equally.

33 Historic maps show that there were different types of landscape areas in the historic core of Bruges: kitchen gardens, orchards, closed monastery gardens, private gardens and the so-called *bleachfields* – fields in which textile was bleached. During the construction of streets and houses in the 19th cent. many landscape areas disappeared, but even today in the historic centre there is a significant proportion of landscape areas in the town fabric (20%), most of which are public gardens. The first public garden was created in the 19th century. Queen Astrid Park botanical garden was created in 1850, at the place of a former Franciscan monastery (it is the oldest public garden in Bruges). Since the 1970s onward, many private gardens have been transformed into public gardens. [*** 2012a]

34 Next to the remains of the town wall (fortification) from the 5th century, built by Theodosius II, there are historic vegetable gardens known as Bostans gardens. The entire landscape belt next to the historic town wall on the area of 16.5 ha is under UNESCO protection, in the category of Outstanding Universal Value [OUV]. Bostans gardens witness the continuity of agricultural activity for over 1500 years. Renewal projects are being carried out by which the space is irrevocably changing. Landscape areas are not considered in their entirety. Along the wall, individual projects by private investors are being carried out, which perceive only the attractiveness for construction. That is why several projects of new residential areas with shopping centres are planned. The historicity of space is negated, residential buildings are situated immediately next to the town wall which prevents its presentation. [Çorakbaş,

to develop models for the enhancement of landscape areas. We have identified three approaches to the treatment of landscape areas within the fortified historic towns which we have named active approach, conservation approach and incidental (spontaneous) approach.

• The active approach – The active approach identifies landscape areas as spatial-content potential of a town, that is, as spaces for new construction or new contents.[32] The risks of such an approach are great because, besides positive effects, negative consequences are also possible. Three contemporary models have been identified: 1) systematic transformations of the historic town whereby landscape areas have a public function (Bruges[33]), 2) unsystematic and entrepreneurial transformations whereby landscape areas lose their identity, diminish or disappear (Is-

tanbul[34]) and 3) activation of moats and glacises in order to restore the historic town[35] (Palma de Mallorca[36], Cascais[37], Jerusalem[38], Cagliari[39]).

• The conservation approach – The conservation approach has been identified in almost all of the analysed towns. It implies the preservation of former landscape areas of the historic town, mostly by maintaining the existing state and without studying the identity features which have faded or disappeared throughout time. Landscape areas are generally cultivated, kept from construction and usually considered as neutral town space, whose design is more often left to the work of nature than human formation. Minimum contents are sometimes introduced (sitting, children's play). Landscape areas are not usually identified as formative (integrative) elements of a historic town on the planning, formative and sociological level.

• The incidental (spontaneous) approach – The incidental approach is not common among European examples. It implies neglected, unbuilt areas where vegetation spontaneously develops due to not using, demolishing or restoring historic buildings. This approach is characterised by complete lack of the concept and awareness of the importance of landscape areas in the historic town.[40]

The identified approaches and the models arising from them are not patterns to be copied because they are not necessarily applicable in every fortified town. How appropriate a certain model is depends on the specificity of spatial circumstances, preservation of the historical layout and urban fabric, original matrix of the landscape area, town character, its size, strategic activities etc. The models are not ideal patterns, let alone 'templates', but rather they are the orientation based on which the criteria for the enhancement and improvement of landscape areas and the historic town as a whole are set. In order to enhance and improve specific landscape areas in a specific town, it is necessary to find new, appropriate models, or to adjust the already identified ones – in accordance with the identity features, valorisation and the set criteria for new interventions arising from that – which will contribute to a higher quality of not only landscape areas but of historic town parts too.

For the purpose of enhancing landscape areas, the treatment will not be the same for all. Some approaches will be focused on maintenance (conservation) if landscape areas are well preserved in their original or later transformed form and if they fulfil the expected criteria with their function and form. Some landscape areas will require recon-

Aksoy, Ricci, 2014; http://culinarybackstreets.com/cities-category/istanbul/2013/yedikule/ /12.8.2018./; https://cityandagricultureistanbul.org/ /12.8.2018./; http://www.citylab.com/politics/2013/07/centuries-old-gardens-are-latest-battleground-rapidly-developing-istanbul/6192/ /12.8.2018./]

35 In addition to the restoration of parts or the entire fortification system surrounding the town wall, the aim is to enhance the functional aspect of the historic core by using the moat and glacis to connect the historical and the "new" town. The former external fortification spaces, which continue outside of the town wall, experienced transformations as early as the 19th century when they were transformed into public gardens [Krajnik, Obad Šćitaroci, Bojanić, 2008; Krajnik, Obad Šćitaroci, Šmit, 2008; Krajnik, 2011]. Recently, this model is being modernised with new construction interventions, but not compromising the identity of space of former fortifications.

36 In 1991, Spanish architects Elías Torres and José Antonio Martínez Lapeña restored the promenade (Paseo) along the town wall with a pronounced covered walkway that connects the garden with the historic core within the walls. In 2013, they made a new project for Baluarte del Principe (Prince's Bastion) – the bastion was restored and the walkway/promenade, with the addition of ramps, goes all the way up the bastion where it turns into a square. [Sebastián Sebastián, Aguiló, Mulet 2017]

37 Transformation of D. Diogo de Menezes square project (Portugal) in 2015 (studio Miguel Arruda Arquitecros Associados) offers the construction of an underground parking garage above which a square/multifunctional promenade was designed with the surface broken into two levels due to terrain configuration. [http://www.plataformaarquitectura.cl/cl/768200/plaza-d-diogo-de-menezes-miguel-arruda-arquitectos-associados /16.8.2018./]

38 Teddy Park in Jerusalem, opened in 2013, was established on the site of a former glacis. It makes use of lightscape and soundscape. [http://www.jerusalemfoundation.org/news-updates/2014/the-2014-design-award-competition-winner-teddy-park-in-jerusalem.aspx /16.8.2018./]

39 http://www.comune.cagliari.it/portale/ambiente/at01_giard_sot_mura [12.8.2018.]

40 Famagusta (Cyprus) is the example with the largest proportion of landscape areas within the town fortifications (65%). Historically and civilisation-wise, it is a multifaceted town where several peoples and religions have left their mark on its architectural features, from ancient times onward. The town's historical heritage has been devastated, neglected, and left to decay. As a result, in 2007 Famagusta was listed among the world's one hundred most endangered cultural heritage sites.

struction (restoration) of their historic appearance and function (original or later developmental stages) if they are neglected and faded. Some might experience transformation (conversion) of form and content if they are without identity and function, in order to be actively integrated into town life. Some, most or all landscape areas can significantly contribute to the revitalisation of the historic town core, the increase in the standard of living in it or visiting it and to the increase of tourist attractiveness of a historic town.

Public gardens and walkways maintain their purpose and historic appearance, but exceptionally they can undergo modernisation if it is professionally legitimate and scientifically grounded. The gardens of family houses and residential buildings need to be maintained and, if necessary, modernised for the citizens' use (spending time outdoors, children's play etc.). Agricultural areas will be difficult to preserve in their original (historic) form in the historic town cores, so in legitimate cases it is possible to transform them into public gardens, walkways or gardens for educational use. Archaeological sites have cultural and content potential which needs to be used to make those spaces visible and available with appropriate archaeological presentation and landscape design. Unregulated landscape areas, without a purpose or content, have the biggest potential but also the biggest risk of conversion for the purpose of construction, which should certainly be prevented. The right approach is the conversion of use or transformation into exclusively public space, closest to the public gardens or walkways type. Natural landscape, which is most often the relic of once large natural forests, should be preserved and maintained so that being in it is functional and safe. Sports grounds are desirable to a certain degree because they contribute to the citizens' standard of living, so they should be enhanced and the vegetation next to them should be increased. Expansions of sports grounds are not appropriate if that reduces the areas under vegetation. Car parks are sometimes necessary, but not desirable in the historic town centres. With appropriate urban planning solutions, it is possible to remove larger car parks from the historic town cores and to give them the public landscape area character.

A good example of the enhancement of landscape areas in the historic town core is the town of Bruges, whose historic core is under UNESCO protection.[41] According to the 2012 management plan, there are four main types of open public spaces: 1) protected (they are maintained as they are), 2) public gardens and squares important for town districts, 3) landscape areas in need of restoration and enhancement, 4) spaces for transformation for the purpose of new pedestrian areas. Many of the projects that have enhanced the landscape areas of the historic core of Bruges were done in the 2001-2002 period when Bruges was the European capital of culture.[42]

Conclusion

Zaključak

Although spatially limited by a wall and often small in size, historic towns of the medieval-Renaissance fabric and distinct fortifications from the Renaissance and Baroque period have different types of open public spaces. The research on 26 European towns has identified nine types of mainly landscape areas: public gardens, walkways, gardens of residential buildings, agricultural areas, archaeological sites, unregulated landscape areas, natural landscape, sports grounds and car parks. Archaeological sites and sports grounds are mostly of landscape character with vegetation. Only car parks cannot be considered landscape areas, although they can become ones by planting trees.

Identifying the types of landscape areas enables us to determine the identity features of each type. Based on those features, we can set the criteria for the valorisation of landscape areas in the context of the historic urban fabric in which they are situated. Seven criteria for valorisation have been determined: the criterion of preservation/authenticity, urban coherence, creation (how they form the town), ecological criterion, aesthetic, cultural importance criterion and the criterion of identity of landscape areas.

A town is a living organism and it is impossible to halt its development, transformations and adaptations to contemporary needs and technological advances. Thus, after determining the values of landscape areas, the research of historic and contemporary utilisation models is initiated in order to identify the possible models for future interventions and enhancement of landscape areas. The models imply principles for the approach and con-

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41 The important characteristics of the activity: balanced expansion of different kinds of landscape areas in the historic town centre; connection of individual landscape areas into a unique network, valorisation of landscape areas, opening and connection with nearby buildings, protection of valuable closed spaces. [*** 2012b; *** 2012c]

42 The developers wanted to make use of the last public spaces in the historic town centre for the construction of new residential buildings. Aware of those pressures, the town authorities created the *Landscape area Policy Plan* in which all the landscape areas were mapped and valuated and the measures for managing, that is, limiting construction were imposed. Sixteen types of public landscape areas were identified and the activity policy was determined (previous footnote). [http://www.b2ai.com/en/projects/detail/policy-plan-for-open-spaces-in-the-historical-center-of-brugge. /12.8.2018./]

sideration, not technical patterns and ready-made solutions. Such an approach contributes to the objectivity of decisions about the use of landscape areas in the historic urban fabric, it contributes to the preservation of historic features and values, enables the variety of use and social inclusion of citizens and visitors.

Determining the purpose and design standard of landscape areas cannot be generalised, but rather it depends on various impact factors and the criteria arising from the valorisation of such spaces. However, scientifically grounded consideration of enhancement and modernisation of public spaces is possible, which includes landscape areas too.

The research presented in this paper can find practical application in the field of urban planning, landscape design, protection of cultural heritage, restoration of buildings and landscape heritage and in the management of historic town parts.

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Illustration and Table Sources

Izvori ilustracija i tablica

Fig. 1 Photo: Ana Sopina
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Summary

Sažetak

Pejsažne površine unutar utvrđenih srednjovjekovno-renesansnih gradova

Tipologija, vrjednovanje i unaprijeđenje

Istraživanje prikazano u ovome radu dio je opsežnih istraživanja koja su rađena u sklopu znanstvenog projekta Urbanizam naslijeđa / *Heritage Urbanism*. Ovaj je rad posvećen tipološkom razvrstanju pejsažnih površina unutar gradskoga zida 26 povijesnih srednjovjekovno-renesansnih gradova na području Mediterana i zapadne Europe. Pejsažnim površinama u ovome se radu smatraju neizgrađene uređene ili neuređene površine koje su nastale planiranjem, kultiviranjem ili prirodnom sukcesijom vegetacije. Te su se površine u prošlosti koristile na različite načine. Istraživanjem su utvrđene aktualne namjene pejsažnih površina, a zatim su istraženi kriteriji za njihovu valorizaciju i unapređenje.

Postavljena su tri istraživačka pitanja: 1) koji se tipovi (namjene) pejsažnih površina pojavljuju unutar srednjovjekovno-renesansnih dijelova gradova, 2) kako utvrditi kriterije za njihovo vrjednovanje i 3) koji su mogući modeli za suvremeno i buduće korištenje pejsažnih površina u povijesnim dijelovima grada?

Prepoznato je devet tipova pejsažnih površina: perivoji/parkovi, šetališta, vrtovi stambenih zgrada (obiteljskih kuća i višestambenih zgrada), poljodjelske površine, arheološka nalazišta (zone), neuređene površine pod nasadima, ostatci prirodnog pejsaža, sportska igrališta i parkirališta. Za svaki tip istražena su identitetska obilježja. Slijedom obilježja postavljaju se kriteriji vrjednovanja u kontekstu povijesnoga tkiva grada. Utvrđeno je sedam kriterija za vrjednovanje: očuvanosti/autentičnosti, urbanističke koherentnosti, gradotvornosti (kako grade grad), ekološki, estetski, kulturnog značenja i kriterij identiteta pejsažnih površina.

Vrjednovanje prethodi odlukama i projektiranju za suvremene zahvate u pejsažne površine. Što su obilježja pejsažnih površina autentičnija i vrjednija, to će biti restriktivniji pristup u pogledu novoga ili drukčijega korištenja takvih prostora, posebice u slučaju nove izgradnje i suvremenih zahvata. Ograničavanje može zahtijevati i potpunu zabranu prenamjene i intenzivnog korištenja pejsažnih površina u tkivu povijesnoga grada.

Nakon vrjednovanja provelo se istraživanje povijesnih i suvremenih pristupa i modela korištenja.

Prepoznata su tri pristupa s modelima za korištenje pejsažnih prostora unutar povijesnih jezgri gradova. Pod modelima podrazumijevaju se načela pristupa i promišljanja, a ne tehnički predlošci i gotova rješenja. Takav pristup pridonosi objektivnosti odluka o budućem korištenju pejsažnih površina u povijesnom tkivu grada, pridonosi očuvanju povijesnih obilježja i vrijednosti, omogućava raznolikost korištenja i socijalnu inkluzivnost stanovnika i posjetitelja.

Zaključuje se da su javni perivoji i šetališta/promenade jedan od najvažnijih prostora povijesnoga dijela grada jer imaju gradotvornu ulogu (urbanistički grade grad i njegovu doživljajnu sliku) te omogućuju društvene aktivnosti i integraciju stanovnika. Svi analizirani gradovi imaju šetalište, javni perivoj nemaju samo četiri grada, tako da najčešće gradovi imaju oboje – i perivoj i šetalište. Velika zastupljenost šetališta (ulica s drvoredima) ukazuje na visoku razinu infrastrukturne opremljenosti gradova, što stanovnicima osigurava bolju vrsnoću života u gradu. Razina njihove uređenosti, vrste sadržaja te standard uređenja i oblikovanja bitno utječu na razinu gradotvornosti pejsažnih površina. Već samo njihovo postojanje u povijesnim dijelovima grada jest vrijednost i potencijal za budućnost.

Mediteranski gradovi imaju najveći udio vrtova stambenih zgrada, ponajprije zbog povoljnih klimatskih prilika, pa se svaki slobodan prostor uređuje za boravak na otvorenom prostoru. Vrtovi obiteljskih kuća, kao i pejsažne površine između višestambenih zgrada, pokazatelji su razine 'ugodnosti' života u gradu. Njihovo postojanje rezultat je povijesnoga stanja ili kasnijih rekonstrukcija. Oni danas predstavljaju vrijednost za stanovnike pa ne bi trebali biti predmet prenamjene za potrebe nove izgradnje.

Poljodjelske površine posebna su vrijednost povijesnoga utvrđenoga grada. Ostale su sačuvane samo u trećini istraživanih gradova. Smještene su između zadnjega reda kuća i gradskog utvrđenja. Ako se nalaze u središnjem dijelu grada, tada je to najčešće posljedica rušenja srednjovjekovnoga sloja grada. Poljodjelske površine bile su u svim povijesnim gradovima. Njihova uloga u srednjovjekovnoj proizvodnji hrane bila je velika, posebice u doba opsada gradova.

Arheološka nalazišta doživljena kao pejsažne površine unutar povijesnoga grada prisutna su u malom broju gradova. Takvi prostori pridonose identitetskim obilježjima i velika su kulturološka i urbanistička vrijednost pa ih treba izuzeti od nove izgradnje.

Neuređene površine pod nasadima bez sadržaja i bez konkretne namjene najveći su potencijal utvrđenih povijesnih gradova za suvremeno korištenje i smisleno oblikovanje. Česte su u povijesnim gradovima te ih valja razborito koristiti i primjereno urediti da bi mogle pridonijeti unapređenju povijesnih gradova.

Prirodni pejsažni prostori – najčešće sačuvani dijelovi prirodnih šuma – imaju ekološku i rekreacijsku ulogu, posebice u utvrđenim gradovima gustoga urbanoga tkiva. U estetskom smislu često imaju funkciju kontraposta izgrađenoj gradskoj jezgri u kamenu ili opeci. Takve prostore potrebno je izuzeti od prenamjene.

Sportska igrališta ne zauzimaju velike površine niti ih nalazimo u svim gradovima, ali su ona važan sadržaj u funkciji održivosti stanovanja u povijesnim gradskim jezgrama. S obzirom na povijesni graditeljski kontekst, udio takvih prostora u tkivu grada, njihov smještaj i oblikovanje trebaju biti promišljeni i uklopljeni u visoke nasade.

Parkiralištima automobila nije mjesto unutar povijesnoga utvrđenoga grada. Posebice se to odnosi na male gradove, kojima treba sačuvati izvorni karakter.

Određivanje namjene i oblikovnog standarda pejsažnih površina nije moguće uopćiti, već ovisi o različitim čimbenicima utjecaja i kriterijima koji proizlaze iz vrjednovanja takvih površina. Međutim, moguće je i potrebno znanstveno utemeljeno promišljanje o unapređenju i osuvremenjivanju javnih prostora, među kojima su i pejsažne površine. Istraživanja prikazana u ovome radu mogu imati praktičnu primjenu u području urbanističkog planiranja, arhitektonskog projektiranja, pejsažnog projektiranja, zaštiti kulturnoga naslijeđa, obnovi graditeljskoga i pejsažnoga naslijeđa te u upravljanju povijesnim dijelovima grada.

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