

TEORIJA IN PRAKSA UREJANJA PROSTORA

# IGRA USTVA RJAVNOSTI

THE CREATI  
VING GAME

ŠT. 10 / 2022

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THEORY AND PRACTICE OF SPATIAL PLANNING

Univerza v Ljubljani





# IGRA USTVARJALNOSTI

## TEORIJA IN PRAKSA UREJANJA PROSTORA

ŠT. 10 / 2022 | NO 10 / 2022

# CREATIVITY GAME

## THEORY AND PRACTICE OF SPATIAL PLANNING



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I.

UVODNIK

EDITORIAL

# Barvita igra ustvarjalnosti



Ob zaključevanju redakcije revije za leto 2022 smo leto sklenili z zanimivim sodelovanjem z Muzejem za arhitekturo in oblikovanje (MAO). Ob večji zalogi legokock, ki jih je muzeju nedavno izročila Mija Razpotnik, smo se domislili, da pripravimo študentsko delavnico na temo poustvarjanja Plečnikovih del s to preprosto, a večno igračo. Obdobje po izbruhu pandemije je zaznamovalo vsako obliko ustvarjanja – znanstveno, umetniško, strokovno in pedagoško. Delo s študenti se je v letu 2022 še vedno odvijalo pod vtigom omejitve za omejevanje širjenja pandemije, druženje ob študiju pa je večinoma zastalo.

Danes si težko zamislimo otroške igrače, ne da bi pomislili tudi na legokocke. Te so tako razširjene, da skoraj ni dela sveta, kjer jih ne bi bilo mogoče dobiti, v zahodni družbi pa so postale del kulture, v kateri so zasidrane že desetletja. Vse se vedno začne z živobarvno potiskano škatlo, ki obljublja marsikaj, v skrbno zbranih vrečkah pa so gradniki, kocke, ki so same po sebi daleč od zamišljene končne podobe. V škatli so praviloma tudi navodila, ta so kratka ali zelo obsežna, a vedno na preprost način in po korakih vodijo do rezultata. V nekaterih kompletih so običajno navodila z več različicami ob uporabi istih kock. Vsak uporabnik teh kock lahko vedno začne graditi sam, brez pomoči knjižice, takrat so možnosti neomejene. Vzporednice z urbanizmom ni težko potegniti, saj so stavbe in prostor tisto, kar iz legokock največkrat nastane. Vendar na arhitekturo spo-

minja tudi proces sestavljanja. Začne se s preprostimi elementi, ki že zaradi načina zlaganja in strogega reda čepov določajo medsebojni način zlaganja in omejijo število različic. Nujno je razumevanje merila, količine, simetrije, osnovnih vzorcev in geometrije. Morda je prav merilo najpomembnejše, saj s pravim merilom lahko uporabimo katerokoli obliko ali barvo kocke, da se dovolj približamo resnični podobi prostora. Tega med poustvarjanjem s kockami rasteriziramo, pikseliziramo in abstrahiramo. Sestavljač se torej poskuša v okviru pravil igre, ki jim sledi, približati svoji ideji. Podobno kot to počnejo arhitekti in urbanisti, ko proučujejo prostorske regulacije, tehnične smernice ali normative. Podobno kot sestavljač sledi navodilom, graditelj sledi načrtu. Proses sestavljanja je vendar poseben, saj gre za aditivni način, pri katerem se elementi vedno dodajajo in se združujejo drug na drugega, pri razstavljanju pa je možnih več težav. Aditivni proces je poseben tudi zato, ker onemogoča preprosto vračanje na prejšnje korake, zato postavitev vsake kocke zahteva tehten, recimo temu inženirski premislek. Sestavljanje je tako veliko lažje kot razdrževanje kock, kar je lahko pravi izziv, pri čemer je treba včasih razdreti del modela in storiti več korakov nazaj. Predhoden razmislek je zato nujen, da so napake še popravljive. To je tuje sodobnemu načinu dela, saj je vračanje na prejšnje korake v računalniškem okolju danes sprejetoto dejstvo.

UVODNIK  
EDITORIAL  
ČLANEK  
ARTICLE  
RAZPRAVA  
DISCUSSION  
RECENZIJA  
REVIEW  
PROJEKT  
PROJECT  
DELAVNICA  
WORKSHOP  
NATEČAJ  
COMPETITION  
PREDSTAVITEV  
PRESENTATION  
DIPLOMA  
MASTERTHESIS

# Colorful Creativity Game



Wrapping up the 2022 issue, we ended the year with an exciting collaboration with the Museum of Architecture and Design (MAO). With a large supply of LEGO bricks recently donated to the Museum by Mija Razpotnik, we came up with the idea of organising a student workshop on recreating Plečnik's works with this simple but eternal toy. The post-COVID-19 period was marked by every form of creativity - scientific, artistic, professional and pedagogical. In 2022, working with students was still subjected to COVID-19 restrictions, and socialising while studying had largely come to a standstill.

It's hard to think of children's toys today without thinking of LEGO bricks. They are so widespread that there is hardly any part of the world where they are not available, and they have been embedded as part of the culture in Western society for decades. It always begins with a colourful, brightly printed box, that promises lots of things. Indeed, inside the carefully stacked bags are the building blocks, the bricks, which as themselves are still far from the final image. The box also contains a booklet of either short or very extensive instructions, but always depicted in a simple, step-by-step manner, leading to the result. Some kits offer instructions which can create different results by using the same bricks. But there is always the option to start building on your own without the help of this booklet, in which case the possibilities are potentially endless. It is not difficult to draw parallels with

urbanism, as buildings and space are often the results that come from using LEGO bricks. The process of assembling these bricks is also reminiscent of architecture. It starts with simple elements which, by the very way they are stacked and the strict order of the studs, determine the way they are assembled, limiting the number of variations. An understanding of scale, quantity, symmetry, basic patterns, and geometry is essential. It is perhaps the scale that is most important, because with the right scale we can use any shape or colour of a brick to get close enough to reality. Besides, in the process of building with bricks, the space is rasterised, pixelated, and abstracted. The builder is therefore trying to get closer to his idea within the rules of the game he is struggling with, just as architects and urban planners do when faced with spatial regulations, technical guidelines, or norms. And just as the LEGO builder follows the instructions, the actual builder follows the plan. The process of assembling is special, however, because it is an additive process, where elements are always being added and combined with each other; but when disassembling, we encounter several problems. The additive process is also special because it makes it impossible to simply go back to the previous steps, so that combining two bricks requires a, let's say, serious engineering consideration. This makes it much easier to assemble than to disassemble the bricks, which can be a real challenge, sometimes requiring breaking a part of the model and going



Na delavnici, ki terja celoletno delo študentskih ekip, so študentje s prvimi koraki spoznali dela arhitekta Plečnika. Ravno prav, saj je v MAO ob sočasnem odprtju Plečnikove razstave ob njegovi 150-letnici rojstva študentom omogočil dostop do izjemnih arhivskih podatkov, na podlagi katerih so nastale interpretacije arhitektovih mojstrovin z legokockami! Zaradi vseh možnosti kock je mogoče z njimi interpretirati prav vsak projekt v arhitektovem opusu. Lotili so se projekta Narodne in univerzitetne knjižnice, Vegove ulice, pokopališča Žale in Tromostovja. Nadaljevanje dela bo mladim obiskovalcem MAO omogočilo igrivo spoznavanje dediščine arhitekture in urbanizma Ljubljane v več markantnih obdobjih in z vidika miniaturizacije še drugih uveljavljenih arhitektov, ki so zaznamovali mesto.

Tako je tudi tokratna izdaja revije, za leto 2022, sestavljena v duhu aditivnega procesa. Izbor člankov in drugih prispevkov je iz pestrih vsebin sestavljen v celoto, predstavljeno v tokratni reviji, ob kritični presoji ter povezovanju stroke in raznovrstnih meril.

asist. dr. **Janez P. Grom**

asist. **Kristijan Lavtižar**

UVODNIK

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back several steps. Careful consideration beforehand is therefore essential to ensure that mistakes can still be corrected. This is foreign to the modern way of working, as reverting to earlier steps is now an accepted fact in the computer environment.

In a workshop that will require the collaboration of student teams throughout the year, the students took their first steps to learn about the works of the architect Plečnik. Rightly so, as the opening of the Plečnik exhibition at the MAO at the time of the 150th anniversary of his birth gave the students access to exceptional archival data that have been used to create »LEGO interpretations« of the architect's masterpieces. Thanks to all the possibilities of the bricks, there is no project of the architect's corpus that could not be properly interpreted with them. Projects that have already been taken on include the National and University Library, Vegova Street, the Žale Cemetery and the Triple Bridge. Continuing this work, young visitors to the MAO will be able to playfully get to know the heritage of Ljubljana's architecture and urbanism through several distinctive periods and in the light of the miniaturisation of other established architects who have made their mark on the city.

Therefore, this 2022 edition of the magazine is also composed in the spirit of the additive process. The selection of articles and other contributions is drawn together from the wide range of topics presented in this journal, in light of the critical reflection and integration of disciplines and diverse criteria.

asist. dr. **Janez P. Grom**

asist. **Kristijan Lavtižar**



II.

ČLANKI

ARTICLES

# Adelina Fejza, Gregor Čok: PROSTORSKI ELEMENTI, KI USTVARJAJO KAKOVOSTEN JAVNI PROSTOR

## SPATIAL ELEMENTS THAT CREATE THE QUALITY PUBLIC SPACE

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1.02 Pregledni znanstveni članek / Review Article

### POVZETEK

Javni prostor je bistveni element človekove blaginje ter celotnega razvoja mesta in družbe. V prispevku je predstavljen kratek pogled na preteklo in sedanje stanje v zvezi z načrtovanjem in uporabo javnih prostorov v urbanih okoljih. Članek naslavlja ugotovitev, da se v teh okoljih postopoma izgublja fokus kakovosti javnega prostora, sčasoma pa se ti prostori preoblikujejo celo v človeku neprizajna okolja. Namen predstavljene raziskave je ugotoviti, kateri so ključni elementi, ki ustvarjajo kakovosten javni prostor. Za doseg tega smo uporabili primerjalno in deskriptivno raziskovalno metodo in izvedli primerjavo dveh relevantnih literatur oziroma avtorskih pristopov, Henaff and Strongova "Public Space and Democracy" ter Pérez-Gómezova "Attunement". Ta dva primera izpolnjujeta kriterije različnih interdisciplinarnih pristopov do javnega prostora, razloženih skozi različna obdobja in ozadja. Ugotovili smo, da so elementi, ki jih avtorji predlagajo kot ključne gradnike kvalitativnega prostora, ustrezeno utemeljeni. Kot take jih je mogoče izvesti v celostni fizični obliki, saj temeljijo na človeškem faktoru oziroma na telesni prisotnosti in izkušnji v prostoru. V zaključku je podan predlog za vključevanje teh elementov v proces načrtovanja in oblikovanja javnega prostora v okviru izzivov sodobne kulture bivanja.

### KLJUČNE BESEDE

javni prostor, kakovosten javni prostor, ključni elementi, človeški faktor, urbanistično načrtovanje in oblikovanje

### ABSTRACT

Public space is an essential element of human wellbeing and the overall development of the city and society. This paper presents a brief outlook of the past and present situations related to the planning and use of public spaces in urban environments. In doing so, this paper addresses the finding that public spaces gradually lose the focus of quality in them, and as time goes by, these spaces are reshaping even in human-unfriendly places. The purpose of this presented research is to find out what are the key elements that create a quality public space. To achieve it, it is used a comparative-descriptive method comparing two relevant pieces of literature or authorial approaches, Henaff and Strong's "Public Space and Democracy" and Pérez-Gómez's "Attunement". These two examples fulfill the criteria of having different interdisciplinary approaches toward public space, explained through different periods and backgrounds. It is found that the crucial elements these authors suggest for building qualitative space are well-grounded. As such, they can be implemented in an integrated physical form because they base on the human factor or the physical presence and experience in space. In the conclusion part, a suggestion was made to include these elements in the process of planning and designing public spaces in the context of the challenges of modern living culture.

### KEY WORDS

public space, quality public space, key elements, human factor, urban planning and design



Figure 1: MFO Park – Zurich, Switzerland (Source: Author, 2013).



Figure 2: Mauritsplaats – Rotterdam, Netherlands (Source: Author, 2019).

## 1. INTRODUCTION

Open public spaces together with the matrix of streets, form the pattern of the city upon which all the build-up structures organize. It defines the city by being an »open-air living room for city dwellers« (UN-Habitat, 2018, p. 6). Public space manifests in different spatial forms such as squares, parks, neighborhood outdoor space, playgrounds, streets, sidewalks, boulevards, etc. (UN-Habitat, 2018, p. 3). It is (should be) a multi-functional and inclusive area where life happens in the form of outdoor activities, various cultural, political, and social events, trading, movement, etc. (Global Public Space Toolkit, 2015, p. 4). The places represented in Figures 1, 2, and 3 are considered good examples of that kind of space. Sufficient open public space successfully connected within a city, enables the cities to upgrade the quality of life and improve its function (UN-Habitat, 2018, p. 3). »It is for urban planning to establish and organize these public spaces, and for urban design to facilitate and encourage their use, in the process enhancing a sense of identity and belonging« (Global Public Space Toolkit, 2015, p. 4).

As the world is constantly changing, every discipline also faces changes in its domain. Ancient architecture has formed spaces that indicated encountered participation, where we understand ourselves through others, enabling human freedom and bodily communication (Pérez-Gómez, 2017). Modern urbanism has significantly put low importance on the idea of city space as a meeting place for people, the overall public space, and the walking experience in it (Gehl, 2010, p. 3). Nowadays, the situation is different. Private interests are escalating, technology



Figure 3: Israels Plads – Copenhagen, Denmark (Source: Ramblersen, 2016).

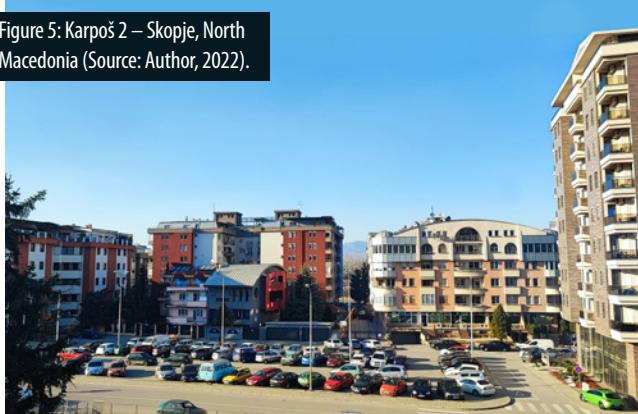
reshapes the real world into the virtual, and the economic and political domain is skeptical about the symbolic values of the space (Pérez-Gómez, 2017). Lawrence Herzog (2006, p. 5) argues about the current situation in Mexico, where the public space is gradually reshaping into something unrecognizable and unmeaningful. Transitional countries are additionally facing the issue of shrinkage or unactive public spaces. It seems like we are losing the focus of quality over quantity, compromising some of our basic spatial needs just for short-lasting benefits. For example, in North Macedonia, with its capital city of Skopje, most of the public spaces within collective housing buildings are not in their intended function. They are not properly designed and managed, and they seem like they don't serve at all for a collective urban living (Figure 4 and Figure 5). The human presence is missing, and what dominates is



Figure 4a and Figure 4b: Taftalidze – Skopje, North Macedonia (Source: Author, 2022).



Figure 5: Karpš 2 – Skopje, North Macedonia (Source: Author, 2022).



the ramp access toward the underground parking, parked cars on the ground floor, and fences around the parcel that disables the pedestrian flow and accessibility.

Sahan (2021, p. 1) states there is a need for serious consideration of the relationship between humans and the urban surrounding. Pérez-Gómez (2016, pp. 15-20) makes a brief overlook of the past, the present, and the future of public spaces. He argues that historically it was the architect's responsibility to provide a sense of home in the city, where the public life prioritized the human experience, which is the opposite of the present situation (Figure 5), where public spaces have converted into places for consumption and transit. He emphasizes that it becomes even more drastic when we add the influence of technology which converts physical communication into virtual, neglecting the rooted human need for live dialogue and touch and putting our psychosomatic health into question. De Graaf (2017, p. 121) has a similar view for the virtual realms, pointing out that nowadays, the public space is not the only place that defines us as a collective. There are other virtual platforms such as Facebook, Instagram, Twitter, etc. who challenge the perception of public space.

Pérez-Gómez (2016, p. 20) highlights only two main possible paths for architecture in the twenty-first century who are opposite; it may intensify the human worth and capability, or it may intensify the production of even more digital environments. He wholly supports the first path. This paper also supports the human approach in creating quality public spaces. It delves into a literature review and focuses on extracting and finding the answer to the question: what are the key elements that create a quality public space?

## 2. METHODS

Seeking an answer, we have used a comparative-descriptive method of two relevant pieces of literature. The purpose of this literature review is to outline and extract the key spatial elements that create a quality public space. Those elements will be a subject of description/comparison. The first selected literature is by Henaff and Strong "Public Space and Democracy" and the second one is by Pérez-Gómez "Attunement". Even though there is a plethora of literature or various authorial discussions and research approaches about public space, the selected ones seem crucial and

appropriate for answering the research question. The selection criteria for choosing these two was: authors having different interdisciplinary approaches toward the field of public space and authors explaining their affirmations of public space through different periods and backgrounds. In this way, we can see distinctive points of view and have a wider chronological overlook of the extracted quality elements.

For justifying the first criteria, Henaff and Strong (2001) are trying to define what qualities a space must have to identify as "public" by connecting it with democracy. They make this connection because these two notions have in common their participants. They interact and manifest their democratic values within the public space. Public space and democracy cannot exist without its participants. Whereas Pérez-Gómez (2016) also has an interdisciplinary approach in his purpose for attunement. He connects philosophy, phenomenology, and neurobiology with architecture and urban design. The book's main idea is in confronting the difficulties of a spiritual place in this nondualist reality and point out its significance on human well-being and sustainability, one in which architecture can and should make a crucial contribution. For justifying the second criteria, Henaff and Strong (in the introductory chapter) refer to ancient times as a background for explaining their statements and definitions. Whereas, Pérez-Gómez refers to the contemporary problems as a background for his affirmations.

Through this literature review, we have identified the key elements that these authors refer to for defining a quality public space, and we find them crucial for the future planning of public spaces.

## 3 RESULTS

### 3.1 Chronological facts

Public space has been reshaped a lot through the years, and it will continue to reshape. It dates since the Ancient Greek (900-338 BC) when Agora represented this space (Caves, 2004, p.10). Agora was the central place of the town which had social, political, artistic, and economic value, serving as a market and formal or informal gathering space. Later, in this formation occurred the open-air gymnasium and the theatre. After Greek Agora, Roman Forums carried out its idea, consisting of the same activities and values as

Greek Agora, including temples, basilicas, shops, and other amusement areas like the theatre and public baths. During medieval times, the market was the central function and attraction in public spaces – it was formed mainly in front of a public building or some roads intersections. In the Renaissance period, public spaces were surrounded by buildings with unified facades, which enhanced the harmony and value of this place. Renaissance Plazas played a crucial part in the local social order and cultural development. (Chitnis, 2021).

In the Modern Era, the meaning of public space changed significantly due to industrialization and the rising urban population, which resulted in urban sprawl (Fainstein, 2021) and automobile-dependent movement. It increased the need for new recreational places within the city as parks and playgrounds (Fainstein, 2021), but on the other hand, significantly put low importance on the idea of city space as a meeting place for people, the overall public space, and the walking experience in it (Gehl, 2010). Nowadays, we are also facing significant changes in public space. The impact of globalization, the privatization of shared public spaces for commercial reasons (Nilsson, 2012), and the technological upgrade reshaped the contemporary public spaces into the concept of shopping malls (Chitnis, 2021) which isolates people from the outside environment. This approach leaves a significant change in the urban fabric, city image, and the health and psychology of the inhabitants.

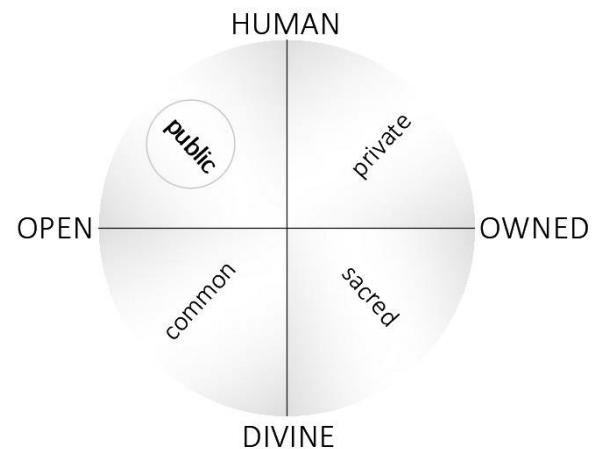
### 3.2 Henaff and Strong – “Public Space and Democracy”

Henaff and Strong (2001, pp. 2-4) firstly seek to define the public space by comparing it with three other space types, claiming that »aside from being public, space may also be *private*, *sacred*, or *common*«. What distinguishes them is the standards that must be fulfilled for someone to have access to that space. A *private* space, besides the standards for access, is also characterized by the virtue of ownership, »such space is one's own space«, and they control it (Henaff and Strong, 2001, p. 2). The *sacred* space doesn't have the virtue of ownership because it is »land reserved to the gods«, and it has a sacred dimension, not human. As opposed to a sacred place, the *common* space doesn't represent any religious dimension, and it is not a public space because it is created by nature and given to humans, such as the sea, forest, etc., they can't own it or control it.

By making a simple diagram of these types of spaces (Figure 6), Henaff and Strong (2001, p. 4) concluded that: »Spaces may be human or divine; they may be a manifestation of the being that owns them, or not«. So, they defined *public* space as a space that is created »by and for humans« even though there are debatable rules that control its creation; it represents an accomplishment of mankind. It doesn't have the ownership virtue, and it is accessible by those who meet the standards. Public space is a rival representation of what can be brought or taken from the public life of a person who shares it with others.

When it comes to what qualities a space must have to be public, Henaff and Strong (2001, pp. 5-8) analyzed the

Figure 6: »Matrix of the spaces« (Source: Author according to Henaff and Strong, 2001, p. 4)



public buildings and Agoras of ancient Greek and the philosophers: Hippodamus, Plato, Nietzsche, etc., and they defined three qualities: being ***open***, ***artifact***, and ***theatrical***. They state that the quality of *openness* determines a clear vision of the location itself and the access in it; the quality of an *artifact* explains human nature for trying to shape the place and enhance communication; and the *theatrical* quality implies the human interaction by defining a space connected with sight or vision and presentness. By seeing the others and being seen by the others, the aspect of publicness emerges in that space. According to them, the quality of theatricality divides into two different sub-qualities determined by the relationship between people in public space. The first one is ***intransitivity*** – which means a nonreciprocal relationship between people involved, and the second one is ***transitivity*** – which means a reciprocal relationship between people involved.

Democracy as a term originates from the ancient Greek word "democratia" which means "rule of the people" (Liddell and Scott, 1999). It »does not mean politics as a way of life... But it does mean politics (citizenship) as a way of living: an expected element of one's life« (Daly et al., 2000, p. 112). Democracy represents the »institutionalization of freedom« (U.S. Department of State - IIP, 2013).

By defining these three qualities of public space – *open*, *artifact*, and *theatrical*; Henaff and Strong (2001, pp. 9-12) conclude that: »democracy is necessarily built into any conception of public space«. They explain that the essence of the public space is in its democratic form, nothing can hide, and everybody has the right to observe and interact with all that appears in public. The authors note that democracy requires transparency and visibility, which only public spaces can provide. It has its roots in ancient Greek, where the need for public debate, shared knowledge, and public law decisions emerged. In this way, the newly political, juridical, intellectual, and religious aspects of life; were formed in the public spaces of the city, which represented a convenient space for direct expression and development. »Democracy manifests itself within that space; the public expression of its being resides in its very being« (Henaff and Strong, 2001, p. 12).

Public space is connected closely with the practice of democracy since its creation. When united, they have the power to impact humans life and the overall urban environment, a fact that was evident in ancient Greek when the intellectual class emerged. That's why public space that supports democracy is a quality space because it enables society's development. Parkinson (2012) also embraces this powerful connection. He adds that nowadays, democratic freedom and actions still require physical public space, even though virtual social platforms are overtaking it, and public spaces are becoming more restricted and controlled.

### 3.3 Pérez-Gómez – "Attunement"

Pérez-Gómez (2017), in one of his lectures at the University of Sydney, argues about the theatrical value of public spaces by making a historical review of the theatre that defined the public realm back in the 18<sup>th</sup> century and how it has transformed drastically at the beginning of the 19<sup>th</sup> century in Europe. He argues that in the 18<sup>th</sup> century, human religious and political values were intervened within these theatrical conventions. It was a place where all the main events took place. The theatre itself had a continued perspective that represented an imitation of the urban life where everybody had the right to speak and, even the audience, showed contentment or discontentment for the performances. Pérez-Gómez (2017) explains that in the 19<sup>th</sup> century, drastic changes occurred when the theatre was no longer a resemblance of the city life. It became a simulative entertainment on stage, where the audience had to keep a certain distance from the scene and to be disciplined and quiet. He argues that such cultural transformation affected the overall human life, undervaluing and ignoring public participation. This societal transformation had a significant impact on architecture, turning its primary meaning into creating private dwellings. Pérez-Gómez (2017, 18:03) highlights that even this historical retrospective denotes that the primary function of architecture was »to open up communicative spaces for focal actions, disclosing a political, social, or mythological order to a community, making, therefore, a good life possible, a wholesome life, both healthy for the body and the mind«. He considers **communicative spaces** the same as public spaces.

Compared with Henaff and Strong, who do not mention architecture and its role in constructing a quality public space, Pérez-Gómez is interested in public space as a potential result in architecture and urban planning. In his purpose for creating an attunement, Pérez-Gómez (2016, pp. 127-128) argued that nowadays, when it comes to a design decision; we neglect the narrative, emotional, and cultural aspects of a place by focusing only on the physical attributes, analyzing them only objectively and superficial. He states that what happens between humans and objects - is the act of **perception**, a subjective feature that cannot be compared with "nothing" because different places influence us to think differently. The qualities of the space can be perceived directly through our senses and consciousness, but this is a complex issue for technology because it tends to ignore the value of such perception,

and gradually reshapes our spatial experience from actual real perception into a virtual one. An addition to the action of perception is the action of **movement**, which was argued by Schmarsow (as cited in Pérez-Gómez, 2016, p. 148), claiming that people can observe the space through movement also.

Pérez-Gómez (2016, p. 48) relies the concept for attunement on the German word ***Stimmung***. This word is an association of **atmosphere and mood** and suggests »a stable "tunedness" of the mind, the attunement of embodied consciousness«. How can we apply this concept in contemporary architecture to create a possibility for attunement? He argues that we have a situation where urban planning and design reduces and focuses on calculational proportions, urban traffic, and monotonous housing blocks, providing a neutral space for better control. Meanwhile, ignoring the atmosphere of public spaces results in forming a negative mood such as anxiety and emotional discomfort (Pérez-Gómez, 2016, p. 26).

**Atmosphere** may be the main aim of the architect that is slightly unreachable (Wigley, 1998). It can be compared with the French word "ambiance", meaning a »"cheerful" to "melancholy," "light" to "oppressive"« activity (Pérez-Gómez, 2016, p. 27). Hermann Schmitz (1969, as cited in Rigby, 2011, p. 143) notes that atmosphere doesn't come just from the inner self because it is a form of emotion that results during some spatial experience. According to Pérez-Gómez (2016, p. 30), atmosphere challenges the virtual communication of the present time by prioritizing bodily presence and experience. It also challenges modern architects such as Le Corbusier, who followed Durand's decisions for unifying the architectural drawings into precise lines, using a grid and focusing only on solving a problem, meanwhile avoiding the atmospheric features and intuitive expression because they are impossible to materialize. Anyway, he adds that some architects embrace the atmospheric value, for example, Peter Zumthor – whose buildings differ by creating atmospheres that »reveal qualities of *place* that appear as autochthonous, resonant with the activities to which rooms and spaces in his projects are particularly dedicated« (Pérez-Gómez, 2016, p. 30). Zumthors' work represents Adolf Loos' statements about the importance of recognizing a feeling - to create the desired outcome (Pérez-Gómez, 2016, p. 30). The situationist Guy Debord (as cited in Pérez-Gómez, 2016, p. 30) also contributed to the sphere of urban design, defining the modern planned city as incapable of creating unique perceptible atmospheres.

**Moods** are intertwined directly with the atmosphere of a place, they come to our inner self in the form of emotion, but we cannot materialize and project them in a particular space; they imitate natural and manmade spaces, establishing »cognition, action and thought«, as claimed by Pérez-Gómez (2016, pp. 36-39). The author states that »emotions are crucial for cognition; they have a life-enhancing, evolutionary origin and are borne out of the body's engagement in the world« (Pérez-Gómez, 2016, p. 36). That is why qualitative architecture should focus on creating atmospheres and moods that result in positive emotions, positive life,

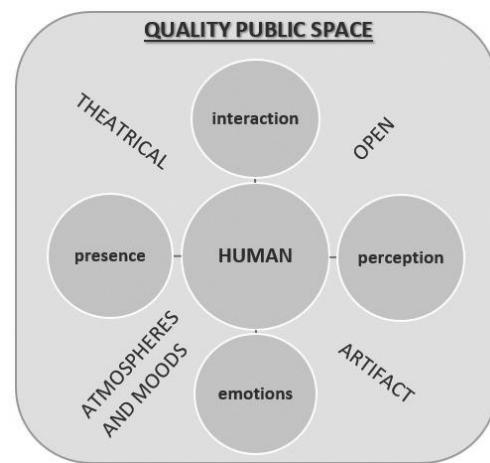
healthful humanity, sense of belonging, homeness, and sociability. »The inner is the outer« (Pérez-Gómez, 2016, p. 36).

Pérez-Gómez (2016, p. 166) also highlights that the attunement space has the risk to not result in impacting us in a way it is envisioned by "Stimmung". Anyway, »enactive understanding and embodied perception are crucial to our grasp of Stimmung« (Pérez-Gómez, 2016, p. 166); it has potential for further development of contemporary architecture and urban design. He concludes that spiritual aspects of a place can have global positive feedback on health and sustainability, in which architecture should have the crucial part in the process of creating it. Just as Vitruvius (ca. 25 BCE) believed that a well-designed city is in harmony with nature, climate, orientation, and proportion of buildings - creating a balanced life between man and the environment - Pérez-Gómez (2016, pp. 14-21) classifies well designed city as a feeling of attunement with the surrounding - which has a vital meaning in human psychological health and well-being. He states that this attunement in a certain place, provided by human actions may be the most lasting feature that architecture gives to humanity.

#### 4. DISCUSSION AND CONCLUSION

Based on the reviewed literature, the key elements that create a quality public space are: **open, artifact, theatrical** (Henaff and Strong, 2001), **atmosphere and moods** (Pérez-Gómez, 2016). Eventhough, they are formed through different approaches and different background periods, the essence in all of them is the same, and it is the human dimension in the space itself, the bodily presence and experience (Table 1). The quality of being *open, artifact* and *theatrical* are all interlinked with the human perception, recognition, and interaction within the public space. Spatial *atmospheres* that create *moods* of positive emotions have a direct connection with the inner human spirit. Based on that conclusion,

Figure 7: Integrated diagram of elements of quality public space, a combination of Henaff and Strong (2001) and Pérez-Gómez (2016) affirmations.



we have formed an integrated diagram which is a combination of both authors' affirmations (Figure 7), and it represents the key elements that create a quality public space.

These quality elements can be designed only with an interdisciplinary approach in urban planning and design, collaborating with disciplines such as urban anthropology and urban sociology, that study the human aspect in public spaces, their behavior, social needs, movements, feelings, perceptions, use of space, etc. Although, as Pérez-Gómez (2016) mentioned, all these elements are subjective features and are difficult to measure and materialize; anyway, the risk of not achieving the envisioned goal is way lower if urban planners and architects consider them. Architects have the skills, knowledge, and intuition to plan these kinds of quality spaces through interdisciplinary collaboration and direct communication and involvement with the users. De Graaf (2017) also encourages people's involvement in creating the city. »Taking part is not just a matter of reflecting on its current state but also a matter of self-reflection«

Table 1: Comparative/descriptive table based on two literature reviews about quality spaces.

	Interdisciplinary approach	Background period	<b>Quality elements of the space</b>	Characteristics
Henaff and Strong	The concept of Democracy in public space	Ancient time	<u>OPEN</u>	Human perception
			<u>ARTIFACT</u>	Human recognition
			<u>THEATRICAL</u>	Human interaction Human communication
Pérez-Gómez	The concept of "Stimmung" as an attunement in architecture	Present time	<u>ATMOSPHERE</u>	Human presence Human experience
			<u>MOODS</u>	Human emotions Human feelings

(De Graaf, 2017, p. 374). Also, through collective participation in the management and maintenance of public spaces within residential areas, the quality of public spaces can be effectively increased (Mandeli, 2010, pp. 170-171). Marcus states the same, arguing that this strategy »provides a profound sense of shared responsibility and community« (Marcus, 2003, p. 6.9/10). The community should also have the right to use the public space however they decide, and even there is a law that forbids some activity, they still have the power to fight the law and prove them they are right (De Graaf, 2017, p. 121).

By analyzing theoretically Henaff and Strong and Pérez-Gómez and reaffirming their claims with other authors' conclusions; we can state that - architecture and urbanism that aim to produce good buildings and spaces should consider the non-material aspects such as human interaction, human feelings, human perception, human needs, human participation; while analyzing and designing the physical attribute of places and buildings. This approach is essential because it is directly connected with the mental state of the human being, providing positive life and healthful humanity that goes hand in hand with the increase of economic and sustainable indicators. »Well-designed neighborhoods inspire the people who live in them, whilst poorly designed cities brutalize their citizens« (Rogers, 2010, p. ix), as Gehl (2010, p. 9) says: »First we shape cities – then they shape us«. Nowadays, it is worth questioning whether the public spaces that we find - spatial but empty, new but unattractive, programmed but dysfunctional, as illustrated in *Figure 4* and *Figure 5*, lack the human dimension as a top priority in the process of urban planning and design. »Public space is made up of more than parks, plazas, and sidewalks; it is a shared world where individuals can identify with one another and see themselves through the eyes of others« (Kohn, 2004, p. 7).

Even though the human approach to planning and design was argued a long time ago, now it requires even more commitment in the contemporary culture of living, where we deal with all kinds of superficiality in this field. The newly framed diagram about quality public space (*Figure 7*) represents a step beyond superficial planning and design. It consists of more abstract notions of operation, but at the same time, they are closer to the human physical and spiritual dimension. They can guide architects and other concerned professionals toward a better possible future for these spaces.

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# Martina Zbašnik-Senegačnik, Ljudmila Koprivec: POMEN POGLEDOV SKOZI OKNO UČILNICE

## THE IMPORTANCE OF THE CLASSROOM'S WINDOW VIEW

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1.01 Izvirni znanstveni članek / Original Scientific Article

UVODNIK  
EDITORIAL  
ČLANEK  
ARTICLE  
RAZPRAVA  
DISCUSSION  
RECENZIJA  
REVIEW  
PROJEKT  
PROJECT  
DELAVNICA  
WORKSHOP  
NATEČAJ  
COMPETITION  
PREDSTAVITEV  
PRESENTATION  
DIPLOMA  
MASTERTHESIS

### POVZETEK

Številne študije izpostavljajo velik pomen pogledov skozi okno na okolico, saj pomembno vplivajo na dobro počutje, bivalno ugodje in učno uspešnost otrok, kljub temu pa je ta vidik spregledan in običajno ni vključen med kriterije pri umeščanju šolskih objektov v urbani prostor. Namen študije je bil ugotoviti, kako na potenciale pogledov skozi okno učilnice gledajo učenci. Za zbiranje podatkov smo oblikovali anketni vprašalnik. Odgovarjali so učenci tretje triade treh osnovnih šol iz različnih slovenskih regij. Odgovore smo obdelali s statističnim paketom SPSS za Windows in z orodjem MS Excel. Učenci so na anketna vprašanja odgovarjali konsistentno. Učencem je njihova učilnica všeč zaradi velikih oken z veliko svetlobe ter zaradi možnosti pogleda na zelene površine. Večina učencev raje sedi ob oknu, ker radi gledajo v okolico. Sicer bi skozi okno najraje gledali na vodo in zelenje ter naravo, najmanj všeč bi jim bil pogled na sosednje stavbe v bližini, če so brez zelenja, in pogled na prometno ulico. Večinoma radi gledajo skozi okno, tudi če jim je ob oknu zaradi tega malo prevročé ali prehladno, hrup, ki prehaja skozi okno, pa jih izrazito ne moti. Rezultat študije je lahko v pomoč pri umeščanju šolskih objektov v urbano okolje.

### KLJUČNE BESEDE

osnovna šola, pogled skozi okno, bivalno ugodje, vizualno ugodje

### ABSTRACT

Many studies point out the importance of the window views to the surroundings, as they have a significant impact on children's well-being, living comfort and learning performance. Nevertheless, this aspect is overlooked and usually not included as one of the main criteria for designing school facilities in an urban area. The purpose of the study was to find out how the students are responding to the potential of classroom's window views. To collect data a questionnaire was implemented in three Slovenian primary schools (in the third triad). The respondent were pupils from three different Slovenian regions. The results were processed with the statistical package SPSS for Windows and with the MS Excel tool. The pupils answered consistently to the questions in the survey. They like their classroom because of the large windows with lots of light and because of the window view of green areas. Most pupils prefer to sit by the window because they like to look outside at the surroundings. Otherwise, they would prefer to look at water, greenery, and nature. The least they would like is the view of neighbouring buildings nearby, especially if the view is without greenery, or of a busy street. They like to look out the window, even if sitting by the window is sometimes unpleasant if too hot in the summer or too cold in the winter. The noise passing through the window clearly does not bother them. The result of the study can be helpful in designing school facilities in an urban environment.

### KEY-WORDS

primary school, window view, well-being, visual comfort

## 1. UVOD

Umeščanje šolskih objektov v urbani prostor zahteva številne premisleke, med katerimi pa se pogreša upoštevanje kakovostnih pogledov skozi okna. Lokacije v bližini narave so sicer razpozname kot potencialno primerno okolje, vendar iz drugih razlogov – boljša kakovost zraka, manjše toplotne obremenitve pa tudi večje možnosti za rekreacijo ali izraba naravnega okolja za zunanjо učilnico. Potencial lepega pogleda iz učilnic je popolnoma spregledan, kar pa ne velja za nekatere druge vrste objektov. Znano je, da je hotelska soba s pogledom na morje zelo cenjena in zato precej dražja od ostalih in da se ljudje, kadar imajo možnost izbirati, v restavraciji odločijo za mizo blizu okna (Kim in Wineman, 2005). Pomen pogledov skozi okno se je pokazal v času epidemije, ki je zahtevala dolgotrajni lockdown, saj je omogočal vizualni stik z okoljem in predstavljal tudi edino družbeno povezavo z drugimi ljudmi (Batoool idr., 2021). Pogled na zelenje skozi okna je zmanjševal stopnjo tesnobe, jeze, strahu, nerazpoloženja, dolgočasja, razdražljivosti in motenj spanja (Spano idr., 2021; Soga idr., 2021).

Pogled skozi okno posreduje informacije o času dneva, letnem času, vremenu, zunanjih aktivnostih in dejavnostih. Kakovosten pogled obsega ospredje s podrobnnimi informacijami. Ima vidne vse tri sloje – zgornji sloj pogleda vsebuje nebo in obzorje, srednji prikazuje naravne ali umetne elemente kot so polja, drevesa, hribi ali stavbe, spodnji sloj je v ospredju in vključuje tla z rastlinami (Bell in Burt, 1995) in nudi pogled v daljavo (Littlefair, 1996). Možnost pogleda v daljavo je še posebej pomembna za sproščanje očesne mišice pri otrocih, ki veliko gledajo na bližnje šolske table, ekrane računalnikov, telefonov in televizorjev, saj zmanjšuje možnost pojava kratkovidnosti pri otrocih (Mihelčič in Podlesek, 2016). Nadaljnji parameter kakovostnega pogleda, ki vpliva na vizualno ugodje, je vsebina motiva, vidnega skozi okno. Raziskave kažejo, da ljudje uživajo v pogledih, ki zagotavljajo določeno raven razumevanja in možnosti za raziskovanje v domišljiji (Kaplan in Kaplan, 1989; Gill idr., 2015). Prvilačni so pogledi, ki ponujajo določeno stopnjo zatočišča (Gill idr., 2015), saj le-to predstavlja varnost pred sovražniki in vremenskimi pojavi.

Ko idr. menijo (2020), da pogled na naravo učinkuje podobno kot bi bili dejansko v naravi. Na splošno so ljudem prijetnejši pogledi, ki vsebujejo tri značilnosti – kompleksnost, odprtost in vodo (Han, 2007; Falk in Balling, 2010). Kompleksnost se lahko definira kot število neodvisno zaznanih elementov v pogledu. Visoka kompleksnost ponuja veliko število različnih elementov (Ulrich, 1977). Bolj pritegne motiv z žariščnim elementom, lahko jih je tudi več, ki ustvarijo dominanto, na kateri se pogled ustavi. Tak primer je npr. skupina dreves na odprttem polju. Horizontalne površine pomembno vplivajo na informativnost pogledov, če imajo enakomerno in homogeno teksturol, s pomočjo katere se definira globina v motivu pogleda. Elementi v pogledu v ustrezнем medsebojnem razmerju dajejo motivu pogleda čitljivost v treh dimenzijah. Kadar globine ni mogoče zaznati, krajinske značilnosti ostanejo v dvodimenzionalni sliki, to pa onemogoči dojemanje in razumevanje motiva. Evidentiranje oddaljenosti elemen-

tov v pogledu je nujno za učinkovito zaznavanje okolice (prav tam).

V urbanem okolju so pogledi sprejemljivi, če vsebujejo določen delež zelenja, urbani del vsebine pogleda pa naj bo čitljiv, zanimiv, dinamičen ter dovolj oddaljen, da je med oknom in urbanim delom čim več zelenih elementov, po možnosti visoka drevesa in grmovje (Kent in Schiavon, 2020). Pri urbanih pogledih sta pogled v daljavo in zagotavljanje vseh treh slojev v pogledu še pomembnejša kot pri naravnih. Sprejemljivejši so pogledi na urejeno urbano okolje, na nove in skladno oblikovane stavbe, stari in slabo vzdrževani objekti v pogledu so moteči in sprožajo nelagodne občutke (Drobne idr., 2022). Evolucijska zgodovina je človeka zaznamovala s preferenco do narave. Njegovo preživetje je bilo odvisno od tega, kako dobro je znal pridobivati informacije o okolici. Če je imelo okolje določene attribute, ki so olajšali njegovo razumevanje, potem je moral človek taki okolici dati prednost. Da ima določeno okolje prednost, ni dovolj, da vsebuje le informacije, biti mora tudi prepoznavno in zlahka dojemljivo. Motiv v pogledu, ki je dvoumen in se ga težko identificira, je manj zaželen (Ulrich, 1977).

### 1.1 Pogled skozi okno v šolah

Študije dokazujejo, da pogledi na naravo skozi okno omogočajo sproščanje in regeneracijo po stresnih situacijah (Van Esch idr., 2019). Kaplan (2001) tudi ugotavlja, da kratki in ponavljajoči se odmori ob pogledu skozi okno v naravo izboljšajo subjektivno počutje in zmanjšajo stres. Grajena okolja, zlasti delovna, namreč zahtevajo stalno usmerjeno pozornost, kar povzroča duševno utrujenost. Po drugi strani pogledi v naravo ne zahtevajo usmerjene pozornosti, temveč vključujejo fascinacijo. Fascinacija sproži nehoteno pozornost, ki človeka regenerira. Podobni učinki pogledov skozi okno so bili potrjeni tudi v šolah. Li in Sullivan (2016) sta v obširnem eksperimentu na petih srednjih šolah ugotovila, da se dijaki, ki so imeli med odmorom možnost pogleda skozi okno na zelenje, po odmoru v preizkusih delovanja usmerjene pozornosti dosegli bistveno višje rezultate in se po stresni situaciji hitreje opomogli kot njihovi vrstniki, ki so odmor preživili v učilnicah brez pogleda na zelene površine. Osredotočenost na delo zahteva odvračanje motečih dražljajev iz okolice, ta zaviralni mehanizem pa se sčasoma utrditi. Med odmorom se ob pogledih skozi okno na zelene površine samodejno aktivira nehotena pozornost in po kratkem času, ko zaviralni mehanizem počiva, se otroku povrne sposobnost osredotočanja usmerjene pozornosti (Kaplan in Berman, 2010).

Nedavne študije, ki so preučevale izpostavljenost študentov naravi, so pokazale, da je količina rastlinja v kampusu in okolici, vidna skozi okno, znatno napovedovala uspešnost študentov v celotni šoli (vpliv na ocene standardiziranih testov, stopnje izobrazbe in število študentov, ki so nadaljevali študij na fakultetah) (Matsuoka, 2010; Wu idr., 2014). Benfield idr. (2015) so preučevali razlike v rezultatih na tečaju pisanja na fakulteti, ki se je odvijal v dveh identičnih učilnicah – ena je imela pogled na naravno okolje, druga pa na betonski oporni zid. Rezultati so pokazali, da so študenti s pogledom v naravo pozitivneje ocenjevali tečaj,

na koncu semestra pa so imeli višje ocene. Ugotovili so, da vključevanje naravnih elementov lahko izboljša počutje in tudi ocene.

Namen prispevka je ugotoviti, ali učencem pogled skozi okno predstavlja pozitivno povezavo z zunanjim okoljem in ali razpozna zelenje in naravo v pogledu skozi okno kot elementa kakovosti pogleda. Rezultati bi lahko služili kot priporočila načrtovalcem in oblikovalcem pri umeščanju šolskih objektov v prostor, ureditvi zunanje okolice šole ter pozicioniraju okenskih površin na fasadni ovoj.

## 2. METODE

V študiji smo raziskovali pomen pogledov skozi okno učilnic. Analiza obsežne relevantne literature je pokazala, da pogled skozi okno vpliva na občutja in razpoloženje (Van Esch idr., 2019; Spano idr., 2021; Soga idr., 2021; Batool idr., 2021), lahko deluje restorativno in olajšuje stres (Van Esch idr., 2019; Kaplan, 2001; Kaplan in Berman, 2010), zaznana je tudi večja učna uspešnost (Li in Sullivan, 2016; Matsuoka, 2010; Wu idr., 2014; Benfield idr., 2015). Zato nas je zanimalo, kako poglede skozi okno dojemajo učenci tretje triade osnovne šole.

V študijo so bili vključeni učenci 7., 8. in 9. razredov na treh osnovnih šolah – OŠ Velike Lašče (VL), OŠ Lucija (LU) in OŠ Ob Rinži Kočevje (KO). Šole stojijo v različnih okoljih, s čimer smo želeli zagotoviti raznolike pogoje za učenje in bivanje. OŠ Ob Rinži v Kočevju stoji ob robu mesta na stiku z gozdom in nudi poglede v gozd in naravo. OŠ Lucija je locirana v urbano naselje turističnega kraja, OŠ Velike Lašče pa na blago pobočje v centru kraja, kar omogoča pogled v zeleno naravo v daljavi, obe šoli od sosednjih stavb loči nekaj visokih dreves.

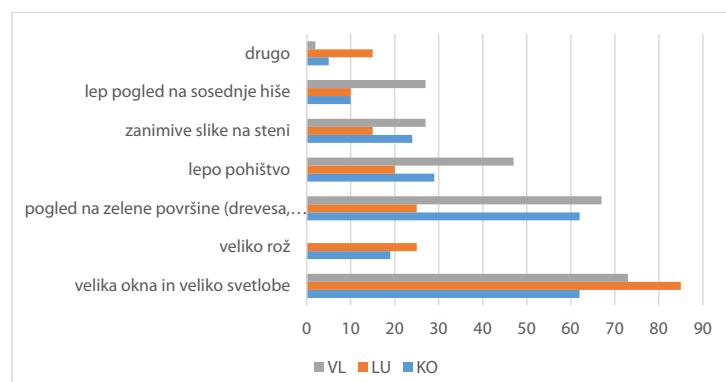
Oblikovali smo anketni vprašalnik, ki je bil med 17. marcem in 15. majem 2022 dostopen na spletnem portalu 1KA. Šole so se vključevale za krajsi čas po dogovoru. Anketo je ustrezno izpolnilo 138 učencev (52 učencev iz Kočevja, 44 učencev iz Lucije in 42 učencev iz Velikih Lašč).

Iz odgovorov, pridobljenih v anketi, smo izračunali osnovne statistične kazalnike. Pridobljene podatke smo obdelali s statističnim paketom SPSS za Windows in orodjem MS Excel.

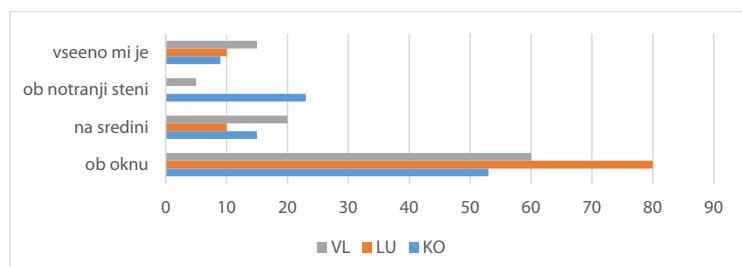
## 3. REZULTATI

Zanimalo nas je, kako učenci ocenjujejo svojo učilnico oz. kaj jim je v njej všeč. Med ponujenimi odgovori so lahko izbrali več razlogov. Večini učencev z vseh treh sodelujočih šol so všeč velika okna in veliko svetlobe v učilnicah. Pogled skozi okno na zelene površine je drugi pomemben element, ki ga najbolj cenijo učenci v učilnicah v Kočevju in Velikih Laščah (slika 1).

Nadalje smo raziskovali odnos učencev do bivanja v učilnici in pogledov skozi okno. Na vseh šolah učenci

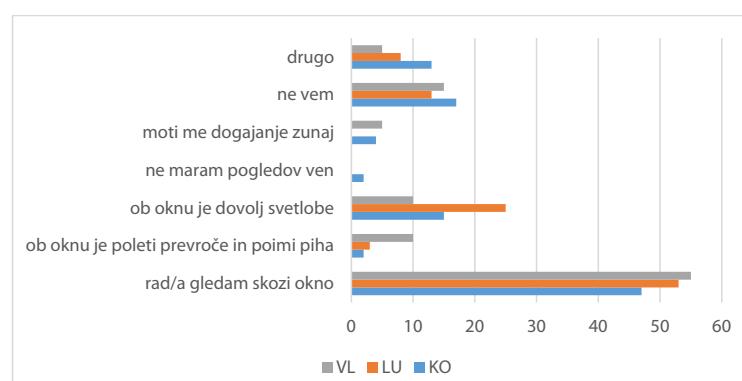


Slika 1: Delež odgovorov na vprašanje, zakaj je učencem njihova učilnica všeč.

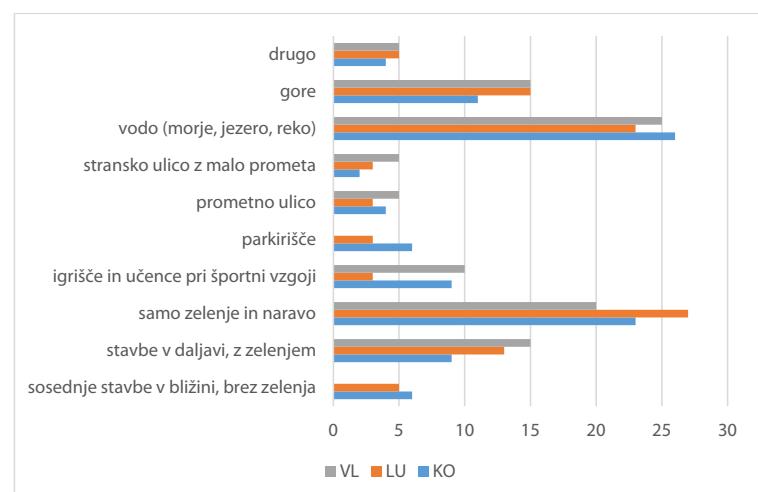


Slika 2: Delež odgovorov na vprašanje, kje v učilnici učenci sedijo najraje.

najraje sedijo ob oknu (KO 53%, LU 80%, VL 60%), manj na sredini ali ob notranji steni. V Luciji nihče ne sedi rad ob steni (slika 2).



Slika 3: Delež odgovorov na vprašanje, zakaj so učenci izbrali najljubši prostor v učilnici.



Slika 4: Delež odgovorov, kaj bi učenci najraje gledali skozi okno.

Učence smo vprašali, zakaj v učilnici najraje sedijo na mestu, ki so ga izbrali v prejšnjem vprašanju. Na vseh treh šolah je razlog, da učenci radi sedijo ob oknu, ker radi gledajo skozi okno (VL 55%, LU 53%, KO 47%) (slika 3).

Preverjali smo, kako učenci na splošno dojemajo poglede skozi okno. V izbor smo ponudili devet pogledov: na gore, vodo, samo zelenje in naravo, urbane poglede z zelenjem ter poglede na prometno ulico, parkirišče in šolsko igrišče in učence pri športni vzgoji. V rubriko »drugo« so lahko dodali motiv po svojem izboru.

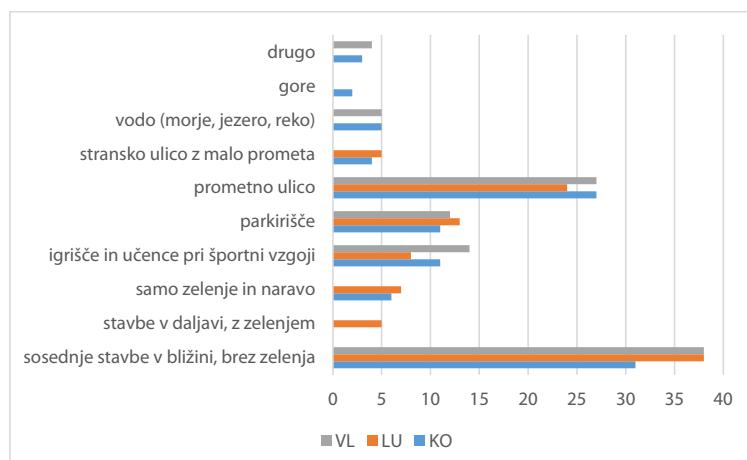
Učenci bi skozi okno najraje gledali na vodo (morje, jezero, reko) (VL 25%, LU 23%, KO 26%) in zelenje in naravo (VL 20%, LU 27%, KO 23%). Od urbanih pogledov so jim sprejemljivi pogledi na stavbe v daljavi, v kombinaciji z zelenjem (VL 15%, LU 13%, KO 9%). Najmanj so se odločali za poglede na prometno ulico, stransko ulico z malo prometa in parkirišče (slika 4).

Pri nasprotnem vprašanju, kaj bi jih najbolj motilo pri pogledu skozi okno, so učenci med istimi predizbranimi možnostmi najpogosteje izbrali sosednje stavbe v bližini (VL 38%, LU 38%, KO 31%). Motila bi jih prometna ulica (VL 27%, LU 24%, 27%) in tudi parkirišče (VL 12%, LU 13%, KO 11%). Med motečimi elementi pri pogledu skozi okno nekaj učencev navaja tudi šolsko igrišče in učence med poukom športne vzgoje ((VL 14%, LU 8%, KO 11%)) (slika 5).

Okno poleg spektra vidne svetlobe prepušča tudi infrardeč spekter – toploto, ki povzroča pregrevanje. Sončna zaščita v oblikah rolet, žaluzije in screenov na zunanjih strani okna je učinkovit ukrep proti pregrevanju, vendar onemogoči tudi povezavo z zunanjim okoljem. Na vseh šolah se je najmanj polovica učencev odločila za trditev, da radi gledajo skozi okno učilnice, tudi če jim je ob tem malo vroče (KO 57%, LU 50%, VL 55%). Kot drugi najpogostejsi odgovor so vsi navedli »vseeno mi je« (KO 26%, LU 25%, VL 45%). V Velikih Laščah je v primerjavi z učenci iz Kočevja in Lucije precej večji delež učencev, ki jim je vseeno (slika 6).

Učenci so kot neprijetnost za sedenje ob oknu izbrali pihanje ob oknu (VL 40%), nezanimiv pogled skozi okno (KO 26%, LU 25%, VL 25%) in temperaturno nelagodje (LU 28%) (slika 7).

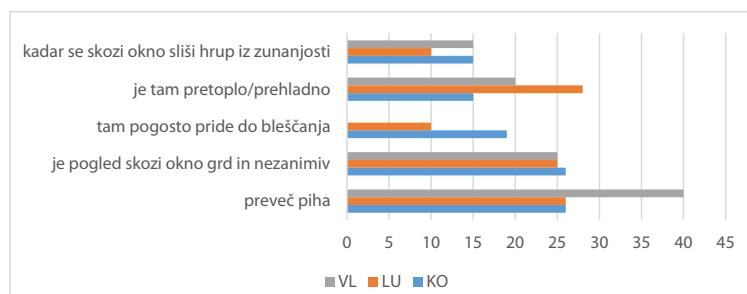
Okno omogoča prenos dnevne svetlobe in vizualno povezavo notranjega in zunanjega okolja. Po drugi strani prepušča tudi zvoke in hrup iz zunanjega okolja šole. Učence smo zato spraševali, kako doživljajo zvoke, ki prihajajo skozi okno. Na vseh treh šolah je največja skupina učencev, ki jim je vseeno, kakšni zvoki prihajajo v učilnico iz zunanjosti (KO 28 %, LU 28 %, VL 25 %). Ostali odgovori so precej razpršeni. Druga največja skupina anketirancev je v Luciji izbrala odgovor, da vsak zvok moti njihovo zbranost (23 %), v Kočevju pa,



Slika 5: Delež odgovorov na vprašanje, kaj bi učence najbolj motilo pri pogledu skozi okno.

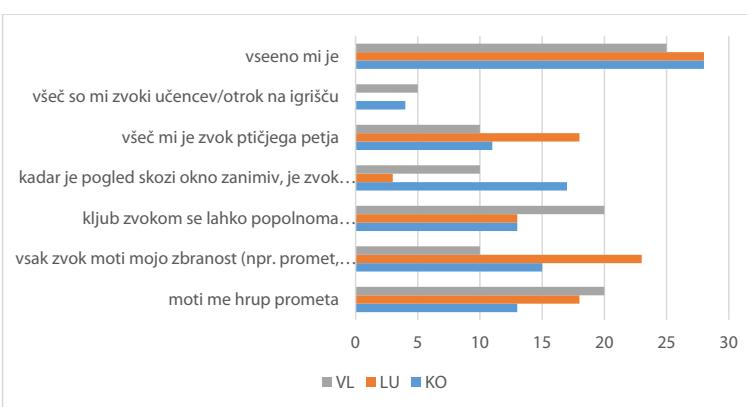


Slika 6: Delež izbranih trditev, da učenci radi sedijo ob oknu brez sončne zaščite (rolete, žaluzije, zavese), da lahko gledajo skozi okno.



Slika 7: Delež odgovorov na vprašanje, kdaj učencem ni všeč sedenje ob oknu.

da je zunanjji zvok manj moteč, kadar je pogled skozi okno zanimiv (17 %). V Velikih Laščah sta druga dva najpogostejsa odgovora dva – učenci so navedli, da jih moti hrup prometa (20 %) in tudi, da se kljub zvokom lahko popolnoma osredotočijo na učenje (20 %) (slika 8).



Slika 8: Delež odgovorov na vprašanje, kako na učence vplivajo zvoki, ki prihajajo skozi okno.

## 4. RAZPRAVA

Otroci velik del dneva preživijo v šoli, zato je prav, da se tam čim bolje počutijo. V študiji smo uvodoma ugotavljali, zakaj je učencem njihova učilnica všeč. Precej enotno so se na vseh treh sodelujočih šolah odločili, da jim je njihova učilnica všeč zaradi velikih oken in svetlobe, ki jo prepuščajo. Na pomen osvetljenosti z dnevno svetlobo opozarjajo tudi druge študije. Raziskava med letoma 1958 in 1974 (Collins, 1976) je npr. opozorila na pomen oken v učilnicah z ugotovitvijo, da so šolarji naklonjeni učilnicam z okni, opazili pa so tudi več odsotnosti majhnih otrok v učilnicah brez oken. Kasneje je Stewart (1981) ugotovil, da dnevna svetloba vpliva na vedenje otrok, v situacijah proste izbire pa so bili otroci zaradi količine svetlobe in možnosti pogledov raje blizu oken.

Večina učencev na vseh treh sodelujočih šolah najraje sedi ob oknu, najpogosteje zato, ker radi gledajo skozi okno. Tudi druge študije so ugotovile, da je otrokom vizualni stik s pogledom skozi okno učilnice pomemben, pri čemer imajo večjo prednost pogledi v naravo (Giraldo Vásquez idr., 2019). V gosto naseljenih urbaniziranih okoljih je težko zagotoviti poglede v naravno okolje, vendar jo lahko nadomesti ustrezno izbrano zelenje v grajenem okolju. Kent in Sciavon (2020) sta ugotovila, da ima podobne učinke na odzive ljudi visoko drevo in grmičevje pred sosednjimi stavbami, ki pa morajo biti dovolj oddaljene, da omogočajo pogled v daljavo in vidnost vseh treh slojev (tla, stavbe in zelenje, nebo).

Številni avtorji ugotavljajo, da pogled skozi okno na naravo pozitivno korelira z življenjskim zadovoljstvom (Chang idr., 2020; Kaplan, 2001; Elsadek idr., 2020). Chang in Chen (2005) predlagata, da je rastline in pokrajine okoli stavb pogosteje treba gledati z vidika pogledov iz zaprtih prostorov navzven. Ob tem se je treba zavedati, da nudijo pogledi skozi okno različne motive, kar sproža različne odzive. Ljudje se najbolj ugodno odzivajo na naravno okolje z visoko stopnjo kompleksnosti in veliko količino vodnih elementov (Han, 2007; Ulrich, 1983). To lahko razloži hipoteza biofilije, ki trdi, da imajo ljudje prirojeno afiniteto do življenja in okolij, ki podpirajo življenje (Wilson, 1984; Ulrich, 1993). Pokazalo se je na primer, da imajo ljudje najraje naravo tipa savane – travnišča z bolj ali manj gosto rastocimi dreves z gosto krošnjo (Falk in Balling, 2010) in mirno vodo (Han, 2007). Tako okolje je omogočalo preživetje skozi celotno evolucijo človeka. V skladu z Wilsonovo teorijo biofilije (1984) bi tudi anketirani učenci najraje gledali zelenje in naravo ter vodo (morje, jezero, reko). Zanimivo je, da so preferenco do pogleda skozi okna na vodo izrazili učenci vseh treh vključenih šol – v šoli ob morju (Lucija), ob gozdu (Kočevje) in v središču manjšega kraja (Velike Lašče). V naši raziskavi učencev o občutjih ob pogledih skozi okno nismo spraševali, vendar jih lahko povežemo z ugotovitvami drugih študij, da kakovostni pogledi izboljšujejo počutje in zmanjšujejo stres (Kaplan, 1995; van Esch, 2019), vplivajo celo na koncentracijo in učno uspešnost (Matsuoka, 2010; Li in Sullivan, 2016; Benfield idr., 2013).

Najnovejše raziskave so pokazale, da niso si motivi pogle-

dov skozi okna enako privlačni in da je pri proučevanju vpliva motivov na odzive treba upoštevati njihove značilnosti oz. prisotnost elementa fascinacije (Koprivec idr., 2021). Nekatere značilnosti v motivu pogleda skozi okno imajo lahko blagodejne učinke, medtem ko druge lahko povzročijo nevtralne ali celo neželene odzive (Martnes in dr., 2011). Učenci so se morali opredeliti tudi pri vprašanju, kaj bi jih pri pogledu skozi okno najbolj motilo. Ponujeni so bili enaki odgovori, kot pri vprašanju o tem, kaj bi skozi okno najraje gledali. Njihovi odgovori kažejo, da so odgovarjali zelo konsistentno, saj so izbirali poglede, ki jih v predhodnem, nasprotnem, vprašanju niso. Učenci so kot negativne izbrali poglede na sosednje stavbe brez zelenja ter prometno ulico in parkirišče. Tudi predhodne študije ugotavljajo, da je pogled na promet in parkirišča zelo moteč (Koprivec idr., 2021). Zanimivo je, da je nekaj učencev pogled na igrišče in učence pri športni vzgoji navedlo kot moteč element, približno enak delež pa tudi kot zaželen pogled.

Velike steklene površine po eni strani omogočajo poglede skozi okno, po drugi pa v prostor prepuščajo sončno energijo. Vidna svetloba zagotavlja svetlobno ugodje v prostoru, toplotni spekter pa je lahko zelo moteč, saj povzroča prekomerno pregrevanje. Ustrezno zunanjo sončno zaščito se uravnava dotok sončne energije, vendar s tem zapremo tudi pogled skozi okno. Giraldo Vásquez idr. (2019) ugotavlja, da so učencem pogledi skozi okno pomembnejši kot toplotno ugodje. Tudi v naši študiji smo ugotovili, da več kot polovica anketiranih učencev rada gleda skozi okno, tudi če jim je zaradi tega malo vroče ali hladno. Ostali so pri odgovorih, kdaj jim sedenje pri oknu ni všeč, navedli več razlogov. Večinsko so izpostavili pihanje ob oknu – največ jih je tako odgovorilo v Velikih Laščah. Možno je, da je za tak razlog krivo slabo tesnjenje oken na tej šoli. Okrog četrtiny učencev na vseh treh šolah je izpostavila grd in nezanimiv pogled skozi okno. Tudi ta odgovor kaže na konsistentnost.

Steklene površine v učilnice prepuščajo tudi zvoke in hrup iz zunanjosti. Dobri četrtini učencev na vseh treh šolah je vseeno, kakšni zvoki prihajajo skozi okno. Zanimivo je tudi, da na vseh treh šolah manj kot polovica učencev dojema zvok, ki prihaja skozi okno, kot moteč. Ostalim učencem so zunanji zvoki celo všeč. Gotovo so odgovori po krajih različni glede na izkušnje učencev v šolah, ki stojijo v različnih okoljih – v Velikih Laščah in Luciji je hrup prometa bolj moteč kot v Kočevju, kjer šola stoji ob gozdu. Prav v Kočevju učenci tudi izpostavljajo, da je ob zanimivem pogledu skozi okno zunanji hrup manj moteč.

## 5. ZAKLJUČEK

Namen študije je bil ugotoviti, kako učenci 7., 8. in 9. razredov dojemajo poglede iz učilnic. Raziskovalno izhodišče so predstavljalne referenčne študije, iz katerih je razvidno, da pogledi skozi okno v odvisnosti od kakovosti opazovanega motiva sprožajo različne odzive, vplivajo celo na učno uspešnost. S pomočjo anketnega vprašalnika smo evidentirali mnenja učencev tretje triade na treh osnovnih šolah v Sloveniji in jih analizirali. V študiji smo prišli do zanimivih ugotovitev:

- Učencem so v učilnicah najbolj všeč velika okna, ki v prostor prinašajo veliko dnevne svetlobe.

- Velika večina učencev najraje sedi ob oknu.
- Sedenje od okna povezujejo z možnostjo pogledov skozi okno.
- Med predizbranimi pogledi bi učenci skozi okno najraje gledali vodo (morje, jezero, reko) ter zelenje in naravo.
- Med istimi predizbranimi pogledi bi bili za učence moteči pogledi skozi okno na sosednje stavbe v bližini, če pogled ne vsebuje zelenja, in prometna ulica.
- Več kot polovica učencev se strinja s trditvijo, da radi gledajo skozi okno, tudi če jim je ob njem malo vroče.
- Večine učencev zvoki, ki prihajajo skozi okno, ne motijo ali jim je vseeno, ostali so za motečega izpostavili predvsem hrup prometa.

Ugotovitve nakazujejo, da se učenci zavestno ali podzvestno zavedajo pomena pogledov skozi okna učilnice, čeprav po njihovih odzivih ob pogledu na realno okolico na posameznih osnovnih šolah nismo spraševali. Vsekakor bi bilo v prihodnosti zanimivo proučiti tudi te vsebine. Rezultati študije so lahko v razmislek ob umeščanju šolskih objektov v urbani prostor. Eden od kriterijev odločitve za lokacijo šole bi morala biti tudi možnost pogleda skozi okno učilnice v daljavo, pogled pa bi moral obsegati tudi zadosten delež zelenja. Tudi pogledi v urbano okolje so primerni, če so stavbe dovolj oddaljene, med njimi in oknom pa je zelenje v obliki gruč dreves in grmičevja (Kent in Schiavon, 2020).

## Zahvala

Zahvala učiteljem in učencem OŠ Ob Rinži v Kočevju, OŠ Lucija in OŠ Velike Lašče za sodelovanje pri anketti.

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# Rrona Berisha, Ilka Čerpes: DRUŽBENI IN PROSTORSKI VIDIK JAVNIH PROSTOROV – SKOZI ANALIZO DEL ALIJA MADANIPOURJA

## THE SOCIAL AND SPATIAL ASPECT OF PUBLIC SPACES – THROUGH THE ANALYSIS OF ALI MADANIPOUR'S WORKS

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1.02 Pregledni znanstveni članek / Review Article

### POVZETEK

Po dokončnem zatonu funkcionalizma v šestdesetih letih 20. stoletja se je debata o javnem prostoru mest vrnila v teoretične razprave in praktično delo na področju urbanističnega načrtovanja in oblikovanja. Najprej kot spomin na zgodovinsko vlogo in obliku javnega prostora, nato pa kot razprava o javnem prostoru kot osrednjem orodju za razvoj trajnostnih mest. Med najpomembnejšimi teoretiiki na tem področju je arhitekt in profesor Ali Madanipour.

V središču tega prispevka sta družbeni in prostorski vidik javnih prostorov. Analizirani sta dve najpomembnejši deli profesorja Madanipourja, ki sta izšli s precejšnjo časovno razliko, da bi razumeli, ali so se stališča profesorja Madanipourja glede družbeno-prostorskega vidika javnih prostorov sčasoma spremeniila oziroma razvila in na kakšen način. Najprej smo analizirali dve deli profesorja Madanipourja, eno iz leta 1996 in drugo iz leta 2020, nato pa smo ti deli kritično primerjali med seboj.

Profesor Madanipour opisuje trenutno stanje javnih prostorov z besedami »od kritike do ortodoxije«. Izzivi in nezadovoljstvo, ki so se pojavljali v preteklosti in jih je omenjal tudi sam, so zdaj postali običajni, torej realnost, ki jo sprejemamo. Njegovo stališče glede javnih prostorov je preprosto, saj zahteva, da so dobri dostopni, vključujoči in odprtji za vse brez razlik ter da upoštevajo družbeno-prostorski vidik prostora in vseh področij, ki so z njim povezana. Kot je omenil, je med drugim najmanj zadovoljen s tem, da se javni prostori obravnavajo kot gospodarski generatorji, pri čemer niso ustvarjeni za krepitev družbenega vidika ter vseh telesnih, duševnih in družbenih koristi, ki jih imajo za uporabnike.

### KLJUČNE BESEDE

javni prostori, družbeno-prostorski vidik, Ali Madanipour

### ABSTRACT

After the final decline of functionalism in the 1960s, the debate regarding public spaces returned to theoretical discussions and practical work in the field of urban planning and design. First as a reminder of the historical role and form of public space and then as a discussion of public space as a central tool for the development of sustainable cities. Among the most important theorists in this field is Professor Madanipour.

The focus of this paper is in the socio-spatial aspect of public spaces. Respectively, in analyzing two of the most important works of Madanipour, with a considerable time difference, for understanding whether and how did his viewpoints regarding public spaces change or develop during time. Initially, the two works are analyzed, one from 1996, the other from 2020. Further, these works are critically compared to each other.

Madanipour describes the current situation of public spaces with the saying "From a critique to an orthodoxy". The challenges and dissatisfactions that were raised in the past, and even mentioned by him, have now become commonplace, a reality we are accepting. For public spaces, his point of view is simple, he requires good access to them, to be inclusive and open to all, and to take into account their social-spatial aspect and all areas related to it. One of his main dissatisfactions is that public spaces are being treated as economic generators. At the end it is talked about nowadays public spaces, and possible directions for their development.

### KEY-WORDS

public spaces, socio-spatial aspect, Ali Madanipour

## 1. INTRODUCTION

Public spaces are "a meeting point and a container for social movements" (Madanipour, 1996).

They play an important role in the public life and enhance the quality of our lives and wellbeing (Carr et al., 1992). If properly planned and maintained, public spaces will promote physical, mental and social health. They will encourage physical activity, social integration, a sense of place, affect the economy, and promote a more sustainable way of living (Carmona et al., 2008) (Carmona et al., 2004).

Many characteristics of nowadays public spaces have their roots in the ancient civilizations. In the ancient Greek civilization, the acropolis and then "agora" were used as gathering spaces for citizens and accommodated social and political activities (Carmona et al., 2008) (Caves, 2005). Access to these public spaces wasn't equal, women, foreigners, and slaves were excluded since they weren't considered citizens (Carmona et al., 2008). Zukin (1995) also argues that cultural symbols can have an impact on the social aspect of a space by excluding or inviting different groups of society.

Carmona et al., (2008) mentions some features of public spaces that we inherited from Greek civilization, which are: public spaces that are multifunctional, democratic, used for economic development and trade, informal spaces that encourage interaction, and also mentions the importance of the aesthetic aspect of public spaces and the limitation of access for different groups of society.

Based on the definitions in the Oxford English Dictionary (1933) and the Concise Oxford Dictionary (1990), public spaces are open to everyone, and are a concern of public authorities to develop and maintain. Public spaces include all parts of the city that users can see and physically access, the streets, squares, sidewalks, and more, up until the boundaries of the private buildings (Madanipour, 1996). They are not semi-public spaces nor private spaces that are developed and managed by private firms or individuals, where access is controlled and not open for all groups of society (Madanipour, 1996).

The aim of the research is to analyze the viewpoints of Professor Madanipour regarding public spaces and whether and how did his viewpoints regarding the social-spatial aspect of public spaces change or develop during time.

## 2. METHODOLOGY

The theoretical groundwork contains examination and study of literature on public spaces, social-spatial aspect of public spaces, and on the theoretical viewpoint of Professor Madanipour about public spaces. The methods used were analytical, qualitative and comparative.

In order to understand Professor Madanipour viewpoints regarding public spaces, two of his most important works, with a time difference of more than 20 years, were analyzed and compared to each other. The first analyzed work is the book *Design of Urban Space - An Inquiry into a Socio-spatial Process* (1996), the second is the paper *A critique of public space: between interaction and attraction* (2020). In addition to these, this article was also based on content from other relevant sources regarding public spaces and their social-spatial aspect, which are listed in the references chapter at the end.

The research was developed in three stages. Initially, the men-

tioned works of Professor Madanipour were analyzed to get an overview of his viewpoints. Further, these works were critically compared with each other to understand if his views regarding public spaces changed over time. At the end, our viewpoints on possible directions for the development of public space in the future are presented.

### 2.1 First case study: "*Design of Urban Space - An Inquiry into a Socio-spatial Process*" - Madanipour (1996)

The book of Madanipour (1996) elaborates urban design, as a product of urban development process, linking it with other fields such as social sciences, architecture, political sciences, economy, philosophy, real estate and more.

The book is structured in two parts, respectively in eight chapters. In the first part "Perspectives into Urban Space", the author explains the theoretical or philosophical aspect of urban space. This part contains three chapters, related to the meaning of urban space or the philosophical definitions of space, the foundation of urban space as defined by professionals, and the social aspect of the city or how people experience and use the city and space.

From the first part we understand the behavior and definition of urban space, everyday life, social diversity, and the restrictions of access and use of public spaces as a result of external factors, such as crimes in public spaces. This part concludes with Madanipour's viewpoint regarding urban spaces. According to him, in order to understand, to create, and have a balanced structure of urban space, we must take into account different aspects, with emphasis on the social and physical aspects.

The second part of the book is called "The making of Urban Space". This part analyzes the process of urban design and various related fields, such as economics, politics, and more, aiming to understand the role of urban design in the process of urban development. It has five chapters, concerning the analysis of urban design, the process of urban development and urban design, the laws and regulations regarding spaces, and the models and concepts of the 20th century for developing the city. In the second part of the book, Madanipour (1996) talks more about the public spaces. He elaborates topics such as the privatization of public spaces, the restriction of access to them, social diversity, the political and economic impact and more.

According to Madanipour (1996), this book provides an understanding of the social and physical aspects of urban design, which includes the process of creating a space and the results or the products.

To start with, in his book, Madanipour (1996) highlights the impact of modernism on the development of the city, respectively on the development of public spaces, and mentions how the spaces were segregated. Not alone, Carmona et al, (2008) also elaborates the impact of modernism in public spaces and argues that it led to "homogenization of spatial types, ignoring the social and psychological needs of an increasingly diverse city".

Due to the development of segregated settlements, public spaces were difficult to reach and the settlements were hard to access (Madanipour, 1996). This situation brought dissatisfaction, and the citizens sought to restore the role and value of public spaces. In response, Madanipour (1996) states that in order to renew public spaces, they were privatized. Therefore, from a situation where public spaces were neglected, a new situation was created where public spaces were privatized.

The privatization of public spaces brought new challenges, among others, Loukaitou-Sideris and Banerjee (1998) mentions design and public spaces tailor made for groups that bring monetary benefits, emphasized social differences, ad hoc interventions, not taking into account the needs of the general public, and more.

During this period, the public spaces were being developed and managed by private firms, then sold to middle classes in order to profit and attract potential customers. Although this current was initially criticized, now it has become commonplace for public spaces to be developed on the basis of monetary potential (Madanipour, 1996).

The involvement of private firms in developing and managing the public spaces has changed the role of the spaces, by first being treated as commodities, spaces which are initially Accessed in terms of economic benefit (Madanipour, 1996). Similar to this, Madanipour (1996) mentions the increase of competition, the increase of the expectations of the users and the decrease of safety in the city. According to Madanipour (1996), these features represent a starting point for controlling public spaces, and according to him, this created a distinction between spaces controlled or managed by public authorities and private investors.

Seeing public spaces as commodities has influenced how a space is "understood and managed" (Madanipour, 1996). In order to maximize the profit, public spaces should be good enough for the market, therefore, the urban development processes started to be standardized (Madanipour, 1996). This is a characteristic of Modernism, where the spaces were mass produced and the design was standardized, yet as Madanipour (1996) says, "this was, a narrow notion of use value, undermining the diversity of the lifeworld beyond instrumental gains".

Related, Carmona et al. (2003), talks about managing and maintaining public spaces, and considers the "third way" of managing as a way out of the situation created by the privatization. Unlike the practice when only the government was responsible, or the other practice when responsibility was transferred to private firms, the "third way" of managing public spaces is a combination of responsibilities between public authorities and private firms, where the government has control over the influence of market forces (Carmona et al., 2003).

Further, Madanipour (1996) highlights the rising fear of crime in the city. He mentions the book *Defensible Space* from Oscar Newman (1972), where 4 elements are proposed to be applied when developing the city in order to increase its safety. These elements are: carefully choosing the location, the shape of objects, the position of windows to observe the neighborhood, and defining what is private, semi-private and public, even through barriers if needed.

Madanipour (1996) in particular comments on the element of "creating barriers", and describes it as a drawback for public spaces. According to him, barriers can create "restrictions on access, a decline in public space, and a fear of difference". Although the city is diverse, creating barriers and segregating the city is not the right solution to increase its security (Madanipour, 1996).

Related, Madanipour (1996) analyses the economic and social aspects of "controlled" closed shopping malls built and managed by private firms. Initially, the shopping mall in the suburb was built and managed by a private firm, and normally the purpose of its construction was financial gain, next, the "public"

space in this shopping mall was originally used for shopping and not to strengthen social relations, further, the design of the building and the physically controlled space invited specific groups of society best suited for shopping, and, being far from the city made access to it more difficult.

In spite of these, Madanipour (1996) mentions some factors that gave the dimension of "public", such as the attendance of a large number of buyers which made the space dynamic and somehow public, regardless of the fact that it was suitable only for specific groups of society. Madanipour (1996) evaluates these types of shopping malls as semi-public spaces.

Peterson (2017) talks about semi-public spaces as spaces that are accessible by the public, but also have a private dimension, due to the activities that take place, which impose our way of acting, e.g. Bookstores, Schoolyards. According to him, in public spaces such as parks, squares, people do not necessarily interact with each other, since they have no reason to interact, however, he sees semi-public spaces as spaces with more diversity and opportunity or motive for interaction. However, Madanipour (1996) argues that semi-public spaces, which are managed by private firms, are an easy solution for the financial aspect, but promote social and spatial segregation.

To summarize, there are two main concerns regarding public spaces that Madanipour (1996) highlights, the standardization of design and the privatization of public spaces.

As a response to the trend of "controlling" public spaces by private individuals or groups, Madanipour (1996) considers public participation a way to get the voice back to the citizens. However, in order for citizens to be properly involved in the process, substantial changes need to be made in the way spaces are produced and managed (Madanipour, 1996). The process of developing the city, should be a combination of both the social aspect and the physical aspect of the space, and all other needed fields, and concentrating one aspect only will affect the process and the product (Madanipour, 1996).

## 2.2 Second case study: "*A critique of public space: between interaction and attraction*" - Madanipour (2020)

In his paper, Madanipour (2020) analyzes the transition of public spaces, and the impact of the economic, political and cultural aspects on them. Below are described 4 areas that have an impact on public spaces.

### "The changing relationship between the public and private spheres"

An important element which had an impact in changing the role of public spaces is the shift of responsibility for developing the built environment from public authorities to private firms.

In his research, Madanipour (2020) describes this transition of responsibility from the period of after the Second World War. He first mentions the existing model of that time for developing the built environment, where the public authorities were responsible for all public relations and for developing and managing the city. In time, public authorities were directed towards the market, respectively towards private firms. Thus, the above mentioned model was followed by the neoliberal model, where the state gave space to the private sector to produce and manage the built environment. This approach continues even today, and Madanipour (2020) considers it a drawback regar-

ding public spaces, since undoubtedly, the goal of the private sector is profit. Therefore, the primary role of public spaces, to be open and accessible to all, changed, and now public spaces are initially seen as economic generators.

Another important element is the change of the character of public authorities, who started to have the same approach as the private firms, initially having in mind the economic benefit that (Madanipour, 2020).

### "The prevalence of economic considerations"

The second area that Madanipour (2020) addresses is the impact of the economic development on the city. He emphasizes that this impact is seen in both the broad aspect, urban development, also in the narrow aspect, through activities offered by a space.

Gehl (2011) describes the types of activities that occur in public spaces, and how their use is affected by their physical condition. He groups activities into: necessary activities, optional activities, and social activities. According to him, regardless of the condition of the public spaces that enable the necessary activities to be carried out, their usability remains the same, therefore people go to work or school, wait for the bus, and more. The same cannot be said for optional activities, if the physical condition of public spaces is not good, it will have a direct impact on the development of activities, such as enjoying a walk, going to the park, and more. As for social activities, Gehl (2011) highlights that they are related to the above two activities, and favoring the development of those activities also increases social activities.

Public spaces are now being developed to make cities more attractive and competitive, in order to stand out from other cities, thus to increase tourism and investment (Madanipour, 2020). They also effect the real estate, the value of the properties increases if there is a genuine public space in the vicinity. More, at a micro level, the activities that take place in public spaces are selected to encourage investment, even the simplest activities like shopping. (Madanipour, 2020)

### "Technological change and dispersing cities"

The development of different types of transport helped in "urban spatial fragmentation and dispersion" (Madanipour, 2020). Different types of transportation enabled people to work and live in different places, therefore, some groups of society prefer to live private and quiet lives in the suburbs. These settlements enabled the desired privacy, but influenced public spaces. Often in these settlements, public spaces are for a certain group of society, sometimes controlled by ramps or guards, and create a physical and mental barrier for outside users. Next, the connection between these settlements is not always good, disadvantaging socialization and shared use of space.

Another shortcoming related to transportation, is the change in the character of roads, sidewalks, squares, and more, from public spaces that promote the social aspect, to functional spaces that allow us to move from one point to another.

Madanipour (2020) also mentions the technological devices that enable us to access information and communicate. He highlights that they were estimated to have a negative effect on public spaces and make the concept of the city and public spaces disappear, but on the contrary, they made the city even more "vibrant" and increased the motivation of tourists to visit them.

### "Social diversification and inequality"

The development of the city increases the number of citizens that will live in it and use it. This creates social diversion which raises the possibility that there will be no equality between different users of the space (Madanipour, 2020).

During time, the city and public spaces were and are still designed to meet the needs of the most dominant groups of users. In this way, intentionally or not, certain groups of society are favored. Madanipour (2020) illustrates this by mentioning women (safety), people with limited mobility and children, and emphasizes that access to public spaces for these groups, and not only, is sometimes or usually limited.

According to Farr et. al (2013), the main reason for the decline of public spaces is the way public spaces are produced. In order to create all-inclusiveness and public spaces that offer equal opportunities for all, a repeated system must be created by planners so that the knowledge gained after analyzing how functional and comfortable a space is after it is used for some time, to be involved in planning stages (Farr et. al, 2013).

Further, Madanipour (2020) talks about the importance of access to public spaces. He considers good access as an essential element for public spaces. According to him, "The more accessible a place, the more public it becomes".

Related, Lynch (1981) highlights that access is "one fundamental advantage of an urban settlement". He mentions three important dimensions of access, it is important what we give access to, the equality of access for different groups of citizens and to control the system of access. Lynch (1981) also argues that access can have an influence in the economical aspect, social aspect and in the psychology of the city.

## 3. RESULTS AND DISCUSSIONS

By analyzing the two case studies, we note that in general, the viewpoint of Madanipour regarding public spaces changed a little.

According to him, for a genuine design process and a genuine public space, the social-spatial aspect of a space, and of all areas related to it, must be taken into account.

While, as far as public spaces are concerned, his point of view is simple, he requires good access to them and to be inclusive and open to all without distinction.

There are many similarities between the two above presented works. Initially, in both cases Madanipour emphasizes the shift of developing and managing public spaces from public authorities to private individuals or groups.

In both cases, this shift is considered a drawback because in principle, public spaces are not being created to strengthen the social aspect and all the physical, mental and social benefits that they bring to the user, but are being created for monetary benefits. Other drawback mentioned are the competition between cities to make the space more attractive to tourists, the increasing the value of property in parallel with increasing the quality of public spaces, the increasing demand of citizens, the tendency to create various activities in spaces all in order to invite as many users as possible and have as many monetary benefits as possible.

A noted difference between the first and the second case study,

regarding the privatization of spaces, is the change of the author's approach to public authorities. In the first case study, Madanipour (1996) says that there is a difference between spaces created and managed by public authorities, and those by private firms, as in the case where he compares the shopping malls mentioned above in the paper. He leans towards public spaces that are under the responsibility of public authorities, since according to him, they promote spaces tailored for the users and not for economic benefit. However, in the second case study, he criticizes public authorities on the grounds that they have changed their character, becoming more and more like private firms, having in mind primary the economic benefit a space can bring. According to him, when the character of public authorities' changes, when public authorities begin to act and think like private firms, then the nature of public spaces changes.

Another reason that the role of public spaces changed, is the segregation of settlements. Among others, a factor that has helped this segregation is the development of technology, respectively of different types of transport, which enabled housing and work to take place in different locations (Madanipour, 1996, 2020).

Regarding technology, Madanipour (2020) in the second case study adds the role of technological devices that enable us to communicate and access information without being present. Despite that some criticize these devices to have a negative impact for public spaces, Madanipour (2020) says they have made the city more "vibrant".

In both cases presented above, he addresses other concerns regarding public spaces, such as social diversity, the inability of the city to respond to all groups, lack of security in spaces, control of public spaces, physical barriers and more.

The current situation regarding public spaces, unlike from the first case study, Madanipour (2019) now describes it with the phrase "from a critique to an orthodoxy". Meaning that the challenges and dissatisfactions that were raised in the past, and

even mentioned by him, have now become commonplace, a reality that we are accepting.

He argues that public spaces have become a place of attraction, a tool to be sold under the reasoning that they are well-designed and qualitative public spaces. However, to end in a positive note, Madanipour (2020) emphasizes the role of citizens, and as a hope for returning public spaces to people he considers the involvement of citizens in the process of developing the city.

Since the city can be seen as an ongoing experiment (Roggerma, R., 2018) or as a permanent transformation (Keiner, 2012), Madanipour (2019) highlights that we have not lost the game, but constant work is needed to make the spaces "open, inclusive and accessible".

In the Table 1 are presented the two works of Madanipour roughly summarized in four areas that are chapters in Madanipour (2020).

## 5. CONCLUSION

The viewpoints of Professor Ali Madanipour regarding public spaces are simple. He highlights that public spaces should be open for everybody, should be accessible and inclusive. This is noted in both analyzed case studies. Other similarities between two works are, his dissatisfaction that public spaces are managed by private firms, his dissatisfaction that public spaces are initially considered commodities, the negative impact of the standardization of design, the negative impact of the segregated settlements, and more.

The difference is noticed in the approach he has regarding public authorities, where in the second case study he criticizes public authorities for thinking and acting like private firms regarding public spaces. Another difference is that he considers the current situation "from a critique to an orthodoxy", we are now accepting the things we once criticized. Another change

Table 1: The two summarized works of Ali Madanipour.

	<b>Madanipour (1996)</b>	<b>Madanipour (2020)</b>
The changing relationship between the public and private spheres	The shift of responsibility to build and manage public spaces from public authorities to private firms is considered a drawback, since public spaces are seen as economic generators, this promotes social and spatial segregation. He favors public spaces created by public authorities because they better understand and manage them.	The shift of responsibility is again considered a drawback. He now highlights the changed character of public authorities, having the same approach as private firms, developing public spaces based on monetary benefits.
The prevalence of economic considerations	The dominance of the economic aspect has come as a result of, and not only, the involvement of private firms in building public spaces, the increase of competition, the increase of the expectations of the users and the decrease of safety in the city. He considers these as starting points for creating "controlled" spaces.	The economic aspect has again a big role in the development of public spaces. He highlights that, public spaces are being developed to increase tourism, increase value of real estate, bring opportunities for investments, and more.
Technological change and dispersing cities	He relates the development of different types of transportation with the segregation of settlements, which brought new challenges, public spaces were difficult to reach, neglected of privatized.	He again highlights the segregation brought by transportation. He further talks about technological tools that enable us to communicate and provide information, and considers them as positive tools that make the city more "vibrant".
Social diversification and inequality	The standardized design of public spaces brought challenges, such as, the city/public spaces being suitable for the dominant group of users, rising crime, physical barriers for accessing spaces, and more.	Public spaces are still designed to meet the needs of the most dominant groups. He highlights that public spaces should constantly be improved while involving the users in the process.

from the first caste study, is the added the role of technology in public spaces.

All these mentioned elements by Madanipour (1996), (2020), are an indisputable reality. However, the course of development of public spaces has had an unpredictable shift from the situation created by Covid-19 pandemic.

Due to the measures to prevent the spread of the virus, many activities stopped, especially indoor activities, therefore, public spaces provided the opportunity for developing activities, without compromising the health of others. As a result, the role of public spaces returned, from spaces that were primary considered as economic generators (Madanipour, 1996, 2020) to spaces that promote physical, mental and social health. "Towards a healthier, more humane and active city" (Broudehoux, 2021).

However, now more than ever in the last years, the role of public spaces returned, as "a meeting point and a container for social movements" (Madanipour, 1996). Therefore, cities should reclaim public spaces, and maintain this character of public spaces, through putting the citizens first, by including them in the process of developing the city, and by improving spaces to be more "open, inclusive and accessible" for all people, based on their needs.

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# Domen Kušar, Kristijan Lavtižar: BARVA STREHE KOT DEJAVNIK OBLIKOVANJA ARHITEKTURNE KRAJINE

## ROOF COLOR AS A FACTOR OF ARCHITECTURAL LANDSCAPE DESIGN

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1.02 Pregledni znanstveni članek / Review Article

### POVZETEK

Dolga stoletja so imela naselja dokaj enotno podobo, ki je bila rezultat uporabe lokalnih gradiv, tehnologije in gmotnega stanja prebivalstva. Z razvojem gradbene stroke in izboljšanjem materialnega stanja sta se začela spremenjati tudi gradbeni material in tehnologija gradnje, ponudba na trgu se je povečala, kar je vodilo do sprememb v podobi stavb. Streha, imenovana tudi peta fasada vpliva na zunanjjo podobo naselja. Po mnenju Fistra in sodelavcev sodita ravno oblikovanje streh in njihova barva (kritina) med najbolj razpoznavne sestavine arhitekture kot merila identitete arhitektturnih krajin.

Spremembe kritine so bile najbolj drastične v zadnjih stopetdesetih letih. S spremjanjem kritine se je spremnjala tudi barva. V nadaljevanju je predstavljen razvoj streh na Slovenskem s podarkom na ključnih dejavnikih razvoja. Pri tem smo se omejili na individualne hiše kot nosilce arhitektурne identitete krajine. Barvo streh smo primerjali na vzorcu preko 700 hiš v Savinjsko-Kozjanski arhitekturni regiji, katerih podatki so bili pridobljeni v sklopu raziskovalnega projekta V5-2111: Arhitektурne tipologije in arhitektурne krajine in regije Slovenije. Pridobljene podatke smo primerjali z zahtevami prostorskih aktov in značilnostmi, ki so jih opisali Fister in sodelavci.

Rezultati so pokazali razlike med stanjem pred 30 leti, zahtevami prostorskih aktov in današnjim stanjem. Čeprav gre v raziskavi za majhen vzorec, lahko sklepamo, da je podobna situacija v večini slovenskih krajev. Pridobljeni rezultati omogočajo širši pogled v to problematiko in odpirajo možnosti ustreznegra ukrepanja. Kot primer odlične prakse so prikazana naselja, ki so prepoznana po kvalitetni naselbinski arhitekturi.

### KLJUČNE BESEDE

streha, barve, arhitektурne krajine, identiteta, Savinjsko-Kozjanska arhitekturna regija

### ABSTRACT

For many centuries, the settlements had a fairly uniform image, which was the result of the use of local materials, technology and the economic condition of the population. With the development of the construction profession and the improvement of material conditions, building materials and construction technology also began to change, the market supply has diversified, which led to changes in the appearance of buildings. The roof, also known as the fifth facade, affects to the external image of the settlement. According to Fister et al., the design of roofs and their colour (roofing) are among the most recognizable components of architecture as criteria for the identity of architectural landscapes. The roof changes were the most drastic in the last 150 years. As the covering changed, so did the colour. The development of roofs in Slovenia with an emphasis on the key influencers of the development is presented in the paper. We limited ourselves to individual houses as carriers of the landscape's architectural identity. We compared the colour of the roofs on a sample of over 700 houses in the architectural region Savinjsko-Kozjansko, which data were obtained as part of the research project V5-2111: Architectural typologies and architectural landscapes and regions of Slovenia. We compared the obtained data with the requirements of spatial plans of municipalities and the characteristics described by Fister et al.

The results showed the differences between the situation 30 years ago, the requirements of spatial acts and the current situation. Although the research involved a small sample, we can conclude that the situation is similar in most Slovenian places. The obtained results enable a broader view of this problem and open the possibility of appropriate action. Settlements that are recognized for their high-quality settlement architecture are shown as examples of excellent practice.

### KEY WORDS

roof, colours, architectural landscape, identity, architectural region Savinjsko-Kozjanska

## 1. UVOD

Razvoj streh je bil v preteklosti predvsem pogojen z varstvom pred požarom ter zagotavljanju ustrezne zaščite stavbe pred vremenskimi vplivi (Deu, 2018). Barva strehe je bila posledično odvisna predvsem od materiala kritine. Prvotna kritina v naših krajih je bila slama in deloma les. Barvna podoba streh je bila sive barve. Zaradi pogostih požarov, ki so zajela celotna naselja in kjer se je ogenj z luhkoto širil s strehe na streho, so se že zgodaj pojavile želje po zamenjavi gorljive kritine z negorljivo. Zahteve po težko gorljivi ali negorljivi kritini najdemo tako v statutih mest kot tudi v požarnih redih (Kušar, 2005). V prvi vrsti je šlo za zamenjavo bolj vnetljive slamnate strehe z leseno. Za obe velja, da zahtevata bolj strm naklon, počasi pa postanejo sive barve. Da je bila zamenjava kritine povezana s finančnim stanjem investitorja, govorji dejstvo, da je oblast zahtevala, da morajo imeti pomembne stavbe negorljivo kritino tudi kot zgled vsem ostalim (Kušar, 2005). Kot negorljiva kritina se je kasneje uveljavila opečna kritina, sprva kot bobrovec in nato kot zareznik. Na podobo strešnikov in strehe vpliva tudi degradacija materialov. Spreminjanje barvnih odtenkov s staranjem lahko pripišemo fizikalnim, kemičnim in biološkim procesom (Berdahl idr., 2008). Ti se odvijajo različno hitro v odvisnosti od vremenskih pogojev in glede na vrste materiala predstavljene v nadaljevanju. Opisani gradbeni materiali se pri individualni stanovanjski gradnji, ki glede števila stavb v Sloveniji prevladuje, uporabljajo najbolj pogosto.

### 1.1 Materiali strešnih kritin v Sloveniji

Opečna kritina je zlasti v drugi polovici 19. stoletja in prvi polovici 20. stoletja izrinila slamnato in leseno kritino (Vilfan, 1970). Kritina je bila najprej rdeče barve oziroma v rdečkastih odtenkih. Sčasoma je zaradi saj, alg mahov in podobnega postajala bolj rjavkaste barve. Opečna kritina je omogočala bolj blage naklone streh kot lesena ali slamnata. Ob tem je potrebno omeniti, da je bila in je še opečna kritina tradicionalna v obmorskih mestih, kjer se le-ta navezuje na antično tradicijo. Običajno so novi opečni strešniki svetlo rdeče do rdeče oranžne barve. Barva je odvisna od sestave gline in načina žganja opeke. V krajih z veliko vlage in sence se na strešnikih razvijejo alge in mahovi. Zato taka kritina postaja čedalje temnejša in dobiva bolj rjavačrn ton. Za tako kritino je značilna tudi drobnozrnata vizualna struktura.

Starodavna kritina je kamnita kritina v obliki skrli ali škrilja (Fister idr., 1993b), ki se je ponekod ohranila do današnjih dni. To velja za nekatera kraška območja, kjer je bil prisoten plastovit apnenec oziroma je bilo kamen lahko lomiti v plošče. Taka kritina je svetlo sive barve. Druga vrsta kamnite kritine so skrilaste ploščice. Te so v Sloveniji omejene z območji, kjer so bila v preteklosti nahajališča skrila. Gre predvsem za Zgornjo Selško dolino ter nekatera območja Koroške in Pohorja. Skrilasta kritina je običajno zelo temno sive barve. Kamnita kritina je včasih veljala za najbolj kvalitetno kritino.

V mestih se je pojavila tudi kritina iz bakrene (Cooper Facts, 2023) ali svinčene pločevine (Wood, 2019), rjave, zelene oziroma sive barve. Za tovrstno kritino je značilno, da ne potrebuje tako strmih naklonov. Poleg njiju se je v času po prvi svetovni vojni uveljavila jeklena pločevina v obliki ravnih ali pogosteje valovitih plošč. Na širšem območju Soške fronte so ljudje po vojni te ostanke porabili zase in tako še danes vidimo nekatere manjše stavbe, krite s pločevino. **Tovrstna kritina je zaradi hitrega rjavenja temno rjave barve.** Prednost pločevine je v majhni teži ter veliki pokriti površini. Poleg valovite pločevine se danes uporablja zlasti trapezno pločevino s podobnimi lastnostmi.

Današnja pocinkana ali aluminijasta pločevina ne rjavi. Namesto rjave oziroma »naravne« kovinsko sive barve ponudniki ponujajo široko paleto različnih barv.

Po prvi svetovni vojni se je pojavil nov tip kritine – betonska kritina sive barve (Fister idr., 1993b). Le-ta se je pojavila v obliki cementnih strešnikov in vlakno-cementnih azbestnih valovitih plošč. Zlasti betonski strešniki so med obema vojnoma v nekaterih delih Slovenije povzročili menjavo kritine skoraj v celoti. Vlakno-cementne plošče so se namreč izkazale kot cenena in trpežna kritina, zato se jih je na veliko uporabljalo v letih 1945–1990 (Inšpektorat Republike Slovenije za delo, 2020). Zaradi raktovnosti azbesta se je popularnost vlakno-cementnih plošč zmanjšala ne glede na to, da je azbest od 2005 prepovedan in so ga v proizvodnji cementnih strešnih plošč nadomestila druga, manj škodljiva vlakna. Prvotna cementna kritina je bila svetlo sive barve. Plošče so kasneje začeli barvati. Danes tržišče ponuja široko paleto plošč različnih barv. Kot cenena kritina velja tudi t.i. Tegola Canadese. Gre za bitumenske skodeli ali trakove različnih barv, ki jih je mogoče pritrdirti na vse vrste naklona in prilagoditi njihovo obliko. Zaradi tega jih lahko srečamo v oblikah pravokotnikov, mnogokotnikov ali v polkrožnih oblikah.

Steklo sodi med novejše materiale kritine ne glede na to, da so ga za strehe zimskih vrtov in rastlinjakov uporabljali že konec 19. stoletja. Danes se ga uporablja za pokrivanje tistih površin, kjer želimo zunanj zvibro pripeljati v notranjost skozi streho in pri tem izkoristiti celotno stekleno površino. Med stekleno kritino lahko uvrstimo tudi solarne panele za pridobivanje električne energije, ki so večinoma v črni ali temno modri barvi, saj lahko tako absorbirajo največ svetlobe (Sudhakar idr., 2013).

### 1.2 Barve streh in identiteta arhitekturnih krajin

Trg ponuja kritine različnih materialov in različnih barv (Kopar, 2013), kar vpliva tudi na zunanje podobo, saj je odločitev o vrsti in barvi kritine odvisna predvsem od investitorja in arhitekta. K poenotenu zunanjé podobe stremijo prostorski načrti. Ti so se razvili iz požarnih redov, ki so med drugim predpisovali tudi vrsto kritine (Kušar, 2005). Tem so sledili stavbni redi. Danes pa so to občinski prostorski načrti. Ti dajejo smernice za oblikovanje streh, je v nadaljevanju bolj podrobno opisana. Izkazalo se je, da imajo nekateri prostorski načrti presplošno napisane zahteve, ki omogočajo različno interpretacijo. K temu dodaja svoje še industrija in trgovina z oblikovalskimi trendi, ki se ves čas spremenjajo. Vsi ti dejavniki vplivajo na neartikulirano in neurejeno podoba prostora, kar lahko opazimo v večini slovenskih krajev (slika 1).



Slika 1: Zračni posnetek dela naselja Prebold kaže na pestrost različnih barv streh (Slikovni vir: GERK, 2022).

Slika 2: Starem mestnemu jedru Dubrovnika daje identiteto rdeča barva opečnatih streh (avtor: Kušar, D.).



S spremembo načina razsvetljave, ogrevanja in priprave hrane ter zamenjavo gorljivega gradbenega materiala z manj gorljivim, požar v drugi polovici 20. stoletja ni bil več ključni faktor za izbiro kritine (Kušar, 2003). Industrijski način proizvodnje je omogočal izdelavo več različnih vrst kritin, ki so bile cenejše in s tem bolj dostopne ljudem. Investitor in arhitekt sta tako imela več različnih možnosti za oblikovanje streh. Kljub temu je bilo še do sedemdesetih let prejšnjega stoletja možno slediti določenim zakonitostim glede izbire in gradnje streh, ki so skupaj s preostalimi značilnostmi stavb oblikovale arhitekturne regije in kraje. Na osnovi arhitekturnih značilnosti je Fister idr. (1993a) razdelil Slovenijo na arhitekturne regije in kraje. S porastom samograditeljstva tipskih hiš po letu 1970 se je pojavil nov tip streh, in sicer z večinoma bolj blagim naklonom in vlakno cementno kritino. V zadnjem desetletju pa so v oblikovalskem trendu priljubljene strehe s sivo kritino. Na strehah je vedno več tudi fotovoltaičnih panelov (Brec, 2021) temno modre barve. Pojavnost novih oblik in materialov kritine skupaj z ohlapnimi prostorskimi akti je pripeljala do razvrednotenja enotne podobe kraja kot dela harmonično oblikovane arhitekturne krajine.

Ponekod se je enovita podoba strešnih kritin ohranila, kar je prispevalo k skladni celostni podobi naselij, in tudi zato nekatera danes po mnenju stroke sodijo med kvalitetno naselbinsko dediščino. Kot primeri so bila izbrana naselja ali njihovi deli, ki sodijo pod zaščito UNESCO kot del svetovne naselbinske dediščine (UNESCO, b.d. 2) ozziroma so turistično prepoznavna predvsem zaradi njihove arhitekture. Za naselja Dubrovnik (slika 2), San Gimignano (slika 3), Sieno in Berat (Albanija) so značilne strehe z dosledno majhnim naklonom in rdečerjavo opečno kritino. Če je v Italijanskih mestih ta bolj pastelne barve, so dubrovniške strehe živo rdeče, kar je posledica vrste gline, iz katere je kritina, predvsem pa, da kritina ni stara. Veliko streh je bilo namreč poškodovanih v zadnji vojni in nato obnovljenih. Stari del mesta Počitelj v Bosni in Hercegovini (slika 4) ima strehe, krite s kamnitimi ploščami svetlo sive barve. Podobne barve so tudi kupole mošej, ki so krite s svinčeno pločevino. Stari del mesta Bern (Švica) ima opečno kritino, ki pa je povsod dosledno temno rjave barve.

Največ enotnosti na področju barve kritine v Sloveniji prepoznamo v starih spomeniško zaščitenih mestnih jedrih in na Primorskem, kjer je značilna opečna kritina, ki daje celotni krajini identiteto. Podoben videz lahko najdemo tudi v Srednjih vasih v Bohinju (slika 5) ter pri nekaterih drugih bližnjih vaseh, kjer so strehe značilne sive barve. Prvotno sivo barvo leseni skodel je uspešno zamenjala siva opečna ali betonska kritina.

Slika 3: Značilna barva toskanskih streh je pastelno opečna. Naselje na sliki je San Gimignano (avtor: Kušar, D.).



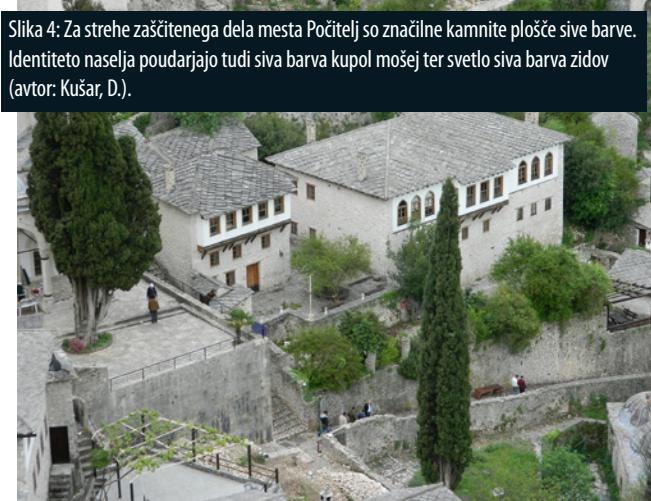
Drugod po Sloveniji je to večinoma manj izrazito, saj se je tradicionalni opečni kritini rdeče rjave barve že pred desetletji pridružila siva cementna v obliki strešnikov ali valovitih plošč. Izjeme so že omenjeni spomeniško zaščiteni predeli mest in kraji z močno tradicionalno kritino. Po letu 1990, zlasti pa v zadnjih desetletjih material strehe ne odraža več nujno tudi barve, kar še dodatno prispeva k vizualnemu neskladju in prostorskemu neredu.

Oblikovanje streh v zadnjih 30 letih odseva družbene in ekonomski spremembe. Lahko celo govorimo o stihiji na tem področju. Tu se pojavi vprašanje o identiteti arhitekturnih krajin in regij ter ustreznosti meja med njimi. Kakšen bo razvoj krajin v prihodnosti in kakšno vlogo bo pri tem imela barva kritine, je možnih več odgovorov. Lahko bo šlo v večjo individualnost oziroma nadaljevanje stihiskske gradnje, kjer se enotno oblikovanje konča ne parcelni meji. Če pa se kot družba odločimo za usmerjanje tega procesa, je potrebno pridobiti podatke o stanju in se na osnovi le-teh odločiti za ustrezne korake. Le ti morajo biti podprtji z ustrezno spremembo prostorskih načrtov, predvsem v občinah, kjer so le ti premalo natančni.

V sklopu raziskovalnega projekta V5-2111: Arhitekturne tipologije in arhitekturne regije Slovenije so bili zbrani podatki za izbrana naselja v Savinjsko-Kozjanski arhitekturni regiji. Na osnovi tega smo preverili zahteve za oblikovanje streh v občinah, v katerih ležijo ta naselja. Glede na zbrane podatke je bila postavljena hipoteza, da prostorski načrti presplošno obravnavajo to problematiko. Ob enem je industrija ponuja proizvode, ki pravno formalno sicer ustrezajo zahtevam, arhitekturno oblikovno pa ne, kar ima za posledice neurejeno stanje v prostoru. Le to pa pripomore k razvrednotenju arhitekturne krajine

## 2. METODA

Pri analizi izbranih naselij smo uporabili podatke, ki so bili izbrani v okviru raziskovalnega projekta V5-2111: Arhitekturne tipologije in arhitekturne krajine in regije Slovenije (Ciljni raziskovalni program "CRP 2021", 2022). V okviru projekta je bilo obravnavanih več naselij v Savinjsko-Kozjanski arhitekturni regiji. Za stanovanjske stavbe je bilo s terenskim delom zbranih veliko podatkov o njihovih arhitekturnih značilnostih vključno s podatki o barvah in materialu strešne kritine. Podatke smo nato primerjali s stanjem, opisnim v delu Arhitekturne regije in kraje Slovenije (Fister idr., 1993a) ter z zahtevami prostorskih aktov in stanju na terenu. Zanimalo nas je, v kolikšni meri današnje stanje še ustreza opisu iz pred 30 let in koliko k temu pripomorejo zahteve prostorskih aktov. Na osnovi tega je možno narediti zaključke o razvoju prostora v zadnjih desetletjih in pokazati na



primere dobre in slabe prakse. Kljub dejству, da gre za majhen vzorec krajev, menimo, da lahko rezultate koristno uporabimo pri prostorskem načrtovanju.

## 2.1 Teoretično izhodišče

Glosar arhitekturne tipologije (Fister idr., 1993b) ter Arhitekturne krajine in regije Slovenije (Fister idr., 1993a) sta temeljni deli za določanje arhitekturnih krajin in regij Slovenije. Slonita na dolgoletnem terenskem delu popisovanja arhitekturnih značilnosti stavb, kartirjanju in skiciranju prostorskih zakonitosti naselij v povezavi z kulturnimi in zgodovinskimi danostmi našega prostora. Predstavljata nenadomestljivo delo določanja identitet slovenskih arhitekturnih krajin in regij. Obe deli predstavljata temelje določitve in zamejitve arhitekturnih krajin na podlagi identitet posameznega območja. Identiteta se določa na treh ravneh; na ravni naselja, na ravni stavb (stavbnih kompleksov) ter na ravni odnosa dominant do prostora. Slovenija je na podlagi prepoznavanja reprezentativnih elementov glosarja (Fister idr., 1993b) razdeljena v 74 arhitekturnih krajin, ki se združujejo v 14 arhitekturnih regij, ki se dodatno združujejo v 8 skupin (Fister idr., 1993a).

## 2.2 Zbiranje podatkov za Savinjsko-Kozjansko arhitekturno regijo

V raziskavi smo se naslonili na značilnosti streh, ki so jih je za posamezne arhitekturne regije in krajine opisali Fister idr. (1993a). Gre za opis stanja in skupnih značilnostih v prostoru pred poplavno tipskimi hiš v sedemdesetih in osemdesetih letih prejšnjega stoletja. Tam je opisano idealizirano stanje, saj avtor opozori, da novejše stavbe, ki ne ustrezajo likovnim in oblikovalskim principom dotedanje arhitekture, niso bile vključene.

Cilj raziskave je bila izdelava metode za določanje in vrednotenje prostorskih značilnosti regij in krajin. V raziskavo smo vključili 773 stavb iz 14 naselij (slika 6). Večina stavb (preko 90 %) je bilo samostojnih enodružinskih hiš. V raziskavi je bilo vključenih tudi nekaj linijskih blokov in stolpičev. Najpopolnejši so podatki za Prebold, kjer je bilo v raziskavo vključenih 258 (55.6 %) od 464 stavb. V to skupino so vključeni vsi objekti v Preboldu, ne samo hiš. Pri ostalih naseljih je bilo vzorčenje narejeno za 5 % hiš, in sicer tako, da so bile enakovredno (5 %) zastopane stavbe glede na leto izgradnje. Glede na leto izgradnje, so bile stavbe razvrščene v 6 razredov: do leta 1919, 1920–1945, 1946–1960, 1961–1991, 1992–2005, 2006 in novejše. V teh krajih so bili na voljo podatki o strehah za 773 hiš. Podatki s terena so med drugim vključevali

Slika 5: Pogled na strehe naselja Srednja vas v Bohinju. Prevladujoči toni so sivi (avtor: Kušar, D.).



tip kritine (npr. zareznik, plošče ...), material kritine (beton, opeka, kovina ...) in barvo (opečna, rjavi toni, siva, drugo).

Velik vpliv na stanje v prostoru imajo prostorski načrti občin. Njihov namen je ohranjati arhitekturno identiteto krajev in skrbeti za skladen razvoj. V ta namen smo preverili prostorske načrte za vse obdelane kraje. Vse tri vrste podatkov smo obdelali in medsebojno primerjali ter na osnovi tega dobili vpogled v trenutno stanje prostora glede na stanje izpred več kot 30 let.

## 2.3 Priprava podatkov in kart za vzorčenje

Prostorske podatke o arhitekturnih regijah in krajinah (Fister idr., 1993a) je bilo potrebno sprva digitalizirati in georeferencirati. Pri digitaliziraju so bile za referenco uporabljeni meje prostorskih okolišev in naselij. Rezultat je topološko urejen vektorski sloj arhitekturnih regij in krajin, ki vsebuje imena ter šifre regij in krajin. Izračuni in kartografski prikazi so bili izdelani s pomočjo programskih orodij GIS. Prostorski podatki o registru prostorskih enot za naselja, katastru stavb in registru nepremičnin s pridobljeni na spletnem portalu E-prostor Geodetske uprave RS (GURS, 2022). Drugi del podatkov, za naselja v tujini, smo dobili preko terenskih ogledov v letih 2013, 2015, 2022, del pa s pomočjo spletne aplikacije Google Earth (Instantstreetview, 2022) in Javnega pregledovalnika grafičnih podatkov MKGPGG (2022, b. d.).

## 3. REZULTATI

### 3.1 Tradicionalne značilnosti oblikovanje streh kot del arhitekturne krajine – Savinjsko-Kozjanska arhitekturna regija:

Po mnenju Fister idr. (1993a) je Savinsko Kozjanska arhitekturna regija prehodna regija in s tem podvržena vplivom sosednjih arhitekturnih krajin, kar velja zlasti za robna in odprta območja. Kljub temu pri strehah najdemo tipične skupne značilnosti. Prevladujoča strela je strma in dvokapna. V nekaterih krajinah se občasno pojavljajo tudi mansardne odprtine, pogost element oblikovanja strehe je čop. Prevladujoča kritina je opečna (Fister idr., 1993a).

Prvotna opečna kritina je bobrovec, ki ga je nato v večini primerov zamenjal zareznik. Tako oblikovana krajina je imela prevladujočo podobo strel v rdečerjavih odtenkih. Med izjemami je lahko uvrstili nekatere domačije v gručah Zgornje Savinjske arhitekturne krajine, kjer je bila prvotna kritina siva, iz lesnih

skodel (Fister idr., 1993a: 188), vendar je kasneje, že v času ko je so to področje raziskoval Fister idr., prevladala značilna kritina opečnatega zareznika.

### 3.2 Zahteve prostorskih aktov za izbrana naselja:

#### Dobrna

Prostorski načrt za Dobrno (2012: 920) določa, da morajo biti strehe simetrične dvokapnice, strme (nakloni strešin od 35 do 45°), možni so čopi, osvetljevanje mansarde je možno s frčadami, drugi arhitekturni elementi streh niso dovoljeni. Napušči morajo biti minimalni. Kritina mora biti pretežno opečnata (zaželeni bobrovci ali zarezniki), pretežno v naravni opečnosti (rdeči barvi). Izjema so le nekateri predeli ob obstoječih stavbah, kjer je lahko oblikovanje streh tudi drugačno – ravne strehe.

#### Gornji grad

Tudi Prostorski načrt občine Gornji Grad (2018) dopušča več vrst streh, saj določa, da je strešna kritina lahko opečne ali temne barve, vendar ne živih barv. Prav tako je na strehah objektov dovoljena namestitev fotonapetostnih modulov, ki se izvedejo v ravnini strešine in ne presegajo gabaritov strehe več, kot zahteva sistem pritrditve, razen pri ravnih strehah in strehah z minimalnimi nakloni, kjer je možna postavitev modulov pod večjimi nakloni.

#### Parižje (Braslovče)

V naseljih občine Braslovče Prostorski načrt (2018) zahteva, da je kritina pretežno opečnata (zaželeni so bobrovci ali zarezniki), pretežno v naravni opečnosti (rdeči) barvi. Dovoljeni so nakloni strešin od 30° do 45°. Siva kritina je dopuščena le izjemoma, kadar taka kritina prevladuje v okolini.

#### Prebold

Za stanovanjske stavbe občine Prebold Prostorski načrt (2010) predpisuje, da so strehe dvokapnice s slemenom v smeri daljše stranice oziroma sestavljene dvokapnice istega naklona v primeru lomljenega tlora. Lahko so zaključene s čopi. Štirikapne (oziora večkapne) strehe in lomljene strešine niso dovoljene. Naklon streh je dovoljen v razponu od 38° do 45°. Strešna kritina je praviloma opečne barve, lahko pa je tudi sive, če je prisotna

Slika 6: Prikaz obravnavanih naselij (Dobrna, Gornji Grad, Parižje, Prebold, Solčava, Šentjur, Šmarje pri Jelšah, Šoštanj, Vinska Gora, Vojnik, Žalec) na karti Savinjsko-Kozjanske regije.

na območju EUP (pri zimskih vrtovih in nadstreških se dovoljuje še brezbarvo steklo in steklu podobni brezbarvni materiali). S strešniki je treba ustvariti drobno teksturo. Nadstreški so lahko tudi enokapni v minimalnem naklonu (do 8°).

#### Solčava

Občinski prostorski načrt občine Solčava (2019) glede streh določa, da morajo biti strehe simetrične dvokapnice, strme, nakloni strešin od 40° do 45°. Osvetljevanje mansarde je možno s frčadami ali s strešnimi okni, dopustni so čopi, medtem ko drugi arhitekturni elementi streh niso dovoljeni. Frčade morajo biti osno prilagojene, krite z dvokapno strešico in zidcem ob straneh. Za slemen velja, da morajo biti vzporedni z daljšo stranico fasade in prilagojeni smeri slemen sosednjih objektov, če je to mogoče. Kritino prostorski načrt predpisuje sive barve, temnejše intenzitete, lahko je tudi lesena (slika 7). Strehe z nezdružljivimi različnimi nakloni, slemeni in kritinami v Solčavi niso dopustne, pač pa dopušča drugačno oblikovanje streh pri nestanovanjskih stavbah s specifično funkcijo, tam se streha namreč prilagaja funkciji objekta.

#### Šentjur

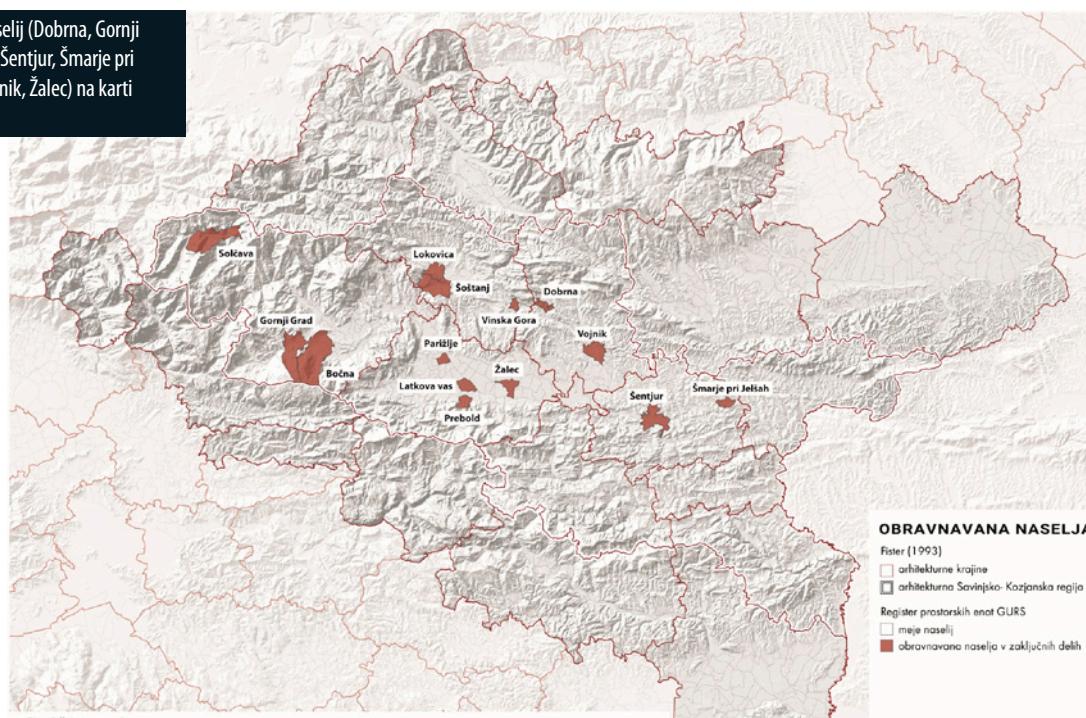
Prostorski načrt občine Šentjur (2012) zahteva, da mora biti strešna kritina sive ali opečne barve, s strešniki pa je potrebno ustvariti videz drobne strukture. Za svojevrstne stavbe (gostilne, trgovine, garaže) velja, da mora biti strešna kritina praviloma v opečnih, temno rjavih ali sivih barvah, pri zimskih vrtovih in nadstreških se dovoljujejo še brezbarvo steklo in steklu podobni brezbarvni materiali. Možna je tudi ureditev zelenih streh.

#### Šmarje pri Jelšah

V občini Šmarje pri Jelšah Prostorski načrt (2018) dopušča več svobode pri izbiri barve strehe, saj je le-ta lahko v sivih, rjavih ali opečnih tonih, pri zimskih vrtovih in nadstreških se dovoljujejo še brezbarvo steklo in steklu podobni brezbarvni materiali.

#### Šoštanj

Prostorski načrt za Šoštanj (2015) dopušča pri strehah več možnosti, saj dopušča oblikovanje streh kot dvokapnice ali ravne oziroma z minimalnim naklonom. Z izjemo enega dela občine, kjer je določena kritina opečnate barve, ni določila glede vrste in barve kritine.



## Vinska gora

Za stanovanjsko gradnjo Prostorski načrt (2007, 2019) predvideva dvokapnice s 40 stopinjskim naklonom. Prav tako so dopustne frčade, strešna okna (mansardne osvetlitve) različnih oblik in postavitev sekundarnih streh z nižjimi slemeni, postavljenimi pravokotno na osnovno smer slemena. Gradbeni material streh ni predpisani, a je predpisano, naj bo kritina drobne tekture, opečne ali temno rjave barve. Zanimivo je, da svetlo siva barva kritine ni dopustna.

## Vojnik

Kot barvo strešne kritine Prostorski načrt občine Vojnik (2016) določa opečne barve, zunaj območij naselbinske dediščine pa je lahko tudi sive, črne ali rjave barve, če takšne strehe prevladujejo v okolici. Pri novogradnjah so dopustne dvokapnice, večkapnice, ravne strehe in enokapnice, oziroma sestavljene dvokapnice istega naklona v primeru lomljenega tlora. Odpiranje strešin je dopustno v obliki strešnih oken in frčad. Oblika frčad je lahko moderne oblike.

## Žalec

Obliko streh, naklon, kritino in smeri slemen v Žalcu je treba skladno s Prostorskim načrtom (2013) prilagoditi splošni oziro-

Naselje	Občina	Številka arhitekturne krajine	Barva (kritina) po fistru in sodelavcih	Barva (kritina) po prostorskih načrtih	Število stavb v naselju	Število popisanih stavb	Število sivih streh	Število streh opečne barve	Število streh v rjavih tonih	Delež stavb z barvo (kritino) po fistru in sod. (opečna in rjava)	Delež stavb z barvo (kritino) po prostorskih načrtih
Bočna	Gornji Grad	11.58	Rdeče-rjava opečna (bobroveč, zareznik)	Opečna ali temne barve (ne sme biti živih barv)	550	21	5	3	13	76,2	100,0
Dobrna	Dobrna	11.57	Rdeče-rjava opečna (bobroveč, zareznik)	Opečnata (rdeča)	237	14	2	10	1	78,6	71,4
Gornji grad	Gornji grad	11.58	Rdeče-rjava opečna (bobroveč, zareznik)	Opečna ali temne barve (ne sme biti živih barv)	497	29	8	9	12	72,4	100,0
Latkova vas	Prebold	11.56	Rdeče-rjava opečna (bobroveč, zareznik)	Opečna, le izjemoma siva	591	29	10	18	1	65,5	100,0
Lokovica	Šoštanj	11.59	Rdeče-rjava opečna (bobroveč, zareznik)	Ni predpisana	712	41	5	18	12	73,2	100,0
Parižlje	Braslovče	11.56	Rdeče-rjava opečna (bobroveč, zareznik)	Opečna (rdeča) barva, siva le izjemoma	523	28	9	5	13	64,3	100,0
Prebold	Prebold	11.56	Rdeče-rjava opečna (bobroveč, zareznik)	Opečna, le izjemoma siva	464	258	63	107	72	69,4	100,0
Solčava	Solčava	11.58	Opečna (prvotno skidle)	Siva, temnejše intenzitete	253	14	9	3	2	35,7	64,3
Šentjur	Šentjur	11.54	Rdeče-rjava opečna (bobroveč, zareznik)	Siva ali opečna	2284	130	15	58	51	83,8	100,0
Šmarje pri Jelšah	Šmarje pri Jelšah	11.54	Rdeče-rjava opečna (bobroveč, zareznik)	Sivi, rjavi ali opečni toni	772	39	7	23	9	82,1	100,0
Šoštanj	Šoštanj	11.59	Rdeče-rjava opečna (bobroveč, zareznik)	Ni predpisana	718	32	1	10	20	93,8	100,0
Vinska Gora	Velenje	11.59	Rdeče-rjava opečna (bobroveč, zareznik)	Opečna ali temno rjava (siva ni dopuščena)	245	13	5	7	1	61,5	61,5
Vojnik	Vojnik	11.57	Rdeče-rjava opečna (bobroveč, zareznik)	Opečna barva (zunaj območij naselbinske dediščine tudi siva, rjava in črna)	1132	58	13	31	14	77,6	100,0
Žalec	Žalec	11.56	Rdeče-rjava opečna (bobroveč, zareznik)	Kritina ne sme biti živih barv, načeloma opečna, izjemoma tudi siva, črna in rjava	1195	67	17	41	7	71,6	100,0



Slika 7: V Solčavi prevladujejo strehe sive barve (Slikovni vir KG, 2022b. d.).

ma kakovostni podobi v EUP. Barva kritine ni predpisana, zahteva se le, da kritina ni živih barv. V prilogi prostorskega načrta je kot barva strehe predpisana opečna barva, zunaj območij naselbinske dediščine ali občutljivejših območij prostora z vidika ohranjanja narave in krajinskih značilnosti pa je dopuščena tudi kritina sive, črne ali rjave barve, če takšne strehe prevladujejo v

Preglednica 1: Delež barve streh po naseljih v odvisnosti od zahtev prostorskih načrtov, ugotovitev prof. Fistra in stanja na terenu.

okolici. Prostorski načrt dovoljuje namestitev fotonapetostnih modulov, a le v ravnini strehe.

Skupna lastnost večine prostorskih načrtov obravnavanih naselij je upoštevanje zatečenega stanja. Pri barvi streh se to kaže v večinoma predpisani opečni barvi (rdeča, rjava) le-ta tudi dopustnosti uporabi sive barve streh. Slednje je dopuščeno v območjih kjer siva barva že prevladuje ali se ta pojavlja izjemoma. Izmed obravnavanih štirinajst naselij le za dve naselji prostorska načrta natančneje natančno določata barvo. V Solčavi je tako predpisana siva barva, medtem ko - za primer - v Vinski Gori siva barva ni dopuščena.

### 3.3 Rezultati terenske raziskave

V sklopu raziskave je bilo analiziranih 773 hiš v 14 krajih Savinjsko-Kozjanske arhitekturne regije. Kot je bilo že rečeno, so bile v analizo vključene hiše kot nosilke arhitekturne identitete krajine. Kraji so bili izbrani tako, da so zastopane različne arhitekturne krajine znotraj regije. V razpredelnici so v prvih stolpcih prikazani podatki o naselju, občini, nato številka arhitekturne krajine, značilne kritine, ki so jih je za posamezno krajino ugotovili in zbrali Fister idr. (1993a) ter zahteve glede barve streh veljavnih prostorskih načrtov občin. V nadaljevanju je prikazano število evidentiranih stavb in število streh glede na barvo. Glede barve so bile stavbe razdeljene v tri kategorije in sicer sive barve, opečne barve in rjave barve. Zadnja dva stolpca prikazujeta delež števila stavb, katerih barva strehe ustrezajo tem merilom, večinoma standotom. Nižji delež je le v naseljih, kjer so barve streh v prostorskih aktih bolj podrobno opredeljene.

Rezultati (preglednica 1) kažejo, da se delež stavb s kritino, ki ustrezajo opisom prof. Fistra, večinoma giba med 60 % in 80 %. Izjema je Solčava, kjer je večji delež sivih streh. Ker prostorski načrti večinoma dopuščajo vse prevladajoče barve, je delež stavb, ki ustrezajo tem merilom, večinoma standotom. Nižji delež je le v naseljih, kjer so barve streh v prostorskih aktih bolj podrobno opredeljene.

## 4. ZAKLJUČEK

Rezultati analize so izpostavili problem prostorske pojavnosti streh različnih barv v obravnavanih naseljih. Kot je bilo mogoče ugotoviti v analizi identitete arhitekturnih krajin, je to posledica zlasti tehnološkega razvoja kritine. Ta se je razvila od prvotno slamnate in lesene kritine v sivih odtenkih do rdeče-rjavih odtenkov opečnate kritine, ki je prevladovala pred tridesetimi leti in je predstavljala del identitete arhitekturne krajine.

Prvotni tip kritine, ki je bila narejena iz skodel in bilse je gradil v odtenkih sive barve, se je najdlje ohranil v hribovitem delu Zgornje Savinjske doline, v kraju Solčava. Ne glede na to, da je v delu Arhitekturne krajine in regije Slovenije (Fister idr., 1993a) tam kot tipično kritino prepozna opečnato kritino (bobrovek ali zareznik), daje veljavni prostorski načrt prednost kritini v sivi barvi. Zaradi tega ima opečnata kritina v rdeče-rjavih odtenkih, ki je bila del identitete kraja pred tridesetimi leti, danes med obravnavanimi naselji najmanjši delež, kar znaša okrog 30 %.

Po drugi strani je v večini preostalih obravnavanih prostorskih načrtih slutiti vpliv zatečenega stanja iz časa 20. stoletja, ko je bila marsikje v gradnji uporabljena priljubljena siva betonska

kritina. Rezultati kažejo, da ima kritino v sivi barvi 21,8 % vseh obravnavanih stavb, v rjavi barvi 27,0 % in v opečnati barvi 47 %. V današnjem oblikovalskemu trendu lahko prepoznamo, da je temno siva kritina še vedno priljubljena, zato večina obravnavanih prostorskih načrtov dopušča uporabo sive kritine, ponekod sicer le kot izjemo, drugod pa jo ti dopuščajo le v primeru prilagajanja barvi že zgrajenih streh okolice.

Za tiste stavbe, dele naselja ali celotna naselja, ki so del kulturne ali naselbinske dediščine in posledično pod varstvom Zavoda za varstvo kulturne dediščine, ugotavljamo, da slednja bolj ohraňajo svojo identiteto. Žal ta vpliv izven področja zaščite varstva kulturne dediščine hitro izzveni, kar posledično negativno vpliva na ohranjanje identitet naselja.

Kot je pokazala raziskava, sedanja opredelitev materiala v večini prostorskih načrtov ni dovolj natančna za doseganje enotne barve streh. Tržišče namreč ponuja opečno kritino v različnih odtenkih rdeče in tudi sive oziroma črne barve (Creaton, b. d.). Posledično opečna barva tako ne pomeni nujno enakega odtenka, kot je denimo pomenila trideset let nazaj. presega -odtenke, celo ih odtenkov in Podobno velja, da tudi betonski strešniki niso nujno izvedeni v sivih odtenkih. Danes material ne določa absolutno tudi končne barve kritine, kar je potrdil terenski ogled. Med analiziranimi strehami je tako tudi betonska kritina rjave barve, kovinski zarezni opečnate barve in podobno.

Prilaganje barve streh oziroma vzpostavitev enotne podobe arhitekturne krajine je dolgotrajen proces, ki obsega spremembe in dopolnitve prostorskih načrtov, osveščanje investorjev o smiselnosti vzpostavljanja in/ali ohranjanja arhitekturne identitete kraja. Ta proces lahko traja več desetletij in bo moral nujno vključevati tudi preostale arhitekturne elemente, ki bodo skupaj pripomogli k ponovnem jasnemu definiranju posameznih arhitekturnih krajin in regij. Potrebno se je zavedati, da arhitekturne identitete naselja ne določa le oblika posamezne stavbe, ampak jo tvori podoba večjega števila stavb oziroma večji deli posameznega naselja.

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# Rrona Berisha, Matevž Juvančič: ODPRTOKODNI URBANIZEM – PREVOD NAČEL IN KRITERIJEV ODPRTOKODNE PROGRAMSKE OPREME NA PODROČJE URBANIZMA

## OPEN SOURCE URBANISM – ADAPTING PRINCIPLES AND CRITERIA OF OPEN SOURCE SOFTWARE TO URBANISM

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1.02 Pregledni znanstveni članek / Review Article

## POVZETEK

Zamisel o odprtakodnosti, ki primarno izvira iz področja razvoja programske opreme, je uporabna na različnih področjih, vključno z urbanizmom, kjer jo poznamo pod angleškim terminom Open Source Urbanism (OSU) oziroma slovenskim odprtakodnim urbanizmom. Ta pristop spodbuja transparenten, demokratičen proces, kjer so na koncu procesa tako uporabljenne metode kot tudi končni rezultati in dognanja drugim zainteresiranim prosti na voljo za uporabo, prilaganje in spremjanje, zasebne, javne in celo komercialne namene pod enakimi načeli odprtakodnosti. V prispevku so načela in kriteriji odprtakodne programske opreme prilagojeni in prevedeni v polje urbanističnega oblikovanja in načrtovanja. Cilj prispevka je izluščiti kriterije za določanje ravni odprtakodnosti projektov, ki temeljijo na načelih odprtakodnega urbanizma. Nadalje smo vzpostavljene kriterije OSU uporabili in testirali na treh študijah primerov projektov, ki se ukvarjajo z urbanim prostorom. Rezultati kažejo, da je načela in merila odprtakodne programske opreme mogoče smiseln in uspešno uporabiti pri urbanističnem oblikovanju in načrtovanju. Načela OSU delujejo na širokem naboru projektov in v različnih merilih, od sajenja dreves do načrtovanja večjih urbanih ureditev.

## KLJUČNE BESEDE

odprtakodni urbanizem, urbanistično oblikovanje, urbanistično načrtovanje, sodelovanje javnosti, odprtakodna programska oprema, odprtakodna načela

## ABSTRACT

The idea of open source, stemming from software development is being applied in various fields, including urbanism, as the concept of Open Source Urbanism (OSU). This approach promotes a transparent process, where the methodology used and developed and the final outcomes are open for others to use, modify, adjust and even profit from while also sharing their process and results openly. In this paper, the principles and criteria of open source software are adopted for-, adjusted to and observed in the field of urban design and planning. The goal was to extract the criteria for determining the levels of urban projects being based on the principles of open source urbanism. Furthermore, the newly established criteria of OSU were applied and tested on three case studies of projects related urban spaces. The results show that the principles and criteria of open source software can be successfully used in urban design and planning. OSU principles can be applied on a wide range of projects and crossing different scales, from planting a tree to large-scale masterplan design.

## KEY WORDS

Open Source Urbanism, Urban Design, Urban Planning, Public Participation, Open Source software, open source principles

UVODNIK  
EDITORIAL  
ČLANEK  
ARTICLE  
RAZPRAVA  
DISCUSSION  
RECENZIJA  
REVIEW  
PROJEKT  
PROJECT  
DELAVNICA  
WORKSHOP  
NATEČAJ  
COMPETITION  
PREDSTAVITEV  
PRESENTATION  
DIPLOMA  
MASTERTHESIS

## 1. INTRODUCTION

### 1.1 The origin and development of OSU

The city is a complex organism, with unpredictable developments in various fields, no defined endings only results from each action we take to plan the city (Roggema, R., 2019). The city can be seen as an ongoing experiment (Roggema, R., 2019) or as a permanent transformation (Keiner, 2012). This challenges planners to find new solutions and experiment with the process.

In recent years, the concept of Open Source Urbanism (OSU), based on the idea, principles and methodology of creating open source software is finding its ways into the process of urban design and planning. Easy to comprehend through its name, open source urbanism connects and links the idea of open source software implanting it into the field of urban design and planning. Phrased differently, planning of the city and its parts becomes sharable, upgradable, adjustable and adaptable, easier to follow and perceive (transparency) and open to different stakeholders and parties to contribute to or tap into.

To begin with, the basic definition of Open Source is that the source code is open to use and modifications so anyone can improve the source code and share the changes (Al-Masri and Curran, 2019). Open Source software and products are widely used, created and maintained voluntarily by the community of developers. Urban planning is one of many fields of possible application that could benefit from the fundamental approach of open source access, development and sharing. We have come to realize the potential of open access publishing, but have the opportunity to go even beyond those with shared methodologies.

In urbanism this is known as Open Source Urbanism, which is established on sharing, using, modifying and redistributing the products based on contribution, alike to Open Source software/programs (Artibise, 2010).

According to Kaspori (2005), this is a model that can be used for solving urban problems and developing the city based on collaboration. The basic requirement for collaboration is shared interest that results in sharing knowledge and experience. Therefore, people are supposed to share ideas and make them available to others, so others can use and modify them and consequently city planning will be an ongoing process and not a onetime action (Kaspori, 2005).

Compared to traditional practices of urban planning, Oswalt et al. (2013) highlights components that develop differently when applying the concept of OSU. Initially, the focus in the first stages of planning is not on designing the buildings or spaces, but to gradually come to a result that meets the requirements of all, through informal activities, activating and temporary using spaces together with the community. Second, the shared control between municipalities, owners and citizens, and another difference is that solutions to urban questions are not coming from architectural and urbanistic competitions but from actions taken together with the community.

If OSU is practiced in a meaningful way, it will promote a bottom-up decision-making process (Scripcariu, 2012), benefit in democratizing urban development (Zhilin et al., 2018), encourage social interaction, promote a transparent and collaborative process, and the outcomes are as per Bradley (2015): “democratized and owned by many”. OSU initiatives also inspire social movements. Since the ‘products’ – the process, methodology, approaches and results -could be used, modified and

developed further by third parties, a planning process and outcome is no longer relevant only for one location but can become a repeated initiative (Zhilin et al., 2018), like ‘parklets’<sup>1</sup>, a guerilla initiative that became a social movement and later was incorporated in urban planning (Bradley, 2015).

The public will benefit in many ways from OSU initiatives, by being included in the process, being able to convey and integrate their needs, gain new knowledge and more (Bradley, 2015). Encouraging citizens to participate in these initiatives can lead to innovative solutions, and their enthusiasm to contribute inspires others and reflects their will to be part of the process (Finn, 2014).

Public authorities will also benefit from OSU. Angelidou (2019) illustrates that tactical urbanism can lead to constructive dialogue and to new initiatives that the municipality cannot implement due to the length of the process by law. Nevertheless, institutions play an important role in supporting OSU by, not only, opening access to the source of information for the public. Douay (2018) argues that opening access to data will allow citizens to be better acquainted with the city by accessing various documents, empower them to follow and be involved in the work and procedures lead by the authorities and propose improvements or suggestions, resulting in processes that are more transparent. The institutions can also show their support by implementing projects of citizens, support them financially, open the resources and make intelligent use of their authority (Oswalt et al., 2013).

The concept of OSU is manifested from citizens through different initiatives, like DIY-urbanism, urban guerillas, urban acupuncture and more (Sassen, 2015-Epilogue). The initiatives are usually documented by citizens, containing their experience and the process in order to be used or modified by others (Zhilin et al., 2018). These documentations are usually shared through online channels and social media. They represent a transparent code and are comparable to sharing the source code in open source software (Bradley, 2015). Specific, tailored information communication platforms, which are currently lacking in OSU approaches could potentially add another level of openness and accessibility to the OSU efforts mentioned by Zhilin et al. (2018).

There is a difference between open source software and OSU concerning an important component. The digital domain offers diversity and interchangeability: if you do not agree with a specific software development philosophy, or you find one that has more beneficial features, you can use another software; that is not the case for cities because projects are specific to one location or building (Demerijn, 2013). It often happens that citizens do not have similar needs or share unified vision for common-spaces, this raises the question of who has the right to shape the city and who is the one with the capacity, knowledge and expertise to negotiate a consensus between the stakeholders involved.

Applying the concept of OSU doesn't end with implementing the project. An important part is sharing the knowledge and if possible constant improvement. This can sometimes depend on the voluntary good of the citizens, and can be considered as a drawback, taking into account the dynamic of life nowadays.

Further, Oswalt et al. (2013) mentions that sharing control between actors, as a characteristic of OSU, would be a win-win situation for all, however the level that shared control that can be applied depends on various factors.

<sup>1</sup> <https://groundplaysf.org/publication/san-francisco-parklet-manual/>

When involving different stakeholders, we must be prepared for a prolonged and more expensive process, to have staff that is trained for developing such processes, and to be careful not to create an adverse effect on the participants, such as the loss of trust and the desire to contribute (Wouters et al., 2011).

The aim of this study is to focus on the concept of open source approach as the core component of OSU and translate principles of open source to the field of urban design and planning as well as set and adapt criteria with which to measure OSU levels. Moreover, this study aims to analyze stages of planning that the concept of OSU can be applied to, the community's willingness to participate and the role of technology in the process.

## 2. METHODOLOGY

The theoretical groundwork contains examination and study of existing practical and theoretical research on Open Source Urbanism (OSU), open source software, public participation, urban design and technology in urban design. The literature review for this article was based on Science Direct and Google scholar databases. The search was initiated with the exact matching term "Open Source Urbanism" during the years 2015 and 2020. This search generated 400 results in Science Direct and 353 in Google Scholar. The number was reduced by choosing articles most related to the field, involving case studies from Europe and written in English. In addition to this search, our research was also extended to different disseminations of OSU in newspapers, university pages, other relevant pages, interviews, lectures and more.

Initially, the above mentioned literature was analyzed, in order to understand the origin and the development of the concept, how it was defined in literature, the practical uses of it, the various aspects of the concept such as methods, principles and techniques. The analysis of the literature is presented in the "Introduction" chapter of this paper.

The findings of the study the article is dealing with are divided into two parts.

The results of the first part came from interpreting Open Source 10 criteria<sup>2</sup> and 6 principles<sup>3</sup> to OSU, to better understand the overlap and the concept. There are 10 criteria of Open source that must be fulfilled in order for a software to be considered Open Source, and 6 principles of Open Source that derive from "open source software development models" and can be applied in different fields, not limited to programming. These were adjusted to Open Source Urbanism for the purpose of this study. This translation from OS to OSU is done by the authors through analyzing each criteria and principle to understand if it can or cannot be applied in Urbanism.

The results of the second part came from comparing the principles and criteria of OSU, found in the first part of the results, to case studies that our initial database search clearly identified as belonging to Open Source Urbanism (OSU) principles. We wanted to determine and establish to which extent and level they really followed OSU, looking for alignment between declared and demonstrated components of OSU and possible misalignments.

Three case studies were chosen for the second part of the research: Space-S residential block, Guerrilla Gardening and Open Street Map Kosovo. We set to have a variety in the case studies

<sup>2</sup> <https://opensource.org/osd>

<sup>3</sup> <https://opensource.com/open-source-way>

and intentionally chose according to the next criteria:

- one case study needed to address larger, building block size areas in the city (Space-S residential block);
- one case study needed to deal with open public or private spaces (Guerrilla Gardening);
- one case study that is not aiming towards physical intervention, however still addresses initiatives, mapping, crowdsourcing or such, dealing being directly or indirectly associated with urban spaces and urbanism (Open Street Map Kosovo).

Each case study is briefly introduced and explained within its context, followed by the presentation of comparative findings in tables 3, 4 and 5. The comparison of three case studies with OSU principles and criteria was done in order to understand if the case studies met the OSU characteristics and to which extent.

During evaluation and comparative process, if a criteria or a principle was present in a case study, its presence was evaluated with positive [yes]. If there was no trace of it, it was evaluated with [no]. If it was partially present, it was marked with [partially]. Partial presence was determined based on being between present and not-present, each such case is explained in detail in the results, when it occurs. If the principle was not applicable to the case study or was omitted due to the nature of the case study, it was evaluated with [ / ]. The case studies were further compared to each other to understand the process and the level of design that the concept of OSU can be applied.

## 3. RESULTS

### 3.1 First part of the results: Interpreting Open Source criteria and principles to Open Source Urbanism

Table 1 lists ten criteria that should be present for a software/application to be determined as open source, provided by Open Source Initiative (Open Source Initiative, 2007) and translated by the authors to OSU guiding principles.

In the table below are mentioned the products of urban planning, which as elaborated by Washburn (2013) are: rules (policy, zoning, steps, guidelines, methodology), plans and projects (built work: streets, squares, plazas, parks, leftover space, communication and transportation infrastructure that knits our cities together).

### 3.2. Second part of the results: Comparing the new established criteria and principles of Open Source Urbanism to three case studies

#### 3.2.1 Case Studies

##### Space-S

Space-S is a residential block developed on 27 hectares area in Eindhoven (Netherlands) as an example of open source urban planning, led by the company 12n urban matters. The urban block was planned through a future users' driven process. The initiative started in 2012 and the first residential units opened for living in 2016 (12n urban matters, n.d.).

In the beginning, it was searched for potential residents for the unbuilt land, and a mix of people signed up, forming a community with more than a thousand participants that represented the future residents of Space-S (Stam + De Koning, 2017). The residential block was co-designed. The source of informa-

Table 1: Open Source criteria  
(Open Source Initiative, 2007)  
translated to OSU

Open Source	Open Source Urbanism
Free redistribution - anyone can sell or give away the software without cost	Free redistribution of the products of urban planning, except built work. Anyone can profit from them.
Source Code - must include the source code and allow its distribution	The method and procedure must be provided (plans, steps and guidelines) and can be distributed by others.
Derived Works - anyone can modify and derive work	Anyone can modify or change the products of urban planning from the original state, except built work.
Integrity of the author's source code	Authors of the products of urban planning must be known, the project may be required to be renamed if it uses the same method/procedure.
No discrimination against persons or groups	Equal participation in the process and for the using the products of urban planning.
No discrimination against fields or endeavor	Impartiality for any field and effort.
Distribution of license - the license is applied to whom the program is redistributed	The rights attached to the original product are transferred to the modified product.
License must not be specific to a person or entity	License to a product must not be specific to a person.
License must not restrict other software	Product must be in harmony with other products, legislation and spatial legislation or have legislation change integrated into the product.
License must be technology neutral	License to a product must be technology and politically neutral.

Table 2: Open Source principles  
(Opensource, 2013) translated  
into OSU

Open Source	Open Source Urbanism
Transparency	Open access to the data, transparent process, open outcome of planning and open (re-)implementation.
Collaboration	Collaborative design, including government, community, investors, and more.
Release early and often	Action based planning, use of temporary, changeable solutions before committing to permanent ones (testing purposes but also providing ongoing place making while waiting for final resolutions), flexible planning and changing, constant updating and re-evaluation of existing plans as the city is an ongoing process in (trans-) formation.
Inclusive meritocracy	Involving all but reasonably assigning tasks according to expertise, e.g. urban plan drafting by professionals who are capable, proficient and talented in this domain.
Community	Involving community and stakeholders in all phases of co-design and decision-making.

tion was shared with the community and they determined what was important for them. The planers needed to decide on the viability of the requests and proposals. If there was no agreement between the parties, proposals were re-designed (12n urban matters, n.d.).

Participants were involved with the help of different ICT channels, with an emphasis on social media. They actively participated, acquired new knowledge or used their prior knowledge, as in the case when a participant helped create the 3D model (12n urban matters, n.d.).

The process resulted in a residential block with shared open public spaces, roof gardens, different types of housing, fulfilling the requests of young, old, families, singles, students, working residents and more (Space-S, 2018). The company 12n urban matters developed an open brochure regarding Space-S, describing the initiative in general but not as a manual that could help reproduce the process.

Space-S is an example of why we should re-think expectations that the process of co-designing, involving community with large number of its members, will be long and expensive. Contrary to preconceptions, 12n urban matters (n.d.) reports, the residential block was designed and built on time and at with a reasonable price tag, since it was a common goal for all.

### Guerrilla Gardening

Guerilla Gardening is a global movement, part of sustainable efforts to find a balance of taking care of the planet and our needs by gardening, regardless of the obstacles to overcome. The movement strives to achieve this by cultivating the neglected

Figure 1: Sunflower Guerrilla Gardening Day (By Bonnie Kittle on Unsplash <https://unsplash.com/photos/vxTpVxYCZJA>).



spaces or spaces that belong to others, without having permission (Reynolds, 2008). As a concept, it occurred centuries ago, when someone cultivated someone's land without his or her permission (Reynolds, 2008). As a term "Guerilla Gardening" was first recorded to be used by Liz Christy in 1973 (Reynolds, 2008) when she and the volunteers transformed a neglected land in Manhattan's Bowery, into a vegetable garden (Liz Christy Community Garden, 2007).

Since then, Guerilla Gardening is spreading around the world through initiatives by citizens, which are different from each other but share the same concept. Some citizens join this move-

ment to beautify the spaces, some to revolt against institutions or owners for leaving the land neglected (Taylor, 2013).

The challenges for guerrilla gardeners are the scarce and neglected spaces (Reynolds, 2008). However, they do not necessarily abide by rules/regulations to intervene on spaces or someone's property. They believe that this movement benefits everyone and the procedures of legalizing gardening are often prolonged and end in failure to acquire permits (Reynolds, 2008). For big-scale projects, Reynolds (2008) argues that it is best to get permission and collaborate with institutions because they cannot be completed by being unnoticed.

This movement is well documented. There are many web pages, among others GuerillaGardening.org, where many initiatives around the world are documented. Such as: Seed Bombing, Guerrilla Park, Roundabout Garden, and more (Figure 1).

### Open Street Map Kosovo

Open Street Map Kosovo is an initiative by Free Libre Open Source Software Kosova (FLOSSK), an NGO that promotes F/OSS since 2009 in Kosovo (FLOSSK, n.d.). This initiative is not a direct intervention in public space, but enriches information regarding public spaces in urban environments and consequently facilitates easier access and use of them by potential general and local users.

By using different publicly accessible and mostly open source software solutions and applications (such as: Open Street Map iD - editor programmed in JavaScript to edit Open Street Map geodata; JOSM - free software desktop editing tool for Open Street Map geodata; and QGIS - cross-platform for viewing, editing, printing, and analysis of geodata), the community together



Figure 2: Tourist maps by Directory of Tourism generated from OSM data (Rrona Berisha).

with professionals edited and added information to the maps of Kosovo in Open Street Map (OSM) platform. They edited historical maps, marked hiking trails, placed road names, mapped geographical features, mapped Kosovo Health System institutions to help with Covid-19 and more. This was established by volunteer work from citizens of Kosovo and abroad, in collaboration with relevant institutions that opened access to the data for the public (FLOSSK, 2020).

The process was organized through Mapathons (an event to make online map improvements), where the community was informed about these events through social media. From time to time, different groups of community were trained on how to use the platforms through workshops and a conference (FLOSSK, 2020).

The process of how the initiative was developed and the maps are open to the user to use, modify and update. The data is available on Open Street Map platform and applications that use data from it (FLOSSK, 2020).

The Municipality of Prishtina also benefited from this initiative. The Directory of Tourism generated tourist maps for Prishtina, by using maps from Open Street Map that were enriched with information from this initiative, as seen in Figure 2 (Guri, 2020, Personal Interview).

There are similar initiatives in the world dealing with urbanity and urban environments, spilling into the urban design and planning domain, such as the Civic Hacking initiative, where citizens add online information that aim to improve the city (Hyder, 2014).

### 3.2.2. The comparison of OSU criteria and principles to the three case studies

The second part of the results contains three tables. Table 3 represents a general analysis of case studies, Table 4 and Table 5 traces the alignment of criteria and principles of OSU with the three case studies.

Case studies differ from each other on the level and nature of planning, two are physical interventions in built up, unbuilt or/and open spaces, while OSM-Kosovo is a non-physical digital intervention (online mapping). The number of participant varies from case study to case study: OSM-Kosovo is a small-scale project with low number of participants (however, it affects the largest number of users among the selected case studies), Guerilla Gardening is a global movement and the number of participants varies depending on the project, Space-S is a big project with more than thousand participants.

All three case studies need facilitators or initiators that manage, seek consensus and help steer the effort. For OSM-Kosovo the facilitator is an NGO, Space-S is an investor with social agenda and Guerilla gardening organization is the ideator and moral authority of the initiative.

Table 3: General analysis of the three case studies.

	Space -S	Guerilla Gardening	OSM - Kosovo
Level/nature of planning	Residential block planning	Urban Gardening	Editing/adding information to maps
Used technology	Social media, others not known	Social media, others not known.	OSM, ID, JOSM, QGIS, Social Media.
Number of participants	More than a thousand participants	Global movement, small initiatives.	Small groups.
Facilitator	Yes	Yes	Yes

	<b>Space -S</b>	<b>Guerilla Gardening</b>	<b>OSM - Kosovo</b>	<b>Table 4: The three case studies compared to Open Source Urbanism criteria.</b>
Free redistribution of the products except built work. Anyone can profit from them.	No	Yes	Yes	
Method and procedure is provided.	Partially	Yes	Yes	
Anyone can modify or change the products, except built work.	No	Yes	Yes	
Author is known	Yes	Partially	Yes	
Equal participation in the process and for using the products	Yes	Partially	Yes	
Impartiality for any field and effort	Yes	Yes	Yes	
The rights attached to the original product are transferred to the modified product	/	/	Yes	
License to a product is not specific to a person or entity	Yes	Yes	Yes	
Product is in harmony with other products	Yes	Partially	Yes	
Product is for all users.	Yes	Yes	Yes	

Most commonly used ICT solutions between the three case studies are social media - used for the design process and for communication.

Space-S is evaluated as 'Partially' in providing method and procedure, because even though the process is described in a brochure, it lacks the needed details to be used as a guideline in order for the process to be reproduced. Thus, the first and the third criteria in the table are evaluated as 'No'. The products of Space-S are both the building itself (in material form) and the development process. Since the process development was not entirely shared and the built work cannot be modified freely, the seventh criteria in the table is not applicable.

Guerilla Gardening is evaluated as 'Partially' for being in sync with other products and for having its author known, because sometimes it is "a revolt against the institutions or owners for leaving the land neglected" (Reynolds, 2008). It is also evaluated as 'Partially' in equal participation because institutions are not always included in the process.

Space-S is evaluated as 'Partially' on the first principle, because of the lack of detailed guidelines regarding the process development, and similarly, the third principle cannot be evaluated due to the buildings being unable to be constantly updated and upgraded.

Guerilla Gardening is evaluated as 'Partially' in co-drafting plans with the institutions, community, and more, since even though the community is involved in projects, the institutions do not always take part or are intentionally left out, and sometimes the projects are individual initiatives.

Open Street Map Kosovo is evaluated 'Partially' in co-drafting plans and including the government, because some the institutions made the data public or publicly accessible but implemented the data into the maps on their own and not together with the volunteers.

## 4. DISCUSSION

From Table 1 and 2 we understand that OSU is focused on the process and final product, with emphasis on rules (policy, zoning, guidelines) and plans. Since built environment includes parks, streets, urban inventory and more, the principles of OSU for free redistribution and upgrading do not apply because they are in conflict with other norms and rules of the society (e.g. private property or interference/privatization of public spaces, etc.). Other urban planning products such as policy, zoning, steps, guidelines, methodology and plans usually meet the criteria of OSU and can be modified, changed or profited by anyone without discrimination.

The processes of case studies and in general developed under OSU principles are transparent and co-developed with interested citizens, without discrimination to people and are fields of expertise inclusive. The final product includes consensus and negotiated interests of all actors and are in harmony with other products, e.g. an urban design plan compliance with overall municipality plan, integration with neighboring places, protection zones and such. The authorship of the original project remains with the initiator. If anyone decides to derive the work or modify the product of urban design, it must change the name from the original work but follow the chain of attribution. The rights attached to the original product for using, modifying, sharing or profiting from it, are transferred to the modified product.

Based on Table 4 and Table 5, Open Street Map Kosovo overlaps the most with Open Source principle, which is not surprising due to its nature, concept and origin, which is closely related to information technology. It stagnates in the field of equal participation because institutions do not participate in adding the data or in editing of the maps, where such involvement would sometimes defy their legislative obligations, but they made the data openly available and the desire to cooperate was mutual.

	<b>Space -S</b>	<b>Guerilla Gardening</b>	<b>OSM - Kosovo</b>	<b>Table 5: The three case studies compared to Open Source Urbanism principles</b>
Open access to the data, transparent process, open outcome of planning and open (re) implementation.	Partially	Yes	Yes	
Collaborative design, including government, community, investors, and more.	Yes	Partially	Partially	
Action based planning, changeable solutions before committing to permanent ones, flexible planning, constant updating of existing plans.	/	Yes	Yes	
Involving all but reasonably assigning tasks according to expertise.	Yes	Yes	Yes	
Involving community and stakeholders in all phases of co-design and decision-making.	Yes	Yes	Yes	

For Guerilla Gardening, the drawback is in involving the institutions. The authorship is also not always known and they do not by default satisfy the needs of all. The outcomes and the process may not be in harmony with other products or societal norms and rules since Guerilla Gardeners often intentionally intervene without permission.

Regarding Space-S, the process was developed based on OSU, but the biggest drawback is that the product of this process is only partially open. There is no detailed guideline or recipe on how to reproduce the process. This contradicts the essence of open source because the process thus cannot be entirely reproduced, modified, added to or redistributed.

Other characteristics of open source presented in Table 4 and Table 5 are fulfilled by all three case studies, therefore, the processes were transparent and equal to all, and participants were willing to improve public spaces and share experiences and ideas with each other.

Analyzing Space-S we come to understand developing big-scale projects based on OSU with more than thousand participants is viable, even though the literature is skeptical towards large scale implementations of OSU due to high costs associated and difficulties in reaching consensus on such a wide variety of interests. OSU is thus not necessarily bound to small-scale initiatives such as DIY-urbanism, guerilla urban tactics and similar.

The case of Guerilla Gardening leaves us thinking that OSU concepts can be – at least to some extent - applied by citizens even when institutions are uncooperative or refrain from participation. It also implicitly sets the boundaries that OSU is reluctant to cross. Namely, it does not condone intentional acting against the norms and values of groups or individuals that would be disadvantaged or discriminated by its actions. OSU is refraining from mere "citizens talking back", an activist action that would revolt and be led by the power of majority, power in its numbers or common good justification.

From Open Street Map Kosovo example we learn that OSU can be applied even without the goal of physical intervention and outcome, but still have urban design, use and planning implications, as long as the goal is to collaboratively improve open public spaces, their access and leave the data open for others to use, modify or profit from.

All cases needed a facilitator of the process, as an equal participant not as a decision-maker. In all the analyzed case studies, there was a facilitator, as an equal participant not as a decision-maker. In such processes, the role of the facilitator is highlighted, as a participant that is needed for direction giving, managing the process, mediating, help in implementation, guiding the group towards meaningful contributions, and more.

Taking into account the nature of work for urban planners, working with different stakeholders, organizing public debates, and more, adds the need for them to be skilled in communication and organizational skills, or else said, to be "good facilitators" (Peel, 2000). Although not always the facilitator of a process is the planner, the planner must have knowledge for facilitating processes (Herd, 2019). The role of technology in the process varied depending on the initiatives' and projects' requirements. ICT and data driven technology have an important role in OSU because using technology is the easiest way to share, manage and manipulate the open data. However, Zhilin et al. (2018) highlights as a disadvantage the lack of an ICT platform tailored especially for OSU. Further, when using technological tools in

the process, we should keep in mind that not all citizens have the same access and knowledge regarding the tools, therefore it's essential to choose the right tools and reach to all audience, otherwise citizens that are the most informed and capable of using technology will dominate the city (Douray, 2018).

In the analyzed case studies, social media was a common media and tool for communication and sharing information. Nowadays, social media has become a common ground, a common point for all, widely used by population and widely accessible. We are used to communication through it, prefer to be addressed through it, and we are more likely to respond and be activated through social media.

## 5. CONCLUSION

While software development became more and more reliant on closely guarded and fiercely protected proprietary code, shrouded in a cloak of business and industrial secrecy, urban design and planning practices were, throughout history, inherently more transparent and open, especially when urbanism approach was scientifically or academia driven. Still, we have much to learn from open source software guiding principles, values and mindset, its radical change of thought and outlook to monetization of creativity and openness rather than propriety and exclusivity.

By now we have established that Open Source Urbanism includes various elements and participants: the city, citizens, government, processes, methodology and principles, technological aspects and tools and more. Learning from open source software principles and guidelines and applying them to urban design and planning process we do not only translate the methodology and ethics but also embrace the fundamental change of thinking and approach from closed systems to open ended systems, thinking within the logic of constant change rather than a perfect snapshots in time, from proprietary to shared principles while not negating the potential of monetization aspects.

We can conclude that OSU offers a contemporary way of democratization of urban design and planning processes. It does so by making them affordable and accessible. By design and its principles OSU creates transparent processes, where we gain more with allowing all participants to contribute their equal share of needs, wishes, experience, feedback but also expertise and knowledge they already possess. It also counts on the participants' willingness to invest all those as long the results will benefit not just specific project but will be openly available also to others to learn from, upgrade, off spin or replicate in new instances with new tweaks.

When included in the process of urban planning, OSU changes the course of classical practices of designing and planning the city. Interventions based on this concept variate from planting a flower to designing a residential block or even more abstract - mapping. Components of the process such as level of planning, method of developing the process, technology used and more change from one process to another. Meanwhile, citizens and other stakeholders, the desire to improve public spaces and the desire to share knowledge with others remain as constants.

The benefits of applying the concept of OSU in the process of urban design and planning are numerous, with an emphasis on meaningfully involving the public in the process. Along with the current practices of involving the public, which are distinguished by many obstacles and hindrances that threaten successful participatory processes, applying the concept of OSU

in the process of urban design and planning can bring positive changes.

Though the concept brings numerous benefits when applied in planning processes, we must keep in mind challenges that may arise along the way. Equally involving the citizens, selecting and using adequate technological tools, motivating citizens to willingly contribute in sharing experiences and ideas with each other, and constantly updating information, present some of the challenges that can harden the process, but, overall don't dominate the benefits brought by applying the concept of OSU in urban development processes.

The concept is already applied in such processes, but further studies can be in analyzing the most appropriate method and visualization/communication tools that can be used for developing a process based on the concept of OSU for planning public spaces.

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# Tomaž Slak:

# VLOGA IN POMEN INSTITUTA MESTNEGA ARHITEKTA V PARADIGMI PROSTORSKEGA UREJANJA MANJŠIH OBČIN V SLOVENIJI

# ROLE AND IMPORTANCE OF THE CITY ARCHITECT INSTITUTE IN THE PARADIGM OF SPATIAL PLANNING OF SMALL MUNICIPALITIES IN SLOVENIA

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1.02 Pregledni znanstveni članek / Review Article

## POVZETEK

Vloga in pomen mestnega arhitekta, nekoč bistvenega člena pri urejanju in razvoju mest tako pri nas kot v nam primerljivih okoljih, se je v današnjem času izgubila v kompleksni zakonodaji za urejanje prostora, ki ga sicer na novo definira, ne opredeljuje pa zaradi kvalitativnih kvalifikacij (razen licence PA ali PPN), ali kakršnihkoli izvršnih pooblastil in odgovornosti. Pregled stanja predvsem v manjših občinah (torej izvzemši Ljubljano in Maribor), pregled zakonodaje in načina delovanja občin pri urejanju prostora v manjših mestih pri nas kaže na potrebo po ponovnem razmisleku o uvedbi tovrstnega instituta. Urejanje mest namreč danes poteka v okviru različno strukturiranih in kadrovsko opremljenih oddelkov za prostor v okviru lokalnih skupnosti (občin). Glavnino odločitev pa lokalne skupnosti (ponekod celo izključno) prepuščajo prostorsko-načrtovalski stroki, izbrani na javnih razpisih ob kriteriju najnižje ponudbene cene. Večja mesta z večjo kritično maso strokovne javnosti pri teh odločitvah manj tvegajo in so obenem tudi kadrovsko bistveno bolj opremljena. Zakon o urejanju prostora (ZUreP) je že v predhodnih verzijah uvedel obvezno delovanje občinskega urbanista, kar naj bi bil sinonim prejšnji definiciji mestnega arhitekta. V članku pa je skozi analizo izpeljan kritičen pogled na ta institut, podane so usmeritve (kot priporočila občinam), ter opozorila in napotila pri nadaljnjih usklajevanjih na tem področju. Za lažjo predstavo je na koncu dodan primer organizacije instituta mestnega arhitekta v Mestni občini Novo mesto, ki je bil apliciran v praksu leta 2014, torej precej pred sprejetjem ZUreP-2.

## KLJUČNE BESEDE

mestni arhitekt, občinski urbanist, kompetence, urbanizem, občine, javni prostor

## ABSTRACT

The role and importance of the city architect, once an essential element in the planning and development of cities both in our country and in comparable environments, has nowadays been lost in the complex legislation for spatial planning, which although redefines it, but does not define qualitative qualifications for it (other than a licensed architect and licensed spatial planner), or any executive powers and responsibilities. An overview of the situation especially in smaller municipalities (that is, excluding Ljubljana and Maribor), an overview of the legislation and the way municipalities operate in the planning of space in smaller cities in Slovenia shows the need to reconsider the introduction of this type of institute. Today, urban development takes place in the framework of differently structured and staffed departments for space within local communities (municipalities). The majority of decisions are left to the local community (in some cases even exclusively) by spatial planning professionals, selected in public tenders based on the criterion of the lowest bid price. Larger cities with a larger critical mass of the professional public take less risk in these decisions and are at the same time significantly better equipped in terms of personnel. The Spatial Planning Act (ZUreP) already in previous versions introduced the mandatory activity of a municipal urban planner, which was supposed to be synonymous with the previous definition of a city architect. In the article, a critical view of this institute is derived through analysis. The guidelines (as recommendations to the municipalities), warnings and references for further harmonization in this field also are given. For an easier presentation, an example of the organization of the institute of the city architect in the Municipality of Novo mesto, which was put into practice in 2014, well before the adoption of ZUreP-2, is added at the end.

## KEY WORDS

city architect, municipal urbanist, competencies, urbanism, municipalities, public space

UVODNIK  
EDITORIAL  
ČLANEK  
ARTICLE  
RAZPRAVA  
DISCUSSION  
RECENZIJA  
REVIEW  
PROJEKT  
PROJECT  
DELAVNICA  
WORKSHOP  
NATEČAJ  
COMPETITION  
PREDSTAVITEV  
PRESENTATION  
DIPLOMA  
MASTERTHESIS

## 1. UVOD – KDO OZ. KAJ JE MESTNI ARHITEKT / OBČINSKI URBANIST

Pri pregledu sodobnih in tudi starejših opredelitev funkcije mestnega arhitekta lahko ugotovimo, da izraz »mestni arhitekt« v splošnem opisuje osebo z vrhunskimi znanji s področja arhitekture, zunanjih ureditev (predvsem) javnega prostora ter še posebej z znanji s področja urbanizma, urejanja prostora in tudi krajine v širšem smislu. Primere oseb v tej funkciji lahko zasledimo tako pri nas (npr. v preteklosti Jože Plečnik, Maks Fabiani in kasneje Boris Kobe v Ljubljani, Marjan Mušič v Novem mestu in tudi v Mariboru, Danilo Fürst na Bledu ter v novejšem času Janez Koželj v Ljubljani ali Stojan Skalicky v Mariboru, ...), kot v tujini, npr. Ernst May (Frankfurt), Jacobus Johannes Pieter Oud (Rotterdam), Mikhail Posokhin (Moskva), Hubert Gessner (Dunaj) ali Tina Saaby (Kopenhagen) in Seung H-Sang (Seul).

Strokovne kvalitete naj bi glede na navedene primere in prakso mestni arhitekt izkazoval skozi svoje realizacije in posege v prostor, ki so prepoznani in splošno sprejeti kot kvalitetni in ki predstavljajo tudi jasen koncept, rdečo nit (potezo), ki ga je določeno urbanizirano okolje opredelilo in prepoznaš kot sebi lastno skozi kriterije zgodovinskega razvoja, trenutnih potreb in skozi vizijo bodočih ureditev in razvoja mesta. V zgodovini urejanja mest je navajanje naziva mestni arhitekt za avtorje mestnih ureditev nedosledno oz. redko. Posamezniki, ki so naj bi delovali v tej vlogi, so delo opravljali po naročilu, na lastno pobudo ali kot zunanji sodelavci mestnih uprav. Primeri takšnih posameznikov, ki so bili na funkcijo imenovani (in ne izbrani z razpisom), so npr. Fabiani v Ljubljani (Trampuž in Dimitrovska Andrews, 2015), Sitte in Wagner na Dunaju (Mihelič, 2008; Collins in Crasemann, 1965) ali Haussmann v Parizu (de Moncan, 2002). V navedenih, pa tudi v drugih primerih, lahko rečemo, da so bili ti posamezniki deležni visoke stopnje zaupanja županov oz. političnih centrov moči ali so z njimi neposredno vodili mestno (urbanistično) politiko. To je opaziti tudi še v današnjem času – primer je »mestni arhitekt« mesta Ljubljane, saj je to vlogo pred leti prevzel profesor s katedre za arhitekturo mesta na Fakulteti za arhitekturo in svoje delo opravlja na funkciji podžupana, ki je po definiciji politična funkcija in vezana na mandat župana, pri čemer Ljubljana formaliziranega instituta mestnega arhitekta nima (Tekavčič et al., 2009). V času, ko so bila javna naročila manj transparentna in ko demokratizacija družbe ni bila družbeni imperativ, so bili mestni arhitekti tudi zaradi vse bolj izrazitega pomena upravljanja z mestnimi površinami najožji sodelavci županov in mestnih uprav. To pomeni, da so bili politični akterji (funkcionarji) s specifičnimi znanji in interesmi. Ključno pri tem je, da pri delovanju mestnih arhitektov takrat ni bilo omejitev v smislu »kolizije interesov«, kot jih poznamo danes. Mestni arhitekt se je opredelil kot tak predvsem skozi delovanje v prostoru (svojega) mesta in nasprotju z današnjo prakso, kjer je vsakršna javna funkcija (četudi samo častna in/ali brez konkretnih izvršilnih ali odločujočih moči) nezdružljiva z morebitnim naročilom, delom in/ali plačilom. V sodobnem času se je vloga mestnega arhitekta razširila tako, kot so se razširila mesta v kompleksnejše sisteme.

Nova zakonodaja v Sloveniji od leta 2017 to funkcijo imenuje s terminom občinski urbanist in jo opredeljuje že ZUreP-2 (Uradni list RS, št. 61/2017), v 44. členu, kot obvezo vsake občine, novi ZUreP-3 (Uradni list RS, št. 199/2021) pa občinskega urbanista opredeljuje v 46. členu, kjer je navedena tudi možnost imenovanja županovega svetovalca v zadevah urejanja prostora. Zakaj je opredelitev občinskega urbanista in/ali svetovalca preohlapna in brez ustrezne teže glede na pomen, ki ga je v preteklosti opravljal njegov predhodnik t.i. mestni arhitekt, bomo skušali obrazložiti v nadaljevanju članka in na koncu prikazati tudi na

primeru uvedbe instituta mestnega arhitekta v obliki veččlanskega Urbanističnega sveta v Novem mestu.

Namen tega pregleda stanja in kritičnega pogleda na institucionalno zagotavljanje čim večje kvalitet arhitekture mesta (ali občine) in javnega prostora je torej predvsem v identifikaciji šibkih točk pri odločjanju in postopkih pri posegih v prostor ter v iskanju načinov za kompetentno vodenje prostorske politike mest vzporedno (t.j. enakovredno) z mestnim menedžmentom oz. z županom, ki naj sega od arhitekture majhnega merila v javnem prostoru (npr. urbane opreme) do opredelitev obsežnejših mestih in urbanih predelov in prostorske politike celotne občine (npr. OPN ali urbanistična zasnova).

## 2. UREJANJE MEST IN PROBLEMATIKA SODOBNEGA PLANERSKEGA PRISTOPA

Vloga in pomen mestnega arhitekta se je v zadnjega pol stoletja izgubila v kompleksni zakonodaji s področja urejanja prostora, ki ga Zakon o urejanju prostora (vse verzije ZUreP) sicer dokaj skopo definira, ne opredeljuje pa zanj kvalitativnih kvalifikacij, meril ali kakršnihkoli izvršnih pooblastil in odgovornosti, razen pridobljene licence pooblaščenega arhitekta (PA) ali pooblaščenega prostorskoga načrtovalca (PPN), kot jih definira Zakon o arhitekturni in inženirski dejavnosti - ZAID (Uradni list RS, št. 61/2017). Zakonodaja arhitektu (z ustrezeno licenco) kot generalistu, katerega kulturno-humanistična in umetniško-inženirska občutljivost sega od merila celotnega mesta ali krajine vse do najdrobnnejših segmentov javnega prostora, sicer daje vodilno vlogo pri pripravi urbanističnih načrtov, ureditev in ključnih prostorskih dokumentov. Vseeno pa so danes postopki urejanja mest povsem drugačni kot še pred 40 ali 50 leti, njihova celovitost in dolgoročnost skladna v viziju razvoja mest (če je le-ta sploh opredeljena) pa bazira predvsem na planerskem in načrtovalskem pristopu, ki končne rešitve oblikuje skozi predpisane postopke variantnih rešitev, javnih razgrnitev, oblikovanja in sprejemanja pripomb ter potrditev na nivoju občinskih svetov (npr. Skalicky, 2008). V Sloveniji, ki ima razmeroma nizko stopnjo urbanizacije (50 % prebivalstva živi v mestih), le v Ljubljani in Mariboru živi več kot 100.000 prebivalcev. To je z vidika raznovrstnih pritiskov na mestno okolje ugodno, saj so le-ti bolj enakomerno razporejeni na druga (manjša) mesta in kraje. Po drugi strani pa zelo razpršena poselitev predstavlja neracionalno rabo prostora (Plut, 2000).

Urejanje mest danes poteka v okviru različno strukturiranih in kadrovsko opremljenih oddelkov za prostor na nivoju lokalnih skupnosti (predvsem občin). Po pregledu javno dostopnih podatkov o kadrovski strukturi v manjših občinah, lahko kljub uvedbi ZUreP-2 in ZUreP-3, še vedno zasledimo mnoge majhne občine brez oddelka ali urada za prostor ali je le-ta bolj kot ne zgolj formalno formiran v okviru drugega urada, ali pa to področje pokriva oseba brez izobrazbe in kompetenc s področja urejanja prostora, arhitekture ali urbanizma. Glavnina odločitev vezanih na posege v prostor se tako, vsaj v primeru manjših mest, v veliki meri (ponekod celo izključno) prepušča prostorsko-načrtovalski stroki, izbrani na javnih razpisih ob kriteriju najnižje ponudbene cene. Če pustimo ob strani državni nivo obravnave prostora (npr. DPN in druge strateške usmeritve), zakonodaja obvezuje vse občine k pripravi OPN in njemu podrejenih podrobnejših načrtov (npr. OPPN). Ob tem kvalitetno v dokumentih opredeljenih odločitev, zaupa izbranim načrtovalcem, potrditvam v občinskih svetih in javnim razgrnitvam, kjer pa je vključevanje kritične strokovne javnosti prej izjema kot pravilo. Večja mesta z večjo kritično maso strokovne javnosti pri teh odločitvah manj tvegajo in so obenem tudi kadrovsko bolje opremljena. Pri manjših mestih je tveganje

bistveno večje, slabi rezultati pa niso vidni samo v grajenem prostoru ampak z izvedbo postanejo tudi precedens ali vzorec za nadaljnjo gradnjo. Zakonodaja predvideva še druge varovalke: npr. obvezna izdelava celostnih presoj vplivov na okolje (CPVO), sprejem ključnih odločitev v mestnem ali občinskem svetu, zaščita posebej varovanih območij z drugimi akti in inštitucijami ipd. Kljub temu pa so lahko te varovalke pre malo, saj gre v primeru prostorskih posegov za tako specifična znanja z dolgoročnimi posledicami, da jih nikakor ne moremo prepuščati dnevnim politiki enega mandata ali razparceliranim in večkrat nepovezanim ali celo nasprotujočim interesom različnih mnenje- oz. soglasje-dajalcev (t.i. nosilcev urejanja prostora). Na podlagi preučitve kadrovske zasedbe manjših (t.j. ne-mestnih) občin, ki v Sloveniji predstavljajo večino (vir: <http://www.stat.si/obcine>), kaže, da planerski in načrtovalski pristop nadvladuje poglobljeno urbanistično in arhitekturno artikulirano sistemsko oblikovanje mest. Zato ugotavljamo, da je planiranje še vedno v krizi (Dešman, 2007) in bi ga bilo v tem oziru zato nujno nadgrajevati. Morda bi bil ravno bolj konkretno definiran institut mestnega arhitekta pomemben korak k nadgradnji planiranja, načrtovanja in oblikovanja manjših mest pri nas.

Iz gornjih ugotovitev lahko sklepamo, da v procesu sprejemanja odločitev manjka predvsem operativni prostorski institut na nivoju občine z določeno odločujočo, izvršno močjo in odgovornostjo, ki bi povezoval obveze izhajajoče iz prostorske zakonodaje, prevedbo le-teh v izvedbene akte, izvajal nadzor nad projekti urejanja prostora višjega (OPN) in podrobnejšega (OPPN) nivoja ter skrbel za skladnost in kvaliteto javnega prostora tako na konkretnem merilu uporabnika, kot na nivoju koncepta, ki izhaja iz skupne vizije. Manjka nekakšen vmesni in obenem krovni člen med prostorskim načrtovanjem na nivoju občine in podrobnejšim merilom oblikovanja javnega prostora, ki mu lahko rečemo tudi arhitektura mesta. Ta vmesni člen bi lahko opredelili kot institut mestnega arhitekta ali lokalni (regijski, občinski) urbanistični institut. Menimo, da ne bi smel biti le (fizična) oseba s kompetencami, ki izhajajo zgolj iz ustrezne licence, ampak kakršnakoli oblika delovnega ali strokovnega telesa z merljivimi (priznanimi, dokazanimi...) kompetencami, kvalitetami in predvsem izvršnimi pooblastili ter iz tega izhajajočo odgovornostjo.

Kot ugotavlja tudi mariborski mestni arhitekt, naj bi bil mestni arhitekt most med stroko, občinskim službami, upravo in zasebnim sektorjem, v smislu preseganja birokratske naravnosti, v skladu z dolgoročno strategijo razvoja mesta in regije (Skalicky, 2008). Odgovornosti mestnega arhitekta so v tem pogledu obsežne, morda preobsežne za eno samo osebo. Mesta, četudi manjša, zahtevajo odzivnost, ki vsebuje pomembne vsakodnevne odločitve z dolgoročnimi posledicami. Preprečiti moramo, da se mesto kot javni prostor izgubi (Kos, 2007).

### 3. KOMPETENCE IN OGOVORNOST OBČINSKEGA URBANISTA

V slovenski prostorski zakonodaji je institut mestnega arhitekta poimenovan z nazivom občinski urbanist in opredeljen kot (fizična) oseba z ustrezno licenco PA (pooblaščeni arhitekt) ali PPN (pooblaščeni prostorski načrtovalec) v 46. členu ZUreP-3. Sodelovanje občinskega urbanista je za vse občine obvezno. Poleg nalog urejanja prostora iz občinske pristojnosti občinski urbanist opravlja tudi naloge strokovnega svetovanja županu v zadevah urejanja prostora, skrbi za celostno politiko prostorskoga razvoja občine, skrbi za koordinacijo priprave prostorskih aktov med občino in izdelovalcem prostorskega akta ter izvaja naloge v postopkih lokacijske preveritve v skladu s tem zakonom. Poleg navedenega imajo občine tudi možnost vključitve nevladnih

organizacij (47. člen ZUreP-3), ki delujejo v javnem interesu na področju urejanja prostora. Dodatna zakonska zagotovila kakovosti izhajajo iz obvez po pridobitvi rešitev skozi projekt natečaj. Nekaj let po uveljavitvi nove zakonodaje postaja jasno, da našteti ukrepi in obveze niso zadosten pogoj kvalitete. V tem času bi bilo možno tudi statistično preveriti, koliko območij je bilo dejansko urbanistično določenih skozi institut natečaja, koga so občine imenovale v službo občinskega urbanista in pod kakšnimi pogoji so se le-temu morda (lahko) izognile.

Pri pripravi nove zakonodaje je bila prisotna pomembna ideja zagotavljanja (minimalne) kakovosti in obvezne prisotnosti vsaj enega arhitekta ali prostorskega načrtovalca v kadrovski zasedbi, obenem pa obveza navedena v 46. členu ZUreP-3 ni tako močno definirana, da ji majhne občine ne bi mogle zadostiti. Kljub temu manjka definiciji občinskega urbanista konkretna izvršna moč in odgovornost za odločitve. S tem bi institutu zagotovili strokovnost, preudarnost in tudi apolitičnost, ki sta pri urejanju prostora (kot omejeni naravni dobrini) nujni.

Zagotovitev enega licenciranega strokovnjaka, ki ima zgolj svetovalno funkcijo, ne zagotavlja kvalitete na področju urejanja mest, ki preraščajo v konfliktna polja kolizije interesov različnih interesnih skupin. Pridobitev licence PA je namreč možna že po dveh letih prakse po pridobitvi izobrazbe in brez ene same izkušnje v urbanističnem načrtovanju (!). Tudi pri licenci PPN niso preverjene kompetence na področju širokega razumevanja urejanja mest. Namreč, oseba s to licenco je lahko še vedno le planer brez razumevanja pomenov in vizije razvoja mesta (glej npr. Zupančič, 1999). Zaposlitev pooblaščenega arhitekta ali prostorskega načrtovalca, če nima strokovne avtoritete, torej ne more biti zagotovo kvalitete (Klipšter 2015). Ob tem je pomembno naglasiti, da sodobni principi urejanja mest pomenijo odziv na vse bolj intenzivno rabo javnih mestnih površin, saj se tudi populacija v mestih povečuje (Gehl, 2010). Tudi v manjših mestih, ki imajo praviloma manjši obseg javnih površin, je kompetenten občinski urbanist ali mestni arhitekt ključen za dvig kvalitete bivanja. Kot navaja D. Sim v monografiji Soft City: »Ker se mesta po vsem svetu zgoščajo in stanovanjski stroški silijo vse več ljudi v manjše prostore, postaja ravnotežje med zasebnostjo in družabnostjo težje. Depresija in osamljenost sta postala normalna pojava. Obstaja epidemija slabega zdravja zaradi ljudi, ki živijo v zaprtih prostorih, sedijo v mehansko prezračevanih zgradbah z umetno svetlobo in se povsod prevaja v avtomobilih. Preživeti več časa na prostem v družbi drugih, se gibati, doživljati življenje med zgradbami je pomembnejše kot kdaj koli prej.« (Sim, 2019).

Kot še navaja Sim, mora mestni arhitekt »pomiriti ljudi v vse bolj strašljivem okolju, ki ga je zaznati v večjih sodobnih mestih«, kar bi lahko povzročilo upor proti urbanizaciji v manjših mestih. »Vse bolj ostra politična klima odraža globok in iskren strah pred spremembami. Obstaja strah pred hitro urbanizacijo, ki bi lahko ogrožala način življenja ljudi. Obstaja strah pred naraščajočim in spreminjajočim se prebivalstvom, prenaseljenostjo in zastoji, socialno segregacijo in neenakostjo. Prisoten je strah pred podnebnimi spremembami, neznanimi vremenskimi vzorci in vse pogosteje naravnimi katastrofami. Ti izviri zadevajo samo bistvo človekovega stanja. Običajna reakcija ob soočenju s strahom je teči v nasprotno smer, zanikit spremembo in zapreti razlike, namesto da bi sprejeli izzive in pozdravili priložnost novega.« (Sim, 2019). Zato je mestni arhitekt pomemben člen v komunikacijski strategiji razvoja mest in pomemben element stroke, ki nagovarja odločevalce v prostoru (mestno politiko) na eni strani ter prebivalce na drugi strani k ustreznim odločitvam glede skupnega javnega prostora ter lahko ob tem usmerja ustreerne oblike participativnega in

hierarhičnega pristopa pri urejanju mesta, kar bo podrobneje prikazan o v naslednjem, 4. poglavju.

#### 4. UTEMELJITEV IN POMEN VZPOSTAVITVE INSTITUTA MESTNEGA ARHITEKTA ZA POTREBE UPRAVLJANJA MEST

Mušič opozarja, da urejanje mest po pomenu presega posamezne objekte ali ureditve (Mušič, 2005). Gre za osnovno lokalno skupnostno merilo, kjer je nujna tudi (so)udeležba uporabnikov mesta oz. prebivalcev. Iz tega razloga predlagamo, da institut mestnega arhitekta/občinskega urbanista sestavlja ekipa strokovjakov različnih področij (arhitekture, urbanizma, krajinske arhitekture, urbanističnega planiranja), dokazanih ali preverljivih kvalitet, kompetenc in strokovne avtoritete, ki bi obenem skrbela tudi za ustrezno komunikacijo s predstavniki širše javnosti in z uporabniki mesta. Čeravno se zdi, da bi v primerih majhnih mest in občin to funkcijo lahko opravljala zgolj ena kompetentna oseba, v nadaljevanju članka navajamo argumente, ki takšne poenostavitev postavljajo pod vprašaj. Ob tem ni zanemarljivo, da zakon dopušča različne oblike pogodbenih razmerij za opravljanje tega dela, zato bi lahko ena kvalitetna ekipa regijskega obsega pokrivala tudi več okoliških manjših občin, ali pa bi se oblikovali regionalni instituti mestnega arhitekta. Svet aktualne različice omenjenega instituta lahko postanejo tudi nove oblike mestnih urbanističnih zavodov. Večlanske oblike institutov mestnega arhitekta namreč lahko zagotovijo pluralnost in demokratičnost ter zmanjšujejo nevarnosti vplivanja na tako opolnomočeno telo.

Vseeno pa moramo tudi v teh primerih opozoriti na sledeče: največji problem upravljalcev mesta je selekcija in hierarhizacija zelo različnih in včasih izključujočih si predstav o mestu. Ta problem velikokrat napeljuje k enostranskim poenostavitvam, različnim ekskluzivizmom (t.j. izjemam in posebnim rešitvam), k skrivanju za arbitarnimi kriteriji stroke in omejenimi finančnimi zmožnostmi, ter k iskanju priznanih avtoritet, ki apriorno zagotavljajo kakovost konkretnih rešitev (Kos, 2007). To so tudi največje nevarnosti vodenja (predvsem manjših) mest, saj če je najboljši tisti urbanizem, ki se odreka avtoritarnemu iskanju prave resnice in se usmerja v iskanje velikega števila drobnih, na prvi pogled malenkostnih rešitev, je ta cilj gotovo lažje uresničljiv v večjih mestih. V manjših mestih že po logiki stvari ni mogoča velika raznovrstnost namembnosti prostora. Kljub temu ali prav zato, so takšni drobni koraki oziroma mreža urejenih urbanih točk, ki imajo vpliv na širši prostor, obenem tudi osnovna mreža preobrazbe celotnega mesta ali kraja.

Ob boku govora o mestnem arhitektu (kot smo zgoraj ugotovili, zaenkrat deloma okrnjenem v funkciji občinskega urbanista) moramo nujno govoriti tudi o upravljanju mest, ki predstavlja širši pojem ravnanja z mestom kot obsežnem fenomenu, ki presega zgolj prostorske implikacije, čeprav so le-te morda najvidnejše in najbolj konkretne, dolgoročne. Zato je ob mestnem arhitektu kot ključnem členu upravljanja mest bistvena funkcija mestnega menedžmenta. Koncept urbanega menedžmenta so zaradi njegove izmazljivosti prevzele mnoge discipline (arhitektura, sociologija, urbana sociologija, urbanizem, politologija ipd.), ki pa si ga razlagajo različno. Irena Bačlija Brajnik v knjigi *Urbani menedžment: koncept, dimenzije in orodja razčlenjuje vodenje mest na tri nivoje oz. ključne hierarhično opredeljene kategorije in sicer: vizija - taktični nivo - strateški nivo, ki jim sledi izvedba posameznih projektov* (Bačlija Brajnik, 2010).

**Vizija** je osnova in je najširša oblika usmeritve pri prenovi in razvoju mesta. Primer vizije, ki je bila sprejeta za MONM je naveden v nadaljevanju članka (poglavlje 5.1). Vizija je osnova za

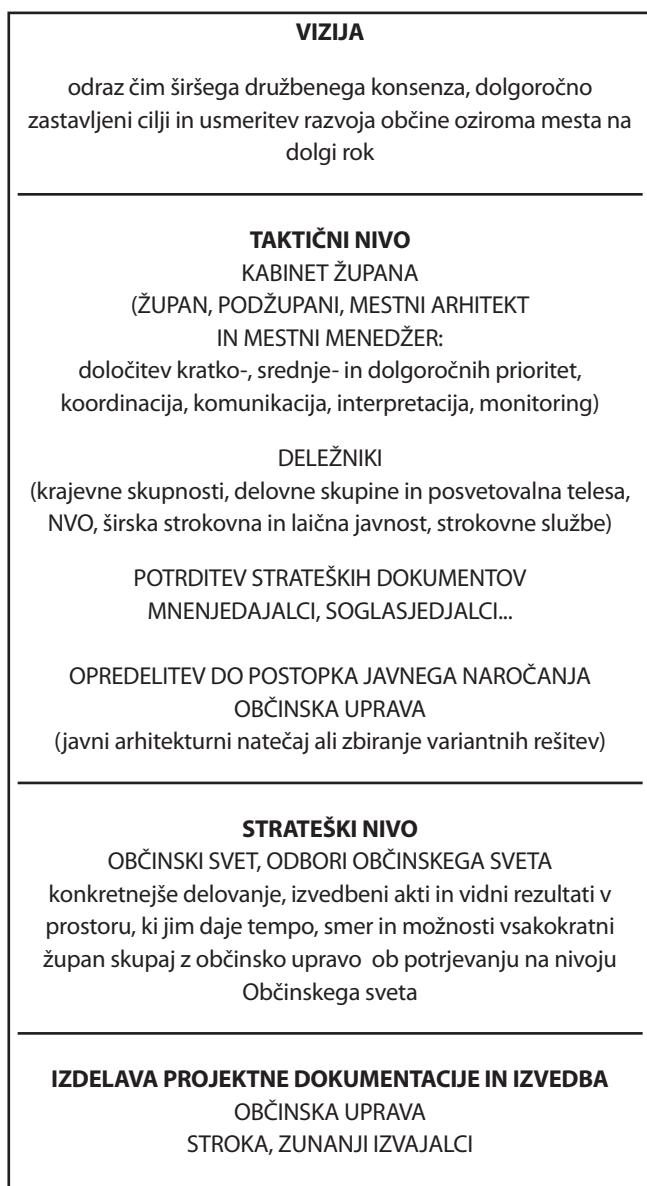
načrtovanje **taktičnih odločitev**, ki so v pristojnosti župana in njegovih sodelavcev, občinskih in državnih strokovnih služb in že na tej stopnji usklajene z nevladnimi organizacijami in širšo zainteresirano javnostjo. Ker je mesto predvsem prostor delovanja različnih interesnih skupin in prostor vsebin, potrebujejo mesta mestnega arhitekta in mestnega menedžmenta z njunimi natančno določenimi medsebojnimi razmerji in nalogami (kot ima to urejeno na primer mesto Ljubljana, kjer je funkcija mestnega arhitekta neformalna funkcija podžupana, medtem ko je mestni menedžer od leta 2013 nova funkcija, ki je del kabineta župana). Njuna naloga je na tej stopnji predvsem koordinacija nalog, komuniciranje z vsemi deležniki ter usklajevanje in interpretacija njihovih stališč. V Sloveniji pa se danes srečujemo s številnimi primeri predvsem manjših občin in mest, kjer ni jasno, kdo opravlja tovrstne naloge. Po pregledu kadrovske sestave manjšega vzorca tovrstnih občin, lahko sklepamo, da dela mestnega menedžmenta največkrat opravlja župan, direktor občinske uprave ali referent za družbene dejavnosti, delo mestnega arhitekta pa občinski urbanist (če ga občina ima) ali eden od zaposlenih na oddelku za prostor (če tak oddelek občina ima), v nekaj primerih pa se je izkazalo, da osebe na tovrstni funkciji preprosto ni.

Ko so ključne prioritete in strateške odločitve glede posegov v prostor mesta določene in usklajene med vsemi mestnimi deležniki, jih občina skladno z veljavno Zakonodajo pošlje v potrditev mnjenjedajalcem oziroma soglasjedajalcem. Od tedaj so potrjeni dokumenti obvezujoči za načrtovanje nadaljnjih aktivnosti prenove in razvoja. Tovrstni postopki pa so že del **strategije** prenove in razvoja, katerih potrditev je v pristojnosti Občinskih svetov, ki morajo za njeno uresničevanje tudi določiti časovne okvire in zagotoviti finančna sredstva. **Izvedbeni del** je v pristojnosti občinske uprave, ki projekte izvaja glede na izbrani način javnega naročanja pri čemer naj bi konkretnе projekte nadzirala, jih usklajevala tudi še v projektni in izvedbeni fazi ter s pomočjo mestnega arhitekta/občinskega urbanista preverjala skladnost z višjimi nivoji. Shema za upravljanje mest po Bačliji vizijo opredeli kot določitev kratko-, srednje- in dologorčnih prioritet razvoja mesta, ki naj bi bila osnova za konkretnejše delovanje in vidne rezultate v prostoru, ki jim daje tempo smer in možnosti vsakokratni župan skupaj z občinsko upravo (Bačlija Brajnik, 2010). Vendar bi morala biti vizija v uspešnih družbah po definiciji odraz čim širšega družbenega konsenza, dolgoročno usmerjena in naj bi presegala partikularne poglede vsakokratno izvoljene občinske oblasti. Prioritete bi morale biti določene na taktičnem in strateškem nivoju, kjer pa jim lahko daje tempo, smer in možnosti vsakokratna oblast, seveda v okviru demokratičnih procesov sprejemanja tovrstnih odločitev. Zato bi morali shemo vodenja mest vsebinsko nekoliko korigirati, na primer tako, kot je prikazano na sliki 1.

Predlog prenovljene sheme ne določa mestnega arhitekta/občinskega urbanista zgolj v krovni funkciji oz. v začetnih (konceptnih) fazah v okviru delovanja kabineta župana. Njegova vloga je ključna pri vseh nadaljnjih korakih in je razumljena skozi način delovanja (komuniciranje, interpretacija...), ki mora potekati ves čas. Predvsem pa je ključno, da strokovni delovni mestni mestnega arhitekta in mestnega menedžmenta nista vezani na mandat župana. S tem se zagotovi profesionalizem (neodvisnost od trenutnih političnih odločevalcev), ohranjanje vizije, strateških odločitev, dolgoročnih prioritet ipd., ki segajo preko štiriletnih mandatov lokalne politike.

Na podlagi te sheme lahko tudi ugotovimo, da obstaja množica možnosti, ki jih manjša mesta in občine premalo izkorisčajo. Če se referiramo zgolj na pilotni projekt TCM (Town City Management), ki ga je pri GZS izvajala Podjetniško trgovska zbornica in

Slika 1: Predlog prenovljena sheme nivojev in hierarhične delitve upravljanja mest. Povzeto po (Bačlja Brajnik, 2010).



v okviru katerega so v sodelovanju z avstrijskimi strokovnjaki iz CIMA GmbH tri slovenska mesta, Ljubljana, Koper in Celje, iskala načine za ohranjanje in izboljšanje ekonomskega, socialnega in kulturnega razvoja mestnih jedr, lahko ugotovimo, da je predlagan model mestnega marketinga (kot končni produkt projekta) močno vezan na službo mestnega arhitekta ali občinskega urbanista in seveda mestnega menedžmenta. Zajema množico spodbud, asociacij, povezav in mestnega marketinga, upravljanje s praznimi prostori ter povezovanje med mestom, podjetniki in turizmom ... ki lahko bistveno izboljšajo profesionalno upravljanje mest in mestnih središč (Upravljanje ..., 2017). Delo mestnega menedžmenta gre tako vedno v spregi z mestnim arhitektom ali urbanistom, kot je to na primer pred leti pojasnila mestna menedžerka v Mestni občini Ljubljana, ga. Razpotnik (Čakš, 2013).

Tako za mestni menedžment ali upravljanje kot tudi za funkcijo mestnega arhitekta se je na primeru Ljubljane izkazalo, da zadošča resnično kompetentna in usposobljena ena (fizična) oseba, pri kateri niti ni pomembno ali ima kakršnokoli licenco, pa tudi to ne, ali zaseda regulirano delovno mesto v občinski upravi ali

gre za zunanjega izvajalca oz. svetovalca imenovanega s strani kabineta župana. Naivno pa je pričakovati, da je moč zagotoviti enako kompetentne osebe tudi v vseh drugih občinah. Že v primerih preostalih 11 mestnih občin je kadrovska podhranjenost na področju mestnega menedžmenta in mestne arhitekture opazna, saj po pregledu kadrovskih sestav, vsaj formalno v nobeni med njimi ni imenovanega mestnega menedžerja ali mestnega arhitekta. To seveda izhaja iz klasifikacije delovnih mest v javni upravi, zato lahko o morebitnih obstoječih tovrstnih funkcijah predvsem sklepamo na podlagi poznavanja razmer v tem segmentu. Poleg tega zagotovitev arhitektov (če se vrnemo na področje prostora) zaposlenih na občini ne zagotavlja tudi kvalitetnega urbanističnega razvoja (Klipšteter, 2015). Ob tem je treba upoštevati eno ključnih funkcij mestnega menedžmenta in mestnega arhitekta. To je spodbujanje sodelovanja javnosti (Kos in Jankovič Potočnik, 2005), ki se mora izražati na različne načine in ki priporomorejo k selekciji prej omenjenih predstav o mestu. Tako imenovani »pristop od spodaj navzgor« (ang. *bottom up approach*), pomembno zmanjšuje samovoljo ali nekritičnost oblasti do urejanja javnega prostora, predvsem pa omogoča bolj holističen pristop pri urejanju sosesk v večjih mestih oziroma urejanje manjših mest. Soudeležba javnosti (v okviru ustreznih procesov za njeno vključevanje) zagotavlja višjo stopnjo legitimnosti in opravlja funkcijo korektiva demokracije (Messerschmidt in von Zadow, 2019).

V končnem Poročilu Urbanističnega inštituta RS »Konkurenčnost Slovenije 2006 – 2013« (Mihelič, 2008) med drugim navedba arhitektурno-urbanistične problematike, ki se kot prva in temu primerno prioritetna razteza skozi dve strani prilog, izkazuje resnost pomanjkanja usklajenega delovanja mestnega menedžmenta in mestnega arhitekta, ki bi skozi možne mehanizme urejanja in vodenja mest lahko bistveno pripomogla k doseganju vizije večine mest v Sloveniji. Iz navedenega lahko sklepamo, da torej brez operativne funkcije mestnega arhitekta tudi trajnostno in urbanistično kvalitetno vodenje mest ni možno. Ali ga lahko zagotavlja uradi za prostor in obvezni občinski urbanist, bo obravnavano v kratki diskusiji, ki sledi na koncu te razprave. V nadaljevanju pa podajamo primer vzpostavitev instituta mestnega arhitekta na primeru Mestne občine Novo mesto, ki je tovrstni institut uvedla konec leta 2014.

## 5. REZULTATI DELA URBANISTIČNEGA SVETA V MESTNI OBČINI NOVO MESTO (MONM), KOT PRIMER VZPOSTAVITVE INSTITUTA MESTNEGA ARHITEKTA

V Mestni občini Novo mesto od leta 1956, ko je bilo prenovljeno mestno jedro po načrtih arhitekta in konservatorja Marjana Mušiča (in ga lahko opredelimo kot mestnega arhitekta), ne zasledimo navedbe mestnega arhitekta, razen v kratkem obdobju v letih 2003-2006, »ko je bilo v sklopu županovega kabineta osnovano delovno mesto 'svetovalca za arhitekturo mestnega jedra', kar je javnost interpretirala kot delovno mesto mestnega arhitekta« (Simič, 2007). Za vzpostavitev instituta mestnega arhitekta v Novem mestu se je ves čas svojega delovanja (tj. od leta 1994) zavzemalo Društvo Novo mesto, leta 2012 pa je to pobudo aktivno podprlo tudi Društvo arhitektov Dolenjske in Bele Krajine. Po lokalnih volitvah leta 2014 se je novi župan namesto delovnega mesta mestnega arhitekta odločil ustaviti Urbanistični svet Mestne občine Novo mesto (US MONM), ki je posvetovalno telo župana za prostorski razvoj občine ter za vzpostavitev urbanistično in arhitektурno skladnega, trajnostnega in kakovostnega razvoja javnega prostora ter zunanje podobe mesta (navedba iz Poslovnika US MONM). Definicija US MONM kot posvetovalnega telesa je skladna z novo zakono-

dajo, sicer pa v okviru svojega delovanja presega definicijo v ZUrep-3, česarovo ni omejena na pogoje imenovanja ene osebe z ustrezno licenco.

Poleg funkcije 'mestnega arhitekta' poslovnik še navaja, "da je namen US MONM vzpostavljanje dialoga župana s predstavnik strokovne javnosti o pomembnih vprašanjih arhitekture, urbanizma in urejanja prostora". Gre za strokovno telo, zato so mnenja, odločitve in nasveti odraz dobrega poznavanja prostorske in urbanistične tematike ter obenem dobrega poznavanja posebnosti in specifike prostora, urbanizma in arhitekture Novega mesta. US MONM spremlja in sodeluje pri vseh pomembnejših odločitvah o prostorskem razvoju Novega mesta. Na svojih sejah preučuje ter v okviru strokovne presoje in argumentacije verificira ali podaja pripombe na zastavljene cilje in razvojno politiko mestnih oblasti. Poleg navedenega se Urbanistični svet ukvarja tudi s konkretnimi problemi ali vprašanji, ki se pojavljajo bodisi s strani meščanov, občinskih strokovnih služb ali druge zainteresirane javnosti.

Imenovani člani US MONM so različne strokovno kompetentne osebe in že več let angažirane na področju prostora novomeške občine, ki ga zelo dobro poznajo ter so ob tem aktivni pri oblikovanju, nadzoru, presojanju in vrednotenju tega prostora.<sup>1</sup>

## 5.1 Vizija prostorskega razvoja MONM – izhodišče za delovanje US MONM

Vizija prostorskega razvoja Novega mesta, ki jo je postavil in ji sledi US MONM se glasi: »V Novem mestu in okolici se bo oblikovalo kakovostno bivalno okolje. To bo nudilo privlačen javni prostor in predstavljalo eno najbolj zaželenih lokacij za bivanje v državi. Vključevalo bo projekte, ki bodo občanom omogočali sodobnejše bivanje (kolesarske steze, rekreacijski centri, pešpoti, biološke poti in turistična infrastruktura), obiskovalce od drugod pa bodo privabljali s svojo inovativnostjo. V bivalno okolje bomo vključevali naravne danosti Gorjancev in reke Krke, kulturne dediščine, vinarstva in kulinarike.

Kvalitetni javni prostor kot prostor družabnih in družbenih dejavnosti, socializacije družbe in predvsem tiste dodane vre-

<sup>1</sup> US MONM so ob ustanovitvi sestavljali:

Doc. Dr. Tomaž Slak, univ. dipl. inž. arh. je redno zaposlen na Fakulteti za arhitekturo Univerze v Ljubljani, kjer je nosilec več rednih predmetov na štud. smere arhitektura in urbanizem. Obenem je tudi prokurist in vodja projektov v arhitekturnem biroju Bazaarhitektura d.o.o. ter član izvršnega odbora Društva arhitektov Dolenjske in Bele Krajine (DAD). Je avtor večjega števila stavb, prenov ter ureditev javnih prostorov, član različnih natečajnih komisij pri ZAPS in predstavnik strokovne javnosti pri MONM pri obravnavi različnih arhitekturno-urbanističnih projektov in pri drugih posegih v prostor.

Dr. Liljana Jankovič Grobelšek, univ. dipl. inž. arh. je redno zaposlena v občinski upravi MO Ljubljana na Oddelku za urejanje prostora, kjer je vodja Odseka za prostorske planske akte. Več let je bila zaposlena v podjetju Acer, d.o.o. iz Novega mesta, v okviru katerega je izdelovala in vodila pripravo urbanističnega načrta za Novo mesto ter sovordila pripravo Občinskega prostorskega načrta za Novo mesto (uvajavljen 2009). Je članica DAD in predsednica Društva urbanistov in prostorskih planerjev Slovenije.

Dr. Iztok Kovačič, univ. dipl. inž. arh. je bil v času oblikovanja US MONM redno zaposlen v občinski upravi občine Šentupert, kjer je skrbel za prostorsko načrtovanje, razvoj in vodenje investicij. Zdaj enake naloge opravlja v občinski upravi MONM kot vodja Urada za prostor in razvoj in je zaradi narave dela prenehal z delovanjem v US MONM, še vedno pa je prisoten na sejah Sveta kot predstavnik občine.

Mitja Simič, univ. dipl. inž. arh. je redno zaposlen na Zavodu za varstvo kulturne dediščine Slovenije, Območna enota Novo mesto. V letu 2015 je postal vodja območne enote v Novem mestu. Je dolgoletni član upravnega odbora Društva Novo mesto in je tudi član izvršnega odbora DAD ter soustovnitelj nevladne iniciative »Pešfolk«, ki aktivno spodbuja kulturno sprehajanje in trajnostno mobilnost ter izgradnjo in urejanje mreže peš poti v Novem mestu in okolici. Je tudi viden slovenski strokovnjak za zgodovinske vrtne in parkovne ureditve.

dnosti, ki nastaja skozi razvoj urbane kulture predstavlja vitalno komponento vsakega regionalnega oz. lokalnega razvoja. S prepoznavnim in kvalitetno usmerjenim oblikovanjem javnega prostora se utrujuje tudi lokalna samozavest prebivalcev, kar posledično povečuje atraktivnost za obiskovalce in dolgoročno zagotavlja vračanje mladih po končanem študiju izven regije. Kvalitetno in v čimvečji meri razvito urbano okolje in kultura sta ključna za to, da se bi na tem prostoru vzpostavila kritična masa intelektualnega, urbanega, izobraženega in inovativnega prebivalstva, ki je tudi sposobno ustvariti bolj optimistično in razvito družbo prihodnosti.«

Prav je, da je vizija splošna in s konsenzom vseh zainteresiranih sprejeta ideja o tem, kakšno mesto si želimo ter, da se ob tem tudi smiselno izvaja. Zastavljena je z namenom, da presega vsakokratno oblast s štiriletnim mandatom, lahko pa se dopolnjuje oz. preoblikuje skozi čas. Na primeru Novega mesta se je izkazalo, da je bil večji problem oblikovanja kvalitetnega javnega prostora določitev kratko-, srednje- in dolgoročnih prioritet, ki bi izhajale iz, v letu 2009 sprejetih, planov – strateškega in izvedbenega dela Občinskega prostorskega načrta MONM. Prav tako ni bilo pravih strateških usmeritev in strukturiranega akcijskega načrta. Naloga Urbanističnega sveta je zato tudi skrb za dosledno izvajanje strateško zastavljenih ciljev in vizije, ki jih določa stroka skozi javno in argumentirano razpravo.

## 5.2 Prioritete, usmeritve in prednostni projekti

US MONM je izpostavil ugotovitev, da mestne občine, ki je obenem regijsko središče, ne moramo razvijati »od zunaj navznoter«. Če gre za manjšo občino, kjer se težko doseže kritično maso oz. ustrezno koncentracijo prebivalstva za oblikovanje urbane kulturne identitete, je ta način lahko poguben. Prioritete si torej sledijo iz mestnega jedra proti periferiji. Sodobna družba ceni urbano kulturo in mešane cone, kjer prihaja do interakcij med bivalnimi, kulturnimi, upravnimi, poslovnimi, trgovskimi in prostočasnimi vsebinami. »Življenje v mestu je življenje v veliki skupini ljudi, ki so si med seboj zelo različni. Razlikujejo se po izobrazbi, svetovnem nazoru, statusu oziroma socialni strukturi, delu, ki ga opravlja, kulturnem razvoju in podobnem, tudi v nacionalni pripadnosti. Zato življenje v mestu zahteva posebno obnašanje. Mesto je namreč še vedno najboljša možnost za kakršen koli napredok posameznika in vse nacije“ (Ovsec, 1994). Manjša mesta, kakršno je tudi Novo mesto imajo potencial, da na majhnem prostoru, ki ga je moč obvladati peš ali z inovativnim javnim transportom, postanejo »velika« mesta v malem merilu.

Ključne prioritete, ki sestavljajo zastavljeno vizijo prostorskega razvoja MONM, je US konec leta 2014 izpostavil glede na **oceno stanja**, ki je bila zaznana ob nastopu mandata. Ocena stanja morda ne zajema vsega, je pa pokazatelj preko katerih ključnih prioritet se lahko učinkovito približamo prej navedeni viziji in bi bila z izjemo specifičnih problematik lahko opis stanja v mnogih manjših mestih po Sloveniji:

- Novo mesto kot javni prostor in urbano središče za bivanje ni privlačno, je preobremenjeno s prometom in ne nudi ustrezne podpore urbani bivalni kulturi in sodobnemu načinu življenja v mestu. Glavni trg kot trg skupaj z območjem na Kandiji ne pride do izraza, meščani mesta ne uporablajo kot podaljška lastnega doma.
- Poslovno-kulturno središče ni dovolj izoblikovano, niti prepoznavno v prostoru. Njegov osrednji del zaseda največja ruševina v mestu (bivša stavba občinske uprave na Novem trgu). Žalostna podoba se kaže tudi na samem »pragu mesta« v obliki neurejenega stanja, v katerem je avtobusna postaja.

- Peš cone v mestu (razen območij ob reki Krki) praktično ne obstajajo. Uporabe koles se v mestu ne spodbuja, tudi zaradi manjkajočih kolesarskih stez, ki so nujne vsaj v radiju 3km iz centra.
- Manjka sistem povezav (peš prehodov) preko Krke, ki bi vzpostavili nove cone za razvoj urbanega življenja in območij sprostitev.
- Javno-zasebni proces ureditve območja BTC v Bršljinu kot vpadnice v mesto poteka počasi in brez ustrezne izpostavljenosti/obveščanja javnosti.
- Okoliški kraji nimajo prepoznavne podobe in jasno izoblikovanih središč, ki so nujna za identiteto in notranjo povezanost lokalnih prebivalcev.
- Sprejeti Občinski prostorski načrt (OPN) je velik korak k urejanju prostora, vendar je potrebna podrobna in kritična presoja dokumenta, ter prevedba ugotovljenih dejstev v izvedbene dele OPN in/ali v izdelavo posameznih Občinskih podrobnih prostorskih načrtov (OPPN).
- V območju celotne občine se za pomembnejše prostorske ureditve in objekte praktično ne izvaja javnih arhitekturnih natečajev, ki so nujni za dvig nivoja grajenega okolja. Izjema so univerzitetni kampus v Drgančevju (2005), športna dvorana Portoval (2011) ter športna dvorana v Stopičah (2009) - izведен je le slednji.
- Pritisk ozkih interesnih dejavnikov iz zasebne sfere na javni prostor je premočan. Javno-zasebno partnerstvo s projektnim vodstvom občine naj bi vzpostavilo ustreznejša razmerja 'javno' (prevladujoče, določajoče) vs. 'zasebno' (podrejeno, prilagodljivo).

Za določitev konkretnih prioritet je US MONM predlagal usmeritve in projekte, ki izhajajo iz vizije in programskega usmeritev, vendar so v bistvu pogojevani na podlagi ugotovljenega stanja. Izpostavljeno je bilo, da se lahko glede na interes, z majhnimi posegi in izboljšanje kvalitete nepremičnin poveča njihova vrednost in atraktivnost. Umestitev ustreznih vsebin (npr. univerze, urbane pisarne, stanovanja za mlade...) na Glavni trg bi poživilo utrip celega starega mestnega jedra. Prioritetno bi morali tudi tu pristopati k nepremičnim v starem jedru in skupaj z že začetimi projekti in vizijami prenove mestnega središča počasi širiti mrežo kvalitetne družbene lastnine navzven. Infrastrukturne probleme je treba reševati vzporedno oz. podrejeno prostorskim nalogam ter jih avtomatično (kot pogoj za delovanje) vključevati v izvedbo primarnih in prioritetnih ureditev v javnem prostoru.

Premišljeno spajanje naravne in kulturne dediščine bi privelo do unikatne konfiguracije izredno kakovostnih javnih prostorov tudi v izvenmestnih območjih, ki so ključna za oživljanje in ohranjanje življenja v njih ter razvijanje lokalnih kvalitet. Izvenmestni prostor ne sme postati serija »satelitov« regijskega središča brez avtohtone in širšemu avditoriju zanimive identitete.

**Prioritete** sestavljajo ključni projekti, da se vzpostavi mreža urejenih točk ali območij, s katerimi bi se začelo trenutno neutrezeno stanje izboljševati:

- Celovita ureditev starega mestnega jedra, predvsem talnih površin, pročelij in drugih površin, ki opredeljujejo ta prostor, v smislu podpore programske in prometni strategiji tega območja (izvedba javnega natečaja)
- Opredelitev in spodbuda za formiranje prepoznavne in urejene poslovno-kulturne cone v mestnem jedru na območju Novega trga in ob Seidlovi cesti (javno-zasebno partnerstvo, obvezna izvedba javnega natečaja)
- Načrtovanje ter izvedba povezovalnih poti in mostov namejenih kolesarjem in pešcem, ki bi bili v največji meri ločeni od cestne infrastrukture in bi povezovali mestne površine z območji za sprostitev.
- Ureditev desnega brega reke Krke v območju Kandijske ceste ter izvedba obrečne cone, ki bi omogočala ureditev t.i. »mestne plaže« z gostinsko ponudbo ob reki (razvoj mesta na južnem desnem bregu Krke)
- Opredelitev območij posebnega pomena (Glavni trg in širše mestno jedro, arheološki park na Marofu, Novi trg, Kandija, območje BTC, Narodni dom) ter priprava prostorskih izhodišč za izvedbo javnih natečajev v teh območjih.
- Preureditev obstoječe avtobusne postaje, ureditev lastniških razmerij ter celovita prenova/rekonstrukcija ali rušitev in gradnja novega potniškega terminala
- Izdelava strategije in projektov za ureditev središč vaških naselij in vasi ter vključitev lokalnega prebivalstva v aktivnosti povezane z izgradnjijo identitete kraja.

### 5.3 Analiza stanja in rezultati

Po analizi stanja, ki je ob nastopu US MONM pokazala, da aktivnosti za doseganje nekaterih zgoraj navedenih točk že potekajo, vendar so mnoge zastale iz različnih upravno-administrativnih, finančnih ali drugih razlogov, je US izpostavil tudi ozjo skupino kratkoročnih prioritet, kjer obstajajo možnosti za opazne premike v krajšem obdobju ali kjer je nujen razmislek glede strateških odločitev (Slak, 2016). Aktivnosti Urbanističnega sveta MONM so v določeni meri že vidne ali pa je v polnem teknu priprava vsega potrebnega za njihovo skorajšnjo uresničitev. Pomembno je poudariti, da tukaj navedeni ukrepi, rezultati in prioritete za urejeno mesto ne bi mogli nastati zgolj na podlagi urbanističnega planiranja in dela Urada za prostor in razvoj, kar je razvidno že iz opisa izvedenega. Izvedeno se morda zdi malo po obsegu, vendar gre za najtežavnejše in najpomembnejše izboljšave, ki so generator (že omenjene točke, ki vplivajo na širši prostor) nadaljnje razvoja in ureditev in predstavljajo mrežo dobrih, drobnih rešitev. Konkretni rezultati večletnega obstoja Urbanističnega sveta so, razen največje operacije v mestnem jedru (prenova javnih površin), pomembni fragmenti, ki sledijo principu posegov od drobnega k velikemu, od znosnjih navzven.

Če bo pri urejanju prostora v Novem mestu pod taktkiro Urbanističnega sveta v nadaljnjih letih prišlo še do izvedbe ostalih prioritetnih projektov – če se bo torej ohranila rdeča nit prostorskega razvoja mestne občine ne glede na vsakokratno oblast, bodo vloga, delo in prizadevanja US MONM povsem upravičena; predstavljala bodo ogrodje nadaljnje rasti in koherentne, inkluzivne, participativne urbane politike.

### 6. DISKUSIJA: PRIPOROČILA IN USMERITVE OBČINAM, TER OPORIZILA IN NAPOTILA PRI NADALJNJIH USKLJEVANJIH NA TEM PODROČJU

Manjše, kadrovsko šibkejše občine in mesta bodo zakonsko zahtevo po enem arhitektu v funkciji občinskega urbanista zagotovile sicer dokaj enostavno, vprašanje pa je, ali bodo novi nosilci urbanega razvoja mest in občin kos tej nalogi in kako bodo občine zagotovile kompetentnost teh oseb. Navsezadnje so špekulacije s prostorom v manjših občinah eden od najbolj donosnih načinov pridobivanja kapitala, zato lahko računamo, da v nekaterih občinah interesa po močnih in kompetentnih občinskih urbanistih ne bo. Regionalni pristop k tej tematiki bi

zagotovo predstavljal višjo kakovost, morebitni negativni vplivi lokalnih oblasti pa bi se zrelativizirali.

Nevladne organizacije (NVO) s področja ravnanja s prostorom, ki jih omenja ZUreP-3, so izrazito omejene na Ljubljano oz. obstajajo predvsem na nacionalnem nivoju. Trenutno je na seznamu NVO, ki delujejo na področju prostora v Sloveniji, registriranih samo 12 organizacij. Le dve od teh sta registrirani izven Ljubljane; ena v Domžalah in ena v Novem mestu (vir: <https://www.gov.si/teme/nevladne-organizacije/>). Tudi društva arhitektov, urbanistov, prostorskih načrtovalcev ali krajiških arhitektov delujejo in so aktivna izključno v mestnih občinah ali celo samo na regionalni ravni. Ob povečanih pritiskih na prostor se lahko celo zgodi pojav ad hoc registracij NVO, preko katerih bi bile omogočene špekulacije z javnim prostorom. Nasprotno temu pojavi pa bi regionalne NVO zagotovile enak status in obravnavo (javnega) prostora v manjših občinah, kot so ga že zdaj deležna večja mesta in mestne občine. Ob tem ni zanemarljivo, da takšen pristop krepi poliocentrično ureditev države in je vsaj na področju obravnave prostora lahko precej učinkovitejši od razdrobljenega pristopa po številnih manjših občinah. Povezovanje občin, ki na področju prostora že zdaj poteka zaradi posameznih aktivnosti, ki segajo preko njihovih meja, bi lahko zaživilo v večjem obsegu.

Ob omembni regionalnih centrov moči in vpliva lahko pride do odpora s strani lokalnih skupnosti, ki dobijo občutek vsiljevanja odločitev z drugih interesnih območij. Temu je moč oporekat, saj je Slovenija majhna in so vplivi regionalnih centrov v vsakem primeru (če ne drugače, v primeru upravnih enot ali zdravstva) že razmeroma močni. Tudi primeri, ko manjše občine vključujejo v svoje upravljanje s prostorom akterje iz večjih mest, niso redki in kažejo, da takšne ureditve ob resnično kompetentnih osebah (priznanih v širšem prostoru) ali skupinah ne bi bile problematične.

Tisto, kar je pri tem problematično, je gotovo določitev kompetenc oz. priznanje le-teh. Menimo, da je na območju regij – torej v bistveno večjem vplivnem območju, kot ga sicer pokriva večina manjših mest oz. občin – enostavnejše zagotoviti in s konzenzom tistih, ki jih regijski okvir zajema, potrditi ustrezno sestavo instituta mestnega arhitekta, kot veččlanskega odločevalskega telesa v obliki sveta, komisije, instituta, zavoda, odbora ipd. Predlagana veččlanska sestava instituta občinskega urbanista ali bolje, regijske urbanistične institucije bi bila lahko sestavljena iz oseb, ki zagotavljajo tako strokovno avtoritetno različnih področij, kot tudi razpršeno lokalno pokritost regije. Izvajanje različnih procesov vključevanja javnosti v odločitve ter kanaliziranje različnih interesov skozi ustrezno politiko odločanja o javnem prostoru s pomočjo vzpostavljenih institucij občinskega ali mestnega arhitekta lahko pomembno izboljša identifikacijo, razvojne in dolgoročne strategije ter zagotavlja neprekinjen, demokratičen in vključujoč razvoj (Messerschmidt in von Zadow, 2019). Prostor je nacionalna, omejena dobrina in kot tak ne bi smel biti podvržen kadrovskim omejitvam majhnega področja (občine). Za vsak kraj bi moral biti zagotovljen kompetenten strokovni institut, ki bi to dobrino obravnaval v širšem (regijskem) kontekstu s konkretnimi rezultati na nivoju soseske, kraja občine ali manjšega mesta.

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