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Fig. 1 Mariahilferstrasse transformation,
Vienna, Austria: up – before intervention in 2012,
down – after transformation, 2017
Sl. 1. Mariahilferstrasse – preobrazba,
Beč, Austrija: gore – prije intervencije 2012.,
dolje – poslije preobrazbe, 2017.

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Alternative Approaches and Tools for the Transformation of Streetscapes
Direct Physical Interventions and Different Modes of Participation

Alternativni pristupi i alati u preobrazbi prostora ulice
Izravne fizičke intervencije i različiti načini participacije

BOTTOM-UP APPROACH
PARTICIPATION
PHYSICAL INTERVENTION
STREETSCAPE
URBAN TRANSFORMATION

BOTTOM-UP PRISTUP
PARTICIPACIJA
FIZIČKA INTERVENCIJA
STREETSCAPE
URBANA TRANSFORMACIJA

The paper presents an overview of a broad range of approaches and tools leading to the substantial spatial and functional transformation of the city streets with the aim to improve the quality of life in urban environments. The approaches range from the traditional top-down planning to the more recent contemporary, informal, creative and adaptive bottom-up approaches involving direct physical interventions and participation of citizens.

Ovaj rad daje pregled brojnih pristupa i alata koji mogu dovesti do značajne prostorne i funkcionalne transformacije gradskih ulica s ciljem poboljšanja kvalitete života u urbanim sredinama. Pristupi variraju od onih tradicionalnih tzv. *top-down* pristupa do recentnih, suvremenih, neformalnih, kreativnih i adaptabilnih *bottom-up* pristupa koji podrazumijevaju izravnu fizičku intervenciju i participaciju građana.

INTRODUCTION

Uvod

Streets have been used as multifunctional spaces throughout the urban history of mankind. A road was a market, a playground, a park, and also a thoroughfare.[1] Structurally speaking, the linear urban space is an 'armature', an assemblage which enables human interactions related to forming relationships, getting involved in commercial activities, entertainment, ceremonial or other communal activities.[2] Due to the excessive expansion of mobility and motorization, especially after World War II, the former character of the street changed. Its role as a vivid social and economic environment, a space for human connections, interaction and exchange has been surpassed by its transport function.[3] The pioneering of street space as a technical or infrastructural space, adjusted primarily to motorized traffic, changed the perception of city arteries. Unacceptable noise levels, as well as degrading air quality, drastically reduced the quality of life in many city areas, especially those along the main roads where the social interaction has weakened.[4] An average of 80% of street space is nowadays still dedicated to motor traffic, and the remaining 20% to the movement and interaction of people – such as sidewalks for pedestrians, cyclists and other possible activities.[5]

The need to rethink spaces of mobility and to redesign streets into more human and heterogeneous places of a city, to reclaim city streets for people, occurred not only in pro-fessional and scientific work but also in concrete actions already with the declining CIAM doctrine.[6]

Since the 1960s, the importance of a street as a social space and living environment has been promoted by Jane Jacobs, Gordon Cullen, Christopher Alexander, Colin Rowe and Fred Koetter, Donald Appleyard, Jan Gehl, and Alan Jacobs to mention some of the most prominent authors.[7] In their recent contributions, Jan Gehl, Vikas Mehta, Zavestoski and Agyeman, or Lydon and Garcia[8] analyzed, influenced and supported several concrete transformations of city streets and city centers with the aim to create better conditions for quality public life in cities, especially by improving conditions for pedestrians in accordance with the mantra of spatial planning for a human scale[9], resulting also in symbolic reconstructions and city marketing in global competition.[10] The change in street uses, mobility patterns, and the design of numerous city streetscapes with a primarily traffic function can be observed in many examples.[11] Influential examples of the transformation of renowned or major city streets are also broadening the appeal of this topic.[12]

Although the scope of possible street transformation design scenarios and street uses are important and related topics, the focus of this paper, however, lies in processes and approaches – approaches to the transformation of motorized traffic streetscapes into inclusive and accessible public spaces. Being familiar with different tools that can help

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1 Montgomery, 2013: 70

2 Grahame Shane, 2007: 198-218

3 Çelik, Favro, Ingersoll, 1994; von Schönfeld, Bertolini, 2017

4 Following Donald Appleyard's showcase from the 1980's analysis of the social interaction on three streets with heavy, moderate and light traffic, social analyses have proven that heavy motor traffic has weakened the sense of neighborhood and local community. [Appleyard, Gerson, Lintell, 1981; European Commission, 2004]

5 Lydon, Garcia, 2015

6 After Athens Charter prescribed 4 elements of organizing space, their revisionists' critique attacked the isolated element of transport for being deprived of human associations and therefore a completely inappropriate category for modern space as well as inadequate for the modern man. Team 10 discussions from the 1950s and Alison and Peter Smithson's studies on *urban structuring* sought after reestablishing of the human associations in relation to circulation and transportation patterns in different scale – within the city, district, street and house. [Smithson, 1967: 14-28; Smithson, 1968: 75-79]

7 Jacobs, 1961; Cullen, 1961; Alexander *et al.*, 1977; Rowe, Koetter, 1978; Appleyard, 1981; Gehl, 1987; Jacobs, 1995

8 Gehl, 2010; Mehta, 2013; Zavestoski, Agyeman, 2015; Lydon, Garcia, 2015

9 Jan Gehl uses the expression to address the development of cities in a more livable, safe and equal way. [Gehl, 2010]

10 Blaż Kriżnik presents Cheonggyecheon restoration in Seoul – the transformation from streetscape to a recrea-

trigger, support, stimulate, and achieve the desired change of the selected street environment, governments and communities can benefit compared to the long-lasting struggle or even inactiveness. According to Brezina and Emberger, the process of introducing change is often considered long-term and difficult.[13] There are numerous approaches and tools to foster urban change, which can be pioneered by professional, political, and civil initiatives. While having in mind different actors, initiators, time-frames, cultural, economic as well as political backgrounds, specific approaches seem appropriate for a certain environment, ranging from the political top-down to the more recent bottom-up community-led approaches (e.g. citizen design science, tactical urbanism, DIY urbanism[14]). European Union policies also support the use of various participatory approaches to achieve sustainable urban change as showcased by ISUDS [Integrated Sustainable Urban Strategies], SUMP [Sustainable Urban Mobility Plans] or European Mobility Weeks.

This article aims to focus on street transformation processes, presenting different approaches and tools – traditional or classic, as compared to emerging, contemporary or alternative ones, and to present their efficiency in immediate physical transformation. Following the related hypothesis, that the use of a multiplicity of tools which have a direct or immediate spatial effect, and champion the participation of different stakeholders, can accelerate or even render urban transformation processes of the streetscapes more efficient.

Fig. 2 Slovenska Street transformation, Ljubljana, Slovenia: left – before intervention in 2013, right – after transformation, 2015
Sl. 2. Preobrazba Slovenske ulice, Ljubljana, Slovenija: lijevo – prije intervencije 2013., desno – poslije preobrazbe, 2015.

Approaches and Tools of Urban Transformation of Streetscapes

Pristupi i alati urbane vizualne preobrazbe ulica *(streetscape)*

In this paper, the term 'approach' is used as a general way of dealing with a specific situation or problem. When analyzing approaches to urban change, terminological distinctions such as *top-down/bottom-up*, *formal/informal*, *non-participatory/participatory*, *classic/alternative*, *traditional/emerging*, but also *integrated*, *interdisciplinary*, *sustainable, neoliberal* and others, are used. They differ regarding the involvement of various actors, the aim of an initiative, and have different impacts at different stages of the process. They can be repetitive, reflect flexibility, adaptability or continuation, conservation, imply a physical impact, or they do not imply any physical impact at all, etc. In this paper, approaches are divided into two characteristic but diametrically opposite groups: the *traditional approach* associated with the top-down, formal or traditional point of view, versus the *alternative approach* with a bottom-up, informal or emerging perspective. *Top-down* and *bottom-up* are the two main tendencies that have marked the history of town planning over the past 50 years and are very much at odds with one another.[15]

Being divided between traditional top-down planning and participatory planning, one should be aware of the benefits and drawbacks of each. The benefits of a participatory approach lie in the strengthening of the role of citizens, and therefore, direct democratic process, identification with the community and the constructing of a smart urban environment.[16] On the other hand, traditional urban planning can be inefficient – i.e. according to Lydon and Garcia, 80% of all plans are never implemented. It is also considered rigid and not able to adjust to short-term changes.[17] According to Bishop and Williams, its inefficiency is a result mainly of lacking resources, power and control to implement formal masterplans.[18]

tional zone along a restored ancient stream to emphasize "how symbolic reconstruction is related to, and influenced by, competitive urban policy, urban renewal and city marketing in Seoul". [Križnik, 2011: 309]

11   More than 3,000 are presented at http://www.urb-i.com and some more at http://www.street-plans.com

12   These examples include the transformation of the New York's 47th street and Broadway in Times Square, the Cheonggyecheon restoration in Seoul, Vienna's Mariahilferstrasse (Fig. 1), Ljubljana's Slovenska road (Fig. 2), streets in Montreal, Beijing, Barcelona, Sydney, Tokyo, and the proposed transformation of Oxford Street in London

13   "Overcoming mental barriers among planners and decision makers as well as users not yet accustomed to a changed streetscape pose a considerable challenge for shaping society's dynamically evolving urban transport regimes." [Brezina, Emberger, 2017: 677]

14   According to Douglas, DIY urbanism is "creative, highly localized, and largely anonymous practice that is aimed explicitly at 'improving' the built environment of local communities". [Douglas, 2011: 6]

15   "The first represents the tendency towards centralism and de-politicizing decision-making, as well as enhancing the role and power of technical experts. On the other hand, there have been demands for more participation in decision-making, a call for more accountability on the part of local politicians and officials, and increasing criticism of technical expertise." [Pissourios, 2014: 84]

16   Citizen participation could be treated as a "significant strategy towards the goal to construct livable and resilient smart urban environments". [Mueller *et al.*, 2018: 182]

17   Lydon, Garcia, 2015

18   Bishop, Williams, 2012: 3

Table I LIST OF CHARACTERISTIC TOOLS FOR STREETSCAPE URBAN TRANSFORMATION WITH INDICATORS
TABL. I. POPIS TIPIČNIH ALATA ZA URBANU VIZUALNU PREOBRAZBU ULICE (*STREETSCAPE*) S POKAZATELJIMA

	Characteristic tool	Short description	⚠	👥	👫	👪
A1	Strategic document	Outlines the vision and goals of future development		●		○
A2	Urban planning, masterplan	Defines future spatial development		●	○	○
A3	Urban-design competition, architectural competition	Public/private call for the best design solution		●		
B1	Urban planning workshop, urban design workshop, charrette	Explores development possibilities in groups and reflecting upon them	○	○	●	○
B2	Exhibition	Presentation to the wider public	●	○	●	○
B3	Street art	Artistic interventions in public space (murals, graffiti, street painting, etc.)	●	○	●	●
B4	Urban hacking	Illegal individual or group action in public space	●		○	●
B5	Creative licensing	Supports the use of streetscape as public space in a more flexible way e.g. 'Park(ing) day' license	●	●		○
B6	Demonstration project	Tests and measures the effects of program changes in real-world situations (one day to one week)	●	○	●	○
B7	Pilot project	Preliminary small-scale experiment, conducted to evaluate feasibility, time, cost, etc, with an attempt to improve full-scale implementation prior to implementation (one month to one year)	●	○	●	○
B8	Interim design project	Improvement of public spaces in the short term, when funds are limited (one to five years)	●	○	●	○
B9	Traffic measures	Different infrastructural interventions regulating/ reducing traffic flow and improving traffic safety	●	●		
B10	Temporary event	Temporary change in the use of streetscape by festivals, marathons, fairs, etc.	●	○	●	○
B11	Critical mass gathering, protests, referendum	Gathering of larger groups of people in an action or decision-making format	○	○	○	●
B12	Discussion group/meeting	Groups of different stakeholders meeting (including conferences, lectures, presentations with round tables, etc.) to discuss ideas and critical issues	○	○	○	●
B13	Web-based community planning	Involving communities in planning by using information- and web-based technologies		○	●	○
B14	Urban hackathon	Compact format involving group work on IT, programming and data mining to find creative solutions for urban problems		○		
C	Supporting tools (research & development project, metrics, evaluation, opinion poll, etc.)	Structured in-depth data-based analysis related to a specific topic (e.g. traffic study, spatial study, program study, public opinion, etc.)	●			

LEGEND: ⚠ physical intervention; 👥 extended expert (inter)action; 👫 citizen/expert (inter)action; 👪 citizen action; ● predominant occurrence; ○ exceptional/limited occurrence

Fig. 3 *CHARRETTE* WAS USED TO TRANSFORM SONNENFELSPLATZ INTO A FIRST SHARED SPACE IN GRAZ, AUSTRIA IN 2011
SL. 3. *CHARRETTE* U AKCIJI PREOBRAZBE SONNENFELSPLATZ U PRVI ZAJEDNIČKI PROSTOR U GRAZU, AUSTRIJA, 2011.

Because of the complexity of urban issues, the combination of different approaches incorporating citizen participation seems to prove effective.[19] Finding appropriate ways to engage citizens, policymakers, planners and other stakeholders in development processes and co-production seems a challenging task, be it by traditional means or alternative ones.

SELECTED EXAMPLES OF APPROACHES AND TOOLS

IZABRANI PRIMJERI PRISTUPA I ALATA

The approaches and tools listed in the table (Table I) have been recognized and selected from various cases of completed or ongoing urban streetscape transformation projects. The table is roughly structured according to prevailing (A) classic/traditional or (B) alterna-

tive/contemporary tools, which are accompanied by supporting tools (C). A special emphasis has been put on the methodological comparison of their observed indicators – physical impact with direct intervention in space as a step forward in the future use, as well as public participation along with different modes of participation in the transformation process, as a democratic way of constantly developing cities.[20] As presented in the table, the selected tools can be compared according to the analyzed indicators marking their predominant or exceptional/limited occurrence.

TRADITIONAL TOOLS

TRADICIONALNI ALATI

Traditional urban planning and urban design tools are predominantly top-down oriented without an immediate physical intervention in space. They usually include programmed democratic participatory elements within a process, ranging from the stage of ideas to the finalization of a legally-binding document for spatial implementation.

A1 Strategic document – Strategic goals of plans are defined in strategic documents such as the spatial development strategy, as they outline the visions and goals of future developments. They are related to, and subject to, policies from different sectors.

Physical intervention: This tool does not have any direct physical impact on space.

Participation: In the preparation phase of the cooperation and interaction among different stakeholders, extended expert (inter)action can be implemented in order to constitute common visions, goals and policy-related synergies.

A2 Urban planning, urban design, masterplan – Strategic documents are traditionally followed by implementation plans employing urban planning projects, urban design projects, masterplans, etc., which define the vision of future spatial development.

Physical intervention: These tools do not have any direct physical impact on space.

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19 As stated by Horelli, "Due to its extreme complexity, the transformation of urban space is the result of planning decisions and of other processes, including the self-organization of different social groups and networks. Since urban problems are so complex, they cannot be solved by urban planning alone, requiring instead an active citizen engagement in the planning process." [HORELLI, 2013: 7]

20 The selected indicators constitute an immediate impact on streetscape and the mode of participation with the participatory nature of the selected tool. *Extended expert action* is primarily a professional activity within a multidisciplinary team with constant communication with a municipality/the government as well as procedural communication with the general public. *Citizen/expert interaction* involves professionals and citizens, and is a more open mode of participation, where citizens play a decisive role, especially in relation to events. *Citizen action* is public par-

Participation: These traditional tools as regulated by the law predominantly include public participation in certain phases. Generally, before a spatial planning act can be confirmed as a law, the public must have access to it for a certain period. In this period, anyone can react to it, and propose amendments which are then considered by the administration and planners.

A3 Urban design competitions and architectural competitions are traditional tools to obtain more ambitious and creative streetscape solutions. They are an instrument for producing or acquiring competitive solutions to design problems, both in architecture and urban design. They are also a formal instrument for public architecture commissions and can be regarded as a form of research.[21] They have been often deemed less efficient, because of mostly obsolete involvement of a large number of participants contributing their ideas, but also because of the potential exploitation of 'images' for political purposes. Due to ambitious plans, many competition results are never implemented, or it takes several years and further adjustments, bringing up the final result far from the one presented at the competition. On the other hand, they can be very efficient when the task is clearly defined.[22]

Physical intervention: These tools do not have any direct physical impact on space.

Participation: Traditionally, these tools do not incorporate public participation. Nevertheless, a hybridization of traditional competitions has been observed recently. This means that alternative approaches of workshops or other participatory tools are introduced in the competition format, transforming it from a 'single author solution' to 'consensus solution' of 'competitors', as has been successfully implemented in the case of Slovenska Street in Ljubljana.[23]

ALTERNATIVE TOOLS

ALTERNATIVNI ALATI

B1 Urban planning workshop, urban design workshop, charrette – Less binding and more process-oriented tools usually involve inter-

disciplinary work in groups. These can be very useful in the preparation phase, as they enable discussions between many actors involved (experts, or with involvement of citizens, municipality representatives...), as well as a theoretical reflection on specific problems.[24]

Physical intervention: Workshops often include site analysis and site exploration; physical models are produced either to support the analysis or to present the idea. Physical interventions in space during the workshop depend on the content of the workshop, and can provide temporary construction or appropriation of space.

Participation: Direct exchange of thoughts, experience and ideas between participants is the essence of these tools. Participatory workshops have become a common format also as part of many EU-funded projects and programs, such as SUMPs. A good example of the implementation of such a collaborative planning process was the proposal for the first shared space in Graz, Austria (Fig. 3), conceived as the result of a charrette[25], which enabled various stakeholders' involvement (municipality representatives, architects, traf-

Fig. 4 *Exhibition* as a street transformation tool by Prostorož. The info box was placed along Slovenska Street in Ljubljana, Slovenia, supporting its transformation process in 2013 (2 pictures on the left). Exhibition panels were placed along Koroška Street in Maribor, Slovenia, in 2015 (picture on the right).
Sl. 4. *Exhibition* kao alat preobrazbe ulice, ProstoRož. Info kutija postavljena duž Slovenske ulice u Ljubljani, Slovenija, kao potpora procesu njezine preobrazbe 2013. (2 slike lijevo). Izloženi paneli postavljeni duž Koroške ulice u Mariboru, Slovenija, 2015. (slika desno).

Fig. 5 *Street art/traffic measures* example in Slovenska Street in Ljubljana, Slovenia, by multiPlan arhitekti from 2008 (left) and street art in Koroška Street in Maribor, Slovenia, in 2012 (right) as part of the European Capital of Culture (comics by Zdravko Duša and Damijan Stepančić placed on degraded facades thematized the violent local football fans).
Sl. 5. *Street art/traffic measures* u Slovenskoj ulici u Ljubljani, Slovenija, MultiPlan arhitekti, 2008. (lijevo) i *street art* u Koroškoj ulici u Mariboru, Slovenija, 2012. (desno) kao dio Europske prijestolnice kulture (stripovi autora Zdravko Duša i Damijan Stepančića postavljeni na zapuštenim pročeljima tematiziraju nasilne lokalne nogometne navijače)

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ticipation in its true sense, compared to 'citizen control' degrees of Arnstein's 'Ladder of Participation' from 1969.

21   Andersson, Bloxham Zettersten, Rönn, 2013: 159

22   Bott, Grassl, Anders, 2013: 204-205

23   An extended workshop/competition with four selected designers, began in 2012. The four initial visions were presented to the general public in November 2012. More than two years of project workshops, with presentations and partial confirmations, resulted in one comprehensive ideas proposal for the new Slovenska Road by the initial four competitors by 2014. [Vuga, 2013: 29]

24   Theoretical reflection "aims at providing a wider insight into the related theoretical field based on a generalized spatial issue". [Šenk, Lobnik, 2013: 78]

25   Charrette is a condensed and multidisciplinary form of collaboration.

Fɪɢ. 6 *Hᴀᴄᴋɪɴɢ* ᴜʀʙᴀɴ ꜱᴛʀᴇᴇᴛꜱᴄᴀᴘᴇ ʙʏ ᴛʜᴇ ᴘᴀʀᴀꜱɪᴛᴇ
ꜱᴛʀᴜᴄᴛᴜʀᴇ ʙʏ Mɪᴄʜᴀᴇʟ Rᴀᴋᴏᴡɪᴛᴢ, ʙᴜɪʟᴛ ᴀɴᴅ ᴅɪꜱᴛʀɪʙᴜᴛᴇᴅ
ᴛᴏ ᴏᴠᴇʀ 30 ʜᴏᴍᴇʟᴇꜱꜱ ᴘᴇᴏᴘʟᴇ ɪɴ Bᴏꜱᴛᴏɴ ᴀɴᴅ
Cᴀᴍʙʀɪᴅɢᴇ, MA ᴀɴᴅ Nᴇᴡ Yᴏʀᴋ Cɪᴛʏ, USA ꜰʀᴏᴍ 1998
(ʟᴇꜰᴛ). Pʟᴀᴄɪɴɢ ꜱʏᴍʙᴏʟɪᴄ ʙᴀɴᴅᴀɢᴇꜱ ᴛᴏ ᴅᴇɢʀᴀᴅᴇᴅ ᴘᴀʀᴛꜱ
ᴏꜰ ᴀ ꜱᴛʀᴇᴇᴛ ɪɴ Mᴀʀɪʙᴏʀ, Sʟᴏᴠᴇɴɪᴀ ɪɴ 2015 (ʀɪɢʜᴛ).
Sʟ. 6. *Hᴀᴄᴋɪɴɢ* ᴜʀʙᴀɴɪ *ꜱᴛʀᴇᴇᴛꜱᴄᴀᴘᴇ*, ᴘᴀʀᴀꜱɪᴛᴇ ꜱᴛʀᴜᴋᴛᴜʀᴀ
ᴀᴜᴛᴏʀᴀ Mɪᴄʜᴀᴇʟᴀ Rᴀᴋᴏᴡɪᴛᴢᴀ, ɪᴢʀᴀᴆᴇɴᴀ ɪ ᴘᴏᴅɪᴊᴇʟᴊᴇɴᴀ
ᴛʀɪᴅᴇꜱᴇᴛᴏʀɪᴄɪ ʙᴇꜱᴋᴜᴄ́ɴɪᴋᴀ ᴜ Bᴏꜱᴛᴏɴᴜ ɪ Cᴀᴍʙʀɪᴅɢᴇᴜ,
MA ɪ Nᴇᴡ Yᴏʀᴋᴜ, SAD, 1998. (ʟɪᴊᴇᴠᴏ). Pᴏꜱᴛᴀᴠʟᴊᴀɴᴊᴇ
ꜱɪᴍʙᴏʟɪᴄ́ɴɪʜ ᴏᴠᴏᴊᴀ ᴜ ᴢᴀᴘᴜꜱ̌ᴛᴇɴɪᴍ ᴅɪᴊᴇʟᴏᴠɪᴍᴀ ᴜʟɪᴄᴇ
ᴜ Mᴀʀɪʙᴏʀᴜ, Sʟᴏᴠᴇɴɪᴊᴀ, 2015. (ᴅᴇꜱɴᴏ).

fic planners, construction planners, lighting designer, sociologist as well as residents and neighboring institutions), understanding and acceptance of the new spatial concept.[26]

B2 Exhibition can be regarded as a traditional approach tool, but also as a participatory alternative approach tool for spreading information, and facilitating interaction and communication.

Physical intervention: When performed in the public space of a particular street, it works as an important and accessible information platform. As Koroška Street in Maribor, Slovenia, was redeveloped, an exhibition was set up as a physical element in the streetscape and used as a dialogical communication support at the time of the one-day demonstration project, and during the interim design project (Fig. 4). The exhibition was focused on the historical facts and contemporary urban data related to the street and its transformation potential.[27]

Participation: Exhibition can be a product of collaboration and participatory process of not only experts but also of for example residents, students, pupils, etc. Visual communication in any creative form (billboards, stickers, posters, video-projections, wallpapers, wall & floor painting, etc.) can support the process of streetscape transformations.

B3 Street art is part of the field of individual artistic expression outside the context of traditional art venues, and is usually unsanc-

tioned. It can be a powerful tool of communication, both in well-kept or in degraded districts. According to Bearder "Radical street art [is] about reclaiming the urban environment for an alternative discussion that those in charge would rather we did not have."[28]

Physical intervention: Many street art projects are important orientation marks and cultural programs in public space. Examples range from graffiti, murals, video-projections, street installation to sculpture.

Participation: Apart from individual citizen approach, street art projects can formally be commissioned by municipalities or the private sector to improve certain aspects of public space (Fig. 5).

B4 Urban hacking – Generally, urban hacking involves small unauthorized spatial interventions that exceed, bypass or break the limitations of systems.[29] 'Hacking' is an act of creativity as showcased by the 'Hacking Urban Furniture' project[30] that questioned the possible future use of street furniture. Between artistic and social intervention, guerrilla urbanism supports a similar approach that points "against the increasingly regulated, privatized, and diminishing forms of public space".[31]

Physical intervention: Urban hacking is based on different kinds of usually temporary physical intervention in urban space. Various installations of 'parasitic' structures, such as Michael Rakowitz's inflatable shelters for the homeless or 'Homeless Vehicle Project' by Krzysztof Wodiczko, also fit into this category (Fig. 6). These are humanitarian, rhetorical, and subversive structures that enable the homeless to survive in adverse weather conditions, and serve as an awareness-raising intervention in public space.[32]

Participation: These tools are characterized by the bottom-up approach and driven by citizens in a creative and open minded way, also critically appropriating public space.

B5 Creative licensing is a tool that enables the overcoming of bureaucratic obstacles when dealing with streets as public spaces

Fɪɢ. 7 *Cʀᴇᴀᴛɪᴠᴇ ʟɪᴄᴇɴꜱɪɴɢ* ᴀꜱ ᴀ ᴛᴏᴏʟ ɪɴ ᴀ ᴘʟᴀʏ ꜱᴛʀᴇᴇᴛ
ɪɴ Bʀɪꜱᴛᴏʟ, UK (ʟᴇꜰᴛ) ᴏʀ Pᴀʀᴋ(ɪɴɢ) Dᴀʏ ɪɴ Mᴀʀɪʙᴏʀ,
Sʟᴏᴠᴇɴɪᴀ ɪɴ 2013 (ʀɪɢʜᴛ).
Sʟ. 7. *Cʀᴇᴀᴛɪᴠᴇ ʟɪᴄᴇɴꜱɪɴɢ* ᴋᴀᴏ ᴀʟᴀᴛ ᴜ ᴜʟɪᴄɪ ᴜ Bʀɪꜱᴛᴏʟᴜ,
Eɴɢʟᴇꜱᴋᴀ (ʟɪᴊᴇᴠᴏ) ɪʟɪ Pᴀʀᴋ(ɪɴɢ) Dᴀʏ ᴜ Mᴀʀɪʙᴏʀᴜ,
Sʟᴏᴠᴇɴɪᴊᴀ, 2013. (ᴅᴇꜱɴᴏ)

26 Walk-space.at, 2017

27 Pᴏɢᴀᴄ̌ᴀʀ, 2017: 7

28 Bᴇᴀʀᴅᴇʀ, 2012: 6

29 "The concept of hacking questions the city as a habitat and as an architectural construction, using modification, reinterpretation, over-identification and alienation." [Fʀᴇɪꜱɪɴɢᴇʀ, Gʀᴇɴᴢꜰᴜʀᴛʜɴᴇʀ, Bᴀʟʟʜᴀᴜꜱᴇɴ, 2016: 35]

30 www.hackingurbanfurniture.net

31 Hᴏᴜ, 2010: 1

32 Šᴇɴᴋ, 2018: 128, 140

33 Cᴏᴏᴍʙꜱ, 2012: 64

34 There is a rising number of initiatives supporting the play street concept around the world (http://playingout.net/, https://www.playstreetsaustralia.com/…).

that are subject to standardization and official procedures, which often prevent creative use of streetscapes (Fig. 7).

Physical intervention: 'Park(ing) day' is an example of such licensing and a worldwide phenomenon, documented in at least 850 'parks' in 183 cities.[33] It enables the physical occupation of space that is usually reserved for parking. Similarly, 'play streets'[34] also attempt to temporarily transform streets to be safer and user friendly as in the case of 'Gudvanger Strasse' in Berlin, which was transformed into a play street [ger. 'Spielstrasse'] in the summer of 2015.[35]

Participation: Licenses for participatory and playful use of public spaces are demonstrated by the concept like 'Playful Commons', which deals with licensing co-creation in public spaces.[36] This triggers public debate on the use of public spaces through licensing to enable owners and administrators of public spaces to allow for clearly-defined kinds of playful uses (e.g. picnic, games, etc.), to create high-quality, safe and fun environments, and influence the design and construction of new public spaces.

B6 Demonstration projects often serve as a quick-checking tool, both for planners as well as users[37] (Fig. 8).

Physical intervention: This tool brings immediate change into a streetscape with an agenda of a temporary intervention (e.g. 72-hour urban action). [38]

Participation: To trigger a change in mindsets, wide public participation is crucial for demonstration projects to succeed. Initiatives such as the 'Open Street Project' (since 2010) show a change in paradigm and the potential for the transformation of streetscapes.[39] Their aim is to introduce gradual change, e.g. by closing roads to traffic on weekends, so that people can gain a positive experience of different mobility systems other than driving, especially walking and cycling, but also to instigate a long-term change in perspective.

B7 Pilot projects are used for preliminary small-scale experiments conducted to evaluate feasibility, time, cost, and other factors,

and to attempt to improve a full-scale implementation within the time span of one month to one year prior to their implementation.[40]

Physical intervention: Pilot projects usually include direct physical intervention in streetscape to enable users to test e.g. new bike lanes, redeveloped parking spaces, etc. In the case of Bike NWA [Northwest Arkansas], a series of month-long bikeway pilot projects was implemented, to connect three cities with two-way protected bike lanes, which were tested for different materials for barrier elements. During the installation, data was collected for a survey which revealed a high overall public support for the pilot project.[41]

Participation: Pilot projects can be highly participatory, and mobilize municipalities, experts, various actors and groups as well as citizens. Public participation and its feedback are crucial for further development of a project.

B8 Interim design projects provide temporary solutions within the time span of one to five years, when funds are limited, but also when complex approval and regulatory processes are challenged to deliver the results that communities demand.[42] "An interim design can serve as a bridge to the community, helping to build support for a project and test its functionality before construction."[43]

Fig. 8 Demonstration project – bottom-up proposal for badly needed pedestrian crossings (left) and temporary installations (right) in Koroška Street in Maribor, Slovenia, in July 2015
Sl. 8. Demonstration project – bottom-up prijedlog za prijeko potrebne pješačke prijelaze (lijevo) i privremene instalacije (desno) u Koroškoj ulici u Mariboru, Slovenija, srpanj 2015.

Fig. 9 Interim design stage during the transformation process of Koroška Street in Maribor, Slovenia, in September 2015 (left), and Slovenska Street in Ljubljana, Slovenia, in 2013 (right)
Sl. 9. Interim design stage u procesu preobrazbe Koroške ulice u Mariboru, Slovenija, u rujnu 2015. (lijevo) i Slovenske ulice u Ljubljani, Slovenija, 2013. (desno)

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35 Flatau, 2016

36 Karjevsky, Quack, 2015

37 Mould, 2014: 530-532

38 www.72hoururbanaction.com

39 Lydon *et al.*, 2013

40 Lydon *et al.*, 2013

41 http://www.street-plans.com/tactical-urbanism-projects/bike-nwa-northwest-arkansas-month-long-pilot-project-bella-vista-rogers-bentonville-ar/

42 NACTO, 2013: 71-81

43 NACTO, 2013: 73

Physical intervention: Physical transformations, such as the redesigning of a complex intersection or the pedestrianizing of a narrow corridor with low-cost and interim materials, can constitute the preparation phase for a permanent solution. In the case of Slovenska Street in Ljubljana, Slovenia (Fig. 9), the first stage (2008-2012) showed the potentials of this space to citizens, staging several interventions, such as facade renovations, lighting of facades, urban furniture, final surface renovations, and placement of 'urban chairs' along a road, to evoke the feeling of a living street, etc. In the second stage (2013-2014), the major physical change was the temporary rearrangement of the streetscape which closed it for cars, narrowed the traffic corridors, and equipped it with groups of potted trees next to the tables and chairs on wooden platforms.[44]

Participation: Interim design projects can be highly participatory, and mobilize municipalities, experts, various actors and groups as well as citizens. In the case of Slovenska Street in Ljubljana, interventions have been proposed and implemented by several initiatives and actors commissioned by the municipality (organizers, experts, designers, architects, landscape architects, artists, etc.). On the other hand, the activities in Koroška Street in Maribor, Slovenia, were mainly initiated by civil society groups and local NGO. In 2015, the municipality supported an interim redesign of the street with movable equipment, three new creative pedestrian crossings, and greenery.

B9 Traffic measures – Numerous design guides refer to the implementation of traffic measures, such as traffic calming, upgraded signalization, and other infrastructure solutions which, together with soft measures, such as informing the public and stimulating walking, the use of bicycles and public transport, can also lead to streetscape character transformation.

Physical intervention: Applying traffic-oriented tools, such as 'traffic regime variability', may induce changes by temporarily closing roads/streets/spaces to traffic in order to enable public use of space as in the case of the highway from São Paulo called Minhocão.[45] Related to the acceleration of traffic, a 'reversible lane' is a solution according to which traffic may use either direction on one or more lanes, which usually depends on the rush hour condition (used in many cities around the globe such as Washington, Beijing, Sao Paulo, Melbourne, and many others).

Participation: Although this tool as such is in the domain of experts and does not incorporate public participation, it enables it by transforming motorized streetscape into tempo-

rary pedestrian-friendly environments or even open public space in some cases.

B10 Temporary events like street fairs, parades, sports events, etc. demand a temporary change of streets from traffic corridors to venues. Large-scale events of the past have shown that "quasi-permanent transformation (closures for vehicular traffic) evoke the transport system's flexibility in reacting on such events: Mobility patterns adapt".[46] Temporary use of streetscapes is also driven by constantly changing demands, the need for time-limited exclusivity, the need for flexibility, and the opportunity to unlock site potentials with pop-up events, art installations, urban agriculture, sports and recreation events.[47]

Physical intervention: Temporary events, when performed in a regular fashion, i.e. weekly or monthly (or for example every Sunday for a street market, or once a year for a specific sports event), can provide a fresh perspective on streetscape, along with temporary spatial arrangements and use. Oxford Street in London used to be closed to traffic only at Christmas, but it paved the way for a decision on the permanent closing to traffic, foreseen to begin in 2018.[48]

Participation: Many times, the initiation and motivation for urban change are related to a major event with political or cultural legitimation as an 'event-based project'[49] with extensive participation. Among them, the European Mobility Week has been an important campaign to promote clean mobility and sustainable urban transport since 2002. It has given people the chance to explore the role of city streets and to experiment with practical solutions to tackle urban challenges.[50] During the European Mobility Week in 2017, the Ciottina Street in Rijeka, Croatia, was transformed in such a way for a week, enabling a variety of events: sports activities, street painting (street

44 www.ljubljana.si/sl/aktualno

45 van Schönfeld, Bertolini, 2017

46 Brezina, Emberger, 2017: 677

47 Bishop, Williams, 2012

48 Block, 2017

49 European Capital of Culture, Olympic Games, Presidency of the European Council and others act as stimulating agents of urban change in many cities. They can be generators of temporary events, as well as initiators of future permanent solutions.

50 In 2017, there were also 577 participating cities from Austria, 11 from Croatia, 202 from Hungary, 129 from Italy and 71 from Slovenia. [http://www.mobilityweek.eu/participants-archive]

51 http://www.mojarijeka.hr/vijesti/rijeka-obiljezava-europski-tjedan-mobilnosti-ciottina-na-tjedan-dana-postaje-pjesacka-zona/

52 https://www.vienncouver.com/2015/01/viennas-begegnungszone-shared-space-program/

53 I.e. the protest that took place in the Spanish city of Burgos, when an ambitious urban regeneration plan of the

art), fair, dancing, entertainment, fashion show, workshops, etc.[51] (Fig. 10).

B11 Critical mass gathering, protests, referendum – While streetscapes are also important for the expression of public opinion at demonstrations, protests, etc., they can be used as political spaces to influence the development of the transformation processes, in both positive and negative ways.

Physical intervention: These tools enable the appropriation of space, while the visibility of certain groups can also be enhanced.

Participation: One can speak about strong participatory tools, be it referendum (as in the case of Mariahilferstrasse in Vienna, Austria, where 48,642 residents of the area provided for a narrow 53.2% approval rate at a very high participation rate of 68.1%[52]) or even protests.[53] But there is also a more spontaneous, positive, even celebrative way to express 'political' demands and raise awareness through critical mass gathering. There are for example numerous cyclist critical mass gatherings happening regularly in many cities across the world, functioning as tools for reclaiming streets by direct action (Fig. 11).

B12 Discussion groups, meetings, including conferences, lectures, presentations with round tables, etc., serve as communication platforms, where ideas can be discussed, and

ways of their enactment orchestrated (Fig. 12). Formats can be adjusted to a specific target group. In this category, discussion groups and meetings of citizen initiatives are a powerful tool, which represents the bottom-up action, and is important for empowering citizens and enabling the growth of the community's social tissue.

Physical intervention: These types of tools usually do not intervene in space in a physical sense, although finding, using or appropriating certain space for discussions can have a physical impact (especially if it happens in public space as in the case of 'MIZA cooks coffee' in Maribor[54] (Fig. 7, right). Certain physical objects can also work as good mediators or attractors for community meetings and discussion groups, as for example in the case of 'the Vivacidade – dress up the city voids'[55] project in Aveiro. This project showcased a series of different communication formats for engaging inhabitants, municipality representatives and other actors in collective transformation of the neglected leftover space along the street, among them a wooden cube as a communication tool.[56]

Participation: Discussion groups, meetings and citizen initiatives[57] are the core tool for participation. Since well-thought-out communication is one of the most important factors in successful participatory projects, expertise from the field of communicology can make a distinction also in the field of urban interventions before, during and after the project is completed, especially when different stakeholders are involved simultaneously.

B13 Web-based community planning – Information-based tools are being developed to support the self-activation of citizens.[58] They can be administered by municipalities or different actors and groups.

Physical intervention: These tools do not have any direct physical impact on space. However, self-organized action in public space may be triggered by different web-based platforms, i.e. Citytoolbox,[59] Straddle3,[60] CitizensLab network.[61]

Participation: Web-based community planning or participatory e-planning is paving the way for better dissemination and reuse of information, more transparency, but also

Fig. 10 *Temporary events* in Ciottina Street in Rijeka, Croatia, at the time of the European Mobility Week 2017
Sl. 10. *Temporary events* u Ciottinoj ulici u Rijeci, Hrvatska, u vrijeme Europskog tjedna mobilnosti, 2017.

Fig. 11 *Critical mass gathering* event intended to mobilize non-cycling population, Budapest 2018
Sl. 11. *Critical mass gathering* – događaj s ciljem mobiliziranja nebiciklističke populacije, Budimpešta, 2018.

Fig. 12 *Meeting* with inhabitants, municipality members, experts at the Tkalka development cooperative in Maribor, Slovenia, in April 2015
Sl. 12. *Meeting* – susret sa stanovnicima, članovima opčine, stručnjacima u razvojnom centru Tkalka u Mariboru, Slovenija, travanj 2015.

boulevard in the Gamonal district was announced, led to the abolition of the plan. [Pogačar, 2015]

54 MIZA has a double meaning – in Slovenian language it means 'table', but it is also an abbreviation for the Maribor Interest Society of Architects. 'MIZA cooks coffee' were organized meetings of architects in different public spaces with improvised table and sitting opportunity, addressing critical issues on spatial development of the city of Maribor.

55 The project was developed within the scope of 'Actors of urban change' program (2013-2015).

56 Praça *et al.,* 2015; Schwegmann, 2015

57 Examples from the Netherlands show the participation of residents involved in a very broad range of activities, such as taking care of street space, maintaining, bringing content and even transforming (e.g. the OpzoomerMee project in Rotterdam where over 1800 street communities have been registered since 1994). [Pogačar, 2017]

58 Horelli, 2013

59 www.citytoolbox

60 straddle3.net

61 www.citizenslab.eu

TABLE II IMPLEMENTATION OF TOOLS REGARDING DIRECT PHYSICAL INTERVENTION AND PUBLIC PARTICIPATION (WITH INDICATED TENDENCIES »»»).
TABL. II. IMPLEMENTACIJA ALATA S OBZIROM NA IZRAVNU FIZIČKU INTERVENCIJU I JAVNU PARTICIPACIJU (S NAZNAČENIM TENDENCIJAMA »»»)

physical	traffic measures	««« demonstration project »»» ««« pilot project »»» ««« interim design project »»» ««« exhibition »»» ««« temporary event »»»	urban hacking street art creative licensing
non-physical	urban design / architectural competition »»» urban planning / masterplan »»» research & development project »»» strategic document »»»	««« workshop »»» ««« web based community planning »»» ««« urban hackathon »»»	««« discussion group / meeting critical mass gathering
	extended expert (inter)action	**citizen/expert (inter)action**	**citizen action**

building capacity to understand urban complexity by involving place-based knowledge of inhabitants.[62]

B14 Urban hackathon – In general, urban hackathons are events where problems are solved in a limited time frame (e.g. 48 h) through intense participant collaboration and usually, with a predefined focus/topic.[63] They are a known and used event-format in the world of software engineering.

Physical intervention: Usually, these tools do not have any direct physical impact on space.

Participation: The participation of mainly experts, but also citizens depends, on the content and topic. The 'Visualizing Neighborhoods: A Hackathon for Good' was held in Minneapolis in 2013 on the topic of spreading relevant information through the creation of visualizations (e.g. bus routes in relation to population density, an activity and route-focused map, etc.).[64]

C Supporting tools: research & development projects, metrics, evaluations, opinion polls, awards – While research & development projects serve as arguments for the political and professional decisions, their results are also indispensable for their legitimations and public presentations (e.g. traffic studies, opinion polls, etc.). During or after each stage of the project, metrics and evaluations can be performed also on opinion polls, in addition to other relevant data related to the project. Evaluation can also be external. Professional awards can legitimize a specific project, design and the underlying political apparatus. Awards stimulate, and attest to excellence in governance, design and implementation.

DISCUSSION

DISKUSIJA

Streetscape transformations are long-lasting processes which pass through different phases. The list of tools with their indicators in Table I can help analyze or set up develop-

ment strategies for streetscape transformation projects. By its comparative method, the table provides a differentiated overview of the selected tools' effectiveness tested in different cases, which have employed a multiplicity of traditional and contemporary tools with direct or immediate spatial effect and the participation of different stakeholders.

The transformation of Mariahilferstrasse in Vienna (Fig. 1) as well as Slovenska Street in Ljubljana (Fig. 2) combined a wide variety of the above-mentioned traditional and contemporary/alternative tools. In Vienna, it was accompanied by a design competition (2013), an information campaign as well as public participation through a special website, newsletter, expert round tables, discussions, resident surveys, and feedback boxes. After intensive reactions to interim design period, the final decision was provided by a public referendum in 2014. In Ljubljana, certain traditional tools, including spatial vision and the spatial strategy in the first phase and the spatial plan and traffic policy in the second, have been complemented by several interventions proposed by different initiatives and actors. These included street art, exhibitions, art installations, temporary events, and other urban interventions designated as interim design projects and demonstration projects. In addition to a special website for citizen initiatives, several presentations, discussions and round tables as well as an extended workshop/competition were held, leading to the renovation with its new and specific character, which also received professional confirmation, with awards including a Mies van der Rohe 2017 award nomination.

Compared to the past, contemporary/alternative tools are a legitimate option to initiate, support and achieve urban change. At the same time, top-down approaches need to be reshaped to pay more attention to communication, and become more open and democratic. In the diagram shown in Table II, tools are structured according to two characteristics. The first characteristic is the immediate physical impact of the selected tools compared to tools having no direct physical impact. The second observed characteristic was the mode of participation. The diagram shows the main difference between traditional approach tools that did not have any direct impact on physical space and predominantly limited public participation, be they strategic documents, masterplans, research & development projects or competitions, etc., and the contemporary/alternative participatory

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62 HORELLI, 2013
63 ŽIŽEK, POGAČAR, 2016
64 ŽIŽEK, POGAČAR, 2016
65 ELDEN, BRENNER, 2009

ones, such as urban hacking, street art or creative licensing with direct spatial interventions and discussion groups, meetings and critical mass gatherings without it. It is also evident that traditional approach tools are facing transformation tendencies from predominantly top-down approaches to becoming more participatory. Considering the emergence of different approaches and tools, one can speak of pluralism as well as of the democratization of approaches and tools. There is still a long way to go before for example a strategic plan and an urban hackathon are treated with the same respect and relevance. But it is clear that bottom-up approaches should not be marginalized and considered less relevant.

CONCLUSIONS

ZAKLJUČCI

Contemporary cities are facing a mobility change paradigm in their most central locations. Once heavily motorized traffic roads are being transformed into sustainable mobility streetscapes championing walking, cycling and public transport, along with supporting different uses and programs. It has been recognized that there is a much wider range of possible approaches and tools for the urban transformation of city streets now than in the past. The paper points out two major differences between traditional approach tools and contemporary ones. Contemporary tools are often characterized by the immediate physical intervention in streetscape. They are also characterized by the involvement of a wider range of actors, especially by the bottom-up participation of citizens and new modes of expert participation. Participation is considered the key element of contemporary approaches, since, the social fabric can be built along with the physical interventions through the involvement, cooperation and decision-making of the, for

example, local communities. This also confirms Lefebvre's notion of space as a product of social (inter)action.[65] From the viewpoint of mobility, behavioral patterns of people do not change easily, old habits and gained rights can be changed with top-down decisions, but incorporating the possibility of personal experience and public participation can primarily support the transformation of mindset. Cases that involve extreme changes in traffic regimes prove that wide participation during the process helps to trigger a change in perspective and consequently, a change in street space for it to become more inclusive, lively, and sustainable.

Although we are witnessing a rise of new ways of activity in public space, the development of new approaches and tools that would enable better connection and exchange between different sectors is more than needed. It is essential to improve the tracking of tools and experiences from different cities, and thoroughly research their policies, planning and interventions with impact on streetscape transformation.

The combination of the selected approaches and tools may vary according to local circumstances. To be effective, the planning of transformation processes of city streetscapes should be supported by participatory contemporary approaches involving citizen and expert initiatives. A list of instruments and tools can help to set up development strategies for streetscape transformation projects coordinators, either from the government/municipality or the private sector. At the same time, it serves as a trigger list of tools for possible engagement of civil society in the context of sustainable development, in which the democratization and transparency of planning processes play a crucial role.

[Written in English by authors; proof-read by Laura Cuder Turk, univ.dipl.angl.]

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ILLUSTRATION SOURCES
IZVORI ILUSTRACIJA

FIG. 1   Martin Ecker / Ricky Rijkenberg
FIG. 2   Miran Kambič
FIG. 3, 8, 11, 12   authors
FIG. 4   Prostorož/ authors
FIG. 5   Prostorož / Virgina Vrecl
FIG. 6   Michael Rakowitz
FIG. 7   Bristol Live/Bristol Post / authors
FIG. 9   authors / Prostorož
FIG. 10   Grad Rijeka – Europski tjedan mobilnosti 2017 / Libra

Sažetak
Summary

Alternativni pristupi i alati u preobrazbi prostora ulice
Izravne fizičke intervencije i različiti načini participacije

Ulice se koriste kao višenamjenski prostori tijekom cijele urbane povijesti čovječanstva. Zbog velike mobilnosti i prevelikog broja motornih vozila, osobito nakon Drugoga svjetskog rata, ulica (kao prostor socijalnog i ekonomskog povezivanja ljudi i njihove interakcije) znatno se izmijenila. Potreba ponovnog promišljanja o prostorima mobilnosti, kao i potreba da se ulice preurede u humanija, heterogena mjesta, pojavila se ne samo unutar stručne i znanstvene zajednice već i kroz konkretne akcije još u doba pada popularnosti CIAM-a. Od šezdesetih godina 20. stoljeća raste važnost ulice kao socijalnog prostora i životnog okruženja. Recentne inicijative usmjerene su k preobrazbi gradskih ulica i centara s ciljem stvaranja boljih uvjeta za kvalitetan javni život u gradovima, s osobitim naglaskom na poboljšanje uvjeta za pješake.

Ovaj se rad bavi preobrazbom prostora ulice *(streetscape transformation)* te predstavlja različite pristupe i alate, kao i njihovu učinkovitost u procesu urbane preobrazbe. Posebno se naglašava registriranje stvarnih intervencija u prostoru u procesu preobrazbe (njihova fizička intervencija u prostoru) kao korak naprijed u budućem korištenju ulice, ali i sudjelovanje javnosti na različite načine u procesima preobrazbe, što je demokratski način kojim se pridonosi kontinuiranom razvoju gradova.

Politika Europske unije podupire razne participativne pristupe u cilju ostvarivanja održivih urbanih promjena, kako to pokazuje djelovanje raznih organizacija: ISUDS *(Integrated Sustainable Urban Strategies)*, SUMPs *(Sustainable Urban Mobility Plans)* ili European Mobility Weeks. Ovaj rad predstavlja nekoliko primjera projekata polazeći od pretpostavke da korištenje mnogobrojnih alata (koji imaju izravan ili neposredan učinak na prostor i podupiru participaciju različitih sudionika) može ubrzati procese preobrazbe ulica i učiniti ih efikasnijima.

Općenito, pristupi se mogu podijeliti u dvije karakteristične, no dijametralno suprotne skupine: tradicionalni pristup koji se povezuje s tzv. *top-down*, formalnim ili tradicionalnim stajalištem, te pristup suprotan ovome, tj. alternativni pristup povezan s tzv. *bottom-up*, neformalnim i pristupom u nastajanju. Navedeni su pristupi i alati preobrazbe ulice prepoznati i odabrani između brojnih slučajeva projekata koji su dovršeni ili su u tijeku.

Iako su tradicionalni alati urbanističkog planiranja i projektiranja primarno usmjereni odozgo prema dolje *(top-down)* bez neposrednih fizičkih zahvata u prostoru, oni obično uključuju programirane demokratske participatorne elemente unutar procesa koji obuhvaćaju etape od ideje do donošenja zakonski obvezujućeg dokumenta za prostornu implementaciju. U tu kategoriju ulaze strateški dokumenti, urbanistički planovi i projekti, glavni urbanistički planovi, urbanistički i arhitektonski natječaji. Manje obvezujući i alternativni alati usmjereni prema procesu, kao što su radionice urbanističkog planiranja i projektiranja, *charrette* i izložbe, mogu se smatrati tradicionalnim alatima u pristupu, ali i alternativnim nezavisnim alatima koji omogućavaju interakciju i komunikaciju. Nadalje, alternativni alati u nastajanju, kao što su zakonito kreativno licenciranje *(creative licensing)*, zakonita ili nezakonita ulična umjetnost *(street art)* ili po definiciji nezakonito urbano 'hakiranje' *(urban hacking)*, uključuju male neposredne i privremene prostorne intervencije izvedene radi poboljšanja nekih aspekata javnoga prostora i poticanja javne diskusije o korištenju tih javnih prostora.

Organizacijski složeniji demonstracijski projekti, pilot-projekti i privremeni projekti omogućavaju privremena rješenja prije nego što se realizira očekivana glavna preobrazba ulice. Njih mogu pratiti privremene prometne mjere, privremeni događaji, kao što su ulični sajmovi, parade, sportski događaji i sl., koji zahtijevaju privremene promjene na ulicama: od prometnih koridora do mjesta događanja, grupe za diskusiju i susrete, masovna okupljanja i planiranje putem interneta kao participatorne komunikacijske platforme te urbani 'hackatoni' *(urban hackathons)* gdje se problemi rješavaju u ograničenom razdoblju kroz intenzivnu suradnju sudionika i obično s unaprijed definiranom temom. Osim toga, uza svaku etapu projekta razvojno-istraživački projekti, metrika i valorizacija mogu se provesti kroz ispitivanje javnog mnijenja i druge relevantne podatke povezane s projektom. Valorizacija može biti eksterna. Profesionalne nagrade mogu dati legitimitet određenom projektu i njegovoj političkoj pozadini. Nagrade stimuliraju i svjedoče o izvrsnosti u upravljanju, projektiranju i implementaciji. Prepoznato je da danas postoji znatno širi raspon mogućih pristupa i alata za urbanu preobrazbu gradskih ulica nego što je to bilo u prošlosti. Uvođenje mogućnosti osobnog iskustva i javne participacije može potaknuti preobrazbu stanja svijesti. Slučajevi koji zahtijevaju velike promjene u režimu prometa dokazuju da široka participacija za vrijeme toga procesa pomaže potaknuti promjenu perspektive i, posljedično, promjenu prostora ulice kako bi ona postala inkluzivnija, življahnija i održiva. S obzirom na pojavu različitih pristupa i alata, može se govoriti o pluralizmu i demokratizaciji pristupa i alata. U usporedbi s prošlošću, alternativni su pristupi legitiman izbor kako bi se inicirala, podržala i postigla urbana promjena. Istovremeno, *top-down* pristupe treba preoblikovati kako bi se veća pozornost usmjerila na komunikaciju koja bi trebala postati otvorenija i demokratičnija.

Kako bi ti procesi bili učinkoviti, razni suvremeni participativni elementi, kao što su građanske i ekspertne inicijative, trebaju podržati planiranje procesa preobrazbe gradskih ulica. Brojni instrumenti i alati mogu pomoći u definiranju razvojnih strategija za koordinatore projekata preobrazbe ulica, kako one iz vlade i općine tako i one iz privatnog sektora. Istovremeno, to služi i kao poticaj za moguće angažiranje civilnoga društva u kontekstu održivog razvoja u kojem demokratizacija i transparentnost u procesima planiranja igraju glavnu ulogu.

Biographies
Biografije

Kaja Pogačar, Ph.D., is an architect and a researcher of contemporary urban processes (Urban activator, Urban hackathon, Renewal of the city interiors...), also involved in numerous community activities for the revival of the old city center of Maribor.

Peter Šenk, Ph.D., is a researcher and writer in the field of architecture, urban planning, and visual culture, an architect (Studio Stratum) and a curator. He is the author of the book *Capsules: Typology of Other Architecture* (Routledge, 2018).

Dr.sc. **Kaja Pogačar**, arhitektica i znanstvenica. Bavi se istraživanjem suvremenih urbanih procesa (*Urban activator, Urban hackathon, Renewal of the city interiors* itd.) i sudjeluje u brojnim aktivnostima vezanih uz obnovu starog centra Maribora.

Dr.sc. **Peter Šenk**, znanstvenik i autor publikacija u području arhitekture, urbanizma i vizualne kulture, arhitekt (Studio Stratum) i kustos. Autor je knjige *Capsules: Typology of Other Architecture* (Routledge, 2018.).