THE MAKING OF THE MEDIATED PUBLIC SPACE

Essays on emerging urban phenomena

Edited by
Carlos Smaniotto Costa and Konstantinos Ioannidis

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Process of making the hearth of the neighbourhood: from analogue to digital public space design

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Abstract – *We are living in a period where communities and individuals have the chance to operate more directly in the city, and present their own opinions and proposals on how the city can be developed and designed in accordance with their needs and expectations. This period is also characterised by change in the general approach to the city as self-organised system that is free from the division of bottom and top urban players. This has led to the creation of a new, open and collaborative city-making method called "urban gaming". On the one hand, the game is a laboratory for "understanding and strategizing" and on the other it is assumed as a 'generative' method. This tool could also be seen as an interface for the creation of knowledge and negotiation in the abstract decision-making process and material construction of the city. The game itself can be designed depending on the specific situation and scale to achieve more sustainable plans and proposals. Due to its complexity and the specificity of urban problems, urban game may use analogue as well as digital techniques. To illustrate this contemporary tool, the present paper will use the experience of the urban gaming process that was held in Belgrade. The game was created and imple-mented to develop a local public space, based on the neighbourhood initiative addressed to the representatives of the local government of the City of Belgrade. In this case study, seen as an urban experiment, special attention is placed on the different phases of the process, the results that have been achieved, as well as the use of analogue and digital tools during the application of the method.*

Keywords - citizen empowerment, urban gaming, local public space, Belgrade, Serbia

INTRODUCTION: EMPOWERING CITIZENS TO ACT AND CREATE COMMON SOLUTIONS

The involvement of citizens and other stakeholders in urban design has been studied for decades. As a result, different forms of collaboration and participation have been created and tested. However, there was a constant lack of understanding between various stakeholders, due to differences in thinking and language used (Steino, Bas Yildirim and Ozkar 2013, Forester 1980, Friedmann 1973). This is best illustrated in a situation whereby "non-designer professionals and non-professional stakeholders

alike typically lack the capacity to fully understand the spatial implications of planning and design decisions, unless they are demonstrated by the use of relatively detailed architectural models, whether physical or virtual" (Steino, Bas Yildirim and Ozkar 2013, 195).

The cause is seen in the complex nature of urban design problems that cannot be distributed and solved individually by different professionals, but which must be solved collaboratively (Steino, Bas Yildirim and Ozkar 2013, Achten 2002), and for which communication is the key method. Furthermore, this also requires the redefinition of the role of urban designer in relation to the process of change (Vukmirovic 2015). Involving residents in the decision-making process further empowers them to take responsibility and resolve their problems. Lefebvre's notion of 'right to the city' is about empowering the users of the space (Lefevbre 1996), which calls for a paradigm shift in the way we conceive the role of an architect. The architect needs to be a facilitator who recognises the user as potential resource and involves him/her in creating an architecture that is socially and culturally responsive.

In his research on how citizens envision the benefits of smart cities, Lighting[1] has discovered that citizens want more ways to interact with their cities (The Economist Intelligence Unit 2016, 3). The results have shown that "less than one-third of citizens (32%) are currently providing feedback to their local authorities, over one-half say they would like to do so" (The Economist Intelligence Unit 2016, 3).

The European Commission, in its report on The Cities of Tomorrow, also pointed out that the new governance models should be based on citizens' empowerment, participation of all relevant stakeholders, and innovative use of social capital. Consequently, new design and delivery models are needed, and cities also must adopt innovative approaches to major social challenges. One way of doing this "is to focus attention on public opinion about urban amenities and on adjusting priorities according to recommended changes, or to use wider participatory processes, such as participatory budgeting, foresights involving citizens, etc." (European Commission — Directorate General for Regional Policy 2011, 94). Planning is seen as an open and flexible process, where all stakeholders and citizens have the same rights and equal significance, while new forms of real participation need to be developed. These new forms of participation demand a new collaborative method that should be able to merge urban rules and interactive negotiation.

PUBLIC SPACE

Public spaces, seen as a vital ingredient of successful cities (Gehl 2010), can help in creating a sense of community, civic identity and culture. According to the UN Habitat (2016) the liveliness and continuous use of public spaces lead to urban environments

[1] This study by The Economist Intelligence Unit (EIU), supported by Philips Lighting, investigates how citizens and businesses in 12 diverse cities around the world—Barcelona, Berlin, Buenos Aires, Chicago, London, Los Angeles, Mexico City, New York City, Rio de Janeiro, Shanghai, Singapore and Toronto—envision the benefits of smart cities.

that are well maintained, healthy and safe, making cities attractive living and working places. Because of the importance of public spaces "urban planning has to establish and organize public spaces, while urban design has to facilitate and encourage their use, in the process of enhancing a sense of identity and belonging" (UN-Habitat 2016, 4). Some paragraphs of the Charter on Public Spaces (UN Habitat 2015) indicate that:

• Paragraph 7 - Public spaces are a key element of individual and social well-being, the places of a community's collective life, expressions of the diversity of their common natural and cultural richness and a foundation of their identity[2]. The community recognizes itself in its public places and pursues the improvement of their spatial quality.
• Paragraph 17 - Public space is the gymnasium of democracy, an opportunity for creating and maintaining over time the sentiment of citizenship and the awareness of the roles that each of us has and can have with regard to one's daily lifestyle and to one's living environment.
• Paragraph 20 - Designing public spaces also means taking into account alternative and creative practices based on new techniques of communication and urban usage.

The last paragraph stresses the need to explore new tools and methodologies that will gather communities and specific groups in creating, designing and managing public space. Moreover, these tools need to "allow designers and promoters a simulation of creative practices, such as planning and designing streets and public spaces" (UN-Habitat 2016, 79). In accordance with these principles, this paper will present the concept of urban gaming as a possible solution, one that has the potential to transform urban communication and collaboration into a method for generating vibrant public spaces and neighbourhoods, and a humane city.

URBAN GAMING, AND ITS ANALOGUE AND DIGITAL MODES

Keeping in mind what was stated above, especially the aim of fostering greater involvement of citizens in the process of urban planning and design, and overcoming problems relating to the lack of understanding among stakeholders, the recent innovative trend in urban participation is gamification. Its appropriateness for this purpose is seen in its capacity to encourage engagement through adding game-like elements to otherwise non-gaming environments. More precisely, it is a method that "translates elements from the digital and analogue games to the dynamics of planning, creating engaging city-building simulations to help make better policies, to generate new design ideas and to enhance communication between different stakeholders" (Ivkovic 2015, 4).

Due to its potential, one of the oldest learning methods of human beings (Huizinga, 1938) is the language of the future (Duke, 1974), the most elevated form of investigation

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[2] As expressed by the European Landscape Convention.

and the most effective and fun way of intervening in and fixing real problems. Observing the city as a holistic self-organizing system, run by multiple urban stakeholders, Tan (2014) used the concept of gaming in the development of a new instrument that facilitates and makes the process of urban participation efficient. The argument for that is found in three simple principles: games are systems that support self-organization; cities function as self-organizing systems[3]; and games can be used to organise cities. In regard to that, gaming is conceived as "a laboratory test for cities, where urban rules are adapted and shaped by negotiation, and subsequently studied and further developed through proposed method of Generative City Gaming" (Tan 2014, 56-57).

In addition, there are two more arguments in favour of the game. One deals with the game environment in which multiple players coexist, compete and learn that if they collaborate with other players they can better advance their own goals (Tan 2014, 123). The other is related to the potential of gaming seen in its hybrid nature "of visual and verbal, two way and interactive, inclusive and engaging from infants to elderly of cross cultures") (Tan 2014, 127).

Generative City Gaming has four main components: **players, interface, process** and **outcomes**. The players refer to different stakeholders – "urban players commit to shared visions and define own responsibilities to implement outcomes of the City Gaming"(Tan 2014, 137). The interface[4] is characterized by the visual and verbal representations of urban processes and formations, integrated in a simple game environment. The process is incremental, ensured by simple and dynamic rules, and open-ended, where each sub-cycle in the game can produce particular outputs within the ongoing process. The outcomes vary with regard to the character of the urban problem as well as the size of the territory the problem is related to. It can be a decision, an unexpected partnership, a design idea, a precise collaborative urban design plan, an urban scenario, a common strategy, etc.

Considering the form in which it arises, urban gaming is in analogue media supported by digital technology. Its supportive role is reflected in the need for data processing, spreading the information about the game, its phases and outcomes, 3D modelling of the development scenarios, simulation of the results, etc. In general, digital media are used to further explain the generated ideas, as well as simplify and expand communication among different actors.

By exploring and testing the gaming method in different situations, Tan has noted that it can yield positive results and can successfully serve a range of purposes:

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[3] Self-organization is a process where some form of global order or coordination arises out of the local interactions between the components of an initially disordered system. This process is spontaneous: it is not directed or controlled by any agent or subsystem inside or outside of the system; however, the laws followed by the process and its initial conditions may have been chosen or caused by an agent (Portugali, Self-organisation and the City 2000).

[4] Low threshold interface, a modifiable 3D model supports the communication of various experts amongst one another and with non-experts. Simple rules are designed in such a way that an ordinary player with limited knowledge of urban terminology can comprehend the consequences of complex notions such as urban density, maximum building height, scale, etc.

'simulating self-organizing urban mechanism', facilitating 'collaborative design', 'conflict resolution' and 'unlocking conversations', 'mapping city initiatives and ideas', 'testing urban plan rules', 'temporary city planning and programming', etc. The cause for the above can be found in stakeholders' differences and readiness to take a stand during the game and share ideas. Another reliance of the outcomes of the game is seen in the political and cultural background of the project or the addressed site. Still, despite this, the gaming methodology as a way of promoting urban participation, or "a form of public consultation, can be applied for a large range of planning regimes such as in polarized and opaque planning procedures, as well as in negotiative and flexible planning conditions" (Tan, Negotiation and Design for the Self-Organizing City: Gaming as a method for Urban Design (A+BE | Architecture and the Built Environment) 2014, 369).

STRATEGICAL FRAMEWORKS OF URBAN GAMING

As previously stated, depending on the need, urban gaming can be applied to areas different in scale, starting with interventions on a concrete object, an entire block, a neighbourhood, or entire cities, determining at the same time strategic levels of participation, defined by all four key elements of the game (players, interface, process and outcomes). A workshop held as part of the 50th ISOCARP Congress, in the Netherlands in 2015, is a good example for testing this method on research areas of various size. The workshop questioned the challenges posed by the concept of Knowledge Region/City, and consisted of three segments, different in size: knowledge district – university complex in Delft; knowledge city – The Hague; and knowledge region – a space of four networked cities: Rotterdam, Leiden, The Hague and Delft.

TABLE 1: STRATEGIC FRAMEWORKS OF THE URBAN GAMING IMPLEMENTATION

STRATEGICAL FRAMEWOKS		
Size of the polygon	Small territory	Large territory
Scale	Small scale	Large scale
Urban units	Building Block / Public space Quarter	City Municipality City Region
Instrument	Public/Citizen workshop Game around the table Analogue + Digital	Digital tools and apps Online/virtual game Digital
Output	Urban transformations Design proposals	Plan Development strategy Vision/Foresight

Generally, strategic levels (see Table 1) covering the smaller scale are oriented towards concrete actions in the space, i.e. urban transformations which happen in common and open municipal public spaces. Unlike these, strategic levels of a larger scale can have the joint plan, strategy or vision of spatial development as their outcome.

On the small-scale strategic level, the process is usually facilitated in the form of a workshop with citizens, as opposed to the strategic level of larger scale, which uses contemporary tools accessible to a higher number of users, focusing on mobile and web applications, as well as certain social networking platforms. However, although traditional forms of communication, such as discussions, and defining the joint solution through dialogue are used to shape the future of urban transformations, which can be characterized as analogue, digital tools are also used on this level, above all to achieve more precision and concreteness in laying out the final solution.

Considering the advantages of this contemporary method (Vukmirovi 2016), with a view to enhancing participative models, the Belgrade City Government decided to initiate its application as part of the IME Project (Foli and Vukmirovi 2016). The mobile and web application *Beogra anin* (the Belgrader, see Fig. 1) was conceived to address the strategic level or larger scale with the aim of attracting large numbers of citizens to participate in the city's developmental projects and processes. The very name of the application indicates the need for active citizen participation in improving the quality of living in their city, on topics related to organizing public spaces, traffic, environmental protection, education, introduction of innovative services, new cultural and tourist services. The application software was developed in the form of digital referendum on various subjects, whose results are to assist the city administration to make decisions. The gaming method was developed to motivate citizens' participation, by enabling a system of point collection, which can be later used to claim the determined prizes (Grad Beograd 2016).

Fig. 1: The appearance of The Belgrader mobile application. Draft 01. Source: New Image, 2015.

On the other hand, this method can be used for the implementation of sub-project "Urban Pockets". Its aim is "to organize open spaces of small scale and local squares, positioned on crossroads, which can significantly contribute to liveliness of certain parts of the city and spatial entities, strengthening the local communities and generating local identity and recognisability" (Foli and Vukmirovi 2016, 38). This sub-project addresses several dozens of mapped locations (see Fig. 2) determined

through consultations with representatives of the local administration of the city's municipalities, encompassed by the General Urban Plan, and recommended by the citizens themselves.

Fig. 2: Locations addressed by sub-project no. 13: Urban Pockets. Source: Vukmirović, 2017.

The first application of the urban game, as a type of a pilot project, was conducted in September 2015, after an initiative on the Momo Kapor St. The administration's stance was that, if this implementation proved to be a success, it would expand the use of urban gaming to other locations which are part of the "Urban Pockets" project, and furthermore to other parts of the IME Project, thus making it an established practice.

URBAN GAMING ON PUBLIC SPACE LEVEL. CASE STUDY: MOMO KAPORA STREET IN BELGRADE

After part of the open public space of Mačvanska St. had been renamed Momo Kapor St.[5] (see Fig. 3), there was a citizen initiative to remove the existing petrol station and organise the area according to the residents' views. Bearing in mind that the initiative, directed to the Belgrade City Manager and the Director of Urban Planning, was signed by dozens of dwellers of this street and neighbouring streets[6], the representatives of the city administration decided to fully include the citizens of this area in the definition of the project's solution. Therefore, to address this issue, the authorities opted for urban gaming, which is in accordance with the strategic level of small scale.

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[5] Famous Serbian painter, writer and publisher, he lived in Nebojšina St, not far from the location which now carries his name, after an initiative launched by the daily newspaper "Politika" in April 2015. Momo Kapor St. was officially opened on 6 September 2015.

[6] Mačvanska, Tamnavska, Mutapova, Sokolska and Stojana Protića.

The game was conceived and facilitated by Milena Ivković[7]. Following the structure of basic elements of urban gaming (players, interface, process and outcomes) the following topics present an example of urban game, prepared for this polygon.

Fig. 3: Inner location of Mome Kapora Street.

PLAYERS

As previously stated, the initiators of this project were citizens who live in the proximity of the location, who are to be its direct users. After the initiative was submitted, a round of consultations was held to prepare further steps. Those present at the consultations[8] included representatives of the initiators, employees of the city administration, and experts in open public space design. The initiators, the citizens who live in the immediate proximity, and the representatives of the Momo Kapor Endowment, presented their aims and basic ideas about the future transformation of this space. Members of the Office of the City Manager, the Office of the Director of Urban Planning, and the Public Enterprise "Belgrade Roads", familiarized the citizens with possibilities of what can be achieved and in what ways, led by the elements of the existing plan for the location, and the resources available for financing it. Urban game and public space experts determined and presented the urban game method as adequate for the specified situation, and explained the possibilities for its implementation to achieve the defined goals. In this way, the **roles** of the specific players were clearly defined not only in the game, but also in subsequent steps – its realization and implementation.

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[7] Ir. Milena Ivković, MArch lives and works in Rotterdam. In 2011, Milena started the Rotterdam-based office Blok74. The office focuses on developing new planning formats, such as urban gaming - a tool that uses gaming principles to understand and change the built environment.

[8] Consultations were held in late August 2015.

INTERFACE

To conduct the urban game with the aim of redesigning the Momo Kapor St, a neighbourhood workshop was developed. The workshop was facilitated by Milena Ivković, who defined the rules and the appearance of the game. The rules were drawn based on the conclusions of the consultations, which included elements of urban planning for the specified location, and various ideas that were put forward by representatives of the local community. The plan determined the surface area of the intervention and some basic directives regarding the distribution of content, i.e. the ways the space would be used (Ivković 2015). On the other hand, the citizens who live in the neighbourhood stated that the primary character of the location should be a green oasis, while the representatives of the Momo Kapor Endowment suggested the design of a memorial to this author, which was to be adequately fitted into the character of the future space.

Considering the stated, the workshop aimed to respond to two basic assignments which dictated the method applied to communicating with the citizens. The first one was to design the future appearance of the space itself, for which the urban game method was applied. The second was to determine the character of the memorial, for which the survey method was used.

The rules of the urban game were defined to create a polygon to simulate the surface of the intervention and the elements which corresponded to various forms of urban equipment, texture and greenery (see fig. 4). The creation of a model of the future space was foreseen, using the stated elements in a way whereby citizens themselves placed the elements onto the polygon – a base for the game, printed on paper of adequate size. The base was placed on a table, which was positioned at the subject location during the workshop. The table was accessible from all sides, citizens could assemble around it, while the base itself was oriented so as to reflect the true orientation in space. This additionally helped citizens to figure out the rules, as well as the existing and future layout of the elements.
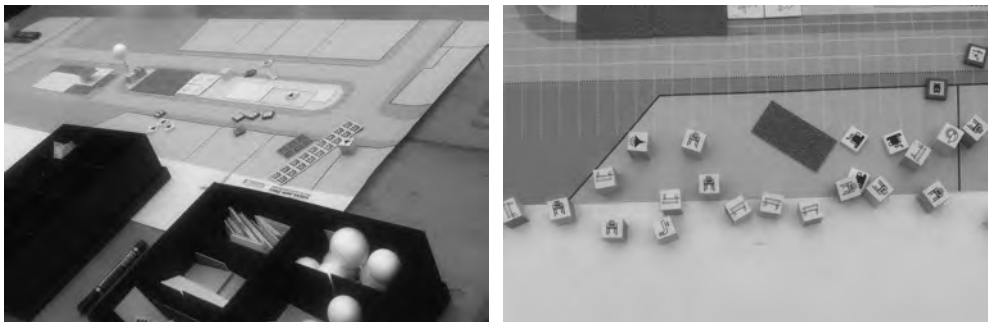

Fig. 4: Simulation polygon and elements of the game designed by Milena Ivković. Photo. M. Vukmirović.

To specify the spirit of the future memorial, the author of the game formulated two questions which were placed on the invitation, i.e. the flyer with information on the workshop. One question concerned the selection of Kapor's most relevant artistic contribution, and the other was on the future character of the memorial within the observed space.

PROCESS

Starting with the citizens' initiative, the very process of realization of the entire project consisted of several stages: consultations among the three groups of actors, determining the model, scheduling and publishing information on the workshop, neighbourhood workshop – urban game, summing up the results of the urban game and interviewing citizens, presenting solutions, consultations regarding further build-up and presentation of the project solution, constructing the 3D model, insight and consultations on the proposed solution, production of the project study for construction purposes, construction and follow-up of post-intervention ways of using the space.

Fig. 5: Public consultations and process of delivering the design proposal. Photo: M. Vukmirović.

On the other hand, the gaming process itself had several phases. The first one was the introduction with the base and all the elements, i.e. rules of the game. The second stage consisted of placing elements onto the model polygon, with constant consultations with other players (see fig. 5). The third phase was the marking of results – recording the created model. The fourth involved summing up the results obtained through the game, and articulating them with the results from the interviews.

Since the interests of the players largely complemented one another, there were no major discussions and differences of opinion, so the players very quickly agreed on the basic determinants of the space. Basic determinants were defined as the position of the memorial, orientation of elements for seating, and the size of green spaces.

OUTCOMES

Each of the stated stages of the entire project had the expected outcomes. Consultations resulted in elements for defining the applied methods, rules of the game, base, and elements for designing the model. The workshop had its outcome in the spatial model, chosen work of art (a hopscotch drawn by Momo) and the character of the memorial (art installation that could be used). As a result of the systematization of workshop outcomes, basic determinants were formed to create the project and 3D model of the future look of the open public space (see fig. 6, 7). Based on the determinants, two proposed solutions were designed, displayed in 3D, and the one which was adopted later went through certain modifications.
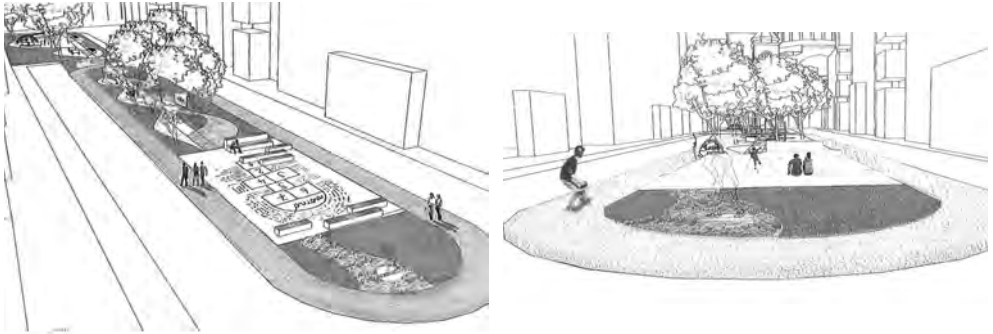
Fig. 6: 3D model and future look of the Moma`s Square. Source: "Greenery Belgrade" company.

Fig. 7: Unveilingf the Square. Source: www.novosti.rs.

The final design proposal was created, which enabled the first phase of the intervention in space to start. Momo Kapor Square was officially opened on 28 December 2016. The second stage of the project's solution is expected to be implemented next year, while for the time being the ways in which citizens use and maintain the space can be tracked. The success of this project is particularly indicated by the fact that it is

used as planned and expected by the members of the local community. Photographs taken by a lady who lives in the neighbourhood speak in favour of it (see fig. 8).

Fig. 8: Art installation and its use. Photo: M. Lalošević.

CONCLUSION

Since the pilot project proved to be a success, the city administration decided that the game was to be applied to other locations, i.e. to become an established practice of designing public open spaces which are important to the local community – neighbourhood, and also to the needs of larger projects where citizen participation is deemed necessary. The key objections to the application of this method are the length of time necessary for project preparation after defining determinants, the complexity of communication with a larger number of stakeholders, especially when there are conflicting interests, as well as the need to form a special division within the city administration to deal with not only the application of urban gaming, but also with planning and conducting communication with citizens in general, related to the topic of urban development.

As indicated by relevant research in this domain, urban gaming can be applied as a participative method on various strategic levels and for solving different urban problems, which makes the game both more, or less complex, and an attractive tool. Besides overcoming the challenges of meeting the determined goals, what is important is the attitude, i.e. the readiness of actors, above all of the city government, to approach participation in such an open and fully democratic way. Moreover, the volume of target groups also dictates the character of tools, i.e. determines their analogue or digital nature, where digital technologies can be of great help. Their role is reflected not only in the ease of access to a large number of interested users, but also in finding a greater number of solutions and their simulations. In this way, more precise outcomes of suggested developmental scenarios can be determined.

In line with what was mentioned above and based on the results of this case study, gaming has the potential to become "the principal medium of processing and executing city planning", because it creates "a trans-disciplinary condition where spatial design, political governance, social and cultural structures can engage in problem-solving through an interactive dialogue that crosses scales, visions, and fields of expertise" (Tan 2014, 375-376)

REFERENCES

Achten, H. H. (2002). Requirements for collaborative design in architecture. *Proceedings of the 6th Design & Decision Support Systems in Architecture & Urban Planning Conference* (pp. 1-13). Ellecom.

European Commission - Directorate General for Regional Policy. (2011). *Cities of tomorrow-Challenges, visions, ways forward.* Luxembourg: Publication Office of the European Union.

Folić, M., & Vukmirović, M. (2016). *Projekat IME (Identitet_Mobilnost_Ekologija) Beograd.* Beograd: Grad Beograd - Gradska uprava, Služba za informisanje.

Forester, J. (1980). Critical theory and planning practice. *Journal of the American Planning Association, 46* (3), 275-286.

Friedmann, J. (1973). *Retracking America: A Theory of Transactive Planning.* Garden City, NY: Doubleday/Anchor.

Gehl, J. (2010). *Cities for People.* Washington: Island Press.

Grad Beograd. (2016 йил 12-April). *App Beogra ani.* Retrieved 2017 йил 10-April from Google Play: https://play.google.com/store/apps/details?id=rs.beograd.beogradjani&hl=sr.

Ivkovic, M. (2015 йил 19-20-October). *Knowledge Regions Challenge. Urban Game Results. 50th ISOCARP Congress Delft The Hague Workshop "How to create a sustainable knowledge region" 19th and 20th October 2015.* Retrieved 2017 йил 10-April from Blok 74: https://media.wix.com/ugd/f87400_81340d84c90a43d0854bb99eaf79a48c.pdf.

Ivkovic, M. (2015 йил 12-September). *Momo Kapor Square. Urban gaming workshop and public space design, Belgrade 2015 -2016.* Retrieved 2017 йил 10-April from Blok 74: https://www.blok74.org/momo-kapor-square.

Lefevbre, H. (1996). The right to the city. In: *Writings on cities* (pp. 63-181). Oxford: Blackwell.

Portugali, J. (2011). *Complexity, Cognition and the City.* Berlin, London, New York: Springer.

Portugali, J. (2000). *Self-organisation and the City.* Berlin: Springer Verlag.

Steino, N., Bas Yildirim, M., & Ozkar, M. (2013). Parametric design strategies for collaborative and participatory urban design. *eCAADe 2013: Computation and Performance–Proceedings of the 31st International Conference on Education and research in Computer Aided Architectural Design in Europe, Delft, The Netherlands, September 18-20, 2013* (pp. 195-204). Delft University of Technology - Faculty of Architecture and eCAADe (Education and Research in Computer Aided Architectural Design in Europe.

Tan, E. (2014). *Negotiation and Design for the Self-Organizing City: Gaming as a method for Urban Design (A+BE | Architecture and the Built Environment).* Delft: TU Delft.

The Economist Intelligence Unit. (2016). *Empowering cities. The real story on how citizens and businesses are driving smart cities.* London: The Economist Intelligence Unit Limited.

UN Habitat. (2015). *Charter on public spaces.* Nairobi: Un Habitat.

UN-Habitat. (2016). *Global Public Space Toolkit: From Global Principles to Local Policies and Practice.* United Nations Human Settlements Programme (UN-Habitat). Nairobi: UN Habitat.

Vukmirovic, M. (2015). *Empowerment of people through urban design and architecture.* Retrieved 2016 from Ljubljana Forum 2015: http://www.ljubljanaforum.org/2015/ppt/14_Milena_Vukmirovic.pdf.

Vukmirović, M. (2016). Inteligentan grad kao kolektivna tvorevina njegovih gra ana. In: B. Stojkov (Ed.), *Pametan grad u Srbiji: Mogu nosti sistematske implementacije* (p. pp). Beograd: Akademija inženjerskih nauka Srbije.

cyberparks

CyberParks - Fostering knowledge about the relationship between Information and Communication Technologies and Public Spaces supported by strategies to improve their use. The CyberParks Project, funded by the European Cooperation in Science and Technology Programme (www.cost.eu/COST_Actions/tud/TU1306), is a collaborative research platform for knowledge and experiences exchange on the role of Information and Communication Technologies (ICTs) to promote participatory urban design processes and the production of inclusive public open spaces. CyberParks is devoted to explore the contribution of ICTs to transform our cities into more social environments, rather than just more high-tech.

In this context, the essays of this book discuss a series of reflections related to space and outdoor digital technologies - the so called Mediated Public Open Space. Thirty international authors and researchers engage in the nexus people, places and technology from different positions and perspectives. They shed light to emerging socio-spatial and technical mechanisms and the multiplicity of interaction of humans with urban spaces intertwined by contemporary pervasive technologies. Can the Mediated Public Open Space enable new interactive experiences? Can it lead to innovative realities where the community celebrate publicness enlivening the public realm? These are some questions posed in this volume and the essays that follow attempt to provide food for thought towards increasing the understanding of public spaces in the postdigital era.

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