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The right to urban public spaces in Sarajevo: Everybody's, somebody's, anybody's, or nobody's spaces?

Multiple socio-political and economic factors have gradually led to widespread neglect, decline, misuse, and loss of public spaces in Sarajevo. The clash between private and public interests has left physical traces in the city, recalling the importance of Lefebvre's notion of the right to the city. In the context of the contemporary urban development of Sarajevo, this is translated into the right to shape, use, recycle, and reactivate the city's neglected shared spaces. As implied by the title of this article, the key question addressed is to whom public space really belongs. This research proceeds from the identification of the key issues of degradation of public spaces, followed by

the valorization of mainstream planning approaches and occasional bottom-up initiatives. It is argued that one of the key origins of the problem lies in dispersal and the lack of pertinent geospatial data on public spaces, as well as in the dissonance between all the relevant stakeholders. This article establishes a methodology for introducing a comprehensive, open, and interactive geospatial database as a platform for strategic planning, design, development, and maintenance of urban public spaces.

Keywords: urban public spaces, Sarajevo, strategic planning, geospatial database, digital place making

1 Introduction

The topography of Sarajevo, a city in a narrow valley with mountains to the north and south, has limited expansion and influenced its morphology. In addition, due to historical and cultural factors, the strategic development of large squares, parks, or other public spaces did not receive adequate attention in theoretical discourse, practice, or public activism in the past. Today, the city of Sarajevo (an administrative unit within the Canton of Sarajevo) has an area of 142 square kilometres and an estimated population of 413,593. It is composed of four municipalities: Stari Grad, Centar, Novo Sarajevo, and Novi Grad.

The architectural image of contemporary Sarajevo reflects its rich and complex history (Figure 1), in which public urban and architectural typologies stand as a memory of past political and ideological systems (Figure 2). The religious buildings echo the Ottoman period, the civic palaces and urban blocks epitomize Austro-Hungarian rule, and the cultural and sports centres symbolize communist Yugoslav ideology, in the same way as the shopping centres have become the "places of worship" of the contemporary age (Zagora & Šamić, 2014).

As a result of the radical political and socioeconomic shifts in the 1990s, the subsequent privately led urban developments and transformations have mostly overlooked the common, collective values in the city. The urban identity of contemporary Sarajevo can be associated with post-war developments, which are mostly indifferent to the layers of previous epochs, lacking a general strategy or site-specificity. They thus result in discontinuities in urban form (Husukić & Zejnilović, 2017). A similar situation was detected in the other countries of the western Balkans. Neoliberal economic and political forces in the post-communist countries have appropriated public assets and expended them solely for private interests. According to



Figure 1: Aerial view of Sarajevo, showing its topography, urban morphology, and cultural history (source: Internet 2).

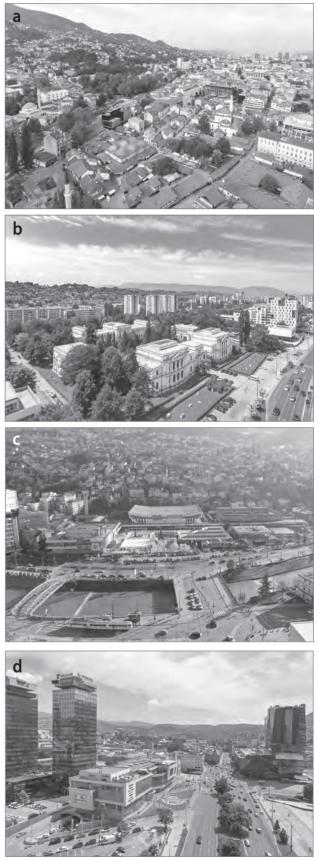


Figure 2: a) religious buildings (source: Internet 2); b) civic buildings and urban infrastructure (source: Internet 2); c) cultural and sports centres (source: Internet 3); d) shopping centres (source: Internet 2).



Figure 3: Examples of private appropriation and neglect of public spaces: physical obstacles in the streets and squares of Sarajevo (photo: authors).

Seferagić, the originators of these social shifts manifested in public space are the neoliberal economic actors, sometimes referred to as the nouveau-riche or tycoons. Unlike the tycoons of the nineteenth century, who contributed to the development of civil society and the cultural scene through endowments for parks, museums, theatres, and so on, the new economic elites only care about privatizing and often destroying the commons (Seferagić, 2007). Parallel activities and processes have yielded similar results in the urban environment in many post-communist cities, such as Belgrade, Zagreb, and

Budapest. The transition from the top-down planning of the communist era to capitalism was uncritical and uncontrolled, resulting in increased urban density in central areas, negative effects of gentrification, commercialization and homogenization of the urban environment, and marginal public participation. Another common feature that can be encountered in all post-communist cities is the discrepancy between plans and developments in the urban environment, which is often manifested only in formal acknowledgment of the public interest, but is not accompanied by actual construction (Zlatar Gamberožić, 2019). Transition has affected not only the society of the post-conflict, post-communist, and post-modern era, but it has also left physical and spatial traces and led to a crisis of public spaces in Sarajevo. This description refers to the deteriorated physical condition in which many public spaces can be found today, as well as their vague programmatic, accessibility, and ownership status or a lack of correlation with the context, and, finally, detachment from the local communities. As a result of the absence of a strategic approach or vision, the public spaces of Sarajevo have been discarded in a transitional limbo, passively standing between the past, present, and future, disengaged from their context. To reclaim the precedence of the topic of public spaces and its relevance for Sarajevo among the local authorities, researchers, professionals, and the general public, this article proposes a methodology and tools that may facilitate systematic urban development and maintenance of the shared spaces in the city.

2 Focus on public spaces

This article analyses the public spaces in Sarajevo, identifies key issues, and proposes innovative possibilities for their improvement. The classic and yet idealistic concept of public spaces as democratic, open, and accessible to everyone has changed over the last decades due to globalization and technological shifts. Some theorists claim that commercialization has challenged the very publicness of public spaces, and that we are witnessing the loss of public space (Sorkin, 1992; Zukin, 1995; Koolhaas, 1997; Putnam, 2001; Sennett, 2002), whereas others regard this transformation as its evolutive phase (Carr et al., 1992; Loukaitou-Sideris & Banerjee, 1998). Instead of proposing a new definition, this research concentrates on essential attributes of public spaces, based on theoretical insight into various typological classifications (Carr et al., 1992; Carmona, 2010); namely, 1) function/typology, 2) scale, 3) enclosure, 4) accessibility, and (5) urban atmosphere.

This article consists of four sections. The introduction, presentation of research objectives, methodology, and hypothesis formulation under the header "Focus on public spaces" are followed by the section "Status quo", which presents the key economic, political, ideological, economic, technical, and organizational issues that have caused the decline of public spaces in Sarajevo. The third section analyses a range of reference cases of geospatial databases of public spaces and positive international practices of merging urban planning and information technologies. The fourth section, "Mapping urban public spaces", provides a methodological outline for creating a future digital platform, explains the roles of the potential stakeholders, and illustrates the analytical possibilities of such a digital tool in selected locations of public spaces in Sarajevo. The research is based on the premise that one of the key prerequisites for developing open public spaces is publicity and open access to information. Most of the urban issues identified in Sarajevo have emerged, directly or implicitly, as a result of the dispersion of information and relevant data on the history, ownership status, accessibility, function, management, physical conditions, and context of public spaces. It is hypothesized that the technological advancement and evolution of digital media can enhance collaboration of professionals, the public sector, the private sector, and the community through creation of an open, democratic, and comprehensive platform focusing on the vision, development, and management of urban public spaces in the city. Application of such methodology together with other tools of digital place-making is anticipated to improve the quality of public spaces and to regenerate urban voids in Sarajevo.

2.1 Status quo

The latest social, political, and economic transition at the turn of the millennium has challenged the public sphere and shared values in general, leaving the public initiative behind (Ibelings, 2010). Consequently, urban public spaces were left at the margins of theory and criticism, practice, and civic engagement. Some of the most frequently recurring issues include private appropriation of public spaces, vague ownership status and accessibility, low maintenance and neglect, inactivity and fragmentation, and a lack of relation to the urban context or community (Figure 3). Reflecting their historical and socio-political context, the current status of public spaces may be defined as unstable and transitory (Zagora & Šamić, 2021). Similarly, the residents and institutions of the city are in a state of in-betweenness, living between the past and recent memories, the present day, and awaited life (Harrington et al., 2017).

Furthermore, within the last few years, as some local governments are starting to notice the importance of creating public and community spaces, there is a noticeable phenomenon of ad hoc public interventions, some which did not involve professional or public consultation, competitions, or discussion (Figure 4). A number of interventions have emerged without prior strategy or correlation with their context, and they most-



Figure 4: a) random granite monoliths lacking relation to their urban context (source: Internet 4); b) a tourist kiosk criticized for being overpriced and never opened (source: Internet 8); c) a promenade lacking a programmatic definition, aesthetic identity, or urban atmosphere (source: Internet 5).

ly remain as monuments to political figures or systems, struggling to find their real purpose. On the other hand, local communities long for purposeful small-scale public interventions, such as playgrounds for various age groups and infrastructure for the elderly. However, there seems to be a lack of efficient communication channels to link community inputs with planners and the municipality, city, and canton administrations.

In the past decade, municipalities have launched urban design competitions at selected public sites in Sarajevo, such as small plazas or parks, mostly for memorials to victims of the 1990s war. However, due to tender procedures, in most cases the winning concepts either are not completed or are only partly implemented without due consultation with the designers of the winning projects. In most cases, the programme of these competitions focused on designing monuments and memorials, whereas the solution for the public space was of secondary importance. For instance, in 2020, a memorial design competition was launched for one the most prominent locations in Sarajevo, Alija Izetbegović Liberation Square (Trg oslobođenja - Alija Izetbegović). The winning design entries were never publicly presented, and the governing municipality recently announced the construction of underground parking in 2021, which subsequently caused public debate. This case demonstrates the absence of a strategic approach and synchronization between the processes and actions designated for a particular site. Regarding non-institutional initiatives targeting urban public spaces in the country, there have been several auspicious activities in Sarajevo and Banja Luka in the past decade. In 2013 the Crvena Association and LIFT Spatial Initiative launched the Gradology Project, an online activist platform that helps residents of Sarajevo discover and map urban open spaces such as parks, squares, abandoned buildings, and unused spaces (LIFT, 2015). Another group of activists organized under name Dobre Kote (Good Spots) has carried out several informal urban intervention projects since 2015, transforming discarded urban spots into gathering places for the local community. Some of the instances outside of Sarajevo that demonstrate a distinctive bottom-up approach in reactivating public spaces can be found in Banja Luka, where a group of professionals and activists gathered in the Small SCALE Team-Centre for Spatial Research have been holding workshops, creating and implementing concepts of small-scale interventions in the city (Karan et al., 2017).

The title of this article is inspired by Lefebvre's 1968 right to the city (Lefebvre, 1968), and it focuses on the issue of public spaces in terms of rights and responsibilities, identifying the key stakeholders: who owns, accesses, designs, develops, maintains, uses, activates, and transforms public spaces in Sarajevo. The dominance of private interests over public ones in the recent history of the city has distorted the perception of the local population toward its heritage, caused an aversion toward the communist legacy, and ultimately generated a discrepancy between the individual and the collective (Zagora & Šamić, 2021). Recalling the communist ideology of shared and collective values, some public spaces have even turned into grey areas of the city or urban voids (de Solà Morales, 2003), and they generally represent low-priority goals in official planning policies. In response to the identified problems of neglect, fragmentation, and appropriation of public spaces by private interests, this article explores the prerequisites for

creating a strategic approach to planning, designing, developing, and maintaining shared spaces by bringing together all the stakeholders, assigning responsibilities, and raising awareness among the general public.

3 Methodology and analysis

3.1 Geospatial database of public spaces

The problem of increased urbanization complemented by a disregard for public spaces has been recognized at the global level. For this reason, one of the sustainable development goals set by the United Nations is as follows: "By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities." To this end, UN-Habitat (2018) has issued recommendations on the desired percentage of urban land allocated to open public spaces, according to which 45 to 50% of urban land should be allocated to streets and open public spaces, which includes 30 to 35% for streets and pavements and 15 to 20% for open public space "The value of public spaces is often overlooked or underestimated by policy makers, leaders, citizens and urban developers. There are several reasons for this, such as the lack of resources, or understanding or capacity to use public space as a complete, multi-functional urban system. Often the lack of appropriate enabling frameworks, weak political will and the absence of the means of public engagement compound the situation. Nevertheless, fundamentally, the lack of a global measurement indicator has hindered the local and global appreciation of the value of the public spaces" (United Nations Statistics Division, 2020).

When it comes to planning and management policies, one of the methods proposed by UN-Habitat for local governments is adopting a systemic approach that includes collecting accurate, timely, disaggregated data and information. The sources for collecting data mainly rely on satellite imagery (open sources), documentation outlining publicly owned land, and community-based maps. The major step forward proposed by the project is the methodology of mapping available and potential public spaces all over the globe. In like manner, the Jan Gehl Institute together with its partners - the Municipality of Copenhagen, City of San Francisco, and Seattle Department of Transportation - has introduced the Public Life Data Protocol (Gehl Architects, 2020). It is an open protocol created to make public space data collecting more comprehensible, compatible, and scalable across urban planning departments all over the world. The Public Life Data Protocol proposes several surveys and monitoring tools such as People Moving Count or Stationary Activity Mapping, which are easy to implement and follow. Similarly, the KTH team led by Setha Low created the Public

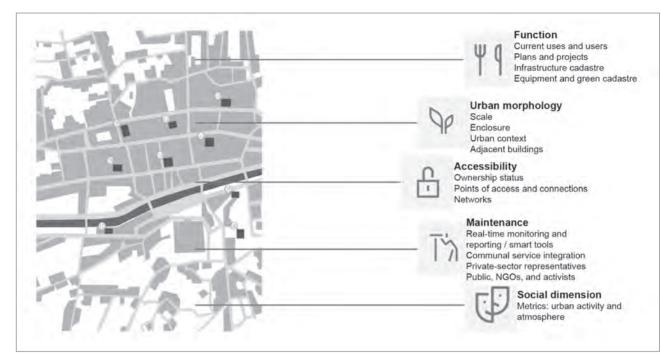


Figure 5: Structure of the interactive digital platform of urban public spaces in Sarajevo (illustration: authors).

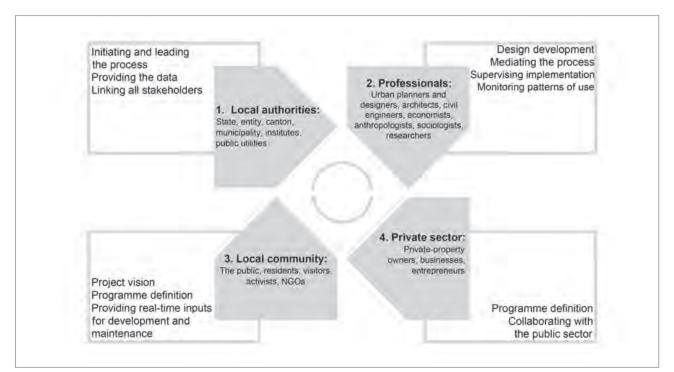


Figure 6: Potential groups of users of the open-source database of public spaces in Sarajevo (illustration: authors).

Space Database Project (Centre for the Future of Places, 2020) to collect relevant research data from various fields and merge them into one body of knowledge with common terminology, accessible and comprehensible to the general public.

The analysis of cases presented reveals an unambiguous conclusion: a multidisciplinary approach and access to all relevant data is the prerequisite for realizing more sustainable and inclusive public spaces. Hence, for Sarajevo to have more quality shared spaces for public use, the first step would be creating and implementing a framework for classifying urban public spaces in Sarajevo, comprising multiple layers of (real-time) information or metadata, such as history, function (hybridity), ownership, management, infrastructure, adjacent facilities and spaces, involved stakeholders, and metrics (patterns of use and performance of public spaces), as well as allowing performance and maintenance monitoring and reporting on technical and safety issues, thus facilitating public participation (Figure 5).

Such a comprehensive open-source database would gather all the relevant data from disparate bodies, such as municipalities, spatial planning institutes, local community councils, NGOs, and activist groups engaged in public space topics, and make the date open and available. The collected data would be systematically classified according to typological criteria (functional, spatial, and social sets of data) and subsequently divided into different layers with the possibility of activating and overlapping them to better understand the specific site. Moreover, the database should perform as an interactive platform designated at the same time for collecting and sharing data. One of the most important benefits that such digital tools can provide is a unique meeting place for all the stakeholders willing to create better public spaces. This involves bringing together the four key stakeholders whose interaction is crucial for the future of public spaces: the economic sector (industries, landowners, and banks), the political sector (political leaders and parties), spatial development experts (urban planners, architects, and engineers), and the civic sector (the general public, NGOs, and urban social movements; Seferagić, 2007). This open platform would encourage and inspire public participation, social cohesion, and trust in community, developing values that seem long forgotten in the post-transitional society.

Public participation will not only signify democratization of all processes related to urban space, but will also change current mindsets. It is important to emphasize that community participation in decision-making via digital tools should go beyond the formal level, and the voice of the public should be acknowledged from the very beginning of the process: "Therefore, in the future it is very important that citizens' participation begins at early stages of urban planning as they are the key players in all urban revitalization efforts" (Zlatar Gamberožić, 2019). In this way, "nobody's spaces" may ultimately be replaced by "everybody's spaces". In this process, the data gathered would be converted into a tool for intervention and guidance for the local authorities. It would also provide real-time monitoring of the physical state of public spaces and urban equipment in the city.

However, it is important to bear in mind that the platform users are different, ranging from urban planners, architects, researchers, developers, and other professionals to private investors, communal companies and funds, NGOs, activists, the general public, and tourists, each looking for and sharing different types of data (Figure 6). Therefore, it is extremely important that common terminology be used, although the platform itself would be structured into various sections according to user requirements, knowledge, and skills.

3.2 Mapping urban public spaces

Public spaces in Sarajevo were mapped to obtain overall insight into their distribution. This process was channelled by using a selection of relevant criteria that define the character of public spaces, such as typology, scale, enclosure, urban activity, accessibility, and urban atmosphere (Table 1).

A similar methodological approach may be applied in the case of developing an interactive database of public spaces of Sarajevo. The resulting geospatial platform would allow grouping, overlapping, or decomposing multiple layers of data, either showing the distribution of the public spaces within the city or expounding the correlation between all spatial and social aspects of a particular site.

In urban mapping, each public space was associated with a particular spatial or social attribute, within the predefined set of criteria. Therefore, the essential part of the process consisted of collecting all the available geospatial data and their association with the surveyed land and official planning documents. In this way, urban mapping was used as a methodological research tool to classify public spaces in Sarajevo. Developing a future digital geospatial platform or database can be structured on a set of predefined criteria to be used for urban mapping, and the data layers may subsequently be grouped into categories or overlapped or intersected. The criteria for urban mapping discussed below are 1) function and accessibility, 2) urban morphology, and 3) the social dimension. Following the elaboration of each of the groups of criteria listed, the functionality of the potential digital platform is simulated by showing the maps or excerpts for four empirically selected locations in the city, each depicting the relevant urban and social topic.

4 Results and discussion

4.1 Function and accessibility

The function or use of space is the fundamental criterion for classifying types of public spaces. In other words, the typology of public spaces is generally determined by the social activities they accommodate and generate. Traditionally, public space provides a zone for social interaction as well as a stage for cultural and political proliferation. However, in contemporary society, as individualism and social media grow stronger, the traditional role of public spaces has been challenged. "Active presence, participation, and experience can now be substituted with passive picture watching, seeing what others have experienced elsewhere. The automobile has made it possible to replace active participation in spontaneous local social activities with a drive to see selected friends and attractions" (Gehl, 2011).

Table 1: Criteria for mapping public spaces in Sarajevo.		
Criterion	Attributes	
Туроlоду	Green, civic, communal, transportation, public interiors, undefined	
Scale	Large and extra-large, medium scale, small and extra-small	
Enclosure	Open, semi-open, enclosed	
Urban activity	Active and seasonally active, passive	
Accessibility	Accessible, conditionally accessible	

Extroverted, introverted

Pursuing the functional classifications of public spaces provided by Carr et al. (1992), Oldenburg (1997), and Carmona (2010), the mapping method was used to record the distribution of the six functional types of public spaces in Sarajevo: 1) green spaces, 2) civic spaces, 3) communal spaces, 4) transportation/circulation spaces, 5) public interiors, facilities, and other places, and 6) undefined spaces. Physical and psychological accessibility are one of the most important aspects that define the public dimension of city spaces. The topic of accessibility underlies the title of this article, and it addresses the entitlement and utilization of public spaces. Levels of accessibility, together with ownership, determine the privacy or publicness of urban areas. In contemporary cities, the boundaries between public and private spaces are often blurred. This phenomenon is often criticized for causing the erosion of public spaces (Sennett, 2002), whereas the hybridization described may be regarded as an evolutionary state of public spaces (de Solà Morales, 1992; Kohn, 2004). Considering the variations of accessibility in the city, urban mapping has identified two categories of public spaces in Sarajevo, 1) accessible and 2) conditionally accessible public spaces. The correlation of function and accessibility is a fundamental aspect of analysis of the existing status and potential of public spaces in a city.

Hence, the primary role of the digital platform of urban public spaces is to provide access to information regarding the functions, accessibility, and ownership status of public spaces as underpinnings for further analysis of potential urban transformations. Furthermore, the platform will allow better insight into the wider urban context and the relationship between different typologies, open up perspectives on creating networks of public spaces, adjacent sites, and facilities, and enhance interactions between all stakeholders. For instance, mapping public spaces in central Sarajevo has revealed the heterogeneity and hybridity of functions, with Susan Sontag Theatre Square (*Pozorišni trg – Susan Sontag*) as the focal point and Jurislav Korenić Culture Square (Trg kulture Jurislav Korenić) as secondary civic space, yet both of them lack the sufficient functional articulation they actually merit (Figure 7). The main theatre plaza is surrounded by three rather inactive public areas, characterized by unclear functionality and accessibility: an archaeological site to the west, private parking to

the east, and a vacant early-twentieth-century hotel building to the north. In fact, due to years-long controversies, the Kalin hadži-Alija Mosque archaeological site has been converted into a veritable urban void, an undefined and physically inaccessible and neglected space, unrelated to its urban context, and it has deteriorated over the course of years of prolonged incompletion. Another adjacent potential public space is the privately owned parking area east of the theatre square. According to the multiple media announcements, this area has been awaiting development of an underground parking for decades. If, on the other hand, the site were converted into a pedestrian zone, it could have potentially acted as a lateral extension of the theatre square, opening up a new perspective to and from the site and creating an area for numerous urban activities. The origins of this fragmentation, the conflicts in urban space, and the oscillations in the patterns of its use lie in the vague programmatic and accessibility status of the zone analysed. One way to overcome these problems and reconnect the disparate urban sites into a potential network of vibrant public spaces is through systematic and transparent collection and mapping of all the relevant data as a basis for a vision of the urban transformation of the entire zone.

4.2 Urban morphology

Geometrical and physical properties, such as scale, configuration, and the three-dimensional enclosure of public spaces, are important aspects of any urban analysis. In the case of Sarajevo, the urban morphology of the built environment, including open public spaces, was largely affected by its natural topography. The hills north and south of the city guided urban development in an east-west direction, along the Miljacka Valley. In the early stage of its development, dating back to medieval and Ottoman times, the scale of the urban matrix was intuitively affected by the human scale, corresponding to the range of intimate urban public spaces as defined in urban theory (Lynch, 1971; Gehl, 2011). Moving from east to west, matching the chronological timeline of the development of the city during the Austro-Hungarian, royal Yugoslav, and communist Yugoslav eras, the scale of the urban matrix increases from the human to vehicular scale (Figure 8). Mapping public spaces by the criteria of urban morphology distinguishes three scalar

Urban atmosphere



Figure 7: Mapping central Sarajevo: 1) theatre square, 2) youth theatre square, 3) archaeological site, 4) parking area, 5) park, 6) vacant building (illustration: authors).

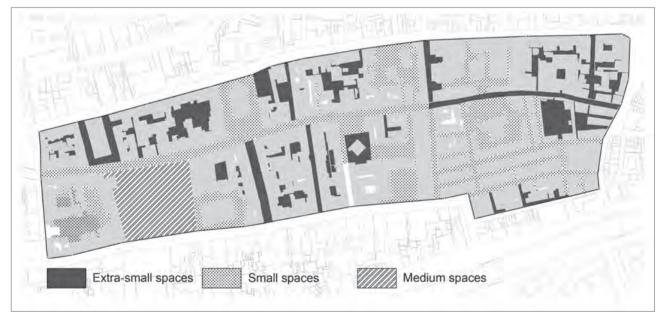


Figure 8: Mapping public spaces by scale in the old town of Sarajevo (illustration: authors).

categories, 1) large and extra-large, 2) medium-sized, and 3) small and extra-small public spaces and zones. The urban configuration and its three-dimensional form is another important geometrical feature of public space. Even though public spaces have traditionally been perceived as spatial negatives, they are in fact contained to a certain degree within their urban ma-

trix, and defined by the "edges", planes, and volumes of the surrounding buildings and blocks. Depending on their level of enclosure, in mapping Sarajevo three categories were found: 1) open public spaces, 2) enclosed public spaces, and 3) semiopen public spaces.

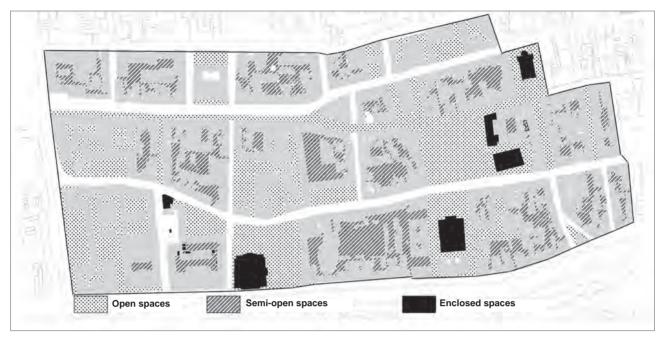


Figure 9: Mapping public spaces in downtown Sarajevo by level of enclosure (illustration: authors).

The prevalent scale in the Ottoman parts of the city is the intimate, human scale, consisting of extra-small and small interior courtyards and streets. The scale increases along the chronological line of development, toward the west, ranging from medium-scale public spaces in the Austro-Hungarian and early Yugoslav neighbourhoods to the large-scale urban areas in the neighbourhoods developed during the communist Yugoslav and contemporary era. Mapping the historical and central parts of Sarajevo by urban morphology yielded particular small- to medium-scale categories of semi-open public spaces (Figure 9). The areas correspond to interior courtyards within Ottoman-era public facilities in the old bazaar, or Baščaršija, as well as with the atriums of Austro-Hungarian buildings. The function and accessibility of some of these spaces are vague and undefined, but at the same time they hold significant potential for urban transformation and possible reclaiming of public spaces in Sarajevo. Taking a systematic approach, and recording, mapping, and correlating all the relevant data associated with the indicated typology of spaces would lead to a strategic vision for urban redefinition and transformation of these sites and their urban context.

4.3 Social dimension

According to major urban theorists, social activity, quality of public life, and an urban atmosphere are the key value of public spaces (Carr et al., 1992; Varna & Tiesdell, 2010; Gehl, 2011). Beyond their physical dimension, public spaces are truly defined by their social value, or the types and levels of social activities and interactions they induce: "Public space affords common ground – for social interaction, inter-

mingling and communication: it is a site of sociability. It is a stage for information exchange, personal development and social learning (i.e. about 'the other') and for the development of tolerance" (Varna & Tiesdell, 2010). According to Jan Gehl, on-site observation and measurement of social activities, such as walking/cycling, standing/staying, sitting, seeing, hearing/ talking, and playing/exercising/entertaining, provides the basis for improving and developing public spaces (Gehl Institute, 2017). The study of urban activity in public spaces in Sarajevo yielded the following two categories: 1) active and seasonally active public spaces, and 2) passive public spaces. Mapping the Marijin Dvor downtown area of Sarajevo revealed unbalanced levels of social activities (Figure 10). The observation of the area revealed that public activities mainly gravitate around business and commercial facilities. Passive zones are associated with institutional buildings such as the parliament or residential blocks due to physical and mental barriers in accessibility. Other passive zones include the urban voids along the Miljacka River designated as future construction sites, as well as numerous atriums in Austro-Hungarian buildings, with limited public accessibility and vaguely defined ownership status. On the other hand, the enclosure and intimacy of these semi-enclosed public spaces and their urban atmosphere may be regarded as advantages in potential urban transformation projects.

This leads to another important aspect that is closely related to users' response to certain urban spaces; namely, urban atmosphere. The phenomenological approach in architecture advocates spatial concepts that transcend visual perception, in which the atmospheric qualities of architectural and urban

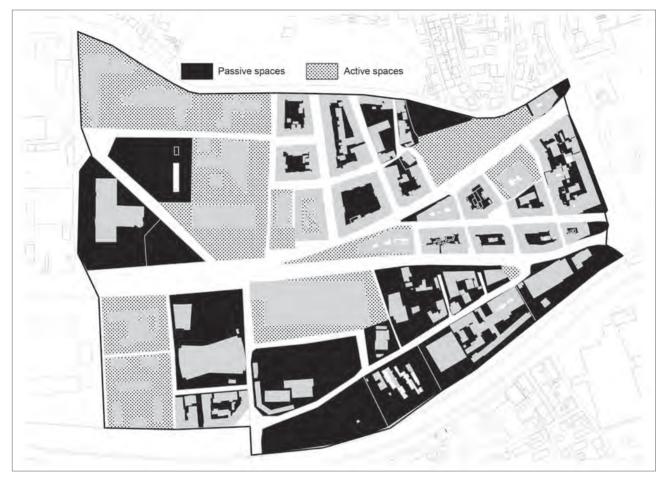


Figure 10: Mapping the Marijin Dvor area of Sarajevo (illustration: authors).

public spaces trigger the entire perceptive apparatus, including touch, smell, and hearing (as discussed by Gaston Bachelard, Martin Heidegger, Christian Norberg-Schulz, Juhani Pallasmaa, Peter Zumthor, and others). Proceeding from the study of urban atmosphere in public spaces in Sarajevo (Zagora & Samić, 2021), the potential of public spaces to generate multisensory atmospheric experience is closely connected with their scale and enclosure, and can be categorized as 1) extroverted public spaces, characterized by their formal atmosphere and urbanity character, and 2) introverted public spaces, characterized by their intimate atmosphere and sense of interiority. The social dimension of public spaces may be regarded as the software, and the physical space as its hardware. Interpretation and analysis of quantitative and qualitative data on urban activity and the urban atmosphere in a real-time interactive geospatial database of public spaces can cast a new light on the understanding and potential transformation of selected sites, together with their larger urban context.

5 Conclusion

One of the effects of the prolonged transition in Bosnia and Herzegovina and its post-conflict, post-communist, and post-modern society is the crisis of urban public spaces in Sarajevo. The effects are manifested in physical deterioration, negligence, and dysfunctionality of public spaces, along with pending issues regarding accessibility and ownership, and detachment of shared urban sites from their local context and the community. In this regard, the essential rights of people to shape, use, maintain, recycle, and reactivate the city's shared spaces have been highly contested. The most recurrent cases include the degradation and loss of public spaces, as well as illegal or dubious private appropriations of common property. The spatial manifestations of the latest political and socioeconomic shifts are accompanied by an acquired aversion of people toward communist values, even with ambiguity toward the notion of shared space.

The current problems in the urban environment of contemporary Sarajevo can be associated with a lack of collaboration between professionals, the public sector, the private sector, and the community, as well as the scarcity of publicly available data and debate focusing solely on public spaces. This study hypothesizes that one of the key prerequisites for developing successful public spaces is the availability of information. Most of the urban issues identified in Sarajevo have emerged, directly or implicitly, as a result of the dispersion of information and relevant data on history, ownership status, accessibility, function, management, physical conditions, and the context of public spaces. In response to the problems identified, this article proposes a methodology for developing a digital geospatial database of public spaces in Sarajevo. Learning from successful projects that have employed digital tools and proactive management of public spaces, the proposed platform is anticipated to be comprehensive, open-source, and interactive. The continuous process of collecting and disclosing all relevant and up-to-date information on public spaces in the city should serve the purpose of sharing gains, responsibilities, and rights between the local authorities, professionals, the private sector, and the local community in a transparent and democratic manner. As the title of this article suggests, this research aims to ultimately substitute the ambiguous concept of "nobody's/ anybody's/somebody's spaces" with a democratic and genuine designation: "everybody's spaces". One way of attaining this standard is using the methodology of urban mapping: systematically harvesting and geolocating various layers of data on public spaces. The mapping proceeds from essential clusters of data related to function and accessibility, urban morphology, and the social dimension of public spaces, allowing the possibility of adding more categories and layers. An important utility of the platform is to allow overlapping and combining different types of information on public spaces, opening up new multidisciplinary perspectives on how they can be improved, transformed, reactivated, and, ultimately, reclaimed by the public.

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References

Carmona, M. (2010) Contemporary public space, part two: Classification. *Journal of Urban Design*, 15(2), pp. 157–173. DOI: 10.1080/13574801003638111

Carr, S., Francis, M., Rivlin, L. & Stone, A. (1992) *Public space*. Cambridge, Cambridge University Press.

Centre for the Future of Places (2020) *The public space database project*. Available at: https://www.kth.se/futureofplaces/research/current-research-pro/the-public-space-database-project-1.888450 (accessed 20 Jun. 2020).

de Solà Morales, M. (1992) Public and collective space: The urbanisation of the private domain as a new challenge. *La Vanguardia*, 12 May 1992, p. 33.

de Solà Morales, I. (2003) Territorios. Barcelona, Editorial Gustavo Gili.

Gehl, J. (2011) *Life between buildings: Using public space*. Washington, DC, Island Press.

Gehl Architects (2020) *Public life data protocol.* Available at: https://gehlpeople.com/tools/public-life-data-protocol-beta/ (accessed 2 May 2020).

Gehl Institute (2017) *Gehl institute*. Available at https://gehlinstitute.org (accessed 26 Feb. 2019).

Harrington, S., Dimitrijević, B. & Salama, A. (2017) Modernist architecture, conflict, heritage and resilience: The case of the historical museum of Bosnia and Herzegovina. *Archnet-IJAR: International Journal of Architectural Research*, 11(3), pp. 178–192. DOI: 10.26687/archnet-ijar.v11i3.1330

Husukić, E. & Zejnilović, E. (2017) The environmental aesthetics of Sarajevo: A city shaped by memory. *Urbani izziv*, 28(1), pp. 96–106. DOI: 10.5379/urbani-izziv-en-2017-28-01-002

Ibelings, H. (2010) *Restart 1995–2010: Architecture in Bosnia and Herzego*vina. Sarajevo, AABH Asocijacija arhitektata Bosne i Hercegovine.

Internet 1: http://www.popis2013.ba (accessed 29 Apr. 2021).

Internet 2: http://www.visitsarajevo.ba (accessed 2 May 2020).

Internet 3: http://www.skenderija.ba (accessed 2 May 2020).

Internet 4: http://www.centar.ba (accessed 1 May 2020).

Internet 5: http://www.starigrad.ba (accessed 1 May 2020).

Internet 6: https://aabh.ba/12044-2/(accessed 29 Apr. 2021).

Internet 7: https://radiosarajevo.ba/metromahala/teme/dobre-kote-umjetnoscu-ozivljavaju-devastirane-javne-prostore-u-sarajevu/269919 (accessed 29 Apr. 2021).

Internet 8: https://www.klix.ba/ (accessed 2 May 2021).

Karan, I., Stijak, M. & Kuvač, I. (2017) The small-scale approach as a generator for urbanity increase of Banja Luka city. In: Bijedić, D, Krstić Furundžić, A. & Zečević, M (eds.) *Keeping up with technologies in the context of urban and rural synergy*, pp. 123–134. Sarajevo, Arhitektonski fakultet, Univerzitet u Sarajevu.

Kohn, M. (2004) *Brave new neighborhoods*. New York, Routledge. DOI: 10.4324/9780203495117

Koolhaas, R. (1997) The generic city. In: Koolhaas, R., Werlemann, H. & Mau B. (eds.) *S M L XL*, pp. 1248–1264. New York, Monacelli Press.

Lefebvre, H. (1968) Le droit a la ville. Paris, Anthropos.

LIFT (2015) *Lift spatial initiative*. Available at: http://www.l-i-f-t.org/ (accessed 26 Feb. 2019).

Loukaitou-Sideris, A. & Banerjee, T. (1998) *Urban design downtown: Poetics and politics of form*. Los Angeles, University of California Press.

Lynch, K. (1971) Site planning. Cambridge, MA, MIT Press.

Oldenburg, R. (1997) *The great good place: Cafes, coffee shops, book-stores, bair salons, and other hangouts at the heart of a community.* Cambridge, MA, Da Capo Press.

Putnam, R. (2001) Bowling alone: The collapse and revival of American community. New York, Simon & Schuster. DOI: 10.1145/358916.361990

Seferagić, D. (2007) Akteri društvenih promjena u urbanom prostoru Hrvatske. *Sociologija i prostor: časopis za istraživanje prostornoga i sociokulturnog razvoja*, 45(3/4), pp. 177–178.

Sennett, R. (2002) The fall of public man. London, Penguin Books.

Sorkin, M. (1992) Variations on a theme park: The new American city and the end of public space. New York, Hill & Wang.

UN-Habitat (2018) *SDG Indicator 11.7.1 Training module: Public space.* Nairobi. Available at: https://unhabitat.org/sites/default/files/2020/07/ indicator_11.7.1_training_module_public_space.pdf (accessed 19 Feb. 2020).

United Nations Statistics Division (2020) *Sustainable development goals*. *SDG Indicators*. Available at: https://unstats.un.org/sdgs/metadata/ (accessed 19 Feb. 2020).

Varna, G. & Tiesdell, S. (2010) Assessing the publicness of public space: The star model of publicness. *Journal of Urban Design*, 15(4), pp. 575– 598. DOI: 10.1080/13574809.2010.502350

Zagora, N. & Šamić, D. (2014) Sarajevo lost in transition? Ideologies and their representational spaces. *ArchNet International Journal of Architectural Research*, 8(1), pp. 159–170. DOI:10.26687/archnet-ijar.v8i1.313

Zagora, N. & Šamić, D. (2021) *Urban rooms of Sarajevo: Transforming urban public spaces using interior design tools.* Sarajevo, Arhitektonski fakultet Univerziteta u Sarajevu.

Zlatar Gamberožić, J. (2019) Revitalization paths of urban centers: Tentative observational comparison of two cities – Ljubljana and Zagreb. *Družboslovne razprave*, 90, pp. 83–106.

Zukin, S. (1995) The cultures of cities. Oxford, Basil Blackwell.