

MATEJ NIKŠIČ

PhD in Architecture, Researcher in Urban Design

Urban Planning Institute of the Republic of Slovenia

matej.niksic@uirsi.si

Access to a Quality Open Public Space as an Urban Sustainability Measure

Abstract

The paper is a critical review of an open public space regeneration program in the city of Ljubljana, Slovenia. The point of departure is an assumption that an important measure of the sustainability of any settlement is the accessibility of quality open public spaces for its inhabitants, no matter where in the city they live. If the inhabitants are not given a chance to reach a quality open public space in a reasonable distance from their homes this hinders the quality of their living environments as well as social aspects of the sustainability of a city. The paper analyses a concrete approach to the open space improvements through the analyses of the strategic spatial plan for the network of public places as well as analysis of distribution of the financial investments into the public spaces across the 17 districts of the city of Ljubljana. It shows how an unbalanced distribution of the investments is gradually leading to a more qualitatively segregated city where the living conditions in the city centre are rapidly improving while the suburban areas and their public spaces are given no attention and are declining.

Key words

Open urban public space; Quality improvements; Accessibility; Quality of living; Ljubljana

1. Open public space distribution as a measure of sustainability of a settlement

The on-going urbanisation processes demand contemporary cities to grow both in qualitative and quantitative terms. The qualitative growth most often relates to the improved quality of life in the city and is not necessarily reflected in the enlargement of physical structures. While quantitative growth implicates an increase of the physical structure of the city, i.e. a spread of urban structures within the urbanised areas as well as further into the landscape.

In the processes of a qualitative growth of the cities, open public spaces play many important roles, from social and cultural to economic and ecological, which have been thoroughly debated by scholars (MADANIPOUR, A. 1992; SORKIN, M. 1992; TIBBALDS, F. 1992; WORPOLE, K. 1992; KATZ, P. 1994; CASTELLS, M. 2000; GEHL, J. 2010). The appearance of open public spaces decisively influence the perception of one's living environments and thus the perceived quality of life (NIKŠIČ, M. 2008). This is closely related to their functional and physical appearance of particular public spaces, but also their physical accessibility and connectedness into a legible network. LOTFI, S. – KOOHSARI, M. J. (2009) claim that the physical accessibility of public space is one of the key assets of good urban environments and directly influences the quality of urban life.

The balanced distribution of a quality open public space and related accessibility does not come by itself. It has to be grounded in a deliberate urban planning. ROSE, A. – STONOR, T. (2009) claim that after the end of the era of modernist zoning the spatial accessibility has become one of the new conceptual pillars of the urban planning policy. Within this paradigm contemporary urban planning strives to provide well distributed and easily accessible open public spaces across the city's territory for a number of reasons.

YOON, H. – SRINIVASAN, S. (2014) raise the question of fair distribution of public spaces throughout the city by studying the distribution of privately owned but publicly accessible public spaces in relation to publicly owned public spaces. They urge for a comprehensive rather

than discrete implementation of both types of public spaces in order to balance the distribution of the public space throughout the city and reduce the overall average distance of the nearest public space for both working and living populations. Similarly, HACKENBROCH, K. (2013) in her discussion of hierarchies of publicness talks about informal and formal public spaces that attract the diversity of the users and ensure equal citizenship. On the other hand, AKSENOV, K. E. (2012) on the case of post-soviet metropolis reports on the shrinkage in accessibility of public space as a result of owners' decision to control the access to their housing premises. Lessening of the access of the public space proves to be emblematic for transitory societies in the course of the privatization of public space not only in the western world but across the globe (LANDMAN, K. 2006).

GILES-CORTI, B. *et al.* (2005) studied the balance between built-up and open cityscapes and its influence on the access of the open spaces from the densely built-up areas. A study showed that the level of usage of public open spaces increases with growing levels of access—people with good access to public open spaces will more likely use them on a regular basis which among others has good influences on public health. According to LIU, J. *et al.* (2010), based on a study of recreational areas in peri-urban *Beijing*, showed that spatial distribution of recreation public spaces is influenced by many factors, among which the attractiveness of the area in terms of cultural and natural heritage, the needs and preferences of users, availability of cost-affordable lands and not least the spatial governance are the most influential. They pointed out the role of spatial policies that can make the distribution of recreation areas around the city more balanced in spatial terms. Among other criteria ZHANG, X. *et al.* (2011) also names the spatial distribution of the parks across neighbourhood areas as one of the basic assets for the residents to access potential public spaces.

LOTFI, S. – KOOHSARI, M. J. (2009) claim that the measures of accessibility of services has a defining role in terms of urban equity, and plead for the living environments with easy access to key services. Public space is thus seen not only as an urban amenity on itself, but also a

medium that allows the access to other services. PINCH, S. (1985) relates this aspect to the travel costs which tend to increase with distance and argues that the spatial distribution of amenities affects the distribution of wealth among urban dwellers.

The structure and detailed design of open public space network strongly influences the mobility patterns in the city too. As MCCORNACK, G. R. *et al.* (2008) showed, one's decision to walk is closely related to perceived environmental attributes. The study revealed the importance of the existence of the linkages that connect the living environments with the areas where the demanding services are located.

CROMLEY, E. K. – McLAFFERTY, S. L. (2002) point out another important aspect. They provide evidence that proximity does not guarantee utilisation, even less so with the development of information technologies. Some other studies show that the significance of physical distance is lessening with the move of economic and social activities into the digital world (MITCHELL, D. 1995; COUCLELIS, H. 2000; TALEN, E. 2003). In pre-digital world the accessibility was generally predicted on physical distance and mobility was the mean to overcome it. LOTFI, S. – KOOHSARI, M. J. (2009) raise the question; how do new virtual places influence the importance of physical accessibility and suggest that it decreases it, but also claim that there are many social acts based on physical means which continue to take place in a physical space and demand a good access in physical terms. They also accentuate the importance of subjective measuring of accessibility—even if an objectively measured level of accessibility is high, the subjective can be low which in urban environments is most often related to the fear of crime. This once more highlights the importance of the detailed design of public spaces which must not be perceived as abandoned, dark or unattractive (PAIN, R. 2000; KOOHSARI, M. J. *et al.* 2012). STABILINI, S. *et al.* (2013), in their studies of the changing notion of proximity through time, point out that urban quality is to a greater part not only an issue of quantity of services and open spaces, but also of accessibility to them in both temporal as well as spatial terms.

The theoretical review indicates that accessibility of public space is one of the key assets of quality urban environments but might be threatened by constraints such as incomprehensive city planning, privatisation and land-development tendencies, transport related pressures and lack of awareness of the importance of the issue among stakeholders in a city planning processes. The following chapter offers an in-depth insight into a concrete case study of *Ljubljana*, a mid-sized city of about 280,000 inhabitants in *Slovenia* which lately put much emphases on the (re)development of public spaces in a rather peculiar way.

2. Open public space strategic plan and regeneration program for Ljubljana

The city of *Ljubljana* is the capital city of the *Republic of Slovenia*. It is governed by a central city administration which is organised into 10 departments. The total municipal area of 275 km² is divided into 17 districts (*Figure 1* and *Table 1*). They are legal entities under public law represented by the district councils, elected by qualified voters having permanent residence in each neighbourhood. The district councils deal with the matters within the competence of the city municipality which concern a district. They also adopt positions, opinions and proposals, launch initiatives and submit proposals to be adopted by the city council, discuss and process proposals submitted by residents and other members of the district community, and submit these proposals for decision to the competent city authority (CITY OF LJUBLJANA, 2014). In conducting public affairs within city municipality, each district cooperates with the city departments, the general city administration, other districts and organisations founded by the city. Districts carry out activities within the competence of the city which to a large extent relate to notifying residents in a locally adapted manner of district activities and other matters of relevance to the district, of cultural, sports and social programs, and of environmental and spatial planning activities. These can be carried out in co-operation with the registered and in-

formal associations of residents (for example by collecting proposals and setting up co-operation between districts).



Figure 1 - The division of the territory of Ljubljana into 17 districts

Source: MESTNA OBČINA LJUBLJANA (2014)

Table 1 - The 17 districts of Ljubljana and their size

Source: Urban Planning Institute of the Republic of Slovenia (2014)

District	Surface in hectares
Bežigrad	724
Center	507
Črnuče	1,810
Dravlje	1,111
Golovec	827
Jarše	906
Moste	340
Polje	2,210
Posavje	905
Rožnik	835
Rudnik	2,548

Sostro	8,856
Šentvid	1,583
Šiška	736
Šmarna gora	1,443
Trnovo	718
Vič	1,438
Total (Municipality of Ljubljana)	27,497

One of the burning issues is the development of the quality public space across the whole territory of the city. Even if the strategic plan for the city of *Ljubljana* has developed a comprehensive approach to the provision of open public spaces all across the city (GOLIČNIK, B. – NIKŠIČ, M. 2007), there is a big discrepancy between the planned and actual development.

The strategic urban development plan (UIRS, 2007) envisioned an open public spaces system at a city scale with the main aim to establish an inter-connected and legible network of high quality open public spaces that will be accessible to all, safe, recognisable, respectful to cultural heritage and natural assets and well-maintained. The general objectives of the plan are:

- maintenance of existing and development of new, easily accessible public spaces, namely in the areas out of the city core;
- prioritising un-motorised users in new designs of public spaces;
- preservation and maintenance of green elements of public spaces; and
- addition of activities and variety to public spaces to reflect the status of *Ljubljana* as a capital city of a nation.

The strategic plan structures the network of public spaces into three main categories at a conceptual level: areas of public space, linear public spaces and particular locations of public space which all together constitute an interlinked spatial structure spread across the whole territory of the city as shown in *Figure 2*. So-called areas of public space are functionally specific areas of the city where the public space provision is densified, for example university campus areas, shopping mall areas, etc.

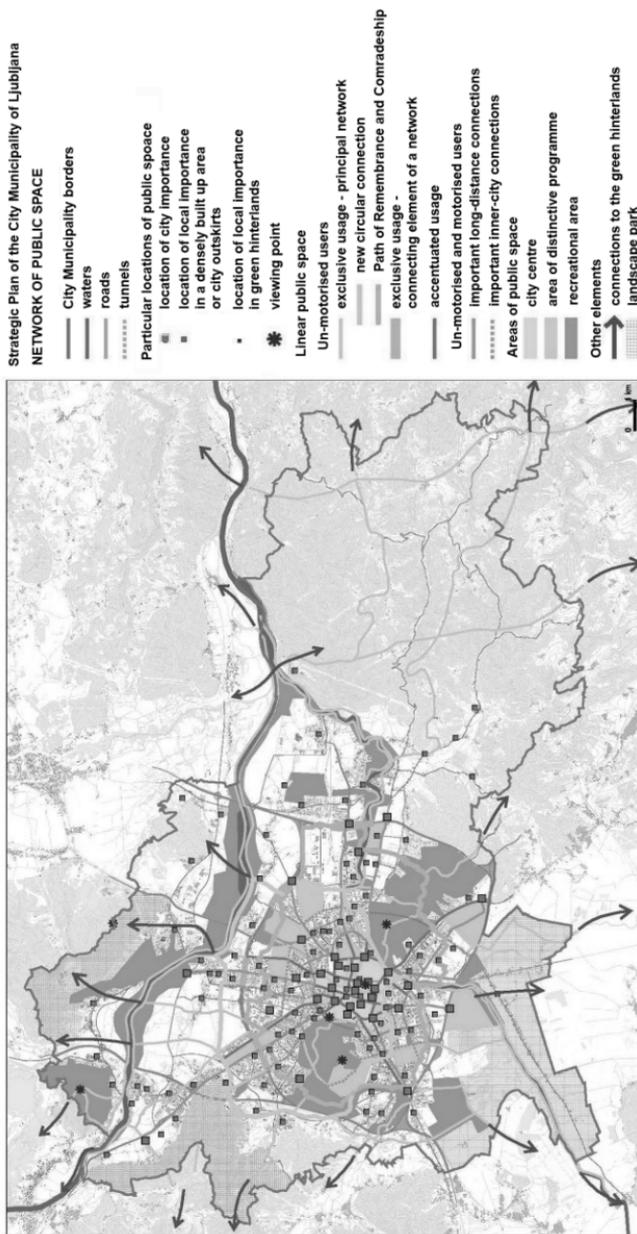


Figure 2 – The network of public space as defined in the Strategic Spatial Plan of the Municipality

Source: ŠAŠEK DIVJAK, M. et al. (2010)

So-called linear public spaces serve as the connectors of various parts of the city and are classified into different categories according to the level of (un)motorised traffic they hold—from exclusively un-motorised users public spaces to the public spaces where motorised and un-motorised users are sharing the same lines. So-called particular locations of public space are spatially clearly bordered ambiances that hold a specific historic, symbolic, spatial or functional value for the city or its parts (neighbourhood, district, etc.). The strategic plans outlines some important pre-conditions that have to be fulfilled to implement the whole network, for example establishment of an efficient public transportation, simultaneous (re)design of important public buildings and the open public spaces attached to them, intensification of public functions along the build edges of public spaces and establishment of a strong management model to interrelate conception, implementation and maintenance of the network of open public spaces.

In 2007, the city adopted another document called *Ljubljana 2025* (ŠUMI, N. 2007; KOŽELJ, J. 2014). The document is a vision which the *City of Ljubljana* adopted as a part of the process of renewing the city planning documentation. It was highly needed to adequately adapt the planning practice to a fundamental change of a social and economic model from socialistic planned model into a neo-liberal marked oriented model in early 1990s after a disintegration of the previous federal state of *Yugoslavia* (BOLE, C. 2013; STEFANOVSKA, J. 2014). Among others, the document specified how city will grow, where new developments will take place and what the key urban development goals of the future are. A provision of a direct access to a quality open public space was identified as one of the key objectives and measures of the sustainable development of the city in this document.

In order to concretise *Ljubljana 2025* vision, 93 projects across the city were identified by the mayor's office and relevant city departments. One of them and the biggest one related to the improvements of the public spaces was the public space regeneration program. It foresaw a 20 million Euros (~16 million GBP) investment into the improvement of the public realm in the centre of the city with the follow-

ing objectives: improvement of the quality of open-air life along the *River Ljubljanica*, enhancing sociability in this space and to stimulation of the economy in the city centre. The project dealt with the most central open spaces of the city along the *Ljubljanica*. The implementation of the programme started in 2006 and was more or less finished by 2012. Due to a successful implementation of this project, *Ljubljana* earned the 2012 *European Prize for Urban Public Space*, a biennial award established to recognise public space projects in *Europe* (Figure 3-4).



Figure 3 – New walk-ways along the River Ljubljanica as a result of a public space improvement programme

Photographed by NIKŠIČ, M. (2013)

The jury (PUBLIC SPACE, 2012) prized the approach that put different design teams to work together, concentrated available resources in specific operations and managed to co-ordinate between different

developers and authors. The improved accessibility of the embankments and a unitary character of open space were pointed out as key qualities that can attract users to the city centre and counteract the effects of urban sprawl.



Figure 4 - The improved access to the river in the city centre after the implementation of the public space improvement measures

Photographed by NIKŠIČ, M. (2013)

While the improvements of the *River Ljubljanica* sequence increased the quality of the public spaces at locations along the river and its nearby vicinity, the quality of public spaces in other parts of the city stayed unaddressed to a large extent. This is closely related to the decision making mechanisms within the city municipality's governing structure that (do not) distribute the financial resources for the public space improvements across the city. The public space improvements agenda is centralised both in terms of decision making (top-down

leaded processes) as well as spatially (the majority of the investment within a small area of the city centre). In order to illustrate this situation and address a topical question of the influence that a distribution of sources for the improvement of open public spaces has on the quality of life across the city, more detailed analyses of public investment into public space were done.

3. Distribution of financial sources for public space improvements

The *Municipality of Ljubljana* has a well-established and freely accessible web database where all the projects financed and implemented by the municipality are listed and mapped (PROJEKTI MOL, 2014). The projects are classified into seven categories:

- infrastructure and traffic;
- culture and tourism;
- health and social care;
- upbringing and education;
- sport;
- environment; and
- others.

They can be inspected by the time-tags related to year of implementation (from 2006 on) and also by a location within one of the 17 city districts. The data that is publicly accessible for each of the projects are the following:

- the location within the municipal territories;
- the period of implementation;
- a short description of the objectives of the project; and
- a full amount of money invested in a particular year.

Based on these data the distribution of financial sources earmarked for the improvements of the public spaces across the city territories from 2006 on has been analysed. In a first step all the data were classified into two categories. The projects related to the improvements of the open public space were classified into the first category where an important criterion was that the project had to contribute to the im-

proved physical, functional or perceptual dimension of the open public space for a non-motorised user. According to this first criterion, all the improvements of the road infrastructure that were for example solely improving the physical conditions of road infrastructure (like repaving the road with new asphalt, etc.) were not classified into first category, but into the second category where all other projects with no relation to public space improvements were placed. The data for the implemented projects in the period from 2007 to 2012 were taken into account in these analyses.

Analyses showed that a total of 705 projects were completed in the 2007–2012 period in *Ljubljana*. 148 or the 26% of all projects were implemented within the central district of the city. 70 projects out of all 705 projects were directly or indirectly related to public space improvements (ranked in group one according to the criterion mentioned earlier)—and 79% of these 70 projects were located in the city centre district (*Table 2*).

The analysis of the financial investments in the studied period showed that for all the projects related to public space improvements, in the city of *Ljubljana* about 67 million Euros (~53 million GBP) were spent in the period 2007–2012. 40 million Euros (~32 million GBP) out of this sum which is 65% of the whole expenditure on the projects in the central district of the city.

The data show that even if the central city district occupies only 2% of the whole territory of *Ljubljana* and accommodates about 9% of city population, it is given an outstanding and favourable position when the redevelopment and upgrading of public space is debated. This statement is based on the following facts:

- 26% of all city's projects take place in the central city district;
- 79% of all projects related to public space in the city were implemented in the city centre district and
- 65% of city's financial investment into public space was channeled into the city centre district.

The disproportion between these percentages and the percentage of the citizens that live in the central districts speak for themselves.

Table 2 – The comparison of the values related to the project investments between the central city district (district Centre) and the whole city of Ljubljana.*

*District centre covers 2% of the total city territory and hosts 9% of the total city population.

Item index and name (€ = Euros)		Item value in				
		2007	2008	2009	2010	2011
A	Total No. of projects – whole city of Ljubljana	123	188	218	125	51
B	Total No. of projects – district Centre	22 (18% of A)	34 (18% of A)	49 (22% of A)	28 (22% of A)	15 (29% of A)
C	No. of projects related to infrastructure and traffic – whole city of Ljubljana	77	47	51	36	19
D	No. of projects related to infrastructure and traffic – distr. Centre	12 (16% of C)	15 (32% of C)	12 (24% of C)	8 (22% of C)	8 (42% of C)
E	No of projects related to public space – whole city of Ljubljana	12	15	19	13	11
F	No of projects related to public space – district Centre	12 (100% of E)	15 (100% of E)	12 (63% of E)	8 (62% of E)	8 (73% of E)
G	Financial investment into infrastructure and traffic – whole city of Ljubljana (MIO €)	24,267	21,783	28,527	42,545	59,896
H	Financial investment into infrastructure and traffic – district Centre (MIO €)	2,860 (12% of G)	3,628 (17% of G)	9,969 (35% of G)	11,084 (26% of G)	27,475 (46% of G)
I	Financial investment into public space – Ljubljana (MIO €)	9,181 (38% of G)	3,877 (18% of G)	12,576 (44% of G)	13,677 (32% of G)	28,259 (47% of G)
J	Financial investment into public space – district Centre (MIO €)	2,124 (23% of I)	3,356 (87% of I)	3,590 (29% of I)	8,324 (61% of I)	27,109 (96% of I)

4. Discussion

The case study of *Ljubljana* opens some important generic as well as site-specific questions related to a spatial distribution of quality public spaces across the city.

The power of strategic planning proves to be limited when the strategic objectives are not concretised and fully integrated into action plans. *Ljubljana* has got a comprehensive and well-thought citywide network of public space in its strategic spatial plan, which—in theory—allows citizens in any part of a city to access easily quality public spaces. Due to the political decision making related to investment policy, this ideal is not met unfortunately. When the majority of the financial sources dedicated to the public space improvements go into a small partition of the city (the central city district in the case of *Ljubljana*), the majority of the city's territories stays poorly serviced in terms of public space provision. Even if *Ljubljana* is not too strongly prone to some typical practices of transition societies of *Eastern Europe*, such as privatisation of space and limitation of access to some privileged user groups, the level of accessibility to a quality public space is decreasing for a majority of population due to an unbalanced public space investment policy.

This results in a situation where a typical public space of out-of-city-centre locations look either abandoned or forgotten and in any case uninviting to use due to the run-down or non-existing street furniture, abundance of parked cars and above all complete lack of any conceptual approach to the improvement of public space. Public spaces at none-central locations are thus subject to mere technical improvements needed for a basic functioning of a city such as re-asphalting of streets, garbage cans disposition etc. which does not improve the experience of public space users.

Such an approach affects the quality of life of a great majority of the population, therefore it is somewhat surprising that civil society movements that already claim certain citizens' rights related to the living conditions in the city stay rather inactive in this field and do not ask the city administration and managing structures to change their

approaches to the distribution of high quality public spaces in the city. On the other hand, the absence of official city's programmes to address the issue of improved quality of public spaces in the suburbs generates some bottom-up initiatives that contribute to better public space with one-time interventions or events to the suburban public spaces (NIKŠIČ, M. 2014). They may be the generators of a new approach to the public space regeneration that will be much more user based and respective to the needs of local populations.

Another important question in these processes is the local self-management model of the city governance. The reorganisation of the decision making process which introduced a strong central city administration with 17 district sub-administrating entities in 1994 proved to incapacitate the local communities to have a say and an active role in a development of their territories. Giving them purely formal tools of influencing the city's decisions, but none of the implementation tools to proceed with concrete actions (including the investments into the locally important public spaces) puts local communities in a subordinated position. This is in an opposition to the sustainable development approaches where emphasis are made to strengthen communities' role in city's decision making by rising community's rights as well as obligations in locally relevant matters. A total command of the central city administration contributes to passiveness (or perhaps inactive role) of the population and strengthens the general conviction that not much can be done to change things for better. And that might be the most harmful aspect of such an approach in a long term. A new decision making scheme that would pass the right to decide the investments to the local communities themselves would not only contribute to a more spatially balanced rise of the quality of public space across the whole city's territory but also activate the human potential that particular communities hold, and thus strengthen their social cohesiveness. The existing model of a supra strong central city authority that manages the city budget in its totality too often follows the pure market logic where the fulfilment of the needs of local community is not an obvious

objective. This disconnects the public investments from the actual needs of the local populations across the city to a great extent.

5. Conclusion

There is growing evidence across the world that the quality of public space in the city is closely related to the economic prosperity of the city as a whole; the higher the economic performance, the higher the investments that can be channelled into the improvements of city's public space and consequently the better public space that can be achieved. The argument goes in the opposite direction too; places with a higher standard of a public space are more attractive for potential users and higher numbers of potential consumers in an area of a city can support the performance of its local businesses. Therefore, it is of a vital importance where the public money dedicated for the public space improvements goes. The investment into a public space most often contributes to the improved quality of life in wider surroundings of such an intervention; therefore, it is not appropriate to implement the practices that evidently discriminate the rest of the city in favour of beautification of some selected (central) areas. Only a balanced approach that strives to improve the quality of the environment and life across the city in a balanced manner can achieve the targets of the sustainable city development. If the living conditions across the city will get too dissimilar the city as a whole may lose its attractiveness as a place to live and work and consequently as an economic entity in a long term too. There is still time for *Ljubljana* to get aware of this fact and rethink its public space improvements programme to bring benefits to the local communities out of the central city area, too.

References

- AKSENOV, K. E. (2012). *Trends in the accessibility of public space in the post-Soviet metropolis. Shrinkage or expansion? – Pleiades Publishing, Regional Research of Russia, Vol. 2, No. 4, pp. 329–338.*

- BOLE, C. (2013). *Ekonomska preobrazba slovenskih mest / Economic transformation of Slovenian Cities*. – Založba ZRC, Ljubljana
- CASTELLS, M. (2000). *The rise of the network society, the information age: Economy, society and culture*. – Blackwell, Oxford
- CITY OF LJUBLJANA (2014). *Statistical Yearbook Ljubljana 2013*. – City of Ljubljana, Ljubljana
- COUCLELIS, H. (2000). *From Sustainable Transportation to Sustainable Accessibility. Can We Avoid a New Tragedy of the Commons?*
- CROMLEY, E. K. – McLAFFERTY, S. L. (2002). *GIS and public health*. – New York: The Guilford Press.
- GEHL, J. (2010). *Cities for people*. – Island Press, Washington
- GILES-CORTI, B. – BROOMHALL, M.H. – KNUIMAN, M. – COLLINS, C. – DOUGLAS, K. – NG, K. – LANGE, A., DONOVAN, R.J. (2005). *Increasing walking. How important is distance to, attractiveness, and size of public open space?* – American Journal of Preventive Medicine, 28, pp. 169–176.
- GOLIČNIK, B. – NIKŠIČ, M. (2007). *Delovno gradivo ob pripravi usmeritev za razvoj omrežja javnega prostora za Strateški prostorski načrt MOL*. – Neobjavljeno, Urbanistični inštitut Republike Slovenije, Ljubljana
- HACKENBROCH, K. (2013). *The Spatiality of Livelihoods: Negotiations of Access to Public Space in Dhaka, Bangladesh*. – Franz Steiner Verlag, Stuttgart
- KATZ, P. (1994). *The new urbanism: Toward an Architecture of Community*. – McGraw Hill, New York
- KOOHSARI, M. J. – KARAKIEWICZ, J. A. – KACZYNSKI, A. T. (2012). *Public Open Space and Walking. The Role of Proximity, Perceptual Qualities of the Surrounding Environment, and Street Configuration*. – Sage: Environment and Behavior
- KOŽELJ, J. (2014). *The Vision of Ljubljana*. In: MIHELIČ, B. – KOŽELJ, J. – GAJŠEK, M. (Eds.) *Ljubljana. Portrait of the City*. – City Municipality of Ljubljana, Ljubljana
- LANDMAN, K. (2006). *Privatising public space in post-apartheid South African cities through neighbourhood enclosures*. – GeoJournal, 66, pp. 133–146.
- LIU, J. – WANG, R. – CHEN, T. (2010). *Factors of spatial distribution of recreation areas in peri-urban Beijing*. – Journal of Geographical Sciences: Volume 20, Issue 5, pp. 741–756.
- LOTFI, S. – KOOHSARI, M. J. (2009). *Analyzing Accessibility Dimension of Urban Quality of Life. Where Urban Designers Face Duality Between Subjective and Objective Reading of Place*. – Soc Indic Res, 94, pp. 417–435.
- MADANIPOUR, A. (1992). *Design of urban space: An inquiry into a socio-spatial process*. – Wiley, West Sussex

- MCCORNACK, G. R. – CERIN, E. – LESLIE, E. – DU TOIT, L. – OWEN, N. (2008). *Objective versus perceived walking distances to destinations. Correspondence and predictive validity.* – Environment and Behavior, 40/3, Sage publications
- MITCHELL, D. (1995). *The end of public space? People's Park, Definitions of the Public, and Democracy.* – Annals of the Association of American Geographers, 85, pp. 33–108.
- NIKŠIČ, M. (2008). *Connecting urban microambients into recognizable whole: Structure of open urban public space in mental image of users.* – Doctoral thesis. Ljubljana: University of Ljubljana
- NIKŠIČ, M. (2014). *Times of economic hardship and the birth of quality public space. Not necessarily an unlikely marriage.* Conference proceedings. – Future of Places, Buenos Aires
- OFFICIAL GAZETTE OF RS (1994). *Zakon o ustanovitvi občin ter o določitvi njihovih območij / Law on the establishment of municipalities and definition of their territories, IV / 60.*
- PAIN, R. (2000). *Place, social relations and the fear of crime. A review.* – Progress in Human Geography, 24, pp. 365–387.
- PINCH, S. (1985). *Cities and services.* – Routledge & Kegan Paul, London
- ROSE, A. – STONOR, T. (2009). *Syntax – Planning urban accessibility.* In: CHRIST, W. (Ed.) *Access for all. Approaches to the built environment.* – Birkhauser, Basel, Boston, Berlin
- SORKIN, M. (1992). *Variations on a theme park: The New American City and the end of public space.* – Hill and Wang, New York
- STABILINI, S. – ZEDDA, R. – ZANETTICHINI, L. (2013). *Accessibility of Public Spaces and Services. Theoretical Remarks, Practices and Instruments from Urban Time Planning.* – Urban and Landscape Perspectives, 15, pp. 119–135.
- STEFANOVSKA, J. (2014). *Planning the post-socialist city. Urban transformations and changing centralities after socialism.* Doctoral thesis. – University of Ljubljana, Ljubljana
- ŠAŠEK DIVJAK, M. – BIZJAK, I. – DIMITROVSKA ANDREWS, K. – GOLIČNIK, B. – GULIČ, A. – JAKOŠ, A. – KERBLER, B. K. – MIHELIČ, B. – MLADENVIČ, L. – MUJKIČ, S. – MUŠIČ, B. – NIKŠIČ, M. – PRAPER, S. – SAVANOVIČ, G. – GANTAR, D. – SENDI, R. – ŠUKLJE ERJAVEC, I. – COTIČ, B. – HOČEVAR, M. – JUVANC, A. – KAVAŠ, D. – KOMAN, K. – KOS, D. – PANJAN, J. – PRELOVŠEK, A. – ŠANTEJ, B. – SLAČEK, M. – TRČEK, F. – URŠIČ, M. – ŽURA, M. – GOLOBIČ, M. – KOZAMERNIK, J. – STANIČ, I. – GUBINA, F. – GUBINA, A. – MARC, D. – STOJČIČ, Z. – FISTER, P. – GABERŠČIK, B. – GABRIJELČIČ, P. – KOŽELJ, J. – MUŠIČ, V. B. – POGAČNIK, A. (2010). *Občinski prostorski načrt MOL: strateški del / Municipal*

- spatial plan of City municipality of Ljubljana. – Urbanistični inštitut Republike Slovenije, Strategic part, Ljubljana
- ŠUMI, N. (ed.) (2007). *Vizija Ljubljana 2025. Glasilo Mestne občine Ljubljana*. Newsletter of City Municipality of Ljubljana; 8, 9 – XII.
- TALEN, E. (2003). *Neighborhoods as Service Providers. A methodology for evaluating pedestrian access*. – Environment and planning B: Planning and design, 30, pp. 181–200.
- TIBBALDS, F. (1992). *Making people friendly towns: Improving the public environments in towns and cities*. – Longman Press, Harlow, Essex
- UIRS (2007). *Strateški prostorski načrt Mestne občine Ljubljana, dopolnjeni osnutek / Strategic spatial plan of city municipality of Ljubljana, amended draft*. – Urban Planning Institute of the Republic of Slovenia, Ljubljana
- ZHANG, X. – HUA, L. – HOLT, J. (2011). *Modelling spatial accessibility to parks. A national study*. – International Journal of Health Geographics
- WORPOLE, K. (1992). *Towns for people: Transforming urban life*. – Buckingham University Press, Buckingham
- YOON, H. – SRINIVASAN, S. (2014). *Are they well situated? Spatial Analysis of Privately Owned Public Space*. – Urban Affairs Review, Sage, Manhattan, New York City.

Electronic sources

- MESTNA OBČINA LJUBLJANA (2014). *Četrtna skupnosti MOL*. Mestna občina Ljubljana [Online]. Available at: <<http://www.ljubljana.si/si/mol/cetrtneskupnosti/>> [Accessed 29 July 2014]
- PROJEKTI MOL (2014). *Seznam projektov, Št. Projektov: 758*. Ljubljanski Projekti [Online]. Available at: <<http://ljublanski.projekti.si/projekti.aspx>> [Accessed 26 September 2014]
- PUBLIC SPACE (2012). *Preureditve nabrežij in mostovi na Ljubljani*. Public Space [Online] Ljubljana (Slovenia), 2011. Available at: <<http://www.publicspace.org/en/works/g072-preureditve-nabrezij-in-mostovi-na-ljubljani/prize:2012>> [Accessed 27 August 2014]