

HOW MUNICIPALITIES SHOULD APPROACH THE TRANSFORMATION OF PUBLIC SPACES

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ABSTRACT. Public spaces are the living rooms of cities, accessible to everyone without any restrictions. Public spaces are the calling card of the city; they are where the community comes together. Their design either enables or complicates community life. From a visitor's point of view, public spaces are the first things to be noticed and encountered in a city. Due to various circumstances, public spaces sometimes fail to meet the abovementioned features or do not fulfil them to the degree they should. Thus, the presented methodology guidelines may help small cities representatives who do not have the professional or personnel capacity to deal with public spaces through planning, preparation and contracting the public spaces studies, which leads to a quality assessment of public spaces. The guidelines also include tips for improving public spaces, recommended practices for public participation in planning the transformation of public areas, and a site assessment form for a non-expert's perspective.

KEYWORDS: Public space, public participation, applied research, interdisciplinary cooperation, guidelines.

1. INTRODUCTION

The city is a complex system that can be seen through a prism of many disciplines – from urban planning and geography, legal science and history, to social science [1]; it is a multifaceted system composed of the physical environment and people and their interactions. The city's location and historical and demographic development also play a vital role.

From the point of view of social sciences, a city is a territorial community [2]. Even in this definition, it is noticeable that it is a multidisciplinary concept.

It may seem paradoxical since it is not usual for this basic theoretical consideration of the city to be practically applied in planning human settlements and public spaces, which are the intrinsic essence of cities. The design of urban spaces is primarily based on architects' perspectives and intuitions; designers usually perceive life in human settlements and provide for the end-users needs (e.g., different groups of inhabitants, visitors, workers) without inviting experts from the social sciences for reflecting on the creation or transformation of urban places and cities.

This awareness led to linking urban planning and sociological expertise in the context of public space planning. Thus, at the University Centre for Energy Efficient Buildings (UCEEB) of the Czech Technical University in Prague (CTU), Czechia, a multidisciplinary team was formed, and it developed the so-called "Methodology for Planning Public Spaces in Small Cities" in order to merge the knowledge of different fields.

This Methodology guides the representatives of small municipalities through the planning process, from the preparation and commissioning to more specific studies and analysis of public spaces. This method aims to facilitate the initial orientation in the issue and negotiations with experts, state administration and users of public spaces – the Methodology has been freely available in electronic form on the <http://www.atraktivniobec.cz/> website since March 2021.

The Methodology guidelines are intended for the general public, including representatives of small communities without architectural or sociological backgrounds. These people often have no experience with architecture or participatory methods; however, they are in charge of deciding the future directions of the transformation of public spaces and setting the parameters for selecting a suitable contractor. This is also what makes the Methodology guidelines different from many other methodologies that have been developed in the last decade for the needs of the public administration [3] or professionals [4, 5] in the Czech environment. The already implemented methodologies are very beneficial for the construction culture in the Czech Republic, but those are written in a professional language that is not understandable to the general public. The originality of the "Methodology for Planning Public Spaces in Small Cities" is based on the establishment of sequential steps in the process of planning the transformation of public space, which are explained in a clear and comprehensible way for the general public. The Methodology also con-

tains several original educational tools that provide deeper insight into architectural issues (i.e. Tips for improving public spaces and the On-site public space assessment form) or public participation (i.e. Public participation in planning the transformation of public space).

1.1. SCOPE OF THE PAPER

The aim of this paper is to present the “Methodology for Planning Public Spaces in Small Cities” and, in particular, one of its unique tools (the On-site public space assessment form) for setting up better cooperation and discussion between relatively distant groups:

- (i) experts in urban planning and public participation, and possibly representatives of the state administration on the one side and
- (ii) representatives of small municipalities and their inhabitants on the other side.

The Methodology is the output of a three-year applied interdisciplinary research project that aims to guide potential stakeholders through creating and validating an urban planning process.

2. PLANNING HUMAN SETTLEMENTS AND PUBLIC SPACES – TAKING THE USER PERSPECTIVE INTO ACCOUNT

The theoretical part of this manuscript introduces potential stakeholders to human settlement planning, its development and its context. It presents public spaces as a phenomenon in which two components are combined – the material or physical component, i.e. the form, and the social component, i.e. life and activities in urban areas. It also introduces several approaches to assessing the quality of both physical and social aspects of public spaces.

2.1. THE MATERIAL FORM OF CITIES, THEIR DEVELOPMENT AND TRANSFORMATION AGAINST THE BACKGROUND OF SOCIAL CHANGES AND TENDENCIES

The material form of cities, and consequently, public spaces, is based on the needs of the inhabitants. Cities were founded in places with the best economic, transport and natural conditions available.

Man-made features also had a significant influence on choosing an optimal site. In this sense, important trade routes, their branching or crossing, played a primary role. These places also offered suitable outlets for artisans and farmers’ products and became centres of trade and regular market places [6]. The transformation of cities’ physical environment, which began in the 19th century, is usually a response to technological development or the evolution of society and its needs.

Gradually, on one side, along with the technological development, the importance of specific functions

(e.g., fortification) got lost; on the other side, emphasis was placed on improving the quality of urban life (such as improvement of sanitary conditions or the needed space for everyday recreation) or on responding to socio-political changes (such as urbanisation due to industrialisation, suburbanisation, revolutionary movements, and wars). These tendencies were manifested by the transformation of the urban structure (greater spacing of buildings, their orientation and height) and, inevitably, also in the character and perception of public spaces (the need for new types of public spaces, such as park squares, waterfronts, public spaces of housing estates, boulevards, and cemeteries) [7].

Gehl [8] pointed to a “clearly physically and materially oriented planning ideology” that neglected the psychological and social aspects of the design of buildings and public spaces.

In cities or parts of cities planned within functionalist visions in the 1950s and 1960s (e.g., condominiums in Toronto or municipal buildings in the former East Berlin), there was a reduction of social activities in public spaces, even if this was not intentional. This result was mainly due to the great distances between people, events, functions, and needs [8].

The 1960s were thus marked by a move away from the discussion with local stakeholders and the public, and urban design, including the design of public spaces, was entirely the responsibility of urban planners [9].

The turn away from the modernist planning approach has long been evident worldwide [10, 11]. However, in the Czech environment, we still encounter insufficient space for discussion in transforming public spaces. “The Methodology for Planning Public Spaces in Small Cities” responds to this situation and, beyond simply describing the process of preparing and commissioning the transformation of public spaces, offers unique tools to stimulate discussion among municipal representatives and experts (On-site public space assessment form), as well as with people among themselves (Public participation in planning the transformation of public space).

2.2. PUBLIC SPACES AS THE INTERSECTION OF THE MATERIAL FORM OF PLACE AND LIFE IN IT

Neither of these public realm components (physical and social) should be neglected, and they should be considered equally in the transformation of a place. Public spaces should always be designed for people and their needs, not the opposite, i.e. people adapt themselves and their needs to the environment [7, 8]. Thus, it can be argued that the connection between physical and social aspects is a fundamental prerequisite for designing attractive public spaces. “*When we talk about public space, we must always keep in mind both the physical and the living aspects and the interrelationship between them.*” [9]

2.3. APPROACHES TO ASSESSING THE QUALITY OF PUBLIC SPACES

Specialists in the physical and social aspects of public spaces, respectively urban planners and public involvement planners seek answers to elementary questions by setting up different evaluation approaches – for example, why is one public space attractive to its inhabitants and another not? – However, there are several approaches to assessing the quality of the physical and social aspects of public spaces. A few of them are described in the following sections.

2.3.1. WILLIAM H. WHYTE'S APPROACH TO THE ASSESSMENT OF PUBLIC SPACES

William H. Whyte was a pioneer in thinking about public spaces in cities and their functioning. Whyte's research focused on New York City and explored why some public spaces are frequented while others are not. He sought to answer this question through participant observation and interviews, which he supplemented with a time-lapse film and photographic footage (his research also resulted in the 1980 documentary film "Social Life of Small Urban Spaces").

His social-behavioural analysis of public spaces aimed to formulate recommendations that would help urban planners design and create attractive public areas [12–14].

"The significance of Whyte's research was not only that it turned planners' attention to how people actually use public spaces, and initiated other similar research in other countries. His undisguised enthusiasm for the varied life of New York's streets was part of his promotion of a return to inner cities [...]" [12]

Whyte's work was followed by several other scholars who further developed his theory. Two of the more notable works were done respectively by the non-profit organisation Project for Public Spaces (PPS) [15–17], which has been working on transforming public spaces with the involvement of the users since 1975, and by the Danish urbanist Jan Gehl.

2.3.2. APPROACH TO THE EVALUATION OF PUBLIC SPACES IN THE DOCUMENT "PUBLIC SPACES IN PILSEN – METHODOLOGY FOR ACCESS TO PUBLIC SPACES."

For the purpose of this work, it has been selected the document "Public Spaces in Pilsen – Methodology for Access to Public Spaces" [18], one of the Czech approaches that deal with the theoretical [4] and practical [19] assessment of the quality of public spaces. This approach, which is taken as best practice by the Methodology for Planning Public Spaces in Small Cities (see Section 3), is the preferred one by the authors – they identified their method in this approach.

Figure 1 shows some outputs that emerged from assessing the quality criteria (such as the offer of available activities, microclimate, and social security) of public spaces following this approach. The case

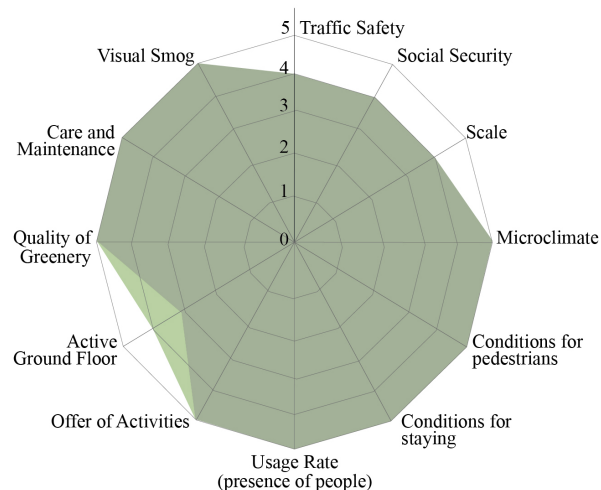


FIGURE 1. Ray diagram showing the assessment of the quality of the public space that surrounds Smetana park in Pilsen, Czechia. Figure readapted by authors from Sedlak et al. [18].

study chosen is the public space surrounding Smetana park in Pilsen, Czechia. The public space components are rated according to a point-based system: five points represent the highest quality solution, while zero points represent the lowest quality solution. The evaluation of the quality criteria is not based on an exact methodology or procedure (quantitative assessment) but instead on the knowledge and experience of the evaluator – it is a qualitative assessment made by experts. The dark green colour in the graph highlights the quality current state of the public space, and the light green colour displays the desired target.

3. METHODOLOGY FOR PLANNING PUBLIC SPACES IN SMALL CITIES

3.1. USE OF KNOWLEDGE FROM URBAN AND SOCIAL SCIENCE SURVEYS

The cause and result of the interdisciplinary urbanistic-sociological approach to public spaces is the above-mentioned Methodology for Planning Public Spaces in Small Cities designed by the UCEEB team. During the qualitative research aimed at learning experiences of municipality leaderships and their agendas targets, it became clear that the original intention of targeting the Methodology to cities with fewer than 20 000 people should have been abandoned. Municipalities with 20 000 inhabitants are still large cities in the context of the Czech environment. In these cities, several specialised authorities administer the wider area; they are "municipalities with extended jurisdiction" (in Czechia, they are named by the abbreviation ORP – *Obcí s Rozšířenou Působností*).

Thus, the Methodology proved to be much more helpful and desirable among small cities (up to 5 000 inhabitants), such as municipalities with no extended jurisdiction. The reason is that these small cities

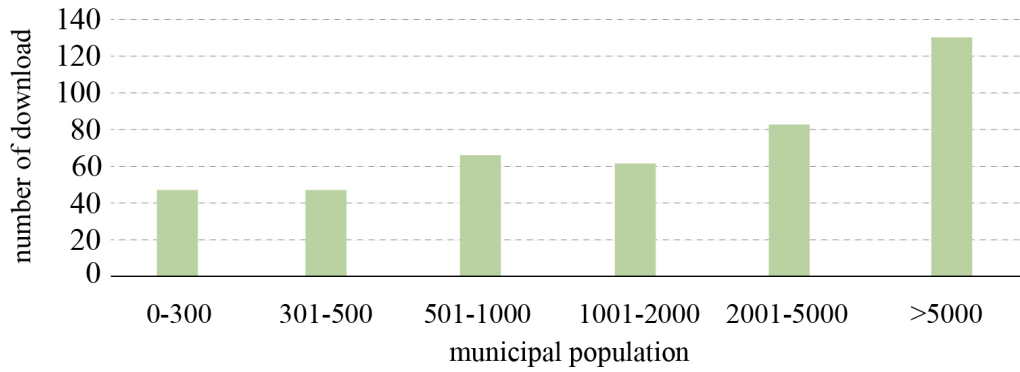


FIGURE 2. Bar chart showing the number of downloads of the Methodology by population in the municipalities.

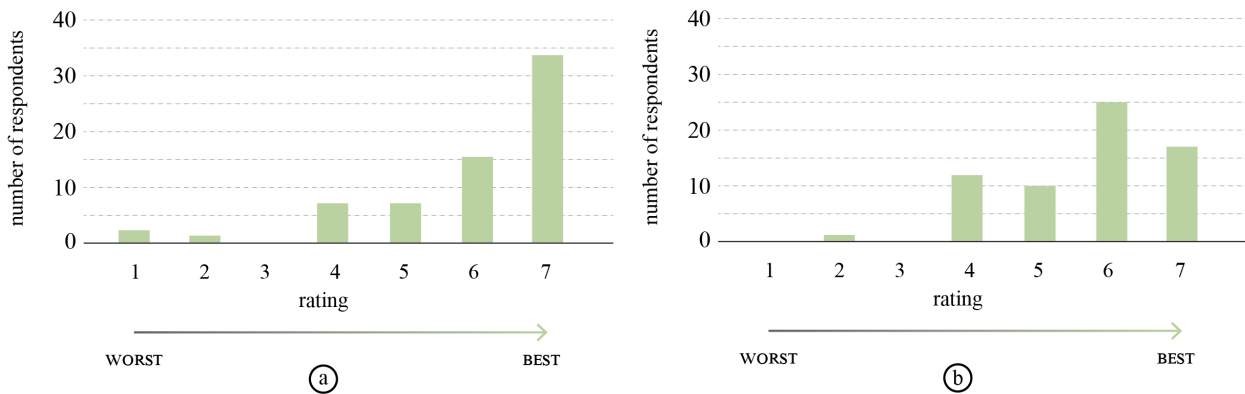


FIGURE 3. (a) Bar chart showing the evaluation of the Methodology in terms of clarity. (b) Bar chart showing the evaluation of the Methodology in terms of usefulness.

do not have sufficient professional or personnel capacity to deal with municipal public spaces, as they have a broad agenda of very diverse topics under their responsibility. This observation is followed by the authors’ attempt to write the Methodology as straightforward as possible, emphasising the clarity of the information presented. This is also reflected in the number of pages of the methodological text itself, around 50 pages of structured text. The assumption regarding the target group was confirmed not only during semi-structured interviews with representatives of the authorities and municipalities but also during the implementation of the Methodology guidelines. The Methodology is freely available for download from the website <http://www.atraktivniobec.cz/>. Considering the period from April to August 2021, it has been accessed by 420 municipalities, 307 of which were representatives of municipalities with a population that counts less than 5 000 inhabitants. Figure 2 represents the number of downloads of the Methodology by population in the municipalities in the period from April to August 2021.

The authors’ goals of text clarity and perceived usefulness of the Methodology guidelines were also met. Feedback on the Methodology (which was collected through questionnaires in October 2021 – number of respondents: 65) showed that 74% of respondents rated the methodology guidelines as understandable

– rating 6 and 7 (Figure 3a), and 64% rated it as useful – rating 6 and 7 (Figure 3b). The practicality of the methodology guidelines was also highlighted in the questionnaires. Here we have selected one of the quotes from a municipality representative: *“From the perspective of a non-fulltime municipality representative, it offers me a professional, substantive, informative, legislative background, including methodological assistance, guiding steps, and essentials that we must not forget.”*

3.1.1. FIRST ANNEX TO THE METHODOLOGY:

ON-SITE PUBLIC SPACE ASSESSMENT FORM

The primary purpose of this methodological text is to invite mayors and other representatives of municipal authorities to become equal speakers in the dialogue with irreplaceable actors of this process in the ranks of architects, planners, sociologists, etc. The main idea is not to make them experts in spatial planning, communication or public participation but to induce them in an understandable and time-saving way to relevant topics or specific issues that they would need to discuss with experts when planning strategies to transform a given public space.

Therefore, this Methodology includes unique materials for municipal representatives (Tips for improving public spaces, the On-site public space assessment form and the Public participation in planning the

transformation of public space), which will serve as tools for discussions with experts and people. This material was developed by combining expertise in urban planning and social sciences in the context of small towns. The main intersection of interdisciplinary collaboration is thus reflected in the On-site public space assessment form and in a document that introduces municipal representatives to public involvement in planning the transformation of public spaces and allows them to view space through the lens of an urban planner. It stimulates the thought process of evaluating a specific public space. Another purpose of the form is to encourage those stakeholders to imagine and think about the space, so that they become more equal partners during discussions with urban planners when it is time to plan the transformation of a particular public space and formulate their ideas and requirements.

This unique tool was created by an urban planning expert who provided information on how public spaces are evaluated in practice (i.e. what aspects are monitored and how they are evaluated). In doing so, the expert drew on different methods established to assess the quality of public spaces by urban planners and social scientists that are presented in Section 2 of the paper. Moreover, it was also based on the results gathered in the field and by questionnaire surveys in three small Czech cities (Drahelčice, Mnichovice and Bustěhrad – total number of respondents: 306) carried out in 2018. The results indicated that resident respondents did not assess the conceptual links in the public realm (i.e. sightlines, permeability, vibrancy and relationship between the building parapet and the public realm) and were unable to assess the appropriate character of the public areas (with reference to history, function and typology). On the contrary, they were competent to determine the safety and maintenance of the public space plus the traffic design (e.g., traffic volume, number and location of parking spaces, the safety of crossing, condition and width of pavements) and the presence of green spaces and urban furniture [20]. It can be summarised that inhabitants do not perceive what the urban planner forecasts and designs in public spaces, but they focus more on what influences their daily user's experience of a specific place. However, this result is legit – citizens are not experts in the typology of public spaces, buildings or benches' location, but they are in community life. The same outcome has been registered regards the municipal leaders. Indeed, the mayor and his/her deputy are also “just” residents of the city, but simultaneously, people responsible for the initial reflections on the current state of public spaces in their city and the subsequent decisions that will lead to their transformation. This is also why the previous mentioned on-site public space assessment form has been created; it intends to guide municipal representatives in viewing public spaces from the perspective of an urban planner. It would help them understand

what these experts research, assess and try to achieve. Nevertheless, filling out the form is not a substitution for an expert's site assessment, but it should show municipal representatives what needs to be considered and how complex the issue is in specific public spaces.

Based on a mutual discussion between the urban planner and the social scientist, the public participation expert then translated the questionnaire into a language that the general public could understand. Each category contains several questions designed to get municipal representatives to think about the public space differently than they used before. In order to determine whether the form fulfils this objective, whether the topics defined in the form correspond to the reality of small cities and whether the questions are understandable for municipal representatives and correctly formulated with their purpose, the form was tested in practice (specifically in our Czech small cities partners – Drahelčice, Hrusice). Figure 4 shows the on-site public space assessment form, thematic area Usability and Functions.

As mentioned in Section 2.3.2, the creation of the form was inspired by the methodological text “Public Spaces in Pilsen. A Methodology for accessing public spaces” [18]. The form is divided into five thematic areas:

- Type of assessed public space – The evaluator should define what type of public space it is (e.g. square, street, park).
- Usability and functions – The evaluator has to select what function the public space has (e.g. representative, commercial, sports) as well as what groups of people may visit the public space and what activities they would do there.
- Pedestrian and cyclist safety – The evaluator should describe how safe the public space is for pedestrians or cyclists.
- Comfort – The evaluator should describe how the public space is comfortable, whether it has a suitable microclimate, and whether there are benches or other furnishings.
- Accessibility and availability – The evaluator should describe how access to the public space is addressed for pedestrians, cyclists and disabled people.

4. CONCLUSION

The paper describes various urban and social science approaches, methods and reflections on the quality of public spaces and the benefits of using methods to engage people in planning public spaces.

After the qualitative research and discussion with municipality leadership, the authors have designed the Methodology for Planning Public Spaces in Small Cities merging urban and social science knowledge. This Methodology is addressed to mayors and deputies for helping plan and design attractive public spaces

2. How do you evaluate the USABILITY AND FUCTIONS of this public space?

2.1 What is the **first thing** you notice when you enter this space? Why? *List it:*

2.2 Is this **area frequented, used**? Why?

YES NO SOMETIMES

2.3 Who are the **different groups of people** who visit it? (e.g., by gender, age, pedestrians, cyclists, in-line skaters, people with dogs, homeless people, etc.) *List them:*

2.4 What **kind of activities** do visitors do here? *List all possible acitivties and specific events:*

2.5 What are the **functions** of this space? *Tick the fuctions:*

- Residential** (benches, picnic areas, playground)
- Recreational** (high promotion of greenery, which encourages spending time there)
- Representative** (the space is linked to important buildings in the city as a church or the municipal office)
- Commemorative, spiritual** (church, memorial, devotion to the landscape, cemetery)
- Commercial** (high promotion of shops and sevicev in the entrance floors of the development)
- Social** (organization of cultural and sport events organized by the town, town associations or active citizens)
- Sports** (playgrounds, workout, suitable conditions for swimming and running, cycling/in-line skating))
- Transport, connections** (the dominant fuction is operational, local roads, parking)
- Other** - *List which ones:*

2.6 Does this place have the potential to **fulfil other functions** in the future?

If so, which ones and why?

2.7 Are there any **abandoned places** in this area?

YES *If so, which ones and why?*

NO

FIGURE 4. Sample of the on-site public space assessment form.

in a time-saving way with the involvement of the residents. It has been an open-access source since March 2021. However, the Methodology is not limited to describing the process of preparing the transformation of public spaces but also contains some unique educational annexes that aim to develop a discussion between experts in the field and the general public. One of these tools, the On-site public space assessment form, has been presented in detail in this article.

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