



# Public Spaces - For People or Not for People?

Klaudiusz Fross<sup>(✉)</sup>, Joanna Tymkiewicz,  
and Dorota Winnicka-Jasłowska

Faculty of Architecture, Silesian University of Technology, Gliwice, Poland  
{klaudiusz.fross, joanna.tymkiewicz,  
dorota.winnicka-jaslowska}@polsl.pl

**Abstract.** Public spaces are, as a matter of principle, meant for people. It does not matter whether it be local residents, incoming guests or tourists. Just as our lives and the manner in which people spend their leisure time change, so do the requirements as to the public spaces. One could even say that these requirements are constantly growing. At present, a mere bench, tree or a fountain will just not serve. One could even raise a question as to how the contemporary public spaces should look? What functions and attractions should they include? How should the architects meet those new requirements? Answers to all those specific questions shall be answered. The authors shall subject some exemplary public spaces to the process of evaluation. Conclusions drawn shall be prepared on the basis of completed qualitative research. At the close, a recipe for a public space, both model and attractive, shall be created.

**Keywords:** Architecture · Public space · Ergonomics · Qualitative research

## 1 Introduction – Spaces and Their Users

The built environment is a frequently applied term used to describe an artificial surrounding, designed by human beings, as well as all the relations which take place within it. This environment is made up of buildings, complexes of building as well as their surroundings. An important element which constitutes part of the built environment are the public spaces. They serve to meet various human needs such as: entertainment, relaxation, sports, leisure etc. Designers give public spaces forms while the form shapes the users. For users in general, the quality of the built environment has an enormous significance. Moreover, relations between the built environment and the natural one are also of key importance. All elements of the built environment are designed, built and then used. Among them, one can find admirable and remarkable pieces of architecture, “ordinary” and properly planned pieces of architecture, pieces that meet the needs and pieces that bring satisfaction. However, there also buildings and other spaces that function incorrectly and cause numerous problems. Such structures and spaces are often referred to as “sick”. An inefficient structure does not always have to be old, dilapidated and unable to meet today’s expectations. It might as well be modern and newly built. One could say that structures which have already been completed constitute a long-lasting record of the success and failure of design. Structures are being built by humans so they serve them and their needs. The main user

together with the intended use have a great influence of the parameters of the structure. People not only stay within public spaces and take advantage of them, they also assess them. Therefore, both the built environment and the users constitute a research field and a potential source of knowledge, information of the built environment, their advantages, strengths as well as disadvantages and drawbacks (Fross 2012), or other publications: [1–3, 5].

All users have the right to make an assessment. They decide whether they will use the given space or not. Of course, space created by an architect constitutes a specific offer as well as a proposition. It also possesses specific solutions. At the end of the day, however, it is the user who makes the final choice. His or her approval constitutes a confirmation of a well-prepared functional and utility program and a correct recognition of user groups together with their needs. It is common knowledge that there are both well designed spaces, which often become cultural meeting places, as well as badly designed spaces which constitute asocial, uninteresting and unacceptable structures. The most important conclusion which may be drawn from the above - the users assess the structures which they make use of.

Public spaces are, as a matter of principle, intended for people. It does not matter if these are local residents, some visitors or tourists. Just as our life or the way we spend our leisure time change, so do the requirements concerning public spaces. One might even claim that these requirements are constantly on the rise. Today, a bench, a tree or a fountain will not suffice. One might ask what the contemporary public spaces should look like. What functions and attractions must they contain? How can the architects meet these new expectations?

One should also specify what creates quality in public spaces, and what specifies the norm. One might claim that the quality of space is created by a set of functional features which are looked at in technical, functional, behavioral (including esthetic), organizational and economic terms. The standard of the space, however, which is seen as an average model of that quality and constitutes a point of reference for all spaces, is specified by means of normative requirements (e.g. of the Building law) as well as by specified requirements of the market and needs of the users. Spaces which do not meet the requirements of the standard are deemed substandard and will require either significant modernization, a redevelopment or demolition. Above-standard spaces, on the other hand, will always offer an above-average quality in terms of qualitative parameters (Fross 2012, 2015). The scientific staff from Department of Design and Quality Assessment in Architecture are specialist in “design by research”, for examples publications: [4, 6–8].

## 2 State of the Art

In scope of the subject matter, the state of the art is significant. Research on public spaces has been the subject of numerous important conferences. Professional literature on the subject is incredibly extensive. Titles of central importance for the professional literature are connected with the methodology of qualitative assessments of the built environment and they include the following:

In the first group of publications that constituted the basis of knowledge during the preparation and execution of research, one may find:

- Fross and Sempruch [2].
- Fross et al. [3].
- Fross et al. [4].

Studies and analyses which describe the effects of research conducted together with students as part of their classes make for an interesting complement to the literature and include:

- Tymkiewicz et al. [6].
- Tymkiewicz et al. [7].
- Winnicka-Jasłowska [8].

It is worth mentioning that the Silesian Metropolis has undertaken an important initiative. On November 16th 2017, during an inaugural conference – “Forum Przestrzeni” (The Space Forum), held at the Marshall’s Office in Katowice, a letter of intent was signed between the Silesian Voivodeship and 8 Stakeholders: The Silesian University of Technology, Silesian University in Katowice, University of Economics in Katowice, Academy of Art in Katowice, The Association of Polish Architects, The Association of Polish Town Planners, The Silesian Regional Chamber of Polish Architects, The Silesian Association of Communes and Poviats. Both the Silesian University of Technology and the Faculty of Architecture were represented by the dean of the faculty - Klaudiusz Fross. One of the forms of cooperation will include participation in the execution of “The Space Forum”.

Preamble of the letter: *“Being aware of the role and significance of the exceptional value that the resources of space and landscape offer in the process of a harmonious social and economic development of the region and striving for their potential to be used as best as possible, the Leader and Signatories of the following letter declare that they will undertake to cooperate for the sake of a rational use of the resources of the space and the landscape of the Silesian voivodeship.”*

During the press conference, Mr. Klaudiusz Fross, the Dean, stated that: *“...One of the most important elements is the public space. The life and well-being of the residents depends on its quality. As shown by scientific research, the best way to promote the city or the commune is to create compelling and attractive structures and public spaces. These places are often seen as the hallmarks of a given place. But what does a public space mean to a resident? A public space is a place which he or she wishes to visit, a place where he or she will feel good, which meets his or her needs and expectations, where there are numerous attractions, it is safe and there are also numerous facilities (toilets, food courts, parking lots, etc.). However, today’s expectations are constantly on the rise and by planning ahead we must meet them. At present, one would even expect a bench to be something more than an ordinary bench. One would like to see in it some additional functions like, for example, a smartphone charger. Such a bench was designed and built by the students of the Silesian University of Technology. It was also equipped with a solar panel. One should keep in mind that we design for all age groups. Proper planning should be started with an identification of user groups and their needs. Next, a program and a concept should be created and only then can we*

*proceed to civil engineering designs. It is also worth mentioning that the Silesian School of Qualitative Research, created at the Faculty of Architecture, at the Silesian University of Technology, is already 20 years old - we should take advantage of that.”* (Fross 2017).

### 3 Research Methodology

Research methodology as well as examples of already executed studies have been described time and time again in author’s publications:

- Fross and Sempruch [1].
- Fross [5].

In his assessment of the public space, the author applied reliable and long-used research methods for an “8-step” pre-design assessment (Fross 2012) devised on the basis of Post Occupancy Evaluation. Prepared on the basis of multiple cases (over 15 years), a research scheme allows people the possibility of a quick assessment based on specific criteria [1, 5].

Various techniques and research tools, in various configurations, have been applied. They included: participant observations, surveying, site inspections, targeted questionnaires, spontaneous conversations, way finding, photographing of the manner of use and user behavior, graphic analyses, attractiveness rankings of a given place, elements of small architecture.

The main criteria of the evaluation included: meeting the needs of various user groups, user satisfaction, universality, safety, functionality, comfort, multi-functionality, esthetics, technical quality, costs of investment, solutions economics, adequacy of solutions etc.

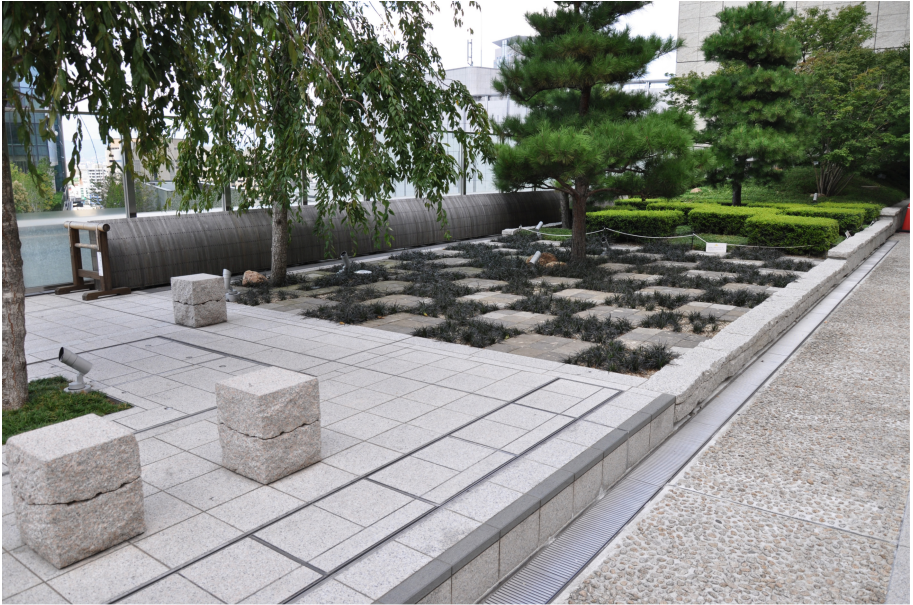
### 4 The Course of the Research Process

Public spaces which have recently been completed within towns and communes were chosen for research. The author performed an on-the-spot assessment by making an observation of its use and the behavior of the users. He went on to compile photographic records and performed a simplified qualitative assessment for the following categories: technical, functional, behavioral and economic quality. Next, he attempted at finding an answer to the following question: is the space attractive or multi-functional, does it meet the expectations and needs, is it adequate for the place where he/she currently is? In selected cases, more detailed assessments were performed, for example, by applying the technique of an unstructured interview in the form of a casual, spontaneous conversation. At each time there was an attempt to specify the correctness of the investments, program assumptions and the final effect that was produced through the prism of meeting the user needs. As the open-access space within a city, district, a settlement or a commune serves, as matter of principle, all users (both the residents and “visitors”) then a specially designed and developed public zone, built in the form of square, park etc. and offering a new quality, should also serve all

groups of users. Due to that fact, in the research process the focus was directed towards that very aspect, towards the needs of various user groups: little children, mothers with children, youth, adults, the elderly, the disabled, couples, multi-person groups etc (Fig. 1).



**Fig. 1.** Examples of the public spaces. What like or what not like people? Examples from Poland (EU): Marklowice “Tropical Island”, Katowice “European Congress Center”, Tychy-Paprocany, Rydułtowy “Fikołkownia” (Foto K. Fross 2012, 2017).



**Fig. 2.** Examples of the public spaces. What like or what not like people? Examples from Japan: Osaka (Foto K. Fross 2013).



**Fig. 3.** Examples of the public spaces. What like or what not like people? Examples from EU: Budapest (Hungary), Milano (Italy) (Foto K. Fross 2013, 2014).

At each time, during the inspection of a site/place, in order to find some answers, the author asked the following questions:

- *why would I come here?*
- *what would I do here?*
- *would I like to visit this place again?*
- *would I recommend this place as a noteworthy place?*

This question was asked in the context of trying to understand different users, not only as a personal assessment of the place/site. However, an expert assessment made by the author was of great importance in the matter (Fig. 2).

In the next part, in the form of a photograph, the collection of author's individual assessments of selected public spaces was presented. As part of a qualitative and observation-based assessment, it was supplied with descriptions and remarks (Figs. 3 and 4).



**Fig. 4.** Examples of the public spaces. What like or what not like people? Examples from Poland: Marklowice, Gliwice, Tychy, Marklowice (Foto K. Fross 2017).

## 5 Recapitulation and Conclusions

Questions provided in the previous point: *Why would I come here? What would I do here? Would I like to come here again? Would I recommend this place a noteworthy place?* constitute typical questions, often asked by users. Whenever children or teenagers are faced with the question: *Would you like to go there?* We often receive an



answer which is a question: *What will we do there?* These questions contain the whole essence of design, adequate and well-suited to the expectations of the public space. Public space is perceived as a place which meets the needs, a place which we often revisit and where we enjoy staying. Were there positive answers to all questions, then one could conclude that the public space had been designed correctly. We design for people so when the end users of a piece of architecture are happy, that means a job well-done. It was the author's intention not to touch upon the issues of esthetics, image, composition, urban context, reference to the existing building development etc. nor the elements of urban and architectonic design. It is because these elements should always be "there". They constitute the elements of the design workshop. Nevertheless, an interesting and intriguing composition or a fashionable design should never blot out the essence. "Graphic" design (as one of the users of a pretty but impractical space called it) cannot supplant the design based on fulfilling needs. At present, a park or a square which is merely "pretty" is definitely not enough.

At the time when there are multiple attractive forms of spending one's free time, at the time of information science development which means that everybody possesses a smartphone, which enables staying up-to-date, staying in touch with the whole family, friends, which enables access to information, films, games and music, etc. and at the time when the expectations and requirements as to the forms of spending one's free time are constantly growing, it is not easy to meet expectations. Active and attractive forms of spending one's free time are becoming more and more popular as people now value their free time.

### **And What About Public Spaces?**

Sometimes, spaces which are incredible in their composition and design, attractive for architects, look well on the cover of magazines, are in fact empty, impractical and nobody wishes to use them. They often constitute an artistic vision of the designer, which is totally out of connection with the needs – one could call them a wasted opportunity for designing a genuine public space, a space for all people, a space which would satisfy all their needs and expectations.

Everything comes down to the planning and programming phase. In the world of today, without professional knowledge of any discipline, it is really difficult to reach success, especially in investments where one must take into consideration not only the risk, competition, a galloping pace of technological development, ever-changing expectations, but also the end user, above all. The end user is the one who will assess the product (structure, space), the work of architects, as well as the assumptions of the investor. Investment decisions as well as decisions connected with the design, which are based on surface premises or just intuition, might not be appropriate and could be encumbered with the risk of multiple errors, as well as complete failure. An ill-prepared, erroneous in its intent and targets, functional and spatial plan of the building or any other structure may not bring about the anticipated effects and, as a result, can put paid to the resources and means used (Fross 2012, 2015).

Since all users are more or less familiar with the public spaces which they use, then why not take advantage of that knowledge at the planning, programming and designing stage to prepare that new investment correctly and rid it of any potential threats and risks of failure (lack of approval on the part of the users/occupants).

What are the elements of a “well-prepared” public space? For a certainty, these elements will include: play and recreational attractions adjusted to various age groups, (something suitable for all groups including interactive, innovative, intriguing and educational facilities), various sitting places, elements which ensure the feeling of safety (CCTV, security, fencing, division, sanitary equipment for example WC, influence on the comfort in use and its service-time), well groomed and organized green space, functional and decorative night lighting (which prolongs service-time and ensures the feeling of safety). To improve the quality of the recreational space, elements which were never considered in the past, such as fencing, security, a WC, should now be provided. They have an influence on the growth of comfort, safety and also on property protection which helps maintain high quality. What is also necessary is the cost analysis, the cost of maintenance and the cost of maintaining cleanliness. Moreover, one should also ensure protection and preventive measures against all acts of vandalism and devastation (Fross 2015) [2].

Investment plans, business targets, functional programming as well as the process of design all require professional knowledge which may only be acquired through qualitative research. At present, *Design by Research* is not an option, it is a duty and necessity. Qualitative research constitutes universal methods of assessing all types of structures, and at the same time it helps recognize the needs of users. Thanks to the results of the assessment, we now are able to take correct decisions which minimize the risk of making an error. In the design practice (at the pre-design stage, in programming). This is the perfect way to take advantage of the norms and standards of the best practice and the best way to avoid incorrect solutions.

## References

1. Fross, K., Sempruch, A.: The qualitative research for the architectural design and evaluation of completed buildings – part 1 – Basic principles and methodology. *Archit. Civ. Eng. Environ. ACEE* **8**(3), 13–19 (2015)
2. Fross, K., Sempruch, A.: The qualitative research for the architectural design and evaluation of completed buildings – part 2 – examples of accomplished research. *Archit. Civ. Eng. Environ. ACEE* **8**(3), 21–28 (2015)
3. Fross, K., Winnicka-Jasłowska, D., Gumińska, A., Masły, D., Sitek, M.: Use of qualitative research in architectural design and evaluation of the built environment. In: Ahram, T., Karwowski, W., Schmorow, D. (eds.) *Proceedings of the 6th International Conference on Applied Human Factors and Ergonomics 2015 and the Affiliated Conferences, AHFE 2015, Las Vegas, USA, 26–30 July, 2015*, pp. 1625–1632. Elsevier (2015). bibliogr. 19 poz
4. Fross, K., Ujma-Wąsowicz, K., Wala, E., Winnicka-Jasłowska, D., Gumińska, A., Sitek, M., Sempruch, A.: Architecture of absurd. In: *18th International Conference, Human-Computer Interaction, HCI International 2016, Toronto, Canada, 17–22 July 2016*, Springer (2016)
5. Fross, K.: Architect-researcher as a model combination of research and design practice on examples. In: Charytonowicz, J. (ed.) *Advances in Human Factors and Sustainable Infrastructure, Proceedings of the 5th International Conference on Applied Human Factors and Ergonomics AHFE 2014, Kraków, Poland, 19–23 July 2014, Las Vegas (2014)*. ISBN 978-1-4951-2092-3

6. Tymkiewicz, J., Winnicka-Jasłowska, D., Jastrzębska, M.: Pre-design studies on the example of modernization project of geotechnical laboratories. *ACEE Archit. Civ. Eng. Environ.* **10** (2), 43–52 (2017). bibliogr. 14 poz
7. Tymkiewicz, J., Winnicka-Jasłowska, D., Jastrzębska, M.: Ergonomics of laboratory rooms - case studies based on the geotechnical laboratories at the Silesian University of Technology. *ACEE Archit. Civ. Eng. Environ.* **10**(2), 35–41 (2017). bibliogr. 17 poz
8. Winnicka-Jasłowska, D.: Quality analysis of Polish universities based on POE method - description of research experiences. In: Antona, M., Stephanidis, C. (eds.) 9th International conference on Universal Access in Human-Computer Interaction, UAHCI 2015 held as part of HCI International 2015, Los Angeles, CA, USA, August 2–7, 2015. Proceedings. Pt. 3, Access to learning, health and well-being, pp. 236–242. Springer, Cham (2015). bibliogr. 11 poz