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Sebastiano Marconcini: URBANO MERILO VKLJUČEVANJA: RAZMIŠLJANJA IN PREDLOGI ZA DOSTOPNE JAVNE PROSTORE

THE URBAN SCALE OF INCLUSION: REFLECTIONS AND PROPOSALS FOR ACCESSIBLE PUBLIC SPACES

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IZVLEČEK

Grajeno okolje ima ključno vlogo pri spodbujanju človekovega dobrega počutja in družbenega sodelovanja, v zadnjih letih pa sta dostopnost in vključevanje postala osrednji vprašanji evropskih politik za trajnostni razvoj. Vendar pa današnje načrtovalske prakse izkazujejo več kritičnih točk glede navezovanja na kompleksnost človekovih potreb, ki jih morajo vključujoči kraji izpolnjevati, predvsem v urbanem merilu. Zato je potreben nov premislek o procesih urbanističnega načrtovanja in oblikovanja, in sicer z analizo omejitev, ki jih grajeno okolje predstavlja, in možnih rešitev, s katerimi bi te omejitve presegli. Pri tem bi morali načrtovalci prevzeti novo vlogo pri upravljanju materialnih in nematerialnih sestavin, ki morajo označevati vključujoči pristop k načrtovanju.

KLJUČNE BESEDE

javni prostor, vključitev, dostopnost, človekove potrebe, družbeno sodelovanje, urbano merilo

ABSTRACT

The built environment plays a key role in fostrering human well-being and social participation and, in recent years, accessibility and inclusion have become central issues in the European policies for sustainable development. However, today's design practice has revealed multiple criticalities in answering to the complexity of human needs that inclusive places should meet, especially at the urban scale. For this reason, it is necessary to rethink the processes of urban planning and design through the analysis of the limitations, and the possible solutions to overcome them, that the built environment presents. In particular, planners should play a new role in managing the tangible and intangible components that must characterize an inclusive design approach.

KEY-WORDS

Public space, inclusion, accessibility, human needs, social participation, urban scale

1. INTRODUCTION

Several phenomena that the contemporary society is facing, such as the aging society and the risen multiculturalism, have made accessibility and inclusion two key points in European policies and strategies for sustainable development.

Provide proper solutions to everyone's needs, regardless of a person's level of abilities, has become an unavoidable design requirement, to which new methodologies such as *Universal Design*, *Design for All* and *Inclusive Design* have tried to answer since the end of the eighties. Although they have been developed in different places and at different times[1], assuming these various denominations, these design approaches have a common purpose: to guarantee social participation, through spaces, products and services that respond to the needs of the greatest possible number of people.

Since its early stages of development, the main implementation of Universal Design has been in the field of products design and communication. However, it later has evolved on larger-scale projects, as well as the other approaches. This transition towards a new understanding of the influence that the built environment has on everyone's life has been possible through the redefinition of the concept of disability. The United Nations Convention on the Rights of Persons with Disabilities (2006) defines it as the result "from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others". Prior to that, a fundamental document was the International Classification of Functioning, Disability and Health [ICF] (2001) by the World Health Organization (WHO), a tool introduced to assess a person's health and well-being. In addition to physical conditions, this classification system acknowledges that people's functioning and their ability to do personal activities and participate in life situations are influenced by contextual factors. The latter are divided into environmental factors, the physical and social features of the surroundings in which communities live their lives, and personal factors, which involve the particular background of an individual, e.g. the cultural one.

Nevertheless, the current design practice still has numerous difficulties in embracing this vision of the built environment, and subsequently of accessibility, as a set of several factors to deal with simultaneously.

2. TOWARDS INCLUSIVE ENVIRONMENTS: THE CHALLENGES OF PUBLIC SPACE

Stemming from these premises, this paper aims to re-open the debate on the role public space plays in people's daily lives, particularly by focusing the discussion on the components of the public realm on which urban planning and design can intervene to provide a better level of accessibility within cities.

2.1 Well-being and human development: the relationship between people and public space

In order to understand why a city and its places can have a great effect on human beings' everyday experience, it is fundamental to introduce two concepts: well-being and human development.

When they first introduced the theories of the Capability approach, A. Sen and M. Nussbaum (1993) define well-being as what people can be or do in relation to the available resources and their potential capabilities to promote or achieve functionings they value. According to this perspective, A. Sen (1999) highlight how "development can be seen, […], as a process of expanding the real freedoms that people enjoy". In particular, in the first report of the United Nations Development Programme (1990), human development has been defined as "a process of enlarging people's choices" and "the most critical of these wide-ranging choices are to live a long and healthy life, to acquire knowledge and to have access to the resources needed for a decent standard of living". The same document set the main objective of "at least create a conducive environment for people, individually and collectively, to develop their full potential and to have a reasonable chance of leading productive and creative lives in accord with their needs and interest".

Everyone's goal is to achieve a life to which give value and that is worth living, through the development of work, recreational and cultural activities within the community a person belongs. The same concept was expressed by the American psychologist A. Maslow (1943) and his "Theory of Human Motivations", which pointed out among the basic human needs those of belonging, self-esteem and self-realization[2]. The latter are closely related to the fulfillment of the previously mentioned activities and the subsequently feeling of accomplishment as expression of someone's full potential.

What has just been said is particularly important for public spaces, since they are the place of social participation and where (or at least the connection between the locations where) the main activities take place. For this reason, their physical configuration and transformation processes in which they are involved have the ability to limit or enhance people's freedom in achieving their functionings.

2.2 Places "for all": the objectives of urban planning and design

Although its scope of intervention can be broad and without clear boundaries, the final aim of urban planning and design is clearly to build spaces for people.

1 The first definition of *Universal Design* was given by American architect Ronald Mace in 1985 and then, in 1997, the Center for Universal Design, an initiative of the College of Design of the North Carolina State University, defined its 7 Principles. In 1993, the European Institute for Design and Disability (EIDD - *Design for All* Europe) was established and through the Declaration of Stockholm, in 2004, was set the purpose of the Design for all methodology. The *Inclusive Design* approach is principally linked to the British area, since its definition and principles where defined in 2005 by the British Standard Institute and the Commission for Architecture and Built Environment (CABE).

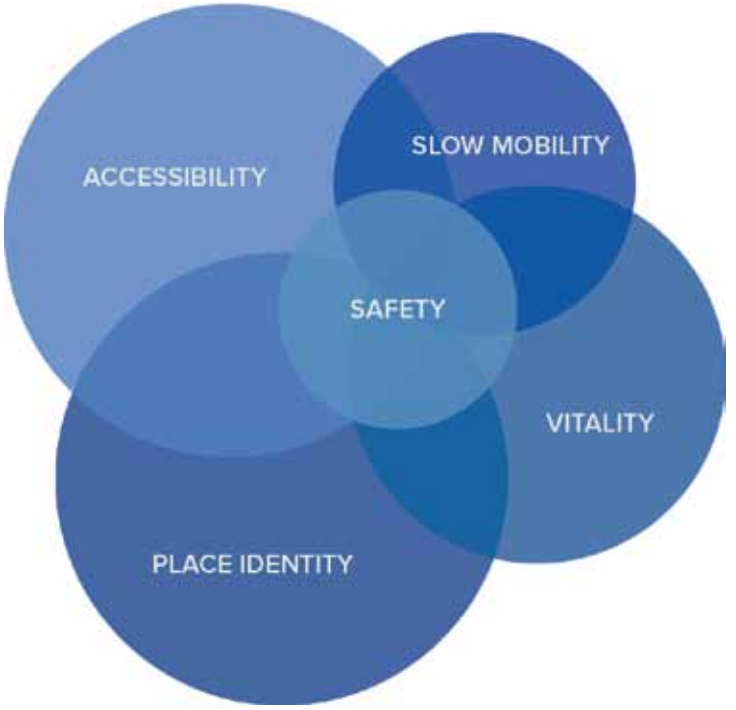
2 In particular, Maslow's hierarchy of human needs was based on a five-stages pyramidal model (from bottom to top): physiological needs, safety needs, belongingness and love needs, esteem needs and, finally, self-actualization needs.

The complexity of public space design is well expressed by the division in six fundamental dimensions that according to M. Carmona et al. (2010) allow to depict the overall pictures of the issues related to the urban environment: the morphological dimension, the perceptual dimension, the social dimension, the visual dimension, the functional dimension and the temporal dimension.

From their analysis, it is possible to identify some cross components that characterize the different dimensions and therefore contribute to the definition of macro objectives to be pursued for the enhancement of public space in contemporary cities. Here, it is proposed the development of five main goals (as shown in Figure 1):

- *Accessibility*, which allows all the potential users of urban environment to access public spaces and buildings, thus favoring the processes of social integration;
- *Place Identity*, which helps to answer the human need to feel part of a community and to express an own personal identity, thus favoring the processes of cultural integration;
- *Vitality*, which favors different aspects of the public realm, contributing to the development of social relations and the activation of local economies, which can only develop in the presence of a constant demand in public space;
- *Slow Mobility*, which, by limiting vehicular traffic, fosters the presence and permanence of people within public space and, consequently, the development of all social activities;
- *Safety*, which is an element that greatly influences the use of public space and in turn improves the vitality of the public real, avoiding the development of situations of social decline.

Figure 1: Urban design objectives for the development of inclusive public spaces.



Given the purpose of this paper, what has been stated until now enables to highlight two key topics[3]. Firstly, urban planning deals with both tangible and intangible components of the built environment, a fundamental issue also in the design strategies to foster accessibility. This implies not only the need of urban re-shaping actions, but also a series of urban managing actions, handling the immaterial effects of city transformations, which could be experience both a top-down or a bottom-up approach. Furthermore, physical accessibility is only one of the parameters through which guarantee places meant "for all". For this reason, the focus of the cultural debate has been shifted from accessibility to inclusion, as the only condition capable of taking into account all the different social, cultural, economic and environmental factors affecting people's ability to participate in the life of a community.

3. TOWARDS AN INCLUSIVE PLANNING: THE CHALLENGES OF URBAN DESIGN

The following section focuses on the analysis of the different parts of the urban environment and their features that must be assessed in order to foster people's public participation. Although previously it has been recognized the complexity of the issues the topic of inclusion deals with, the attention of this paper will be primarily set on the physical accessibility, considered a feasible target. However, it will be described how the physical supports intended for people with particular impairments, like the sensorial ones, could be useful to overcome cognitive barriers, furthering e.g. intercultural dialogue.

3.1 Methodological approach

The reflections presented in this article belong to a broader research aimed at the definition of inclusive design practices and policies, especially regarding historical context´s. From the methodological point of view, the outcomes about the current limitations of public space in fostering inclusion are the results of a literature review and an empirical investigation applied to Mantua[4]. In particular, the latter has been development through on-site surveys and the distribution of a questionnaire, concerning the perception of the accessibility level in Mantua, distributed to a sample of city users. In addition, a further fundamental step has been the identification and the study of numerous case studies of cities that have started to develop inclusive practices, not that can be found within the cities but also

3 For a further detailed study concerning the topic emerged within the paper, it's possible to refer to the wide literature on urban design developed by great authors such as J. Jacobs, K. Lynch, W. H. Whyte, J. Gehl and S. Porta.

4 Mantua (Mantova) is an Italian city located in Lombardy region, entered in the UNESCO World Heritage List in 2008, along with the site of Sabbioneta, as extraordinary examples of Italian Renaissance urban centers.

to observe how they can be overcome. A primary reference of this process has been the *Access City Award*, a recognition that celebrates, since 2011, the cities of the European Union committed to the construction of inclusive environments.

3.2 Real users and real needs: the subjects of urban planning and design

Before proceeding on the investigation of the features of the built environment affecting people's lives, it was essential to develop the necessary knowledge around real human needs, above all for those with special ones. The focus on the necessities rather than people's characteristics allows the transition from dedicated design solutions, aimed to solve requirements for specific disabilities, to a fully inclusive view of the project.

For design purposes, it is possible to identify two main categories, able to contain within them the complexity and diversity of human needs (as shown in Figure 2):

- *Physical needs framework*, the necessities that a person presents in moving and using the objects or other elements located in the built environment, regardless of his physical characteristics;
- *Sensorial and cognitive needs framework*, the necessities that a person presents in relation to the activities of orientation and localization, in addition to the ability to communicate and relate to persons and objects in the space, regardless of his sensorial and cognitive abilities.

3.3 City components and design opportunities in the development of inclusion

The brief theoretical framework here introduced sets the basis for the discussion around the components that urban planning and design must consider in the process for the development of inclusion (as shown in Figure 3).

The first aim is to ensure that all public spaces and facilities are physically accessible to all. The principles of the different approaches of Universal Design, Design for All and Inclusive Design represent the main reference in providing full inclusive solutions. However, even if a building, a square or a pedestrian path are designed according to these recommendations, this doesn't imply that they are completely accessible. All this point of interest and the surrounding spaces of the city must be reconnected within an urban system, to let everyone move independently and safely between them.

In connection with this, another fundamental aspect is that urban planning must deal with urban mobility and public transport. Through the questionnaires distributed in Mantua, it was possible to highlight how city users consider inappropriate public transport services one of the main reason why they cannot access the urban environment. The importance of this component is also represented in the Access City award, which always provides a special mention for inclusive transport and related infrastructure, including e.g. the cities of Ljubljana, Malaga and Budapest.

Figure 2: The two main frameworks describing the complexity of human needs.

A further essential factor that can foster inclusion is information, as acknowledged by literature review, people's opinions from the questionnaire and some specific design solution highlighted by the Access City Award. Information is indispensable to ensure the ability to access and move in the built environment and the current success of digital maps has widely recognized it. In particular, people with disability need to receive as much data as possible, in order to know the level of accessibility of a place and be able to organize their movements, according to their personal needs and the possibilities offered to them through specific proposed services. For this reason, it is necessary to intervene on two elements: on the one hand, to provide the physical supports to use in the process of way-finding, regardless of the physical, sensorial and cognitive abilities of a person, within the urban environment; on the other hand, to implement information technologies (ICT) as a tool that sometimes represent the only possibility to guarantee everyone access or experience a particular context, e.g. cultural heritage sites.

The issue of information has introduced the intangible dimensions that urban planning and inclusion have to address. From this point of view, another necessary action is to foster social and economic participation. Work and recreational activities have been already mentioned as fundamental needs of a person and, for this reason, it is important to establish programs to assure everyone this opportunity. In this regard, *InovAccess* is an interesting project developed by the city of Grenoble (France), though which the municipality and the local business companies have been collaborating to favor the employment of people with disabilities, parallel to the elimination of architectural barriers within the city. In addition, the direct involvement of stakeholders in administrative decision-making processes makes it possible, as well as encouraging active participation, to guarantee the effectiveness of the identified solution, proposed on the basis of their real needs.

Figure 3: City components that have to be taken into account for developing inclusive urban environments.

A final consideration is related to education, since inclusion is (also) a matter of culture. From a professional point of view, accessibility has been slowly introduced in the programs of universities only in recent years. The current professionals didn't receive this training, so it is necessary to promote educational activities among them. In addition, raising citizens' awareness on inclusion is another key issue. From the questionnaire, it has emerged how in the urban environment certain people's "bad behaviors", like parking cars and bicycles on the sidewalk, can become great criticalities. Not only because they can become actual "architectural barriers", but also because, as unexpected obstacles, they are a source of danger (e.g. a visually impaired person could fall on it) or force people in unsafe conditions to avoid them (e.g. walk on the roadway to turn around them). For this reason, raising awareness on these themes is an essential action and everyone could help improve inclusion in public space.

4. CONCLUSIONS

The paper has briefly introduced the topic of inclusion, in all its complexity, and the importance for which it must be considered as one of the interpretative keys and no longer an option of urban design.

However, the principal aspect that the discussion has tried to highlight is that a fully inclusive design approach requires to work at the urban scale, as the only one able to embrace all the different components that must be taken into account to guarantee everyone the right to social participation. To strengthen what has just been said, the description of the approaches to overcome the limitations of current public spaces, especially their tangible and intangible outcomes, has emphasized the necessity to look at inclusion as a system of interrelated solutions that can only be controlled at a large scale.

If this series of suggestions provides some basic recommendation useful to approach inclusion, the latter requires additional efforts to guarantee the effectiveness of the proposed actions. The complexity of the inclusive project is linked to the complexity of its management, which requires the involvement of numerous stakeholders. Therefore, the definition of new governance models and tools that could help in managing and monitoring inclusion in the urban environment are the expected further developments of this discussion, in order to guarantee everyone the possibility of accessing public space resources.

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