Working against Exclusion: Design for All as a Tool for Improving Social Participation

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This paper should be cited as follows:

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Abstract

The designed world doesn’t suit anyone perfectly. At times, we all have problems with the spaces we live in and the products we use, which according to the dramaturgical perspective in different ways may affect our ability to play specific roles. So, disability (in a broad sense) is a common condition, and more pervasive than many people realize. Most likely, everyone will experience disability in his or her lifetime, even if only temporarily (in its physical social or cultural meaning). The environment (including society) in which we live is created for a mythical “average” group of people, but in fact this group does not exist. Every individual is unique and as a group, the human species is quite diverse. It is possible to design an environment to suit a broad range of users, (including: children, older adults, people with disabilities, people of atypical size or shape, people who are ill or injured, and people inconvenienced by circumstance). This approach is known as Universal Design (or Design for All, Inclusive Design, Accessible Design) which can be defined as the design of products and environments to be usable to the greatest extent possible by people of all ages and abilities. Universal design respects human diversity and promotes inclusion of all people in all activities of life. The article is a presentation of the idea of Universal Design as a way of creating social participation. The theoretical analysis will be supplemented with presentation of selected solutions in universal design implemented in various countries including their socio-cultural context.

Keywords: Disabilities, social exclusion, design for all.
Introduction

“Good design and place management can contribute to a more widespread sense of belonging and can foster good relations between, and within, communities. Our sense of being at ease and belonging are strengthened by positive contact with neighbours and by being involved together in decisions about the spaces and places we share.”

In the early 20th century, the elderly and people with disabilities were true minorities. The average human life expectancy was only 47 years old and those who received spinal cord injuries has only a 10% chance of survival. Due to healthier living, better medicine and sanitation People are living longer today, and average life expectancy has increased to 76. The World Health Organization (WHO) estimates that only 10 percent of the world’s population experience some form of physical disability, mental or psychological impairment.

The consequences of disability is one of the major reasons for peoples’ exclusion from participation in social life. In order to minimize this phenomenon, there are taken different ways of involving people in society. It is mainly a part of social policy but we also can observe that this issue became one of areas of designers’ activity. The reason for writing this text became a curiosity to look at the problem of social exclusion through various kind of disabilities not only from the social sciences, but also specialists actually affect the shape of the environment in which we live - urban planners, architects and designers. Through the concept of universal design is possible to see how people can be included in the society using design’ tools and methods in creating environment in order to minimize the risk of social exclusion.

Disability in the Modern World

Data and Models of Disability

According to an official Eurostat website we can analyze disability taking into account the two definitions of the phenomenon.

The first definition assumes that disability means that people have a basic difficulty of activity (such as sight, hearing, walking, communication); in the second definition it assumes that disability concerns persons who are limited in

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the work due to long-term health problem. The employment rate of people with the basic problems of activity according to first definition in the EU-28 in 2011 was 47.3%, almost 20 percentage points lower than those without such problems. At the national level, the biggest gap in employment rates were in the Netherlands (43% and 80%) and Hungary (24% and 61%). Due to second definition of disability the employment rate observed in the EU-28 level for this category is surprisingly lower (38.1%), almost 30 percentage points less than people who do not declare restrictions at work.4

The multiplicity of directions in research and reflection on disability translates into a multitude of theories about its various aspects: from the strictly biological to the only social. These theories correspond to the three main models of disability: medical, functional, and social.

- **Medical model** takes into account the definition of the WHO, which states that impairment means each performance degradation or irregularity in the construction and functioning of the body in respect of psychological, physical or anatomical and psychosocial the consequences of this the absence / disability. In this context disability = impairment.

- **Functional model** – disability means any restriction or inability to lead an active life in a way or in terms recognized as typical of the man of similar age and the same sex. WHO definition also says that this inconvenience (handicap): restriction or inability to complete implementation of social roles corresponding to age, sex, and consistent with the social and cultural circumstances. In this context disability = handicap.

- **Social model** – according to the definition of the British Council of Disabled People disabilities means lack or limitation in human activity due to the modern social organization in which is not taken into attention the needs of people with physical injuries and difficulties in learning. As a consequence they are excluding from the main stream of social life. In this context disability = oppression by the society.5

The most common type of disability is a restriction of movement, hearing and communication. We can expect that aging of society will influence on the general rate disability. Even if medical progress, positive changes in health behaviour, preventive and improvement in the provision of health care services to slow this trend, their impact is unlikely to be large enough to reverse the effects of aging.6 One of the most serious consequences of disability can be an

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5 Anna I. Brzezińska, Radosław Kaczan, Karolina Smoczyńska (red.), 2010, *Diagnoza potrzeb i modele pomocy dla osób z ograniczeniami sprawności (Diagnosis of needs and models of assistance for people with reduced efficiency,)*, p.17-18, Scholar, Warszawa
exclusion from participation in social life. Therefore in the debate of condition and development of modern society is taken a discussion on how to incorporate in the stream of society people who for various reasons could be on the margin of social life.

**Social Exclusion and Its Consequence**

*Social Exclusion in Definition*

One of the leading researchers of the problem of social exclusion - Hilary Silver wrote that this phenomenon is usually defined as the gradual dynamic multi-dimensional cracks in the "social bond" at the level of individual and collective.

By social relations, institutions and imagined social cohesion of the identity of belonging, acting integration or solidarity. Social exclusion prevents full participation in normatively prescribed activities in the society and denied access to information, resources, sociability, recognition and identity, destroying respect for each other and reduce the opportunities to achieve personal goals.

Social exclusion is the process social isolation, of stripping away many dimensions of social engagement. It entails an active relationship between the excluders and excluded.

As Hilary Silver says in social studies, important is how we measure the dimensions of exclusion because indicators can include multiple dimensions of social exclusion: financial situation, ownership of durable goods, the quality of housing, neighbourhood perceptions, personal, social relationships, physical health and mental well-being. It can be measured as a multi-dimensional disadvantage in housing, health, education, social relationships and participation. We have sets of indicators of ‘participation in ‘normal’ activities of society’: (1) production (those still economically active who are not engaged in socially valued activity); (2) consumption (less than half the mean net household income) and savings; (3) social interaction (lacking someone who will offer support (listen, comfort, or help in a crisis) or having someone to relax with or who really appreciates you), (4) political engagement (those who do not vote or belong to political organisations); and most important for our purposes”.

According to the authors of Report on Social Inclusion edited by European Commission the major structural changes identified in this Report recognised as important factors which are impacting on poverty and social exclusion, are:

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9 ibidem, p.32
- long-term dependence on low/inadequate income,
- long-term unemployment,
- low quality or absence of employment record,
- low level of education and training and illiteracy,
- growing up in a vulnerable family,
- disability, health problems and difficult living conditions,
- living in an area of multiple disadvantage,
- housing problems and homelessness,
- immigration, ethnicity, racism and discrimination.

Role of Social Participation

Exclusion from social life refers to denied participation in different aspects of life activity. We have lots of evidence that through engagement in social network, all the life challenges have a chance not only to be better perceived but also conducted. Participation is a conviction that involvement means an opportunity to express own views and take advantage of the inherent rights such as: membership in social organizations, contacting local and state officials, discussing problems with neighbors, participation in public meetings and assuming a role in decision-making process\textsuperscript{10}. To prevent social exclusion (of seniors or people with disabilities) very important is to have supporting people who can ensure participation in social life.

That is why it is said that the disability community includes not only disabled persons themselves, but also their caregivers. In addition, it includes families and friends who want to accompany people with disabilities, wherever they want to go. Exclusion from other activity aspects of life requires action in many policy areas. One of the areas in which the debate on social integration is important and often in professional practice is the area of design.

Inclusion by Design

Contemporary Concept of Design

The term design is open to varied interpretations and it has got a range of definitions that have been offered and applied. Traditionally, design was seen as an exception limited to luxury segments that could appreciate a product’s artistic value. The products should have been stylish and aesthetic. Design is now spreading in different fields far beyond the luxury sell, low-tech industries and rapidly redefining its character and its role in the process of innovation\textsuperscript{11}.

Changing demographics and attitudes towards active participation of the elderly or with people disabilities in social life are fuelling the demand for accessible products, housing, and environments. These changes indicate a wide

\textsuperscript{10}Probosz M., Sadura P., 2011, \textit{Konsultacje w społeczności lokalnej: planowanie, przygotowanie, prowadzenie konsultacji społecznych metodą warsztatową} (Consultations in local community: planning, preparation and conducting the public consultation with workshop method), Instytut Socjologii Uniwersytetu Warszawskiego, Warszawa, p.5

\textsuperscript{11}Lojacono G., 2002, \emph{Design e posizionamento delle imprese}, (Design and positioning of companies), Economia & Management, n.4
range of opportunities for designers who can increase or reduce feelings of security, stretch or limit boundaries, promote or reduce mobility, and improve or damage health.\textsuperscript{12} Despite that the accessibility has improved over the last years, the fact remains that disadvantaged people are live in poor quality environments. Social, economic and cultural inequalities are still being built and designers need to examine more closely the force of their decisions.\textsuperscript{13}

That’s why more design professionals have urged that design should have a social responsibility to bring benefit not only to the majority but also the minority who most of the time are deprived. For many years “designers would first consider the space and facilities for the majority, and then put the minority in second place in their consideration list. This is the reason why so many elevators (giving assistance to older people and persons with physical disability) are installed in inconvenient locations in rail stations while escalators (for the general public) are installed in the middle or in convenient locations”\textsuperscript{14}.

In this perspective, design is becoming the synthetic expression of a wide range of activity, including product innovation, communication, adding social inclusion value. Earlier definitions of the designer’s work emphasized the broadcasting of an aesthetic quality for objects, whereas nowadays more and more definitions are requiring the participation of users, enterprises whose involvement can affect the quality of the final result of the designer's work. Designers’ contemporary work goes beyond such understanding of designing and they themselves can do much more for the surroundings than their predecessors. With the innovative and socially-conscious approach to designing (universal design, sustainable design) designers enable more efficient, innovative and user-oriented action. Their role is both in generating innovative solutions and building a dialogue with a recipient in a broader context. Well-designed services, public space or communication systems do not only influence the quality of the surroundings but they also engage users in the process of ultimate defining of needs and priorities. Without the backing of such activities it would be difficult for the recipient to diagnose a problem and also create the atmosphere conducive to the planned changes. The contemporary role of a designer must be noted that design is not only stylization, functionality and aesthetics. The value of the designer’s work refers in equal measure to the fact that they create a unique design as well as ensure extra activities and services such as increasing social participation of people at risk of exclusion. One of the trends in design, where these problems have become a priority for the project is the area of Design for All (also called Universal Design, Inclusive Design), which simply means designing all

\textsuperscript{12}Mace Ronald L, Graeme J. Hardie, Jaine P. Place,1991, Accessible Environments: Toward Universal Design., The Center For Universal Design, North Carolina State University, NY, p.4
\textsuperscript{13}Inclusion by design. Equality, diversity and the built environment, 2008, Commission for Architecture and the Built Environment., p.3
products, buildings and exterior spaces to be usable by all people to the greatest extent possible.

**Universal Design as an Idea**

Thinking about design as an idea of social inclusion has begun from The Civil Rights Movement of the 1960s. One of the example was The barrier-free movement which began a process of change in public policies and design practices which recognized that physical barriers in the environment were a significant hindrance to people with mobility impairments. The main challenge of universal design (design for all) is to integrate people with disabilities into the mainstream of social life and attempts to meet the specific needs of minority. We can point two interpretation of universal design: “The design of products and environments without the need for special adaptation or specialized to be usable by all people, to the maximum scope as it is possible.

In older definition the idea of universal design was originally focused on usability but nowadays its emphasis has expanded to social inclusion. The first definition reflects its roots in the disability rights movement, the second is more appropriate to all citizens without ignoring people with disabilities. Its focus on social inclusion is, in fact, consistent with the current paradigm of disablement theory in which the outcome of interventions to ameliorate the negative impact of disability is both improving function and improving social participation (WHO, 2011).”

One of the most important tasks in today's society is to create worlds for all people who diverse in all aspects, no for average but for extremely users. Only in this kind of thinking is possible to satisfy the needs of diverse population. People will always be of various ages and have different abilities so design can be a tool for occur in this a valuable heterogeneity. As theorists say universal design are generally no more expensive than traditional features. It is needed to be made aware of the trend toward stricter accessibility standards in employment, housing, education and public services. Designers will be faced with a choice: reluctant compliance with minimum accessibility standards, or a positive, sensitive offering of universal design services. Older people and people with impairments are particularly disadvantaged, therefore design processes address how products, communication systems, buildings, public utilities and spaces can suitable functional and aesthetically for the greatest number of users. Advocates of universal design acknowledge that poorly designed products and environments are discriminatory and disable

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16 Mace, Mace, R., 1985, Universal Design: Barrier Free Environments for Everyone. Los Angeles, CA: Designers West., p.78
17 Steinfeld Edward, 2013, Creating an inclusive environment, Trends in: Universal Design An anthology with global perspectives, theoretical aspects and real world examples, Norwegian Directorate for Children, Youth and Family Affairs, page 52
large sections of the population at various stages in the life course. We can analyze the universal design on a micro, meso and macro level. As Inger Marie Lid says the micro level relates to different individuals, inclusion and self-respect. Universal design products, environments, programmes and services should be “usable for all people to the greatest extent possible”. Experiencing access contributes to giving individuals a social basis for self-respect as equal citizens. At the meso level, the physical barriers hinder people from taking part in life and society as citizens is addressed by technical standards in planning and building regulations. Disability can emerge in concrete situations if technical standards do not include the perspective of people with impairments. At a macro level, universal design is an ethical and political concept based on democratic values aiming at social inclusion. At this level, universal design expresses recognition of people as different and equal. Universally designed products and environments are based on the following seven principles:

1. Equitable Use: The design is useful and marketable to people with diverse abilities.
2. Flexible in Use: The design accommodates a wide range of individual preferences and abilities.
3. Simple and Intuitive: Use of the design is easy to understand, regardless of the user’s experience, knowledge, language skills, or current concentration level.
4. Perceptible Information: The design communicates necessary information effectively to the user, regardless of their sensory abilities.
5. Tolerance for Error: The design reduces hazards and adverse consequences of accidents.
6. Low Physical Effort: The design allows efficient usage with minimum effort.
7. Size and Space for Approach and Use: Appropriate space is provided to enable comfortable and effective use for anyone regardless of physical and sensory ability.

Universal Design as Practice

With quite comprehensive notion of universal design searching for good practices especially it is worth referring to examples which promoting the concept of social inclusion by design. Such special design improves lives and makes things better allowing older people to complete activities of daily living without particular problems.

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Table 1. Examples of Universal Design Techniques that Will Older People to Complete Basic Activities of Daily Living And Instrumental Activities of Daily Living with Greater Ease

<table>
<thead>
<tr>
<th>Activities of daily living</th>
<th>Examples of universal design</th>
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<td><strong>Basic Activities of Daily Living</strong></td>
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| **Bathing** | • Make provisions during construction to reinforce walls in the shower area to facilitate future installation of grab bars  
• Bathtub/shower controls positioned to allow for operation outside the fixture  
• Lever handle faucets  
• No threshold walk-in shower |
| **Physical ambulation** | • No threshold, zero step entrances  
• Wider doorways and corridors  
• Straight staircases with consistent risers |
| **Toileting** | • Make provisions during construction to reinforce bathroom walls to facilitate future installation of grab bars by the toilet  
• Installation of a downstairs bathroom  
• Adjustable toilet and sink for easy access, with a short reaching distance to paper dispenser and grab bars |
| **Instrumental Activities of Daily Living** | |
| **Food preparation** | • Kitchen counter tops at varying levels to accommodate standing and seated users, and people of varying heights  
• Kitchen cabinets that accommodate limited reach ranges and allow various ways for approach and manipulation  
• Color contrasts, large-print readouts, audible and tactile feedback of controls  
• Close access to ovens with counter space directly next to the oven |
| **Shopping** | • Lowering or making height adjustable electronic devices used in typical purchasing transaction (i.e., credit card reader/swipe;  
• Larger print on signs indicating aisle numbers and locations of goods, and on packaging of items  
• Larger aisle ways  
• Automatic powered doors at entrances and exits |
| **Transportation** | • Complement higher-order roads (i.e., interstates) with lower-speed, two lane through-routes  
• Connect local street networks within communities to create short drives and walking distances |


**Conclusion**

It is worth noting that the role of design goes far beyond the project itself. Contemporary design is in fact strongly linked to the educational function and the proposed solutions often are meant to influence the authors of changing attitudes and social behaviour. Therefore in the process of building inclusive society, is often highlighted the conscious participation of groups that are or can be excluded from the main stream of social life. Universal design can be seen as a philosophy that requires enlarged attention from designers, planners
and architects that the application of its rules means to built environment that is conducive for successful aging. Certainly, it is worth emphasizing that applying this principle we also meet the needs of others, those, who currently do not suffer from any dysfunction. Universal design means indeed the design for each of us. In this way we minimize the risk of social exclusion and economic costs of helping dependent persons. It is worth noting that the exclusion carries consequences not only for the individual but as we can see, even for the whole society. We often lose the valuable people from social life, that is why promotion and support for such ideas like universal design should be strongly highlighted in interdisciplinary discussion.

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