

ARCHITECTURE PAPERS
OF THE FACULTY OF ARCHITECTURE AND DESIGN STU
www.alfa.stuba.sk

ISSN 2729-7640

3/2023 (Vol. 28)

DOI: 10.2478/alfa-2023-0013

Editorial

Zuzana Čerešňová

The topic of this special issue of Architecture Papers of the Faculty of Architecture and Design STU (ALFA) is focused on Design for All research in the field of human-centred design, architecture and urban planning that accepts the diversity of people, their different needs and requirements in the built environment. The Design for All methodology is based on the analysis of human needs and aspirations and requires the involvement of users in the participatory design process. This special issue aims to present and discuss a multidisciplinary design methodology that implements knowledge from social, psychological and neuroscience fields and information technology into architectural, urban and design work. Attention is paid to the psycho-social aspects of the environment and the study of the environment's impact on people and their health and well-being. In connection with human-centred design approach, an expanded understanding of the attributes of universally accessible environment is also applied. This includes physical, sensory and information accessibility, visitability, adaptability and flexibility of the environment for a wide range of people to ensure an inclusive environment.

The challenge for architects, designers and urban planners is to create an environment that is aesthetically appealing and at the same time responds to the functional and psycho-social needs of people. The question is how architects can improve the built environment for the well-being of all people. The focus is on creating an environment that is friendly, accessible, safe, healthy, and satisfying the requirements of a wide range of people. The recent initiative of the New European Bauhaus (NEB) spans across various disciplines to come up with tangible, sustainable, beautiful and inclusive solutions improving our daily lives. NEB strives to give citizens an active role in shaping their environment and draws on cultural and urban innovation to build a sustainable, inclusive and resilient society.

The variety of article topics in this issue reflects the broad spectrum of the Design for All methodology, which is not only focused on creating an accessible built environment for all people, but also includes new achievements in the field of digital technologies and robotics to maximize the inclusiveness of the environment.

The article *Using a digital participatory approach to facilitate inclusivity in Jordanian heritage Sites: Stakeholders' requirements and a proposed system* by Aseel Aljaafreh, Vanja Garaj, and Youngok Choi presents an exploratory quantitative study focused on identifying barriers affecting the implementation of inclusive approach in historical sites and defining challenges of digitally inclusive applications. Based on the study results authors propose a unique framework for remotely analysing target users within an immersive environment, which emphasizes the importance of user involvement in designing accessible and enriching tourism experiences. The combination of social engagement engines and immersive technologies (virtual and augmented reality), holds great potential for the development of tourism industry.

Likewise, new technologies and challenges are presented also in the article *Universal design and social care: Assistive robots as other users of the built environment?* by Lea Rollová, Peter Hubinský, and Natália Bošková Filová. The authors investigate the spatial requirements of people and robots and present the results of a simulation using Assistive and Butler Robots in a housing facility, where a social care is to be provided in the future with the help of robots. Manoeuvring of people in a wheelchair and robots is simulated in a floorplan of the chosen model project of a family type house. The paper concludes with several recommendations for the creation of residential buildings that support the symbiosis of humans and robots in an accessible environment.

Innovative health care institutions that pioneered social inclusion of patients through proper education and adaptable architecture are analysed in the article Architecture of healthcare and social inclusion in interwar Czecho-slovakia: Pezinok Psychiatric Institute and the Masaryk Institute for Young People with Intellectual and Physical Disabilities in Bratislava by Matúš Kiaček. It was believed that elementary education and practical skills would socialise patients, adapt them to general society, and decrease their dependence on the government and their relatives. The author highlights the importance of adapting architecture to the needs of people with disabilities, while simultaneously not creating a special environment with specific features only for them that would lead these people to feel stigmatised and segregated.

The connection between the quality of the urban structure of residential areas and residents' mental health is studied in the article *Mental health as determining factor* of urban district's character: Case study Bratislava – the Pentagon by Barbora Šimkovičová and Katarína Smatanová. A high incidence of drug addiction, as a mental disorder, in the residential area called Pentagon stigmatises the whole urban district, reducing the residents' quality of life significantly over the years. The authors proved in their study that the mental health status of the residents has an essential impact on the development of urban neighbourhoods and vice-versa. They have detected a number of environmental stressors that are present in the built structure.

The authors Jakub Hanták and Danica Končeková raise questions about how architectural and design thinking can contribute to the promotion of inclusive children's education. Their article *Positive effects of wood in Vorarlberg's (Austria) timber kindergartens* highlights the impact of wood materials in the interiors of preschool facilities, their positive influence on children's cognitive abilities, development and well-being. The authors prove that interiors with exposed wood can support social interaction and playful learning of children. The results of this study can present a strong argument for the support of the New European Bauhaus initiative, advocating for the implementation of renewable materials in accordance with the principles of biophilic, restorative, inclusive, and salutogenic design in practice.

This spectrum of articles shows that the Design for All methodology provides great inspiration to architects, urban planners and designers on how to improve the quality of well-being in the built environment.