Summary

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Elder-friendly urban space.
Design of urban infrastructure elements supporting activity of seniors.
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This work aimed to highlight design elements of urban infrastructure supporting the activity of the elderly in the city. The main task was to draw attention to the problems of the increasing number of older people living in cities, as well as to the needs changing with the age of seniors related to operating in urban spaces. The research area focuses on improving the functioning of older people in urban spaces, their activities, and their integration within society. The dissertation is divided into four parts.

The first part introduces the aging process. It answers the phenomenon of aging within the population. The author discusses several ways of classifying the age that determines the 'old age' limit, while at the same time emphasizing that seniors are not truly a homogeneous group and that the pace of aging is an individual trait. The most important demographic datasets on aging within the population, together with urbanisation, have been presented against the background of the world but in the context of Poland. The issues discussed show the scale of the problem and therefore the need to introduce solutions suitable for seniors.

The second part presents the psychophysical condition of the elderly, which determines solutions designed for seniors. The limitations and problems faced by the elderly as a consequence of advancing age are discussed. Both the weakened physical form of the elderly, limitations related to the functioning of the sensory organs, and the weakened physical condition of seniors are introduced. The author shows how age restrictions affect the way people function and move around the city, as well as the interpretation of this space. The author presents her findings using the 'old age' simulator, which allows the reader to experience the physical limitations of the elderly. It outlines the importance of the role of exercise and physical activity in

the aging process. The data provided in this section allow us to define the profile of users of the designed solution and justify its need.

The third part concerns the functioning of the elderly in the city. We learn about the benefits of inclusive design - both for the target group of seniors and for other social groups living in the city. The author discusses the subject of an age-friendly city and the possibilities it offers. There is also an analysis of urban space in terms of adaptation and accessibility for the elderly, which cites the recommendations of the World Health Organization regarding the spatial requirements of a city that is friendly to seniors. This part presents the opinions of elderly people alongside the author's observations about the daily activities of seniors in the city and the inconveniences faced by older users when using city spaces. Based on analysis and observations, the author outlines the urban problem that has been noticed - the lack of places for temporary rest.

The fourth part presents the proposed design solution that meets the needs of seniors in the city. The author, based on the design assumptions, developed a design for a perching bench that allows the elderly to rest temporarily while out walking, which contributes to them being more willing to be active in the city space. This part presents the way to the final solution, tests with users on the basis of which the design was developed, and tests functional models in urban space. This part contains a detailed description of the proposed solution and its variants creating elements of the urban space that facilitate the daily operations of the elderly in a city environment.

In summary, additional possibilities offered by the project and its possible further development are discussed.

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