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Concepts of urban planning of the XXI century cities in the context of ageing society

Koncepcje przestrzenne miast XXI wieku w aspekcie procesu starzenia się społeczeństw

Abstract:

The article attempts to define the concept of formation the twenty-first century urban structures under the influence of ageing population. In 2007, the World Health Organization (WHO) has published the "Global Age-Friendly Cities: A Guide", which set out a vision of modern cities - tailored to the needs of all residents, regardless of age, with particular attention to the needs of the elderly people. In Europe in recent years, EU countries and the OECD have developed two concepts of ageing: active ageing and ageing in place. These concepts are crucial for the future development of European cities, as well as housing, services and transport. These two approaches offer a range of solutions for the creation of urban space. This article analyzes the above concepts of ageing and attempts to find specific examples that reflect these concepts in the context of formation the twenty-first century cities.

Streszczenie:

Artykuł jest próbą określenia koncepcji kształtowania się struktur miejskich XXI wieku pod wpływem procesu starzenia się społeczeństw. W 2007 roku Światowa Organizacja Zdrowia (WHO) wydała publikację „Global Age-Friendly Cities: A guide", w której określiła wizję współczesnych miast - dostosowanych do potrzeb wszystkich mieszkańców, niezależnie od wieku, ze szczególnym uwzględnieniem potrzeb osób starszych. W Europie w ostatnich latach kraje UE i OECD opracowały dwie koncepcje starzenia się: active ageing i ageing in place. Koncepcje te są kluczowe dla przyszłego rozwoju miast europejskich, a także polityki mieszkaniowej, usług i transportu. Te dwa podejścia oferują szereg rozwiązań w zakresie tworzenia przestrzeni miast. W artykule dokonano analizy powyższych koncepcji starzenia się oraz podjęto próbę znalezienia konkretnych przykładów, odzwierciedlających powyższe koncepcje w kontekście kształtowania się miast XXI wieku.

Key words: *city, urban planning, ageing society, spatial concepts*

Słowa kluczowe: *miasto, urbanistyka, starzenie się społeczeństwa, koncepcje przestrzenne*

In the last decades of the twentieth century, many towns have been affected by the demographic crisis caused by the prolongation of human life and a decrease in the number of births. This phenomenon affecting particularly developed countries such as Germany, Sweden, United Kingdom, and Poland is called ageing of the society, and it is also commonly called "demographic bomb", "gray wave" or "senior's epidemic". The effect of this phenomenon are many changes taking place in various spheres of social life including increasing demands of life quality, changing of family patterns, better education and increased investment in health and social care. Of a significant importance is the fact that demographic trends vary between particular countries, and aging is growing at different rate in various countries. In the future, the social, economic and physical effects of those major demographic changes will be of a significant importance for the development of cities and regions. Currently, unfortunately, the cities are not adequately adapted for the needs of older people. That is why a new look is necessary, which will positively contribute to a better quality of life of all residents.

European Union countries are making significant strides in politics, economics and management, to meet new demands and expectations of future urban population. Numerous projects aimed at countering the negative effects of ageing population are developed. Thus, slowly, new concepts and visions of the 21-st century cities are created in terms of the challenges of an ageing society.

City and ageing

The process of ageing has a significant impact on the development and renovation of the cities and urban areas, and causes a number of issues outlined below, as described by Professor Colin Fudge [1]:
1) There are many myths and stereotypes about older people, imputing to them among other "resistance to changes". It is worth noting that today the elderly

people are a social group, which is heterogeneous and very differentiated in regard to the requirements of life.

2) Changes in demographics – ageing of society caused major structural changes in the cities. The question arises: how cities should be planned and how to approach urban design, including the ideas of "Universal Design" or "Design for All"?

3) The general desisting from an idea of construction of large institutional buildings for the benefit of small apartments, integrated with the urban fabric. The construction of such housing should be supported by new technologies and a flexible system of social welfare integrated with local access to employment, public space and transport.

4) Dissemination of innovation and experimentation, in city urbanism and urban policy. Both old and new housing should be adapted to the needs of an ageing population, supporting small residential units with easy access to public spaces and public transport as well as with improvement of home care. The essence is a prudent and thoughtful planning of housing for the elderly people in various spatial scales (region - the city - a district).

Actually in Europe dominate two concepts of ageing of society developed by OECD countries in 2003 (Fig. 1):
1) Active ageing
2) Ageing in place.

Fig. 1 The concepts of aging in spatial context according to OECD [2] (in own modification)

These concepts are a basis for the development of housing policy and services as well as for spatial planning. Politics of *ageing in place* and *active ageing* propose comprehensive actions, instead of the segmentation of the social politics as it analyse the individual needs and abilities of older people, and also the way of spending free time by these people [2].

The concepts of ageing developed by OECD countries, have a direct influence on the formation of ageing cities. They contribute to creation of specific spatial activities. The concept of *ageing in place*, helps to create a compact and comprehensive urban tissue (*compact city*), where most of the functions are located nearby the residence, without the need for construction of extensive infrastructure. In turn, the concept of *active ageing*, enforces the need to locate new functions, enabling leisure activities, as well as creating a well-developed network of

urban infrastructure for easy and rapid translocation both in the city and beyond it.

The concept of *active ageing*

According to the World Health Organization (WHO) *active ageing* is defined as the process of optimizing the relationship between health, participation in social life and safety in order to improve the quality of life of older people [3].

The concept of *active aging* has been developed by the European Commission and it is used in human resource management. This concept refers to the extension of the work activity of people of retirement age as long as possible and to adapt working methods to the employee's age [4]. The extension of a period of the productive life and activity of older people as well as their participation in a social and economic life can bring benefits not only the country's economy, but also for the citizens, enjoying greater retiring pension and longer intellectual efficiency.

The studies have shown that older people living in the twenty-first century stay active for much longer time than in previous years, seeking a better quality of life. WHO organization has adopted the term "*active aging*" to give an expression to the fact that ageing should be an active process of achieving a better quality of life for people in advanced age. The word "active" refers not only to physical activity or participation in the labor market but also to a continuous participation in a social, economic and spiritual life, as well as to participation in public affairs. In turn the word "health" refers only to physical, mental and social welfare as described by the WHO definition.

Basic areas of active ageing are shown in the diagram below (Fig. 2) [4].

Fig. 2 Determinants of active aging [4] (in own modification)

Active ageing in the context of urbanism of twenty-first century cities could mean a vision of active, enjoying their

life senior citizens, who have no qualms about the abandonment of their house and changing a current lifestyle to a more mobile, giving them more freedom, satisfaction and a chance to explore the world. An example of such a concept of *active ageing* could be a new form of urbanism, called RV Urbanism.

Example 1

Nomadic Network Urbanism of the Senior RV Community (Fig. 3)

Fig. 3 An example of the concept of RV Urbanism [6]

The theory of RV Urbanism, which was introduced by Buckminster Fuller in 1963, preached an original understanding of urban planning, different from the traditional one [5]. According to Fuller, in the modern world the concept of permanent urban space is becoming obsolete and it should be replaced by urban planning, which is not associated with a particular place, but is mobile, forming a "network of nomadic mobile objects", operating on a global scale, linked by invisible radio waves [6].

This new look at urban planning, created by Fuller is now, after more than thirty years, again intensively re-developed.

One of examples of the practical use of this concept, described by Deane Simpson [6], is a "the Senior RV Community" in the United States, who has created a "network of an urban nomads", that is opposed to the traditional model of urban planning, because it is characterized by mobility, informality, lack of a hierarchy and a network structure. There are three basic categories of nomadism: hunters, shepherds and wanderers. Recently, a fourth category of nomadism has been introduced by Deane Simpson – recreational nomads, that arose in the context of demographic, sociological and cultural changes. It is created by the population of the *New Third Age*, so-called *young-old* – older people who are not employed or retired and have a good health, thus having an opportunity to live a life of a mobile style [7].

Figure 4 shows a practical example of the concept of RV Urbanism in the U.S. based on the recreational vehicle (RV) for the elderly people.

The social group that uses this form of residence are the American retired that do not like a static form of spending leisure time, who prefer an independent and wandering lifestyle, are fond of spontaneous meetings, and who leave their homes for the benefit of "recreational vehicles". They create online, by means of a web communication capabilities, special clubs, which currently have more than one million members, who meet together every year at conferences, joint dinners and outdoor fires.

A comparison of a traditional urbanism of a typical Polish city with the idea of RV Urbanism is presented in Fig. 5 and 6.

RV Urbanism contributes to the creation of temporary spatial structures. Such form of urban planning shapes in the area constantly changing space without permanent buildings. The vision of retirement in the new generation of older people is a continual holiday, offering stimulating, rejuvenation and escape from the problems of everyday life [9]. The conditions, which provides RV Urbanism promote staying away from home, and practicing a tourism and enable fighting against boredom, alienation and depression of older people. However, this trend represents an escape from participation in social life and from accountability, which contradicts the idea of *active ageing*.

A "holiday" model designed for retirees should not be treated as the main model of development of the New Third Age urbanism, but as a new form of identification, a way of life and social connections, as well as a new spatial form of formation of urban planning linked to a tourism and leisure activities.

The afore-mentioned example of the concept of RV Urbanism argues, that "older people are the demographic group that contributes to the most radical experiments of modern urbanism" [6].

The concept of *ageing in place*

Ageing in place is a concept, that favors staying of the elderly people in their former communities of residence, without necessity to move up in elderly age to the centers of an institutional nature. In this concept a leading role play: an improvement of housing conditions, a modern design, an availability of all services which are associated with mobility of older people and maintaining the appropriate degree of their physical and mental efficiency, as well as an increase of quality of life.

The concept of *aging in place* is very different from traditional politics, where the aging and housing were usually considered in the category of the sector, with taking no account of major spatial issues. Currently, OECD countries in their policies are geared towards a comprehensive look at ageing, identified as the links between housing, a provision of services and an access to
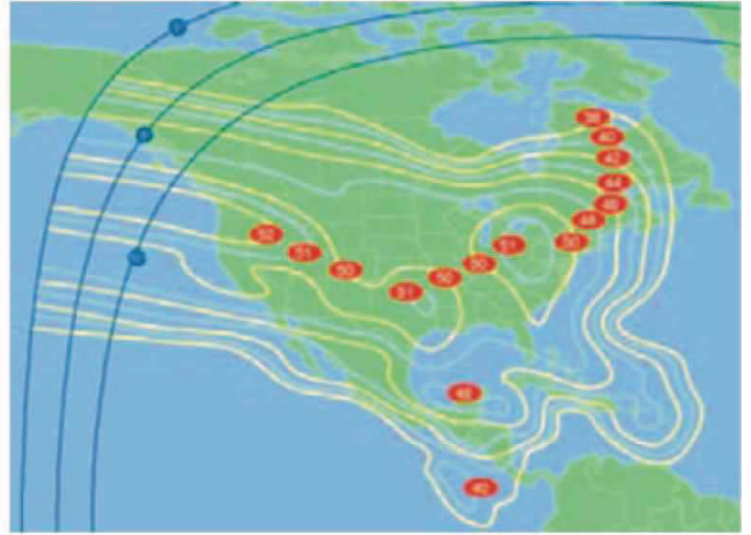
Fig. 4 Vehicle RV with satellite antenna (left side) and a map of satellite links (right side) [7]

Fig. 5 Urbanism of typical Polish city

Fig. 6 Urban planning in line with the concept of RV Urbanism – Quartsite, Arizona 2008. Photo: Deane Simpson [8]

urban facilities suitable for this social group, taking into account economic and cultural possibilities of the older people and treating them as a key partner in a society. This view affects the transformation of the city, in particular through an integration of the system of services and shortening of spatial distances, that may contribute to a formation of more compact and dense urban tissue in a development of the future cities (Fig. 7), thus supporting economic growth and revitalization of urban areas [2].

Fig. 7 Transformation of „typical" city into „compact" city (own elaboration)

The expression of the concept of *ageing in place* is the idea of the "gentle city" (a delicate, sensitive city) – the city adapted to the needs of the elderly people, which was defined during "*Women in the City Conference*" organized by the OECD [2]. The older urban dwellers have worse physical fitness than the average young, healthy persons, so the city must be particularly sensitive to their needs. "Sensitive City" may become more attractive for all its citizens due to a wide range of different types of housing opportunities and providing an appropriate care for the residents at every stage of their lives: the intergenerational apartments, housing for retired and disabled people, housing with availability of services such as nursing and medical care, etc. The bigger attractiveness of the city can be also achieved by adapting the urban environment for the elderly people needs as a result of new forms of urban planning (playgrounds for seniors and integration spaces

located in the city), new functions (special locations for services assigned primarily to the elderly people) or a new design, that contribute to creation a more accessible, integrated urban space, with respect to the natural environment (the idea of "Design for All" and "Universal Design").

The concept of *ageing in place* forces conducting of a politics oriented towards an appropriate adaptation of the cities for the future urban residents of older generation, but, what is of a great importance, the formation of the "sensitive" and "compact cities" contributes to a development of a life environment favorable for all residents. An example of a new urban form developed in the 90s of the last century, that promote the ideas of *ageing in place* in the cities are theme parks, together with the function of housing for the elderly people.

Example 2

A specific example of urban planning policy, that promotes ageing in place, described by Simpson in the article: "Grayscale Urbanism: Cities for the New Third Age" as a case study, is a theme park Huis Ten Bosch in southern Japan.

Huis Ten Bosch is a theme, cultural park located near Nagasaki, which was opened in 1992. It occupies an area of 151 hectares. The park Huis Ten Bosch is a town-planning foundation, which is a replica of the historic Dutch town, reconstructed using the characteristic Dutch bricks [9].

A genesis of the creation of the park is linked to the interest of the Netherlands among the Japanese, which was developed as a result of lively trade relations between Japan and the Netherlands in the times of Edo Dynasty, ruling from the seventeenth to the nineteenth century. At that time Japan was closed for contacts with the Western world, except for the Netherlands, who led the barter with Deshima, a small island near Nagasaki, located just 36 km from the current theme park [9].

In the park Huis Ten Bosch the typical urban layout of the Dutch city was preserved, with the copies of famous buildings: the market and town hall of Gouda, Nijenrode Castle, located near the Brooklyn and the Huis Ten Bosch, the summer residence of the Dutch royal family located near The Hague (which gave a name for the park) (Fig. 8).

Huis Ten Bosch is a combination of a theme, cultural park with a housing community, designed especially for persons of retirement age.

The main residential area in the park is a residential quarter Wassenaar, located between the main entrance and the squares of Kinderdijk and Maurits, in which 120 villas were built (Fig. 9).

The inspiration for their creation arose from the buildings located on the bank of a canal in Wassenaar, a town located in south-western Netherlands, made of a red brick and characteristic tile fragments used to decorate the walls of houses, with small gardens arranged along the street and large gardens with a landing-place for private boats located on the bank of a canal. Permanent residents of this area have unlimited access to public spaces with shops, restaurants and other available functions.

The space of a theme park acts as an "urban living room", where people spend their time in Dutch cafes, restaurants, parks, shops and participate in many other cultural events and activities, that are offered to them by the park without necessity to move out of the area of their residence.

In many cities all around the world there are different forms of amusement parks similar to the Huis Ten Bosch, designed for different age groups, such as the original Coney Island, "Venice", acting as amusement grounds (lunapark), aimed mainly at young people or popular Disneylands, founded at the suburbs during the so-called "baby boom", which are amusement parks aimed at young families [9].

In a case of the formation of the Huis Ten Bosch an important role was played by demographic changes and ageing of a population in the late twentieth century. According to Miodrag Mitrasinovic, at the end of the 90s of the twentieth century in the United States the theme parks were built, which set out the need for more sustainable entertainment offering a greater emphasis on the demonstrations and street performances considered as an entertainment of higher quality in relation to an aggressive entertainment in the early 90's. In the Huis Ten Bosch a balanced type of entertainment is offered, that includes among others: visiting museums, diverse cultural programs, seasonal activities associated with plant cultivation and crops and other specific activities targeted at older people [9].

The theme park has developed a "third culture" as the Dutch town-planning has been "teleported" to Japan. This type of urbanism can be colloquially called "Frankensteinian Urbanism" (Fig.10), since only the structure of the Dutch city was moved, without any conditions and problems typical for a western city, such as homelessness, drug abuse and hooliganism. Such form of urban space seems to be untrue, striving to create an ideal environment. The older people experience here an endless vacation, being simultaneously both at home, and also on the way [9].

The urban form of the Huis Ten Bosch has several advantages and disadvantages (according to D. Simpson) [9]:
- it promotes the integration and safety (as the site that is under constant control and surveillance) and it prevents a social exclusion,
- it eliminates the difficulties and costs associated with a travel (promoting the idea of *ageing in place*),
- it is primarily targeted to the older persons with large financial possibilities,

- it may cause social criticism resulting from the isolation of a population living inside the park (life behind the gate, creating ghettos),
- combining a function of an amusement park and a housing for older people raises some concern, because there is a risk of the popularity of this model as the only form of creation of the life environment for the elderly people in the contemporary and future cities.

Conclusion

Worldwide research is being conducted to determine the best concepts of a formation of the twenty-first century cities. Among these concepts one can distinguish the following: afore-mentioned Compact City, Healthy City [11], Eco City, a city of modern technologies (Digital City) and a city that is friendly for people of all ages (Age-Friendly City) [12]. These concepts are designed to achieve one goal, to create cities that cope with the demands of all residents. The cities should be tailored to the needs of all residents (including elderly people) and readily available as in the case of the concept of *ageing in place*. Properly developed communication network between the towns should provide for older people also a possibility of translocation beyond the borders of the city (*active ageing*). The older people should feel that their cities are attractive, friendly and safe. Currently, many modern cities require intensive renovation in order to secure a high quality of life for the people of all ages. The above-mentioned ideas of the proposed solutions for contemporary urban planning, arising from the various concepts of ageing of a society, show how many different lines of thinking are related to the twenty-first century cities formation. In order to develop optimal concepts of urban development, taking into account the observed demographic trends, it is necessary to arouse an interest of specialists in many fields in the subject, because the problems connected with the issue of cities of the future are complex and interdisciplinary.

The subject that is taken up in the article still requires a lot of research related to seeking a concept of urban planning and renovation, in order to find optimal solutions for contemporary challenges, that are associated with the process of ageing of society.

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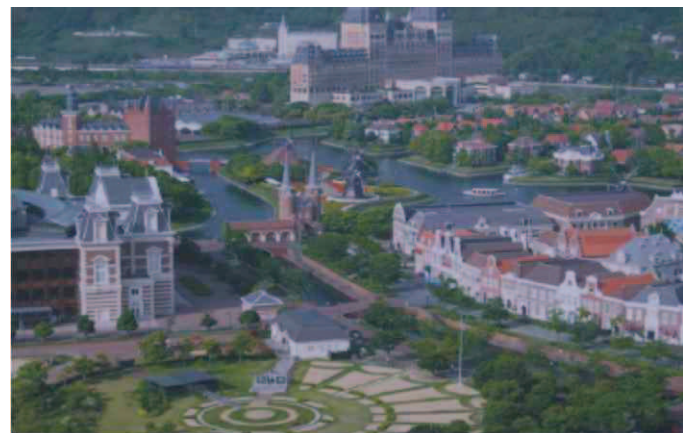[12] World Health Organization: Global Age-friendly Cities: A guide. WHO Press, Geneva 2007.

Fig. 8 Thematic Park Huis Ten Bosch, Japan [10]

Fig. 9 Residential quarter Wassenaar. Park Huis Ten Bosch, Japan [9]

Fig. 10 „Frankensteinian Urbanism". Park Huis Ten Bosch, Japan [10]