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РОЛЬ ДИЗАЙНА ДЛЯ СОЦИАЛЬНОГО ДИСТАНЦИРОВАНИЯ В ГОРОДСКОЙ СРЕДЕ: ОБЗОР ЗАРУБЕЖНЫХ ПРИМЕРОВ

Аннотация. Одним из актуальных вопросов, с которым столкнулись за последний год многие люди, организации, предприятия, администрации и города в целом – это то, как жить, успешно и безопасно организовать свою деятельность и коммуникацию для людей в условиях новой коронавирусной пандемии. В городской среде многих городов мира применяется концепция социального дистанцирования, которая была выбрана как мера предотвращения распространения новой коронавирусной инфекции. Данная статья представляет обзор городского дизайна открытых общественных пространств (таких как парки, городские площади, парклеты и пр.) и общественных пространств в помещениях (городские кафе, коворкинги, офисы и пр.), реализующих метод социального дистанцирования через дизайн. В статье рассматриваются как примеры адаптации уже существующих пространств, так и новые идеи, специально разработанные с учетом проблемы. К специфике современного градостроительства и урбанистики относится необходимость учета постоянно меняющихся факторов, таких, как проблемы экологии, больших данных и ГИС, приватности жизни и цифровизации, мобильности людей, безопасности и предотвращения инфекций, и готовность включить в спектр задач новые проблемы. Данная статья проблематизирует возможности и роль городского дизайна, который активно может быть использован для социального дистанцирования в городской среде.

Ключевые слова: социальное дистанцирование; элементы городского дизайна; бихевиоризм в пространстве; индивидуальное пространство; адаптация общественных пространств для предотвращения пандемии.

Introduction. One of the recent relevant issues that many people, organizations, enterprises, administrations and the city as a whole have faced during the past year is how to live, to safely and successfully organize various activities and to communicate between people in the context of the new coronavirus pandemic. The problem of prevention of the spread of a new coronavirus infection along with the necessity to restore and keep urban activities and businesses in a new reality is relevant to many cities around the world [1]. In Russia the measures to prevent the spread of pandemic were sufficient and successful and included social distancing at public spaces and at public transport in large cities (for example, in Moscow, Saint-Petersburg, and other cities) [2]. Many schools, universities and offices had to experience the on-line remote formats of education and work [3, p. 268].

Balancing out many complex factors of the urban life with the need to keep measures for coronavirus prevention, the concept of social distancing was introduced in the urban environment of many cities around the world and a lot of people have inevitably experienced it. Social or physical distancing means keeping around 1~2 m distance between people to avoid a physical interaction. From social distancing, minimization and restrictions in traveling, limitations and bans in use of public space and cancelations of performing large events and gatherings, to overall lockdown – there are various strategies that administrations of many cities have used.

The purpose of this paper is to outline the role of urban design for social distanc-

ing through different cases. This article provides an overview of 1) the urban design of open public spaces (such as parks, city squares, parklets, etc.) and 2) indoor public spaces (cafes, co-working spaces, offices, etc.) that implement the method of social distancing in space. The article examines both examples of adaptation of already existing public spaces and new ideas specially developed taking into account the problem.

Urban life is a complex phenomenon. There is not a right answer how urban design can be used in social distancing; however, it is a significant tool that affect human's behavior [4; 5].

Literature Review. This paper aims to observe the role of urban design for social distancing through different cases. It relates the concept of social distancing (or physical distancing) with the theory of human's behavior in space.

Social Distancing in terms of prevention coronavirus basically means to maintain at least a 1-meter distance between yourself and others to reduce your risk of infection. The definition and suggestions are given by WHO [6] and by authorities in different countries (for example, [7]).

To view a **social distancing** and relate it to a **human's behavior in space** this paper focuses on behaviorism theories by Edward T. Hall [8] and Robert Sommer [9]. Edward T. Hall developed the concept of proxemics and explored cultural and social cohesion, and described how people behave and react in different types of culturally defined personal space. Robert Sommer in his book "Personal Space: The Behavioral Basis of Design" (first published 1969), discussed the influence of the environment on human activities. He distinguished terms 'personal space' and 'territory.' Four levels of personal space (based on E. Hall) are shown at *Fig.1.*

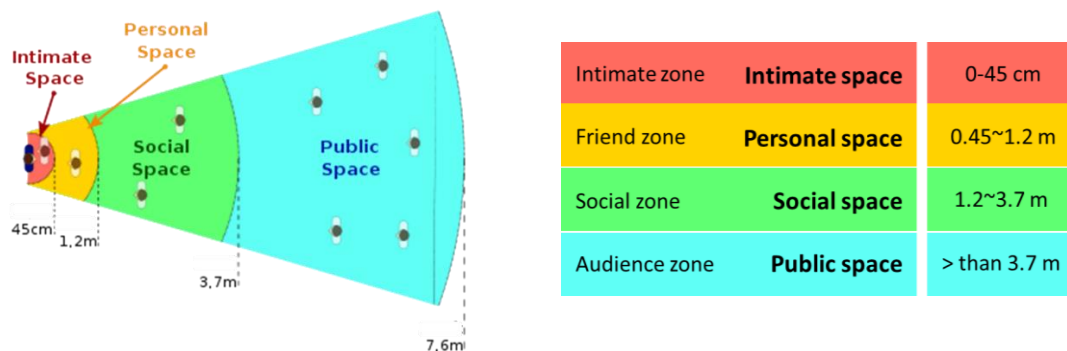


Fig.1. 4 levels of personal space (by Edward T. Hall)

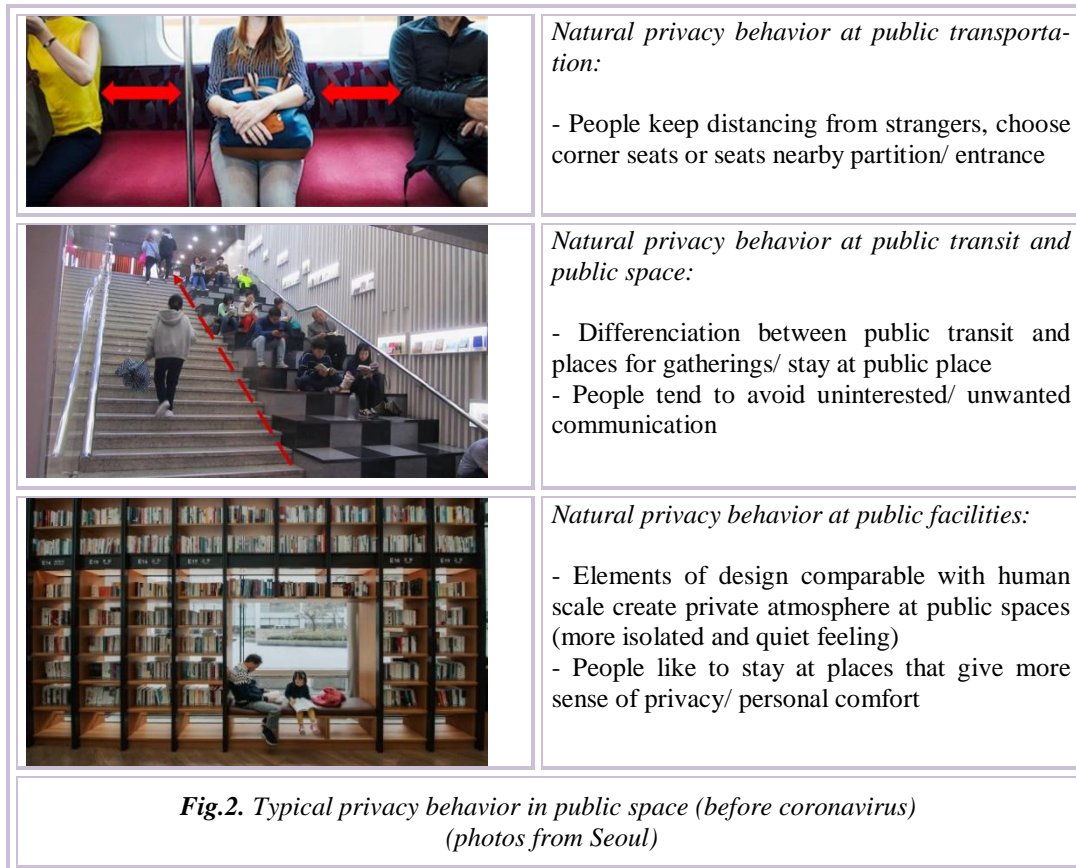
Generally, human's behavior in space is very complex. However, it is usually related with people's tendency to keep privacy and it can be affected by built environment, as well as with elements of design that shape the space and influence on circulation between outer spaces and buildings.

Naturally (before coronavirus) people's privacy behavior (keeping personal space) in large cities can be described with the following:

Natural Privacy Behavior in Public Space:

- Physical closeness maintained between familiar people; physical distancing maintained between strangers
- Sense of time appropriate for communication
- People behave differently when they are uninterested or want to avoid communication (will look at the side, avoid eye contact)

Privacy human's behavior in space, to a certain extent, depends on social and cultural norms, background and mentality, on the urban density and amount of people (the tendency to keep privacy especially can be noticed in very populated high-dense mega polices). *Fig. 2* shows some typical examples from Seoul (S. Korea).

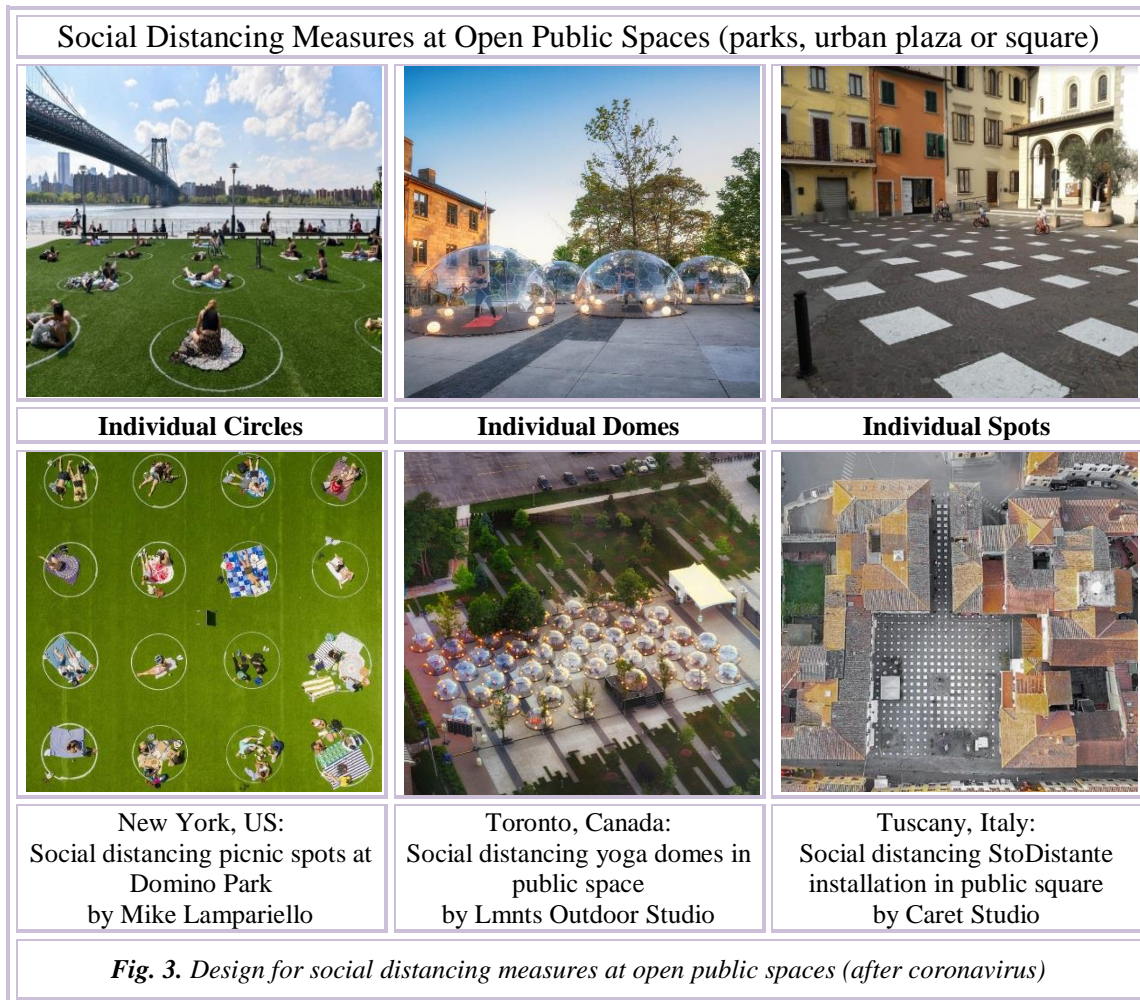


During the recent time of coronavirus pandemic, many publications related to public space reconsideration due to adaptation to new situation in large high-dense mega polices appeared (for example, [10-12]). However, taking into account that the situation is current, there has to be more research about human's behavior, elements of design, and the role and effect of mandatory 'social distancing' at public spaces in large cities.

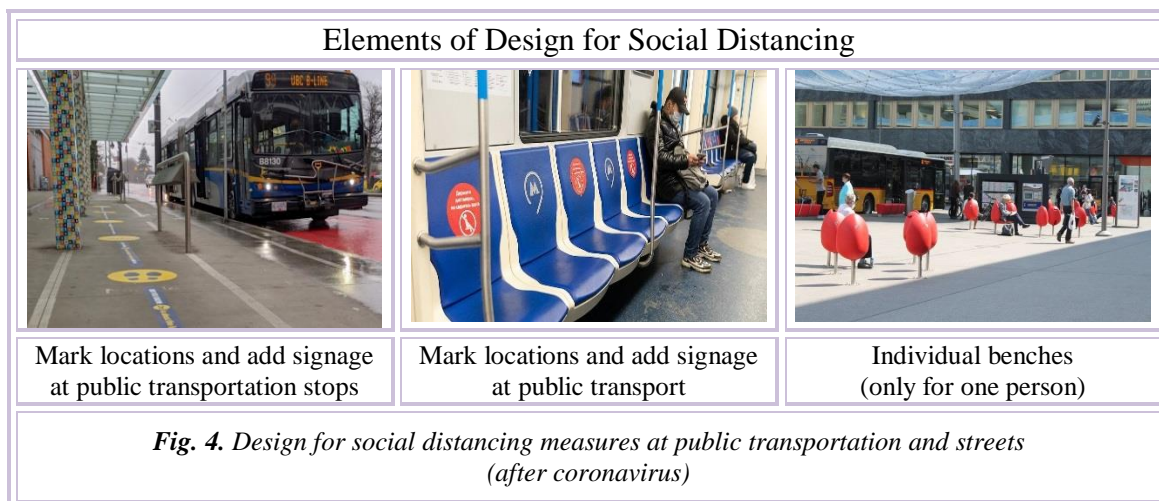
The specifics of contemporary urban design and urban studies include the need to take into account constantly changing factors, such as environmental problems, big data and GIS, privacy and digitalization, human mobility, safety and prevention of infections, and the willingness to include new problems in the spectrum of tasks.

This article problematizes the possibilities and role of urban design, which can be actively used for social distancing in an urban environment. It uses case study as a method of research.

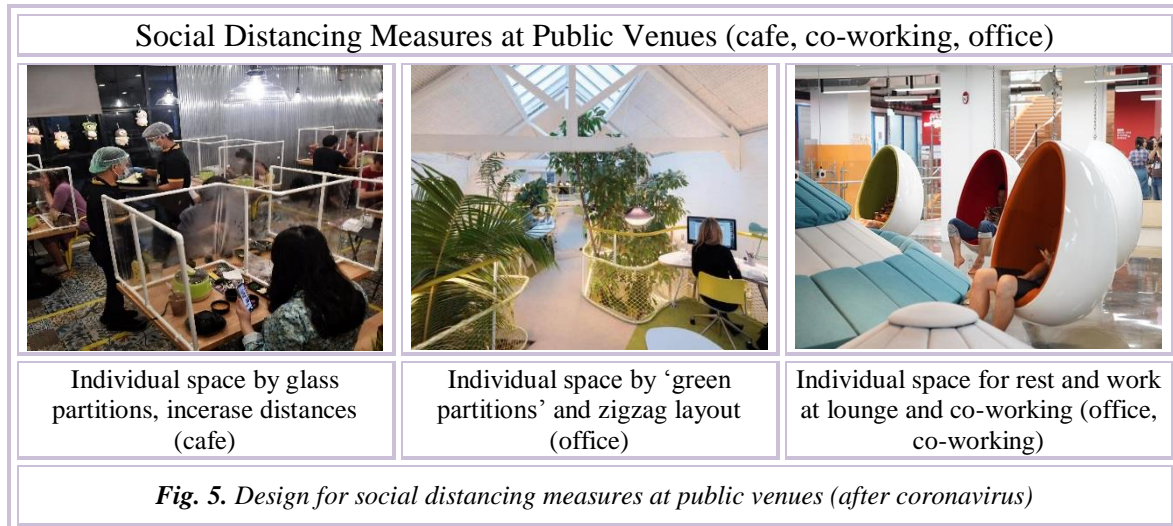
Keeping social distance at open public spaces (parks, urban plaza, streets). During the recent time of coronavirus pandemic, a creative response on the question – how existing urban environment and public places can be adapted to a new reality started to appear around the world. It started as a pop-up events and initiatives with ideas to 'visualize' the social distancing 'boundaries' with circles or other shapes. Especially, the re-design of Domino park in New York became a viral example (*Fig. 3*).



For public transportation, transportation hubs, subway and bus stops, streets design and pedestrian transit in cities with high-density the ‘social distancing’ by design was implemented by use of stickers that mark locations. Another measure is using individual benches (only for one person) especially designed for that (Fig. 4).



Keeping social distance at public venues (café, co-working, office). During the recent time of coronavirus pandemic, a new design and re-design of existing cafes and offices started to appear. Different measures by design (reducing the number of tables at cafes and increasing spaces, zigzag layout of furniture, etc.) and by management (wearing masks, temperature check and thermal monitoring, limitation of people at public places, circulation management, hands and surfaces disinfection, air ventilation) are used. Measures by design creatively repurpose the partitions in space (to border and ‘visualize’ the social distancing). Some cases are shown at *Fig. 5*.



Another trending measure for social distancing at cafe or store is to provide service using various machines or robots, without actual physical contact between visitors and waiters for ordering food and beverages, bringing food and paying. Fig. 6 shows some trendy cafes with robots in Seoul that are gaining popularity among visitors.



Results and Conclusions. This paper views the ways how to respond to pandemic with social distancing measures at public spaces using tools of design. Especially it is relevant for large mega police cities with big population and high density of people. This article provides an overview of 1) the urban design of open public spaces (such as parks, city squares, parklets, etc.) and 2) indoor public spaces (cafes, co-working spaces, offices, etc.) that implement the method of social distancing in space.

At public parks and public squares, the ideas for social distancing are to ‘visualize’ the ‘boundaries’ with circles or other shapes. For public transportation, transportation hubs, subway and bus stops the commonly used measures for social distancing are to use stickers and visual signage that mark the space for seating or waiting in line. Another idea is to use individual benches.

At public venues, such as cafes, offices and co-working spaces, the ideas for social distancing are to border and ‘visualize’ the social distancing with glass partitions, increase distances and provide zigzag layout of furniture. Besides design, management and operation measures are used as well (for example, wearing masks, temperature check and thermal monitoring, hands and surfaces disinfection, air ventilation).

This article also views the natural privacy human’s behavior in space, especially in large cities. The tendency for keeping personal space at public space is natural and it is related with history, social norms, people’s mentality and other factors. Therefore, the requirement for mandatory ‘social distancing’ due to coronavirus is reflected differently and has different impact on people regarding culture and their personal behavior.

Nowadays, the specifics of urban design and urban studies is that it has to take into account constantly changing factors and to be able to quickly and adequately respond to new problems. The situation with prevention of pandemic infections give a new challenges and make us to rethink the role of urban design in cities.

List of References

1. Kang M. et al. COVID-19 impact on city and region: what’s next after lockdown? // *International Journal of Urban Sciences*. – 2020. – Т. 24. – No 3. – P. 297–315.
2. Нарожная Д.А., Поленок Д.А. Особенности подхода «Здоровый город» в управлении общественным здоровьем в условиях пандемии коронавирусной инфекции (COVID-19) // *Государственное управление. Электронный вестник*. – Вып. 85. – М.: МГУ им. М.В. Ломоносова, 2021. – С. 122–141.
3. Коваль Ю.Н. О возможности преподавания в условиях распространения нового вирусного заболевания COVID-19 // *Pedagogicheskii zhurnal [Pedagogical Journal]*. – 2020. – Vol. 10 (5A). – P. 268–273.
4. Social Distancing: The Latest Architecture and News // ArchDaily. 2021. [Online]. – URL: <https://www.archdaily.com/tag/social-distancing> (accessed: 01.06.2021).
5. 15 Proposals For Adapting Outdoor Spaces For Social Distancing // Dezeen. 2020. [Online]. – URL: <https://www.dezeen.com/2020/06/26/outdoor-spaces-social-distancing-coronavirus/> (accessed: 01.06.2021).
6. Coronavirus disease (COVID-19) advice for the public // WHO. 2021. [Online]. – URL: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public> (accessed: 01.06.2021).
7. Все о коронавирусе // Стопкоронавирус.рф. 2021 [Online]. – URL: <https://xn--80aesfpebagmblc0a.xn--p1ai/about-covid/#prevention> (accessed: 01.06.2021).
8. Brown, N. (2001). Edward T. Hall: Proxemic Theory, 1966. Center for Spatially Integrated Social Science. University of California, Santa Barbara. – URL: <http://www.csiss.org/classics/content/13> Read, 18, 2007.
9. Sommer R. Discipline and field of study: A search for clarification // *Journal of Environmental Psychology*. – 2000. – Т. 20. – No 1. – С. 1–4.
10. Honey-Rosés J., Anguelovski I., Chireh V.K., Daher C., Konijnendijk van den Bosch C., Litt J.S., ... & Nieuwenhuijsen M.J. (2020). The impact of COVID-19 on public space: an early review of the emerging questions-design, perceptions and inequities. *Cities & Health*, 1–17.
11. Thorpe, A. (2020). Reclaiming the streets? Possibilities for post-pandemic public space. *Possibilities for Post-Pandemic Public Space (November 1, 2020)*. Forthcoming, 20–65.
12. Streets for Pandemic Response & Recovery // NACTO, Global Designing Cities Initiative. 05/21/2020. [Online]. – URL: <https://nacto.org/publication/streets-for-pandemic-response-recovery/> (accessed: 01.06.2021).