

DOI: 10.32347/2076-815X.2024.85.625-636

UDK 72.01:130.2

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INCORPORATION OF UNIVERSAL DESIGN IDEAS IN INDEPENDENT UKRAINE

This text describes the development and emergence of the ideas of accessibility, inclusiveness, and universal design in the time of independent Ukraine. The basic principles of universal design developed by R. Mace's team and the initial state of the trend's development within the Ukrainian social and political field (discourse) are described. The difference and local peculiarities of the use of the terms "barrier-free environment", "inclusion" and "universal design", "accessibility" in the Ukrainian social field are also identified and described. Examples are also given and the first material embodiments of accessibility principles in the architectural environment of Ukraine are described. A brief analysis of the possible development of the trend of inclusion and accessibility in the structure of Ukrainian architectural and social discourses is also provided. The increase in the number of people with disabilities caused by natural, social and man-made causes, on the one hand, and the low quality of the culture of universal design of state and public institutions in modern Ukraine, on the other hand, leads to a growing need to introduce a culture of inclusion to address numerous problems that limit inclusiveness.

Key words: inclusion, universal design, accessibility, architecture.

The term "universal design" was introduced by the American architect Ronald Mace to describe the concept of designing any products and design of the environment, so that it was based not only on aesthetic principles, but also as much as possible could be used by any person, regardless of their age, gender, race, ability or social status. [1]. The ideas of universal design were summarized in seven principles:

- Equitable Use
- Flexibility in Use
- Simple and Intuitive
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size and Space for Approach and Use [Ошибка! Источник ссылки не найден.]

In general, these principles derive from the concept of natural human rights and freedoms. [13] In many countries of the world, these principles are often based on the legal acts made in the standards of design and production. Due to mental and geo-social conditions, ideas of universal design often have regional features. For example, in the united Europe UD got the name "Design for All". It can be assumed that institutional formalization has emerged here, because "Design for All" was proposed by the European Commission as a search for a more comfortable space for a European society at the end of the 20th century, and in connection with the formation of a heterogeneous polyethnic society. [3, 5] With the increase in the population of the planet, the growth of its differentiation, the emergence and the existence of old and new mental or material barriers, there is a steady need to create a common space for life. Even the theory and practice of UD creates the basis for the possibility of solving this complex task, because it postulates the requirements of mobility, accessibility, convenience in the perception and in use of different people.

Barrier free architecture or Universal design

The UD paradigm was preceded by the concept of barrier free architecture, which was developed in the western world after the WWII. In general BF was concerned with the creation of a space for people with disabilities who were victims of war. [4] The Main task of BF was to adapt the environment for the possibility of movement of people with musculoskeletal disorders. This is the main difference between UD and BF, which only guarantees mobility for individual groups of people. Unlike BF, UD seeks to design and create environments and objects for the accessibility of their use by all people. UD postulates the constancy of the design process, because it is adaptive to the time and human needs.

The BF concept had an impact on the architectural process in the USSR and became especially popular in it's last years. BF concepts and norms were developed and used which, in part, had a political and ideological subtext and was declarative because postulates of the BF and the UD did not correspond to the basic ideological conception of the USSR and were not weighty.

To some extent, BF was an attempt to adapt the UD to the Post Soviet Space in the initial period of development of the newly created countries such as Ukraine, Belarus, Russia, but at the present time one can emphasize the need to change the old concept to a more correct concept of UD.

"Euro 2012" and "universal designer revolution"

After Ukraine gained it's independence and finally got the recognition as an equal partner in the international information space, the ideas of the UD became distributed among the community of Ukrainian experts. Thus, the new ideas of the UD, together with the existing concept of the BF in the Ukrainian SSR, have created a complicated and often illogical, contradictory architectonics of social and professional

consciousness. The chaotic nature of the implementation of the UD in Ukraine is quite obvious. The reasons for this include novelty and incomplete comprehension of the ideas of UD, as well as the lack of funds and strict law requirements, This results in partial or complete absence of UD elements in the environments of most cities and villages of Ukraine. On this background, the activities of foreign institutions implementing the UD "standards" can be commended. Great support for the establishment of UD in Ukraine is carried out by European and international organizations. Projects are being developed and implemented in different parts of the country on the basis of their financing. UD is also an important PR factor of reputable international organizations in Ukraine (British Council, London University of Art). The large-scale international event – a competition for the right to host the European Football Championship 2012 was a real catalyst for the UD development process. One can express the opinion that Ukraine's participation in Euro 2012 has led to the appearance of the first Ukrainian stakeholders for the UD ideas. During this period, city planning and construction organizations are beginning to actively involve National Assembly of People with Disabilities of Ukraine and other Community organizations [7, 9] in real cooperation to develop projects for the preparation of Euro 2012. In fact, NAPDU conducted annual monitoring of buildings and structures on the subject of accessibility since 2005. However, the number of real projects involving NAPDU, increased significantly only after 2012 [7] The involvement of European specialists and a clear introduction to the EU standards of UD during the reconstruction of urban spaces and buildings for Euro 2012 influenced the views of Ukrainian architects and the policy of architectural (design) bureaus and construction campaigns. In addition, other EU grants and competitions encourage people to implement and promote UD ideas.

After 2014 the “second wave” of the emergence of UD in Ukraine should also be noted. Taking into account the quantity and quality of the projects that were created using the UD from 2014, it can be said that the Revolution of Dignity, the Russo-Ukrainian War, the emergence of military losses (killed and injured) and refugees, population diversification and socio-political crisis, created demand on the idea and implementation of UD.

Since 2014, the UN activity in Ukraine has considerably expanded. One of the directions of its activity in Ukraine is realization of the concept of the program of sustainable development of ideas of UD. A social program "Promotion of Integration Policy and Services for People with Disabilities in Ukraine" was established and implemented by the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF), the World Health Organization (WHO), the International Organization Labor (ILO) in partnership with the Ministry of Social

Policy of Ukraine and the National Assembly of People with Disabilities of Ukraine. [6]

A website that includes publications, examples of the implementation of the ideas of the UD was created as part of the implementation of this program and its promotion. Links to various public organizations and structures aimed at implementing the UD are also available on this website. [6]

The displacement of people from the occupied territories of the Donbas to Western Ukraine probably influenced the creation of an inclusive area in Ivano Frankivsk, with the support of UNDP, an active policy of adapting diverse populations. [8] In turn, the creation of inclusive administrative service center in the city council of Druzhkovka and Popasna, located near the border with the so-called DPR in the front-line zone, was caused by a difficult situation with displaced persons and a complex bureaucratic problem with people's documents. Due to the situation in the Eastern regions of Ukraine, the local authorities lacked support from the central authorities in approaching the full creation of administrative service centers. Within the Program of Restoration and Peacebuilding, a project on the equipment of the administrative service centers in the city of Druzhkovka was implemented. Local governments provided a fully renovated building for the further implementation of the project. The United Nations Development Program has been working on the purchase of necessary furniture and equipment for 28 workplaces, as well as waiting areas, children's corner, archival, server, back office and kitchen. The work on designing a set of workplaces, recreational zones of the administrative service center has been done. [6]

In the period since 2014, not only institutions but individuals, such as Vladimir Azin, do their own projects, and show interest in UD ideas. [18]

It can be argued that before the direct contact with the problems associated with a large number of people with different abilities, displaced persons and the socio-political crisis, the ideas of the UD did not have a strategic embodiment and existed more chaotic in the form of old concepts (such as BF). It can be said that without the need for demand there is much less demand. A collision with a barrier environment may push for the pursuit of freedom in space. It can also be argued the ideas of the UD may act as a counter to the various forms of modern warfare.

Association with Europe and “London Teachers”

On the 7th of October 2017 a presentation of the Universal Design contest Get me 2the Top from SBID Ukraine and the British Council took place. The presentation discussed the main concepts of UD. The organizers of the contest were the University of Arts in London (University of Arts London), the British Design Association (SBID) and the British Council (British Council). The London University of Art has implemented a modern marketing strategy on the market of educational services in

Ukraine and in the world. Active participants in the event were Linda Doyle (a London University Examiner) and Wang Nguyen (Deputy Director of UNDP in Ukraine).

Speaking about the international experience of UD practices and the main reasons for the emergence and popularity of ideas, the representative of the London University of Arts in Ukraine Olena Khilkova considered the desire to develop the world, new spaces, making them accessible to all people. She also highlighted the diversification of the population. The director of the British Council in Ukraine Simon Williams who also participated in the event, described the importance of the commercial aspect in promoting UD in Ukraine. British Council and the British Design Association are involving the experience of running existing design business projects to implement a relatively new UD idea. The director notes that quite often companies involve people with disabilities in their processes. The creation of a universal space for all people can be commercially beneficial for companies, so they are interested in distributing the universal design policy in Ukraine and abroad. During the presentation SBID regional directors Natalya Bolshakova and Yulia Danilova provided information about the start of the construction of the school in Brovary with UD principles. This project also has support both from the state and from foreign investors.

Ukrainian specialist Elena Ivanova (UNDP project coordinator for social sector reform in Ukraine) divides UD into 2 categories.

1. Universal items
2. Specialized items

She also separates subcategories.

1. Furniture and home furnishings
2. Design of public spaces
3. Inclusive education.
4. Involving users to design process

There is a certificate of conformity to the rules of universal design. Elena Ivanova emphasized the importance of implementation UD postulates to the future reconstruction of the Donbas and other territories. [22, 15]

The American Future

There is a probability that a repeated rethinking of the concept that has already been analyzed in another geo-social situation, such as the European Design for all or the Russia's "Borderless Environment" will not bring a meaningful understanding and sense of the ideals of the UD in the Ukrainian environment. Since UD ideas were born in the United States, it would be logical to turn to the sources of the concept and to understand the future of the UD idea and its possible development for Ukraine. European incarnations of UD also acquired local geo-social changes, and created

their vision of the principles of UD. The implementation of UD in different geo-social situations will be different. One can say that Ukraine is trying to implement an already analyzed experience without having a chance to analyze it.

Currently, there are many articles and different opinions about the existence and development of UD ideas in the United States. There are websites, programs, institutes and conferences like (Universal Design Today) [17] aimed at exploring the process of the development of the UD idea and solving existing problems in the US and in the world. [16]

"Ukrainian" projects with the use of universal design

Over the past 5 years, a number of projects have been implemented and started in Ukraine

The main implementations are: [6]

1. Accessibility area in the center of Ivano-Frankivsk. (2016-2018) Created with the assistance of EU and UN. There is a city accessibility portal. There are induction loops and special traffic lights. Available visual communication tools. (The Accessible Ivano-Frankivsk Project is one of the measures aimed at implementing the EU Program and was implemented as part of "Smart Cities" concept for partner municipalities of the Urban component of the EU / UNDP project "Local Development, focused on community-III ".) Customer - Executive Committee of Ivano-Frankivsk City Council and NGO" Center for Municipal and Regional Development - Resource Center " [6]

2. Oschadbank Branch (Velyka Vasilkivska St., Building 116). The installed equipment is designed in accordance with UD principles. Department employees speak the sign language. They also note that UD is commercially profitable for them, as the number of clients has increased. Among the employees are people with disabilities. Private finance.

3. Administrative Service Center at Popasna District State Administration. (2017)

Reconstruction according to UD principles was completed on September 14, 2017. Government funding from district budget with financial support of the European Union.

4. City Council and Administrative Service Center in Druzhkovka. (2017) The special inclusive equipment designed by the EU and the UN was created for the city council and the reception hall. June 22, 2017

5. Reconstruction of the Arsenal plant (Kyiv) under the Kyiv Appeal Court, Kyiv Appeal Court is located in the building since 2011. The customer was the court itself. State funding. The development of the project involved UD specialists from the National Assembly of People with Disabilities of Ukraine and Vladimir Azin.

6. The reconstruction of the Museum of Taras Shevchenko in Kyiv (2014)

This project is also based on the principles of UD. Elevators and inclusive equipment are available on each floor. The museum also runs exhibitions of people with disabilities. Government financing. In 2014, the Museum launches a project "Museum without barriers: from theory to practice"

7. High-speed tram in Lviv. (2012 - 2013) Designed in Ukraine. Low-floor carriages have been developed. Government financing. The first route was opened in 2013. The project was made with the support of the National Assembly of People with Disabilities of Ukraine.

8. Terminal D of the airport of Borispol. (2012) This project was based on the principles of UD and was supported by European investors. Financing 40% - state 60% - private. The project was developed as part of the preparation for Euro 2012

9. Kyiv City Children's Diagnostic Center, Kyiv. (2017) Reconstruction was made according to UD principles. State financing. The project was made with the support of the Resource Center "Barrier –Free Ukraine" [9] (created after Euro 2012) and National Assembly of People with Disabilities of Ukraine and Volodimir Azin.

10. Reconstruction of the building on the Gregory Skovoroda, 4/12 street. Kyiv under the British Council. (2010-2011)

The surrounding area is also designed according to UD principles. The project was created with the support of the British Embassy in Ukraine and the British Council Foreign Representations.

Future of the culture of universal design in Ukraine.

Education

From the history of the development of the ideas of the BF one can distinguish the appearance in the architectural higher education of Ukraine and Russia, the course on BF. On the basis of this course the problems of people with special needs are covered partially. For example students in KNUCA are actively interested in this course from 2014. [24] But the ideas of BF and UD are not included in the general tradition of designing buildings and structures, as well as in design programs.

One can conclude that the ideas of the UD still exist in the education of Ukraine, but in a modified form.

In addition Open International University "Ukraine" disseminates the idea of the accessibility of higher education to all people. Also, the university has developed its methodology for determining the accessibility level of facilities for people with disabilities. [14]

Media

In the Ukrainian media, information about UD is also gaining more publicity. UD ideas are gaining popularity among the public and become a popular theme in the media space since 2014. Dmytro Shchebetyuk became one of the popularizers of the topic of accessibility on TV, YouTube, social networks. During the games in Rio and

Pyongchang Dmytro was the lead Paralympic Studios TV program on Channel 24 within the framework of the Paralympics Phenomenon for Spirit project. Also in October 2017, in the second season of Roman Vintoniv's (Michael Schur) satirical digest (Play, dog, bracket, hryvnia, question mark, dollar, zero), coming out on three broadcasters: UA First, Channel 24 and at the Gromadsky as well as the Youtube Channel Television of Toronto, Dmytro Shchebetyuk maintains a permanent section entitled "Inclusion", [21] which describes and explores the quality of the implementation of inclusiveness, accessibility and postulates of UD in urban space. Many Ukrainian media, including Channel 5, Channel 24, 1 + 1, Radio Liberty (Svoboda), and others made special reports with the participation of an activist.

Together with Margo Gontar, he is the founder of the Accessible UA Initiative [23], founded on December 3, 2015, to monitor various facilities for their accessibility to people with disabilities. Also, the VR game Wheelchair Simulator [12], which allows the player to immerse themselves in the world of wheelchair users, to experience all the obstacles in moving, was also launched by AUA and ViRa Games.

In addition, Dmytro is included in the reserve of the Paralympic team of Ukraine on archery. In 2017 he entered the hundreds of most influential Ukrainians according to the FOCUS magazine.

Art

The universal design as a kind of activity aims to create a space of freedom for people, reconstructing existing material and spiritual constructs to the maximum level of comfort for any human needs. It is probable that art exists when the artist is free and he seeks freedom in his work. Considering UD practices from this point of view, we can say that many Ukrainian artists and artists embody similar ideals of struggle for freedom in life and work in their works. Contact with the activities of the UD is both sensual and intellectual. UD has its aesthetic categories, representing the freedom of movement for people with all needs as beautiful, and barrier, hard-to-reach space as an antipode of freedom of movement. One can express the idea that the embodiment of the UD is the personalization and individualization of space, in its material expression acts as a social and human value that embodies the ideal of freedom and liberation. It should be added that the implementation of the UD is always different, it depends on the unique local situation, thus creating a new, unique solution.

Sport

It should be noted that activities are also conducted with the participation of people with different opportunities and abilities. The oldest and most famous are certainly the Paralympic Games. The Paralympic movement in Ukraine began to develop in 1989, when the country's first established sports clubs and health clubs for

the disabled were developed. Later, four national sports federations of people with musculoskeletal disorders, visual impairment, hearing and intellectual disabilities were formed. By combining federations in 1992 the National Committee of Sport for the Disabled of Ukraine was formed. The National Committee of Sport for the Disabled of Ukraine represents Ukraine in the International Paralympic and Deaflympic Movement and serves as the National Paralympic Committee. In 1993 the Ukrainian Center of Physical Culture and Sports for Disabled "Invasport" and 27 regional centers "Invasport" were created.

For the first time Ukraine participated in the 2000 Summer Paralympic Games in Atlanta. Since that time, Ukrainian athletes annually take active part in the competitions. It is interesting to note that the Ukrainian Paralympic Team has risen in recent years to a fairly high score in the rating table. So in the summer games in Rio de Janeiro in 2016 the team gained 117 medals. And during the winter games in Pyongchang in 2018 the team gained 22 medals. [19]

In recent years, Prince Harry and the UK Department of Defense, with the support of the Olympic and Paralympic Committees, has created new Paralympic Games "Invictus Games". The idea of the game was to involve affected soldiers and war veterans to participation. Annually, the competition is partly sponsored by such world brands as Jaguar, Land Rover. In 2017, the team of warriors from Ukraine participated in Toronto games for the first time. [20]

Conclusions

The increase in the number of people with disabilities caused by natural, social and man-made causes on the one hand and the low UD culture of state and social institutions in modern Ukraine on the other, causes an increasing need for the implementation of the UD culture for solving numerous problems limiting inclusivity. Until a recent spike in the number of people with disabilities and displaced persons, the UD ideas were not on the forefront in Ukraine, did not have a comprehensive strategy of implementation, and often existed in chaotic form of old concepts under the general name (BF). UD values logically follow from the more general existential problem of freedom as the most important human need. Objects created with the principles of UD may also act as cultural artifacts. The ideas of the UD reflect a worldview that is becoming more and more popular in Ukraine, and its influence on culture is becoming more prominent.

It can also be assumed that the UD culture can act as a counter to modern forms of expansionism. Ideas and postulates of the UD are an axiological basis and, at the same time, an applied form of cultural cooperation. One can perceive the UD culture as a culture of human activity, generating new economic and social interconnections. The implementation and practice of UD are intended to increase both the country's cultural and economic potential.

- An important step in the development of UD ideas in Ukraine at this stage are:creation of accessibility maps, development of convenient infographics,
- clear presentation and popularization of UD ideas in society.

It should be noted that the UD must be implemented comprehensively, creating and guaranteeing an "infinite network of roads" to ensure freedom of movement and create opportunities for all people.

Summarizing the experience of projects with the attempt to implement the principles of UD, we can see a certain pattern in the localization of projects:

- Areas near combat zone,
- Kyiv
- Western Ukraine.

Such localization indicates a high degree of politicization of the process and a large dependence on external investment.

From the analysis of the educational sector, it should be noted that currently there are not enough full-time UD training courses in Ukraine. The growing need for competent specialists on UD and practical skills to apply its principles in almost all areas of public life, undoubtedly makes the course on UD very relevant. Recently, the number of available stakeholders on UD in the Ukrainian media has increased. At present, in the media there is a process of saturation of information about UD however, there is no complete understanding of these ideas.

An interesting fact is that Ukrainian sportsmen who win the Paralympic Games and other parasport events are at the forefront of the process of disseminating UD ideas. (Invictus Games) Paralympics at the moment play a key role in promoting the ideas of UD in Ukrainian society.

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ЗАРОДЖЕННЯ ІДЕЙ УНІВЕРСАЛЬНОГО ДИЗАЙНУ В УКРАЇНІ

Присвячено опису розвитку та зародження ідей доступності, інклюзивності та універсального дизайну за часів незалежної України. Описано основні принципи універсального дизайну, розроблені командою Р. Мейса та саме початковий стан розвитку тренду у межах українського соціального та політичного поля (дискурсу). Також було виявлено та описано різницю та локальні особливості уживання термінів «безбар'єрне середовище», «інклюзія» та «універсальний дизайн», «доступність» в українському соціальному полі. Також наведено приклади та описано перші матеріальні втілення принципів доступності у архітектурному середовищі України. Також надано короткий

аналіз можливого розвитку тренду інклюзії та доступності у структурі українського архітектурного та соціального дискурсів. Збільшення кількості людей з інвалідністю, спричинене природними, соціальними та техногенними причинами, з одного боку, та низькою якістю культури універсального дизайну державних та суспільних інституцій в сучасній Україні, з іншого, зумовлює зростаючу потребу у впровадженні культури інклюзії для вирішення численних проблем, що обмежують інклюзивність. До нещодавнього сплеску кількості людей з інвалідністю та внутрішньо переміщених осіб ідеї універсального дизайну не були основними в політиці України та не мали комплексної стратегії впровадження, а часто існували в хаотичній формі старих концепцій під загальною назвою (безбар'єрна архітектура). Цінності універсального дизайну логічно випливають із більш загальної екзистенційної проблеми свободи як найважливішої людської потреби. Об'єкти, створені за принципами універсального дизайну можуть також виступати як культурні артефакти. Ідеї універсального дизайну відображають світогляд, який стає дедалі популярнішим в Україні, а його вплив на культуру стає дедалі помітнішим.

Можна також припустити, що культура універсального дизайну може виступати як протидія сучасним формам експансіонізму та авторитаризму. Ідеї та постулати інклюзії є аксіологічною основою і водночас прикладною формою культурної співпраці. Культуру інклюзії можна сприймати як культуру людської діяльності, що породжує нові економічні та соціальні взаємозв'язки.

Ключові слова: інклюзія; універсальний дизайн; безбар'єрність; доступність; культура; архітектура.

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