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## Application of aesthetic principles in the creation of inclusive urban environments

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**Abstract.** The development of the modern inclusive urban environment of advanced countries increasingly considers aesthetic principles that help to make the space not only functional and accessible to all, but also aesthetically pleasing, thus achieving internal comfort through aesthetic influence. The purpose of this study was to identify and classify the aesthetic principles of forming an inclusive urban environment at the beginning of the 21st century. The study was based on the analysis of the literature on inclusive design and methods of aesthetic development of urban areas. The study proved that the aesthetics of an inclusive urban environment positively influences the well-being and experience of people with disabilities. It was determined how aesthetic elements can be used to improve navigation, orientation, and safety for people with disabilities. The study explored new and creative ways of integrating aesthetics and inclusivity that extend beyond basic accessibility requirements, creating a more comfortable and attractive urban space. Aspects that help to achieve the optimum combination of practicality and aesthetic appeal were identified, making the inclusive environment convenient for everyone and at the same time preserving its aesthetic value. The study analysed and highlighted the aesthetic principles that are most effective for creating a truly inclusive and functional urban environment. The practical significance of the findings lies in the fact that the use of aesthetically designed solutions, such as contrasting colours, clear navigation, and tactile surfaces can substantially improve orientation and safety for people with various types of disabilities. This contributes to the psychological well-being and sense of belonging of all users, regardless of their physical capabilities

**Keywords:** accessibility; urbanism; environmental design; spatial harmony; barrier-free environment; ergonomics; visual appeal

#### INTRODUCTION

The issue of inclusive urban environments is gaining increasing significance. This involves creating spaces that are accessible and comfortable for all categories of the population, including people with disabilities. However, inclusivity is not limited to mere functional accessibility. The aesthetic component plays a crucial role, significantly affecting users' psychological well-being, sense of dignity, and overall quality of life. Application of aesthetic principles in the design of inclusive urban spaces not only ensures physical access but also helps create a harmonious, attractive, and inspiring environment that fosters social integration and enhances the emotional state of all its inhabitants.

Therefore, the identification and classification of aesthetic principles for shaping contemporary inclusive urban environments necessitate a thorough analysis of publications by both Ukrainian and international researchers. S. Balasubramanian *et al.* (2022) analysed key physical, visual, and aesthetic aspects. The researchers identified the influence of aesthetic elements on user activity, reactions, and perceived colours. The study results demonstrated that the diversity and attractiveness of an environment – specifically facades, colours, building proportions, maintenance, and the presence of greenery – are intricately linked to people's desire to walk. M. Kovalchuk (2025) investigated the application

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of inclusive design principles to create comfortable and aesthetically appealing spaces. The analysis revealed that inclusive design principles enable the creation of products that are not only functional but also evoke positive emotions and satisfy the needs of a wide range of users. Kovalchuk identified and substantiated the specifics of applying inclusive design principles to create an aesthetic environment. The researcher demonstrated how these principles influence the processes of forming ergonomic, aesthetic, and inclusive spaces.

C. Evangelinos & S. Tscharaktschiew (2021) assessed the aesthetic preferences of users and their impact on urban transport infrastructure. The researchers analysed how the visual and aesthetic characteristics of the urban environment, such as facade design, colour palette, building proportions, quality of service and landscaping affect people's behavioural reactions, their activity, and preferences for movement, particularly walking. The researchers substantiated the features of the application of the inclusive design principles in the development of the aesthetic environment and its impact on the creation of a comfortable, safe, and accessible space for all. The key areas of development of an aesthetic inclusive environment were covered to improve the quality of life in urban transport infrastructure. G. Xiangmin et al. (2022) presented an analysis of the development and validation processes for a dynamic method of assessing the visual attractiveness of commercial streets using eye-tracking technology. Their study involved collecting data on gaze fixation points, saccades (rapid eye movements), fixation durations, and eye movement trajectories within real or virtual environments. Analysing this data helped to identify urban landscape elements that attracted the most attention, evoked interest, or, conversely, were sources of cognitive load or discomfort.

M. Lamirande (2023) focused on the study of current practices and theoretical approaches to inclusive design. The study analysed the various methodologies and tools used to create products, services, and environments that are accessible and convenient for a wide range of users, accommodating their diverse capabilities, needs, and experiences. H.P. Johannes et al. (2021) presented a study of the impact of visual design on litter prevention in urban and public spaces. The study examined specific elements of visual design, such as the placement of litter bins, their visibility and design, the cleanliness of the area, the quality of materials, lighting, and the overall aesthetics of the space that can influence people's desire to maintain tidiness. E.M. Alnikov (2020) investigated an innovative approach to designing an inclusive environment through the lens of aesthetics, using the potential of additive technologies (3D printing). The analysis presented the possibilities of 3D printing in the production of individualised tactile navigation elements, adapted furniture, decorative details, and other architectural components that are ergonomic, safe, and visually pleasing all at once.

While earlier studies explored various aspects of inclusive design, further clarification of its aesthetic dimensions is still necessary. The purpose of present study was to identify and systematise the key aesthetic principles that can be effectively integrated into the design of modern inclusive urban spaces.

#### MATERIALS AND METHODS

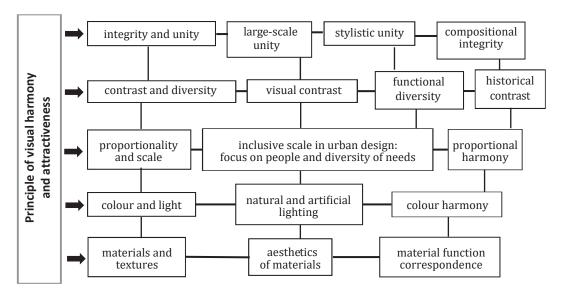
The applied research methodology was fully consistent with the tasks set, including a wide range of scientific approaches. It included a wide scope of scientific frameworks that correspond to the set goals and objectives, such as systematisation and grouping of existing aesthetic principles and their manifestations in inclusive design; art historical analysis, where the visual and aesthetic characteristics of urban objects and spaces were studied in detail. This analysis covered such aspects as imagery, stylistic features, form, colour palette, textures, and materials. It allowed assessing the impact of these elements on the perception of the environment by users. A comparative analysis was also employed to establish distinct approaches to the integration of aesthetics and inclusivity in the urban environment, identifying best practices and effective solutions both in Ukraine and abroad. The materials for the study included scientific articles, monographs, and reports on architecture, environmental design, urban sociology, perceptual psychology, and inclusive practices, as well as photos and videos of urban spaces and objects demonstrating a variety of aesthetic solutions. Additionally, planning and design documentation on urban infrastructure, materials from international conferences and symposia on urbanism and inclusive design, as well as data from field observations and personal visitors to various cities, such as Kyiv, Lviv, Chernivtsi, were used. Direct observations were made of the interaction of diverse categories of users (specifically, people with disabilities, elderly people, etc.) with elements of urban infrastructure. This included recording behavioural reactions, the nature of activity, and the perception of visual aspects in real conditions of urban space. The study also involved a detailed review and analysis of successful projects of inclusive urban environments, where aesthetic principles were effectively integrated. Specific design solutions, materials, planning, and their influence on accessibility and attractiveness were assessed. This helped to identify key visual design patterns that enhance both inclusivity and overall aesthetic appeal in urban environments.

#### RESULTS AND DISCUSSION

The development of an inclusive urban environment is one of the crucial tasks of modern urban planning. The application of aesthetic principles not only makes the city attractive but also contributes to its perception as a harmonious and hospitable space, where everyone feels part of the community. The modern inclusive urban environment is formed based on such principles

as visual harmony and attractiveness through the lens of accessibility, functional aesthetics and ergonomics, socio-cultural and emotional significance, as well as ecological aesthetics and sustainable development (Kovalchuk, 2025). These principles can be further classified and analysed in greater detail from

the perspective of inclusive design. The principle of visual harmony and attractiveness through the lens of accessibility becomes a significant prerequisite for inclusion, inviting people to interact, facilitating orientation, and creating a sense of security. It has the following typology, presented in Figure 1.



**Figure 1.** Typological structure of the principles of visual harmony and attractiveness **Source:** created by the author of this study

The key result is the creation of a psychologically comfortable and pleasant inclusive environment. When an urban space is visually harmonious, it evokes a sense of calm, order, and security. For people with increased sensitivity, cognitive disorders, or those who

are easily disoriented, this harmony reduces stress and anxiety (Kryvuts & Katrichenko, 2016). Balanced lighting, a pleasant colour palette, the absence of visual noise – all this contributes to everyone's mental well-being (Fig. 2).



Figure 2. Psychologically comfortable and pleasant inclusive environment

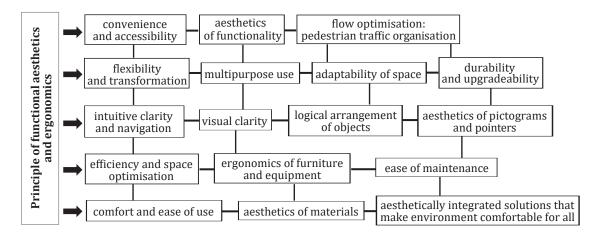
**Note:** a – inclusive equipped area for wheelchair users during a football match; b – modern inclusive design of a metro station; c – inclusive playground **Source:** Science Photo Gallery (n.d.)

The principle of functional aesthetics and ergonomics ensures that the space is not merely visually appealing, but also intuitive, user-friendly, and safe for every person. This reflects the transition from the perception of beauty as an adornment to its understanding as an integral component of human purpose and well-being. It is through the integration of forms that serve specific needs and design focused on the interaction of people with space that true harmony is achieved (Johannes *et* 

al., 2021). This approach to integrating form and function also extends to the visual communication environment. For a comprehensive assessment of the accessibility of images, only one method is sufficient. It is necessary to incorporate processes that evaluate the quality of the accompanying text, as this is instrumental in ensuring a comprehensive functional aesthetics and ergonomics of information perception for all users, considering their individual needs (Alahmadi &

Drew, 2018). Specifically, the linguistic clarity, consistency of terminology, and adaptation to various literacy levels play a crucial role in making information accessible to a wider audience. Applying ergonomic principles in visual communication means that information

should be presented in a way that minimises cognitive load and ensures maximum efficiency of its perception (Smirnova, 2020). The principle of functional aesthetics and ergonomics is revealed in the following types presented in Figure 3.



**Figure 3.** Typological structure of the principle of functional aesthetics and ergonomics **Source:** created by the author of this study

When applying the principles of functional aesthetics and ergonomics, the result is the creation of products, systems, and environments that harmoniously combine practicality, convenience, and visual appeal.

This approach ensures not only high efficiency and safety of human interaction with the object, minimising physical and cognitive load but also evokes positive emotions and aesthetic pleasure (Fig. 4).



Figure 4. Ergonomic and aesthetically pleasing products and environments

**Note:** a – inclusive walking device with fixed weight load; b – ergonomic wheelchair transformer; c – Jackson Street in St. Paul, reconstructed by Toole **Source:** Science Photo Gallery (n.d.)

The principle of sociocultural and emotional relevance is a concept that merits greater consideration in the context of inclusive solutions, despite its frequent underestimation. This principle extends beyond purely functional and physical aspects, exploring the manner in which objects and environments influence an individual's mental state, self-perception, and social integration (Osadcha *et al.*, 2019). Therefore, the principle of sociocultural relevance emphasises that design does not exist in a vacuum. It is embedded in a certain cultural context, reflects the value of society, shapes and is

perceived through the lens of social norms, traditions, and symbols. For people with disabilities, this means that design should not only ensure physical accessibility, but also destroy stereotypes, reduce stigmatisation, and promote their full participation in society (Orshansky, 2019). Products and environments should not be "special" or "medical", but integrated, aesthetically appealing, and emphasising individuality, not merely functional limitations. It is these principles of sociocultural and emotional relevance that are crucial in inclusive design when developing clothing for

working women with physical disabilities, because clothing should not only provide comfort and functionality, but also emphasise their identity, professionalism, and promote social integration without stigmatisation (Carroll & Kincade, 2009). The principle of

sociocultural significance in the context of design and ergonomics encompasses the profound influence of objects and environments on social interaction, cultural norms and personal perceptions, which determines its multifaceted typology (Fig. 5).

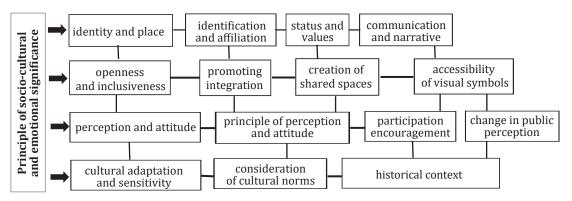
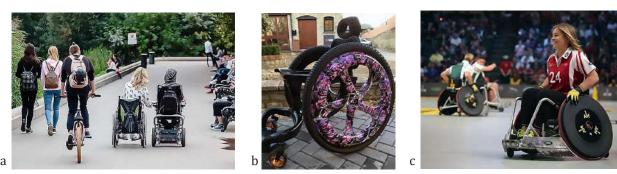


Figure 5. Defining types of sociocultural and emotional value

**Source:** created by the author of this study



**Figure 6.** Inclusive space and products created using the principles of socio-cultural and emotional significance **Note:** a – inclusive Queen Elizabeth Olympic Park; b – natural motifs of Spain in the decoration of wheelchair wheels; c – inclusive sports complex **Source:** Science Photo Gallery (n.d.)

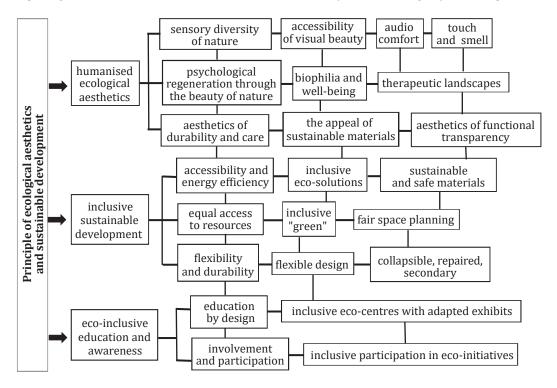
Application of the principles of sociocultural and emotional significance in creating an inclusive environment transforms space and objects, giving them functionality that extends far beyond simple physical accessibility. This means that inclusion is achieved not only through the removal of physical barriers, but also through the development of an environment that actively accommodates the psychological, social, and cultural needs of a person (Krasnikova, 2018). The result is an environment that actively destroys social barriers and stereotypes, contributing to deep integration and a sense of belonging. The primary role in this process is played by the use of colour combinations. Colour is a powerful tool that influences emotional state, psychological perception, and cultural associations, and therefore its conscious use in inclusive design contributes to the achievement of the above principles. A judiciously curated colour palette can engender a sensation of calmness, stimulate activity, facilitate enhanced navigation, delineate spatial domains, attenuate anxiety levels, and

underscore a sense of cultural affiliation. This approach serves to foster a sense of belonging while concurrently mitigating tangible manifestations of division. Thus, colour becomes not simply an aesthetic element, but an integral component that allows implementing a truly inclusive environment that meets not only the physical, but also the socio-cultural and emotional needs of all users (Ralko et al., 2023). In this context, colour also performs a communicative function, facilitating navigation and promoting an intuitive perception of space, regardless of the user's age, experience, or cognitive characteristics. Such an approach not only provides functional comfort, but also evokes positive emotions, a sense of dignity and confidence, allowing each person to fully interact with the surrounding world and society (Bulatov, 2023) (Fig. 6).

The principles of ecological aesthetics and sustainable development are interrelated approaches aimed at creating inclusive, harmonious, and environmentally responsible design and operation of systems. Ecological

aesthetics focuses on visual appeal and an emotional connection to nature, integrating natural forms, materials, and processes into design to evoke feelings of calm, harmony, and respect for the environment. It seeks to ensure that functional and urban spaces are not simply utilitarian, but also environmentally sensitive and visually pleasing, enhancing the quality of life and human well-being (Steiner, 2019). Sustainable development provides a practical framework to achieve a long-term balance between social, economic, and environmental needs, requiring the use of renewable resources, waste

minimisation, energy efficiency, reduced impact on ecosystems, and the promotion of social justice. These design approaches differ from the existing sustainable design paradigm, which, while focused on technological and material solutions to achieve environmental efficiency, lacked attention to real-world experiences, individual needs, and actual user activity (Evans, 2018). The principle of ecological aesthetics and sustainable development, which integrates beauty and functionality with environmental responsibility, can be typologically characterised by the following key criteria presented in (Fig. 7).



**Figure 7.** Defining types of ecological aesthetics and sustainable development of an inclusive environment **Source:** created by the author of this study

The developed typology reveals the relationship between the principles of ecological aesthetics and sustainable development in the context of the development of an inclusive urban space. Application of these approaches allows creating an environment that is not only visually attractive, but also functional, safe, and responsible towards nature and society. The integration of natural elements contributes to psychological well-being and ensures the accessibility of green areas for all. The use of sustainable materials and energy-efficient solutions guarantees durability, safety, and minimisation of the ecological footprint, which makes the space healthier for all residents, including people with special needs. The study highlighted the significance of social justice and equal access to a quality environmental environment. Additionally, design can create educational opportunities and actively involve people with disabilities in environmental projects, promoting their active contribution to sustainable development. As a result, such an integrated approach creates not only beautiful, but also liveable, equitable, and responsive urban spaces, where everyone feels comfortable and dignified (Fig. 8). The result of combining these principles is the creation of innovative solutions that are not only functional and aesthetically perfect, but also actively contribute to the conservation of natural resources, the reduction of the ecological footprint, and the development of a more sustainable, healthy, and environmentally conscious society. This enables the design of a future where human needs are met without compromising the capabilities of future generations. I. Bondar (2022) explored innovative design trends as a key factor in shaping the modern urban environment. The researcher analysed the influence of new concepts, technologies, and materials on the creation of functional, aesthetically pleasing, and sustainable urban spaces. Bondar paid special attention to the integration of the principles of human-centred Smart City design, green architecture, and adaptive infrastructure solutions. The researcher found how these trends contribute to improving the quality of life of residents, optimising urban resources, and ensuring ecological balance, proposing methodological approaches to the implementation of leading design innovations in the practice of urban planning and development. E.-N. Untaru *et al.* (2025) analysed aspects focusing on the effectiveness of biophilic design in the context of a hospital and its impact on employees. The researchers analysed how the integration of elements of nature and natural systems into the design of the workspace

contributes to emotional well-being, increased environmental satisfaction, and strengthened attachment to the workplace among staff. The study examined how access to the natural world, vegetation, natural materials, and vistas of nature can reduce stress, increase productivity, and overall job satisfaction in conditions of high emotional stress typical of staff. These findings were consistent with the results of the present study, where the integration of natural elements into inclusive urban environments was shown to foster psychological well-being, reduce anxiety, and enhance inclusivity through emotional and sensory engagement.







**Figure 8.** Ecological aesthetics and sustainable development in the context of the development of an inclusive urban space

**Note:** a – inclusive green roof, San Francisco; b – inclusive Azor Beach; c – inclusive Big Bend Park **Source:** Science Photo Gallery (n.d.)

A. Ricciardel et al. (2025) explored the multifaceted process of urban regeneration, considering it from the stage of space design to their social integration. Particular attention was paid to the issue of innovation and its connection with organisational aesthetics. The researchers analysed how visual appeal, harmony, and functionality of design affect the success of regeneration projects. Specifically, the researchers considered the role of aesthetic solutions in the development of an inclusive and comfortable environment that promotes active community participation and social cohesion. The present study confirmed that aesthetic and ergonomic principles play a key, not secondary, role in shaping inclusive urban spaces by directly affecting user comfort, interaction, and sense of security. I. Ryzhova et al. (2024) examined barrier-free architecture in the context of inclusiveness and sustainable development, identifying a series of key principles for creating an accessible environment. In contrast to their generalised approach, the present study examined detailed typologies of aesthetic principles in inclusive design, which allowed structuring visual, ergonomic, socio-cultural, and environmental aspects as independent analytical categories.

M.D. Trupp *et al.* (2022) investigated whether short-term interaction with online digital art can positively affect a person's well-being. The researchers performed a comparative analysis of the impact of online presentations of art and culture on several psychological indicators: mood, anxiety level, subjective

well-being, and feelings of loneliness. The study found that even a brief virtual immersion in the world of art can serve as an effective tool for improving emotional state and reducing negative psychological manifestations. This study empirically confirmed the above principles. By comprehensively analysing the impact of diverse types of art, as well as inclusive design, on the well-being of people with special needs in adapted spaces, the scope of earlier studies was expanded and new findings were obtained. However, M.D. Trupp et al. (2022) did not examine the long-term duration of these positive effects. It was also worth considering that the quality and format of online presentations can vary significantly, and it is unclear to what extent these findings can be generalised to all forms of digital art. Furthermore, the question stays open whether virtual immersion can completely replace physical interaction with art. The latter often provides the unique atmosphere of galleries and museums, social interaction, and a deeper sensory experience, while the principle of socio-cultural and emotional significance may be weakened or altered in the virtual environment.

H. Loodin & O. Thufvesson (2022) investigated the architectural styles that best contribute to the creation of attractive streetscapes, with a particular focus on the aesthetic preferences of city centre managers. Their analysis presented key visual and aesthetic characteristics of architectural solutions that shape the urban environment, including building facades, materials, colour

schemes, proportions, and the overall harmony of the development. However, a key aspect of their study, which was controversial, lied in the special attention paid to the aesthetic preferences of city centre managers, which, on the one hand, allows understanding what priorities and visions dominate among the decisionmakers in the urban development. On the other hand, it is unclear whether the preferences of city centre managers are representative of the wider community of residents and users of these spaces. The urban environment is created not only for management, but also for thousands of people with diverse aesthetic views, cultural preferences, and functional needs. The present study addressed this issue by including observations of different user groups in an inclusive urban environment, which allowed evaluating aesthetic and functional aspects from the perspective of real users with diverse needs and sensitivities. Aesthetics in this context plays the role of a tool capable of integrating functional solutions into a holistic, attractive, and understandable image of the city (Alnikov, 2020). The conducted study helped to systematise aesthetic principles and substantiate their application in the context of creating inclusive spaces. However, E.M. Alnikov (2020) did not detail the specific methods and criteria for assessing the effectiveness of such integration in practice, nor did the researcher consider potential conflicts between aesthetic solutions and functional accessibility, which are the subject of a deeper analysis in the present study.

This study was based on the findings of Ukrainian and international researchers who analysed the role of aesthetics in creating inclusive urban environments. Their work covers a wide range of issues, from visual accessibility and comfort to the psychological perception of space by people with diverse needs. The examination of their findings identified key principles and approaches that serve as the basis for developing effective solutions in this area. Specifically, these sources emphasised the significance of emotional resonance, cultural relevance, and multisensory engagement in shaping environments that are not only accessible, but also meaningful and welcoming to diverse user groups.

#### CONCLUSIONS

The study identified effective and creative strategies that provide an organic combination of aesthetics and inclusion. Analysis of the latest methods showed that they enable the development of urban spaces that exceed basic accessibility standards, significantly

increasing their level of comfort and visual appeal. It was found that the harmonious integration of aesthetic principles with accessibility requirements contributes to increasing the level of comfort and attractiveness of urban spaces. The study identified the key factors that help achieve synergy between practicality and visual appeal, making an inclusive environment not only comfortable, but also aesthetically valuable for everyone.

Within the framework of the study, a series of typologies were developed to systematise approaches to designing inclusive environments. Specifically, the typology of the principle of visual harmony and attractiveness in the context of accessibility emphasises the role of aesthetic elements in improving navigation and orientation without compromising visual value. The typology of functional aesthetics and ergonomics organises approaches to creating spaces that simultaneously meet aesthetic standards and ensure user convenience. The typology of ecological aesthetics and sustainable development integrates beauty and functionality with environmental responsibility, expanding conventional notions of aesthetics through the lens of environmental awareness and long-term viability. The typology of socio-cultural significance in design and ergonomics highlights the value of social and cultural context in shaping inclusive spaces.

Further research should focus on in-depth study of the socio-cultural and emotional impact of specific aesthetic elements. This includes analysing how colour solutions, lighting, textures, shapes, and materials affect the psycho-emotional state and cognitive processes of people with diverse types of disabilities – e.g., with autism spectrum disorders, sensory or cognitive impairments. A special role should be given to experimental research, specifically, conducting controlled experiments to investigate the impact of certain aesthetic elements (colour, shape, lighting, texture) on the perception of space by different population groups, including people with disabilities.

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#### CONFLICT OF INTEREST

None.

#### REFERENCES

- [1] Alahmadi, T., & Drew, S. (2018). Evaluation of image accessibility for visually impaired users. *Journal of Accessibility and Design for All*, 8(2), 125-160. doi: 10.17411/jacces.v8i2.167.
- [2] Alnikov, E.M. (2020). Designing an inclusive environment using additive technologies (3-D printing). *Bulletin of KNUKiM. Series in Art*, 43, 181-189. doi: 10.31866/2410-1176.43.2020.220251.
- [3] Balasubramanian, S., Irulappan, C., & Kitchley, J.L. (2022). Aesthetics of urban commercial streets from the perspective of cognitive memory and user behavior in urban 793 environments. *Frontiers of Architectural Research*, 11(5), 949-962. doi: 10.1016/j.foar.2022.03.003.

- [4] Bondar, I. (2022). Innovative design trends in the formation of urban environment. *Demiurge: Ideas, Technologies, Perspectives of Design*, 5(1), 49-66. doi: 10.31866/2617-7951.5.1.2022.257481.
- [5] Bulatov, V. (2023). The influence of aspects of the general theory of form formation on achieving accessibility and equality in inclusive design. *Theory and Practice of Design*, 27, 133-141. doi: 10.32782/2415-8151.2023.27.17.
- [6] Carroll, K.E., & Kincade, D.H. (2009). Inclusive design in apparel product development for working women with physical disabilities. *Family and Consumer Sciences Research Journal*, 35(4), 289-315. doi: 10.1177/1077727X07299675.
- [7] Evangelinos, C., & Tscharaktschiew, S. (2021). The valuation of aesthetic preferences and consequences for urban transport infrastructures. *Sustainability*, 13(9), article number 4977. doi: 10.3390/su13094977.
- [8] Evans, G. (2018). Inclusive and sustainable design in the built environment: Regulation or human-centred? *Built Environment*, 44(1), 105-119. doi: 10.2148/benv.44.1.105.
- [9] Johannes, H.P., Maulana, R., & Herdiansyah, H. (2021). Prevention of littering through improved visual design. *Environmental Research, Engineering and Management*, 77(4), 86-98. doi: 10.5755/j01.erem.77.4.25043.
- [10] Kovalchuk, M. (2025). Application of inclusive design principles in creating an ergonomic, aesthetic environment. *Current Issues in the Humanities*, 82(1), 215-219. doi: 10.24919/2308-4863/82-1-32.
- [11] Krasnikova, L.V. (2018). Concept, history and styles of interior design. *Young Scientist*, 12(64), 22-26. doi: 10.32839/2304-5809/2018-12-64-6.
- [12] Kryvuts, S.V., & Katrichenko, K.O. (2016). <u>Design organization of urban space for people with physical disabilities</u>. *Bulletin of the Kharkiv State Academy of Design and Arts*, 5, 33-36.
- [13] Lamirande, M. (2023). *Exploring practices and understandings of designing inclusively.* (PhD thesis, The Open University, Milton Keynes, United Kingdom). doi: 10.21954/ou.ro.000162cc.
- [14] Loodin, H., & Thufvesson, O. (2022). Which architectural style makes an attractive street scape? Aesthetic preferences among city centre managers. *Journal of Urban Design*, 28(1), 25-43. doi: 10.1080/13574809.2022.2072716.
- [15] Orshansky, L. (2019). Aesthetic culture of future design specialists: Essence and structure. *Youth and Market*, 7(174), 23-28. doi: 10.24919/2308-4634.2019.176044.
- [16] Osadcha, A., Pilhuk, O., & Bystriakova, V. (2019). The use of decorative art elements in the works of Ukrainian designers. *The Culturology Ideas*, 15(1), 177-184. doi: 10.37627/2311-9489-15-2019-1.177-184.
- [17] Ralko, M.O., Varchenko, Y.E., Bulatov, V.A., & Vasylenko, A.V. (2023). The phenomenon of "irritating" colours in the field of design. *Theory and Practice of Design*, 29-30, 197-205. doi: 10.32782/2415-8151.2023.29-30.23.
- [18] Ricciardel, A., Amoruso, P., & Liddo, F. (2025). Urban regeneration: From design to social innovation does organizational aesthetics matter? *Urban Science*, 9(3), article number 79. doi: 10.3390/urbansci9030079.
- [19] Ryzhova, I., Pavlenko, T., Hnes, L., Antypenko, Ye., & Pavliuk, O. (2024). Principles of barrier-free formation of "green" architecture in the contemporary spatial-object environment. *Architectural Studies*, 10(2), 55-63. doi: 10.56318/as/2.2024.55.
- [20] Science Photo Gallery. (n.d.). Retrieved from <a href="https://sciencephotogallery.com/art">https://sciencephotogallery.com/art</a>.
- [21] Smirnova, O.V. (2020). Formation of innovative buildings using ergonomic design in the context of sustainable development of the urban environment. *Municipal Economy of Cities*, 6(159), 103-107. doi: 10.33042/2522-1809-2020-6-159-103-107.
- [22] Steiner, F. (2019). Toward an ecological aesthetic. *Socio-Ecological Practice Research*, 1, 33-37. doi: 10.1007/s42532-018-00004-0.
- [23] Trupp, M.D., Bignardi, G., Chana, K., Specker, E., & Pelowski, M. (2022). Can a brief interaction with online, digital art improve wellbeing? A comparative study of the impact of online art and culture presentations on mood, state-anxiety, subjective wellbeing, and loneliness. *Frontiers in Psychology*, 13, article number 782033. doi: 10.3389/fpsyg.2022.782033.
- [24] Untaru, E.-N., Han, H., David, A., & Chi, X. (2023). Biophilic design and its effectiveness in creating emotional well-being, green satisfaction, and workplace attachment among healthcare professionals: The hospice context. *HERD*, 17(1), 190-208. doi: 10.1177/193758672311920.
- [25] Xiangmin, G., Weiqiang, C., Tiantian, L., & Shumeng, H. (2022). Research on dynamic visual attraction evaluation method of commercial street based on eye movement perception. *Journal of Asian Architecture and Building Engineering*, 21(5), 1779-1791. doi: 10.1080/13467581.2021.1944872.

# Застосування естетичних принципів у створенні інклюзивного міського середовища

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Анотація. Формування сучасного інклюзивного міського середовища передових держав все більше враховує естетичні принципи, які допомагають зробити простір не тільки функціональний та доступний для всіх, але і естетично привабливим, таким чином досягаючи внутрішнього комфорту за рахунок естетичного впливу. Метою дослідження було визначити та класифікувати естетичні принципи формування інклюзивного міського середовища на початку XXI століття. Дослідження ґрунтувалося на аналізі літератури з питань інклюзивного дизайну та методів естетичного облаштування міських територій. Доведено, що естетика інклюзивного міського середовища позитивно впливає на самопочуття та досвід людей з інвалідністю. Визначено, як естетичні елементи можуть бути використані для поліпшення навігації, орієнтації та безпеки для людей з інвалідністю. Досліджено нові та креативні способи інтеграції естетики та інклюзивності, що виходять за межі базових вимог доступності, створюючи міській простір більш комфортним та привабливим. Визначено аспекти, які допомагають досягти оптимального поєднання практичності та естетичної привабливості, щоб інклюзивне середовище було зручним для всіх і одночасно не втрачало своєї естетичної цінності. Проаналізовано та виокремлено естетичні принципи, які є найбільш ефективними для створення справді інклюзивного та функціонального міського середовища. Практичне значення отриманих результатів полягає в тому, що застосування естетично продуманих рішень, таких як контрастні кольори, чітка навігація та тактильні поверхні, можуть суттєво покращити орієнтацію та безпеку для людей з різними видами інвалідності. Це сприяє психологічному добробуту та відчуттю приналежності у всіх користувачів, незалежно від їхніх фізичних можливостей

**Ключові слова:** доступність; урбаністика; дизайн середовища; гармонія простору; безбар'єрність; ергономічність; візуальна привабливість