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Design aspects of post-war reconstruction and renovation of public urban spaces

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Abstract. This study aimed to systematise existing approaches, principles, and trends related to the restoration and renovation of public spaces, while also identifying the actual needs of residents through surveys. Based on the findings, recommendations are proposed for the post-war development of public urban spaces. The primary methods used for data collection included visual analysis, individual surveys, and interviews with residents to determine their genuine needs. The results were structured using general scientific research methods. The survey revealed that 63% of respondents expressed a willingness to participate in the renovation and revival of damaged public urban spaces. 43% believed the restoration process should retain historical elements that existed prior to destruction, supplemented with new components. Among those surveyed, 31% preferred complete restoration to the pre-war state without alterations, while 36% wished to see elements of military memorial themes incorporated into the renewed public spaces. The study outlined key aspects highlighting the significance of public space in the functioning of a modern city and identifies major challenges associated with their post-war formation. Methodological recommendations have been provided to guide the formation, restoration, and renovation of public spaces, taking into account both residents' interests and current trends. Existing approaches, ideas, and proposals for the renewal and renovation of public urban spaces have been systematised and supplemented with new concepts. Evaluation criteria for public urban spaces have been refined based on indicators such as functional and spatial organisation, principles of public space formation, development prospects, and public participation. Mechanisms for civic engagement in the restoration and renovation of public spaces have been proposed for all stages – discussion, design, planning, and practical implementation. The findings of this study may be applied by designers and architects in developing projects for the reconstruction of war-damaged public spaces, as well as by local authorities during their implementation

Keywords: spatial planning; post-war transformation; public participation; residents' needs; architectural environment; urban identity; design solutions

INTRODUCTION

Russia's full-scale military aggression against Ukraine has resulted in the destruction not only of buildings, structures, and infrastructure but also of public spaces and recreational zones within the urban environment. The most extensive damage occurred in frontline cities, although virtually all cities across Ukraine have been

affected by the war to varying degrees. The scale of destruction clearly indicates that the entire urban infrastructure – including public spaces – requires both restoration and renovation. In the long term, the post-war recovery and renovation of Ukraine's urban public spaces is one of the key factors influencing planning

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processes at various levels: national, sectoral, regional, and local. Moreover, the need to develop a comprehensive national recovery plan, particularly for public spaces and urban recreational areas, remains pressing even before the full onset of the post-conflict period.

The issue of forming and restoring urban public spaces has been examined from various perspectives in numerous studies. In their exploration of urban design as a project-based and artistic activity, I.V. Ladygina & A.O. Rudenko (2024) focused on the functional and spatial organisation of urban environments and their material and spatial components. The authors noted that certain public spaces – such as squares, boulevards, embankments, gardens, and parks – constitute key elements of the structural framework of the urban landscape. In the article by M. Husiev (2024), it is argued that the spatial and planning structure of public urban spaces serves as a key reflection of the history and culture of the residents. Therefore, various aspects of the functioning and transformation of public spaces should align with the lifestyle and traditions of their users. Yu.V. Idak (2020) emphasised that the transformation of public spaces should be based on a combination of traditional and contemporary approaches. Similarly, S.K. Al-Mosawy *et al.* (2021) noted in their study that the restoration and renovation of public spaces in cities affected by armed conflict can draw upon practical experience and real-world examples from other countries. Drawing on the post-World War II experience of restoring public spaces in German cities, S. Neugebauer (2021) focused on the importance of adhering to fundamental criteria for assessing the attractiveness of public spaces – namely, identity and individuality. The author argued that observing the principles of identity and individuality in the renovation of public spaces contributes to a city's uniqueness.

In her research, V. Praslova (2021) stated that the renovation of open public spaces should be grounded in the principles of multifunctionality and inclusivity, which are key directions in the development of contemporary public environments. Inclusivity is an essential component of modern public spaces and must be integrated into any project focused on the restoration and renovation of a damaged urban environment. According to A. Alkazei & K. Matsubara (2021), incorporating innovative architectural and design solutions – based on the experience of countries that have undergone post-war recovery – is a vital tool in creating inclusive, multifunctional, and futureoriented public spaces in post-war settings.

During the post-war restoration and reconstruction of historical urban areas, the principles of accessibility and social inclusion serve as important benchmarks for renovation, as noted by N.A. Leshchenko (2024). In her article, N. Sosnova (2021) argued that the development of public spaces must take into account collective preferences and the right of all users to contribute to their

formation. This approach increases public engagement and usage of such spaces. Public spaces should be designed to encourage civic activity, providing venues for community gatherings, cultural events, and leisure, as highlighted by researchers V.V. Vorobyov & O.S. Shylo (2022). They also emphasised that the stylistic integration of old and new architecture is a crucial aspect in the formation of public spaces during the post-war reconstruction of Ukrainian cities.

A review of academic studies revealed that researchers have primarily focused on the challenges of organising public spaces, the principles of their development, and the criteria for assessing their quality. Scholars have noted that within Ukraine, there are currently very few examples of restored public spaces damaged by the war, and there is a lack of clear guidance regarding their functional and spatial renovation structure. This highlighted the need for further research on the topic, taking into account regulatory requirements, cultural and traditional specificities of the residents, and current trends in public space design. Therefore, this study aimed to summarise approaches and trends in the renovation of public spaces and to provide recommendations for their post-war development, based on a conducted survey.

MATERIALS AND METHODS

The research employed general scientific methods, including analysis, synthesis, generalisation, systematisation, and surveying. A review of academic literature helped to identify existing approaches to the reconstruction and renovation of public urban spaces. The method of synthesis allowed for the integration of different ideas, concepts, and proposals to form a comprehensive understanding of the issues surrounding public space restoration. Generalisation enabled the identification of key trends and existing solutions that may be applied to post-war recovery and renovation efforts. The systematisation of fragmented data provided a structured scientific framework within the context of design-related aspects. The survey method offered deeper insight into user preferences and gathered suggestions for the restoration and improvement of public spaces.

The survey was conducted by the authors together with students of Cherkasy State Technological University, who volunteered to assist throughout 2024 under the slogan “Civic Engagement in the Renovation and Development of a Comfortable Urban Environment”. The aim was to assess the condition of existing public spaces in cities across Ukraine. In addition to observing the state of public areas, a survey was carried out among residents and visitors in the cities of Cherkasy and Kyiv (Ukraine).

The survey involved 597 respondents, divided into two categories: city residents (377) and visitors (220). The participants included 79 educators, 194 students,

69 civil servants, 137 business employees, and 118 individuals from other professions (Table 1). Respondents were both men and women aged between 16 and 75, who voluntarily disclosed their age and occupation. The geographical background of respondents covered Cherkasy, Kyiv, Kharkiv, and Donetsk regions (Ukraine),

as the survey included students, internally displaced persons, and visitors to Cherkasy from those areas. Most participants were students from Cherkasy State Technological University. The survey was conducted both among working individuals within organisations and on the streets of the city.

Table 1. Distribution of respondents by profession

Respondents	Educators	Students	Civil servants	Business employees	Others	Total
Residents	62	115	51	88	61	377
City visitors	17	79	18	49	57	220
Total	79	194	69	137	118	597

Source: compiled by the authors based on original survey data

In line with the research objectives, respondents were invited to answer seven open-ended questions with suggested response options, along with one free-form question allowing them to share their personal opinions (Table 2). Respondents were informed about the aims of

the survey and the research in general. Ethical aspects of the study were aligned with the principles of the Declaration of Helsinki (2013). Following the initial analysis of the survey results, statistical processing and synthesis of the collected data were carried out by the author.

Table 2. List of survey questions

No.	Question	Response options
1	How often do you visit public spaces?	a) Every day b) Several times a week c) Several times a month d) Several times a year e) I do not visit them
2	How would you rate the quality of public spaces before the war?	a) Excellent b) Good c) Satisfactory d) Poor
3	How has the war affected the condition of public spaces?	a) It has worsened b) No change c) Difficult to answer
4	Are you willing to participate in discussions on the reconstruction and renovation of public spaces?	a) Yes b) No c) It is the responsibility of the authorities d) Difficult to answer
5	How do you view the extent of renovation of public spaces?	a) Complete preservation of all original elements b) Preservation of historical elements with the addition of new features c) Full transformation with the introduction of modern urban design elements d) Difficult to answer
6	Which elements would you recommend including in the design of public spaces?	a) Historical and cultural themes b) Military and memorial themes c) Creative small architectural forms d) Elements showcasing scientific achievements
7	In your opinion, are city residents sufficiently involved in decision-making related to the development of public spaces in the urban environment?	a) Yes b) No c) Difficult to answer
8	What would you suggest to improve the overall quality of public spaces?	Please provide your own suggestions

Source: compiled by the authors

The research methodology was designed to ensure a comprehensive and multidisciplinary approach to the study of public space transformation. By combining theoretical insights with empirical observations, the study aimed to capture both structural patterns and human-centred dimensions of urban renewal. This approach allowed for the integration of diverse perspectives relevant to the socio-cultural, spatial, and participatory aspects of post-war reconstruction.

RESULTS AND DISCUSSION

Renovation and revitalisation of public spaces and recreational areas in urban environments destroyed as a result of military aggression represent one of the primary objectives of Ukraine's post-war recovery. The renovation and revitalisation process must follow a multi-step approach, incorporating plans for the short-, medium-, and long-term future. This process requires not only technical and engineering solutions but also the integration of current trends in urban planning.

The definition and components of public space vary among researchers. For instance, according to I.I. Ustinova & A.S. Matsokha (2024), a public urban space is described as municipal property open for unrestricted public access, facilitating communication and social interaction. However, in modern cities, municipal and private open spaces are often closely interwoven. C. Nelischer & A. Loukaitou-Sideris (2023) define public space as part of the urban territory accessible to everyone and designed for non-commercial use, reflecting the city's social and cultural character. It is also considered a place for communication, leisure, recreation, public events, and social interaction. This interpretation fully aligns with the present study. Although researchers differ in their definitions of public space and its elements, all approaches converge on a shared understanding: public space is an open, universally accessible urban area that fosters social interaction, recreation, and communication while reflecting the city's socio-cultural context.

Public space should be regarded as a multifunctional platform for social interaction, economic exchange, and cultural expression among a wide range of social groups. It should be designed to promote human development, foster peaceful and democratic societies, and encourage cultural diversity. To ensure multifunctionality, the Declaration of UN HABITAT III Issue Papers (2015) proposed allocating 45% of urban land to streets and public space. Specifically, it is recommended that 30% of the urban area be designated for streets and pavements, and 15% for open public spaces and green zones.

Types of public spaces in the urban planning context include pedestrian streets, squares, boulevards, embankments, parks, garden squares, and residential courtyards, all shaped by historical, cultural, social, and economic factors (Kudumovic, 2020). In a social dimension, such spaces are public domains that respond to

socio-economic changes and serve as hubs of civic life. A sufficient quantity of high-quality, inclusive public space that reflects the cultural and social needs of the population is essential for increasing social activity and visitor engagement. Modern public spaces have become an important element of the urban environment, integrated into residential developments and commercial complexes. They function not only as practical areas but also as spaces that enhance comfort, support social activity, and improve the overall quality of life. Based on their spatial structure, the main types of publicly accessible spaces can be identified (Fig. 1).

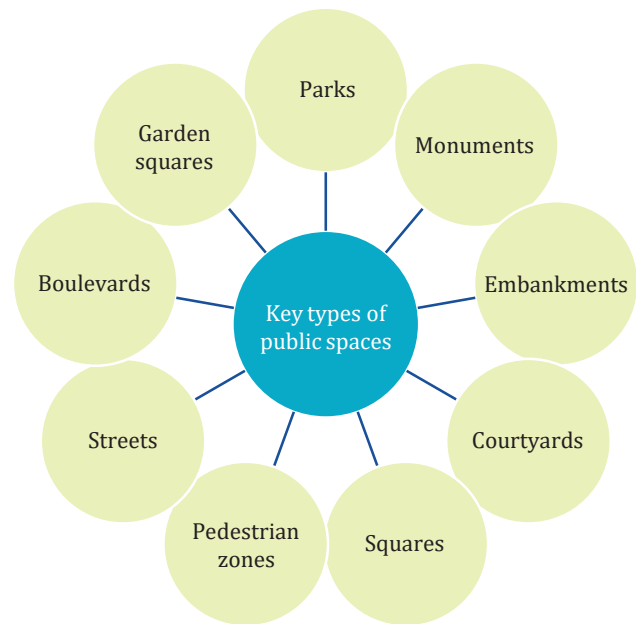


Figure 1. Key types of public spaces
Source: systematised by the authors

In the restoration and renovation of all types of public spaces, an effective approach involves implementing the core principles of inclusive environment design and enhancing quality in line with contemporary trends, as emphasised by H. Kamalipour (2023). The authors of this study have systematised and expanded the principles of public space design, building upon and enriching the researcher's ideas (Fig. 2).

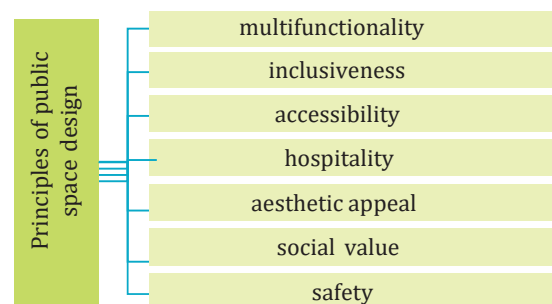


Figure 2. Core principles of public space design
Source: systematised by the authors

Public spaces in modern cities serve multiple important functions, acting as centres of social activity (Fig. 3). The creation of clearly defined and purpose-driven spaces often becomes a key factor in the

development of the urban environment. Once a public space is established, it is essential to ensure the fulfilment of its functions as an integral component of a comfortable and effective urban setting.

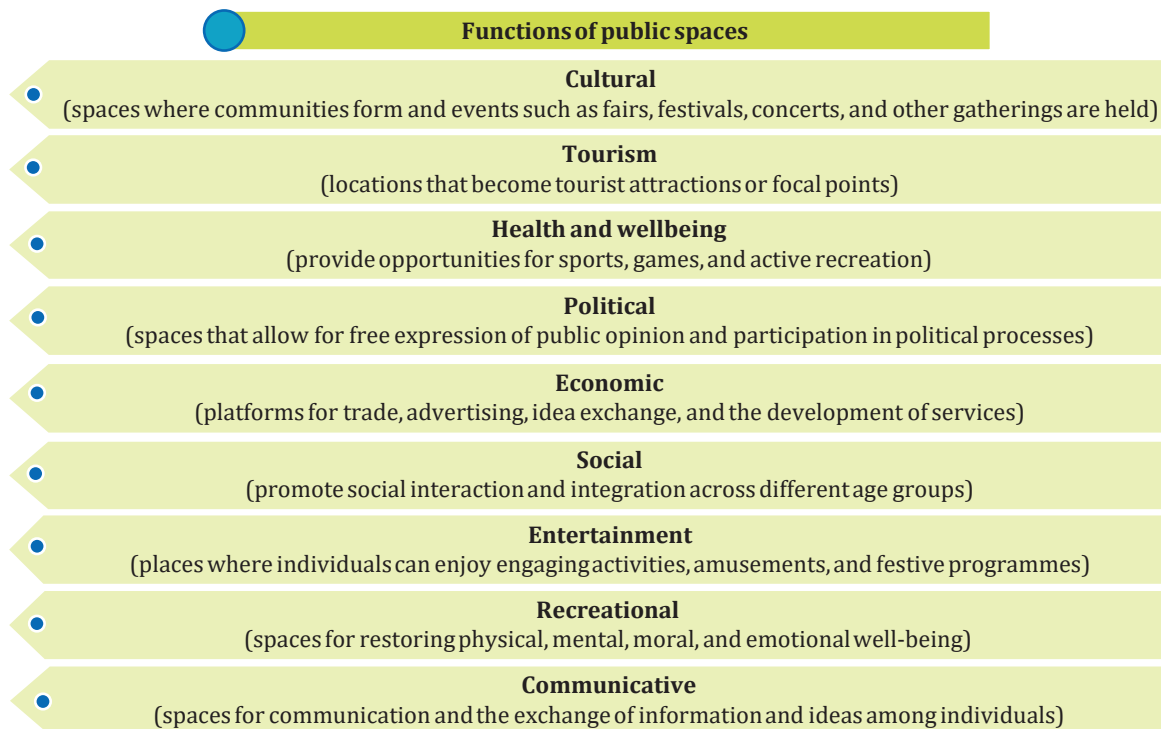


Figure 3. Key functions of public spaces

Source: systematised by the authors

A. Uhl *et al.* (2021) noted that, under contemporary conditions, public spaces must fulfil essential functions and respond to the social, environmental, and cultural needs of the population. When these requirements are met, public spaces become more attractive and frequented by residents. This necessitates the development of new concepts in which comfort is combined with innovative approaches and modern trends. In the process of designing urban renovation projects, it is essential to incorporate current trends that serve as tools for shaping high-quality public spaces. Among the leading trends in the development of contemporary public spaces, several key characteristics can be distinguished, reflecting the evolution of approaches to their design and function. Multifunctionality refers to the ability of a space to serve multiple purposes simultaneously, addressing the needs of various user groups. Transformability involves the flexibility of spatial elements to adapt to dynamic environmental changes or evolving social demands. Interactivity is evident in the implementation of interactive features such as touch panels and the use of smart technologies that enhance the functionality and user experience of the space. Cultural and historical thematisation is achieved through the integration of artefacts that represent the cultural, artistic, and

historical identity of a city or community. Greening, as a key environmental component, involves the inclusion of vegetation and compositions of herbaceous and flowering plants, contributing to the creation of a comfortable and aesthetically appealing environment. Spatial identity is established by creating a unique image, character, and atmosphere that distinguishes one urban space from another. Lastly, inclusivity refers to the level of accessibility and usability of public space for all segments of the population, including people with disabilities, the elderly, and children – an essential factor in ensuring social equity and justice. In this context, the findings of S. Bollano (2024), which examined the planning of “Cities of the Future” in Albania, are particularly relevant. The study confirmed the importance of a balanced integration of innovative technologies, energy efficiency, cultural heritage preservation, and economic resilience as key factors in the successful development of urban environments. The approaches identified in Albanian cities – such as the creation of eco-parks, restoration of historical sites, and digital integration – may be adapted to local contexts in the development of public spaces in various countries.

The success of renovation and reconstruction depends on the application of progressive, innovative

solutions – not only during the planning and restoration of damaged public spaces but also in the ongoing development of the urban environment as a whole. This requires the formulation of a comprehensive approach, beginning with a project design that incorporates modern technologies and extending to the active

involvement of residents in decision-making processes. Public participation in discussions and decisions concerning socially significant issues plays a crucial role in improving the quality and attractiveness of public spaces. The engagement of citizens should be based on the following socially innovative principles (Fig. 4).



Figure 4. Key principles of public participation

Source: systematised by the authors

Public participation in the discussion of social projects can play a significant role in strengthening the relationship between society and municipal authorities, while also increasing public trust in decision-making. In the context of public space regeneration, citizen engagement becomes especially relevant, as it enables effective consideration of the real needs, preferences, and interests of residents. Involving the community ensures that the use of public spaces aligns with specific local demands. Therefore, the foundation for creating a comfortable and functional public space lies in engaging all stakeholders from the early stages of design through to implementation. This inclusive approach helps to develop shared solutions that meet the needs of a broad cross-section of the population.

There are numerous tools and mechanisms available for gathering public opinion. However, the typical sequence of interaction with the public during the planning of public spaces may follow these steps:

1. General information dissemination.
2. Gathering data on population needs, analysing existing issues, and collecting suggestions from residents.
3. Development of a general project concept.
4. Public discussion of the project sketch.
5. Publication and coordination of the project with residents.
6. Implementation of the proposed design.

O. Zavalnyi *et al.* (2023) emphasised that conducting a preliminary study and comprehensive analysis of the damaged area of a region is advisable before proposing a project concept. The authors stressed that the creation of a high-quality urban environment is

impossible without addressing existing problems. In their research, I. Dreval & A. Zhabina (2021) noted that the quality of the urban environment is assessed based on its capacity to meet users' needs. This aligns with the core principle of user-oriented design. For a space to function effectively and remain popular among residents, it must respond to their needs and interests, which should be identified through communication and active participation in the renovation and regeneration of public spaces. Considering public opinion is a key driver of successful implementation and the creation of a comfortable public environment. Communities can express their vision, articulate their needs, draw attention to existing issues related to the functioning of public spaces – such as parks, squares and courtyards – and propose potential solutions and ideas. Based on this, and in line with the theme and aim of the present study, the authors carried out an assessment of public opinion on the subject.

Researchers X. Zhang & Y. He (2020) identified one of the most important concepts in the development of public spaces as their ability to foster social cohesion through communication and the exchange of information among people. This concept is supported by the results of the survey presented in this article, which show that the population regards public spaces as key places for meeting and social interaction. Survey results revealed that the majority of urban residents (52%) visit public spaces several times a month. Overall, 97% of respondents frequent urban public spaces to varying degrees, indicating a strong interest in improving their quality (Fig. 5). Thus, public space serves not only

as a physical environment but also as a social institution that facilitates communication, the generation of ideas, and the formation of collective actions. The high rate of attendance underscores the role of such spaces

as meeting points, platforms for social interaction, and arenas for the exchange of ideas. Public spaces may therefore be considered key communicative locations for a broad spectrum of the population.

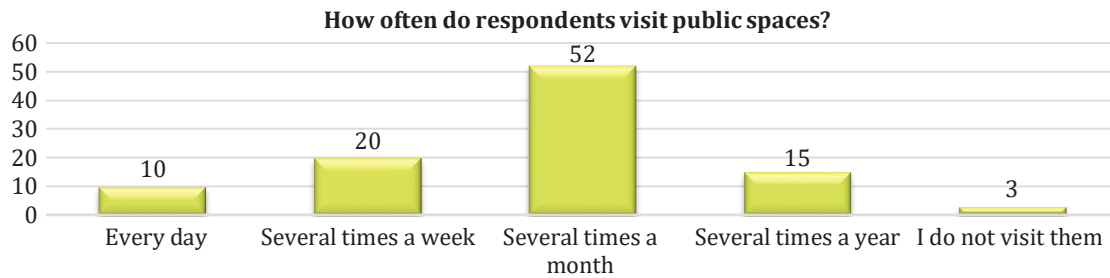


Figure 5. Frequency of visits to public spaces

Source: compiled by the authors based on original survey data

Researchers H.M. Azhar *et al.* (2021) argued that the quality of public spaces has a direct impact on individuals' psychological and physical well-being. Based on the authors' own research, it can be further asserted that high-quality and universally accessible public spaces are capable of meeting residents' needs and improving urban quality of life. The quality of public spaces is one of the key factors in shaping an attractive, comfortable,

and inclusive urban environment. Well-designed public spaces should meet the criteria of safety, convenience, and accessibility for people of different social and age groups. According to the survey, prior to the outbreak of full-scale war in 2022, the general quality of public spaces in most settlements was assessed as relatively satisfactory: 35% were reported to be in good condition, and 48% were in satisfactory condition (Fig. 6).

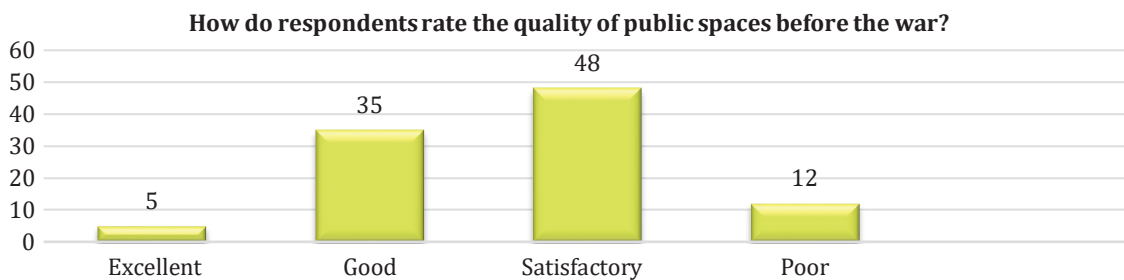


Figure 6. Assessment of public space quality before the war

Source: compiled by the authors based on original survey data

The conducted study showed that, as a result of military actions, the quality of public spaces has significantly deteriorated. In some locations, public spaces were completely destroyed or rendered unfit for use. More than 70% of respondents confirmed

damage to public spaces alongside residential and infrastructure facilities (Fig. 7). This highlighted the need to assess the extent of destruction and begin drafting recovery and renovation plans for urban spaces even before the war ends.

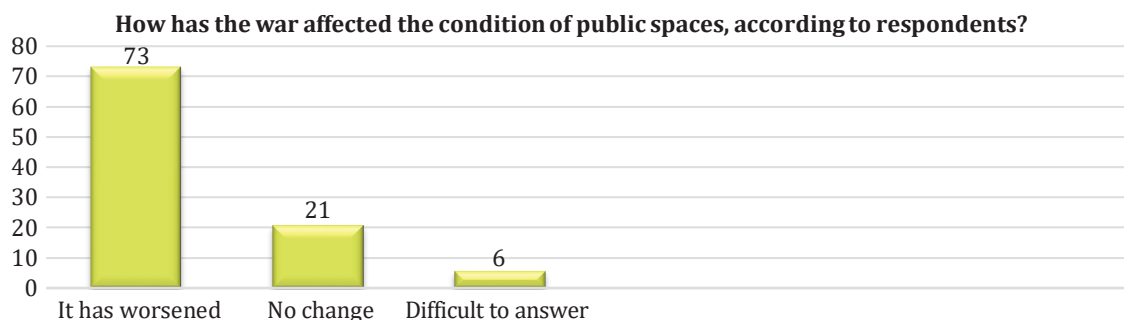


Figure 7. Impact of war on the condition of public spaces

Source: compiled by the authors based on original survey data

The analysis of the survey results revealed that city residents expressed openness and willingness to participate in the renovation and revitalisation of a comfortable urban environment – from the discussion stage through to the implementation of improvement projects. Sixty-three per cent of respondents indicated readiness to engage in various forms and at all stages of

the project life cycle, and many proposed specific mechanisms for shaping public space (Fig. 8). This reflects the population's active civic stance and patriotism, which positively influences the development of public spaces. Harnessing this potential through active involvement in the design and restoration of public spaces will accelerate progress and increase the popularity of urban sites.

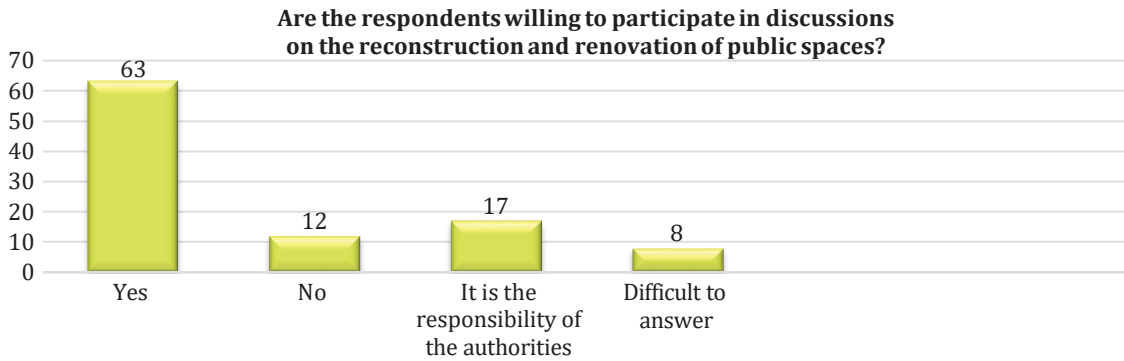


Figure 8. Citizens' willingness to engage in discussions on the restoration and renovation of public spaces
Source: compiled by the authors based on original survey data

According to the survey, 44% of respondents believed that public space restoration should combine historical elements with new components, while 31% favoured a full reconstruction of the pre-war appearance (Fig. 9). This indicates a strong desire among residents to preserve local identity and traditions while remaining open to renewal and modernisation. The study by N.Y. Merzhiievska & V.H. Sukhanov (2023), using the example of Odesa, examined public spaces within historic urban developments as active

elements of city infrastructure. These spaces can be transformed into modern facilities (such as heritage hotels), due to their high architectural and aesthetic value, which contributes to the cultural and economic development of the city. Therefore, an optimal restoration strategy should be based on a dialogue between the past and the present, allowing both the preservation of the urban environment's identity and the fulfilment of current residents' needs for functional, safe and inclusive spaces.

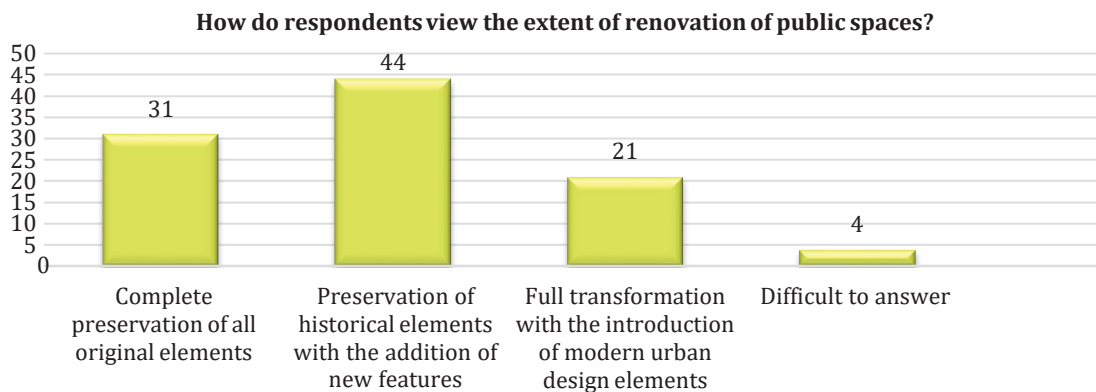


Figure 9. Degree of public space renovation
Source: compiled by the authors based on original survey data

The challenges of preserving and revitalising national identity amid rapid globalisation are addressed in the study by T. Kashchenko *et al.* (2021). The authors provided classical examples of the harmonious integration of architecture and landscape design in urban spaces that reflect national identity – specifically through public spaces in China and Japan, where

certain traditions and cultural values were incorporated into the creation of modern parks. Respect for the national characteristics of the population is one of the key principles in the restoration and development of public spaces. The importance of considering the national identity of city residents – alongside other factors – is supported by the results of this study, which

were obtained through a public survey. Over a quarter of respondents emphasised the necessity of incorporating historical and cultural themes into the design of public space restoration projects. When asked which components they would like to see in renewed public

spaces, 36% of city residents identified commemorative elements with a military/memorial theme (Fig. 10). This indicates a desire among citizens to honour the memory of national heroes and preserve history for future generations.

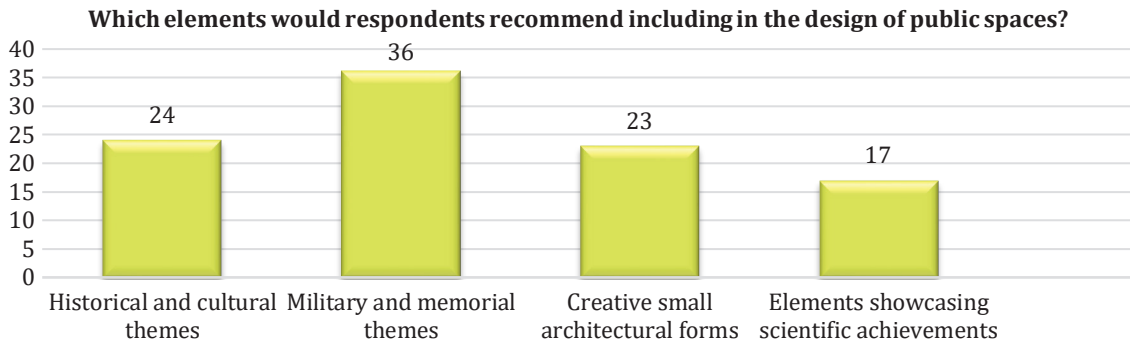


Figure 10. Recommended components for public spaces

Source: compiled by the authors based on original survey data

The study's findings reveal a positive attitude among residents towards including military/memorial elements in the composition of public spaces. This emphasis reflects the relevance and significance of integrating military themes into urban recovery projects. Considering the role of public spaces in people's lives and leisure, W. Holy-Hasted & B. Burchell (2022) highlighted the importance of involving the public in shaping the urban environment to create spaces that residents enjoy and identify with. However, the findings of this study indicate that local authorities often disregard public participation when discussing urban development concepts for public spaces. By involving residents in discussions about the future of public spaces, city authorities can reach decisions that better reflect the needs and interests of the wider community.

The creation of a platform for communication with the population was examined in the study by M.L. Kent

& A. Lane (2021), in which the authors emphasised that engaging in dialogue with residents encourages their active involvement in addressing various social issues. Based on the findings of the present research, it was confirmed that such dialogue fosters tolerance and mutual understanding promotes discussion of real challenges related to post-crisis recovery, and helps to accommodate diverse perspectives. In response to the question, "In your opinion, are city residents sufficiently involved in decision-making related to the development of public spaces in the urban environment?", the majority of respondents (71%) stated that local authorities do not put such projects up for public debate, and therefore they had not taken part in discussions on any particular initiative (Fig. 11). This indicates that public participation in shaping the urban environment is often viewed by city officials as unimportant.

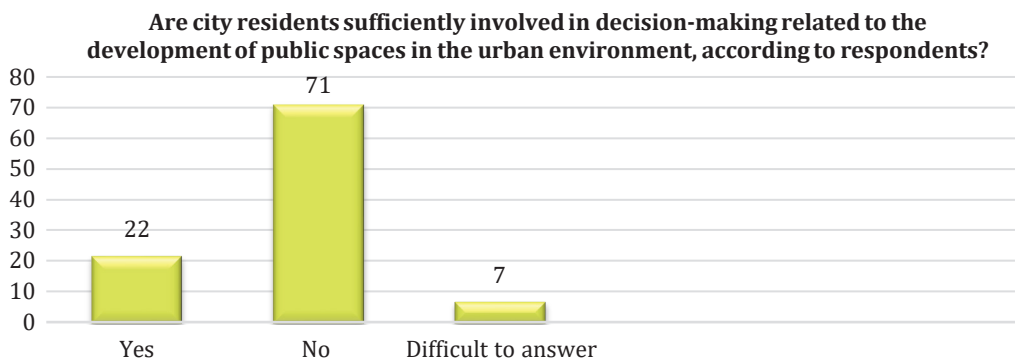


Figure 11. Level of public involvement in decision-making on the development of public spaces within the urban environment

Source: compiled by the authors based on original survey data

City residents, as direct users of public spaces, play a crucial role in their restoration and improvement.

Harnessing the creative potential of the community can serve as a foundation for shaping a high-quality,

modern, and functional urban environment. Collaboration between local authorities and the public enables the development of shared solutions that take into account the interests of all parties, reducing the risk of social tensions and urban disputes. Active public participation in the planning and implementation of spatial development projects contributes not only to the effective transformation of urban space but also to increasing trust in municipal initiatives. In this context, it is essential that city authorities take the lead in initiating and supporting citizen involvement at every stage of urban renewal processes.

G. Valatkaityte & B. Svagzdiene (2024) emphasised that the effective organisation of leisure in public spaces requires an integrated approach that considers the needs of diverse user groups, the characteristics of the

surrounding area, and the collective goals of local communities. This study addressed the importance of such a comprehensive approach in restoring damaged public spaces. Among the elements of this approach is the inclusion of the population in resolving urban issues. The significance of public involvement in both the restoration of damaged and the creation of new public spaces is also confirmed by the findings of this research.

Public participation in discussions on urban environment planning at the local level is one of the most important factors in improving the quality of recreational areas. In this context, the survey also aimed to identify the main issues residents face when visiting public spaces. To this end, an openended question was included, allowing respondents to list their suggestions for enhancing the quality of public spaces (Fig. 12).

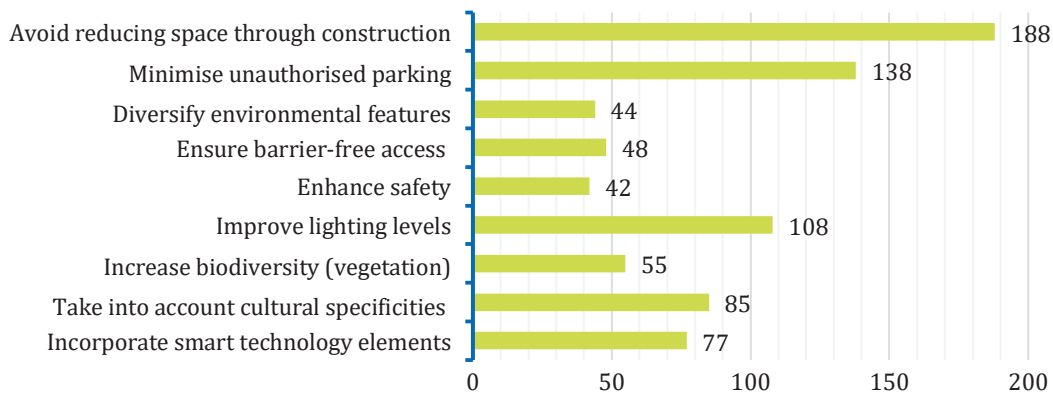


Figure 12. Residents' suggestions for improving the quality of public spaces

Source: compiled by the authors based on original survey data

An analysis of the survey results revealed that the main concerns expressed by residents regarding the development of public spaces include: the reduction of public-use areas in favour of residential or commercial construction, the presence of unauthorised parking, and insufficient lighting. Respondents also emphasised the importance of reflecting the cultural specificity of the area when designing such spaces, alongside the integration of modern technological solutions (such as smart devices) and other innovative elements (Fig. 12). Residents' subjective perceptions often correlate with the actual condition of the environment and can serve as a valuable source of information for local authorities in spatial planning processes.

Based on interviews with community activists and field observations, several key barriers to effective interaction between local authorities and the public were identified:

- a low level of public awareness regarding urban development plans;
- a lack of transparency in decision-making processes for project implementation;
- the absence of mechanisms for public oversight during the execution of initiatives;

- a lack of effective feedback channels, public hearings, and opportunities for resident involvement;

- an unclear distribution of responsibilities among the institutions accountable for the urban environment.

The survey also showed that over half of the respondents expressed interest in actively participating in urban planning and the reconstruction of damaged facilities. Establishing meaningful dialogue between communities and governing bodies is essential for identifying current challenges, developing relevant solutions, and enhancing the effectiveness of public space transformations. Therefore, the successful transformation of public spaces requires transparent communication between authorities and residents.

CONCLUSIONS

The study found that the effective resolution of issues related to the functioning of public spaces lies in the creation of a multifunctional, inclusive urban environment that addresses the needs of all social groups and takes into account the historical and cultural characteristics of the area. The importance of public engagement in the planning, implementation, and monitoring of urban recovery and renovation projects has been demonstrated,

as it enhances both the effectiveness and social legitimacy of these initiatives. A comprehensive approach to public space renewal has been proposed, aimed at creating comfortable living conditions, fostering a favourable sociocultural environment, supporting civic interaction, and enabling the realisation of collective initiatives.

The survey results confirmed the relevance of the issue: 188 respondents noted a trend towards the reduction of public space due to new construction, particularly in central urban areas. At the same time, 63% of respondents expressed a willingness to take part in initiatives aimed at restoring such spaces, indicating the presence of considerable civic potential that should be taken into account in administrative decision-making. Approximately 70% of respondents also confirmed that public spaces had been damaged as a result of armed aggression, particularly in the south-eastern region of Ukraine. This highlights the urgent need for

damage assessment and the development of appropriate renovation projects. Future research should focus on an in-depth analysis of the extent of destruction across specific public spaces and the development of tailored recommendations for their restoration, with due regard to the specific characteristics of the local environment and community needs.

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CONFLICT OF INTEREST

None.

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Аспекти дизайну повоєнної відбудови і реновації публічних просторів міського середовища

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Анотація. Метою роботи була систематизація існуючих підходів, принципів та тенденцій щодо відновлення та реновації публічних просторів, а також виявлення реальних потреб мешканців шляхом проведення опитувань, та пропонування рекомендації щодо повоєнного формування публічних просторів міського середовища. Під час дослідження основними методами отримання первинної інформації були візуальний аналіз, індивідуальні опитування і бесіди з мешканцями для виявлення їх реальних потреб, результати яких було систематизовано загальнонауковими дослідницькими методами. Опитування показало, що 63 % респондентів демонстрували готовність брати участь у реновації та відродженні руйнованих публічних просторів міського середовища, 43 % вважали, що процес відновлення має містити ті історичні елементи, які були до руйнування з додаванням нових компонентів. Серед опитованих 31 % хотіли б побачити повне відновлення без змін, як було до війни, а 36 % – бачити в оновлених публічних просторах елементи військово-меморіальної тематики. Сформульовано аспекти, які характеризують важливість публічного простору у функціонуванні сучасного міста та подано проблемні питання при їх формуванні. Надано методичні рекомендації необхідні для формування, відновлення та реновації публічних просторів з урахуванням інтересів мешканців та сучасних тенденцій. Систематизовано та викладено існуючі підходи, ідеї та пропозиції щодо відновлення та реновації публічних просторів міського середовища та доповнено новими концепціями. Вдосконалено критерії оцінки публічних просторів міського середовища за показниками функціонально-просторової організації, принципу формування громадських просторів, перспективи розвитку і принципу громадської участі. Запропоновано механізми громадської участі у відновленні і реновації публічних просторів на етапах обговорювання, проектування, планування та у практичній реалізації проєктів. Результати даного дослідження можуть бути використані дизайнерами і архітекторами при розробці проєктів відбудови зруйнованих публічних просторів внаслідок війни, а також органами місцевого самоврядування під час їх реалізації

Ключові слова: просторове планування; післявоєнна трансформація; громадська участь; потреби мешканців; архітектурне середовище; міська ідентичність; дизайн-рішення