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EXPERIENCE OF RENOVATION OF CITY PARKS OF THE POST-SOVIET PERIOD

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Abstract. Parks of culture and recreation occupy a special place in maintaining the ecological balance in the urban environment, due to their location and large territory. However, in the existing park facilities, opened in the Soviet period, the condition of the appearance has noticeably deteriorated, the former grandeur of architectural forms and landscapes has been lost. With the change in ownership, the multifunctionality and accessibility of object zones located in the park space has been lost. The study examined the developments of designers in the field of architectural and landscape design, specialists studying the sociological, communication, technological and economic issues of the functioning of public spaces in the urban environment. The relevance of this study lies in the need to reboot the architectural and landscape design of parks, which must meet the requirements of the time; in the development of a certain approach to the application of pre-project analysis methods for the renovation of parks as public spaces. The study provides a brief historical background on the origin and development of park culture, and examines in detail the principles and methods of designing park areas at the present stage. Using the method of environmental preproject analysis, a new view of the park is proposed as an environmental object that ensures the full satisfaction of the needs of a modern person. The presented experience of park renovation is interesting and accessible for use in practical activities when creating a multifunctional aesthetically complete environment based on a natural complex.

Keywords: Renovation, park space, pre-project analysis, environmental design, placemaking.

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ПОСТКЕҢЕСТІК КЕЗЕҢДЕГІ ҚАЛАЛЫҚ САЯБАҚТАРДЫ ЖАҢАРТУ ТӘЖІРИБЕСІ

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Аңдатпа. Қалалық ортада экологиялық тепе-теңдікті сақтауда мәденидемалыс саябақтарының орны және аумағының үлкендігі ерекше орын алады. Дегенмен, бұрынғы кеңестік кезеңде ашылған саябақ нысандарында олардың сыртқы келбетінің жағдайы айтарлықтай нашарлап, сәулет нысандары мен ландшафттарының бұрынғы салтанаты жойылды. Меншік нысандарының кеңістігінде орналасқан өзгеруімен саябақ нысандар аумақтарының көпфүнкционалдылығы мен қолжетімділігі жойылды. Зерттеу сәулетландшафттық дизайн саласындағы дизайнерлердің, қалалық ортадағы қоғамдық кеңістіктердің жұмыс істеуінің социологиялық, коммуникациялық, технологиялық және экономикалық мәселелерін зерттейтін мамандардың әзірлемелерін зерттеді. Бұл зерттеудің өзектілігі мынада: саябақтардың уақыт талабына сай болуы тиіс сәулеттік-ландшафттық дизайнын қайта жүктеу қажеттілігі; саябақтарды қоғамдық кеңістік ретінде жаңартуды жоба алдындағы талдау әдістерін қолданудың нақты тәсілін әзірлеуде. Зерттеу саябақ мәдениетінің пайда болуы мен дамуы туралы қысқаша тарихи мәліметтерді береді және қазіргі кезеңдегі саябақ аумақтарын жобалаудың принциптері мен әдістерін егжей-тегжейлі қарастырады. Жобалау алдындағы отырып, экологиялық талдау әдісін қолдана қазіргі адамдардың қажеттіліктерін толық қанағаттандыруды қамтамасыз ететін экологиялық объект ретінде саябаққа жаңа көзқарас ұсынылады. Саябақты жаңартудың ұсынылған тәжірибесі табиғи кешен негізінде көп функционалды, эстетикалық құнды ортаны құру кезінде практикалық қызметте пайдалану үшін қызықты және қолжетімді.

Түйін сөздер: Жаңарту, саябақ кеңістігі, жобаға дейінгі талдау, қоршаған ортаны жобалау, орналастыру.

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УДК 711 МРНТИ 67.25.25 НАУЧНАЯ СТАТЬЯ

ОПЫТ РЕНОВАЦИИ ГОРОДСКИХ ПАРКОВ ПОСТСОВЕТСКОГО ПЕРИОДА

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Аннотация. Особое место в поддержании экологического равновесия в городской среде занимают парки культуры и отдыха, в силу своего расположения и значительной территории. Однако, в существующих парковых объектах, открытых еще в советский период, заметно ухудшилось состояние внешнего вида, утрачено былое величие архитектурных форм и ландшафтов. Cизменением форм собственности, многофункциональность и доступность объектовых зон, расположенных в парковом пространстве. В ходе исследования рассмотрены разработки дизайнеров в области архитектурно-ландшафтного дизайна, специалистов, социологические, коммуникационные, технологические экономические вопросы функционирования общественных пространств в городской среде. Актуальность настоящего исследования заключается: в необходимости перезагрузки архитектурно-ландшафтного дизайна парков, которые должны соответствовать требованиям времени; в выработке определенного подхода к применению методов предпроектного анализа реновации парков, как общественных пространств. В исследовании дана краткая историческая справка о зарождении и развитии парковой культуры, детально рассмотрены принципы и методы проектирования парковых зон на современном Методом средового предпроектного этапе. предлагается новый взгляд на парк, как на средовой объект, обеспечивающий удовлетворение потребностей современного полноценное Представленный опыт реновации парков, интересен и доступен к использованию в практической деятельности при создании на основе природного комплекса многофункциональной эстетически полноценной среды.

Ключевые слова: Реновация, парковое пространство, предпроектный анализ, средовой дизайн, плейсмейкинг.

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CONFLICT OF INTEREST

The authors state that there is no conflict of interest.

АЛҒЫС/ҚАРЖЫЛАНДЫРУ КӨЗІ

Зерттеу жеке қаржыландыру көздерін пайдалана отырып жүргізілді.

МҮДДЕЛЕР ҚАҚТЫҒЫСЫ

Авторлар мүдделер қақтығысы жоқ деп мәлімдейді.

БЛАГОДАРНОСТИ/ИСТОЧНИК ФИНАНСИРОВАНИЯ

Исследование проводилось с использованием частных источников финансирования.

КОНФЛИКТ ИНТЕРЕСОВ

Авторы заявляют, что конфликта интересов нет.

1 INTRODUCTION

In modern conditions, a park zone is an integral part of the city, intended for mass and affordable recreation of city residents.

From Wikipedia: "Parks of culture and recreation are usually located in populated areas on the territory of garden and park or forest areas. Large parks in the Soviet period often had their own summer theaters, lecture halls, reading rooms, attractions, dance halls, as well as rental bases for various sports and cultural equipment. Shooting ranges, children's towns and sports grounds operated in the parks, in winter - ski bases and skating rinks, children's towns and playgrounds. Boat stations operated on the reservoirs near the parks.

Parks of culture and recreation carried out mass - political, cultural and educational and physical education - health work. Exhibitions, folk festivals, state and sports holidays were held here, performances, concerts and films were organized in summer theaters. The parks also hosted various courses and clubs, health and sports groups".

This study, using a number of post-Soviet parks as an example, offers an analysis and development of conceptual proposals for the renovation of public space in modern conditions and in accordance with international standards.

The study is based on the study of the works of domestic and foreign scientists and specialists in the field of architectural and landscape design, including as applied to the design of park areas.

Along with field research, information was collected and processed, the main conflicts of the park environment were identified using the method of environmental pre-project analysis and their solutions were worked out in the process of thematization.

The toxicity of the existing infrastructure of parks opened in the twentieth century is shown. The problem is that despite the presence of a recreational place, there is a complete lack of its functionality. Moreover, there are parks that are degrading in an ecological and social sense, becoming a dangerous place for city residents.

Using analog design and collage modeling methods, taking into account the world experience of architectural and landscape design, elements and innovative ideas that can be applied in the course of park renovation have been selected. and will introduce modern trends in demand by all categories of citizens.

The relevance of this study is due to the combined approach to the application of domestic and foreign experience in the field of improvement of ecological zones in the urban environment, which is of interest to specialists in architectural and landscape design, as well as specialists working in the field of communication and information technologies.

For interested specialists, a selection of proposals for the use of new forms of analysis in the preliminary design is offered, and the attention of developers is focused on individual zones for special categories of visitors.

The main risks and requirements for park safety in the urban environment are identified. Solutions to problems of different mobility and socialization are proposed. Particular attention is paid to the creation of an inclusive case of accessibility of stay of people with limited mobility in the natural environment.

The study shows the use of placemaking and the practice of participation in the project. Using the opinion of city residents in updating the appearance of the park and creating infrastructure will provide additional ideas for transforming existing objects in the interests of visitors. This practice has a positive response among the population, attracts additional investment from the private environment of small and medium businesses.

When zoning the park, it is necessary to resolve issues related to the objects: organizing various cultural events, entertainment and shows that meet the needs of various groups of park visitors; holding ethnocultural events, exhibitions, fairs of arts and crafts; promoting scientific and educational knowledge, achievements of science, technology, art and literature; developing physical education and sports; organizing a variety of recreation for visitors - active and passive forms, in summer and

winter. Much attention when making landscape decisions should be paid to landscaping, the so-called quiet recreation areas: paths, pedestrian, running and cycling paths, and ski routes in winter.

Also, as one of the zones, it is necessary to provide a children's location for younger children, with the possibility of organizing a variety of recreation in a playful way.

A specific aspect in the development of the concept of the park zone is introduced by motives of ethno-cultural elements based on the historical and cultural features of the arts and crafts of Kazakhstan. In general, the study examines the general patterns of application of the basic principles and methods of architectural and planning pre-project analysis, their relationship with the renovation of parks, with adaptation to modern requirements.

The use of various innovative technologies will help to create modern architectural forms and landscape design in three-dimensional space.

It is in this area that such conditions are created for the population that ensure a high standard of living. Thus, pre-project development offers conditions for a healthy, comfortable, convenient life for both an individual and all residents of the urban environment.

The purpose of this study is to develop the main architectural and planning directions for the renovation of parks in the post-Soviet period.

The value of the study lies in the creation, on the basis of the presented work, of a template module of a preliminary design solution for full or partial use in the renovation or design of the construction of park areas.

2 LITERATURE REVIEW

Today, it is impossible to imagine urban space without parks – they have become a multifunctional eco-platform in the lives of city dwellers. In some sources, the prototypes of park recreational areas were created by the Persian kings, while others mention their origin in ancient China. The first parks and gardens appeared in the Baroque era in France. Thus, the Royal Tuileries Garden at the Louvre was opened to the public in the 17th century. Then similar park areas appeared in Europe. At first, park space was distinguished by aristocratic forms of design, which implied that visitors observed a certain etiquette. Publicly accessible city parks appeared in the 19th century.

During the reforms of Baron Osman in France, the Bois de Boulogne and the Bois de Vincennes were landscaped as parks, where new boulevards with trees, walkways and gazebos were created. In the Buttes Chaumont Park in Paris, the complex relief is already arranged in a romantic style, with small architectural forms and attractions. Among the first architects of urban park spaces, Frederick Law Olmsted in the USA should be noted, defending the ideas of accessible recreation for the rich and the poor. In Austria, landscape design was represented by the artist Joseph Selleni and the chief city gardener Rudolf Siebeck, the founders of the Stadtpark - an important part of this park was a large cafe. In the 20th century, parks acquire the multifunctionality characteristic of modern times, they combine nature, entertainment, sports, culture and ideology. As an example, we should consider Gorky Park in Moscow (Russia), created in 1928. At different times, architects Konstantin Melnikov, El Lissitzky, Alexander Vlasov and Georgy Shchuko worked on the park project. The park was designed taking into account the suggestions of workers, uniting the territories of Neskuchny Garden and the All-Russian Agricultural Exhibition.

An interesting multifunctional development is La Villette Park in Paris (France), created in 1982 by architect Bernard Tschumi and philosopher Jacques Derrida. The architectural idea of the park consists of three independent layers with different thematic loads, united into a single integral space.

In the generally accepted architectural hierarchy, parks are divided into several types: natural park, botanical park, arboretum, zoological park, forest park, national park, landscape park, amusement park, park of culture and recreation.

The authors Guk T.N., Frolova Yu.V., Semenkova E.V. (Guk et al, 2018) in their works consider the division of parks into the following types: open-parterre options, where the presence of flower beds, flower gardens, lawns and living decorative hedges is most prevalent; closed - the presence of

trees and densely growing shrubs predominates, which, thus, allows isolating from noise, exhaust gases and other interferences; with reference to a building structure or object - such squares and parks perfectly decorate high architectural monuments, modern buildings and are also designed to ennoble the central squares of the city.

In landscape design, there are: a regular park (French or geometric, with well-groomed alleys, flower beds, pools of regular shape) and a landscape park (English or natural, with a natural landscape). Park design styles: classical, which is represented by the Renaissance, French and English; modern in the form of minimalism, loft and hi-tech.

Vergunova A.P. (Vergunov, 1980) in her works is of the opinion that in the traditional sense, the ultimate goal of designing landscape objects, including gardens and parks, was to create a certain artistic image of the park, a park ensemble in which "nature, architecture and man are harmoniously interconnected."

Rozenson A.A. (Rozenson, 2007) believes that the modern practice of designing public space is aimed not so much at obtaining a highly artistic object, but at creating a harmonious and comfortable environment for a real person, capable of "treating a person in a humane manner."

According to Gelfond A.L. (**Gelfond**, **2019**): "public space is a public space for communication and social activity, organized in accordance with the dominant function." Stepanchuk A.V., Gafurova S.V., Latypova M.S. (**Stepanchuk et.al**, **2020**) adhere to the idea that public space is considered not just as an additional element of the city, but as a component that changes its appearance, like an "urban living room". The perception of the holistic image of the city and its local landscape objects is formed on the basis of the significance and identity of the place (**Treija et.al**, **2020**).

This statement has many followers who believe that the design of public space should include such types of analysis as urban planning, historical, analysis of the cultural potential of the territory, local community (community), with the definition of target audiences and identification of their needs. Based on the results of a comprehensive pre-project analysis, a complete picture of the local identity of the territory is formed, its development potential is revealed, problems are identified and the main ways of solving them are determined. The reorganization of urban public spaces should be carried out while maintaining identity (Salakhova et.al, 2022).

It is important to endow each space with an individual architectural and figurative solution in order to consolidate it in the visual perception of a person in the urban structure as a whole. It is extremely important, "in the process of designing public spaces, to take into account the peculiarities of the formation of the symbolic identity of the city, to identify and preserve the characteristic features of the city's uniqueness" (Jaszczak et.al, 2021). Some architects and designers, when developing park projects, put the economy as the dominant factor, while others put the ecology as the dominant factor. There are views that combine both directions. "Parks, squares and other typologies, competently integrated into the urban structure, create a single public and recreational framework, shaping the image of the city, transforming adjacent territories and having a positive impact on its economy" (Kaplan, 1984, Grundlingh, 2017, Abbott, 2020). This interpretation of the urban environment is aimed primarily at improving the ecology and reducing the negative impact of the metropolis. At the same time, "the viability of the urban ecosystem, as well as the natural one, is ensured by a combination of various components" (Stepanchuk et.al, 2020).

It should be noted that as a result of various approaches to design, most recreational spaces of the post-Soviet period often simply do not meet the requirements of the modern world. Thus, at the level of internal and external appearance, small architectural forms have an archaic appearance, landscape design is presented in the simplest forms, zoning is practically absent, the infrastructure is technologically outdated. Such territories require updating and an integrated approach for comfortable and meaningful recreation of citizens. An integrated approach to the organization of spaces is the ability to create an environment and provide a scenario for the social life of a place. Design is characterized, first of all, by the fact that during work on the transformation of the territory, processes are launched that will develop after the end of the project (Ivankina & Perkova, 2018, Shchenkov & Antonova, 2020).

Currently, the design of park objects is actively developing in the process of urbanization of modern cities, enriched with new approaches, for example, environmental design methods: problematization and thematization of the design task. This allows taking into account a number of requirements for the urban environment, such as functional, social and environmental, during the design process. The created park ensemble assumes harmoniously interconnected "nature, architecture and man" (Hayward & Weitzer, 1984, Cohen, 2009, Dmitriychuk & Denisova, 2019).

The study, as the most effective approach, presents the method of environmental pre-project analysis, which allows you to look at the park not only from the point of view of the natural complex and architectural landscape ensemble, but also from the position of the environmental object.

It can be safely stated that "without environmental analysis, only in rare cases do holistic natural, artistic and functional dominants develop simultaneously in a single park complex." In most cases, these are long years of "adaptation", "grinding in" of contradictory situations, trends and processes (Sidorenko, 2022). Solutions to the problems of "grinding and adaptation" are described in the review by Anel Moldakhmetova: "According to placemaking expert Guillermo Bernal, director and founder of the Lugares Publicos bureau, when creating a concept for a public space, it is important to ask people not about the objects they would like to see there, but about the functions and scenarios they need. We need to discuss not the color, shape, style and size, but the emotions, activities and scenarios for using parks as public spaces" (Moldakhmetova, 2019).

Having studied domestic and foreign materials devoted to the architectural and landscape design of park spaces, we can state the effectiveness of the integrated use of methods: environmental pre-project analysis, by analogy, collage, placemaking and participation. This symbiosis of methods will satisfy the wishes of society, and on the basis of scientific and specialized knowledge create an environmentally useful, and most importantly, multifunctional park space within the urban system.

3 MATERIALS AND METHODS

The study included a set of methodological activities aimed at developing an algorithm for preproject analysis of architectural and planning renovation of post-Soviet parks.

The study is based on the method of environmental pre-project analysis, through problematization and thematization of the project assignment. Using field research (in the form of a survey, observation, photo recording and documentation of problem points of the existing type of park), as well as collecting and processing information, the main conflicts of the park environment were identified.

When working through the problematization, groups of conflicting contradictions were identified and directions for their solutions were developed.

The solution of social conflicts can include the search for compliance of environmental zones, which take into account the interests of age and social groups of the population.

Consideration of the functional conflict is intended to unite the needs of different groups of the population in one territory when visiting the park. For example, to provide separate recreation areas for playgrounds, walking areas for different ages and mothers with strollers, bike paths and dog walking. The solution of visual-aesthetic and artistic conflicts is in the plane of satisfying the aesthetic and spiritual needs of visitors, through the harmony of the natural landscape and architecture of the park space.

Resolution of the environmental conflict consists in identifying and eliminating possible negative environmental impacts on the park landscape. For example, the close location of a highway with toxic emissions, failure to comply with the requirements for maintaining the drainage cover of soil and water bodies.

Understanding the communication and information conflicts will help make the public place more accessible to visitors. For example, the presence of two or more entrance groups, proximity to a transport interchange, the presence of parking lots, the location of recreational placement maps and signs for orientation in the park space.

Accessibility of park visitors to modern technologies (availability of power supply bases, Wi-Fi, LED screen) is a solution to the technological conflict.

In addition, when designing, it is imperative to take into account the climatic features of the location of park areas, consider the presence of open, closed and covered facilities.

When thematizing the design task, a quantitative and qualitative analysis of existing architectural and landscape solutions was carried out, and issues of zoning the park space were worked out. In the course of a comparative analysis, as well as by the method of designing by analogies and collage modeling, ways of design solutions were proposed.

The study was conducted on the example of a comparative analysis of the general plan of the Alash Arystary Park (formerly the Park of the Fighters of the Revolution, 1957-2023), with a study of the opinions of residents of the city of Kokshetau and the Akmola region in social networks and through an individual survey. The research material is partially based on archival data of the Kokshetau History Museum.

4 RESULTS AND DISCUSSIONS

The Alash Arystary Park, previously known as the Fighters of the Revolution Park until 2023, is one of the oldest recreation areas located in the city of Kokshetau in the Akmola region (area of the territory is 24 hectares).

According to the materials of the City History Museum, the creation of the Park of the Fighters of the Revolution dates back to 1918, when General Annenkov's White Guards shot about 60 Bolsheviks from Kokshetau here. The history of the monument is notable for the fact that the burial place of the fallen revolutionaries was originally located 100 meters to the west. However, in 1957, by decision of the executive committee of the Kokshetau City Council of People's Deputies, the remains were reburied to their current location and a modest obelisk was erected. In 1967, in honor of the 50th anniversary of the Great October Revolution and in memory of the fallen heroes, a monument was erected, which still stands today (**Figure 1**).

The archives of the museum fund indicate that the authors of the monument were sculptor V.I. Kostin from Donetsk and architect V.K. Romanko from Kokshetau. The monument was erected with funds from the city's workers, and the figures were made at the Kokchetav Instrument-Making Plant.





Figure 1 – View of the monument to the Fighters of the Revolution: \mathbf{a}) – 1967 [photograph from the archive of the Kokshetau city history museum]; \mathbf{b}) – 2024 [material of the authors].

From the description of the monument: "On a high granite pedestal is a bronze sculptural group of three reinforced concrete figures - two men and a woman. The total height is 11.5 meters. The area of the stylobate is lined with concrete slabs. On the southern side is a bas-relief depicting an episode of the battle and a bas-relief symbolizing the exploration of space, the idea of the struggle for peace. To the left of the monument is a bowl for the eternal flame. On the stele located on the right side of the monument are words from the poem by Robert Rozhdestvensky "Letter to the Thirtieth Century" (Museum of the history of the city of Kokshetau, a.d. 03.09.2024).

The monument occupied a central place in the park, where, along with the park area, a children's railway was installed in Soviet times. **Figure 2** shows the carriages of the "Young Kokchetavets" train and the 1.8 km long circular railway track (the children's railway station operated until 1995, and by 2001 it was completely dismantled and liquidated).

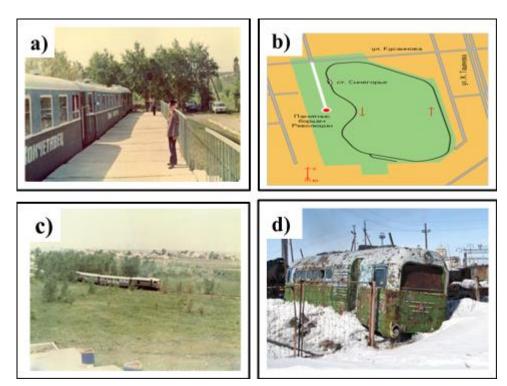


Figure 2 – Views of the "Young Kokchetavets" train of the children's railway: **a**) – at the Sinegorye station; **b**) – diagram of the Children's Railway; **c**) – on the section [photo by M. Helme, 1991 from the Museum's archive]; **d**) – a diesel locomotive of the Children's Railway at the locomotive depot [authors' materials].

There was also a football court here, which in winter became a hockey field and an ice rink. According to old-timers, the park was a favorite place for citizens to relax, athletes trained here and city holidays were held.

In the 90s of the twentieth century, the park area lost its former significance and cultural appearance. So, without proper care, the children's railway was gone, everything was overgrown with weeds. At the same time, citizens have repeatedly raised the issue of restoring the park.

Since 2015, the Fighters of the Revolution Park has begun a second life, it was decided to make an updated park of culture and recreation with a roller ski track on the site of the park. **Figure 3** shows the general plan for the reconstruction of the park. All subsequent years, adjustments were made to this plan. In 2023, by the 200th anniversary of the city, work was completed on the project, on which about 900 million tenge had been spent since 2015.

The initial project included the following: construction of an entrance area, a sports and utility complex, and a public toilet; fencing of the area; installation of external utility networks; placement of a roller ski track, bridge, pond, and parking lot. Landscape design included: arrangement of flower beds and lawns; planting of trees and shrubs; installation of small architectural forms; covering of paths with paving stones. Through public-private partnership, the park was planned to accommodate: a stele, a youth palace, a water park, an indoor gym, a swimming pool, volleyball and basketball courts, football pitches, a motorcycle track, an amphitheater, a Ferris wheel, a rock garden, a cafeteria, an ethno zone, and attractions.

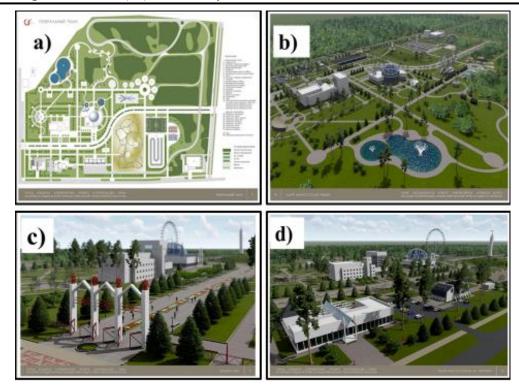


Figure 3 – a), b), c), d) – Types of the master plan "Construction of a park of culture and recreation in the park "Fighters of the Revolution" of the Akmola region" (since 2023 – park "Alash arystary") [authors' materials].

As a result of the project adjustment, the construction of the bridge and pond was replaced by the installation of pedestrian and bicycle paths, children's and sports playgrounds.

A study of social networks and a survey of city residents showed an ambiguous attitude towards the reorganization of the park. The architectural plan, according to park visitors, does not correspond to the actual object. Visual inspection and photo recording of the current state of the park confirm the problematic nature of the object (**Figure 4**).



Figure 4 - a) collage diagram of constructed and unconstructed objects, from those planned by the general plan [authors' materials].

When comparing the condition of the park space, it should be noted that during the reorganization period (2015-2024), the central alley with many trees was cut down in the park. The monument to the fighters of the revolution was left unchanged, but needs reconstruction. On the positive side, a children's playground, a playground with sports horizontal bars, a skateboarding area, a sports and utility complex building were built, and a large number of paths were paved with paving stones. At the time of the study, there was no landscape design in the park space at all, which is clearly shown in **Figure 5**. Thus, the lawns are overgrown, flower beds are missing, and the planted conifers are in a non-textured condition. The paving stones on the main alley and paths have crumbled in places and are overgrown with grass. The children's playground surface has partially become unusable, and there are no goals on the football field.

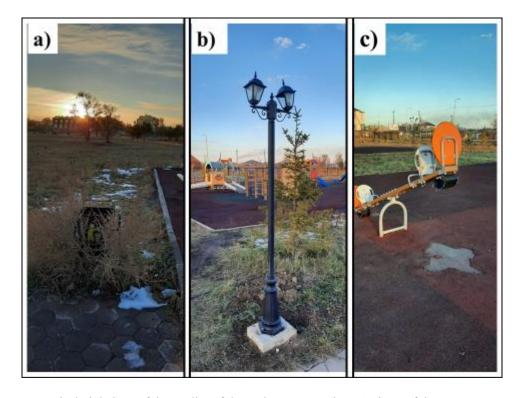


Figure 5 – typical violations of the quality of the park reconstruction: a) views of the overgrown grass lawn and trash can; b) view of the playground, broken lampshade, unkempt lawn and spruce seedlings; c) defects in the tartan covering of the playground [authors' materials, 2024].

In general, the arrangement of the park for the most part does not coincide with the general development plan, zoning was carried out without taking into account the social and functional load, the requirements for the visual and aesthetic appearance of the public space were not met. The infrastructure of the park was partially established, including external utility networks for electricity, heat, telephone, water supply and sewerage, a well was installed, the fencing of the facility was reconstructed. At the same time, the reconstruction was carried out without taking into account the communication, information and technical load on the park, as an object of mass visitation of different age groups of the population. Thus, it can be concluded that, using the example of the Alash Arystary Park (formerly the Bortsam Revolutsii Park, 1957-2023), parks of the post-Soviet period have lost their former significance; their reconstruction was often carried out without proper development and compliance with master plans and architectural and landscape requirements, according to the principles of uncontrolled development of funding due to the placement of small forms of "yard level" (children's slides, exercise machines, a football field).

Regarding the analysis of the thematization of the master plan for the reconstruction of the Alash Arystary Park, the authors of the study propose to revise it using existing analog design

solutions, from which the most suitable techniques and functional processes for the designed park should be selected.

Using environmental analysis, a study was conducted to develop a pre-project design or adjust the master plan of the park zone (in this case, making adjustments is more appropriate, since construction has not yet been completed).

The long term of the existing project, constant deviations from the plan and the inadequate quality of the already erected objects indicate the lack of proper technical, author's and state control over the implementation of the general plan of the park zone.

In the future, according to the project, within the framework of a public-private partnership, it is planned to place in the park: a stele, a youth palace, an indoor sports hall, a swimming pool, a water park, a moto track, volleyball and football courts, an amphitheater, an ethnic village, attractions, a Ferris wheel and a cafeteria with an inner courtyard. In some sources, city officials discuss the possible placement of retail facilities on the territory of the park.

According to the basic principles of placemaking, the opinions and wishes of citizens, their vision of the development and functionality of this public place became the focus of the study.

For example, the existing playground and the area with exercise machines, according to the suggestions of visitors, should be made less traumatic. During the survey, many complaints and requests were received to install more children's play equipment, as well as to make sports equipment multifunctional in terms of physical activity.

Another desire of citizens was to launch a mechanical, colorful train along the main alley and paths for excursion rides around the park area for children and older visitors.

A football field without goals, according to the current plan, is a universal site where you can play mini football or gorodki. At the same time, it would be more productive to expand the football field and make a court, and in winter - a flooded skating rink and a hockey field.

The survey and the analysis of social networks show a complete denial and negative attitude of citizens to the placement of retail facilities and restaurants on the territory of the park.

Questions arise about the feasibility of building a Ferris wheel, since there is one in the central park of the city and it is in demand by only 25%. More than 80% of the respondents surveyed positively consider the placement in the park space of: a youth palace, an indoor sports hall, a water park, a motorcycle track, a volleyball and football field, since among the residents of the adjacent residential area there is a need for the functioning of these facilities.

The survey participants showed significant interest in the organization of places of mass recreation and landscape design of natural zones. In **Figure 6**, in the form of a diagram - collage, the changes proposed in the park renovation project are presented.





Figure 6 – a collage diagram of proposals for the park renovation plan for the placement of:

a) – small architectural forms in a natural forest area for its comfortable and safe visiting; - a rope town; - a quiet recreation area; - benches, benches and swings of various shapes; b) – an LED screen in the amphitheater area; - an openair exhibition in the ethno-village area; - a typical cafeteria [authors' materials, 2024].

A significant area of the park zone is occupied by a natural forest, which needs to be made more accessible, comfortable and safe for visitors, while maintaining its recreational purpose. Using landscape design tools, the forest (without cutting) should be divided into pedestrian paths, lighting should be installed (paths and forest glades), good benches, picturesque bridges over ravines, urns, feeders for animals and birds should be placed.

In the forest area adjacent to the sports facilities, a rope town should be located, which will be especially appreciated by lovers of active recreation. The opposite part, overlooking the rock garden, is well suited for visitors of middle and older age categories for a place of relaxation in the form of yoga or doing a set of exercises.

Parallel to the main park alley, make indentations where benches, benches, swings will be placed, the design of which can be varied. It is proposed to announce a competition among residents or enterprises of the city for the development and installation of these small architectural forms. In the area of the ethno-town, to maintain the national flavor and create a creative mood, it is proposed to install indoor rows of exhibitions and fairs-sales of decorative and applied art items. The path leading from the main alley to the ethno-town should be decorated with stand structures of open-air exhibitions, where you can demonstrate the works of artists, photographers, place information about the history and achievements of the city and the region.

The idea of collective recreation will work great if you install an LED screen in the amphitheater area - an open-air cinema with free viewing. Firstly, this will solve the problem of free space when concerts or other festive events are not held. Secondly, with a good selection of the repertoire, the cinema will become a place of attraction for different ages. Visitors attracted by ticketless viewing will certainly be interested in other attractions of the park.

Considering the fairly large area of the park space, one of the main tasks of the public place is the presence of a main entrance and two side entrance groups. In addition, one stationary toilet is not enough, it is proposed to install bio-toilets or stationary toilets for visitors in the perimeters of the boundaries of the target spaces (in the zone of visibility and accessibility, approximately 100-200 meters).

In addition, in addition to the power supply unit included in the project, it is proposed to place at least two more typical cafeterias: 1 - between the ethno-village and the amphitheater (open-air cinema); 2 - between the sports area and the rental place for sports equipment of the roller ski track.

When modeling the space, the implementation of the principle of accessibility and awareness of visitors is of great importance. This is primarily the placement of maps, diagrams and signs on orientation in the park, which should not only have an explanatory function, but also aesthetically please visitors, encourage them to visit these places.

The project requires special attention for people with limited mobility. Inclusive landscape design involves the placement of paths, steps, benches that will be comfortable for different age groups and people with limited mobility. These can be designed facilitating steps, seats, ramps, railings that will make the natural environment safe and comfortable (Sinyavskaya, 2019, Morozova, Medvedeva & Dovbnya, 2024).

Based on the interests of the safety of park visitors, the project should provide for facilities and a system for the timely prevention of anthropogenic threats (hooliganism, vandalism, failure to comply with fire safety rules, terrorist attacks). CCTV cameras, stationary devices (such as an "SOS panic button") should be installed on the park territory, it is necessary to resolve issues of park area security and access control, as well as lighting of the territory.

Lighting of park facilities performs a number of interrelated functions, including ensuring safety, comfort and aesthetics.

In general, the issues of attractiveness of public space are a combination of functional and aesthetic composition that creates an emotional release, encouraging people to visit the park area and receive a response in mental balance, physical health, satisfaction of interests, which is individual for each visitor.

Ethnic and decorative elements that combine the natural landscape and functional zones: art structures, photo zones, various locations with lighting, respond well to the emotional response of park visitors.

The requirements of modern times dictate the conditions, without fail, to provide visitors with access to innovative technologies: to place places for charging mobile phones and electric vehicles, to provide free Wi-Fi.

The real application of placemaking is not only the definition of desired processes, but also a significant step towards solving the problems of financing and promoting project ideas. In the modern world, the practice of participatory design is in great demand, both in the development of the concept of an object and its financing. For example, at the World Urban Parks Congress (Kazan, Russia, 2019, over 130 speakers and 1,500 delegates from all continents), the economic model of natural parks, tools and cases of their financing were discussed. "Different economic models of parks were considered: for example, La Mexicana in Mexico City exists 100% on private funds, and Bosque de Chapultepec in Mexico City (the largest in South America) is half made up of public funding, half by sponsors and income from events and souvenirs" (Moldakhmetova, 2019).

When city residents and wider communities are involved in the design of park space, then a common desire arises to make the facility a better and more exciting place for everyone. A sense of ownership, responsibility and participation in the creation of something new appears, and then - the management of these processes. During the discussion, motives for sponsors and ways to solve financial problems of construction are revealed. Financing a public space is a costly and lengthy process, but with great economic prospects. In order for the park to be in demand as a public space, it is necessary to constantly develop all recreational areas, hold cultural and mass, sports events, exhibitions, fairs, master classes and other events.

5 CONCLUSIONS

In conclusion, it should be noted that the study:

- 1. Identified typical problems of architectural and landscape design of parks of the post-Soviet period;
- 2. Identified and tested as the most effective approach to park renovation an integrated approach to the use of methods of environmental pre-project analysis, design by analogs and collage modeling, as well as placemaking and participation;
- 3. Developed the main architectural and planning directions for the renovation of parks of the post-Soviet period;
- 4. Substantiated the importance of the opinion of the public community in creating the concept of park space, in terms of implementing their vision of functionality, aesthetics and a scenario for subsequent development;
- 5. Proposed options for solving the problems of financing design solutions for the renovation of park space.

The practical value of the study is that, using the example of the developed integrated approach, an analysis of the master plan for the renovation of the Alash Arystary Park was carried out, focusing on the identified shortcomings and violations in the implementation of the existing project. In the course of the study, a number of proposals are made for adjustments to the master plan for the renovation of the park.

The significance of this study lies in the accessible presentation of the material, on the creation of a template module for preliminary project analysis of the renovation of a natural complex that meets the interests of visitors and determines the culture of the urban environment.

REFERENCES

1. **Guk, T.N., Frolova, E.V., & Semenkova E.V. et al.** (2018). Improving repairs. Approaches and problems [Blagoustroystvo v rekonstruktsii. Podkhody i problemy] Moscow, ART-studio,

- 268. https://www.artlebedev.ru/moscow/improvement-and-renovation/improvement-and-renovation.pdf (In Russ.).
- 2. **Vergunov, A.P.** (1980). Architectural composition of gardens and parks [Arkhitekturnaya kompozitsiya sadov i parkov] Moscow: Stroyizdat, 134-188. https://books.totalarch.com/architectural_composition_of_gardens_and_parks_vergunov (In Russ.).
- 3. **Rozenson, A.A.** (2007). Fundamentals of Design Theory: Textbook for Universities [Osnovy teorii dizayna: Uchebnik dlya vuzov] St. Petersburg: Piter, 200. https://books.totalarch.com/node/1581(In Russ.).
- 4. **Gelfond, A.L.** (2019). Architecture of public spaces: monograph [Arkhitektura obshchestvennykh prostranstv: monografiya] Moscow: INFRA-M, 412. https://elibrary.ru/item.asp?id=35617279 (In Russ.).
- 5. **Stepanchuk, A.V., Gafurova, S.V., & Latypova, M.S.** (2020). «Genius Loci» as a resource for the development of historical areas of the city. Conference series: Materials Science and Engineering, Kazan, Russia: Nauka. http://dx.doi.org/10.1088/1757-899X/890/1/012013
- 6. **Treija, S., Bratuškins, U., Barvika, S., & Bondars, E.** (2020). The liveability of historical cities: current state and prospects for habitation. WIT Transactions on the Built Environment https://www.witpress.com/Secure/elibrary/papers/GD17/GD17002FU1.pdf.
- 7. **Salakhova, M.R., Stepanchuk, A.V., & Salakhova, V.M.** (2022). Reorganization of urban public spaces taking into account the preservation of identity [Reorganizatsiya gorodskikh obshchestvennykh prostranstv s uchetom sokhraneniya identichnosti] KSASU News, 4 (62), 129-141. https://doi.org/10.52409/20731523 2022 4 129 (In Russ.).
- 8. **Jaszczak, A., Kristianova, K., Pochodyła, E., Kazak, J. K., & Młynarczyk, K.** (2021). Revitalization of Public Spaces in Cittaslow Towns: Recent Urban Redevelopment in Central Europe. Sustainability, 13(5). https://doi.org/10.3390/su13052564
- 9. **Kaplan, R.** (1984). Impact of urban nature: A theoretical analysis, Urban Ecology: Amsterdam 8 (3), 189-197 https://doi.org/10.1016/0304-4009(84)90034-2
- 10. **Grundlingh, L.** (2017). The great outdoor living room of the city: A survey essay on the thoughts and aims of urban park development in the late 19th and early 20th century in Europe and the United States of America. Tydskrif vir Geesteswetenskappe. 57 (2), 542-561. https://doi.org/10.17159/2224-7912/2017/V57N2-2A4
- 11. **Abbott, C.** (2020). City Planning: A Very Short Introduction, Oxford University Press, Search in this book (6), 87. https://doi.org/10.1093/actrade/9780190944346.001.0001
- 12. **Stepanchuk, A.V., Gafurova, S.V., & Latypova, M.S.** (2020). «The Spirit of the Place» as an Impetus for Revitalization of the Territory of the Admiralty Settlement of the City of Kazan [«Dukh mesta» kak impul's revitalizatsii territorii Admiralteyskoy slobody goroda Kazani] Architecton: News of Universities, 4(72), 6. https://archvuz.ru/authors/911/ (In Russ.).
- 13. **Ivankina, N.A., & Perkova, M.V.** (2018). New urbanism movement: prerequisites of evolution and basic planning models [Koncepciya novogo urbanizma:predposylki razvitiya i osnovnye polozheniya] Bulletin of the Belgorod State Technological University named after V. G. Shukhov, 8, 75-84. https://doi.org/10.12737/article 5b6d585f08a625.50385604 (In Russ.).
- 14. **Shchenkov, A., & Antonova, N.** (2020). Architectural heritage and identity of Russian cities [Arkhitekturnoye naslediye i identichnost' russkikh gorodov] Project Baikal, 17 (65), 27-31. https://projectbaikal.com/index.php/pb/article/view/1670 (In Russ.).
- 15. **Hayward, D.G., & Weitzer, W.H.** (1984). The Public Image of Urban Parks: Past Amenities, Present Ambivalence, Uncertain Future. Urban Ecology, 1(3), 243-268. https://doi.org/10.1016/0304-4009(84)90038-X
- 16. **Cohen, D.A.,** (2009). Effekts of Park Improvements on Park Use and Physical Activity: Policy and Program Implications. American Journal of Preventive Medicine, 37(6), 475-480. https://doi.org/10.1016/j.amepre.2009.07.017
- 17. **Dmitriychuk, N.M., & Denisova, Yu.V.** (2019). Design of urban park complexes [Proyektirovaniye gorodskikh parkovykh kompleksov] Bulletin of BSTU named after V.G.

- Shukhov, 6, 70–77. https://cyberleninka.ru/article/n/proektirovanie-gorodskih-parkovyh-kompleksov (In Russ.).
- 18. **Sidorenko, M.V.** (2022). Methods of problematization and thematization in the design of urban parks [Metody problematizatsii i tematizatsii v proyektirovanii gorodskikh parkov] Belarusian State Technological University, Minsk. https://cyberleninka.ru/article/n/metody-problematizatsii-i-tematizatsii-v-proektirovanii-gorodskih-parkov (In Russ.).
- 19. **Moldakhmetova, A.** (2019). Useful Participation: Parks as a Point of Assembly for Civil and State Initiatives [Poleznoye souchastiye: parki kak tochka sborki grazhdanskikh i gosudarstvennykh initsiativ] (access date 22.10.2024) https://ekonomist.kz/moldakhmetova/poleznoe-souchastie/ (In Russ.).
- 20. **Sinyavskaya, V. V.** (2019). Park for all [Park dlya vsekh] Sochi State University. Scientific and practical electronic journal Alley of Science, 12 (39). https://alleyscience.ru/domains data/files/10December2019/PARK%20DLYa%20VSEH.pdf (In Russ.).
- 21. **Morozova, T., Medvedeva, O., & Dovbnya, S.** (2024). How to create an inclusive gaming space? A guide for public organizations, investors and users [Kak sozdat' inklyuzivnoye igrovoye prostranstvo? Gayd dlya obshchestvennykh organizatsiy, investorov i pol'zovateley] Naked Hearts Foundation (access date 22.10.2024). https://nakedheart.online/articles/kak-sozdat-inkluzivnoe-prostranstvo-gaid-dlya-obschestvennyh-organizatsii-investorov-i-polzovatelei (In Russ.).
- 22. **Filipova, A.G.** (2016). «Child-friendliness» of cities: children's and adults' views (based on the cases of russia's Far east cities) [Gorodskaya «Dobrozhelatel'nost'» k detyam: vzroslyy i detskiy vzglyady (na materialakh gorodov Yuga Dal'nego Vostoka)] Vladivostok, Russia: Labyrinth Journal of Social and Humanitarian Research, 5, 58-67. https://cyberleninka.ru/article/n/gorodskaya-dobrozhelatelnost-k-detyam-vzroslyy-i-detskiy-vzglyady-na-materialah-gorodov-yuga-dalnego-vostoka (In Russ.).
- 23. **Frolova, V.A.** (2015). Transformation of the urban post-Soviet landscape into public spaces and environment of the new generation [Preobrazovaniye gorodskogo postsovetskogo landshafta v obshchestvennyye prostranstva i sredu novogo pokoleniya] Bulletin of the Moscow State Forest University Forest Bulletin, 5 (19), 9-16. https://cyberleninka.ru/article/n/preobrazovanie-gorodskogo-postsovetskogo-landshafta-v-obschestvennye-prostranstva-i-sredu-novogo-pokoleniya/viewer (In Russ.).
- 24. **Minervin, G.B., Shimko, V.T., & Efimov, A.V.** (2004). Design. Illustrated dictionary-reference book [Dizayn. Illyustrirovannyy slovar'-spravochnik] Moscow: Architecture-S, 288. https://f.eruditor.link/file/16415/(In Russ.)
- 25. **Sanders, R.A.** (1984). Estimating satisfaction levels for a city's vegetation, Urban Ecology: Amsterdam 8 (3), 269-283. https://doi.org/10.1016/0304-4009%2884%2990039-1
- 26. **Museum of the History of the City of Kokshetau.** Monument to the Fighters of the Revolution [Muzey istorii goroda Kokshetau. Pamyatnik bortsam revolyutsi] (access date 03.09.2024). https://museum-kokshetau.kz/ru (In Russ.).