Lviv Architecture School experience in projecting "landscape" theaters in park areas of urbanized Ukrainian cities

Abstract

This publication reviews the research projects conducted by students and lecturers of the *Institute of Architecture* of Lviv Polytechnic National University. These projects offer various ways of building "landscape" theaters with infrastructure, that would be located in green zones of the largest Ukrainian cities and provide the population with modern cultural and spectacular complexes.

Keywords: architecture, outdoor and "landscape" theater, manor, park, square, green backstage, theatron

1. Introduction

This article is devoted to problems of projecting modern outdoor theaters in real building conditions, that are located in historical districts of Ukrainian regional centers, such as Lviv and Kirovohrad. The Department of Design of Architectural Environment of the Institute of Architecture in Lviv Polytechnic National University within the tight cooperation with several architectural departments of higher educational institutions in Poland accomplishes the process of students exchange in order to take part in design and drawing seminars, hold architectural workshops within the framework of educational programs and to be involved into competition projecting of various objects in Ukraine and Poland.

This publication, also makes an attempt to develop the concept of building open-type theater-scenic structures in connection with general volume-planning solutions of specific park zones and existing buildings, water objects and green plantations. The undertaken analysis of open-type theater complexes draft projecting creates preconditions for developing modern typology of "landscape" theaters and demonstrates progressive approaches to the new generation scenic structures architecture at open space in real conditions [1].

2. The purpose of this publication

The goal of this publication is the analysis of diploma projects of the open-air and "landscape" theaters, developed by lecturers and students of the Department of Design of Architectural Environment of Lviv Polytechnic National University. The article goal includes searching an optimal concept of architectural solution to "landscape" theaters at open space with harmonic connection with surrounding environment in park zones of regional cities in Ukraine.

3. The analysis of recent researches and publications

The project solutions of open-air theaters and garden-park zones of ancient building reconstruction projects, reviewed in this article, were previously analyzed in publications [2, 3]. However, time is flowing and Lviv Architecture School represented by the creative staff of the Department of Design of Architectural Environment of Lviv Polytechnic National University under the supervision of professor V.Proskuryakov, Doctor of Architecture, continues research exploration in the direction of projecting "landscape" theaters at various sites in historical zones at Ukrainian regional cities. During last three years (the period of 2011-2014), some new diploma projects and bachelor qualification works were realized. In these works, students of the Department of Design of Architectural Environment together with the authors of the current publication have made an attempt to offer new approaches and modern concept solutions to projecting "landscape" theaters at the Tobilevych manor (family of the Ukrainian classic dramatist Ivan Karpenko-Karyi) in Kirovohrad outskirts, cul-

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ture and recreational structures in educational zone of Lviv Polytechnic National University and the Bohdan *Khmelnytskyi* Culture and Recreation Park in Lviv city.

4. The main part

The contribution of the Lviv Architecture School into the process of national theatre establishment is particularly important. During the last two decades, the collective group of architects-scholars proficient in the area of theatre architecture has been formed under the supervision of V. Proskuryakov, a professor of Lviv Polytechnic National University. Among works conducted by the collective group, we can single out not only the development of theoretical aspects of "landscape" theaters architecture, but the whole range of its practical applications, represented by the example of designing and construction of a "landscape-folk" theatre in the Museum of National Architecture and Household Activity in Lviv (authors' group of architects-lecturers: V. Proskuryakov, P. Havrylov, I. Sherbakov) and the "landscape" theatre in the complex of the Spiritual centre "Live ethics" in Lviv, carried out by the graduate students O. Kordunian and I. Marphiyan under the supervision of V. Proskuryakov (Pic.1).

The students O. Surovetska, Kh. Vovchanska and N. Buchok during the period of 2013–2014 under the supervision of the Department of Design of Architectural Environment professors (professor V. Proskuryakov, senior lecturer Yu. Bogdanova, assistant I. Gumennyk) undertook the draft projects stage-by-stage realization of "landscape" summer theaters at the Tobilevych manor at the outskirts of Kirovohrad city. Each project of the Department of Design of Architectural Environment analyzed in this article is identified by the idea of necessary usage of famous historical memorials of garden-park architecture for realization of cultural and educational actions with implementing modern "landscape" theaters under the open-air.

The master work by the student O.Surovetska, accomplished in 2013 under the supervision of the publication authors, offered not only the idea of theater-scenic structure, but a realization of the whole project of manor architectural-landscape environment with saving existing garden-park zone. Three main axis with per-element dividing the greenery zone into auxiliary directions has been used as the basis for realization of this project [4].

More detailed development of the landscape environment on a regular basis was proposed at the main entrance and existing ensemble main buildings concentration zone. The bosquet compositions of triangle and square shapes will create the basis of the composition. The landscape elements take romantic nature at the rest of territory, it is the attempt of maximum saving the existing environment with adding only the trails which are required for functioning of projected zones. Territory around the pond is actively used. A few round chamber spaces are located here for additional theatrical and various scenic actions realization. Besides that, the territory around two bathhouses was developed, which are saved since the lifetime of Ivan Karpenko-Karyi and have great historical value.

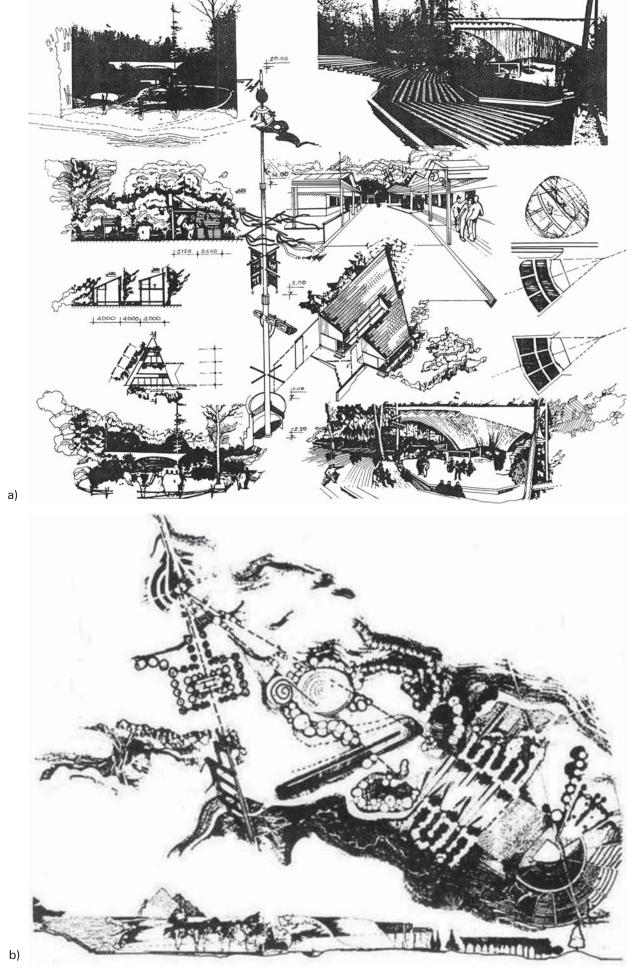
The open-air theater with up to 800 person capacity was chosen as the developed project main highlight. The object was offered to be located at the territory of existing theater, but with changed orientation, mainly the main axle stretched from north to south. This fact is caused by the following factors: first of all for creating maximum comfortable natural light, i.e. removing possible blinding of actors or audience by sunlight during performance; the second fact is because of the fact that exactly this theatron positioning a perfect view at the pond opens at the background and an additional axis is being created, which opens up new opportunities for interesting theatrical performances realization.

According to the project, theater has round shape with a passage in the center and pedestrian trails around it. Spectator places are located half-circle way, their constructive basis is a concrete frame. From southern side the theatron is limited by the colonnade, which may be accessed by the stairway located in the both sides from it or over three radial passages between spectators seats. Except for concrete basis, spectators places consist of wooden seat and grass line behind it. This allows to reduce the amount of pavement with colored concrete figure elements.

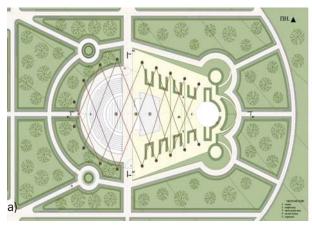
The project shows the infrastructure objects located in theater zone of the open scenic structure: the make-up rooms in the scenes, portals transforming during the performance, stage covering constructive elements (flyloft), auxiliary rooms for stage service and public catering facility near the theater. Main axle of the general alley and theater ends up with cafeteria, which resembles by shape and accomplishment the motive of chosen for the project round shapes. The colonnade framing the yard near the cafeteria entrance is an original continuation of the building cornice. The composition center of current projecting solution is presented by the flower-bed connected with small artificial pond.

Another bright example of competition designing at the Tobilevych manor is the 2013 diploma project of the student Kh.Vovchanska, developed at the Department of Design of Architectural Environment (supervisors: prof. V.Proskuryakov, senior lecturer Yu.Bohdanova, assistant I.Gumennyk), on the topic: "The project of landscape theater at the Tobilevych manor in Kirovohrad city outskirts" [5].

The "landscape" theater is located in eastern part of the projected formal park. The amphitheater is designed to include 400 spectators,



il. 1. Realized projects of "landscape" theaters in Lviv: a) "landscape-folk" theatre in the Museum of National Architecture and Household Activity (Authors: V. Proskuryakov, P. Havrylov, I. Sherbakov); b) "landscape" theater in the complex of the Spiritual centre "Live ethics" (Supervisor: V.Proskuryakov,students: O. Kordunian, I. Marphiyan)





il. 2. Project solution to the open-type "landscape" theater at the Tobilevych manor in Kirovograd: a) scheme of the open theatre plan; b) amphitheatre panoramic view (Authors: prof. V. Proskuryakov, s. lecturer Yu. Bohdanova, assist. I. Gumennyk, st. Kh. Vovchanska)

has a semicircular shape and its stage is oriented to the East. The amphitheater back stage is formed by the green elm tree wing flats located on the performance venue. Blue Siberian spruces planted behind the wings perform the wall protective function and prevent the influence of external noise from the park zone onto the audience space (il. 2).

The acting space is constituted by the orchestra pit and the forestage, i.e. the front part of the stage portal, which overhangs the orchestra pit 700 mm above. Apart from natural daylight, the project envisages installation of four portable light towers and additional stationary portal, on which the screen for films transmission should be placed. It is planned that the theatre should be covered by the cross awning roof made of the field-oriented steel sheet and can be used as a structural element for installing acoustic and lightning systems.

The radically different approach to spacing a outdoor theater on this territory was taken by the 2013 bachelor qualification work of the student N.Buchok under the topic "Design of the "landscape" theater near Kirovohrad and development of its architectural, landscape, and stage elements and equipment". The current project is founded on the idea to restore a characteristic for those times formal park with the usage of dif-

ferent architectural and landscape elements and to construct a "landscape" theater for the possibility of holding the annual festival of theatre art called "September Gems" and other theatre spectacles.

The project implies changing some trees to decorative plantations, which are used in designing formal parks. Apart from this, the project envisages construction of a new theater meant for the larger amount of spectators and a stage becoming universal due to the installed pistons raising it to the necessary height. The light-weight type of construction contributes to its portability. If needed, the stage can be installed by two schemes ((a) solid without a bonding bar; and (b) disjoint with a bonding bar) and this allows using it for theatric, folk and ballet performances, concerts and festivals. New park roads connecting the theatre and the lake are designed for the sake of ensuring maximum comfort in performances staging. To emphasize the cir-

il. 3. Project solution to the open-type "landscape" theater at the Tobilevych manor in Kirovograd: a) scheme of the open theatre plan; b) amphitheatre panoramic view (Authors: prof. V. Proskuryakov, s. lecturer Yu. Bohdanova, assist. I. Gumennyk, st. N. Buchok)





cular shape of the amphitheatre, the author designed two additional colonnades. Such innovation divides the theatre from the part zone and allocates its entrance by the two pergola arcs (il. 3).

Thus, based on analyzed projects of volume-planning and architectural-constructional solutions organization in the conditions of existing Tobilevych manor in Kirovograd outskirts, we may make the conclusion below: the proposed new concept of great building site (up to 11 000 sq.m.) reconstruction saves natural specificity of Nadiya khutor and creates modern cultural-theatrical infrastructure, which will not only popularize existing Ukrainian historical heritage but allows to undertake mass art actions with harmonic consideration of surrounding landscape. That is why proposed project solutions contribute for the Tobilevych manor will become real center of rebirth, development and propaganda of national and culture traditions, and modern outdoor theater would play the role of popularizing the historical heritage among tourists and contribute realization of culture-recreational actions and festivals at the Kirovograd region.

In their part, creative collective of teachers in the Department of Design of Architectural Environment could not leave themselves apart of the problems concerning creating a modern type theatrical-recreational complex at the territory adjacent to educational corps of Lviv Polytechnic National University, which could bring in variety into students and professors-teachers personnel sphere of satisfying their own cultural needs.

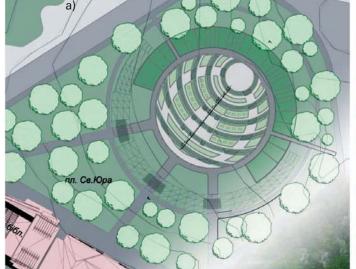
For this goal students have realized diploma projects (bachelors and masters qualification works) on topic of building in the educational zone of "Lviv Polytechnic" a complex of land-scape-scenic and cultural-recreational structures for various mass actions and theatrical arrangements realization. The authors students Kh.Maksymchuk, O.Kolodiy and R.Grushynska in 2009–2013 in different ways proposed for Lviv city a successful project of building multilevel theatrical-recreational structure in the open space of territory located between monumental sacred structures complex of St.George cathedral and educational corps of Lviv Polytechnic National University [6]. The building site is located at Lviv city historical center, mainly in the architectural habitat of city since adjoins with St.George Cathedral. Its connection with the city is comfortable for us-

ing public transportation, tourists and Lviv citizens access. Special attention is given to students who can visit various lectures, reports and culture actions which are provided to take action in the projected structure. A feature of a location mentioned above is the relief, the site is 120 meters long and has incline up to 8 meters. That would demand partial deepening structure into the ground, but at the same time would give an opportunity for structure green roof maintenance with direct access from square alleys.

In 2013 student Kh.Maksymchuk has realized a project which includes building an open theater with 750 places capacity and outdoor theater square up to 2,5 thousand m2 on this site. Proposed amphitheater is located directly at the St.George square. At the same time it acts as the roof for new students media center. The idea of such a planning solution is simple: to make square single open space for community and use the relief overfall of 8 meters horizontally. If needed, square may be used as a place for recreational or social-educational mass culture actions. For example, performances, presentations of library new books, theme forum, creative evenings, etc. The amphitheater is the structure roof and in the same time - a garden-square, where one may have good time with family or friends. This openair theater - is a recreation zone for students, teachers and Lviv city guests for comfortable education and recreation (il. 4).

Thus, realization of this concept project creates objective circumstances for new multifunctional scenic object with open air "landscape" theater to appear in the educational zone of Lviv Polytechnic National University, which is saturated with significant numbers of visitors (students, teachers, service personnel). This significantly expands the opportunities of satisfying various cultural needs of

il. 4. Project solution to the open-type "landscape" theater at the territoty of Lviv Polytechnic National University: a) amphitheatre of the multi-functional complex on St. Yura Square in Lviv; b) scheme of the open theatre plan (Authors: prof. V. Proskuryakov, s .lecturer Yu. Bohdanova, assist. I. Gumennyk, st. Kh. Maksymchuk)





visitors in the district of "Lviv Polytechnic". Also the architectural expressiveness and functional attractiveness of this place rises, as a part of ancient central district of Lviv near to territory attributed to historical heritage objects, which are protected by UNESCO.

In recent twenty years not a single ten of scenic-recreational zone in the Lviv B. *Khmelnytskyi* Culture and Recreation Park reconstruction projects were accomplished by students of the "Lviv Polytechnic". The Department of Design of Architectural Environment has contributed to this process greatly and in 2011–2014 several interesting projects were realized by students N. Buchok, O. Olenuch, T. Kluba and Kh. Kordynian [7].

In 2014, the student N. Buchok in her masters qualification work under supervision of professor V. Proskuryakov, the Doctor of Architecture, senior lecturer Yu. Bogdanova, assistant I. Gumennyk has accomplished an attempt of generalizing all volume-spacial and architectural-constructional solutions experience to create complete entertainment-recreational environment at the territory of one of the most favorite recreational places of Lviv citizens. As a projecting site the territory of the Lviv B. *Khmelnytskyi* Culture and Recreation Park was chosen, which is a garden-park art monument at the local level, located between streets Stryiska, Gvardiyska, Vitovskoho and Zarytskykh.

The relief of this site descends to the northern direction. The difference between the highest and the lowest places is 22 meters. Among the positive sides of the site one should consider, first of all, the various natural surrounding with numerous greenery plantations. Due to the amount and thickness of the green plantations the territory is protected from negative impact from winds and noise from the streets side and creates comfortable conditions for park visitors stay.

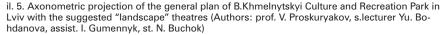
For many years Lviv has become the host for theatrical festival "Golden Lion", exist present conditions in the center city district can no longer satisfy needed project demands, it was appropriate and actual to fulfill the project of outdoor theaters complex arrangement at the territory of one park, which would meet modern projecting needs (il. 5).

The goal of this project was creating appropriate architecturelandscape environment with conditions to preset ideological and aesthetic reference points and create positive aestheticpsychological climate to affect both visitors and actors. According to process of solving the mentioned task for projecting modern recreational-scenic complex a row of measures were undertaken to create appropriate architecture-landscape environment of the park. Concerning the site accomplishment, the basis of this project became the following: saving existing main axes of the territory, developing "landscape", summer open-air theaters for supplying place for mass actions and the "Golden Lion" festival in particular. The main objects for realization of this goal located at the general plan scheme of the park. Existing pedestrian alleys of the park were maximum saved and the new ones were added only there, where it was necessary for new projected transport zones functionality [8].

The reconstruction of "Druzhba" cinema, currently inactive and only the building remaining was also proposed. It was offered to turn cinema to an outdoor theater. Only the main portico has to be left from the old theater, as an example of social realism architecture. Theater has to be built using green walls, phyto-walls and decorative plants.

Beside that, it was decided to develop territories near existing sport stadium, where the new open-air summer oval shaped theater and "landscape" theater, which previously was located at the opposite side from the main alley. Oval shaped theater was made using greenery plantations in tubs and phytowalls. Theater is projected with parterre zone and balconies arrangement (Pic.6).

The main highlight of projected complex is the building open-type theater with up to 950 person capacity. It is proposed to be located with axis along the Vitovskogo street. So in that way after lowering the existing road level and projecting a tunnel for municipal transport passage, the main theater axis is located paral-





lel to the main alleyway axis, stretching from North to South. Such concept made most comfortable natural light for the site possible, which is a factor of removing possible blinding actors and spectators with sunlight. And with this way of placing open-type theater the magnificent view at the park opens at its background and this creates new possibilites for interesting theatrical performances realization (il. 7).

Open-air theater is projected round shape in plan. Places for spectators seats are arranged half-circle shape and their constructive basis – concrete frame. From northern side the theatron is limited by the hill, which may be accessed with stairs located in both sides from the theatron. Except for concrete basis, spectator places consist of wooden seat and grass line behind it. This allows to reduce pavement square. Also, the rooms which may be used for equipment or stage costumes storage, are located by the both sides of the theatron. These rooms may be also used for offices or public cafeterias. An interesting element of stage covering organization is the covering arrangement around the stage in shape of eleven concentric circles. Above the theatron and the arc circles create reliable protective roof.

Special lightning zones were planned to be created to provide the theatron with modern light. Projectors are located in four sides from the stage in a shape of separate towers which can effectively accomplish the process of lightning the stage and spectators hall. In this way of locating in the recreational zone of the Lviv B. *Khmelnytskyi* Culture and Recreation Park the main goal was reached – to create comfortable multifunctional environment where numerous actions may take part in the same time: sport contests, attractions functioning, art actions and concert-theatrical performances at the couple of opentype scenic squares.

An alternate solution to organize leisure time for urban city population in a green zone is suggested by the 2014 bachelor qualification work of the student O.Olenych entitled "Design of landscape garden-theatre in B. Khmelnytskyi park with development of stage equipment and landscape elements".

The author designed a circular shape of theatre construction, since it allows locating amphitheatre without carrying out significant excavation works. The chosen circular shape and colonnade disposition creates in a theatre an interior space, the so called "atrium", where actors and spectators function as

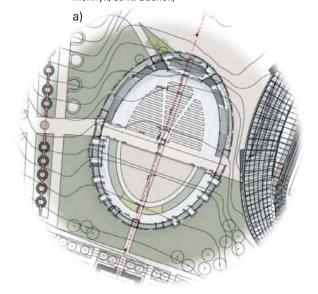
detached from the surrounding environment. Herewith, through the laced spatial structure and the green hedge one can enjoy the exciting panoramic view of the historical part of Lviv city (il. 8).

The rectangular gallery with utility rooms, exhibition and trading halls is projected to attach to the main theatre building from the southern part. The developed conceptual idea of the project consists of supplementing the B.Khmelnytskyi Culture and Recreation Park with different landscape elements, which rebrand the open-type theatre building within the existing relief. Consequently, all exploited improvements create a dominant landscape axe of the park and highlight the beneficial blend of natural environment and projected outdoor theatre building, which are not numerous in the city with 800,000 population and over 40 different festivals and massive celebrations held annually.

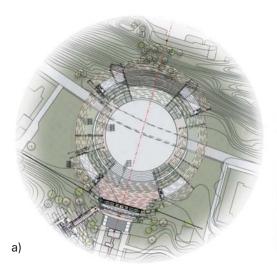
5. Conclusions

The analysis of discussed conceptual projects, which are developed recently by the students and lecturers of Lviv Architecture School proficient in the area of projecting "landscape" open-air theaters in the historical zones of Ukrainian cities, gives an evidence that the ideas presented in the mentioned masters and diploma works have the right to exist because they create circumstances for interesting and extraordinary theatrical structures and infrastructure objects at specific building sites. And they may co-exist harmonically with existing landscapes and garden-park territories and successfully cooperate with adjacent educational, sacred and recreational structures. This expands the specter of creative services which may be provided while exploiting projected buildings. In this way the

il. 6. Project solution to theatre and performance building in B.Khmelnytskyi Culture and Recreation Park in Lviv: a) outdoor theater plan scheme; b) oval shaped theater structure at open space fence solution concept (Authors: prof. V. Proskuryakov, s .lecturer Yu. Bohdanova, assist. I. Gumennyk, st. N. Buchok)









il. 7. Project solution to theatre and performance building in B.Khmelnytskyi Culture and Recreation Park in Lviv: a) open-air theater plan scheme; b) theater structure at the open space (Authors: prof. V. Proskuryakov, s. lecturer Yu. Bohdanova, assist. I. Gumennyk, st. N. Buchok)

experience of Lviv architecture school may be used to realize new culture-creative projects, increase the network of theatrical-educational institutes and satisfy more and more expanding cultural needs of Ukraine population and other European countries.

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Translator: Halyna Lutsyshyn

il. 8. Conceptual solution to "landscape" theatre in B.Khmelnytskyi Culture and Recreation Park in Lviv: a) scheme of outdoor theatre plan; b) project solution to "landscape" theatre construction (Authors: prof. V. Proskuryakov, s.lecturer Yu. Bohdanova, assist. I. Gumennyk, st. O. Olenych)



