

Evolution of the Typology of Open-Type and “Landscape” Theatrical Facilities in the Conditions of Urban Environment from Antiquity to the Present Days

Abstract

The analysis of the literature sources dealing with the problems of formation of conceptual solutions of the open-type theatrical and entertainment facilities construction was done in the article. The attempt at systematization the main types of “landscape” theaters in the context of certain schemes of these spectacular facilities for public art events from antiquity to the present days was done (based on the review of the literature).

Keywords: architecture, open-air and “landscape” theater, typology, amphitheater, stage area

Introduction

The need of undertaking fundamental analysis of literature sources, which were foreign published in recent years is caused by the fact that the main scientific-theoretic researches took part only in 50–60 years of XX century in works of V. Bykov, who is still the most famous open-type theatrical-scenic structures typology researcher [1]. Prof., Dr.Sc., V. Proskuryakov continues scientific exploring in branch of projecting “landscape” theaters at various areas in the conditions of urban environment of Ukraine [2].

However we should note that in period from 1997 to 2014 years in Europe and in USA authoritative publishers have had published a whole selection of scientific works devoted to the following: the issues of forming “landscape” theaters typology with detailed analysis of such structures architecture features forming factors with taking into account factors of time influence on their typology changes in period from antiquity to the present days.

The purpose of this publication

The goals of researches undertaken in this publication are:

- 1) information from literature sources systematization. Sources have concentrated scientific-theoretic analysis of open and “landscape” theaters typology forming;
- 2) selection of main architectural factors which would be appropriate to use for projecting and building open type theatrical objects in modern conditions. These should include community aspects as a component of architectural environment organization to harmonize with building site existing landscape;

- 3) basing new scientific-theoretic approaches to form contemporary “landscape” theaters typology. This should take into account the following: historical constituent of antic architecture experience with its great experience of mass scenic structures at first; forming principles of building contemporary generation open space theaters which will use new technological methods and modern scenic effects during performance to amplify the art action effect on spectator.

The analysis of recent researches and publications

Review covered the publications of famous researchers devoted to the appreciation problems of ancient (antic Greece and Roman empire of before Christ times) open theaters interaction with building site landscape and community interests of mankind. Sources claim that antic theater in its architectural design is an image of real social structure of society [3].

This means that each theatrical structure, especially the antic ones, were built usually at the open space, created complicated problems for architects. The problems were caused by choosing location and the surrounding landscape relief properties [4].



Theatre at Priene, Turkey - Orchestra Detail



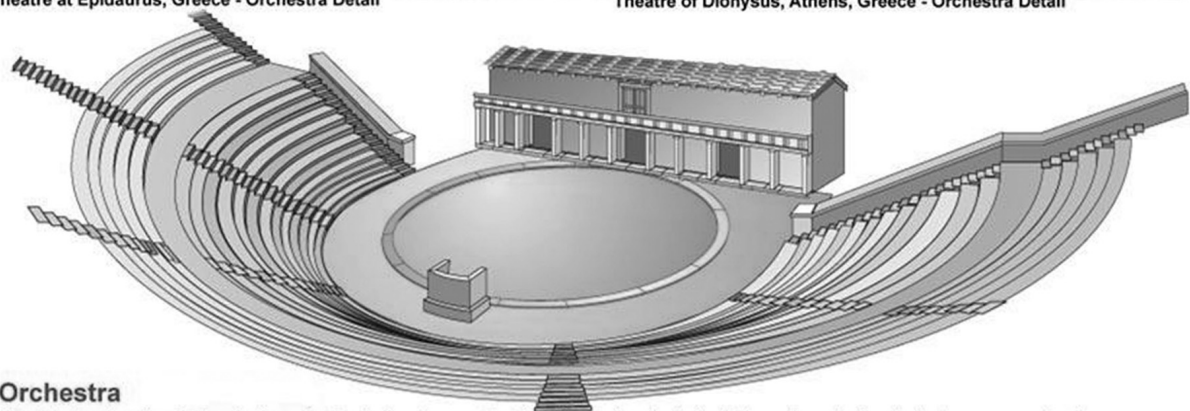
Theatre at Delphi, Greece - Orchestra Detail



Theatre at Epidauros, Greece - Orchestra Detail



Theatre of Dionysus, Athens, Greece - Orchestra Detail



Orchestra

(Greek: dancing place) Circular in early Greek theatre construction, horseshoe in Hellenistic; and semi-circular in Roman constructions, the orchestra was the space between the audience and the stage; primary chorus performance space in Greek theatre; also adapted for use as an arena for Roman "spectacle entertainment"

il. 1. The orchestra building principle on the example of ancient Greek theaters. Greek – Roman Theatre Glossary / Thomas Hines – 2011 [Electronic Resource]. – Mode of access: URL: <http://www.whitman.edu/theatre/theatretour/glossary/glossary%20images/orchestra.jpg> – Title from the screen.

The majority of ancient Greek architects have used the opportunities they could take from the landscape in maximum rate. Only after that they have used various constructional features in order to enhance acoustic properties or field of view for spectators in specific open type theatrical-scenic structure.

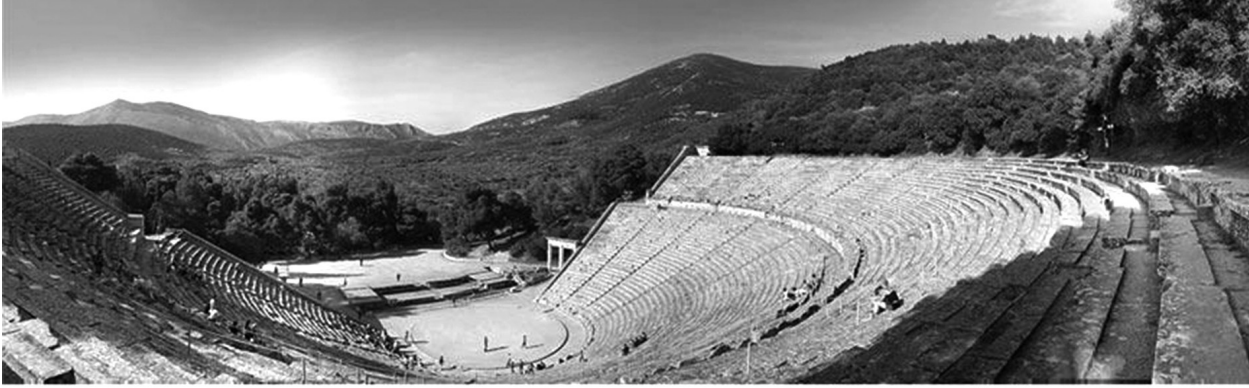
The mentioned above public researches have determined the main differences between architectural typology of ancient Greek and Roman open type theaters, which may be formulated in the following thesis:

- the ancient Greek theaters had a wide orchestra zone established, in Hellenic period half-circle theaters spectators halls in most cases were established at natural inclines with concentrated geometrically-proper spectators seats zones. In other words, ancient Greek open theater was usually a part of natural landscape (il.1);
- the publications have learned in detail the architecture of spectacular square of antic Greek theaters; the special stage building features are shown and methods of achieving connection with surrounding natural environment and the spectator in the urban structure (il. 2);
- determined the fact of ancient Roman open type theatrical-scenic structure is characteristic by fundamentally different

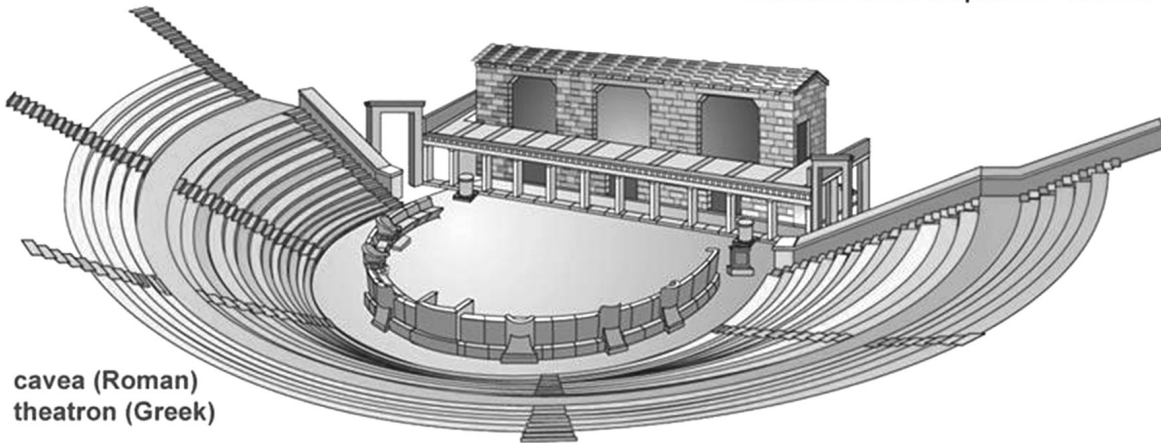
shape of amphitheater in comparison with ancient Greek building principle, which usually had small circular or oval shape. Their full circle or ellipse made possible to use the structure for observing sport competitions, gladiator fights and various exhibitions. In other words, ancient Roman amphitheaters noticeably extended functional destination for open theatrical structures and made possible to cover not only the theatrical branch, but to realize other spectacular mass actions in cities of ancient Rome times;

- even more, there was determined that the one of the most characteristic features of ancient Roman open-air theater was the decision not to use the orchestra in process of scenography and using powerful and massive constructions in building in order of establishing spectators hall and enlarging capacity of scenic structure.

Among that the principles of building ancient Roman outdoor theaters have the following fea-



The Greek Theatre at Epidauros - Theatron View



**cavea (Roman)
theatron (Greek)**

cavea

(Latin: enclosure or den) Auditorium/theatre or seats/audience; the audience seating portion of the Roman theatre; corresponds to Greek theatron.

theatron

(Greek: viewing-place) Originally referred to the audience space of the Greek theatre, but later became synonymous with the entire auditorium consisting of the spaces for both the audience as well as the performance; corresponds to Roman cavea.

il. 2. Building of ancient Greek classic amphitheater on example of theater in Epidauros. Greek – Roman Theatre Glossary / Thomas Hines – 2011 [Electronic Resource]. – Mode of access: URL: <http://www.whitman.edu/theatre/theatretour/glossary/glossary%20images/cavea.jpg> - Title from the screen.

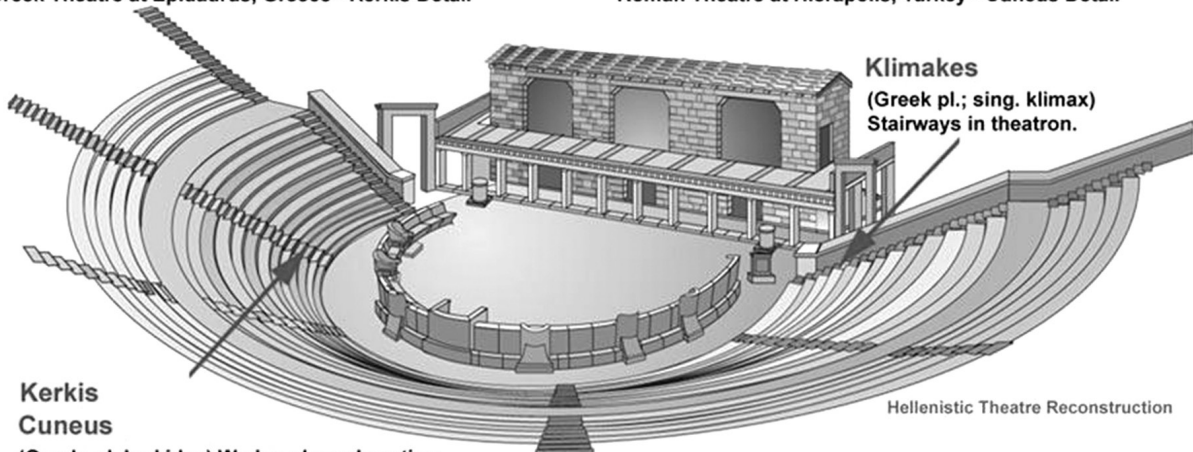
il. 3. Main factors of building ancient Greek and ancient Roman theaters at open space. Greek – Roman Theatre Glossary / Thomas Hines – 2011 [Electronic Resource]. – Mode of access: URL: <http://www.whitman.edu/theatre/theatretour/glossary/glossary%20images/cuneus.jpg> - Title from the screen.



Greek Theatre at Epidauros, Greece - Kerkis Detail



Roman Theatre at Hierapolis, Turkey - Cuneus Detail



Klimakes
(Greek pl.; sing. klimax)
Stairways in theatron.

**Kerkis
Cuneus**

(Greek; pl. kerkides) Wedge-shaped seating section in theatron; corresponds to Roman cuneus.

Hellenistic Theatre Reconstruction

tures in comparison to the theaters in the conditions of urban environment of ancient Greece:

- when constructed on flat squares theaters achieved more monumental look;
- the scenic square shape was changed due to excluding the choir zone;
- the orchestra zone size was greatly reduced, in ancient Rome it was used as spectators stand with special passages (kerkis or cuneus with klimakes stairs);
- the proscenium was used as a basic zone for theater actors performance. This made possible to greatly enlarge its square. Such way of scenic space solution is an analogue of modern open type scene.

The factors above are depicted in built ancient Roman and ancient Greek theaters, which are shown on il. 3.

The main part

Ancient Roman open-air theater in most cases was created as a multifunctional municipal spectacular object. The landscape role as the connection with architectural environment was not the main goal. The most important were such factors as structure capacity, stage overview quality and acoustic properties for spectators hall of the amphitheater. Also the ones to mention are the researches undertaking the analysis of amphitheaters building solutions features with the experience of building theatrical structures from the Roman empire era of building open theaters at the modern Great Britain territory realized in period of XIX-XX centuries. The researches mentioned above have analyzed three fundamental typological types of buildings, which are: military theatrical amphitheaters, municipal open type amphitheaters and “landscape” theaters at the countryside, which were built in the Roman empire era at the modern Great Britain territory [5].

Military amphitheaters built in Roman Britain mostly before Christ are divided into two main groups by the authors of the publication:

- a) amphitheaters inside the fortresses at the places of Roman legionnaires disposition at the territory of the Foggy Albion. They were used for militarized sport contests and spectacular mass actions (gladiator fights, animal shows, militarized theatrical performances);
- b) auxiliary amphitheaters were built in towns near secondary forts with disposition of forces, which took auxiliary roles in military actions (supplying citizens and army with forage and provisions while cities were under siege).

Municipal type open amphitheaters were located in recreation places of main provincial towns of Roman Britain, in particular: at the territories of modern Britain counties Hampshire, Dorset, Sussex, Northern Yorkshire, Norfolk, Northern and Southern Wales and Kent. Archeological researches at all above mentioned theatrical structures or ancient Roman era were undertaken in XX century in period 1901-1988 years. As a result of archeological researches results analysis the optimal places capacity for such class amphitheaters was determined – from 5000 to 7000 spectators. In most cases these structures were built in elliptical shape with wooden constructions. These architectural-constructional features of legionnaires amphitheaters at Roman

Britain are significantly different from the main spatial planning solutions for military theaters built in other regions of Roman empire. This proves the authenticity and local coloring of the objects located at modern Great Britain territory. As a result of Great Britain’s ancient Roman era local open theaters architectural features and spatial planning solutions analysis the following conclusions are to be made: the scenic structures mentioned were intended for small spectators places quantity – from 2300 to 2500 seats with large squares for local spectators who were watching the performance upright. In most cases amphitheaters had circular shape, but in Silchester and Dorchester (Hampshire and Dorset counties) the building configuration had oval (elliptical) shape. Local theaters were usually located at wharfs of rivers going through the settlements. The amphitheaters walls construction consisted of natural stone and burned clay bricks. The decoration design of local open-air theaters was ascetic. This was their main difference with the military amphitheaters built for Roman legionnaires. These ones were characterized with luxury and great quantity of expensive architectural decorations.

Both types of amphitheaters (military and municipal) had direct multifunctionality, in fact, in the first place were used for military branch sport contests and in the second place for realization of theatrical performances and general mass actions. Amphitheaters were located at the sites where the territory and environment were used as integral part-component of theatrical or military-sport action.

The largest effect of landscape role in spectacular action perception in specific open type theatrical structure developed in the amphitheaters of ancient Rome era built in small towns at the territory of Roman Britain. The research works had detailed research on 27 main monuments of ancient Roman architecture, 18 of those objects may be considered as provincial amphitheaters. Open “landscape” theatrical structures in provincial lands had capacity from 1000 to 1200 spectators and were located at the open space on relief with natural incline in order to achieve optimal overview of spectacular square from every spectator seat. In some cases this required volumetric ground works in process of amphitheater building. Existing greenery and threes of provincial landscape were used as natural scenes or makeshift back part of amphitheater’s stage. As the main building material for theatrical structures the main local resource was used – the wood. Exactly this harmonic approach of combining municipal landscape with architec-



il. 4. The multifunctional park with amphitheater project at Taiwan

tural solution for the amphitheater located in urban areas have created conditions for realizing religious festivals for community and other theatrical actions which usually took part at the territory of Great Britain in times of ancient Rome.

The authors of these researches attempted to explain in the view of metaphysics the way how the theatrical structure, which at first consisted only of the amphitheater and spectacular square, in the first place manages to turn a person into spectator in case he entered the theater through the spectators hall, and in the second place, turn a common person into an actor in case he entered theater from the stage. In this way, the theater duplicates one man into active person and in the same time into personality who observes the performance plot. The mentioned above approach to the understanding the roles of main constituents of antic theater (amphitheater, orchestra, stage) and the influence of surrounding environment on the person inside the theatrical structure gives a push for creating significant new interaction between the spectator and the actor. In other words, creates the symbiosis of feelings and visual effects perception in process of theatrical performance.

The functionality of this interaction between man and open theatrical structure scheme is realized in modern structures of urban sport arenas – stadiums, where people sitting at the platforms play themselves. While in traditional “landscape” theater at the open space the role of spectacular square with portal in a shape of a box rises to the accent which starts to weight the spectator in the hall with its massiveness. Such interaction between spectators and actors is proven with democratic essence of “landscape” theaters in comparison with stiffness and certain coldness in contacts between the hall and spectacular square in traditional closed type theatrical structures [5,6].

This phenomenon of “landscape” theaters was accentuated in publications which proposed the evolution of transforming “landscape” theaters depending on their art and functional features, referring to centuries-old experience of building open type theatrical structures in urban environment from antiquity to the

present days [7]. This table shows the genesis of “landscape” theaters architecture typology changes from formalized perception of theatrical action to the creative beginning (author’s theater at the open space) in organization of internal and external environment of the spectacular structure of this type. At the same time specific examples of theatrical structures built in various places worldwide in the conditions of urban development make possible the significant changes to be observed. The situation changed from consumer-like role of theatrical spectator with passive performance perception to active interaction person who came to the action of creative process, the process of actors pay at the spectacular square and the events taking part in specific landscape environment as a part of theatrical action. The spectator takes active participation and his creative cooperation in performance enhances the overall degree of performance emotional perception. This scheme by Joanne Carole Mendenhall shows analysis and analogues of antic era open type theaters and modern open space spectacular structures. These analogues illustrate the mass spectacular events destination architecture objects optimal classification development. The features which have significant influence on “landscape” theaters architecture typological features forming in harmony with surrounding environment are present in urban structure.

Modern architects use in their creativity the principles of building connected amphitheatres of ancient Greece and Rome, based on harmonic landscape and architectural-constructional solutions for urban open space theaters. The open-

air theater at the Taichung city, Taiwan is a good example of using such modern approach for building “landscape” amphitheater [8]. The teatron was used as a most spectacular structure for mass theatrical actions and musical performances (Pic.4). As the used three-dimensional solutions of proposed “landscape” theaters typology analysis shows, the principles of connecting scenic space, spectators hall and surrounding environment organization methods tend to continue the main conception for building amphitheatres at the times of ancient Greece and Roman empire.

Contemporary outdoor amphitheatres built in XX century include permanent structure (sometimes bent shape or park “cup” shaped) both behind the scene and audience. Such components create the sound amplifying zone, exclude the possibility of echo and make the whole “landscape” theater a structure perfect for grand popular musical performances, gala-concerts, large scale theatrical performances and spectacular stagings realization [9].

Conclusions

Conceptual solutions from the ancient Greek and ancient Roman amphitheatres architecture have found the evolutionary development in projecting modern “landscape” theaters in the conditions of urban environment. As the analysis result of foreign literature sources published in period from 1997 to 2014 years the following conclusion can be made: the urban surrounding environment of theatrical object and optimal teatron shape with good spectators hall positioning harmonic connection may create effective system which has a significant amplification of the spectacular action effect and enhances the emotional influence the performance affects the audience with. The scientific researches experience in researching open type amphitheatres from antiquity till nowadays creates preconditions for developing new generation “landscape” theaters typology. Such experience is in need for choosing optimal architectural-planning solutions in process of projecting new theatrical-spectacular structures and reconstructing existing ones [10,11].

The sources scientific-theoretical researches and worldwide theatrical structures at open space projecting and building experience in urban development undertaken in this publication gives us the opportunity for creating modern architectural typology of “landscape” theaters. For its part, this gives a push to realize

new grand cultural-creative projects and leads society to understand that the new philosophical term in art should be used– “The green theater”. It is the architectural object where harmonious connection united natural environment and urban structure. And creative potential of spiritual action emanated into hall by actors in symbiosis with active spectator perception – all what we figuratively call “the wonder of wonders– his majesty THEATER!”.

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