PRINCIPLES OF ARCHITECTURAL AND LANDSCAPE ORGANIZATION OF GARDENS OF UKRAINE ORTHODOX MONASTERY COMPLEXES

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Abstract

Peculiarities of monastic gardens and structural-functional model of the monastery complex were identified on the basis of a comprehensive analysis of historical and graphical sources. The semantics of monastic complexes and their structural elements was investigated. It was determined that landscape composition in monastery gardens was built on the basis of the symbolic content of plants and small architectural forms. Principles of architectural and landscape organization of the orthodox monastery complex were formulated.

Keywords: principles of organization; garden; architectural and landscape organization; orthodox monastery complexes

INTRODUCTION

The sacred landscapes concept has a dual meaning in contemporary culture. In a narrow sense, it means religious buildings' landscapes, which by fulfilling the religious needs of people, become the objects of pilgrimage and cause a certain category of people emotional connection with the landscape (place) and the desire to communicate with it. In a broad sense, sacred landscapes are any of landscapes (natural, urban, agricultural, etc.) that have the status of Holy Places in the national culture and are valuable to people as the source of inspiration of folklore and art, and as a factor of the formation of ethnic consciousness and mentality (sacred groves, mountains, rivers, altars, ancient sites, places of battles etc.). These concepts are the same in relation to the landscape of orthodox monasteries in Ukraine.

This is determined by the fact that throughout the history of Ukraine monasteries, preserving the uniqueness and immutability of architecture, performing important religious and socio-cultural mission, kept the spiritual and artistic heritage of the nation. The processes of sacralization of Ukraine orthodox monastic landscapes are mediated by some antecedent semantic structures which are formed in the structure of life world of the nation, society and the individual. They are defined by the society values and social ideal of "beauty", which has been nature for a long time. In most cases the man considers material objects to be meaningful and valuable. But the subject of our study is objective qualities and regularities of building monasteries that determined the processes of their sacralization and aestheticization in Ukrainian culture. The purpose of this study is the definition of architectural - landscape organization principles of orthodox monastery gardens. The object of the study is orthodox monastery complexes in Central Ukraine.

Distribution of atheism in the twentieth century led to numerous losses of orthodox monuments of architecture, a long break in the construction of monasteries and a loss of culture of monastery design. Unfortunately the revival and restoration of monasteries is now limited to the restoration or construction of buildings only, which leads to the loss of content and historical role of monasteries and their gardens, the simplification of functional and planning structure of the monastery and the loss of symbolic meaning of gardens. This determines the relevance of this research.

1. THEORETICAL BACKGROUND OF EXAMINATION OF UKRAINE ORTHODOX MONASTERY COMPLEXES

The scientific and archival sources, iconographic materials and full-scale investigation are materials of this research. The following scientists were engaged into the study of monasteries and their gardens: Snegirev I. M. (1853), Dubenskiy N. (1887), Tonin N. (1889), Regel A. (1896), Palentreer S. N. (1945 a, 1956 b), Zabelin I. E. (1872), Chernyiy V.D. (2006). Common issues of architecture and composition of orthodox monasteries were considered in the works of: Tsapenko M. P. (1967), Logvin G. N. (1980), Miroshnyk N.S. (1999), Osychenko H.O. (2006), Ilvitskaya S.V. (2006).

Semantic aspects of the reseached problems were described in publications by Lihachev D. (1998), Osychenko H. and Martynenko O. (2014). We used the works on the monastery gardens of Russia (Medvedeva A., 2002) and Galicia (Taras V., 2001).

The study involved a variety of materials (chronicles, literary works, land acts, various descriptions) with information about individual monasteries of Ukraine, namely:

- Materials of «Gustyinskaya letopis» (2003), Trudyi Poltavskoy Uchenoy Arhivnoy komissii (1915), description of Poltavskiy Krestovozdvizhenskiy monastery (1911) and others;
- Materials of research papers by Parhomenko V.A. (1909), Dobrovolskiy P. M. (1900), Smirnov Ya.I. (1908), Granovskiy A. (1901), which are dedicated to the monastery history;
- Cartographic materials of towns and monasteries of Central Ukraine, which are stored in TsGIAL (Russia) and IR NBUV (Kiev) archives.

For the purpose of comparative analysis and research of features of orthodox monasteries we involved sources about monastic gardens of Europe, the most significant of which are the Capitulare of Charlemagne (802), Walafrid Strabo's poem «Hortulus» (1966), and the Plan of St. Gall (dating from 830). These sources give an idea about the monastery gardens of early and classical Middle Ages in Europe. A garden was present in St. Gallen in four "hypostasis"¹: *claustrum* is a courtyard surrounded by buildings and is an open space covered with grass, the center of which was a tree; *herbularius* is a place where aromatic and medicinal herbs were grown; a vegetable garden (*hortus*); *an orchard*, where a cemetery was also located.

Researchers identify the following characteristics of the organization of medieval European gardens²: the prevalence of domestic gardens in monasteries and castles; simplicity and geometric layout of internal gardens, the emergence of the green labyrinth; symbolism; feudal art synthesis; utilitarian purpose of gardens. Gardens of orthodox monasteries in Ukraine in general are subject to the same regularities of construction, but they also have significant differences. In general, we must recognize the lack of materials on the gardens of orthodox monasteries in Central Ukraine and the need for additional studies.

2. RESEARCH METHODS

The paper used a complex method of research, which is based on: historical and theoretical methods (analysis of literary, archival and iconographic sources, chronicles and project materials); comparative analysis; semantic analysis (to determine the symbols of the monastery and its components) and field inspection facilities. Field research conducted by the author on the territory of 10 monasteries in Central Ukraine, which began to form in the Hetmanate era:

Khrestovozdvyzhens'kyy monastery (Poltava), Mhars'kyy Spaso - Preobrazhens'kyy monastery (Lubny), Vydubyts'kyy and Svyato - Voznesen'kyy Florovs'kyy monasteries (Kyyiv), Svyato - Troyits'kyy monastery in village Hustynya (Chernihivs'ka region), Yelets'kyy and Troyits'ko – Illins'kyy monasteries (Chernihiv), Spaso-Preobrazhens'kyy monasteries (Chernihiv), Spaso-Preobrazhens'kyy monastery (Novhorod – Sivers'kyy), Molchens'kyy Rizdva Bohorodytsi monastery (Putivl), Sofroniyevs'kyy monastery in Novay Sloboda (Sofroniyevs'ko - Molchenskaya pustyn', Sums'ka region).

The approbation of research results were conducted by the example of the reconstruction of Mhars'kyy Spaso - Preobrazhens'kyy monastery gardens in Lubny (student Martynenko O., head Osychenko H., 2015). Method of historical analogies was used to simulate the landscape structure of the monastery.

3. PECULIARITIES OF UKRAINIAN ORTHODOX MONASTERY GARDENS

Strict adherence to the requirements of the canonical Orthodox Church has provided stability of the basic principles of landscape and architectural organization of the orthodox monastery complex. The basic premise of architectural formation of a monastery was to accept from the Byzantine theological doctrine of the church, the rules, canonical requirements, regula-

¹ Plan of Saint Gallen. Reichenau, early 9th century.

² O.B. Sokolskaya, Istoriya sadovo-parkovogo iskusstva, M.Infra- V, M., 2004, p. 38-40.

tions and statutes of monasteries and orthodox christian symbols. In the investigation it was determined that the techniques of architectural and landscape organization of an orthodox monastery complex are achieved through such constructing regularities: the principles of social and functional specialization of gardens; unity with the surrounding landscape; traditionalism and canonicity; symbolism and rituality.

3.1. The principle of social and functional specialization of monastery gardens

An orthodox monastic complex garden is not confined to the inner part of the monastery walls. It is a multi-level system of organized landscape territory of inside and around the monastery. The main garden, very festive, with thoughtful planning, planting structure and semantics, was inside the monastery walls near the cathedral church. Small implantations were located near the cells. Other ones, mostly of utilitarian purposes, were located on the periphery of the monastery's territory, but most gardens were placed on defensive walls of the monastery.

"The first monastery garden appeared in the Kiev-Pechersk Monastery in 1051. It was a big apple orchard planted on the initiative of Abbot Anthony. In the first third of the XII century in the same monastery monk Nicholas planted a garden near his cell with his own hands"³.

With the development of monasteries in Ukraine the system of their gardens is becoming more complicated and is developing in several directions: functional and utilitarian specialization of gardens, social specialization of gardens and development of the diversity of thematic and symbolic gardens within the monastery walls. An island in the shape of a cross on the territory of Ferapontov Monastery (Russia, 16th century) should be called the first among symbolic monastic gardens. It "Christianized" the nature surrounding the monastery. The appearance of recreational gardens with elements of gaming environment for pilgrims and guests is a modern trend in monasteries. But still, unlike Europe, in the monasteries of Central Ukraine there are no green labyrinths.

In the summary of the study, the functional structure of orthodox monasteries was defined reflecting the peculiarities of their life style. The functional zones of the monastery were revealed (entrance, temple, residential, industrial, agricultural, household, guest). Social and cultural, educational, recreational functions are gaining importance in today's monasteries. Each zone has its own plantations; therefore this structure corresponds to a certain structure and typology of monastery gardens, which is represented in figures 1, 2. Typology of monastery gardens includes: a) inside the monastery gardens; gardens and landscapes surrounding the territory of the monastery and landscape organization of the monastery land; b) open access gardens, limited access gardens (monks' gardens, a garden of the abbot) and closed access territory (monastic hermitages and hermits' caves); c) various thematic and symbolic gardens dedicated to the Virgin Mary, Holy Ghost and miracle workers and religious holidays.

3.2. The principles of unity with the natural land-scape

Since the XIV century, in addition to planting gardens inside monasteries, the choice of location for a monastery in the forest, on banks of rivers and lakes has gained great importance. This choice was imposed by the concepts which developed in the XIV century in Russia and stated that only primordial nature was sinless, ordered by God himself, and was in harmony with aspirations to improve. Monasteries were placed in a wooden area on the slopes of hills, on the top of hills and plateaus, deep canyons, and if on flat terrain, they were placed in the bend of rivers and tributaries, or on the islands. Of the 20 Ukrainian monasteries described by Tsapenko M. (1967), only 7 monasteries were located on a flat terrain. The mere posing of the monasteries in the surrounding landscape also obeys the natural regularities of relief forming. At the same time its spatial and visual qualities are used with maximum efficiency. The closed intimate inside gardens of a monastery acguire visual connections with the natural environment.

When the monastery is perceived from the outside, its silhouette repeats or emphasizes landforms. The ensemble of the monastery dominates in the space of a few miles around. Low density of building of monasteries, high planting systems of monastic courtyards, irregular planting techniques, using mainly local breeds of plants "dissolve" a monastery in the environment, it becomes an organic part of the natural landscape. Thus, the orthodox monastery and its gardens' system are single, integrated architectural and landscape ensemble, and the principle of unity with the natural landscape defines the main features of an orthodox monastery complex. In surrounding landscapes small architectural forms and highly ornamental plants - introducers were skilfully placed; symbolic places and

³ V.D. Chernyiy, Sadovoe iskusstvo Drevney Rusi: istoki, tipologiya, evolyutsiya, M., Prometey 2006, p. 14.

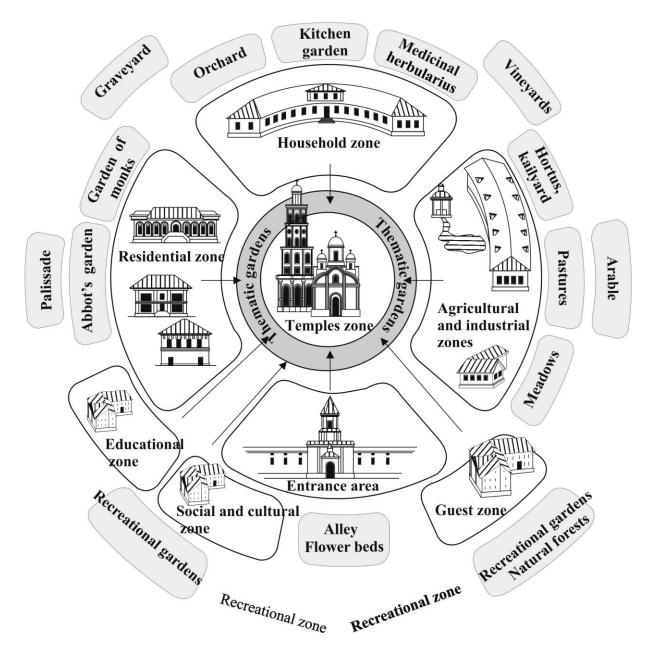


Fig.1. Structural - functional model of the landscape of an orthodox monastery; source: drawing by the author

themed gardens were created. Thus, the natural landscape around a monastery was decorated by man, and the whole of nature was perceived in some ways as a huge garden, waiting to be cultivated by man – gardener in their own right. One of the main functions of a garden was a repetition of the process of creation of the world in miniature.

Although the investigated monasteries were originally created as suburban and modern surrounding monasteries land boundaries were much diminished, natural landscape still remains near monasteries (Fig. 3).

3.3. Traditionalism and canonicity principle

Traditionalism and canonicity principle in the organization of the monastery complex includes:

- strict regulation of style of monastery buildings (the church for a long time only encourages compliance to Byzantine, Ukrainian Baroque or Empire styles);
- regulation of orientation of orthodox monastery buildings and entrances according to compass points (the altar and the entrance should be placed on the East-West axis, the entrance to the temple must be from the west);

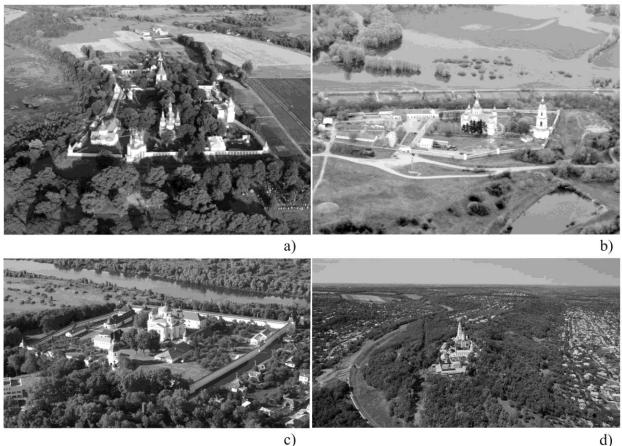
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1 - main temple; 2 - belfry; 3 - guest house; 4 - deanery; 5 - monk's cells; 6 - household yeard; 7 - Skete area; 8 - garden of aromatic herbs; 9 - abbot's and monk's garden; 10 - medical gerbariu; 11 - linden alley; 12 - apple garden; 13 - garden - labirynth; 14 - kailyard;
15 - welt; 16 - a worship cross; 17 - monastic interment; 18 - pilgrims garden; 19 - natural amphiteater; 20 - forest; 21- gazebo by the pond; 22 - Oak St. Athanasius; 23 - the garden of Our Lady; 24 - Garden of resurction of Christ; 25 - Orchard

Fig.2. The use of structural-functional model of the landscape of an orthodox monastery for reconstruction of Mhars'kyy Spaso-Preobrazhens'kyy monastery, Lubny; source: drawing by the author

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c)

Fig.3. Current environment of Ukraine historical monastic complexes a) Svayato-Troits'kyy monastery in vilage Hustunya (http://gustyn-mon.church.ua/); b) Mhars'kyy Spaso-Preobrazhens'kyy monastery in Lubny (photo by P. Kozhamyakin, 2006); c) Spaso-Preobrazhens'kyy monastery in Novhorod - Siverskyy (http://siver.com.ua); d) Krestovozdvyzhens'kyy monastery in Poltava (photo by D. Sleduk, 2010)

- traditional forms of the territory of the monastery, which is committed to the ideal for the church canon square configuration while adapting to the natural topography;
- placing refectory building in the west of the main monastery temple;
- enabling circular circumvention of the main monastery temple and the formation of the main square in front of it;
- presence of mandatory elements and methods of forming compositions of gardens in the buildings and on the territory (Fig. 4). For example, it is the presence of an orthodox cross on each building, small architectural forms; installation of crosses in gardens; division into three parts of bell towers and church buildings, which symbolizes the Holy Trinity; necessity of a water area - the main element of Baptism. The following things are also traditional: ceremonial floral design of the main square; putting a garden house near water sources and waterbodies; the use of white lilies

and white flowers in the garden of the Virgin and necessarily the presence of an apple orchard;

preference of irregular planting techniques.

Regarding landscaping of monastery territories it should be determined that there is free use of various methods of gardening and floral design. For example, one of the characteristics of landscape garden style of the nineteenth century in Ukraine and Russia was the presence of the main linden alley, which led to the main building of the garden. The author found that the linden alleys as a tribute to style along the way to the main gates of monasteries were planted through the woodlands in most investigated monasteries. The monks followed the trends of garden styles of the era, borrowed from foreign experience in gardening and subscribed to a new assortment of plants from Europe. This is traditional for Ukrainian folk agriculture; they did not adhere to the difference between the garden and the vegetable garden. In the orchard vegetables, herbs, roses and other flowers were planted on the same area; and in the vegetable garden apple trees, cherry trees and

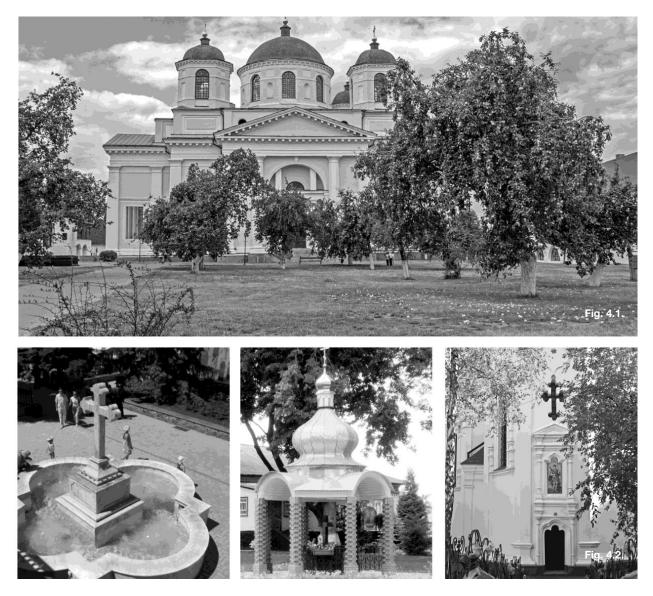


Fig.4. Required elements of the monastic landscape

4.1. Apple-tree orchard. Spaso-Preobrahens'kyy monastery (Novhorod-Sivers'kyy). Photo by author; 4.2. The use of the Cross (left to right); worship cross in the form of a fountain, Sviatohirsk Lavra (Donetsk region); worship cross in a open chapel, Svyato-Troits' s'kyy monstery (Hustynya); St. George's Cathedral window in the form of an othodox cross, Vydubyts'kyy monastery (Kyyiv). Author photos.

lilac were cultivated between vegetable beds. Overall, this leads to mixed garden style of inside the monastery gardens, which represents a pragmatic and aesthetic syncretism in culture and in a sense the unity and complementarity of all aspects of human existence.

3.4. Symbolism principle

The monastic complex is considered by us as a complex semantic system, which has several hierarchical levels: the semantic interpretation of the garden as a whole in Christianity, the semantics of the monastery complex and an underlying basis of its natural elements, semantics and symbolism of the individual elements of the monastery garden. The entire monastery is comprehended as "heaven manifest on earth", "rescue ship"; therefore general composition solution of a monastery embodies the image of the "Heavenly City of Jerusalem." Placing monastery on the hill is treated as an approximation to heaven, God and Eden. Axis Holy Gates and Cathedral symbolizes the "way of salvation." The location of buildings on the territory of the monastery also has a certain symbolic significance. Centrality of the main cathedral and its dominance in space mean "One God", microcosm and heaven. Other buildings around the main Cathedral embody Righteous around the throne of God. Assortment of plants in gardens was not determined by modern principles of landscape composition, but by the symbolic meaning of plants and their blossoming period on major religious holidays. Sculptures, icons, wells, crosses and others architectural forms have a symbolic function. Thus a monastery garden is a hypertext, which tells us Bible stories and encourages concentration, prayer and reflection on life.

3.5. Rituality principle

Orthodox rituals provided processions and sanctification of the gifts as an expression of common faith of the orthodox in the common prayer about the protection, assistance and glory of God. Rituals are:

1) general church large processions - Velyki Khresni khody (Paschal Cross Way, Velyke Vodosvyachennya or the Way to Jordan);

2) Prestol'ni Khresni khody - on the days of patronal feasts of an individual monastery (eg, the feast of the Preobrazhenyya Hospodneho – on 19 August and the feast of St. Athanasius, Lubny miracle worker, May 15th in Mhars'kyy monastery);

3) General church ritual consecration of the gifts and small processions around the cathedral (Apple Spas and Nutty Spas, Palm Sunday, Easter);

4) Episodic line processions are at a meeting of the higher clergy or holy icons in monasteries, the rank of burial of monks and others. All the rituals require a cathedral square for people gathering during the enlightenment of gifts, a ring alley for the circular circumvention of the main temple, the identification of the main alley from the gate to the main temple; the presence of the direct path to the church cemetery and organization of the way to the natural body of water outside the monastery. The way of Processions was provided by a sign system; visual, planning and compositional accents fixing the basic directions of movement and by establishment of memorial signs in some places.

CONCLUSION

The research expanded the concept of "monastic garden", that cannot be considered without architectural and landscape characteristics of the orthodox monastic complex of Ukraine. It includes not only a system of indoor and outdoor gardens, which go and merge with the natural landscape. It represents Heaven on earth, harmony of man's relationship with nature, harmonious way of human life. A specific type of an orthodox monastery has developed in Ukraine: the whole monastery is the Garden.

The principles of architectural and landscape organization of an orthodox monastery complex were formulated: traditionalism and canonicity, functional specialization of gardens, rituality, symbolism and unity with the natural landscape.

The research results can be used in the practical design of new, reconstruction and restoration of historically formed orthodox monasteries and their gardens.

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