

The urban features of the formation of the ensemble development of the kyiv-pechersk lavra (the latter half of the 17th-18th centuries)

Abstract

Significant development of monastic construction in the Naddniprovyanshchyna (the Dnipro Ukraine), Livoberezhzhia (the Left-bank Ukraine) and Slobozhanshchyna (Sloboda Ukraine) during the time of the Hetmanate had a solid socio-political background, the main of which was the liberation from the national and religious oppression and the formation of statehood. The economic conditions were no less important. The economic power of the monasteries allowed to rebuild the ancient monasteries, which already had brick buildings, rebuilt the ancient monasteries that were entirely wooden to the masonry ones.

The subject of the formation of stone building on the territory of the Kyiv-Pechersk Lavra in the 17th -18th centuries is of exceptional interest for research, as it is the only architectural ensemble, united by unique monuments, which has no analogues in the Ukrainian architecture.

Key words: urban aspect, Orthodox monasteries, the Kyiv-Pechersk Lavra

Introduction

According to historical experience, a large number of architectural monuments was built considering the natural environment, and when it comes to religious buildings of the Hetmanate in the lands of the Dnipro and the Left-bank Ukraine, they tried to locate them on the most picturesque high-rise sites, with the possibility of viewing them from afar, and in the presence of water files – rivers, lakes, ponds – with the inclusion of them in the general composition [7–9]. A typical example of the Hetmanate's time is a temple or monastic ensemble situated on a high bank of a river or on a hill above a lake, surrounded by greenery, at a certain distance from the background development [7-9]. The temple building kept the same tradition in the future.

For example, St.Sophia Monastery, St. Andrew's Church, Three Saints Church, St. Michael's Golden-Domed Monastery, Upper and Lower Lavra, Trinity Monastery of St. Jonas, Vydubychi Monastery in Kyiv were built on rising ground [7-9]. Often the existence of ancient caves in the mountains was an additional factor for the location of the monastery [12].

Thus, the monastery was often officially founded in the days of the Hetmanate, and the settlements in this place or the caves of the hermits in the mountains could have existed since ancient times, which was explained by a combination of favorable factors: rising ground (protection and complete inspection – defense function), availability of water (water supply, fish farming, river

transport – life support and trading function), favorable climate, soils (agricultural function). An example is the location of St. Michael's Golden-Domed Monastery, the Upper and Lower Lavra, Vydubychi Monastery [4, 10-13]. It is precisely in the time of the Hetmanate that the prosperity of Orthodoxy begins after years of long unfavorable Uniate domination. In the days of the Hetmanate until the days of Catherine the Great, who began the policy of secularization – the removal of the monastery land into the state treasury – the monasteries and temples were the richest landowners who had plough lands, vegetable plots, gardens, apiaries, lakes and hayfields.

1. Characteristics of the urban ensemble of the Kyiv-Pechersk Lavra.

As already noted, the Kyiv-Pechersk Lavra occupies a special place among the ensemble development of the Hetmanate.

The periodization of the planning and compositional structure of this complex should be determined. The town-planning basis of the Upper Lavra ensembles, the territories of the Near and Far Caves, the Pechersk town with their boundaries, check points, planning and spatial links, which had been defined in previous times, was preserved in the Mazepa period. As before, there is a clear functional division of the territory into a residential

(a town with a market) and monastic. The foundations of the architectural and town-planning peculiarities of this territory, the main ways that linked the structural parts of the complex with each other and with the environment were laid.

Analysis of the dynamics of the development of the Kyiv-Pechersk Lavra ensemble and the Pechersk town at this time indicates, firstly, about the active change of wooden structures by stone ones, and secondly, about the abundance of the architectural dominants on the territory of the Pechersk, and thirdly, about significant work on improving the system of fortifications of the Pechersk. It was then that the architectural ensemble of the Kyiv-Pechersk Monastery and the system of fortifications of the Pechersk were formed, which can rightly be referred as the most important urban measures of the Mazepa era. The defensive structures played the most important role in this process. Like all other Orthodox monasteries, the Kyiv-Pechersk Monastery played the role of suburban fortification and had its defensive fortifications, which at the turn of the 17th – 18th centuries have undergone radical restructuring. During this period a solid stone wall with towers and gates, with gate churches was built around it. Construction was carried out between 1695 and 1706 years. The north-western wall was built not earlier than 1697, because a brick, which indicated this year, was found on this site.

The leading role in the formation of the architectural perception of the monastery belonged to the main gate, which was called the Holy and was located in the Ukrainian Orthodox monasteries, depending on the town-planning situation, mainly from the west or south. The installation of one more gates in the northern part of the defensive wall made some influence on the subsequent planning of the monastery. These gates were called Konovski in some archival documents of the 18th century.

The system of the monastic defensive wall also includes the Onufry Tower-temple, which is located on its eastern

section. It is a single-domed, pillarless building without a passage. The volume and spatial solution of this structure is characteristic of the church building: in plan view it is a Greek cross with blunt angles of the branches – typical for traditional crossing-square temples of this period. Initially, this tower, like the Church of All Saints, was probably characterized by its completion – a dome with a cupola crowned with a cross (not preserved). This cupola can still be seen on iconographic sources of the second half of the 18th century. Thus, this tower is depicted with a baroque cupola on a light tholobate in the drawing of 1780 with a panorama of the Kyiv-Pechersk Monastery. Four faceted dimensional towers rising from the cross of the plan, are completed with the gables.

Another tower with the church in the name of Venerable John Kushnik, patron of Hetmans I. Samoilovych and I. Mazepa, was built in 1696 and, according to some researchers, on the means that Hetman I. Mazepa took from the treasures of I. Samoilovych.

The construction of this church tower is two octagons one on the other, covered with a dome, with a false lamp. This tower was recorded in 1744 by V. Bertholz.

The Holy Gates of the Kyiv-Pechersk Monastery – Trinity Gate Church, is located in the center of the western part of the defensive wall. The appearance of the Trinity Gate Church during the restoration, performed during the times of Mazepa, has undergone some changes.

2. Features of urban, architectural and building traditions of the Mazepa era

The analysis of the formation of the architectural ensemble makes it possible to follow the ideological foundations of the Ukrainian culture of the very



Ill. 2. Dormition Cathedral. Fot. O. Chobitko

complex and bright Mazepa era in the end of the 17th and 18th centuries, since the architectural monuments are not worse than the written sources revealing the peculiarities of the Ukrainian construction culture of that time. The lower chronological limit of the formation of the Lavra development in the time of the Hetmanate period was determined by 1648 – the beginning of the Liberation War (the Khmelnytskyi Uprising), which resulted in significant changes in architecture and urban development. The upper chronological limit was determined not by the year 1765, the moment of liquidation of hetmanship according to the decree of Empress Catherine the Great, but by the year 1781, when Ukraine was divided into the provinces.

Witnesses of the era are important to cover the issues of architecture and the formation of the architectural ensemble of the Kyiv-Pechersk Lavra of the Mazepa time. First and foremost these are the architectural monuments that have survived to this day, including the monastic wall around the Upper Lavra with a gate church in the name of the Trinity and the Church of All Saints, towers-churches of Kushnik, St. Onufry, the Clock Tower, as well as the Church of the Nativity of the Virgin, Church of the Exaltation of the Holy Cross, Theodosius of the Pechersk, the Resurrection of Christ, St. Nicholas Hospital Church. Also, these are fragments of architectural monuments of the late 17th century-the early 18th centuries, preserved in the structure of later buildings. They were discovered and investigated during the restoration of some monuments.

During a fairly short time several important urban objects emerged on the territory of the Pechersk

Monastery. It should be noted that the basis of the aforementioned city-forming process was the principle of the spatial and structural unity of the city and the landscape. Enriched with the construction of the stone fence with towers and temples – the important architectural accents of the ensemble, the panorama of the Pechersk Monastery acquired a vivid and picturesque character.

The control over the construction of the wall was carried out by Hetman I. Mazepa himself, as evidenced by his long stay in Kyiv, in particular, in the Pechersk town. For example, it was there that Mazepa signed the Universal dated September 30, 1700, as well as the Universal dated October 27 of that year.

Form of monastic life in the Pechersk monastery on the basis of the statute of St. Theodore the Studite needed a special territory and a certain functional zoning. It was according to the above-mentioned design that he built his architectural ensemble. Monastic structures were located here as concentric belts. The central place was occupied by the Dormition Cathedral with the original monastic garden and a spring that embodied sacred and recreational functions. The Refectory was also situated here. The main activity of the monastery took place in the first concentric belt.

There were cells, economic buildings, fences of the monastery in the second belt. The exterior wall of the monastery, besides the utilitarian, defensive role, remained the form of a traditional, canonical image, invariably typical to the monastery.

Ill. 1. View to the territory of the Upper Lavra. Fot. O. Chobitko



The defensive wall surrounding the Lavra made the monastery similar to the city, emphasizing its self-sufficiency, symbolizing the border between two worlds – the ecclesiastic and the secular. The fence was associated with salvation, with isolation from sin. Monastery walls thus served not only the defensive purpose, but also symbolized the paradise seclusion of monastic life.

Like other Orthodox monasteries, the Kyiv-Pechersk Monastery featured a large number of temples. However, the Dormition Cathedral, which played a leading role in its ensemble, dominated the rest of the buildings in size (volume and height), location (in the center of the Cathedral square) and its symbolic significance. Placed freely on the square, this temple, in accordance with the town-planning and ensemble principles of the Ukrainian Baroque Orthodox temple building, had an «all-facade» of a dimensional solution. As an accentuating link in the composition of the Cathedral square, it was located asymmetrically with respect to the main axis, which created an extremely picturesque effect. Occupying a central position in the system of monastic development, the temple determined at the same time the direction of the main visual axes and the attitude of the Holy Gates to the entrance to it.

Like in all Orthodox monastic complexes, the second most important after the cathedral was the building of the Refectory. It was associated with the Lord's Supper and had a mystical meaning, therefore, was not interpreted as a utilitarian structure, but functionally, figuratively and compositionally tended towards the cathedral temple. This value of the Refectory is reflected in a special temple built in it. The location of the Refectory was connected with the features of the monastic order and ritual.

A complex of buildings belonging to the Refectory (church and kitchen) in the Kyiv-Pechersk Monastery was located on the southwestern side of the Dormition Cathedral in the Old Russian times. The ruins of these buildings are mentioned in 1584 by Martin Gruneweg. He also mentions «a great beautiful wooden house» – a new Refectory where «monks gathered for a holiday» and where Gruneweg was invited «to bread and honey.» In 1638 there was «the rather big Refectory, the warm church in it, named after the holy Apostles Peter and Paul» in the monastery and along with it «the gate to the brethren kitchens and the Archimandrite kitchen» on the south or southwestern side of the Dormition Cathedral.

On the plan of 1638, the Refectory is a rectangular structure, in plan view completed by four stepped high pediments that cover the edges of high saddle roofs, directed across the length of the building. After the stone old Russian Refectory ceased to function, these structures were wooden for a long time. Only during the days of Hetman I. Samoilovych the work on their replacement into the stone ones started. This work lasted quite a long time and was completed only in

1694. Construction was carried out at the expense of Kyiv citizen Mykhailo Maksymovych. On the plan of 1695 the complex of stone buildings of the Refectory is shown as complete. The Refectory church and the chamber, as well as the kitchen room were damaged during the fire of 1718, but they were quickly repaired, according to the report of 1721 to the governor of Kyiv.

The complex of reconstructed buildings consisted of three parts: a small temple in the name of the Holy Apostles Peter and Paul, a large rectangular in plan view two-story refectory on the west side of it and service rooms with a kitchen – from the south. These buildings were separated and only later, in the 1940's of the 18th century, a one-story building of the main dining room with a buffet and two rooms was attached to them.

3. Bell Tower as a town-planning dominant of the monastic ensemble

An integral component of every Orthodox monastic complex was the bell tower. As a rule, it was erected over the main gate or near the temple. In Kyiv-Pechersk Monastery the bell towers were always located near the Dormition Cathedral. In the first half of the 17th century two bell towers rose near the western facade of the main church on the Cathedral Square, described at one time by Paul of Aleppo.

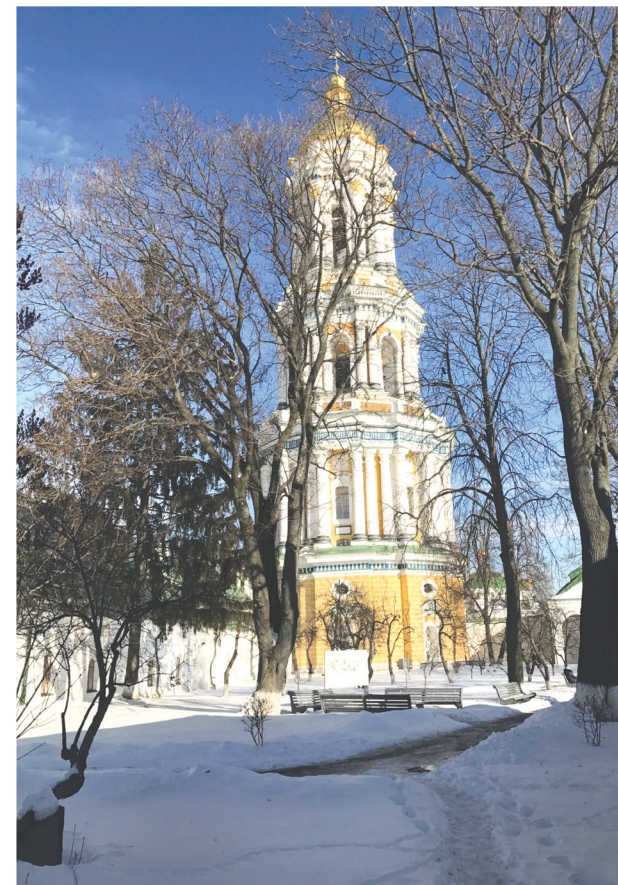
Regarding the location of the bell tower in the complex, two fundamental solutions are known:

1. Above the main gate (Maksakivsk Monastery, Hamaliivsk Monastery, in Kyiv – St. Sophia, Vydubychi and St. Michael's Golden-Domed monasteries);
2. Near the Cathedral Church (Kyiv-Pechersk Lavra, Kozeletsk St. George Monastery).

However, by the middle of the 18th century the bell towers, being important vertical accents, did not have an independent compositional role, and always were dominated by the cathedral.

The Bell Tower was an important vertical accent in monastic building and played a significant compositional role in it. And yet, as bell towers of other monasteries of that time, it did not exceed the main temple. Judging by the image of the Bell Tower in the panorama of the monastery by Athanasius the Clericus in 1677 and «Drawing» by I. Ushakov in 1695, its height was lower than the central dome of the Dormition Cathedral and was about 40 m.

During the fire of 1687 the Bell Tower, probably, was not significantly damaged, but the active process of replacing wooden monastery buildings with stone ones, started at the end of the 17th century, could not ignore such an important building as the main Bell Tower. The Hetman and the authority of the monastery had a desire to build a new stone



Ill. 3. Bell tower. Fot. O. Chobitko

bell tower, taking into account the needs and tastes of that time.

These works were entrusted to the Moscow architect D.V. Aksamytov, who then worked in Ukraine. But the planned construction of a stone bell tower in the days of Hetman I.S. Mazepa was not implemented. Aksamytov had only laid the foundations, but soon after that he died, and only in 1731 the erection of the Great Lavra Bell Tower began by architect G. Schädel, which lasted until 1745. It is a faceted, four-tier of classical order: the first tier has rustic walls; the next tiers are accented with columns, order of which is visually lightened from the bottom up: from the Roman-Doric order to the Corinthian.

4. Additional buildings of the monastic ensemble and methods for planting of greenery at the monastery territory

«Archimandrite's chambers» were situated to the west of the complex of the Refectory.

Archimandrite's garden was located behind the archimandrite's chambers within the monastery wall around the Upper Lavra. The garden was represented in the Christian world as a paradise on earth, Eden. Trees, shrubs and flowers were symbolic and allegorical in it. So, in the monastery garden, every plant and every de-

tail reminded us of the foundations of divine home-building, of Christian virtues.

Gardens of that era in aesthetic terms were subject to architecture, which involved, in particular, building there the main walls of terraces, stairs, railings. Gardeners took care to open the views at the surroundings – from windows, terraces, garden sites. This style is characterized by the desire to create scenery from greenery, combining them with invisible transitions with architecture.

A stone cell of kvass (rye beer) brewers «with kvass cellars» was located in the southwestern part of the Cathedral Square, as evidenced by archival documents, at the end of the 17th – at the beginning of the 18th centuries. In the volume and spatial composition the Cathedral Square, closing the perspective that opened from the main gate, was flanked in the east with a complex of buildings of a Print-house and a Bakery. There was the Lavra Print-house not far from the Bakery.

After the construction of the monastery wall and the appearance of the gates with the Church of All Saints, a broad street, which leads to the north of the Dormition Cathedral and called «economic», was gradually formed in the northern fronts of the fence. The perspective was completed by the Church of the Saviour at Berestovo.

5. Formation of the ensemble development of the Lower Lavra (Near and Far Caves)

In the period under consideration, certain changes had taken place in the development over the Near Caves. Comparing the image of buildings in the territory of the Near Caves on the plan of the monastery of 1638 with the Lavra drawing, traditionally dated 1651, one can conclude that the wooden Church of the Exaltation of the Holy Cross over the entrance to the caves was built up to this time, that is, probably, in the days of the metropolitan Petro Mohyla.

At the engraving of Elijah (1655-1658) to the «Kyiv-Pechersk Patericon», published in 1661 and 1674, the Church of the Exaltation of the Holy Cross, which occupied a dominant position in architectural ensemble of the Near Caves, is depicted in the form of a wooden temple with two tops: above the altar and the nave.

On the «Drawings» of I. Ushakov the Church of the Exaltation of the Holy Cross was already recorded as a stone one. Presumably, it was built in the time of the Hetman I. Samoilovych. That is, the widespread belief that the stone church was built here in 1700 is not true. This was confirmed by the field studies of the monument, performed in 1985. Thus, the analysis of the brick mural of the monument has allowed to set such a sequence of construction of different volumes of the building. At



Ill. 4. Church of the Exaltation of the Holy Cross. Fot. O. Chobitko

the beginning of the 17th century, a small stone chapel was erected near the entrance to the Near Caves. Fragments of it are revealed by the above-mentioned studies in the structure of a later construction. Then the church was built over the western entrance to the cave, which in its turn was later included to the existing temple.

That is, in 1700 the Church of the Exaltation of the Holy Cross was not built, but rebuilt. It was consecrated on September 14 of that year by the Metropolitan of Kyiv, Barlaam Yasynskyi, under the Archimandrite Joasaph Krakovskyi. It was during this period that the temple gained an architectural appearance that has survived to this day.

Images of the Church of the Exaltation of the Holy Cross after the works carried out on the funds of P.S. Hertsyk were recorded by L. Tarasevych on the engraving of «Venerable Matthew the Clairvoyant» (1702). The church building was located on the terrace of the southern slope of the Lavra hill.

The placement of the Church of the Exaltation of the Holy Cross at the foot of the high slope provided for its original perception: the entire volume of the building is visible only from the south and east. The western facade is hidden by the Refectory, the northern – by the slope of the mountain.

In addition, there was a road along the arcade from the southern gate, on which it was possible to drive to the Near Caves Square on horseback. Here, there was a well

at the entrance to the Square, over which there was a chapel with a dome top and a cupola, covered with a shingle.

Gardens were planted on the slopes of the mountains adjacent to the Church of the Exaltation of the Holy Cross during Athanasius Kalnofoiskyi time.

The Square of the Near Caves from all sides was fenced with wooden fences and hedges, in which gates and wickets were arranged. The fence that surround the monastery gardens, turning south, stretched along the soles of the slopes of the upper edge of the natural amphitheater, which included the lower territory of the monastery.

The territory of the Near Caves was connected with the territory of the Far Caves with paths, as well as with arched curved passage, laid on the edge of the slope of the hill. The latter was due to the relief of the area. The territory of the Far and Near Caves was connected with a covered wooden arcade.

It should be noted that in conditions of a complex relief there is no accident in the placement of buildings that created the architectural ensemble of the Near Caves, since the moment of visual perception was taken into account, which resulted in the extraordinary scenic beauty of this complex. A wonderful panorama of the Dnipro and the foot of its

steep bank opened from the territory of the Caves.

Buildings in the Far Caves were located on a high hill on two natural terraces. On the top, in the place where, presumably, in ancient times there was the first ground monastery church, later several temples, changing each other were erected.

On the territory of the Far Caves the wooden temple of the Nativity of the Virgin was the dominant feature. It existed until 1696, and then, in the times of the Archimandrite of the monastery Meletii Vuiakhevych, was replaced by a stone church by the means of the colonel of Kyiv, Kostiantyn Mokiievskyi. The first image of a stone church is found on the engraving of L. Tarasevych «The Cave of the Venerable Our Father Theodosius» in 1703. The stone church has survived to our days almost unchanged. It should be noted that all cave churches and cells, like the caves themselves, have survived to our time in an extremely reconstructed form. This complicates the issue of their attribution and chronology. Around 1679, «by provision of a resident of the Pechersk town» O.O. Novytskyi along with the Church of St. Andrew the First-Called a stone Church of the Conception of St. Anna was built.

Newly built temples, as well as their predecessors, played an important role in the spatial organization of not only the complexes of the Far and Near Caves, but also the entire monastic architectural ensemble. They consolidated the character of the planning of the monastery, discovered its temporal features, contributed to the heredity of the development of the structure and created the integrity of the urban fabric of this formation.

In front of the entrance to the Far Caves a «fence» was arranged. For the convenience of descending to the entrance to the caves wooden stairs with railing were arranged on the path leading down a steep slope. Subsequently, until 1695, they turned into a covered arcade. The path, forking in two directions, led from the arcade. One of its branches led to a small one-story house «cell of lawyers», who lived in a cave; the second – to the Church of the Nativity of the Virgin and to the «cell of the brethren watching the grapes».

In the period under consideration, the volume and spatial composition of the ensemble, which appeared in difficult relief, was based on the planning structure that was defined in previous times.

Conclusions

Each monastery had its own planning structure, which certainly obeyed some principles. The monastery, for the most part, originated from several wooden cells around the chapel. After receiving the bishopric blessed certificate for the establishment of the monastery a cathedral church was erected. It immediately changed the volume and spatial structure of the complex: it acquired an architectural and ideological dominant and became an orderly integrity, a symbolic model of the «City of God». The cathedral church (a cathedral) dominated the

rest of the monastery buildings both by its physical size (volume and height) and the spiritual meaning (the cathedral was symbolically interpreted as «the earthly sky», «the eye of God», the image of the Holy Sepulcher). Therefore, the leading compositional role of the cathedral should have been preserved during all subsequent reconstructions and extensions of the monastery. This explains the development of the monastic cathedrals of the Princely era, carried out in the 17th -18th centuries: the Dormition Cathedral in the Kyiv-Pechersk Lavra, St. Michael's Golden-Domed in Kyiv and the Cathedral of Borys and Hlib in Chernihiv.

The towers and defensive towers (cornerstone and mediastinal), which besides defensive had also economic functions. The structure of each monastery consisted of a number of economic and even industrial buildings, which were compositionally wholly subordinated to the dominants. Gardens, vegetable plots and cemeteries within the walls also formed the image of the monastery (Kyiv-Pechersk Lavra, St. Sophia and Vydubychi monasteries in Kyiv). They also had some theological symbolism.

Hospitals in large monasteries were allocated into separate complexes, which were grouped around the hospital church, as we can see in the Kyiv-Pechersk Lavra (St. Nicholas Hospital Church).

All of the abovementioned types of buildings were located in the monastery not in a picturesque and chaotic way, but strictly logically. These principles are confirmed in the study of the monastic complexes of the Hetmanate.

The completion of the upper edges of the high banks of the rivers by the temples and monastic ensembles was the characteristic method. This variant of the interaction of architecture, natural relief and water bodies is more effective, since such components of the natural landscape as the hills, the slopes of the hills and mountains, the steep banks of the rivers are the most expressive. Such examples are the buildings of the St. Jonas' Monastery, the Kyiv-Pechersk Lavra, St. Michael's Golden-Domed Monastery, St. Andrew's Church in Kyiv, the buildings of the Yelets and Trinity Monasteries in Chernihiv. In those cases when the bank was high, the monastic complex could develop on several levels, terraced. The church development could be located at different levels along the slope of the steep bank – as can be seen from the example of the temples and monastery buildings of the Kyiv-Pechersk Lavra [4, 10-13]. At the same time, the most significant objects, such as the Dormition Cathedral, the Great Lavra Bell Tower stood on the highest flat area, surrounded by not so high and not so magnificently decorated temples and buildings, and other temples and buildings were locat-

ed below [4, 10-13]. This provided a certain Orthodox church hierarchy: the Dormition Cathedral – the House of the Mother of God is a unique temple both for the value for all Eastern Orthodoxy and for Ukraine, and for the history and architecture, so everyone who drove up to Kyiv from the sloping left bank, immediately understood which temple is the main in the Lavra: it was emphasized by the nearby baroque multi-tiered Bell Tower, which was the tallest building in Kyiv for centuries [13]. And here we come to the main contradiction of the location of temples in previous ages: on the one hand, they sought to place them in the highest place, but did not take into account the presence of landslides and groundwater. Therefore, the main cause of the state of emergency and damage, the collapse of parts of all the temples of the upper edge of the right bank were the subsidence of bases and foundations, water-saturation

of loess soils and, consequently, the appearance of cracks [5,6,13].

BIBLIOGRAPHY

- [1] Vecherskyi V. *Arkhitekturna i mistobudivna spadshchyna doby Hetmanshchyny. Formuvannia, doslidzhennia, okhorona* [Architectural and Urban Heritage of the Hetmanate. Formation, Research, Protection]. Kyiv, 2001. 350 p. [in Ukrainian].
 - [2] Vecherskyi V. *Spadshchyna mistobuduvannia Ukrainy: Teoriia i praktyka istoryko-mistobudivnykh pamiatkookhoronnykh doslidzhen naselenykh mist* [Heritage of Urban Planning in Ukraine: Theory and Practice of Historic and Urban Researches of Populated Areas]. Kyiv, 2003. 400 p. [in Ukrainian].
 - [3] Vecherskyi V. *Ukrainski monastyri* [Ukrainian Monasteries]. Kyiv, 2008. 400 p. [in Ukrainian].
 - [4] Ivashko Yu.V. Baroque style in the architecture of Ukrainian churches. *Liudyna i svit* [Man and the World], 1997, No 11–12, pp. 12–15. [in Ukrainian].
 - [5] *Istoryko-mistobudivni doslidzhennia Kyieva* [Historical and Urban Studies of Kyiv]. Vecherskyi V. V. (Ed); Serdiuk O.M. (Rel). Kyiv, 2011. 454 p. [in Ukrainian].
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