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**CURRENT STATE OF PRESERVATION
AND PROBLEMATICS OF RESTORING POLYCHROME
PAINTINGS BY MODEST SOSENKO IN THE STRUCTURE
OF SACRED ARCHITECTURE**

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Abstract. The current tendency of preserving monuments of immovable cultural heritage has gained negative connotations since the conservation treatment activities executed by state and religious communities that become ‘owners’ of significant sacred objects still lacks the sufficient legislative regulation. The synchronization of multidisciplinary studies of specialists in different areas is extremely important for the comprehensive preservation of an architectural object. A bright example is constituted by the preservation state of murals by Modest Sosenko (1875–1920), a famous modernist of the first quarter of the XXth century, which are painted in the interior space of Ukrainian churches. Deterioration processes, ideological prerogatives, and changes of aesthetic principles have resulted in the total destruction of these unique pieces of decorative and monumental art. The preservation state and the problematics of restoring sacred polychrome paintings by Modest Sosenko on the terrains of Lviv region have been analyzed as those based on the empirical, scientific, and restoration studies.

Key words: polychrome painting, sacred architecture, Modest Sosenko, preservation, restoration, physical and chemical research, restoration probing.

1. Introduction

Taking into account the dynamics of destructing the authenticity of architectural monuments, particularly the total ‘renewal’ of polychrome paintings and the supplementation of temple interiors with objects, the interdisciplinary approach to observation, scientific identification, certification, comprehensive conservation, and restoration of an object becomes more topical. Conclusions of the art expert evaluation, which are based on the archive documents, literary sources or visual observation, do not always render the real state of preserving the authenticity of a definite work. To determine the objective state of preserving original murals within an architectural monument, scientists apply the method of scientific and restoration research of the material structure of polychrome paintings, which enables the possibility of elaborating the efficient scheme of actions for the comprehensive preservation of architecture.

2. Analysis of recent studies and publications

The idea of determining the efficient ways of preservation and the aesthetic approach to conservation and restoration practice within the area of decorative and monumental art within an architectural object is analyzed by Cesare Brandi (Cesare Brandi, 2006, p. 7–66). The information about preservation of church polychrome paintings and iconostases by Modest Sosenko is taken from the publications of the art expert O. Semchyshyn-Huzner (O. Semchyshyn-Huzner, 2014, p. 46–52), the restoration artist V. Radomska (Radomska, 2009, p. 190–195, 2010, p. 171–178). The topic of uncovering and preserving polychrome paintings is highlighted in the articles of I. Z. Dutkevych, O. B. Rishniak, O. Ya. Sadova, P. Bolinskyi, R. S. Herman, A. I. Pochekva, T. O. Kondratiuk and the XIth International Scientific and Practical Conference organized to mark the 80th anniversary of founding the National Scientific and Research Restoration Center in Ukraine (NSRRC), 2019, Kyiv (edited by Strelnikova, 2019, p.109–114, 177–182, 246–250, 376–380).

3. Research objective

The objective of the article is to highlight the current preservation state of polychrome paintings by Modest Sosenko in the interior space of Archangel Michael Church (Arkhanhel Mykhail Church) in Pidberiztsi village, St. Nicholas Church (Sviatyi Mykolai Church) in Zolochiv, and Church of Resurrection of Christ (Voskresinnia Hospodnie Church) in Polyany village, Lviv region, as based on the scientific and restoration analytics. The research aims at determining the authenticity of murals, the stages of restoration interventions, the preservation state and the non-destructive ways of conservation and restoration work. The analytics outlined in the article is based on multiple expeditions to architectural objects, physical and chemical laboratory analysis, and practical application of restoration procedures (2015), which facilitate the professional preservation of authenticity of polychrome paintings by Modest Sosenko in the interiors of Archangel Michael Church in Pidberiztsi and Church of Resurrection of Christ in Polyany.

4. Results and Discussion

The key component of adapting monuments of art and architecture to the requirements of any epoch is time, which performs the function of mediation between the final creative process and the moment when this creative act, i.e. monument of art and architecture, arises in the consciousness of an observer belonging to a certain epoch. The distance between the moments in time with respect to evaluating the eternal and the historical aspects brings about the conflict that can significantly affect the preservation of an object. As a result of transformations, different alterations in terms of shape and content, destructions, reconstructions, and reformatting, a certain art object becomes topical for the society and, simultaneously, remains a part of cultural and historical past (Cesare Brandi, 2006, p. 35–39). A study of the main principles of stratigraphic and technological structure of wall paintings as an example of decorative and monumental art constitutes the significant stage of preserving the monument in general. The search for new technological materials and the change of aesthetic, social, and cultural prerogatives significantly changes the methods and the technical and technological principles of decorating architectural buildings. Currently, the study of authenticity of monumental art dating back to the first half of the XXth century, namely the determination of authorship, the confirmation of previous attributions or the attribution of new objects, is at the initial stage of development as compared to the study of panel painting. Art expert evaluations based exclusively on archive and historic data do not always correspond to the real state of preservation. The situation becomes more complicated when the preserved architectural ensembles are dated or identified taking into account only the indirect evidence, such as age determination of an architectural environment (data taken from the history of a temple, graffiti with dates on the walls,

paleography, inscriptions, etc.). Another type of evidence, which is iconographic and stylistic analysis, cannot always serve as the basis for dating or identification of an author because paintings can be changed and renewed multiple times. For the sake of establishing the chronological connection between interior decorations and architectonics of a construction, we should pay attention to the decisive role of the scientific and technological study of the physical structure of layers that constitute a certain type of architectural monument. The topic that has not been highlighted so far in the national scientific historiography deals with the creation of an analytical database of individual methods, principles, technical and technological specificity of the Ukrainian monumental artists who created their works in the first quarter of the XXth century. One of the talented representatives of this group of innovators is Modest Sosenko (1875–1920), who in the early XXth century introduced a new type of organizing the interior space of sacred buildings and, thus, created ‘Ukrainian’ Neo-Byzantine direction combined with the strongly pronounced modernism stylistics of that time. Taking into account the research objectives, we have determined the preservation state of polychrome paintings by Modest Sosenko in the architecture of three churches in Lviv region and outlined the set of recommendations concerning their preservation and restoration. The general scientific and special methods of research have been applied. They served as the basis for developing the comprehensive methodology of studying polychrome paintings in architecture, which apart from the theoretical aspects presupposes drawing scientific and restoration conclusions on the basis of field observations, physical and chemical laboratory examination, research interviews.

The construction of Archangel Michael Church in Pidberiztsi, Pustomyty district, Lviv region (architect V. Nahirnyi) was finished in 1891. Modest Sosenko executed organization of the interior space in 1907–1910 actively collaborating with the firm of I. Levynskyi as a stylist and decorator, icon painter, designer of stained-glass windows and iconostases.

This is a brick crossed-dome temple, which has a two-armed cross with a longer descending part (nave, narthex) and an octagonal drum of a dome at the transept crossing (four main sides are smaller), which is crowned by a lantern with an onion dome. The eastern part of the temple has a rounded apse with a hemispheric top (Fig. 1). The architectural space of the temple is divided in accordance with the basic functions of a temple of the byzantine rite. The temple interior is the expression of harmony and interconnection between the architectural and constructive intention of the architect and the stylistic organization of the sacred space (Fig. 1–3). At the first glance, the preservation state of the authentic polychrome paintings by Modest Sosenko is satisfactory. However, as those of 2019, the material structure of the paint layers is exposed to serious deterioration processes. In 1980s, the group of professional restoration artists under the supervision of N. Prysiazhna performed the reinforcement test of the powdering pigment of authentic polychrome paintings and cleaned the surface contamination that partially distorted the original coloristic patterns (last eastern pilaster of the nave). However, restoration works were stopped due to the lack of funds. During mechanical interventions, the powdering nature of pigment causes its loss and gradual peeling from the wall. Such mechanical damage ruins the elegance and integrity of a colorful compositional image of a painting and causes its elimination with the help of faster and less pricy procedures, as it happened with the repainting of transept niches back in 2008. One of the priorities of the further monument preservation is to discontinue the practice of fragmentary renewals that occur in the structure of polychrome paintings (authentic inscription above the narthex, repeated oil-based coats of panels in the nave). The availability of multiple oil-based coats led to the cease of ventilation of walls and plaster. The condensed moisture in the brick laying and the lime and sand plaster resulted in accumulation and reproduction of microbes, appearance of salt efflorescence, etc., and, consequently, its detachment from the walls and powdering. In July 2008, “Restoration practice” (restoration artist V. Radomska) was organized and its primary objective was: – to uncover the original polychrome paintings by M. Sosenko located in the northern and southern niches of transept from the re-paintings made in 1970s and 2008; – to cease the subsequent unprofessional restoration interventions; – to develop and test in practice the program of the subsequent comprehensive restoration of this unique monument

of architectural polychrome, created by Modest Sosenko in the first quarter of the XXth century (restoration artists I. Dutkevych and V. Radomska).

The stratigraphic analysis of historical and technological layers, as well as the physical and chemical examination conducted in the laboratory at the Faculty of Conservation and Restoration of Works of Arts at the Academy of Fine Arts in Krakow (ASP, Krakow, Poland) served as the basis for elaborating and implementing the restoration program. The selected techniques were practically tested on different problematic areas of the object. High stabilizing possibilities of the applied techniques were noticed in regards to the powdering nature of polychrome pigment. The restoration program would enable the possibility of reinforcing the surface of the painting and simultaneously making the surface contamination that distorts the coloristic patterns of the murals much thinner.



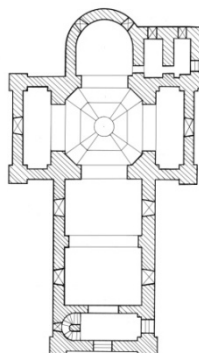
a



c



b



c1

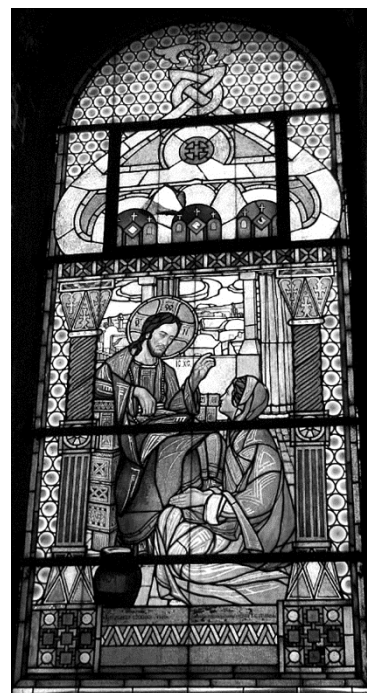


Fig. 1. Arch. Michael Church, Pidberiztsi (a); Fragment of mural by M. Sosenko (1907) on the apse top (b); photo by A. Tyrpych, 1996

Fig. 2. Polychrome painting, central dome of transept (c); Layout of Arch. Michael Church, Pidberiztsi performed by A. Tyrpych (c1), 2015

Fig. 3. Arch. Michael Church, Pidberiztsi; stained-glass window, northern wall of apse; photo by A. Tyrpych, 2005

St. Nicholas Church in Zolochiv, Lviv region, is the architectural monument of the XVIth century, which back in the past used to be a part of the defensive constructions of Zolochiv in Hlynianske suburb. The defensive features of St. Nicholas Church are preserved nowadays and include thickness of walls, window apertures, fittings, etc. The construction started in the XVIth century and finished in the early XVIIth century; its founder is Mykola Vasyl Pototskyi; the church was restored in 1765; the sculptor of the stone plastic arts on the church facade is Frantsisk Olenskyi; the author of polychrome paintings of 1911–1913 is Modest Sosenko (Hupalo, 2007, p. 12–15). The inscription states that back in 1911–1913 the interior space of the church, namely murals, was fully reconstructed and restored. The task was assigned to Modest Sosenko, who created the new conception of decorating spatial composition of church interior with the help of polychrome paintings and followed the traditional for him idea of combining Neo-

Byzantine stylistics and modernist aesthetics. In 1940s, during the Soviet period, St. Nicholas Church housed the museum of atheism. The iconostasis was dismantled; the icons and the elements of carvings and plastic arts were sent to Lviv National Museum named after A. Sheptytskyi, Museum of History of Religion and Lviv Art Gallery. In 1990, when Greek Catholic church was legalized, the building was transferred to serve the liturgical needs of Zolochiv Basilian Monastery. In 1991, scientific expedition (V. Radomska) was organized and its objective was to examine the monuments of architecture with murals and iconostases by Modest Sosenko. It helped to record the real state of polychrome painting preservation as of the moment of changing the functional purpose of the interior space (Fig. 5). In general, the expedition noted the satisfactory and integral state of mural preservation, which could enable the possibility of carrying out the professional conservation and restoration works. Murals in the sanctuary part of the church are preserved most fully, because it used to be the staff area for the museum workers. Repeated changes and renewals are spotted at the narthex top and walls. The reasons for this are the waterproof defects in the roof cladding and the mental habit of “renewing” the entrance transit zones in public buildings. The original name inscriptions on the northern and southern supporting walls of the nave and the narthex were partially covered because the content and the mentioned personalities were “hostile” to the Soviet ideology. As of the spring of 1991, the conclusions of the scientific and restoration expert evaluation outlined the following problems: general powdering of the polychrome painting structure (loss of binding media) and weakening of its connection with the plaster base; cracking, detachment of layers and peeling of plaster; significant surface contamination of the structure of paint layers; salt efflorescence in the structure of plaster and painting; repainting of certain fragments of art work; partial peeling and mechanical damage of paint layers.

In 2013, the next expedition (restoration artist V. Radomska) was organized and it detected the following changes in the interior space of the architectural monument: – the reconstruction of iconostasis was carried out with the serious changes in stylistics and iconographic content; – the conducted restoration works caused the significant losses in the original coloristic patterns and the texture of polychrome paintings.

The capital repair of the building was conducted in 2000 by efforts of Father Hegumen Volodymyr Palchynskyi. Following the initiative of Father Vasyl Tuchapets, Hegumen of the Basilian monastery, the group of specialists from the Lviv branch office of National Scientific and Research Restoration Center in Ukraine restored the wall murals painted by Modest Sosenko (Utkovych, 2008, p. 130–135). Restoration was executed using the method of preserving the patterns and compositional structure of the original intention of Modest Sosenko. It included integral repainting of an area and partial replication in accordance with the author’s painting and coloristic patterns. The technique of restoration toning in the areas of original painting loss was not detected (Fig. 6). Macro photofixation used in the process of examining the polychrome paintings has outlined the significant differences between the original and the “renewed” coloristic patterns. The subtle texture of glue paintings by Modest Sosenko was leveled down and became monolithic and dumb. The date of “restoration” is recorded at the memorial inscription, located at the supporting northern wall of the nave and the narthex. Later in 2001–2003, the iconostasis was restored by efforts of Father Hegumen Klymentii Stasiv. The external architectonics of the church has also changed. In the past, the lower part of the building socle and the buttress used to have the bare brick texture of the calcareous rock. However, as of 2014, the stone foundation was covered with plaster, most probably without the preliminary correction of the horizontal waterproof system. It affected plaster and caused the increase of humidity in the lower part of foundation and walls. Macro photofixation revealed the tendency of the selective monument preservation, as the earliest architectural details and limestone sculptures made by F. Olenskyi are undergoing the process of gradual deterioration. In general, the object is hypothetically preserved, even though the authenticity of the elegant coloristic patterns and the specific texture that belong to the characteristic technical and technological features of polychrome paintings by Modest Sosenko are irreversibly lost.



Fig. 4. St. Nicholas Church, Zolochiv, graphics by A. Tyrpych, 2015



Fig. 5. Polychrome paintings by M. Sosenko (1911–1913), photo by V. Radomska, 1991



Fig. 6. Polychrome paintings by M. Sosenko (1911–1913), photo by A. Tyrpych, 2013

Church of Resurrection of Christ, located in Polyany village (Rykiv village till 1946), Zolochiv district, Lviv region, was designed by the architect V. Nahirnyi and dates back to 1903. In 1913–1914, Modest Sosenko created icons for the iconostasis and the two side altars and painted the central dome of the nave (Fig. 7–9).



Fig. 7. Church of Resurrection of Christ, Polyany, graphics by A. Tyrpych, 2015



Fig. 8. Polychrome paintings by M. Sosenko (1913–1914), photo by A. Tyrpych, 1991



Fig. 9. Polychrome paintings by M. Sosenko (1913–1914), photo by A. Tyrpych, 2015

During the expeditions aimed to evaluate the preservation state of the monument of architecture (V. Radomska, 1991, 1996, 2016), we have noticed the gradual self-deterioration of Modest Sosenko polychrome paintings, located at the junctions of wooden constructions under the central dome space (Fig. 9). Partial detachment of linen canvas at the junctions of wooden boards resulted in the peeling of levkas and paint layers of the polychrome paintings. The situation was worsened by the unsatisfactory waterproof characteristics of the church roof cladding. The unstable temperature and humidity regime triggered the deterioration of joints between wooden boards and the appearance of fungi spores, etc. (Fig. 9). It should be pointed out that in 2018 the region council allocated funds to cover the central dome of the church, which could significantly influence the preservation of polychrome (elected official M. Babinska). Currently, those unique murals that are still preserved in their authentic form require urgent attention of experienced and professional restoration artists who specialize in the area of preserving decorative and monumental art objects, located in the structure of an architectural building. The program of restoration works should be based on the idea of preserving original texture, coloristic patterns, and technical and technological peculiarities. It should prevent the unprofessional approach and the “renewal” experience observed in St. Nicholas Church in Zolochiv. The

preservation state of the icons in iconostases and two side altars, created by Modest Sosenko, is satisfactory and no renewals were made.

5. Conclusions

The study of the material structure of an object from the stratigraphic aspect gives the possibility of conducting professional restoration and eliminating the consequences of aesthetic renewals that deteriorate the authenticity and hinder the subsequent preservation of an object. Contrary to renewals, professional restoration aims at discarding the influence of new layers that were made with time and uncovering the authenticity of an artwork in the eyes of the contemporary society. Such works become topical while remaining a part of the past that is embodied in the consciousness of the contemporaries. However, the preference for the aesthetic and stylistic factor results in some differences in terms of the principles of preservation, conservation, and restoration of this authenticity. The restoration theory failed to elaborate the uniform principles of preserving a work of art which would not be a matter of controversy and “supremacy of taste”. These assumptions about the preservation state and the principles of restoration of polychrome paintings by Modest Sosenko are based on the examples of three churches in Lviv region. In one of them (St. Nicholas Church in Zolochiv), the complex original authenticity is lost, while in two others (Arch. Michael Church in Pidberiztsi and Church of Resurrection of Christ in Poliany), the authenticity is being self-deteriorated due to the lack of funds. The absolutely vandal approach to “restoration” can be observed as based on the example of Dormition of Mother of God Church in Slavsk, Lviv region, which was decorated with the polychrome paintings by M. Sosenko (though significantly renewed and reconstructed). For the period of a week the local community destroyed the historic layers of plaster with polychrome paintings without any approval (June, 2019).

The combination of scientific and practical studies of art experts, restoration artists, chemists and technologists can prevent the subsequent unprofessional interventions which are accompanied by the change of aesthetics and material structure of a work and the disregard for its historical and artistic value. The comprehensive research of one object can serve as the basis for preserving and protecting sacred cultural heritage of the first half of the XXth century, which is presupposed by the Ukrainian legislation.

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СУЧАСНИЙ СТАН ЗБЕРЕЖЕНОСТІ ТА ПРОБЛЕМАТИКА РЕСТАВРАЦІЇ ПОЛІХРОМІЙ МОДЕСТА СОСЕНКА В СТРУКТУРІ САКРАЛЬНОЇ АРХІТЕКТУРИ

Анотація. Сучасна тенденція збереження пам'яток нерухомої спадщини набрала вкрай негативного характеру, оскільки надалі залишається нерегульованою законодавча пам'ятко-охоронна діяльність держави та релігійних громад, які стають «власниками» визначних сакральних споруд. Для комплексного збереження архітектурного об'єкта вкрай важливо синхронізувати багатовекторні дослідження фахівців усіх напрямів. Яскравим прикладом може слугувати стан збереженості стінописів відомого модерніста першої чверті ХХ століття Модеста Сосенка (1875–1920), виконаних у структурі інтер'єрного середовища українських церков. Руйнівні процеси, ідеологічні прерогативи, зміна естетичних принципів призвели до тотального знищення цих унікальних пам'яток декоративно-монументального мистецтва. На основі емпіричних, науково-реставраційних досліджень розглянуто збереженість та проблематика реставрації сакральних поліхромій Модеста Сосенка на теренах Львівської області. Серед значної спадщини церковних стінописів та іконостасів, а це понад 12 об'єктів, станом на сьогодні збереглось: три іконостаси, церковні поліхромії в трьох храмах. Визначити стан збереженості авторських поліхромій та розробити рекомендації щодо охорони і реставрації декоративно-монументальних творів в архітектурі вкрай важливо, оскільки маємо нещодавній негативний пам'ятко-охоронний досвід повного знищення історико-мистецької спадщини – стінописів Модеста Сосенка та Юліана Буцманюка в церкві Успіння Богородиці, смт. Славське Львівської обл. (червень 2019 р.). На основі узагальнення досвіду українських та іноземних науковців і реставраторів розроблено рекомендації щодо охорони та реставрації ще існуючих автентичних стінописів і вітражів авторства Модеста Сосенка (1907–1910 рр.) в інтер'єрі церкви Архистрати́га Михаїла с. Підберізіці Львівської області. Такий об'єкт доцільно включити в перелік культурної спадщини для занесення до Державного реєстру нерухомих пам'яток України, як об'єкт монументального мистецтва. Сучасна науково-реставраційна галузь зобов'язана розробити дієву концепцію популяризації, просвітництва та тісної співпраці з активом громад для збереження пам'яток нерухомої спадщини, які переходять у їхню власність. Результати дослідження сприяють вирішенню проблем охорони, реставрації, збереження та використання архітектурної спадщини України, що відповідає потребам загальнодержавних та міських програм розвитку.

Ключові слова: поліхромія, сакральна архітектура, Модест Сосенко, збереженість, реставрація, фізико-хімічні дослідження, реставраційний зондаж.

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**TO THE ISSUE OF URBAN SPACE IDENTITY:
RELEVANCE OF THE DISTINCTION**

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Abstract. Development of compositional characteristics of the urban environment in various countries has been characterized by a pervasive tendency to unification. In today's context, the main threat for the architecture is an absence of individuality. Support of the local identity of the architectural space is essential not only in the context of tourism, but, first of all, for the meaningful socio-cultural functioning of a country.

Key words: urban space, architectural identity, concept of environment formation.

1. Introduction

Since ancient times, approaches to formation of the urban space in the territory of Europe have been different. In various cultures, due to the influence of geographical and climatic situation, aesthetic and ideological social priorities and other factors, the urban space differed by density and height of buildings, percentage of green areas and their role in the architectural composition, by the character of planning, its association to the local landscape, etc. Together with special features of buildings themselves, these characteristics of the urban space essentially influenced formation of the architectural identity of the environment (B. Cherkes, 2008), which allows to identify the affiliation of a specific object with a certain country or national culture even after a brief inspection. Notwithstanding the broad range of possible variations of the architectural composition, there are two main concepts that incorporate these variations to a greater or a lesser extent.

One concept positions formation of the urban space as an open architectural composition connected with the local landscape. The other concept is based on the regular composition of self-sufficient closed spaces, where visibility of the surrounding landscape does not have a crucial significance. Each of these concepts of formation of the urban space provided the basis for the historically developed architectural identity of specific European territories.

In particular, the architectural identity of Ukrainian cities was developed on the basis of a close connection of architecture and landscape, preservation of open visual corridors, dispersed urban housing system interspersed with green areas and irregular picturesque composition of architectural ensembles (I. Dyda, 2009).

Urban environment in Southern and Western Europe was developed on the basis of the concept of formation of a system of closed interior spaces encompassed by densely built-up areas with high-rise buildings. This concept was especially distinct in the European territories that previously belonged to the Roman Empire – in Italy, Spain, Portugal, France and other countries. Urban architectural space in these countries formed a basis for the concept of “a real European city”.

Traditional identity of the urban space in the specific zone is formed as a result of interaction of objective circumstances. Therefore, it is logical that the change of these circumstances leads to certain transformations of the identity of urban architectural space in such zone. The purpose of our article is to analyze trends of transformation of the architectural identity of cities in the Eastern and Western Europe, general tendencies of the modern development of this process.

2. Basic Theory Part

Urban architectural identity, which is autochthonous for the East-European territory and forms a basis for the concept of compositional cooperation of architecture and landscape, was preserved in the territory of Ukraine for a long time. According to bibliographic and iconographic sources, in particular sceneries of Ukrainian cities pictured on artists' paintings (Fig. 1–3), these peculiarities of architectural identity survived in the Ukrainian urban environment until the 18th – 19th century. Since that time, Ukrainian urban development was characterized by active tendencies to purposive harmonization of traditional city planning with regular classical schemes. According to V. Tymofiyenko et al. (2003, p. 246), based on the concepts of the Age of Enlightenment, urban compositions ought to correspond to the schemes of “ideal cities” developed in times of Renaissance and be characterized by a strict geometric shape that became a symbol of intelligence and harmony. Ideas of centralism, which emphasized order, were implemented gradually. In 1763, the Empress of Russia Catherine II issued a decree “On fulfillment of special plans for each governorate by all cities, their buildings and streets”. As a result of this decree, practically all Ukrainian cities underwent radical replanning (Fig. 4, 5), and a concept of new replanning differed a lot from the historically developed concept in cities of Eastern Europe. These processes were ideologically grounded by a need of “Europeanization” of the urban space, its approximation to the West-European standards. At that time, Western European countries were more successful in the economic aspect, and modification of the urban space according to the West-European standards had to prove the affiliation of a certain territory to this successful European cohort. It is important that appearance of such tendencies coincided in time with the loss of the state independence by Ukraine. The imperial government of Russia initiated change of concepts of formation of the architectural space of Ukrainian cities. Instead, both the community of Ukrainian architects and their construction customers showed dissatisfaction with such tendencies in the urban space as urban densification, separation of planning of street networks from the local landscape, formation of visually closed areas encompassed by high buildings, since they gradually and purposefully destroyed the traditional local architectural identity. V. Vecherskyi (2001, p. 227) gives documentary evidence of longstanding ignoring of new urban development approaches by local people. In particular, it concerned the decree on observing the single “red” line of street development. This issue had an essential meaning for the architectural identity of Ukrainian cities. Following the requirement on location of buildings in one even row along the straight prospect, the urban development composition, which was traditionally linked to the local landscape and created based on the sculpture landscape principle, could no longer preserve its irrational intrinsic character. In this case, the concept changed radically: from an irregular open composition – to a regular, metrical, closed one. Ukrainian writers expressed intuitive feelings of ordinary people. For example, Mykola Hohol, characterizing architectural reconstructions of Ukrainian cities in the classicism style, wrote: “... new cities have no appearance. They are so correct, so smooth, so monotonous, that after walking along one street you feel bored and refuse to peep into the next one. It is a row of walls and nothing more...” (V. Vecherskyi, 2001, p. 229). It should be noted that according to M. Hohol the main disadvantage of a new identity of the urban space was the absence of vivid visual impressions and features that could stick in one's memory for a long time and be associated with a specific city.

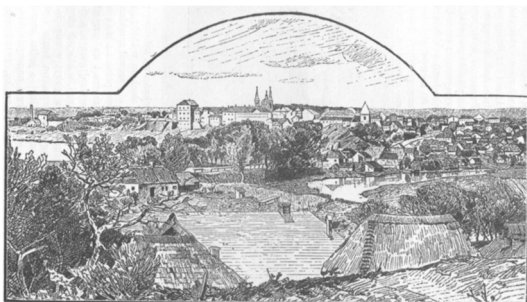


Fig. 1. The view of Ternopil, the 19th century
(S. Majerski, 1900, t. II, p. 279)



Fig. 2. The view of Kyiv, the 17th century
(V. Vechersky, 2003, p. 140)

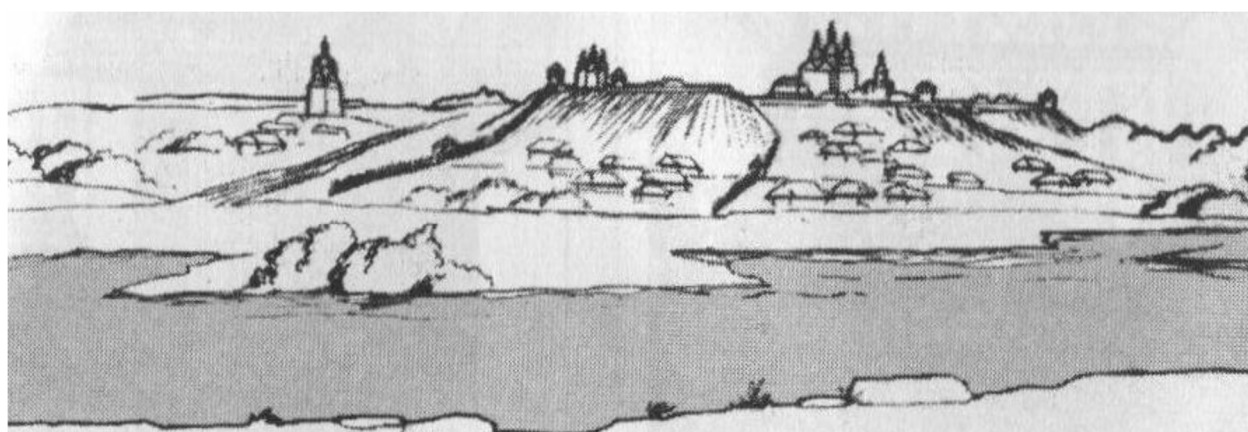


Fig. 3. The view of Romny in 1770: reconstruction by V. Vechersky
(V. Vechersky, 2001, p.118)



Fig. 4. Zhytomyr. Reconstruction project,
1827 (V. Tymofiyenko, red., 2003, p.266)

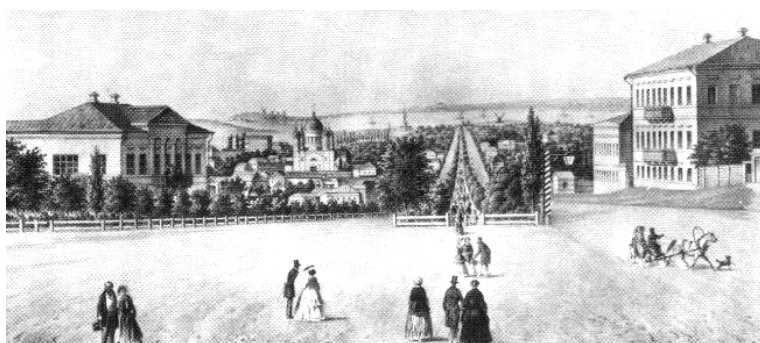


Fig. 5. Katerynoslav (now Dnipro) on the print of the 19th century
(V. Tymofiyenko, red., 2003, p. 268)

In the Soviet period, the Ukrainian urban space continued to lose its traditional identity. Ideology of the hereditary evolution of urban development “was destroyed in the 1920-ies under the pressure of spiritual outbreak of the so-called Russian communism” (V. Vechersky, 2001, p. 230) and the historic nihilism penetrated into the architecture and urban planning for many decades, being inconsistent with the notion of the traditional architectural identity.

Although socio-economic, technical, and production factors (development of transport, increase in population, requirements of industrial production) undoubtedly actively impacted the change in the architectural identity of Ukrainian cities, the main accelerator of these changes was represented by an ideological factor in a form of outside authoritarian administrative influences dictated from above: at first by the Russian czarist regime, later on – by the Soviet government. Therefore, we have grounds to assume

that in conditions of a stable statehood Ukrainian cities would have had a possibility to continue formation of the identity of their architectural space in line with the traditional concept of cooperation with landscape.

In contrast to Ukrainian cities, which were continuously changing in the period of last centuries due to objective external circumstances and systematic hostile interferences, cities of Western European countries had a possibility to develop their architectural space without an outside pressure, continued to freely apply their traditional compositional approaches and preserve local architectural identity. Traditional for the Western Europe peculiarities of the urban space were particularly clearly manifested on the South – in Italy, Spain, Portugal, France.

However, notwithstanding the favorable circumstances for preservation of the national architectural identity in West-European cities, it should be noted that theoretical works of urbanists of the end of the 19th century also contain criticism of changes in the urban environment of Europe of that time. It is interesting that the main reason for dissatisfaction of scientists with the appearance of a contemporary city was its loss of the traditional local identity. It was emphasized that new European city planning involved a change in proportions of built-up areas and undeveloped lands. C. Sitte (1993, p. 135) writes: “A correlation between built-up and unbuilt areas in the modern city planning radically changed. Previously, a free space (streets and squares) was a closed integrated whole aimed at a certain artistic effect; now the whole territory is split into enclosed regular zones and spaces left between them are called streets and squares”. Apart from that, C. Sitte (1993, p.135) is concerned about excessive introduction of green areas into the city space, planting of rows of high trees along the streets and around the perimeter of squares that, in his opinion, prevented from adequate perception of the composition of facades of city houses. C. Sitte explains such undesired changes by overindulgence of architects of that time by right angles and parallel planes that leads to appearance of visual corridors and impedes the formation of a traditional closed urban space. In the opinion of C. Sitte, such features as the straight line of uninterrupted housing, ideal visual closeness and compositional self-containment of spaces of urban squares created an image of a real European city. He wrote: “According to the historical principle of development, an uninterrupted line of housing that is still preserved in villages, closeness of space and artistic distinctiveness in old cities remain a starting point for all construction activities” (C. Sitte, 1993, p.151). As a positive example of an approach to formation of the architectural space, he cites the Bavarian Building Code of 1884 with its main aesthetic requirement: “...in composition of facades one should avoid anything that can ruin the symmetry and morality...” (C. Sitte, 1993, p.100).

In the traditional identity of a West-European city, green areas were never perceived as an equal and independent element of the urban space. They usually had a decorative role, only emphasizing and enriching the artificially created architectural space. From the perspective of such perception of the role of plants in the city, C. Sitte (1993, p.149) categorically protests against the mass appearance of high trees on the city streets and squares in the 19th century: “Huge monumental squares of the ancient age, medieval times and Renaissance were the centers of fine arts, mainly of architecture and sculpture. Planted trees, especially miserable unhealthy alleys of circular streets, stand in the way of such works of art... Maybe it would be better without them? What is a visually open square supposed to mean, if it is closed by leaves? It follows that trees should never be a visual obstacle...”. Further, he cites such practical recommendations for architects: a row of trees should be interrupted before monumental buildings, since aesthetic losses from impossibility to perceive the facade are more essential in comparison with the little use of the greenery for the environment. Therefore, the architects should choose the lesser evil and refuse to plant trees on the city streets.

Analysis of these critical remarks shows that C. Sitte mostly worries not about the fact that the time brings certain changes in planning and architecture of his contemporary European city (for example, changes in the style of buildings or origination of some other concept of formation of the urban space). He is disturbed by the fact that the urban space loses its traditional features, which are replaced by “greyness”, non-specificity, uncertainty of the urban composition, absence of certain characteristics that

would define its identity. He does not like the fact that West-European cities lose traditional visually closed spaces, which are replaced by partially closed and partially open “intermediary” spaces; that rows of trees were planted on the paved, closed, interior in their nature streets and squares, where plants were previously used only for decoration of windows and balconies, and now these areas are no longer perceived as “urban interior” and became partially green, but yet far from being a blossoming garden. In view of these semi-steps towards an opposite compositional concept, a West-European city loses its identity, its image and specific beauty. In contrast to the situation in Ukrainian cities in the 19th century, these changes were not dictated by the desire of the state to borrow some more accomplished and popular way of urban space composition from neighboring countries. Obviously, in this case, there is some general tendency for transformation of the urban environment towards its unification.

In order to verify whether the evolution of architectural composition of spaces in West-European cities followed the direction described by Camillo Sitte, we can carry out a comparative analysis of iconographic materials. As we can see from old paintings and photos picturing panoramas of European cities of the end of the 19th – beginning of the 20th century, cities had few or no green zones at all. For instance, if we compare the panorama of Glasgow central street on the engraving of the 19th century with its modern appearance, we can see that a row of trees was planted along the street that now became a pedestrian one. The same tendency can be revealed concerning Puerta del Sol in Madrid (S. Majerski, 1900, p. 80). As compared to the image on the graphical painting of the 19th century, modern wide open space of the square is filled with numerous elements of the urban design (Fig. 6, 7). In conditions of the hot climate, tree plantations are rather scarce here, however new elements such as billboards, small architectural forms, street lamps have the same visually destructive function in the compositional aspect as rows of trees in critical remarks of C. Sitte, i.e. hinder perception of the historic development of the square as a uniform architectural ensemble. The book “Opis ziemi” (S. Majerski, 1900, p. 89) gives a graphic image of the panorama of Lisbon of the 19th century. It pictures no tree at all. Certainly, it does not mean the real absence of any green areas in the city of that time, however it proves that trees had no meaning for the architectural identity of Lisbon (as a comparison, it would have been impossible to picture the panorama of Kyiv of the 19th century without large-scale areas of planting, since the nature component was very significant for the architectural identity of the Ukrainian capital (Fig. 2). Green areas on the photos picturing panoramas of modern Lisbon are more noticeable.

In the 20th century, a tendency to introducing green areas reached the USA. For example, in the book “Chicago then and now” (E. McNulty, 2000) picturing old photos of separate architectural landscapes of Chicago accompanied by modern images of these places, we can see that more trees and vertical greenery on facades appeared at the beginning of the 21st century, and due to this fact the buildings themselves are perceived fragmentarily. For example, at the end of the 19th century the building of St. Ignatius College had no tree around, so all facades were fully perceived by people walking by. Instead, the photo of the end of the 20th century pictures a row of trees that partially close the half of facades of buildings (Fig. 8). A similar situation can be observed on the square near Dearborn railway station, Franklin Company building, Presbyterian Church on Michigan Avenue, on the so-called “Street of Forty Doors” created by blocked workers’ houses designed by architect Joseph Brompton in 1904 (E. McNulty, 2000, c. 46, c. 47, c. 48, c. 49, c. 62, c. 63, c. 118, c. 119), and other images. Apart from trees, new buildings appeared in the midst of many old houses, visually competing with them. As a rule, they are higher, more ponderous and compositionally standard, therefore, they often turn into visually aggressive planes that prevent from adequate perception of a historical object. Transport system also adds to an effect of visual discomfort of the modern urban environment. Its destructive impact on perception of the architectural ensemble manifests in two ways: a) directly, when high buses or trucks close the facades; b) indirectly, when quick movement of vehicles on the streets distracts attention and does not allow to concentrate on perusal of architecture.

Therefore, one can assert that the character of the urban space in those countries that developed its architectural space without an outside ideological pressure has been also gradually changing during the last century, estranging itself from the initial compositional principles.



Fig. 6. Madryt, the 19th century
(S. Majerski, 1900, p. 80)



Fig. 7. Puerta del Sol in Madrid, the 21st century
(<https://ispaniagid.ru/puerta-del-sol-serdtse-madrida/>)



Fig. 8. The building of St. Ignaceus College (Chicago) at the end of the 19th century and in the end of the 20th century
(E. McNulty, 2000, pp. 98, 99)

3. Results and Discussion

At first sight, these compositional changes that took place in the urban environment of Ukrainian cities in the 19–20th centuries and changes in the urban space of West-European cities differ greatly in a qualitative aspect. Ukrainian cities that initially appeared as an architectural and landscape ensemble, where green areas and nature elements had a significant compositional and even utilitarian function (defensive, memorial, symbolical), suffered transformations towards an increase of density and height of buildings, reduction of green zones. It led to the visual closeness of urban spaces and loss of visual connections with the landscape, while regular geometric planning of streets was leading to the loss of interconnection between street tracing and local relief. Cities of the West-European type, which originated as a complex of visually closed spaces encompassed by densely built-up areas and designed on the basis of a rational geometric approach to planning with minimal quantity of green zones within the city territory, underwent transformations towards expansion of the city territory,

inclusion of open green areas, formation of a visual connection of the city center with the surrounding landscape, planting of trees on city streets.

However, if we analyze these changes in the context of their non-material, visually sensual result, in the context of their impact on the condition of the architectural identity of the urban environment, we can assert that they are very similar. Processes taking place in the urban environment of West-European cities, criticized by C. Sitte (1993, c. 135), are actually a mirror reflection of parallel processes in Ukrainian cities. In both cases, their action had a centrifugal direction: from the space with distinct characteristic features to the space, in which these features become more and more indistinct, vague and unnoticeable. As a result, irrespective of the initial compositional characteristics of the traditionally formed environment in a certain country, for the last two centuries they have been complemented with their antipodes, and the image of the urban space in various countries approaches a certain average level, where neither of characteristics is pronounced strongly enough to become a basis of the architectural identity of the environment.

At the modern stage of urban development, when new construction in the whole world follows a similar technology, when the same popular design bureaus with clear stylistic and aesthetic priorities receive orders in cities of various countries, when famous trade companies, having developed the unified style of their buildings with an advertisement purpose, place them into the environment of different country – the process of losing the national architectural identity actively continues. Taking into account the pace of construction and dimensions of modern buildings, new elements of city architecture will have a visual advantage in the near future in every country of the world. Globalization of the city space and its negative socio-cultural impact is a long-recognized world problem. To a certain extent, it can be neutralized through a revival of a traditional local concept of formation of the urban space with the help of modern architectural and constructive possibilities and resources. There are scientifically proven arguments for preservation and targeted formation of a local territorial identity, in particular in the economic aspect – as a precondition of an efficient development of the tourism industry.

Architectural identity of an environment is a result of a complex interaction of material and social factors, objective and subjective circumstances. Among numerous factors such as, for instance, economic, technological, climatic, historical ones that cannot be impacted by a local architecture, there are factors belonging to a psycho-emotional realm. Namely, these factors have a certain potential to influence the choice and use of a certain concept of formation of the urban space, since every nation or ethnic group expresses its identity in its own architecture, while presence of local traditions in the architecture evolves, in its turn, into an important factor of support and development of a local identity. Emotional, educational and psychological impact of the architectural space allows to draw some parallels between the architecture and language. Architectural forms, architectural composition help to convey understanding of aesthetic priorities, moral principles, even a behavioral model. Unlike the verbal language, the architectural language has a very long history of existence; and in contrast to the literature, the architecture is more cooperative irrespective of the human desire. The expression “*Hic mortui vivunt et muti loquuntur*” (“Here the dead live; here the mute masters speak”) on the wall of the library of Lviv Polytechnic National University is very appropriate for characteristics of the architectural environment. Therefore, certain social processes taking place in the language environment have their reflection in symbolics of architectural forms. In particular, in conditions of absence of statehood, more wealthy and educated groups of local population as a rule speak the language of a dominating country in order to achieve a certain social status. A similar phenomenon can be observed in the sphere of architecture, when less successful countries try to copy the architectural environment of those countries that have the biggest economic and political influence. In such a manner, they want to improve their image and raise their self-esteem. For a long time, Ukrainian architecture tried to follow foreign examples, and this practice also did not do any good to preservation of the local architectural identity. In recent years, increased social consciousness and interest in the national arts and culture created preconditions for positive improvements in the aspect of the Ukrainian architectural identity. However, since qualitative changes in the architecture have significant

inertia, efficient implementation of these changes requires efforts on the part of both architects and state government institutions. Due to the huge emotional and educational potential of the architectural space, support and development of its own traditional identity have a crucial significance for survival of the state, first of all, in the socio-cultural aspect.

4. Conclusions

Therefore, identity of the architectural environment in territories with its own historically developed architectural traditions and original concepts of composition of the living space, which in architectural and urban development aspect significantly differed by many distinctive features, has been consistently moving towards mutual rapprochement, a certain “common denominator” for the last two centuries. In the architectural space of modern cities, irrespective of their geographical location and historical circumstances, there is a continuous general tendency for transformation of the urban environment towards its unification.

In summary, the same shared threat for the architectural space of any country exists in modern times – a loss of the traditional identity as a result of an absence of individuality. Therefore, efforts to copy foreign architectural examples, even the best ones, only worsen the situation leading to further unification of the space. Later on, it may lead to real economic losses of local budgets due to the lost opportunity to earn on the international tourism. Apart from that, because of this “strategy of borrowing ideas” the potential of emotional impact of a new standardized architectural space will form a cosmopolitan “citizen of the world”, not a conscious citizen of the motherland.

Therefore, it would be expedient to choose a search for methods of formation of the modern urban space on the basis of local architectural traditions as the main direction of scientific studies in the theory of architecture and urban studies, to pave our own way in the architectural space composition, using achievements of other countries for a comparative control of the quality of practical implementation of architectural projects.

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Ірина Діда

ДО ПРОБЛЕМИ ІДЕНТИЧНОСТІ МІСЬКОГО ПРОСТОРУ: АКТУАЛЬНІСТЬ ІНДИВІДУАЛЬНОСТІ

Анотація. Архітектурна композиція міського простору і окремих його складових елементів під впливом об’єктивних обставин, починаючи з XIX ст., в цілому світі демонструє тенденцію до взаємного образного зближення. В Україні цілеспрямоване перепланування міст на «європейський» лад призвело до втрати більшості традиційних для українських міст характеристик, основою яких був композиційний і візуальний зв’язок архітектури з ландшафтом. Вважається, що це стало наслідком авторитарних адміністративних впливів в умовах відсутності власної державності, адже тоді відкидали проекти, зроблені українськими архітекторами згідно з місцевими містобудівними традиціями, а

перевагу надавали класичним пропозиціям архітекторів з Москви і Петербурга. В той час західноєвропейські країни мали можливість розвивати архітектурний простір міст без стороннього тиску, згідно зі своїми власними поглядами і традиціями. Але, незважаючи на такі сприятливі обставини, в кінці XIX ст. міське середовище тогочасної Європи часто піддавалось критиці за втрату місцевої ідентичності. Якщо простір українського міста трансформувался у напрямі ущільнення забудови і втрати візуальних зв'язків з ландшафтом, то простір західноєвропейського міста змінювався у протилежному напрямі – через впровадження відкритих озелених територій і втрату візуальної закритості міського простору – основної ознаки його архітектурної ідентичності. Отже, йдеться про загальну тенденцію до уніфікації композиції міського простору, яка почала проявлятися в XIX ст і триває дотепер. Незалежно від первісних композиційних характеристик середовища, їх поступово доповнюють їхні антиподи, наближаючи місто до певного середньостатистичного рівня, де жодна з характеристик не є настільки яскраво вираженою, щоб стати основою архітектурної ідентичності. У підсумку в сучасних умовах для архітектурного простору міста будь-якої країни існує спільна загроза – втрата традиційної ідентичності через відсутність індивідуальності.

Ключові слова: *архітектурне середовище, ландшафт, урбаністична композиція.*

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**SIMILARITY OF GRAMMARS OF ARCHITECTURAL SPACE
IN CANONICAL ICONS AND THE ARCHITECTURE
OF DECONSTRUCTIVISM**

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Abstract. The analogies in the grammar of architectural space in an icon and the architecture of deconstructivism have been revealed, the factors of influence on the formation of the grammar of the architecture of deconstructivism and architectural space in an icon have been listed, as well as the comparison of the grammar of the architecture of deconstructivism and architectural space in an icon has been made.

Key words: perceptual perspective, reverse perspective, architectural space in an icon, the architecture of deconstructivism.

1. Introduction

1.1. Problem stating: The evolutionary scientific tendency to knowledge gaining and the psychological peculiarity of human perception through associative-figurative interaction of objects led to the discovery of common rules in construction of the architecture of deconstructivism and architectural space of an icon. A new look at the well-known things generates new knowledge. Destructive fragments of the architecture in icons, which are built according to the laws of perceptual perspective, generate associations with the architecture of deconstructivism and, as a result, encourage deeper understanding of the associative relations between them.

1.2. Article objectives: 1) To show the connection of the perceptual perspective in an icon and the architecture of deconstructivism with non-Euclidean space, with n-dimensional space; 2) To reveal the ideological (conceptual) factors which influence the development of the grammar of the architecture of deconstructivism and architectural space in an icon; 3) To identify general rules of the grammar of the architecture of deconstructivism and create the image system in an icon with the help of architectural forms (so-called “chamber writing”).

1.3. The analysis of recent studies and publications has shown that the theory of perceptual perspective in an icon was revealed by B.V. Rauschenbach [1975], reverse perspective – by P. Florensky [2008]. Poetics and in particular the grammar¹ of architecture of deconstructivism are disclosed by C. Jencks [1985], I. A. Dobritsyna [2004], which is based on the concepts of such philosophers as J. Derrida, M. Foucault and semiotician R. Barthes, as well as on the theoretical architects of deconstructivism Peter Eisenman, Bernard Tschumi, Remment Koolhaas, Daniel Libeskind and Zaha Hadid. The author does not know any publication, which reveals the idea of comparing and collation of the construction of architectural space with an icon and the architecture of deconstructivism.

¹ Grammar includes morphology, syntax and morphogenesis regularity (form creation).

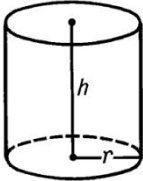

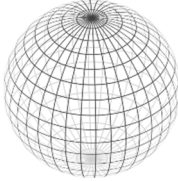
2. Basic theoretical section

2.1. The system of perceptual perspective in the light of spatial theories.

The formation of perceptual space (the process of perception of space) occurs according to the following scheme of objective space → image on the retina → perceptual space (compressed information is needed in this context) [Rauschenbach, 1975, p. 129, 153]. The perceptual perspective is something between the spatial and plane images of the object. B.V. Rauschenbach [1975, p. 154] proves that the properties of the perceptual perspective due to the psychology of human perception at small distances (12m–19m – the space of the immediate environment of a person) can be formally described as the properties of Riemann space of a negative curvature (1851), that is the properties of Lobachevsky space (1826), which at the same time are the properties of a reverse perspective. The perceptual perspective includes a reverse perspective. According to P. Florensky [2008, p. 62] a reverse perspective 1) does not believe in three-dimensionality, homogeneity of the Euclidean space; 2) excludes a special single point of ascension, while all places of space are equal; 3) uses the mechanisms of a binocular vision, not a monocular one as a linear perspective; 4) does not think that the world is immovable and unchanged, shows the subject from different points of view; 5) includes all psycho-physiological processes of the act of sight, which are accompanied by memories, spiritual efforts and knowledge. All this indicates the non-Euclidean nature of the perceptual space that surrounds us. Characteristics of the Euclidean and non-Euclidean spaces are presented in Table 1.

Table 1

The system of perceptual perspective and non-Euclidean space

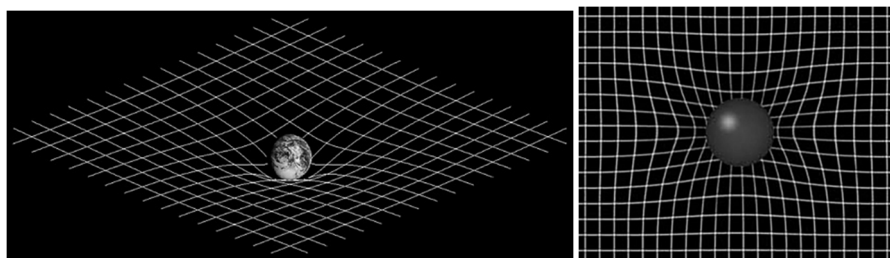
Euclidean space	Non-Euclidean space (by Lobachevsky and Riemann)	
Euclidean geometry – two straight lines perpendicular to the third one are parallel	Hyperbolic geometry – two straight lines, perpendicular to the third one “run away” from each other, in case of moving from the points of intersection with the common perpendicular	Spherical geometry – two straight lines, perpendicular to the third one, gradually “get close” to one another and eventually intersect
Zero curvature of the space – constructs the axonometry of the middle plan	Negative curvature of the space – forms the reverse perspective of the foreground	Positive curvature of space – forms a linear and curved perspective of the middle ground and the background
	 pseudosphere	

The curvilinear perspective (negative and positive curvature) was used in icons depicting thrones, beds and other constructions. V. N. Prokofiev [Rauschenbach, 1975, p. 180] points out that the masters of the Northern Renaissance (Bosch, Bruegel) noticed the effect of the concavity / prominence of the horizon line, the cup-like appearance of the earth's space, while the space of the artist P. Sezanne is a spheroidal-dynamic field (by Lilian Gerry). B. V. Rauschenbach [1975, p. 162] indicates that the perceptual space is much more complicated and the closest analogy to the perceptual space is a four-dimensional model of Einstein's space-time, which has a variable curvature caused by the placement of masses in space. Thus, the energy of the gravitational field (generated by substance) is capable to deform space-time so that the lines in space and time have the properties of “curved” lines (Pic. 1). If we talk about the analogy between Einstein's space and the perceptual space, a priori information of the observer (the constant of the form and value) plays the role of mass in Einstein's space: just as the increase in the quantity of mass in some area of the physical space causes an increase in the curvature of space, as well as an increase in a priori information about objects of a

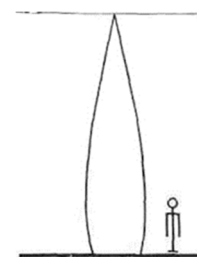
certain area of perceptual space causes an increase in its deformation (use in the image of a spatial object on the plane of the method of a moving point of view in all directions).

The morphology of the perceptual space as a result of the performance of the mechanism of the constant value becomes the Riemann space of an alternating curvilinear (negative, positive) reflected in the image of the road (Pic. 2).

In the basis of the futuristic, cubist, surrealist, suprematic painting, sculpture, architecture of deconstructivism and nonlinear architecture lays the expression of motion in two forms: “penetration inside” as a method of multiplying and “simultaneity” (so-called illusion of a one-way movement) – a long period of time in one moment to comprehend the space which is depicted not from one privileged point of view. In this case, the perceptual perspective is hyperbolized, which is built on the mechanism of constancy of the form. Analytical cubism by avoiding colours simplifies natural forms to geometric, analyzes two or more object views simultaneously (side and top projection of dishes, a table), presenting them together in the same way as in icons. But still deconstructivism first comes to one’s mind while looking at the architectural space in an icon.



Pic. 1. Einstein’s theory about a four-dimensional model of space-time.
Image source is <http://www.zamandayolculuk.com/html-1/relativityfile.htm>



Pic. 2. A picture of the road in a perceptual perspective
[Rauschenbach,1975]

2.2. Grammar of architectural space in an icon.

The grammar of the space construction with architectural objects (the method of “chamber writing”) in an icon developed in the Palaiologan period of Byzantine art (1261–1453.) It is the space with the effect of metaphysics and the interactive² attraction of the viewer into the space of the Universe of other-existence. Thus, an icon looks at us due to its construction in the system of perceptual perspective and in particular the reverse one, where the meeting point of these reverse-spatial constructions is a real person. For Byzantine and Ukrainian icon painting as well as medieval painting, there is a characteristic perceptual perspective. The system of perceptual perspective is characterised by complex differential equations in contrast to the linear one, although it was built by artists intuitively without complex geometric theory while the linear one requires certain knowledge in construction. The perceptual perspective takes into account two factors: 1) optical illusions in perception; 2) real knowledge about the environment. Using the perceptual perspective an icon painter has the possibility to construct the architectural space of an icon (he chooses which parts of the object or the plane to depict in a curved way and in what perspective to depict each architectural object or fragment of the object, for example, isometry, the combination of orthogonal projections, reverse, linear, curved perspectives (Pic. 3a), as well as an architect who works in the style of deconstructivism can compose spaces and planes in different variations. The degree of deformation of the perceptual space depends on a priori information about the objects which are possessed by the observer. The system of perceptual perspective gives an opportunity to an artist to transfer locally correct images taking into account the

² Interaction is the ability of the onlooker to act upon an artistic object with the aim of its transformation (I. A. Dobritsyna), involving the onlooker in the process of understanding of a certain information (S. M. Linda, B. S. Cherkes)

mechanism of magnitude and form constancy, for example, by showing two angles correctly in the object of the parallel-shaped form, and the third one is curved. The sum of angles of a parallelepiped in the perceptual perspective will be $270^\circ < \alpha < \beta < \gamma < 360^\circ$. The mechanism of magnitude constancy redefines the image on the retina in a whole, while the mechanism of form constancy acts only on those elements of the image on the retina, which are well-known objects to the viewer from his life experience (vision plus knowledge).

It should be noted that in the article we compare the perceptual perspective (plane-spatial), which reflected objects form, in our case, they are the architecture in an icon and the real space created by the architecture of deconstructivism. A continuous depiction of a three-dimensional space (for example, $n = 3$) on a plane ($m = 2$) is only possible with refusal of unambiguous conformity if $m < n$. Similarly, with forms in four-dimensional space, when we change them into three-dimensional one, we obtain a hypersurface³ (hypercube – tesseract). The new possibilities of spatial measurements the artists call the fourth dimension⁴, the three-dimensional Euclidean space has changed to the space of the vastness in all directions, and every moment, “the fourth dimension gives the objects a plasticity” (G. Apoliner). Today, the fourth dimension projected into three-dimensional space is understood through the hyper-surfaces. The method of transmitting the four-dimensional space in an icon happens due to the splitting method. As a result the coexisting three-dimensional spaces, for example, in an icon, the objective and mystical spaces (parallel worlds) are shown alternately. Moreover, the transmission of two three-dimensional “layers” of a four-dimensional space is reduced to the transmission of the geometry of the three dimensional space, where the areas (fragments) of these layers “adjoin” with each other, and are not “superposed” upon the other. The mutual penetration of the plans in the space of an icon is created with the method of layering of light, bleached ocher on the colored background and the method of geometric contradictions (Pic. 6, 9). In an icon, a small spatial depth is revealed with the help of a moving point of the view as vertically (different levels of the horizon (the view from the bottom is combined with the view from the top)), and horizontally (combining the appearance of the object from three sides), methods of geometric and light-shadow contradictions in perspective constructions, effects of omission in the construction of forms, which allows to complete it in different variations, “transitions / refractions of the frontal plane of the walls in a binary curvature – all this creates the decentralization of the perspective, the complexity of perception and metamorphology of architectural space in an icon (Pic. 3a, Pic. 7).

2.3. Conceptual principles of the architecture of deconstructivism and architectural space in an icon.

The philosophical concept of the deconstructivism involves revealing of the hidden content, which is visualized with the help of formal methods of fragmentation, multilayer, fracturing of planes, complex geometry of an architectural image and its aggressive invasion in the urban environment. Theological conception of an icon is a manifestation of supersensible, immortal, invisible world through a system of perceptual perspective as sensual, real and visible one by applying the figurative methods of iconography, besides that an ontological connection is established between the image and the icon.

The main task is to strengthen the ideological and artistic dimensions of an icon and an architectural object of deconstructivism, to create a metaphysical space. But the ideological factors that influence the formation of the grammar of the architecture of deconstructivism and architectural space in an icon are slightly different (Table 2).

³ Hypersurface is a generalization of the concept of the usual surface in a three-dimensional space in case of a multi-dimensional space.

⁴ A four-dimensional space (marking: 4D or R4) is a mathematical object that summarizes the properties of a three-dimensional space. It should not be confused with the four-dimensional space-time theory of relativity (the space of Minkowsky). Algebraically, four-dimensional space can be constructed as a set of vectors with four valid coordinates. Geometrically, in the simplest case, the four-dimensional space is considered to be the Euclidean space of four dimensions; in general, it has a non-Euclidean metric, which is varied from point to point. Available at: <https://uk.wikipedia.org/wiki>

Table 2

**The difference between the ideological factors in the formation of the grammar
of the architecture of deconstructivism and the construction of the architectural space in an icon**

The architecture of deconstructivism (the principles of post-structuralism concepts)	The architectural space in an icon
The impossibility of a modern man to experience the world order as harmony and integrity, the transformation of the ontological connection with the metaphysical	An ontological connection is established between the image (icon) and its original image (God) and a man
The architecture of deconstructivism is an experiment with reality → creating another reality. The space of the experiment space with form and meaning. Deconstruction as a method of analysis	The architectural forms in an icon express the ontology of reality (the embodiment of the synthesis of the sensory experience of the form and the spiritual efforts of recognition, the process of contemplation-perception, the understanding of Eternity)
Violation of the mechanism of form constancy, broken perfection	Application of the mechanism of form constancy. Search for perfection.
Mechanistic aesthetics of forced de-structuring, aesthetics of disturbed perfection. Mechanical installation. Doubts about the values of the structure	Aesthetics of visible and spiritual experience
“Open Architecture” – in which the syntactic structures of the architectural language are freed from connection with utilitarian needs (functional and semantic), “sign fighting,” the complexity of meaning reading “meaning flicker”)	Each form is symbolic and works on the plot, the event of an icon
The emphasis on the new syntax and morphogenesis as opposed to existing ideas about architecture, the concept of equivalence of form and space	The emphasis on metamorphology (thorough uncovering of sensual and spiritual experience of perception of existing reality, complex syntax of forms and space)

2.4. The principles of grammar of deconstructivism

As it has been mentioned above, the system of perceptual perspective in an icon consists of separate perspectives of the image of architectural objects and objects of interior: axonometric, linear, curved and inverse (Pic. 3a). Moreover, if the general outline of buildings is approaching axonometry, fragments, details of these buildings are constructed in reverse, linear and curved perspectives, and these perspectives create similarities between architectural forms or interior elements and form the ensemble of the architectural space of an icon. It is the same “romance of scale”⁵, which was used in Gothic (latitudinal) and baroque (hyperbolisation) due to the similarity of parts to the whole which created the effect of metaphysical space. By the modern architectural terminology this method is called “staccato” – dissolubility that creates a scattered perspective of the image, without a specific point of ascension, simulates the situation of equivalence of elements of the universe which is also typical for the style of deconstructivism. The main manifestos of deconstructivism are 1) deformation of the compositional motives of constructivism; 2) curvilinear architecture. This first concept can already be found during the

⁵ «Romantic of scale» is a manifestation of the principle of analogy, similarity, the creation of values of similar forms and sizes primarily in architecture. Creating nuances, with the help of which different values in the architectural composition are in harmony with each other. The common “romantic of scale” in Gothic: the same form on the facade was repeated in the interior, altars, choral chairs, relics, so-called miniaturization. In baroque the details increased in size (maximization): cartouches, volutes, balusters, which decorate the buildings. In both cases, the compositions create a certain metaphysical space, as the forms change into one another, there is a decreasing or enlarged reflection.// Dictionary. V. V. Vereshchagin. The Internet source: <http://www.vereshchagin.ru>

Italian Mannerism of 1525–1620 as a parody of the classics, where constructive elements such as triglyphs and metopes or castle stones, columns are depicted atectonically on purpose (for example, the architect Julio Romano Palazzo del Te in Mantua). The curvilinear architecture of deconstructivism sends us to the baroque plastic arts.

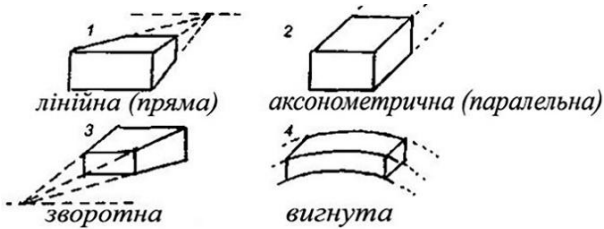


Fig. 3a. Perspectives of the image of architectural objects in an icon as a way of perception of reality: 1) linear (direct); 2) axonometric (parallel); 3) reverse; 4) convex






Fig. 3b. A real combination of forms. Vitra Design Museum at Weilly-on-Rhine, Germany, 1990. F. Gary

Deconstructivism is characterized by atectonics, it is not clear how certain structures carry out their bearing function, the feeling of the absence of gravity. The basic principle of deconstructivism is a hidden work of structures. In interiors of the style of deconstructivism, a person gets into the space conditions, which is difficult to assess in its geometry, and which is typical for the virtual world [Zymina, p. 276]. For deconstructivism, the method of induction or juxtaposition is a characteristic one (typing figures one into another or their chaotic imposing one on another), which is built according to the scheme of assembling – dismantling – reassembling. Syntax of dismantling: stratification, doubling, cutting, turning and, according to re-assembling, it can be with intended displacements, rearrangements, merging, bias, and other inverse interspersions. The leader of deconstructivism, Bernard Tschumi, also accepts the juxtaposition as a semantic plan: juxtaposition is a chaotic imposing of various cultural meanings, a stick, and a collision of uncertain cultural meanings. Uncertainly, dynamics is a characteristic feature of a new type of space (P. Eisenman) [Dobritsyna, p. 135–158]. A task to create a dynamic new type of space was put forward by the masters of the Italian mannerism, baroque, avant-garde, deconstructivism, and now is put by the masters of the electronic baroque.

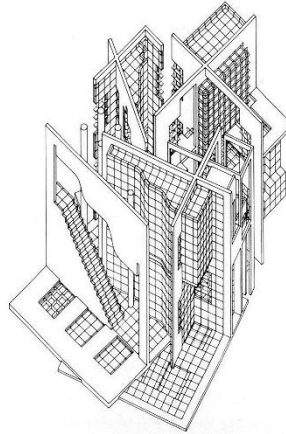
Table 3

Comparison of the architecture of deconstructivism and architectural space in an icon

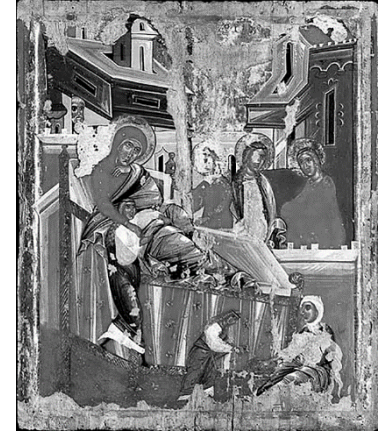
Deconstructivism		Icon painting
		
<p>Fig. 4. Todoroki's residence 1976, Hiromi Fuji.</p>	<p>Fig. 5. Central library in Seattle, USA, 2004, Remment Koolhaas</p>	<p>Fig. 6. An icon of Presentation of Jesus at the Temple, the XVth–XVIth centuries, village Rohatyn</p>



Pic. 7. A building in Berlin,
P. Eisenman



Pic. 8. A building project. Hiromi Fuji T39



Pic. 9. Blessed Virgin Mary Nativity
the XVIth century, village Rohatyn,
St. Demetrius church (now territory
of Poland)

3. Results

The system of perceptual perspective makes the basis of the grammar of the architectural space in an icon. Comparison of the grammar of the architectural space in an icon and the architecture of deconstructivism, which includes the morphology, syntax and regularities of morphogenesis (form creation) is summarized in Table 4.

Table 4

**Common grammar rules for the construction of architectural space
in an icon and the architecture of deconstructivism**

The architecture of deconstructivism	The architectural space in an icon
1	2
1. Regularities of morphogenesis	
1.1. An image of a four-dimensional or n-dimensional space in a three-dimensional space (m)	1.1. An image of a three-dimensional space in a two-dimensional space
1.2. m < n	
1.3. Increased postmodernism sensuality in perception (intuition, metaphor) is caused by the unstable position of a man in the world	1.3. Perceptual perspective – semantic (sensory-perceptual) and semantic knowledge about reality
1.4. Anamorphic distorted projection of reality. Feeling the impossibility of space	1.4. Geometric contradictions – a conscious distortion of the form of the depicted subject (Pic. 6)
1.5. The effect of the designing process, combinatorics, the state of uncertainty. Imperfection – as a designing option	1.5. Method of understatement (it is given an opportunity to perceive an object as in axonometry as in the reverse or linear perspective)
2. Morphology and syntax	
2.1. Deconstruction is a distortion of “architectural logic and the laws of tectonics”. The degree of the distortion depends on imagination – the process of play (artistic trails: alogism, paradox)	2.1. The degree of a space deformation depends on a priori information which a person has about the depicted subject

Continuation of table 4

1	2
2.2. “Irregular” form, bright contrasting colours Trimming, consoling, preservation of the dimensional origin, the effect of irreality, antigravity effect (Pic. 5, 7, 6, 9)	
2.3. Method of juxtaposition, superposition (Pic. 4, 9)	
2.4. The labyrinth reality, the perception of a strained space (Pic. 6, 8, 9)	
2.5. Multilayer space, scale changing (“romance of scale”), a dialogue between a part and whole (Pic. 4)	
2.6. Perspective decentralization Condition of uncertainty (Pic. 3b)	2.6. Scattered perspective, multicentre perspective. The equivalence of all elements of the structure, each element has its own horizon. Condition of uncertainty
2.7. Fragmentation (evil, dimensional turns). Disclosure of shallow spaces, aspect composition	2.7. Fragmentation (a combination of linear, curved, parallel, reverse perspective of separate objects)
2.8. Angular capacities (main angles of perception on the corner), Pic. 5, 7	2.8. Depiction of architectural objects from the corner (revealing the depth and completeness of knowledge about the object), Pic. 6, 9
2.9. Language of confrontation (dynamics-statics, symmetry-asymmetry)	2.9. Presentation of the form from different points of view (combination of the top and bottom views, and of axonometry and orthogonal projections, combination of orthogonal projections, the method of simultaneity

4. Conclusions

The perceptual perspective in an icon is subordinated to a subjective factor (it allows to freely apply knowledge about the object) as well as in deconstructivism, where the mechanical assembling of parts is generated by the aesthetics and semantics of subjectivity. The distortion of the architectural space in an icon is caused by the psychology of the perception of several plans by a person, namely, the nearest plane is seen according to the laws of the inverse perspective (negative curvature). The middle plan is spherical, so-called convex perspective, and the background is the linear perspective (positive curvature). The maximum artistic expression, which the grammar of space building in deconstructivism works on, causes the game of contents: the attempt to find ambivalence, the recognition of competitive interpretations, while the grammar of the architectural space in an icon embodies the spiritual experience in the cognition of the metaphysical world.

Similar methods of constructing of the architectural space in an icon and the architecture of deconstructivism are: 1) scattered, decentralized perspective of an image which leads to the fragmentation and disclosure of shallow spaces; 2) depiction of the form from different points of view; 3) the methods of geometric contradictions (icon) and unreality of forms (deconstructivism); 4) the method of juxtaposition, superposition and disperse multilayer space; 5) the method of understatement (the possibility of the form perception as in axonometry as in reverse or linear perspective).

The similarity of the purpose of the space constructing in an icon and in deconstructivism which is to reveal the hidden meanings, the essence, to achieve the quality of metaphysical forms. The difference is in the interpretation of reality. Thus, the architectural forms in an icon express the ontology of reality (the embodiment of the synthesis of sensory experience of the physiological space of a man and spiritual experience in contemplation-cognition), while the architecture of deconstructivism is an experiment with reality (distortion), mechanistic aesthetics of violent destruction, changed perfection, which is caused by increased sensitivity to the problems in relationship “man – the modern civilized world”. An icon focuses on metamorphology (comprehensive disclosure of sensual and spiritual experiences of perception of existing reality, complex syntax

of forms and space), when deconstructivism focuses on the new morphogenesis and the concept of forms and space equivalence.

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ПОДІБНІСТЬ ГРАМАТИКИ АРХІТЕКТУРНОГО ПРОСТОРУ В КАНОНІЧНИХ ІКОНАХ ТА АРХІТЕКТУРИ ДЕКОНСТРУКТИВІЗМУ

Анотація. У статті розглянуто граматику архітектурного простору в іконі (зображення тривимірного простору у двовимірному) та граматику архітектури деконструктивізму (зображення n -вимірного простору у тривимірному), де за спільну основу взято закономірність морфогенезу: зображення у меншому m -вимірному просторі, більшого n -вимірного простору. Розкривається граматика базової перцептивної перспективи в іконі. Перцептивна перспектива підпорядкована суб'єктивному чиннику (дає змогу вільно застосовувати знання про об'єкт) так як і в деконструктивізмі, де механічний монтаж частин породжений естетикою і семантикою суб'єктивізму. Викривленість архітектурного простору в іконі зумовлена психологією сприйняття плановості людиною, а саме, ближні простори людина бачить за законами зворотної перспективи (від'ємна кривина). Середній план є сферичним, так звана опукла перспектива, а задній план – лінійна перспектива (додатна кривина). Максимальна художня виразність, на яку працює граматика побудови простору в деконструктивізмі породжує гру змістами: намагання знайти амбівалентність, визнання конкурентних інтерпретацій, тим часом як граматика архітектурного простору в іконі втілює духовний досвід у пізнанні метафізичного світу.

Визначено, що однаковими методами побудови архітектурного простору ікони і архітектури деконструктивізму є: 1) розсіяна, децентралізована перспектива зображення, звідси фрагментарність і розкриття неглибоких просторів; 2) подача форми з різних поглядів; 3) прийняття геометричних протиріч (ікона) і нереальність форм (деконструктивізм); 4) прийняття джакстапозиції, суперпозиції і дисперсного багатопрошарового простору; 5) прийняття недомовленості (можливість сприйняття форми і в аксонометрії, й в зворотній або лінійній перспективі).

Виявлено подібність мети побудови простору в іконі, як і в деконструктивізмі – розкрити приховані змісти, сутності, досягнути якості метафізичності форм. Відмінність у трактуванні реальності: архітектурні форми в іконі виражають онтологію реальності (втілення синтезу чуттєвого досвіду фізіологічного простору людини і духовного досвіду у спогляданні-пізнанні), водночас архітектура деконструктивізму це експеримент з реальністю (викривлення), механістична естетика насильної руйнації, порушеної досконалості, спричинена підвищеною чуттєвістю до проблем у відношенні «людина – сучасний цивілізаційний світ». Ікона акцентує увагу на метаморфології (всебічне розкриття чуттєвого і духовного досвіду сприйняття існуючої реальності, складний синтаксис форм і простору), а деконструктивізм – на новому морфогенезі й концепції рівнозначності форми і простору.

Ключові слова: перцептивна перспектива, зворотна перспектива, архітектурний простір в іконі, архітектура деконструктивізму.

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GESAMTKUNSTWERK AS A FORMULA FOR CREATING ARTISTIC CHARACTER IN ARCHITECTURE BY VOLODYMYR POKROVSKY

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Abstract. The concept of *architecture as Gesamtkunstwerk* exemplifies a model for creating an artistic building's character. This article explores how it is reflected in non-ecclesiastical edifices of Volodymyr Pokrovsky (1863–1924) during the cultural Renaissance of the early twentieth century in Ukraine within the context of the *fin de siècle's* architecture.

Key words: legacy of Volodymyr Pokrovsky, Gesamtkunstwerk, synthesis of arts, public buildings, the cultural Renaissance of the early twentieth century, Kharkiv, Ukraine.

1. Introduction

A style is a reflection of worldview and attitude to life. At the turn of the nineteenth and twentieth centuries, breakthroughs in science such as X-ray discovery; theories of special and general relativity with its empirical proof; discovery of radioactivity and radioactive elements; the notion of noosphere; and the birth of quantum physics significantly changed human understanding of the fundamental laws of nature. It was of utmost importance for human consciousness. Along with many spectacular technological innovations, including electricity and flying machines, scientific discoveries played a formative role in visual arts, literature and architecture. New ideas about space-time left a profound imprint on the way artists and architects viewed the world and interpreted perspectives and proportions. The Art Nouveau convincingly demonstrated this. Each country assimilated Art Nouveau in a different way, adapting it to suit its own historic tradition in terms of design, materials and techniques. Although Art Nouveau was born in Britain, eventually its final chord sounded in Eastern Europe. In Ukraine, which was divided between the Austro-Hungarian and Russian Empires at the time, the style widely varied whilst its specific features depended on the local art school and on the techniques and materials used. It was not until the collapse of the Soviet Union that Art Nouveau became a theme for research. When the Western European art historians were rigorously studying Art Nouveau in the twentieth century, Ukrainian Art Nouveau stayed essentially undiscovered due to the robust Soviet regime. Art Nouveau architecture was coined as the *architecture of capitalism* whilst Ukrainian Art Nouveau was regarded as a manifestation of nationalism. Once Ukraine gained independence in 1991, a number of scholars began extensive exploration of Art Nouveau architecture, featuring fascinating stylistic peculiarities. One of its most distinctive characteristics was the synthesis of arts – *Gesamtkunstwerk*⁶, where the emphasis was put on the coherence and homogeneity of every constructive and decorative detail of the building, packing as much decorative art as possible into the premises' spaces.

⁶ Gesamtkunstwerk (from German) – coherent and homogenous artistic work: gesamte – overall, whole; die Kunst – art; das Werk – work.

2. Basic Theoretical Section

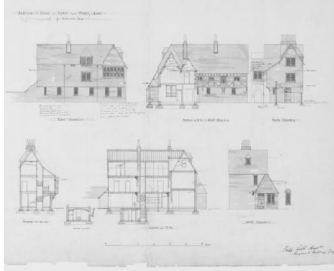












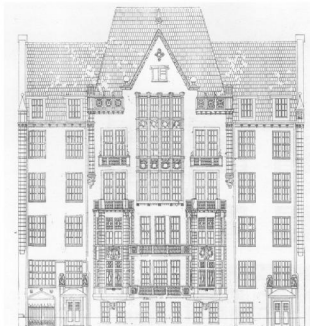


The term *Gesamtkunstwerk* was first introduced by a representative of German romanticism, a philosopher and theologian Carl Friedrich Trandorff (1782–1863) in the work *Ästhetik oder Lehre von Weltanschauung und Kunst* (1827). Wilhelm-Richard Wagner, a German composer and art theorist, developed this concept in his essays *Art and Revolution* (1849) and *The Artwork of the Future* (1849). Due to these works, the term *Gesamtkunstwerk* became known in local artistic circles and spread further afield.

In architecture, there could be no better example of the aspiration towards an integrated and stylistically coherent architectural environment than the architects' houses. The artists and architects of this period expressed their talent in the creation of their own homes – making the home a kind of tangible artistic manifesto, e.g. Philip Webb and William Morris in *Red House*, Bexleyheath, London, UK, 1859–1860 [1]; William Burges in *Tower House*, London, UK, 1875–1881 [2]; Oleksiy Beketov in his private house, now the *House of Scientists*, Kharkiv, Ukraine, 1900–1901; Vladyslav Horodetsky in *House with Chimeras*, Kyiv, Ukraine, 1901–1903 [3].

A peculiar reflection of such synthetic ideas manifested in the architecture of Volodymyr Mykolayovych Pokrovsky (1863–1924) during the cultural Renaissance of the early twentieth century in Ukraine (Fig. 1). Trained as an architect and artist at the Imperial Academy of Arts in Saint Petersburg [4], he became a junior assistant in the architectural offices of Albert Spiegel in 1888–1891 [5], a leading figure in Kharkiv's architectural realm at the time. From 1891 until 1905, Pokrovsky had diverse architectural experience in Poland [6], leaving behind a remarkable heritage in Sloboda Ukraine. The decade of 1905–1915 marked heyday of architecture in Kharkiv, the fourth largest city in the former Russian Empire at the time. Although holding a position of the Kharkiv diocesan architect from 1905 until 1918 and designing mostly the religious edifices for the parishes of the Kharkiv Province (currently Kharkiv, Sumy and northern part of Luhansk oblasts in Ukraine), Pokrovsky faced more complex tasks – he designed numerous non-ecclesiastical buildings: residential, administrative, educational and cultural. His public buildings of the 1910s chronicle his virtuoso skills, which he developed over time. Pokrovsky, consciously or unconsciously, mirrored the ideas of John Ruskin (1819–1900) – an advocate of the Pre-Raphaelite Brotherhood and the mentor of the Arts and Crafts Movement – yet still in tune with the *Zeitgeist* of the early twentieth century. He followed the path of Ruskin – “the return of beauty on earth” – established by him in *The Seven Lamps of Architecture* (1849) and *The Stone of Venice* (1851–1853). The quintessential characteristic of Art Nouveau architecture – *Gesamtkunstwerk* – was reflected in Pokrovsky's public buildings of two major cities in Sloboda Ukraine – Kharkiv and Sumy – from 1910 until 1915 (Fig. 2).

The Tree of Life. “Ruskin's view of the importance of direct and careful observation of nature as a means to truth in art, a truth both moral and material” [7] would have been familiar to Pokrovsky. A whole vocabulary of tree imagery, both formally and artistically, is present in every possible expression in the asymmetrical building at 10 Universytetska Street, Kharkiv. In 1912, Pokrovsky fundamentally reconstructed the department store built by Kharkiv municipal architect Olexander Rakov (1840–?) in 1871 and lately rebuilt by Volodymyr Nemkin (1857–1908) in 1889 [8], giving it a new image with a façade bloom, plant shaped reliefs, flamboyant pediment and colonnade. Initially designed as a department store, the premise's space changed its functional purpose to a museum. The house stands out for its symbolic tree design with intersections of stems, leaves and blossoms. The source for the lavish décor on the façade seems to be an amalgam of many influences. There are direct historical associations with the refined reliefs of the Western European Romanesque churches, e.g. cathedral of Saint-Pierre, Angoulême, c. 1136 [9]; the church of Notre-Dame-la-Grande, Poitiers, from the middle of the twelfth century [10]; or portal archivolts of the abbey church of Sainte-Marie-des-Dames, Saintes, from the second third of the twelfth century [11]. At the same time, it resembles the elegant white-stone carving of Vladimir-Suzdal temples of the twelfth century, such as the Church of Intercession upon the Nerl River and the Cathedral of Saint Demetrius [12]. Mascarons add the sense of spirituality to the blossoming tree and a mist of eternal life. Two thirds of the façade area is covered by glass, which creates transparency indoors and an exterior lightness. The ceiling windows are designed in the form of geometrically intricate iron structures whilst floor ceramic tiles create a rhythm in

the interior space. Pokrovsky thus convincingly translated the universal language of trees and flowers into the symbol of the Tree of Life. “This premise” – stated the leading Ukrainian scholar Volodymyr Yasyievych, – “has become one of the bright and original manifestations of Art Nouveau in Kharkiv” [13].

	Elevation	Interior Décor	Furniture Decorative Object	Stained Glass Window
<p>Philip Webb</p> <p>Private Residence Commissioned by William Morris</p> <p><i>Red House</i></p> <p>Bexleyheath London, UK</p> <p>1859–1860</p>				
<p>William Burges</p> <p>Private Residence</p> <p><i>Tower House</i></p> <p>London, UK</p> <p>1875–1881</p>				
<p>Oleksiy Beketov</p> <p>Private Residence</p> <p>Kharkiv, Ukraine</p> <p>1900–1901</p>				
<p>Vladyslav Horodetsky</p> <p>Private Residence</p> <p><i>House with Chimeras</i></p> <p>Kyiv, Ukraine</p> <p>1901–1903</p>				
<p>Volodymyr Pokrovsky</p> <p>Private Residence and Gymnasium</p> <p><i>House with Chimeras</i></p> <p>Kharkiv, Ukraine</p> <p>1912–1914</p>				

Credit: Architectural drawing, Philip Speakman Webb, 1859, England. Museum no. E.66-1916. © Victoria and Albert Museum, London

Credit: RIBA Collection 16707. The Building News. 1880. Source: Maurice Adams. Artists' homes (London, 1883) plate 1.

Credit: Private Collection. Post Card N 103. Kiev. Maison Gorodetski. 1900s.

Credit: Ukrmiskbudproekt. Kharkiv

The interior has been significantly altered, including removal of the original decorative elements.

Fig. 1. Architecture as Gesamtkunstwerk in the late nineteenth and early twentieth century

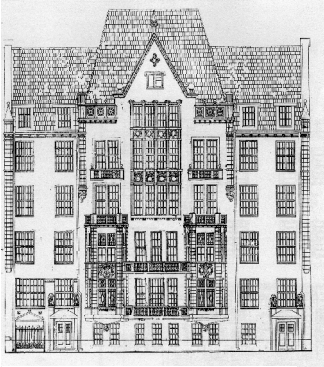


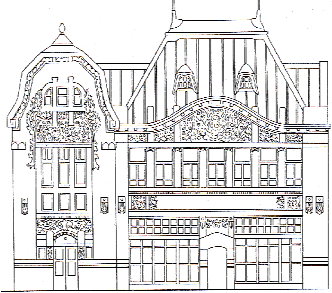

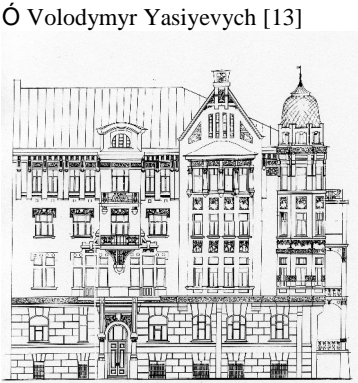
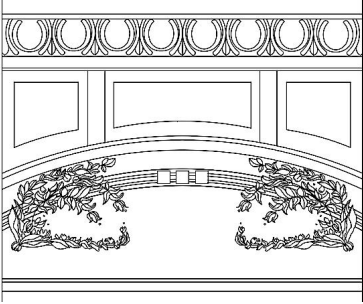



Elevation	Location Construction Year	Architectural Décor	Artistic Character
	<p>Chernyshevska Str., 79 Kharkiv Ukraine</p> <p>1912–1914</p>		<p>A Knight</p>
<p>Ó Ukmiskbudproekt, Kharkiv</p>	<p>Univesytetska Str., 10 Kharkiv Ukraine</p> <p>1912</p>		<p>The Tree of Life</p>
	<p>Chernyshevska Str., 66 Kharkiv Ukraine</p> <p>1910–1913</p>		<p>The Garden of Eden</p>
	<p>Yuriyivska Str., 8 Kharkiv Ukraine</p> <p>1911</p>		<p>A Rainbow</p>
<p>Ó Ukmiskbudproekt., Kharkiv</p>	<p>Romenska Str., 1 Sumy Ukraine</p> <p>1915</p>		<p>The Gingerbread House</p>
	<p>Ó Oksana Kondratyeva, 2018</p>		<p>Ó Oksana Kondratyeva, 2018</p>

Fig. 2. Institutional and residential buildings. Volodymyr Pokrovsky. Ukraine, 1910–1915

The Garden of Eden. The corner apartment building at Chernyshevska Street, 66, Kharkiv, is full of narratives that carry their own stories. The impression here is that Pokrovsky sought to render the essence of natural creation at the moment of greatest tension and exuberance. Compositionally dissymmetric architecture is a paraphrase of the Gothic architecture with typical corner turret, bay windows and sharp front-gables. The verticality of structures, underlined by the use of uncovered brick, is accompanied by rich decoration with floral and fauna reliefs, cornices and intricate ornamental friezes and mouldings. They resemble the mysterious wealth of symbols of Romanesque sculptured capitals, e.g. monastery of Santo Domingo in Silos, c. 1085–1100 [14]; Saint-Trophime in Arles, after c. 1150 [15]; the Church of Notre-Dame in Serrabone, c. 1150 [16]; San Martino in Lucca, c. 1204 [17]; façade relief of San Pietro in Spoleto, c. 1200 [18]. Like a poetic refrain, ornamental details are evident in balcony balustrades, metal railings and fenestration. The content of architecture can be read as the Garden of Eden whilst the atmosphere reflects Pokrovsky's lifelong pursuit to increase his vocabulary of beauty.

A Rainbow. The asymmetrically spatial composition of a two-storey blue-and-white building in Yuriyivska Street, 8, Kharkiv, can be seen as an illustration of the natural phenomenon – the rainbow. It represents an allegory for Iris – the goddess of the rainbow and the messenger of the Olympian gods in Greek mythology. Pokrovsky defined the essence of naturalism, as where forces operate just as in nature. This building contains those qualities of vitalism or distilled naturalism, which characterised authentic Art Nouveau. Pokrovsky also repeated floral motives in various architectural décor whilst accentuating most narrative detail in the form of a rainbow. Overall, it must be recognised that majestic, impressive premises can be viewed as a new appearance of the ancient symbol in architecture.

The Gingerbread House. The striking asymmetrical administrative premises of the Saint Panteleimon Monastery ensemble in Sumy had a façade in exquisite brickwork layers – echoes of the *quattrocento* architecture. Reminiscent of the ornaments from Florence and Venice, it has effects of the polychromy of High Victorian Gothic. Richness of arabesque patterns, round decorative inclusions and decorative semi-columns at the corners could be traced to the polychromy in Ruskinian Gothic, e.g. Chester Town Hall, 1863–1869, of architect William Henry Lynn. On the other hand, the building has a touch of the seventeenth-century Russian *terem* architecture. Its asymmetrical tri-spatial composition represents a crescendo to the lavishly decorated portal with the open-sided balcony on the massive columns. The decorative richness of the premises tends to remind us of the Gingerbread House in *Hansel and Gretel* fairy-tale or a Candyburg's building from *The Nutcracker*.

A Knight. In the five-storey building at Chernyshevska Street, 79, Kharkiv, Pokrovsky advocated the return to the Middle Ages. His choice for functionally combined premises – educational and residential – was completely harmonious, yet had a strong trace of chivalry. Solemn composition with decorative gable roof in the central part, strong axial alignments riddled with symbolic reliefs represent the legend of a knight. Medievalism became the source of reference but it is not just a reminiscence of medieval art and architecture – this premise could be read as an allegory for a knight. The building has a Gothic air, though in harmony with its functional purpose, showing concern for synthesis and structural essentials. Its Neo-Gothic perpendicularity combined with eccentric fenestration was tempered by a good dose of common sense. Thoughtful functionality of corridor structures was designed for the educational part of the private gymnasium run by the architect's sister Olena Pokrovska, as well as a residential section for the architect's family. The architect sought model dwelling for artistic and social activities, including literary and musical events. Intricate design of the stair railings and the mosaic flooring, illustrates the architect's careful approach to all parts of the building. He incorporated a collection of symbols – coded messages to those few who could read it. As a symbolist, he harnessed the power of myth, conjured chimeras, foliage and knights in armour. Besides typical Art Nouveau birds and animals, crooks and foxes, Pokrovsky also integrated bizarre and grotesque creatures. But medievalism was more than a stylistic trait: it was part of Pokrovsky's thinking. He became a committed medievalist.

From 1892 until 1914, Pokrovsky extensively travelled around Western Europe, with a number of visits to Italy [19]. These trips strengthened his knowledge and enabled him to establish contacts with construction factories in Germany and France. In Kharkiv, Pokrovsky's social commitment was genuine and led him and his wife Anna Pokrovska, née Vyubova, to open a salon and form friendships with artists, poets, composers and musicians,

philosophers and politicians at the time. A prominent poet and painter Maximilian Voloshin (1877–1932) was one of the family's closest friends [20]. Poetry readings, philosophical and theosophical discussions, musical performances and political debates were frequently held at the Pokrovsky's salon. Furthermore, his range of activities expanded to include painting, drawing, piano playing, organising literary, musical and art public events, publishing books [21], teaching (he was a professor at the Construction Department at the Kharkiv Technological Institute (1919–1922) [22] and at the Architectural Department at the Kharkiv Art College (1921–1924)) [23]; and lately politics (he was elected to the Kharkiv City Duma during the Civil War) [24]. Pokrovsky also expressed his fascination with emerging technologies and was a member of the Automobile Club (1911–1917) [25]. His expertise spanned a number of subject areas that his personality could be regarded as *homo univesalis* of the early twentieth century.

3. Results

If one could weigh the constituents of the Vitruvian Triad in the context of Art Nouveau architecture, then its dominant would be *venustas*. Richly decorated buildings, fragments of flora and fauna in the ornaments on the façades, fantastic chimaeras, bold use of majolica, stained glass, artistic iron castings and colourful mosaic have little in common with utility and durability. Pokrovsky did not oppose the results of industrial revolution but disliked excessive simplification. Ornament was a strong instrument in interior and exterior décor. The architect placed an emphasis on coherence and homogeneity of decorative and structural elements, which led to integration of premises' macrostructures with microstructures. These were emphasized by widespread use of metal, which the architect generously applied in window decorations, staircase railings and gates. He paid particular attention to fenestration, varying shapes from oculus, arches, trapezia-like hexagonal windows, octagonal shapes in varied compositions, which participated in the rhythm of the whole building's structure. Pokrovsky used themes taken from nature, and also put forward Medieval ideals as his chief frame of reference. Hence, he headed towards synaesthesia, literally a "mutual sensation" [26]. "Art Nouveau condensed synaesthesia into reality: great waves of thick hair, ornamental curves and plant arabesques resemble graphic notation" [27]. The *fleur mystique* can be viewed as a central leitmotif of his creativity. The mystic flower, this highly conscious inclusion, occurs frequently enough throughout his work to show that they express a constant infatuation with the natural world. He never lost this fascination. It occurs in passages of foliage or breaks through the ornamental mouldings. In non-ecclesiastical architecture, the artistic vision became a working model for Pokrovsky, where the common denominator – thematical, philosophical and aesthetic – was the Symbolism and the constant aspiration to move from *realia* to *realiora* [28]. Beneath the feast of the façade's decoration – "flickering, feathering, flowering linearism" [29] – there was a sinuous, practical and precise approach. Underneath it, all was a master builder and at the heart of his work, there was a form. He looked beyond Ukrainian and Russian tradition, to the art of European Medieval architecture, glittering mosaics of Byzantine churches and European wooden architecture of the seventeenth century. Above all, he designed functional buildings. The study considered Pokrovsky's public buildings of 1910–1915 for the first time in the context of the British and Continental Art Nouveau architecture. The peculiarities of Ukraine's Art Nouveau architecture of the early twentieth century could be a significant addition to the European history of architecture as a whole.

Discussion. The public buildings show Pokrovsky to be a disciple of the *fin de siècle*. Although he chose the language of symbols, for him "symbolism was far more than a mere aesthetic tendency; rather, it represented an entire world view and a way of life which engaged intense dreams, religious explorations, decorative rhetoric, and various kinds of metaphysical creativity" [30]. Like many scientific discoveries, which proved that one could see the world beyond its outer appearance, the same is true with architecture: one can see the allegorical image beyond the construction's structure. In fact, Pokrovsky's initial reputation was formed as an original designer of religious edifices, including his masterpiece Three Saints Church in Kharkiv, 1907–1915 [31]. It would be worthwhile to consider Pokrovsky's ecclesiastical buildings within the context of *architecture as Gesamtkunstwerk*. Pokrovsky occasionally designed the interior details and appointments for his ecclesiastical buildings, for example, iconostasis [32] and ferramenta window traceries. Nevertheless, the combination of other

decorative parts such as geometrical patterns of flooring tiles and wall painting were the results of his teamwork with craftsmen and artists. Yet it illustrates another sign of integration of the arts and crafts in architecture. Furthermore, a comparative study of Pokrovsky's religious buildings with Aleksei Shchusev's interior of Saints Anthony and Theodosius of Pechersk Church, Kyiv Pechersk Lavra, Ukraine, 1902–1910 [33], as well as exterior and interior of Trinity Cathedral, Pochayev Lavra, Ukraine, 1906–1912, would make a fascinating case study.

Conclusion. Pokrovsky's non-ecclesiastical buildings in Ukraine of 1910–1915 can be described as the true essence of Art Nouveau and illustrate the manifesto of the new style in Sloboda Ukraine. He put an emphasis on shaping an artistic image of a building. The parts of his buildings are intimately interconnected and explicable only by reference to the whole. Each premises constituted to the same principle – symbolism. On the other hand, he achieved a masterly balance between constructive principles and décor whilst felt liberated to use all the construction elements considered important. However, Pokrovsky never succeeded in freeing himself entirely from tradition and academism, designing premises with Neo-Classical, Neo-Romanesque or Neo-Gothic elements. Art Nouveau was part of a larger trend in Ukraine's territory, where Kharkiv's architectural school illustrated its distinctive features, notable in the history of the European architecture. Volodymyr Pokrovsky formed the characteristic visage of an era, managed to produce an overall sense of design, which both fascinated and unified whilst speaking a universal language. He was, thus, a true Art Nouveau architect, an *architecte d'art*.

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«ГЕЗАМТКУНСТВЕРК» ЯК ФОРМУЛА СТВОРЕННЯ АРХІТЕКТУРНО-ХУДОЖНЬОГО ОБРАЗУ В БУДІВЛЯХ В. М. ПОКРОВСЬКОГО

***Анотація.** Наукові відкриття кінця XIX – початку XX століття докорінно змінили світогляд та розуміння тонкої структури всесвіту. Нове світосприйняття було взаємопов'язане з «ренесансом» в образотворчому мистецтві, музиці, театрі, архітектурі, філософії, а синтез різноманітних мистецтв і мистецтв з наукою, філософією та релігією стали центральними у творчості чималої когорти митців fin de siècle. Це був час всеосяжної «культурної революції». Термін Gesamtkunstwerk вперше увів до вжитку представник німецького романтизму, філософ, теолог Карл Фрідріх Трандорфф (1782–1863). Німецький композитор і теоретик мистецтва Вільгельм-Ріхард Вагнер розвинув цю концепцію в есеях «Мистецтво і революція» та «Твір мистецтва майбутнього» 1849 року. Саме завдяки працям К. Ф. Трандорффа та В. Р. Вагнера термін Gesamtkunstwerk став відомим у мистецьких і мистецтвознавчих колах. Своєрідним віддзеркаленням цих синтетичних ідей став розвиток концепції «архітектура як Gesamtkunstwerk», яку втілювали, створюючи цілісні образи-будівлі та універсальні простори, архітектори Філіпп Вебб («Червоний будинок», приватний будинок, Лондон, 1859–1860 рр.); Вільям Берджес («Будинок Башта», приватний будинок, Лондон, 1875–1881 рр.); Олексій Бекетов (приватний будинок, нині – «Будинок вчених», Харків, 1900–1901 рр.), Владислав Городецький, (приватний будинок, нині – «Будинок з химерами», Київ, 1901–1903 рр.).*

Творча універсальність була притаманна і архітектору-художнику В. М. Покровському (1863–1924). Амплітуда його життєтворчості відзначена надзвичайним розмахом: архітектор-художник, дизайнер (декоратор), реставратор, керівник численних будівельних проектів, громадський діяч, викладач – професор Харківського технологічного інституту 1919–1922 років, професор Харківського художнього технікуму 1921–1924 років. В. М. Покровському була властива важлива, глибока риса творчої еволюції: випускник Імператорської академії мистецтв, єпархіяльний архітектор Холмсько-Варшавської і Харківської єпархій, він став одним із найвизначніших майстрів модерну в Україні.

Ідея «архітектура як Gesamtkunstwerk» найвиразніше віддзеркалилася у його архітектурних творах, які були створені під час активної проектної практики на теренах Слобідської України упродовж 1906–1915 років. Властивості «всеосяжного твору» були притаманні як його цивільній, так і культовій архітектурі, проте стаття зосереджує увагу на громадських та житлових будівлях 1910–1915 років у Харкові та Сумах. В архітектурних форматворах архітектор-художник вдало поєднує технічні досягнення; будівлі вирізняються архітектурною «полістилістикою», гармонійним синтезом різноманітних видів декоративно-ужиткового мистецтва. Кожна із цих споруд – особлива, але між ними можна почути внутрішню риму – вони є архітектурно-художніми образами. Рівень їх естетичної інтенсивності підкреслює висоту творчої думки В. М. Покровського, його міждисциплінарне мислення у створенні всеосяжного твору.

***Ключові слова:** творчість архітектора-художника В. М. Покровського, єпархіяльний архітектор, синтез мистецтв, архітектурно-художній образ, культурний ренесанс початку XX століття, Харків.*

**IN SEARCH OF THE PERFECT FORM: THE GEOMETRY
OF THE CITY IN THE TREATISES BY PLATO, T. MORE,
T. CAMPANELLA**

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Abstract: The article has been devoted to the analysis of the architecture and urban structure of utopian cities and states, their interrelation with social and political aspects in the works of “Republic” and “Laws” by Plato, “Utopia” by T. More and “The City of the Sun” by T. Campanella.

Key words: utopia, architectural utopia, public space, public and residential buildings.

1. Introduction

The notion of utopia is used to characterize the model of an ideal social system. The term “utopia” consists of the Greek words οὐ – “no” and τόπος – “place”, and is translated as “a place which is not”. It comes from the eponymously-named book by Thomas More, which is considered to be the first work to be written precisely as utopian.

Utopia means a certain country or place, often fictitious, where everything is perfect (English Oxford Living Dictionaries). There are significant numbers of utopias, among which we distinguish architectural utopias that are derivatives from socio-political ones. Utopian philosophers, appealing to the historical ideas of mankind about the ideal, described the planning structure of city states. Forming perfect models of social structure, they used architecture as a background to provide a comfortable and functional space that would meet the requirements of an ideal society.

The aim of the article is to determine the main geometric characteristics of ideal cities, based on the analysis of architectural descriptions and urban planning; establish the relationship between socio-political ideas in the treatises by Plato, Thomas More and Tommaso Campanella. This will allow us to trace the relationship between social ideals and possible attempts to implement them, since we get a list of certain patterns and signs that can be used to analyze the concepts of urban development or architectural projects and it will help us get more insight into the influence of utopian works on real changes in society and the architecture of that time and present.

This article presents an analysis of three most famous socio-utopian treatises – “Republic” and “Laws” by Plato (2000), “Utopia” by Thomas More (1988, p. 16–130) and “The City of the Sun” by Tommaso Campanella (1988, p. 131–182). These works are considered to be the first ones to describe the models of utopian states and have a strong influence on all subsequent works of utopian philosophers.

When we talk about the ideal model of society, we focus on social and political aspects, without paying enough attention to the environment in which the inhabitants live. However, analyzing the developments in relation to utopias, it's hard to ignore how in detail the authors of sociological, political or philosophical works

deepened in urban planning and architectural aspects. Some scientists have outlined the problem of coverage of architecture and structure of the city in Plato's, Thomas More's and Tommaso Campanella's works: Heorhiy Hradov (1968); Tatyana Savarenskaya (1984); Michael Chyutin (2006); Tessa Morrison, Mark Rubin (2014); Eva Eylers (2015); Andrew Simoson (2016) and others.

For example, T. Savranskaya (1984, pp. 77–80) analyzed the planning features of Atlantis, which were described in the work of Plato "Critias" as the architecture of the utopian country. In contrast, M. Chyutin (2006, p. 178), writing about the ideal city-state of Plato, gives an analysis of the architectural aspects of the country from the "Laws". Among contemporary researchers, it is possible to distinguish works by Tessa Morrison and Mark Rubin (2014), who analyzed and systematized information about the geometric characteristics of ideal cities and created 3D digital models.

2. Basic Theory Part

The first works in which the ideal social and political system are described were Plato's "Republic" (2000), "Utopia" by T. More (1988, pp. 16–130) and "The City of the Sun" by Campanella (1988, pp. 131–182). They are characterized by attention to everyday life and relationships between people who must be a subject to specific rules and regulations.

Plato's "Republic" (360–370s BC) is his main work, which describes the basic principles of an ideal country. Despite the detailed description of various political and social aspects, this treatise does not provide a clear understanding of the city-building configuration of the republic and cities. The most detailed description of architecture was given in philosopher's late work "Laws" (1994, pp. 71–437), which was written in about 354 BC., where he partially reviewed his own ideas and supplemented them with new details. There is one main city (policy) with twelve colony-villages around. The form of government that Plato prefers is an electoral aristocracy or monarchy; the state is headed by a philosopher who is a wise ruler. There is no private property in the country, so people live in common residential buildings

More precise is the description of architecture in "On the Best State of a Republic and on The New Island of Utopia" by Thomas More, which he wrote in 1516. Following Plato's ideas about common property, More described an island whose inhabitants were living in a country without private ownership and with a clear hierarchy. Thus, the term "utopia» comes from the name of his work. The form of government is a representative democracy and the ruler is elected for life. Thomas More stresses that there is slavery in Amaurot – it serves as a punishment for serious crimes and a travel ban between cities without the prior consent of the ruler. The island was named after- Utop, who was the founder of the island and the cities and the author of the basic idea of area planning

Under the influence of Plato and More, Tommaso Campanella wrote his own work – "The City of the Sun» in 1602 (1988, pp. 131–182). City of the Sun is located on a hill and is an one of the four states on the island in the Indian Ocean. The author considered that everything had a common beginning and was interconnected. Campanella deduced his own model of the unity of people between themselves and with the outside world based on his knowledge of astrology. A theocratic monarchy is a proposed form of government in "The City of the Sun", so the state is headed by a priest. The basis of his utopian model is the notion of social equality for all residents, which is achieved due to community ownership, division of labor and responsibilities.

3. Results and Discussion

For better comparison of the architecture and urban characteristics of the utopian countries that were described by Plato, More and Campanella, the data are structured in Table Characteristics of Urban and Architectural Design in the Works of Social Utopian.

3.1. Architectural and Urban Design in Plato’s “Republic” and “Laws”

To ensure the implementation of social utopia, Plato used the correct geometric form-circle, thus forming the circumferential and radial roads in the city. Agora is the main market square in the center of the city and the country and the main public square at the same time. There are public buildings near agora, which looks like a city center with public function. The city around the agora is divided into 12 equal parts – districts of the city. Identical residential buildings create protective walls, because of the very location density (Plato, 1994, pp. 71–437). The city is surrounded by moat.

The territory of the whole country was also divided into 12 equal parts. The colony-village is in the center of each part. The location of gymnasiums (in the city) and hippodromes and sport grounds (outside of it), could be arbitrary, but at the same time, they had to be at the same distance from each other, providing all residents with equal opportunities for their use (Fig.1).

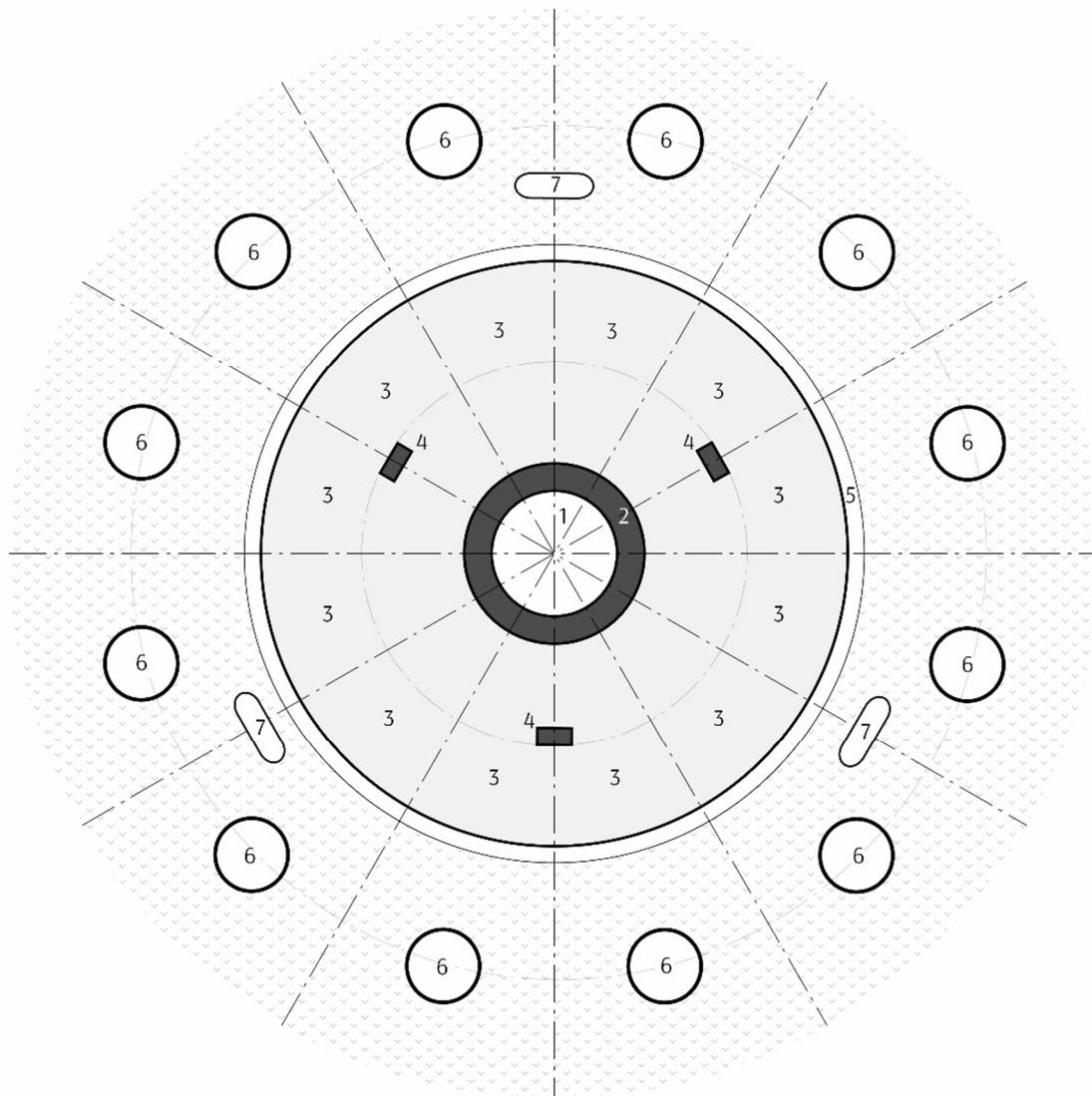


Fig. 1. Scheme of the utopia city by Plato:

- 1 – agora – the center of the city; 2 – public buildings; 3 – district of the city; 4 – gymnasium;
 - 5 – earth moat; 6 – colony-villages; 7 – hippodromes and sport grounds
- (Drawn by Author from the description in Plato’s “Laws” (1994, pp. 71–437))

Plato paid special attention to numerical characteristics: exactly 5040 families should live in the city, since this number is most convenient for its proper division. Author did not pay attention to the materials or architectural solutions, but emphasized the comfortable and reliable buildings (Plato, 1994, pp. 71–437).

3.2. Architectural and Urban Design in Utopia by T. More

T. More (1988, pp. 16–130) gives a sufficiently detailed description of both urban and architectural and constructive solutions. In spite of this, a number of questions arise as to the correct interpretation of these descriptions. For instance, A. Simoson (2016) gives examples of possible variants of the configuration of the Utopia Island, the rivers and mountains on it, according to various mathematical models. An island that is located in the sea (the name of the sea is not specified), separated by an artificially created canal 15 miles wide (24 km) from the mainland.

The shape of island is close to the correct form and remote from the mainland by 2.4 kilometers by an artificially created strait. The capital of the country – the city of Amaurot is located in the central part of the island that enables residents of all cities to have equal access to it (More, 1988, pp. 16–130).

T. More used the grid plan in the planning structure of the city. He divided the city into four equal areas- districts with 50 residential neighborhoods of each. The lack of private property affects the fact that all buildings should have the same architecture and plan, and all residents have equal access to all buildings on the island. There remains an open question of the location of schools and temples, as well as the Senate and major public institutions. For example, soviet architect H. Hradov (1968, pp. 30–36) drew a scheme of Amaurot, where place around the river is a big public space with sport and public buildings there. Instead, E. Eylers (2015) has drawn the temples and the rest of public facilities on larger quarters than residential and located them around the city.

Fig. 2 shows a simplified general plan of the city with an author's interpretation of the location of the river and some public buildings.

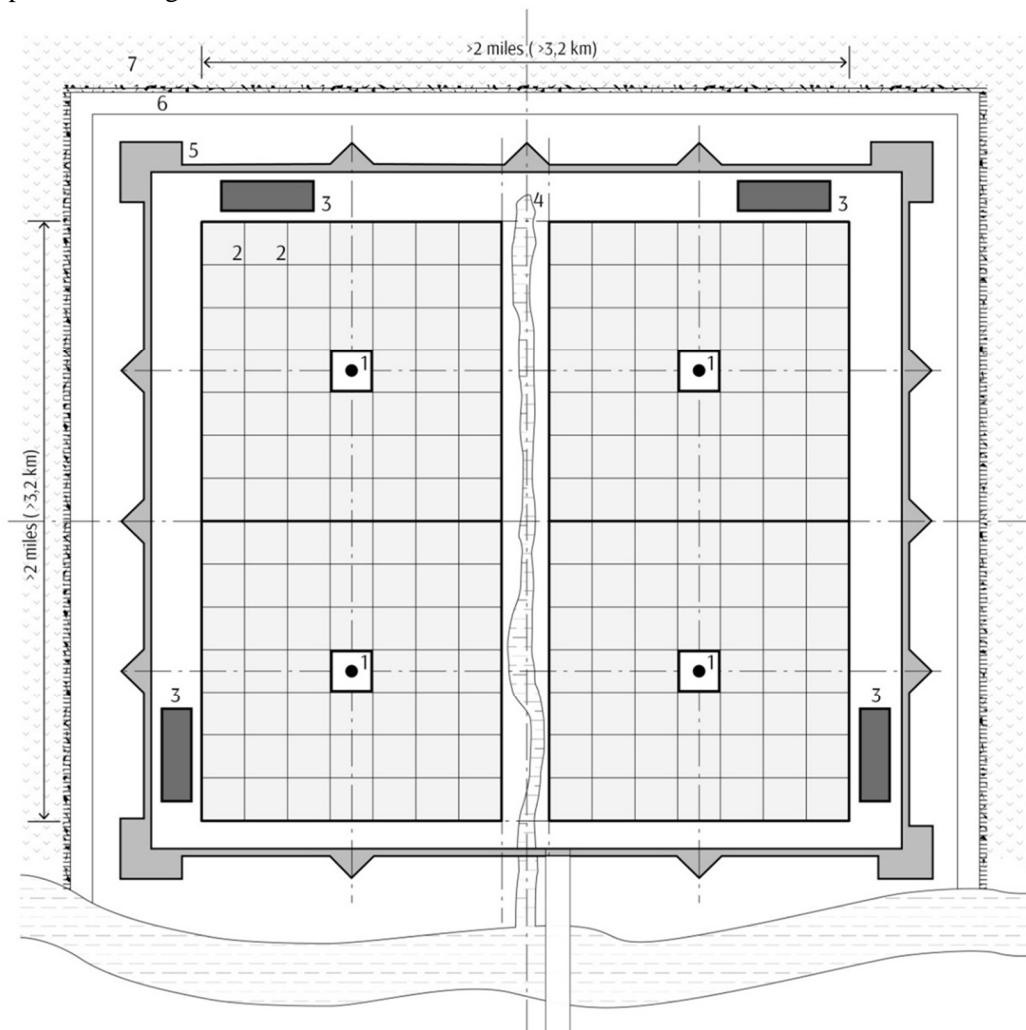


Fig. 2. Scheme of the utopia city Amaurot:

1 – market square; 2 – residential quarter; 3 – hospitals; 4 – river; 5 – stone wall with bastions and towers; 6 – moat; 7 – fields
(Drawn by Author from the description in “Utopia” by More (1988, pp. 16–130))

3.3. Architectural and Urban Design in “The City of Sun” by T. Campanella

In “The City of the Sun” Tommaso Campanella (1988, pp. 131–182) used circumferential and radial roads. His city has four main roads, which are oriented around the world. The central object of the utopian city is a temple, whose architecture had been given considerable attention (Fig. 3). An important part of the city space is the decoration of the buildings-walls drawings, because they become not only the decoration of the city, but also the main place for educating children.

The main difference between the architecture of “The City of the Sun” from the architecture of the cities of Plato and More is not only the astrological context, but also a lack of a significant number of public buildings as separate structures. More (1988, pp. 16–130) allocated separate dining-house buildings in each residential area, foreseeing buildings for hospitals and the Senate, Plato (1994, pp. 71–437) proposed to build a large number of public buildings around the agora. In contrast to them, the main public functions in the city of the Sun are performed by the first floors of residential buildings and the temple of the sun.

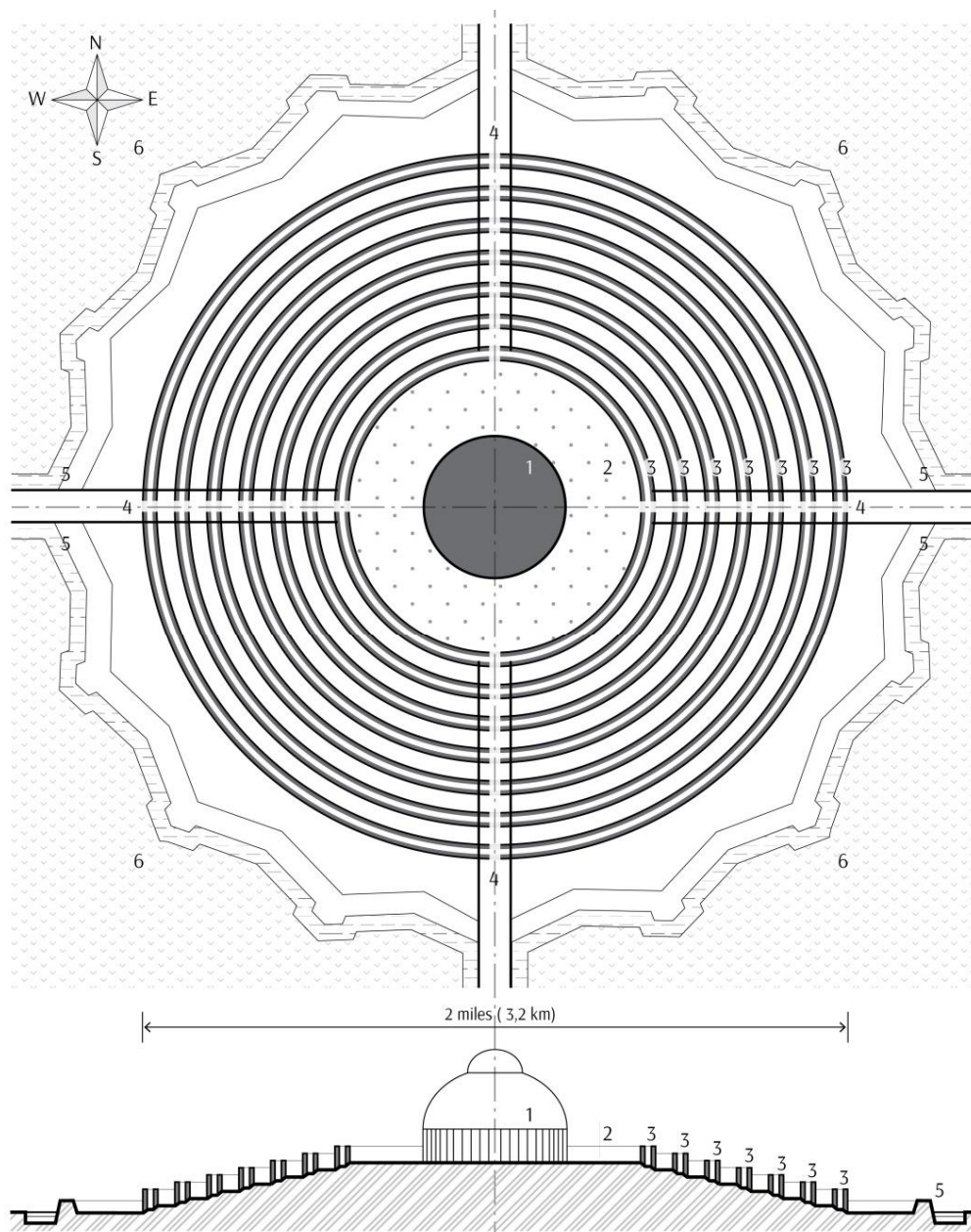


Fig. 3. Scheme of the Campanella’s utopia city: 1 – temple; 2 – public space; 3 – belt of residential and public buildings that act as defensive walls; 4 – main road; 5 – earth wall and moat; 6 – fields (Drawn by Author from the description in “The City of the Sun” by Campanella (1988, pp. 131–182))

Characteristics Of Urban And Architectural Design In The Works Of Social Utopians			
Source	“Republic” (2000) and “Laws” (1994, pp. 71–437) by Plato	“Utopia” by More (1988, pp. 16–130)	“The City of the Sun” by Campanella (1988, pp. 131–182)
1	2	3	4
Type of state, by territorial characteristics	City-state	Island country	City-state
Main city	There is one main city (policy) with twelve colony-villages around	Amaurot	–
Forms of government	Elected aristocracy or monarchy, the country is headed by philosophers	Representative Democracy. The ruler is elected for life	Theocratic monarchy. The state is headed by a priest
Territorial location of the country	The city-state is located in the central part of its suburbs, on the areas that can provide consumers with all what they need.	An island that is located in the sea (the name of the sea is not specified), separated by an artificially created canal 15 miles wide (24 km) from the mainland.	One of the four states on the island in the Indian Ocean. Located on a hill, the diameter of which is 2 miles (3.2 km). The city is surrounded by the plain. There are four cobbled roads in direction to the ocean. Near the city, there are villages, groves and forests.
Author / Chief Architect	–	The author is Utop – a founder of the island and the city	–
Administrative division	The main unit of the country is a city, which consists of 12 parts. The outskirts of the city are also divided into 12 equal parts.	The country is divided into 54 cities with the same planning. The minimum distance between them is 24 miles (38.4 km), and the largest one allows a pedestrian to come from one city to another during the day. Also, there are villages, the distance between them and their number is not normalized	1 City Village or villages on the outskirts of the city
The population of the city / town	There should be exactly 5040 families in the city. If the number increases, they are resettled in a colony-village, whose number of inhabitants is not normalized	Each city has 6,000 families; each has from 10 to 16 adults. There is a total of 60–96 thousand adult residents without children. The number of village families is not specified. It is known that there are about 40 adults in each peasant family, and two slaves	–
The shape of the city	Circle	Almost square, each side of which is almost 2 miles (3.2 km)	Circle, with a diameter of 3.2 km (the size is indicated according to the horizontal section of the hill where the city is located)

Continuation of table

1	2	3	4
The planning scheme of the city street network	Circumferential and radial roads	Grid plan. The city is divided into four big districts, and 200 small residential quarters .The width of the streets is about 6 meters	Circumferential and radial roads. The city consists of seven rings and four radial roads
Fortifications of the city	The city is surrounded by moat. There is no reason to build stone walls because of the residential houses, located in a close proximity, thus forming protective walls.	There is a stone wall with bastions and towers. The three sides of the city are surrounded by dry moat and hedge, and the fourth one is surrounded by river.	There is a stone wall with bastions and towers. The city is surrounded by moat.
Public space	<ul style="list-style-type: none"> – Agora – the main market square, which is located in the city center, and is the center of the country too. It serves as the main public space for the residents, performing market functions, and place for judicial and other meetings. – 3 sports grounds, which are outside the city, near hippodromes – Small streets 	<ul style="list-style-type: none"> – Streets that are located along row of residential buildings (6 m wide) – Gardens located in the middle of residential neighborhoods. Planted with a large number of different trees. – 4 main market squares, which are centers for 4 parts of the city. 	<ul style="list-style-type: none"> – Galleries for walking, peristyles that are located on each ring of the city – 4 main streets – Pools, which are constructed both on the outskirts of the city and within its borders – Trading areas outside the walls
Public buildings	<ul style="list-style-type: none"> – Temples, which are located around agora – Administration buildings, which are near the temples – 3 educational buildings – gymnasiums, located at the same distance from each other within the city. Also, it is mentioned about college – 3 hippodromes, next to which there are equipped areas for sport: exercises in throwing, archery. They are located outside the city – Three types of prisons: the first one is on the square of the city, the second one is near the meeting room, the third one is outside the city, on the most distant area – Public baths – Theaters 	<ul style="list-style-type: none"> – 13 temples that are built as true works of art. The interior space of the temples is semi-dark, according to the advice of the clergy – Palaces of Syphograntus (heads of districts). They are located in each quarter at the same distance from each other. Serving as a dining room and a gathering place for residents. Divided into 2 main rooms, each of them accommodates 15 families (in general, these buildings are for 60 families), and they include a separate room for mothers with infants – Schools – There are no prisons – 4 public hospitals, which are located on the outskirts of the city, and are large in size 	<ul style="list-style-type: none"> – Temple. It consists of two domes, smaller dome relies on the larger one, which is on the columns. The diameter of the temple is 350 steps, which is approximately 310 meters. The large dome is decorated with drawings of stars. Clergy's rooms are near the small dome. The temple also serves as the venue for the courts – Shops – Warehouses, kitchens, dining rooms, baths – are located on the first floors of buildings – Bakery, various workshops for tailoring, forging, joiner's and others – Schools. The walls are the main area for learning, since they represent a significant amount of information that needs to be learned. – Public buildings for mothers and infants – Palaestra for sport – Tower, which is the prison

Continuation of table

1	2	3	4
Residential buildings	The city is divided into 5040 sections for residential buildings, according to the number of inhabitants. The buildings are identical, and locate in close proximity, thus forming protective walls. There is no private property in the country – residents cannot change anything in the planning or architecture of their home.	Residential buildings are three stored and blocked into each other, thus forming quarters with common gardens in the middle. All buildings have identical architecture and are common property. The houses have two entrances, one from the street and the other from the garden. Residents change their homes every 10 years according to the decision of the landlord. Rural residential buildings are identical and equipped with everything you need	Residential buildings are in common property (residents change their housing once every 6 months). The buildings are embedded in the outer walls of each of the seven rings, forming a solid row of buildings. Entrance to the house is from the inside of the wall. The first floors are devoted to public functions, living rooms are located exclusively on the second floor. From the outside of the building there are galleries for walks
Memorial monuments / cemeteries	The burial place is located beyond the boundaries of the city, on the territory of non-fertile soils. Residents are forbidden to put monuments on the graves, and the tombstones should be of such size that they can accommodate at most four praise poems about the deceased	<ul style="list-style-type: none"> – Historical statues and monuments are erected at the square – There are equipped burial places, with a column with the name of the deceased on them 	<ul style="list-style-type: none"> – Historical statues and monuments are erected at the square – There are no cemeteries
Building materials	Stones	<ul style="list-style-type: none"> – Wood: Used for the construction of bridges, pillars, etc. – Solid stone, sandstone, brick – the outer walls of buildings – Special coating for roofing – Glass or cloth – used in windows 	<ul style="list-style-type: none"> – Paver – used for paving roads – Marble as a material for stairs in buildings – Stone – for the erection of walls, as well as lava around the temple – Iron – doors, shutters – Precious stones used as floor coverings in the temple
Constructive characteristics	–	<ul style="list-style-type: none"> – The walls are made of stones and brick, the inner gap between them is covered with crushed stone – Roofs are flat 	<ul style="list-style-type: none"> – The thickness of the outer convex walls of residential buildings – 88.9 cm, concave – 53.34 cm. – Interior partitions have a thickness from 17.78 to 26.67 cm
Infrastructure: water supply systems	Primitive constructions for collecting rainwater. There are also special channels that provide water to all areas of the city throughout the year	Within the city, there is a part of the river, from which water disperses all over the city through the pipes. It is foreseen to collect rainwater in tanks in those areas where it is impossible to supply water because of the relief.	Water supply is provided in the bathhouse and in the fountains. There are drains and mourning for dirty water, and special storages for storing rainwater for further use.

The end of the table

1	2	3	4
Applied arts	<ul style="list-style-type: none"> – Making tableware from gold, bronze, silver – Wooden and stone products for the glorification of gods 	<ul style="list-style-type: none"> – Tableware are made of clay, but night pots are made of gold and silver – Ornaments and chains for slaves are made of gold 	<ul style="list-style-type: none"> – Lamps, tableware, jewelry made of gold and silver – – Mosaic for decorating lower galleries – Paintings adorn all the walls and walls of the city. The paintings provide detailed information on the science, history of the city and crafts

4. Conclusions

1. Utopian thinking has always guided the trajectory of creative thought, based on it as life-affirming goals, as well as ways to search for new social and artistic values. Actually, urban planning and architectural solutions embodied in perfect forms helped visualize utopian ideas, so architecture has become an important part of thinking about the place “which is nowhere”.

2. In their writings, Plato, More and Campanella focused on architectural and urban aspects as an important level of social utopia. In their works, special importance was paid primarily to the functional purpose of certain elements of the urban structure, which was expressed in the correct geometry of urban formation (aesthetic and visual characteristics, as a rule, were left out from the attention of philosophers). For example, Plato's work is characterized by greater attention to the location of public buildings in the structure of the city, while More and Campanella define them very broadly. This demonstrates the differences in their socio-political models, since Plato focuses on the complex and more precise hierarchy of various processes, while More and Campanella – on processes integration into everyday life is (as an example, using images on defense rings-ants for teaching children in “The City of the Sun» by T. Campanella).

3. The desire to create the ideal structure of the city, which should reflect the ideal social order, is quite significant. Urban formations are described as ideal geometric shapes (circle or square), divided into identical fragments, forming a holistic centric and at the same time equivalent architectural composition in the direction from the center to the periphery.

4. The central structure laid by Plato and Campanella reflects the concept of vertical hierarchy of the organization of society (domination of law and authority) and horizontal equivalence (social and property equality, lack of private property). At the same time, such geometric structures of cities appeal to archetypal ideas about the ideal world order in human consciousness (the concept of the world tree, mandala, etc.).

5. Numerological aspects that utopian philosophers use to confirm the ideality of their models, can be traced in all works of social utopians. Plato lays the city, which is divided into 12 equal parts, with a population of 5040; T. Moore writes that the state is divided into 54 cities, each of which has 6,000 families; T. Campanella describes a city with 7 building belts that are intersected by 4 main streets.

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Світлана Лінда, Анна Федак

У ПОШУКАХ ІДЕАЛЬНОЇ ФОРМИ: ГЕОМЕТРІЯ МІСТА У ТРАКТАТАХ ПЛАТОНА, Т. МОРА, Т. КАМПАНЕЛЛІ

Анотація. Статтю присвячено аналізу геометричних характеристик, містобудівної структури та архітектури утопічних міст та держав, а також їхнього взаємозв'язку з соціальними та політичними аспектами у трактатах Платона «Держава» та «Закони», Т. Мора «Золота книжечка, така ж корисна, як і забавна, про найкращий устрій держави і про новий острів Утопія» та Т. Кампанеллі «Місто Сонця». Дослідження ідеальних міст-держав, описаних філософами-утопістами, часто зводиться до аналізу їхніх політичних та соціальних характеристик. Однак, розглядаючи досконалі моделі суспільного устрою, філософи заторкували усі сфери людського життя, тим самим показуючи їхню взаємозалежність та рівнозначність у процесі формування єдиної системи. Для їхніх трактатів характерна увага до геометричних характеристик міст та архітектури, з метою створення відповідних умов життя для мешканців, в яких вони могли б реалізувати ті типи поведінки, які передбачало від них суспільство. Фрагментарні описи архітектури та планувальної структури міст призводять до низки неточностей та різних варіантів інтерпретації планування міста. Філософи-утопісти, апелюючи до історично-сформованих уявлень людства про ідеальне, описуючи планувальну структуру міст-держав, використовували правильні геометричні форми, ідею симетрії та центричності. Формуючи досконалі моделі суспільного устрою, вони послуговувались архітектурою, як фоном для забезпечення комфортного та функціонального простору, який відповідав би вимогам ідеального суспільства. В статті представлено розроблені авторами схеми міст-держав, відповідно до їхнього опису, а також проаналізовано та систематизовано інформацію щодо геометричних характеристик міст, публічних просторів, громадських та житлових будівель, що описані в трактатах філософів. Так, у працях Платона, Т. Мора та Т. Кампанеллі міста мають правильні геометричні форми (коло, квадрат), розбиті на рівні за площею частини, симетричне планування та уніфіковані житлові та громадські будівлі, – все це є важливим елементом досягнення утопічної моделі суспільства.

Ключові слова: утопія, архітектурна утопія, публічний простір, громадські та житлові будівлі.

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**TRANSFORMATION OF PARADIGM IN CONTEST FOR THE
DEVELOPMENT OF KYIV CITY CENTER IN THE 1930–1940s**

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Abstract. The main tendencies of transformation of the city's architectural and artistic field in connection with social and political changes caused by the World War II have been explored on the example of two key contests for the development of Kyiv city center (Government quarter in 1934–1935 and Khreshchatyk in 1944).

Key words: architecture of Kyiv, contest, Government quarter, Khreshchatyk, transformation of paradigms.

Starting with the establishment of a vertical control over art and culture that was finally crystallized in the USSR in the mid-1930s, and by the mid-1950s, Soviet architecture as a whole and the architecture of Kyiv, as the capital of the second in terms of the republic's significance, were primarily ideological and declarative, representative character. The main task delegated to the ruling elites was to legitimize the new social order and establish its power by creating an appropriate mythological field, which, like any invented tradition (according to Hobsbawm), was emphasized by historical reminiscences: “In fact, where possible, they [invented traditions] normally attempt to establish continuity with a suitable historic past” [1, p. 1].

However, the conditions prevailing within the relevant cultural and artistic environment were not homogeneous, substantially changing in time under the influence of a powerful external factor – the World War II. Conditionally breaking the corresponding field into “before” and “after”, the military conflict has made powerful deformations in the global perception of the development vectors of Kyiv architecture, which we will talk about in this article.

The architectural and artistic life in the capital of the Ukrainian SSR in the corresponding period was full of vivid events, from which we distinguish two main, most characteristic and representative, both in terms of scope and meaning, and by the galaxy of the represented masters: two contests for the development of the Governmental quarter in 1934–1935 – “before”; and the reconstruction of Khreshchatyk in 1944 – “after”.

The selection of competitive works is not accidental: in our opinion, conceptual projects are most presentable both in terms of manifestation of the ideological and declarative requirements of the customer, power elites, and the true creative idea of the architect. It is precisely in pure “paper” projects that both the declarative and the ideological and artistic component can be traced without the subsequent changes and layers that arise during implementation, often lead to impoverishment and distortion of the original idea due to various structural and financial obstacles.

Both contests were well covered both in the professional and in the widely popular media. Specific literature sources can be divided into two main groups: 1) Eyewitnesses and contemporaries of relevant events; 2) Later researchers from the Soviet and post-Soviet periods. Within the first group we should especially note the architect O. G. Molokin, who was the direct participant of the first contest and gave its detailed description in the article “Designing the Government Center of the Ukrainian SSR in Kyiv” [2]; and researcher M. P. Bilinkin, who described the second contest in the article “Main Highway of Kyiv: designing the Khreshchatyk” [3]. Almost all participants of the events touched them in their memoirs. They have not been left out from the attention of a large number of Soviet and modern researchers from Yu. S. Aseyev, S. K. Killeso, A. V. Ikonnikov, M. I. Grechini to B. L. Yerofalov-Pylypchak, B. S. Cherkes, V. E. Alyoshin, D. S. Khmelnytsky and others. We, as the author, have also devoted more than a dozen articles to this topic.

However, the outstanding importance, scale, complex and multifaceted ideological, political, social and artistic factors, a galaxy of invited masters and the fundamental issues posed by questions still inspire researchers to discover more and more facets of relevant events. In this article, we will analyze the transformations that took place in the specified architectural artistic field and try to interpolate the revealed trends and patterns on the general processes that took place in the construction life of Kyiv in the second half of the twentieth century.

Let us start with the identification of identities: both contests were initiated at the highest level of political elites, both of them invited the best architects of the country, both of them were supposed to change the historical center of Kyiv in a key way. Both almost did not touch (and according to D. S. Khmelnytsky, directly ignored) the surrounding residential development, highlighting only key administrative and public facilities as meaningful. However, the tasks and strategies for their solution had a number of fundamental differences, dictated by the transformation of the social and political paradigm.

The first contest for the development of the Governmental Quarter was initiated by the decision of the Central Committee of the Communist Party (b) of Ukraine [4] after returning the capital from Kharkov to Kiev in 1934, when the question arose about the creation of a new center for the governing apparatus of the Ukrainian SSR. A massive redevelopment was planned: the capital of Soviet Ukraine had to be transformed from “priestly-philistine <...> into the advanced industrial center”, according to the head of the Kyiv city council R. R. Petrushansky. It was planned to lay new transport arteries, change the zoning of the territory and, unfortunately, the demolition of numerous religious buildings. The new government quarter concentrating a number of administrative buildings, primarily the houses of the RNK and the Central Committee of the CPU (B) U, grouped around a large square for the ceremonial parades and demonstrations had to become the key core [5, p. 1].

The three rounds of the contest were attended by brigades led by:

Round I: Y. A. Steinberg, F. F. Oliynyk, V. G. Zabolotny, O. G. Molokin, V. K. Trotsenko, V. O. and A. O. Vesnin [2, p. 12];;

Round II: I. O. Fomin, K. S. Alabinyan, V. O. and A. O. Vesnin, D. M. Chechulin, F. F. Oliynyk, J. G. Langbard and P. F. Aleshyn, V. M. Rykov, J. A. Shteinberg and V. G. Zabolotny [2, p. 12];

Round III: I. O. Fomin, K. S. Alabinov, S. V. Grigorjev, D. M. Chechulin, and J. G. Langbard (The third round, whose participant works were often attributed to the second one, was discovered by the researcher during the processing of the materials in the archives of the Sofia Kyivska National Reserve, more details are given in other articles of the author [6, 7, 8 etc.]).

Thus, 21 projects of 13 brigades from all over the Soviet Union were presented at the contest, which makes it quite representative in terms of general trends of contemporary Soviet architecture.

The second contest for the restoration of Khreshchatyk, blown up by Soviet undergrounds [9, p. 286], was announced before the end of the World War II, which shows its great ideological and propaganda significance. “June 22, 1944, the Council of People's Commissars of the Ukrainian SSR announced a contest for the planning and development of Khreshchatyk. The initiator of its conduct was

the current leader of the Communist Party of Ukraine Nikita Khrushchev. The definition of the function of new structures was influenced by political factors ...” [10, p. 67].

The first round of the contest was attended by “full members of the Academy of Architecture of the USSR K. Alabyan, G. Golts, the full members of the Academy of Architecture of the Ukrainian SSR P. Alyoshin, O. Vlasov, V. Zabolotny, correspondent members of the Academy of Architects of the USSR V. Gelfreich, E. Levinson, I. Fomin, M. Parusnikov, I. Sobolev, Kyiv architects O. Tatsiy, A. Ivanchenko, prof. Steinberg heading the group of architects in Kiev, an architect from Kharkiv O. Kasyanov and others» [9, p. 286]. Vlasov, Tatsiy and Zabolotny were invited to the second round – the latter refused to participate [9, p. 315].

Consequently, considering the range of outstanding masters, the direct participation of senior party functionaries in the composition of jury commissions, and extensive press coverage, we can assert the approbation of competitive projects of national architectural tendencies, which, according to Khmelnytsky, automatically acquired the force of law and were obligatory for implementation.

Summing up the global similarity of the competition tasks, the environment, the conditions of implementation and the composition of the participants, let us turn to the study of differences. Not having the opportunity to submit an analysis of each of the bids within the same article, we will be inductive to identify the general tendencies that were followed in the contests and their stages.

I. Regard to existing development.

Contest for the development of the Governmental Quarter was started with the choice of a plot for future construction. Six principle decisions were developed regarding the location of the future center:

1. The Zvirynets variant, proposed by the architects V. M. Nesterenko and A. Ya. Zinchenko, proposed to place the center on the territory of the former Zvirynetsky fortress, at the highest point on the slopes of the Dnipro.

2. The Pechersk variant of the architects M. I. Grechin, M. Kholostenko and V. M. Onashchenko envisioned a government block on the territory of the racecourse.

3. The Lyvky version of the architect P. F. Alyoshin with the team transferred the government area to the crest of the slopes between the modern streets Lyvska and Shovkovychna.

4. A variant of the Proletarian (Pioneer) garden by V. I. Zabolotny with the team disclosed Khreshchatyk to the Dnipro. Unfortunately, the perspective solution was not fully appreciated by contemporaries.

5. An option proposed by a group of architects under the direction of V. G. Krichevsky, provided the dispersion of large administrative and public buildings along the uphill part of Kiev.

6. Architects P. G. Yurchenko and Y. Y. Karakis proposed placing the center on the site of the Mykhailivsky Golden-Domed Monastery (first turn) and Government Offices (second turn) [11, p. 53, 54].

The Contest Commission selected a plot on the place of the Mykhailivsky Golden-Domed Monastery, Vasylkivska (Three-Holy) Church, the Square of the Red Heroes of Perekop [12] (now Sophia Square) and the Government Offices. The square should have been 130 meters wide and more than 600 in length [5, p. 2].

The chosen plot caused a lively debate due to the proposal to demolish Mykhailivsky Golden-Domed Monastery. The modern Ukrainian periodical and special press often blames the choice for the architectural and artistic elite of the 1930s, in particular Yosyp Karakis, although his variant was the only one on the designated site, which preserved the cathedral building, with the placement of the building of the Central Committee of the CP (b) U on a semicircle, bypassing the temple. The insufficient force of protests and appeals for preservation of the monument is emphasized. However, most historians regard P. P. Postishev as the one who played a decisive role, the second secretary of the Central Committee of the CP (b) U, and, subsequently, the first secretary of the Kyiv regional committee of the party [13], who, ignoring the opinion of experts, influenced the final decision of the commission.

In the case of the second contest, the pre-destroyed Khreshchatyk street was selected as a building site. All submitted projects did not require significant destruction of the survived structures, in particular leaving the buildings of the Bessarabian market and the Central Department Store, built in pre-revolutionary and interwar periods, respectively. That is, in the postwar Kyiv, the setting of the conditions for a contest for the development of a new main artery of the city was much more loyal to historical development, which was completely ignored (and according to the opinion of many researchers, including the author, purposely destroyed) in the previous competition. In our opinion, this was due not only to the financial calculations and to the fact that the site was almost free – in the case of the Governmental quarter, Zvirynets and Lypky variants were also relatively vacant, and were rejected. The Proletarian version partially coincided geographically with the new contest and outstripped its task, offering the disclosure of Khreshchatyk to the Dnipro.

After the tremendous destruction caused by the World War II, the world generally changed its attitude to the historical heritage: large-scale loss of cultural heritage led to the creation of UNESCO as an organization designed to protect and cultivate the heritage of previous eras. Examples of destroyed cities and burnt down historic centers have reinforced the society's demand for the preservation of unique and original buildings.

In our opinion, the corresponding tendency also took place in the USSR, because the state rhetoric of 1941–1942 began an active appeal to the historical past as a means of mobilizing patriotic sentiment. As the confirmation of above there were numerous posters of the time of Moscow's defense, which follows a straight line from the prince's Russia through Peter to the power of that time; the official restoration of the church (and the suspension of the mass destruction of religious buildings), and so on. Despite the revisionist's attitude to the history of the Stalinist regime, in the postwar period, certain elements of the historical past are again “legitimized”, to underline, according to the canons of the invented tradition, the connection of a modern regime with previous experience. Appropriate trends also penetrate into architecture, reflected, on the one hand, in a relatively leaner attitude to surviving objects and in the use of “folk» figurativeness and ornamentation on the other, as we will discuss further. Global trends in the growth of the moral value of historic buildings and the crystallization of conservation and museum design approaches in the present form begin precisely in the postwar period. We can see the echo of the relevant tendencies on the example of changing the approach in the contests.

II. Social and city-forming role.

The task for a contest in the government quarter contained clear requirements for the houses of the RNK and the Central Committee of the CP (b) U, grouped around a large square for the celebration of parades and demonstrations [5, p. 1]. Most of the task was focused on the square and concomitant facilities:

- I. “Place the square near the main city highways and at the same time it should not be transit;
- II. The square should have a good connection with the railway and river stations;
- III. The square should dominate the city with the disclosure of the ensemble to the Dnipro, with the discovery of its unique topography;
- IV. Placement of the square should not cause large demolition of structures (primarily, housing stock);
- V. The central square should be located in the most upscale part of the city;
- VI. The chosen place of the square should provide the best compositional possibilities in creating an interesting architectural ensemble” [14, p. 16].

A separate place, according to Molokin, since the second round of the contest, was given to the monument to Lenin [2]. Construction of non-administrative, cultural structures was not mentioned. Housing construction was not foreseen.

In the contest in 1944 Khreshchatyk was considered as a street with not only administrative but also cultural buildings – in the projects you can see the city council, the Red Army Theater, the Museum of the Patriotic War, the Post Office and the dwelling. B. S. Cherkes points out that the corresponding multi-functionality had far-reaching goals: “Stalin was in a hurry with the creation of the United Nations and tried

to get as many places as possible in this organization by introducing his loyal satellites to it. <...> Therefore, the task of designing Khreshchatyk was supposed to place here, first of all, the structures of government, representative and public character and thus provide Kyiv with formal features of the capital of the state.” [10, p. 67].

D. S. Khmelnytsky in the article “Soviet Town Planning during the War 1941–1945” substantiates and consistently criticizes the very setting of the problem of such contests, states: “The city was considered as a feudal center with impressive architectural ensembles surrounded by indistinct and elemental mass of schematically indicated districts. The ‘art of urban planning’ was taken to mean the planning of conspicuous ensembles and nothing more” [15, p. 329]. In fact, the situation for a city where a large number of people were completely deprived of their roof or lived in a so-called barrier-type temporary housing fund raises a lot of questions. The housing, which was erected on Khreshchatyk, did not solve the problems of the city as a whole, and it was intended primarily for the privileged groups of the population.

However, with all formalism and representative rhetoric, the key change in approach, the departure from a clear division of the city into “quarters”: closed government and the rest, which was directly put in the contest in 1934–1935 biennium, cannot be overlooked. The tendency to create a holistic space of the central part, saturated not only with administrative but also with other structures, the gradual transformation of the type of building from the facade on the red line to the dispersed tends to “humanize” the urban space, deploying it to the ordinary urban, which will develop in urbanism from the second half of the 1950s. An example of Khreshchatyk blurred the territorial barrier between the “government” and the “public” part of the city, which began to prevail before the war.

III. *Transformation of monumental propaganda.*

After the first round of the contest in 1934–1935, the State Commission noted that “the central monument (monument to Lenin) in all projects did not receive proper significance and expressiveness” [2, p. 13]. Namely, the ruling elite, acting as a customer, prompted masters to change the compositional accents in the direction of monumentalization of the sculpture, as the core of the complex. As noted earlier, starting with the second round, the researchers, O. Molokin, the direct participant of the event, and S. Kilessov, our contemporary, mark the leading role of the monumental approach to the contest task. The customers of the competition, the Central Committee of the CP (b) U, require, first of all, a figurative solution of the buildings, and architectural tasks only after that. It is necessary “to find comparable and well-specified with the buildings interpretation of the monument, giving it a silhouette and character, corresponding to its value” [2, p. 15].

Fomin and Zabolotny interpret buildings as a peculiar background, a background for a monument of heroic scale. Significant hypertrophy of the sculpture manifests itself in the work of Alabyan – a monument, in fact, dominates in space, shifting the compositional accent. In the projects of Alyoshin, Langbard and Rykov, there is a continuation of the trend of installing a monument on a pedestal column, which is executed accordingly to the general style solution of the complex. The proposal of Chechulin in general transforms the complex of structures of the RNK and the Central Committee of the CP (b) U into a colossal pedestal, a cupboard, a sculptural arch crowned by a monument to the leader. The only project that departed from the general course, one can consider the architect's choice of Oleinik – but his idea was subjected to decisive criticism.

In the contest projects of Khreshchatyk in 1944, the sculpture plays a much smaller role – in all the proposed projects, the authors solve vertical accents due to architectural forms: campanile towers, as G. P. Golts, P. F. Alyoshin or V. I. Zabolotny; obelisks like O. T. Tatsiy or residential development, as O. V. Vlasov. And although the bathos of personality cult is still far away, the tendency towards unpersonalization, the creation of monuments by architectural, and not just sculptural means, the departure from a monument of heroic scale toward multisculptural compositions is directly reflected in urban studies. The transformation caused by global social and psychological shifts in society, where each individual in the practice of war felt the power of the collective, and not a separate leader, reinforced by the rhetoric of

propaganda about the “nationwide” victory, is directly implemented in changing the approaches of even the formal capital ensembles.

IV. *The return of folk motifs.*

The history of the Ukrainian Art Nouveau and Neo-Baroque in the Soviet architecture is surprisingly complex and dramatic. After obtaining free development in the first post-revolutionary years and some state support in the course of the policy of “root-fixing”, the National Art Nouveau and Neo-Baroque became the first victims of censorship cleansing and repressions of the mid-1930s. And if some of the master's projects are simply corrected as the V. G. Krichevsky's Shevchenko Museum in Kaniv [16], others with the corresponding projects lose their contests and are criticized for “inconsistency with modern architecture”, such as P. F. Alyoshin and V. G. Zabolotny at the contest for the Governmental Quarter, some are repressed and eliminated, accused of bourgeois nationalism, as D. M. Dyachenko. Accordingly, the three stages of the 1934–1935 contest tendentially show an unofficial ban on the citation of Ukrainian traditional architecture and any national historical variations.

However, a change in the propaganda paradigm during the war and the self-legitimization of the ruling elites through the mythological connection with the historical past leads to a revision of these guidelines, as it has been mentioned before. Along with the marked increase in the moral value of historical achievements against the background of massive destruction, it leads to a revival of interest in folk architecture and the Ukrainian Baroque as a means of architectural and artistic expression and underscores the national and local figurative identity (which, according to Cherkes, also had political motives when the UN was created [10]).

Accordingly, the contest for the reconstruction of Khreshchatyk was a collection of vivid ideas and variations on the topic of Ukrainian motifs, expressed in the citation of baroque or traditional rural architectural forms, as well as in decoration, color scheme, selection of materials for decor. The projects of V. G. Zabolotny and O. O. Tatsiy have been particularly distinguished in it. In the final version, the corresponding trends become more restrained, in the meanwhile, in the widespread use of ceramic decoration of facades with folk motifs, small sculptural plastics and decor. Considering similar projects in other Soviet republics, we can assert the formation of a certain canon of the Soviet post-war neoclassic, which by slightly reducing the heroic scale of elements, allows their national diversity to be identical to the basis of neoclassical forms of structures: a kind of compromise between the interwar Empire style and national variations.

Conclusion

In complex conditions of the Stalinist dictatorship, creative searches and certain uncertainty, national architectural contests are gaining the leading importance, as a possibility on the one hand, dialogue in artistic circles, and on the other – direct delegation of the will of the ruling elites. Starting from contests for the Palace of Workers in Petrograd in 1919 and the Palace of Labor in Moscow in 1922–1923 [17], open and closed multi-stage contests define the vector of development and determine the leading accents. Architectural contests were an extremely important phenomenon, which went beyond the choice of a particular project for a specific task – it was a place of synthesis, the creation of a new stylistic doctrine and the approval of the development vector in architecture of those years.

Based on the analysis of two contests in Kyiv: Government Quarter in 1934–1935 and reconstruction of Khreshchatyk in 1944, we followed the important tendencies of the gradual transformation in architectural and artistic field under the influence of global social and political changes caused by the World War II.

Trending in the direction of a certain liberalization:

1. The regard of ruling elites to previous development and historical experience as a whole;
2. Social and city-forming role of the central part of the city and reducing the territorial barriers between the elite and the average population. Conditional humanization of the administrative center;

3. Transformation of monumental propaganda with a gradual departure from the heroic scale and cult of personality;

4. The return of folk and Neo-Baroque motifs to architecture as a means of national identity and creative distinct expressiveness.

Accordingly, the indicated tendencies can be extrapolated to a broad public cultural and artistic field of Kyiv and Ukraine in the mid-1930s – mid-1950's.

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Андрій Марковський

ТРАНСФОРМАЦІЯ ПАРАДИГМ У КОНКУРСАХ НА ЗАБУДОВУ ЦЕНТРУ КИЄВА 30–40-х рр. ХХ ст.

***Анотація.** У статті досліджено трансформації архітектурно-мистецького поля України 1930–1940-х років та далі до середини 1950-х, під впливом зовнішніх факторів, зумовлених Другою світовою війною. За основу пошуків прийнято матеріали двох провідних конкурсів: на забудову урядового кварталу 1934–1935 років та відбудову Хрещатику 1944 року, як найбільш тенденційні та представницькі події у Київській архітектурі періодів “до» та “після» війни в означеному хронологічному інтервалі.*

У складних умовах сталінської диктатури, творчих пошуків та певної невизначеності, провідного значення набувають загальнодержавні архітектурні конкурси, як можливість з одного боку, діалогу у мистецьких колах, а з іншого – прямого делегування волі правлячих еліт. Починаючи від завдань на Палац робітників у Петрограді 1919 р. та Палац праці у Москві 1922–1923 рр., відкриті та закриті багатоступінчасті конкурси задавали вектор розвитку, визначали провідні акценти радянської архітектури та були надзвичайно важливим явищем, що виходило за межі вибору того чи іншого проекту під конкретне завдання – це було місце синтезу, створення нової стилістичної доктрини та затвердження вектору розвитку архітектури тих років.

Дослідником взято за основу загальну подібність умов поля, в яких існувало архітектурно-мистецьке життя Києва 30-х і 40-х років ХХ ст.: підсилення вертикалі імперської влади, держзамовлення, репресії та декларування ідей правлячих еліт напряму через засоби монументальної пропаганди. Також враховані ідентичність матеріально-технічних можливостей та подібний склад учасників. Тим часом відслідковується низка важливих закономірностей поступової трансформації поля під впливом глобальних соціополітичних зрушень, спричинених Другою світовою війною.

Тенденційно трансформуються у бік певної лібералізації:

- 1. Ставлення правлячих еліт до попередньої забудови та історичного досвіду загалом;*
- 2. Соціально-містоформувальна роль центральної частини міста та зменшення територіальних бар'єрів між елітою та пересічним населенням. Умовна гуманізація адміністративного центру;*
- 3. Трансформація монументальної пропаганди з поступовим відходом від героїзованого масштабу та культу особистості;*
- 4. Повернення народних та необарокових мотивів в архітектуру як засіб національної ідентифікації та творчої самобутньої виразності.*

Відповідно, означені тенденції можуть бути за допомогою індуктивного методу екстрапольовані на широкий загал культурно-мистецького поля Києва та України середини 30–40-х років XX ст. (і далі до середини 50-х рр. XX ст.).

Ключові слова: *архітектура Києва, конкурс, урядовий квартал, Хрещатик, трансформація парадигм.*

Oleg Sleptsov, Ali Alimadad Soltani

FEATURES OF FUNCTIONAL-PLANNING SOLUTIONS IN THE ARCHITECTURE FORMATION OF CONTEMPORARY IRANIAN SHOPPING AND ENTERTAINMENT COMPLEXES

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Abstract. Based on the analysis of modern experience of architectural organization in shopping and entertainment complexes, in this study authors have identified the main functional-planning schemes of the Iranian shopping and entertainment complexes. A correct approach to compositional solutions and shopping and entertainment complexes formation has been considered in this article. The existing models of this type of buildings in contemporary cities of Iran have been analyzed, large shopping and entertainment complexes have been particularly regarded.

Key words: shopping and entertainment complex (SEC), functional-planning structure, composition solutions.

1. Introduction

The rapid development of science and technology, which we can observe over the past decades, has been reflected in the architectural space of the whole world and also affects the architecture of Iran. A large number of established stereotypes has been changed, new gadgets and social networks are close to replace many functional processes from our everyday life, including the formation process of surrounding space (Abyzov, V. A., 1985). All these aspects allowed to create new conditions and requirements for architectural environment designing in the East. The interior and exterior space gradually ceases to exist separately and it's synthesizing in forming new systems, sometimes even peculiar ecosystems and the center of those is human.

Environment is a concept of a global scale, it covers natural conditions of the material world which cannot be influenced by them (natural environment), and the adapted conditions of all processes and types of life activity (artificial environment) as well. The world of artificial and natural environment is also a subject of interpenetration and synthesis due to the increasing human activity. However, in any form-making activity there are some issues that combine variety of aspects into one, therefore the object which is projecting becomes more perfect and self-sufficient (Timokhin, V. O., 2010). It is important to take an integrated approach to the environmental design process, which provides the predevelopment of algorithm for actions that pass through certain "filters" of the variable selection to get the best solution.

Modern technologies allow to solve many issues including the artificial environmental formation issue. But the environment itself constantly requires elaboration of additional techniques and methods for its organization and development, reconstruction and modernization (Sleptsov, O. S., 1999). For example, it is easier to develop the structure of a dwelling unit due to its small size and the structure of large social and cultural centers

is much more difficult to form because of the size and expanded room nomenclature. These premises are designed for various functions such as work, leisure, education, culture, that is why it is very difficult to combine them together. In conditions of contemporary Iran, such complexes are subject to very significant changes, frequent replacement of functions, modernization, which is why the principles of universality and transformability in the architectural and planning organization of Iranian construction are most relevant. The transformability and universality principles may be well supplemented by a number of other architectural forming principles which are characteristic for space organization, such as the principle of complexity, flexibility of space, functional accessibility, spatial development, systematicity, etc. (Attavna, Bashar., 2011). Consideration of such problematics on the basis of the Iranian SEC construction is possible through the prism of typological features that determine the functional-planning and volume-spatial structure of a building.

2. Analysis of recent research and publications

The publication analysis considering issues of space harmonization and architectural – planning features of the SEC buildings organization as the main scientific directions of the architecture development in SEC of Iran and the world. Many scientific studies of local and foreign authors are devoted to the environmental typology issues. It is necessary to mention scientific studies of Abyzov V. A. (1984, 240 p.), Kutsevich V. V. (2004, 455 p.), Timokhin V. O. (2008, 628 p.). These and other authors use the concept of a systems approach, considering architectural environment as the integrity of the human material world conditions on various levels of its modeling. *Breus A. I.* (1990, 199 p.) and *Attavna Bashar* (2011, 245 p.) paid a lot of attention to the development of shopping and entertainment architectural complexes. However, the topic of functional planning of the space remains not fully opened, which determines the relevance of this research.

3. Research findings

To compile up recommendations for designing and arranging the internal space of shopping and entertainment complexes of Iran, it is efficient to analyze already existing global and local experience of such type of building design and eventually determine its area and functional planning solution.

The research is focused on searching of necessary aspects of space development of the SEC due to its modernization, universality and complementarity of various functional zones. Complex functional-planning schemes of shopping and entertainment complexes include a wide range of zones which are blocked by a developed communication system of interconnections (vertical and horizontal). (Abyzov, V. A., 1985). It is necessary to remember that while drafting up functional-planning schemes of the Iran's SEC, it is needed to follow some requirements such as economic, functional and technological, ecological, aesthetic, socio-demographic, ergonomic and traditionally-cultural, which are the basis for this type of planning. For example, functional and technological requirements allow to take into account construction conditions to make possible the usage of new technological processes inside of the building and allow possibility for further re-planning and transformation of space. Economic requirements make possible to use materials that guarantee a reduction in construction costs, to apply constructive technologies and rational architectural solutions. And cultural-traditional requirements allow us to find the right approach to the SEC architecture formation taking into account the features of culture and traditions of Iran.

Systematization of contemporary types of shopping and entertainment complexes has a great meaning in principles defining their architectural and planning organization. SEC are usually classified according to such basic features as size, planning organization and place in the service system, seasonality of use, compositional solution, form of plan and its location in the planning structure of the city (Kutsevich, V. V., Abyzov, V. A., 1990).

The functional-planning schemes of SEC are characterized by four main types of this building: **small, medium, large and very large (complex)**. This kind of classification is also characteristic of the Iranian shopping and entertainment architectural complexes (Fig. 1).

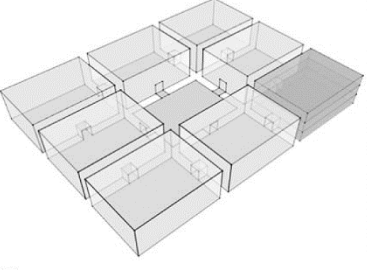



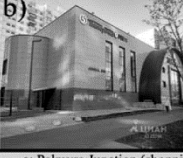

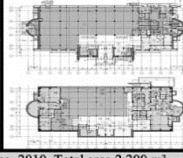
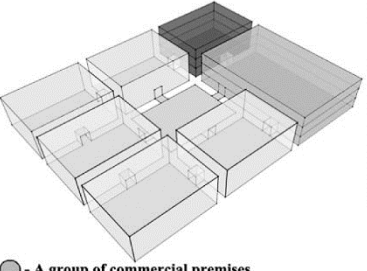


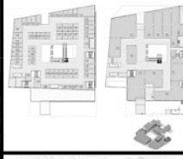
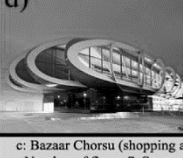

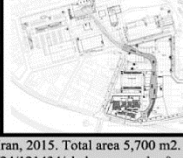
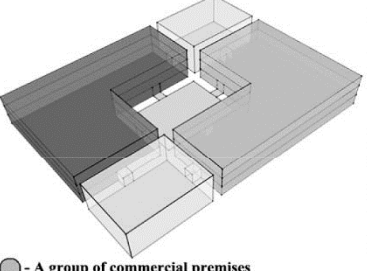





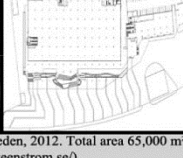
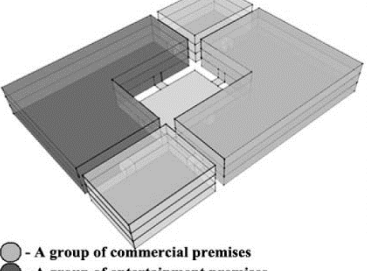
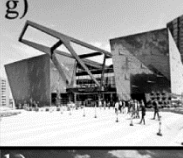

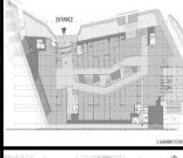



Typological signs		Model of the complex	General view of the complex
Architectural and planning organization of shopping and entertainment complexes by size and capacity	Small Trade + Entertainment	<p>Total area from 1000 to 3000 m²</p>  <p>● - A group of commercial premises</p>	<p>a)   </p> <p>b)   </p> <p>a: Palmyra Junction (shopping center) Cape Town, South Africa, 2010. Total area 2,200 m². Number of floors 1. Source: (http://www.rba.co.za/projects/retail/22/Palmyra_Junction) b: Lady shopping center (shopping center). Moscow, Russia, 2000. Total area 2,650 m². Number of floors 2. Source: (http://metrplus.com/complex/55)</p>
	Medium Trade + Entertainment	<p>Total area from 3000 to 9000 m²</p>  <p>● - A group of commercial premises ● - A group of entertainment premises</p>	<p>c)   </p> <p>d)   </p> <p>c: Bazaar Chorsu (shopping and entertainment center) Tehran, Iran, 2015. Total area 5,700 m². Number of floors 7. Source: (https://www.kojaro.com/2016/8/24/121434/chahrsu-complex/) d: Mediacite Mall (shopping and entertainment center) Liege, Belgium, 2009. Total area 9,750 m². Number of floors 2. Source: (https://www.mediacite.be/)</p>
	Large Trade + Entertainment	<p>Total area from 9000 to 30000-85000 m²</p>  <p>● - A group of commercial premises ● - A group of entertainment premises</p>	<p>e)   </p> <p>f)   </p> <p>e: Emporia mall (shopping and entertainment center), Malmö, Sweden, 2012. Total area 65,000 m². Number of floors 4. Source: (https://emporia.steenstrom.se/) f: The Street Ratchada (shopping and entertainment center), Bangkok, Thailand, 2016. Total area 42,000 m². Number of floors 7. Source: (http://www.thestreetratchada.com/)</p>
	Complexes Trade + Entertainment + Business functions	<p>Total area from 50000 to 150000 m² and more</p>  <p>● - A group of commercial premises ● - A group of entertainment premises ● - A group of various public buildings</p>	<p>g)   </p> <p>h)   </p> <p>g: Buyaka Mall (shopping and business center) Istanbul, Turkey, 2012. Total area 155,365 m². Number of floors 4. Source: (http://www.buyaka.com.tr) h: West Edmonton Mall (shopping and entertainment center) Alberta, Canada, 1981. Total area 350,000 m². Number of floors 3. Source: (http://www.wem.ca/?utm_source=google&utm_medium)</p>

Fig. 1. Suggestions for functional-planning organization of shopping and entertainment complexes

Source: scheme by Ali Alimadad Soltani

Small SEC (shopping centers in microdistricts) serve microdistricts for 6000–30000 inhabitants and combine several small enterprises and institutions, their area is 1000–3000 m². Radius of transport and pedestrian accessibility is 500 m, approximately 5–10 min. Accommodate from 6000 to 10000 visitors.

Medium SEC (District shopping centers) serve residential areas for 30–100 thousand inhabitants with a large number of enterprises, institutions and public service organizations. The area varies from 3000 to 9000 m². The radius of walking and transport accessibility is 5–10 minutes. The number of visitors is up to 40,000 people.

Large SEC (regional shopping centers), urban significant, serve areas of more than 100 thousand inhabitants and combine multi-component facilities with various forms of trade, food, leisure, communication, entertainment and information. Area is from 9000 to 30000–85000 m², able to accommodate more than 100,000 visitors. The radius of walking and transport accessibility is from 10 to 30 minutes.

Very large (complex) SEC (Superregional shopping centers) are located in the public centers of large cities, combine multi-component cultural, everyday, shopping and entertainment facilities. The area varies from 50,000 m² to 150,000 m² or more. The radius of walking and transport accessibility is from 30 minutes to 1.5 hours. Capable to accommodate over 150,000 visitors. Large shopping and entertainment complexes include a group of retail premises and a group of entertainment premises (which may include playgrounds, multiplexes and leisure facilities), general purpose premises, consumer services, catering establishments (cafes, restaurants, bars, canteens), business center premises, administrative and business institutions, boutiques, exhibition halls and more.

Natural and climatic conditions, the same as a design and construction zones, play an important role in designing of trade and entertainment complexes of Iran. All volume-spatial solutions of SEC and its accepted scheme (open, covered, half-open) are often dependent on such zoning.

The system approach will help in modeling of necessary parameters of space, develop acceptable search options for the future model, classify and systematize the SEC according to various typological characteristics, which, in general, will allow for the complex formation of the architectural space of the institution, starting with trade, recreation and leisure zones and ending with the landscape of the territory. Purpose of the research outlines the boundaries of this article and the possible development directions of the designed space of SEC in Iran (Linda, S. M., 2010).

4. Conclusions

There is a reasonable need in searching for a new ways and methods of complex architectural space designing of shopping and entertainment complexes in Iran. The authors propose new models and approaches to the harmonization of compositional solutions and ways of space reorganization in the structure of contemporary megapolices and especially of large shopping and entertainment structure complexes in the cities of Iran. Conclusions of the research provide for an integrated approach to the architectural environmental analysis of the East. Such models are completely dependent on the algorithm of the developed sequence of the designed modules of various sizes and specificities. The contemporary design of SEC in Iran is based on the individual design, which is grounded on the previously developed basic typological models and those models are conditional theoretical models obtained by the experiment. So, the designers introduce conditional hypotheses “what if?”. Predicting the possible development of space for various functions that may appear in this zone, the architect will be able to improve and modernize space, to determine the degree of possible interpenetration for different functional zones into each other.

The main research conclusion is that the proposed method will help to significantly improve the architectural space design of the Iranian shopping and entertainment complexes, to harmonize the environment and interconnect the functions of leisure and shopping.

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Олег Слепцов, Али Алимадад Солтани

ОСОБЛИВОСТІ ФУНКЦІОНАЛЬНО-ПЛАНУВАЛЬНИХ ВИРІШЕНЬ У ФОРМУВАННІ АРХІТЕКТУРИ СУЧАСНИХ ТОРГОВО-РОЗВАЖАЛЬНИХ КОМПЛЕКСІВ ІРАКУ

***Анотація.** У цьому дослідженні, основаному на аналізі сучасного досвіду архітектурної організації торгово-розважальних комплексів, виявлено основні функціонально-планувальні схеми ТРК. Подано правильний підхід щодо композиційних вирішень і формування торгово-розважальних комплексів та проаналізовано вже наявні моделі цього типу будівель у сучасних мегаполісах, зокрема розглянуто великі торгові й розважальні комплекси. Основна спрямованість дослідження полягає в пошуку необхідних аспектів розвитку простору ТРК за рахунок його модернізації, його універсальності й взаємодоповнюваності різних функціональних зон. Складні функціонально-планувальні схеми торгово-розважальних комплексів охоплюють широкий перелік зон, що блокуються завдяки розвиненій комунікаційній системі взаємозв'язків (вертикальних і горизонтальних). Систематизація сучасних типів торгово-розважальних комплексів має дуже велике значення у визначенні принципів їх архітектурно-планувальної організації. ТРК прийнято класифікувати за такими основними ознаками як величина, планувальна організація і місце в системі обслуговування, сезонність використання, композиційне рішення і форма плану, розташування в планувальній структурі міста. Для функціонально-планувальних схем ТРК найхарактерніші чотири основні типи цієї будівлі: малі, середні, великі й дуже великі (комплекс).*

***Ключові слова:** торгово-розважальний комплекс (ТРК), функціонально-планувальна структура, композиційні вирішення.*

IGOR SEREDYUK – AN ARTIST WHO WAS AHEAD OF TIME

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Seredyuk Igor (1929–2016) – Ukrainian architect and designer, theorist of architecture and contemporary design, professor.

In the 70's and 80's he became one of the key figures in the theory of architecture and design, architecture and design education in Ukraine and influential figure in the education system of Central and Eastern Europe.

Igor Ivanovych Seredyuk was born in 1929 in Poland. He received his architectural education at Lviv Polytechnic Institute, having graduated from the Department of Architecture (1948–1953) and postgraduate studies (1960–1962).

He had a powerful scientific and practical influence from the scientific supervisor during postgraduate studies, the Head of the Department of Architectural Design, Professor I. Bagensky. Moreover, an overall creative, democratic atmosphere prevailed at the department. It also encouraged a young scientist.

Talent, perseverance, inclinations of the leader and exceptional desire for the best result – these qualities were noted by the colleagues of I. Seredyuk. The traditions of Lviv School of Architecture and Design in the sphere of formation of the subject world and the environment of human activity had a significant influence on the formation of his professional outlook and creative personality.

In the period of post-war recovery of Ukrainian economy, there were radical changes in all social sectors, the transformation of traditional industrial paradigms, and changes in value orientations. Design activity became an integral part in terms of social and cultural dimension. In the context of pan-European trends, in 1959 there was a training of specialists by “Interior and Furniture Design” specialty at Lviv Polytechnic, and in 1960 – “Architecture, Furniture, Interior”. Designing activity was shaped and developed as a socially and culturally necessary phenomenon, caused by socio-economic and cultural-ideological development of society, social production and consumption.

I. Seredyuk was one of the first to evaluate the role and importance of design in shaping the human environment and actively engaged in practical and theoretical solutions to this important problem. At the beginning of the 1960s, the Student Design Bureau (SDB) of Lviv Polytechnic developed a program of built-in transformed equipment for student dormitories. A piece of equipment of this program (introduced by I. Seredyuk) was exhibited at the Exhibition Achievements of National Economy in Moscow in 1962 and had a silver medal award. This program has become a model for the conceptual approach to the formation of economic and social housing, which would provide on this basis the minimum needs of the consumer. In 1964 Igor Seredyuk developed upholstered chairs for the assembly hall of the first building of Lviv Polytechnic. At the beginning of the 70's he and S. Migal took part in the development of a program of furniture and equipment for educational institutions of the Ministry of Education of Ukraine, which was soon implemented.

In 1963, I. Seredyuk defended his thesis “Architectural and structural prerequisites of designing furniture of modern apartments” and received a scientific degree of Candidate of Architecture.

In 1964 he underwent a scientific internship in France. Personal meetings with Le Corbusier in his workshop, permission to use the library, archive and communication within the workshop expanded the range of professional interests of I. Seredyuk. Attending cycles of lectures at the Ministry of Construction and at the Science and Technology Center in Paris, read by V. Bodiansky, J. Candilis, M. Lads, B. Lassou, J. Pruve, J. Schein, as well as personal contacts, exchange of articles, monographs and scientific ideas with M. Benz, A. Baie, B. Barkin, R. Bosil, K. Dvorzak, U. Eko, G. Lavrik, G. Minervin, A. Mol, J. Friedman, I. Strautmanis, V. Kurt – Umerov, O. Shvidkovsky contributed to the formation of critical analytical approaches to architecture and alternative views on its theoretical problems, broad understanding of the environment as a complex multifactorial and mobile phenomenon, the study of patterns of which requires the usage of interdisciplinary approaches. The main theoretical results, combined into a corresponding system of psychological analysis of the environment, are the consequence and further development of the ideas generated in the works of V. Dakhn, M. Demin, G. Lavryk, V. Mironenko, I. Fomin, A. Yablonsky. The works of these authors actually laid the foundations for the development of national science in the design of the architectural environment of the late XXth century.

In the 1965–67s I. Seredyuk worked as a Head of the Department of Building Materials at the Royal Technical University in Cambodia. Along with his teaching activities, he designed several villas for the university directorate and they were built. For his successful national training and cultural development, he obtained an award of the Order of Commander Cambodia by the People's Republic of Sihanouk.

I. Seredyuk was one of the active organizers of architectural and design education in Ukraine. In 1971 the Department of Architecture was restored at Lviv Polytechnic Institute (since 2001 – the Institute of Architecture), the dean of which was I. Seredyuk, which contributed to the qualitative evolution of architectural education in Lviv. The structure of the institute included the following departments: “Architectural Design” (the head of the department is Prof. I. Seredyuk); “Urban Planning” (Head of the Department – Prof. A. Rudnytsky); Architectural Structures (Head of the Department – Assoc. Prof. Y. Shvets); “Drawing and Painting” (Head of the Department – Assoc. Prof. R. Lypka, since 2003 – Department of “Design and Fundamentals of Architecture”, Head of the Department – Prof. B. Cherkes). In 1992, there was the Department “Reconstruction and Restoration of Architectural Complexes” (now “Restoration of Architectural and Artistic Heritage”, headed by Professor M. Bevz).

There is a democratic atmosphere at the Department. The staff of teachers and students was the only family for which the sole purpose and sole criterion was Architecture. The School of Architecture is becoming a powerful “locomotive”, which forms and produces talented specialists. It not only generates new ideas and design methods, but also pioneers fundamental changes in the pedagogy.

In the 60–70s I. Seredyuk took part in the work of the state boards of the Ministry of Industrial Policy of Ukraine on the assessment of the quality of household goods and consumer goods. The experience gained is used in the program materials of “Lviv Integrated Product Quality Management System (IPQMS)”, which is implemented in its territory on the recommendation of the USSR leadership. It is also worth noting that during this period Lviv became one of the centers of Central and Eastern Europe in the field of industrial design. The serial bus “Tourist” (designed by Ya. Trach, R. Mirensky) at the World Exhibition in Belgium (Brussels, 1958) was marked with a gold medal, while the buses “Ukraine – 67” and “Ukraine – 69” (V. Pyvovarov, P. Chepel) at the 18th and 19th international weeks in France (Nice, 1967, 1969) received a silver medal and a Grand Prix for high performance and comfort. The first domestic TV models of the Ist – IVth generation were being developed at the SDB of Lviv Television Plant: Lviv, Verkhovyna, Vognyk, Electron (A. Glushko, B. Bratyko, M. Zubchenko). SDB of Lviv Forestry developed conceptual furniture (S. Migal) for study rooms and laboratories, which had a gold medal award at the Exhibition of Achievements of National Economy in Moscow (1972, 1975). With the opening of Lviv House of Models in 1954, costume collections (S. Semenko, L. Mazur, A. Shevchenko) amazed visitors and juries of exhibitions of fairs in Tokyo, Marseille, Paris, New York, Moscow, Warsaw, and Budapest with the creative imagination.

As an ideologist and a bright representative of Lviv School of Design, the so-called “star generation” of Ukrainian design in the 60–80s, I. Seredyuk advocates the necessity to transform the methodology of

designer training, to integrate all types of plastic art into the architectural environment. “Functionalism, as I. Seredyuk noted, which for decades has unified, standardized and unified our environment – architecture, urban planning, design, has come into sharp contradictions with real human needs and opportunities. A person no longer wants to live in the same residential buildings, work and study in the same interiors, walk the streets with monotonous construction ... The central aspects of creativity – cultural, psychophysical and semantic ... The modern creative process is complex, systematic”.

In 1977–1987 I. Seredyuk – Rector of Lviv State Institute of Applied and Decorative Arts (LSIADA, since 2004 – Lviv National Academy of Arts). The training of artists in decorative and applied arts at the Institute was conditioned by the traditional art and craft model by type of the Bauhaus School of Architecture and Art (1919–1933) on the basis of combination of education and craft. Handwork with materials was considered a perfect and irreplaceable school of artistic skill and development of creative abilities. The ideology of decorativeism largely dominated the institute.

In the period of post-industrial society formation, radicalism in architecture and design, transformation of industrial paradigms into new post-industrial ones, different attitudes towards creativity, traditional principles and norms of design were formed. The foundations of these searches were laid by prominent designers – educators of the Ulm High School of Formation (1953–1967) by M. Bill, T. Maldonado, and H. Gugelot. Their aim of creativity was in modeling in the social space of new reality in the context of combination of scientific and technological progress and aesthetics.

The idea of projection, formation of culture of project interdisciplinary thinking and culture of artistic education served as the basis of fundamentals of the training of specialists’ methodology by Professor I. Seredyuk. To accomplish these tasks, together with the Departments of “Interior and Furniture Design” (S. Migal, Head of the Department) and “Design of Clothing” (T. Kuzminska, Head of the Department), he created the qualification characteristics and models of specialists for acquiring new knowledge, skills and capabilities. A number of disciplines have been introduced into the curricula with a focus on a broad integration with manufacturing. The subordination of all academic disciplines to the main one – design, promotes qualitative preparation of specialists for the conditions of real practical activity, as well as tangible practical usefulness of the obtained knowledge. The theory and practice of design, combined with the modern production and technological sphere, became one of the initial models for the introduction of new ideas, conceptual and contextual approaches. It was also facilitated by the experimental and creative associations of teachers and students, created in the research sector of the Institute: “Prestige” in the field of costume design, “Spectrum” – environmental design and SDB in furniture design. The structure of the Association “Prestige” (supervised by O. Korovytsky) included all sewing schools in Lviv, which implemented creative ideas of students of the Institute. The design of furniture – the program of furniture “Universal” (B.Kurlishchuk, S.Migal) for Production Association (PA) “Lvivderev”, due to which nine experimental sets of furniture were exhibited at the regional exhibition (Lviv, 1981) – provoked positive public resonance. In 1982–83, a series of chairs and sets of cabinet furniture “Vatra”, “Crystal” and “Systema” (co-authored with V. Pavlov and O.Tazalov) were developed under this program. They were presented at the IVth All-Union contest “Furniture-83” in Moscow and honored with juries I, II and special prizes respectively. The preparation of artists of decorative art in interior and furniture, modeling of clothes was carried out with the implementation of complex coursework and diploma works on real subjects and taking into account their further work in the conditions of industrial production. These are numerous interior design of public buildings, playgrounds in Lviv, socio-cultural environment in the National Historical and Cultural Reserve “Naguevychi” – “Pathways of Ivan Franko”: etc.

The project conceptualism of interior and furniture design, artistic modeling of clothing, consumer goods in the field of innovation and the search for national identity became a specific project form of knowledge of Lviv School. They are an example of new thinking and a reflection of globalization and national aspects of environmental design within the walls of LSIADA. Reviews of diploma works of students of architectural and artistic universities in Central and Eastern Europe serve as a proof. Scientific and

methodological council for aesthetic education and art education at the Academy of Arts of the USSR and the Ministry of Education of the USSR by annual materials of All-Union exhibitions of diploma works of students of art universities in Vilnius (1978), Kiev (1979), St. Petersburg (1980), Baku (1981), Tbilisi (1984), highly appreciated new searches and professional level of completion of diploma projects of interior design, furniture and clothing of Lviv School. In these forums Professor I. Seredyuk acted as a representative of the Ukrainian School of Architecture and Design, and the rector of the National Academy of Fine Arts and Architecture (Kyiv), People's Artist of Ukraine, Professor of Fine Arts Oleksandr Lopukhov. Meetings with leading artists, academicians of the Academy of Arts, leaders of the Republics, where forums were held, facilitated the establishment of organizational and creative contacts.

The first persons of Azerbaijan (G. Aliyev) and Georgia (A. Shevardnadze) separately received the reception of Lviv delegation, as Lviv citizens were preparing national personnel for these Republics. LSIADA is on a par with the Lithuanian and Latvian Academies of Arts, Moscow Art and Industrial Academy named after S. G. Stroganov (Russia). It was facilitated by the great work of Professor I. Seredyuk in the scientific and pedagogical field and his high regard.

During the principalship of I. Seredyuk, the social and physical infrastructure of the LSIADA was enhanced. A new experimental and laboratory building of the Institute (architect M. Vendzylovyeh) and a food processing plant (architect A. Konsulov) were under construction. The design and equipment of these buildings by their employees and pupils was carried out in accordance with Lviv tradition of constructing and designing educational buildings, initiated by Rector of Lviv Polytechnic Yu. Zakhariievych.

In 1982–1985 he became a UNESCO expert and head of the Ministry of Higher and Secondary Specialized Education of Ukraine on long-term, cross-national research in the topic No. 11 “New Technologies in Education”. In 1992 he became a Ukrainian correspondent from the international magazine L'Arca (Italy, Milan).

In 1988–1999 I. Seredyuk – Professor of the Department of Architectural Design of Lviv Polytechnic. In 1999 Professor I. Seredyuk celebrated his 70th birthday at the Architecture Department of Lviv Polytechnic and moved to live in Prague with his daughter, who worked and lived there. I. Seredyuk died at the age of 87 in Prague, where he lived in his recent years.

Professor Igor Seredyuk is the author of about 80 articles, 8 of which were published in foreign publications (France, Russia, Italy, Cambodia), 3 monographs “Culture of your apartment” (1970), “Perception of the urban environment” (1979), “Urban environment and optimization of human activity” (1987, co-authored). The latest monograph gave rise to school of psychophysical analysis in architecture, recognized by the Institute of Social Psychology of the University of Strasbourg (Prof. A. Mol). The published materials on this issue have received positive reviews in the Czech Republic, Germany, France, Italy.

Public speeches, lectures, numerous articles by Professor Igor S. Seredyuk made a significant impact on the development of project ideology and practice.

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ІГОР СЕРЕДЮК–МИТЕЦЬ, ЩО ВИПЕРЕДЖАВ ЧАС

Ігор Середюк (1929–2016) – український архітектор і дизайнер, теоретик архітектури та сучасного дизайну, професор.

У 70-х та 80-х роках став однією з ключових фігур в теорії архітектури та дизайну, архітектурно-дизайнерській освіті в Україні та впливовою постаттю в системі освіти країн Центральної і Східної Європи.

Ігор Іванович Середюк народився в 1929 р. у Польщі. Архітектурну освіту отримав у Львівському політехнічному інституті, закінчивши архітектурний факультет (1948–1953) та аспірантуру (1960–1962).

Потужний науково-практичний заряд він отримує від наукового керівника навчання в аспірантурі, звідувача кафедри архітектурного проектування, професора І. Багенського. Цьому сприяла також загальна творча, демократична атмосфера, яка панувала на кафедрі.

Обдарованість, завзятість, задатки лідера та виняткове прагнення до найкращого результату – ці якості відмічали колеги І. Середюка. Значний вплив на формування та становлення його професійного світогляду і творчої індивідуальності мали традиції Львівської архітектурно-дизайнерської школи у сфері формування предметного світу та середовища життєдіяльності людини.

У період стиснених умов післявоєнного відновлення господарства України відбуваються радикальні зміни усіх суспільних галузей, трансформація традиційних індустріальних парадигм і зміни ціннісних орієнтирів. Невідминним компонентом культури суспільства стає дизайнерська діяльність. В контексті загальноєвропейських тенденцій у 1959 році у Львівській політехніці відкривають підготовку фахівців за спеціальністю «Проектування інтер'єру та меблів», а 1960 – «Архітектура, меблі, інтер'єр». Дизайнерська діяльність формується та розвивається як соціально і культурно необхідне явище, зумовлене соціально-економічним і культурно-ідеологічним розвитком суспільства, громадського виробництва і споживання.

І. Середюк був одним із перших, хто оцінив роль і значення дизайну у формуванні середовища життєдіяльності людини та активно підключився до практичного і теоретичного розв'язання цієї важливої проблеми. На початку 60-х років СПКБ Львівської політехніки розробляє програму вбудованого трансформованого обладнання для житлових комірок студентських гуртожитків. Фрагмент обладнання цієї програми (автор І. Середюк) у 1962 р. експоновано на Виставці досягнень народного господарства у Москві й відзначено срібною медаллю. Ця програма стала моделлю для концептуального підходу до формування економічної та соціальної житлової комірки, яка б забезпечувала мінімально необхідні потреби споживача. В 1964 р. Ігор Середюк діяв у залі Першого навчального корпусу Львівської політехніки розробляє крісла-пюпітри. На початку 70-х років бере участь спільно з С. Мигалем у розробленні програми меблів і обладнання для навчальних закладів Міністерства освіти України, яку впроваджено в життя.

У 1963 році І. Середюк захищає дисертаційну роботу на тему «Архітектурно-конструктивні передумови проектування меблів сучасних квартир» і отримує науковий ступінь кандидата архітектури.

У 1964 році проходить наукове стажування у Франції. Особисті зустрічі із Ле Корбюзьє в його майстерні, дозвіл на користування бібліотекою, архівом та спілкування з працівниками майстерні розширили діапазон професійних поглядів І. Середюка. Відвідування циклів лекцій в Міністерстві будівництва та в Науково-технічному центрі будівництва в Парижі, які читали В. Бодянський, Ж. Канділіс, М. Ледс, Б. Лясю, Ж. Пруве, Й. Шайн, а також особисті контакти, обмін статтями, монографіями та науковими ідеями з М. Бензе, А. Байї, Б. Бархінім, Р. Босілом, К. Дворжаком, У. Еко, Г. Лавриком, Г. Мінервінім, А. Модем, Й. Фрідманом, І. Страутманісом, В. Курт-Умеровим, О. Швидковським сприяли формуванню критичних аналітичних підходів до архітектури та альтернативних поглядів на її теоретичні проблеми, широкому розумінню середовища як складного багатофакторного та мобільного явища, вивчення закономірностей якого потребує застосування міждисциплінарних підходів. Основні теоретичні результати, об'єднані у відповідну систему психологічного аналізу середовища, є наслідком та подальшим розвитком ідей, генерованих у працях В. Дахна, М. Дьоміна, Г. Лаврика, В. Мироненка, І. Фоміна, А. Яблонського. Працями цих авторів закладено фактично основи розвитку національної науки в дизайні архітектурного середовища кінця ХХ ст.

У 1965–1967-х роках І. Середюк працював завідувачем кафедри будівельних матеріалів Королівського технічного університету в Камбоджі. Паралельно із викладацькою діяльністю він спроектував декілька вілл для дирекції університету, які було споруджено. За успішну підготовку національних кадрів та розвиток культури нагороджений королем Камбоджі Народомом Стануком орденом Командора Камбоджі.

І. Середюк був одним із активних організаторів архітектурно-дизайнерської освіти в Україні. У 1971 році у Львівській політехніці відновлюється архітектурний факультет (з 2001 р. – Інститут архітектури), деканом якого стає І. Середюк, що сприяло якісній еволюції архітектурної освіти у Львові. В структуру факультету/інституту входять кафедри: архітектурного проектування (зав. кафедри – проф. І. Середюк); містобудування (зав. кафедри – проф. А. Рудницький); архітектурних конструкцій (зав. кафедри – доц. Я. Швець); рисунку та живопису (зав. кафедри – доц. Р. Липка, з 2003 р. – кафедра дизайну та основ архітектури, зав. каф. проф. Б. Черкес). З 1992 року на факультеті функціонує організована і очолювана А. Рудницьким кафедра реконструкції та реставрації архітектурних комплексів (тепер реставрації архітектурної і мистецької спадщини, зав. кафедри – проф. М. Бевз).

На факультеті сформувалося демократичне середовище, де колектив викладачів і студентів був родиною, для якої єдиною метою і єдиним критерієм була архітектура. Архітектурна школа стає потужним «локомотивом», який формує і випускає талановитих спеціалістів. Вона стає не тільки генератором нових ідей та методів проектування, але також піонером кардинальних зрушень у самій педагогіці.

У 60–70-х роках І. Середюк бере участь у роботі державних комісій Міністерства промполітики України з оцінювання якості побутових предметів та товарів народного споживання. Набутий досвід використовують у програмних матеріалах «Львівської комплексної системи управління якістю продукції (КСУЯП)», яка за рекомендацією керівництва СРСР впроваджується в життя на його теренах. Варто відмітити також, що в цей період Львів стає одним із центрів Центральної та Східної Європи в галузі промислового дизайну. Серійний автобус «Турист» (диз. Я. Трач, Р. Миренський) на Всесвітній виставці у Бельгії (Брюсель, 1958 р.) відзначають золотою медаллю, а автобуси «Україна-67» та «Україна-69» (В. Пивоваров, П. Чепель) на 18 і 19 міжнародних тижнях у Франції (Ніцца, 1967, 1969) отримують срібну медаль та «Гран-прі» за високі експлуатаційні якості та комфортабельність. У СКБ Львівського телевізійного заводу розробляють перші вітчизняні моделі телевізорів I–IV покоління: «Львів», «Верховина», «Вогник», «Електрон» (А. Глушко, Б. Братейко, М. Зубченко). В СКБ Львівської лісотехніки виготовляють концептуальні меблі (С. Мигаль) для навчальних кабінетів та лабораторій, які на Виставці досягнень народного господарства у Москві (1972, 1975) відзначено золотими медалями. З відкриттям у 1954 році Львівського будинку моделей, колекції костюмів (С. Семенко, Л. Мазур, А. Шевченко) дивують творчою фантазією відвідувачів та журі виставок – ярмарок у Токіо, Марселі, Парижі, Нью-Йорку, Москві, Варшаві, Будапешті.

Будучи ідеологом та яскравим представником Львівської школи дизайну, так званого «зіркового покоління» українського дизайну 60–80-х років, І. Середюк виступає за необхідність трансформації методології підготовки дизайнера, інтеграцію в дизайні архітектурного середовища всіх видів пластичного мистецтва. «Функціоналізм, – як зазначав І. Середюк, котрий десятиріччями уніфікував, стандартизував та уніформував наше оточення – архітектуру, містобудування, дизайн, вступив у гострі протиріччя з дійсними людськими потребами та можливостями. Людина не бажає більше жити в однакових житлових будинках, працювати та вчитися в однакових інтер'єрах, ходити вулицями з монотонною забудовою... Центральні аспекти творчості – культурологічні, психофізичні та семантичні... Сучасний творчий процес має комплексний, системний характер».

У 1977–1987 роках І. Середюк – ректор Львівського державного інституту прикладного і декоративного мистецтва (ЛДІПДМ, з 2004 – Львівська національна академія мистецтв). Підготовку художників декоративного та ужиткового мистецтва в інституті обумовлювала традиційна художньо-ремісничка модель за типом архітектурно-художньої школи Баугауза (1919–1933) на основі поєднання навчання і ремесла. Ручну працю з матеріалами вважали досконалою і незамінною школою художньої майстерності й розвитку творчих здібностей. Ідеологія декоративізму значною мірою домінувала в інституті.

У період становлення постіндустріального суспільства, радикалізму в архітектурі та дизайні, трансформації індустріальних парадигм у нові постіндустріальні, формується інше ставлення до творчості, традиційних принципів і норм проектування. Фундамент цих пошуків закладено видатними дизайнерами-педагогами Вищої школи формотворення в Ульмі (1953–1967) М. Біллем, Т. Мальдонадо, Х. Гугелотом. Вони бачили мету творчості в моделюванні у соціальному просторі нової реальності в контексті поєднання науково-технічного прогресу та естетики.

Професор І. Середюк в основу методології підготовки спеціалістів закладає ідею проектності, формування культури проектного міждисциплінарного мислення і культури художнього образотворення. Для реалізації цих завдань, він спільно з кафедрами проектування інтер'єрів та меблів (зав. кафедри С. Мигаль) і моделювання одягу (зав. кафедри Т. Кузьмінська) створив кваліфікаційні характеристики і моделі спеціалістів для набування ними нових знань, вмінь та навичок. До навчальних планів введено низку дисциплін з акцентом на широку інтеграцію з виробництвом. Супідрядність усіх навчальних дисциплін головної – проектуванню, сприяє якісній підготовці фахівців до умов реальної практичної діяльності, а також відчутної практичної корисності отриманих знань. Теорія і практика дизайну, в поєднанні з сучасною виробничо-технологічною сферою, стає однією з вихідних моделей для впровадження нових ідей, концептуально-контекстуальних підходів. Цьому сприяли також створені при науково-дослідному секторі інституту експериментально-творчі об'єднання викладачів і студентів: «Престиж» у сфері дизайну костюма, «Спектр» – дизайну середовища та СКБ із дизайну меблів. У структуру об'єднання «Престиж» (кер. О. Коровицький) входили усі швейні училища Львова, які реалізовували творчі ідеї студентів інституту. Позитивний резонанс громадськості викликав дизайн меблів – програма меблів «Універсал» (Б. Курліцук, С. Мигаль) для ВО «Львівдерев», згідно з якою дев'ять експериментальних наборів меблів експоновано на обласній виставці (Львів, 1981). У 1982–1983 рр. за цією програмою розроблено серію стільців і комплекти корпусних меблів «Ватра», «Кристал» і «Система» (у співавторстві з В. Павловим і О. Тазаловим), які представлено на IV Всесоюзному конкурсі «Меблі-83» у Москві і відзначено журі I, II та спеціальними преміями відповідно. Підготовка художників декоративного мистецтва щодо інтер'єру і меблів, моделювання одягу здійснюється з виконанням комплексних курсових і дипломних робіт з реальної тематики і з врахуванням їх подальшої роботи в умовах промислового виробництва. Це численні розробки інтер'єрів громадських споруд, дитячих майданчиків у Львові, соціокультурне середовище в Національному історико-культурному заповіднику «Нагуєвичі»-«Стежки-дороги Івана Франка» тощо.

Проектна концептуалістика дизайну інтер'єру та меблів, художнього моделювання одягу, предметів народного споживання у річизні інновацій та пошуків національної ідентичності стає специфічною проектною формою пізнання Львівської школи. Вони є прикладом нового мислення і віддзеркаленням глобалізаційних і національних аспектів розвитку

дизайну середовища в стінах ЛДПДМ. Про це свідчать огляди дипломних робіт студентів архітектурно-художніх вишів країн Центральної і Східної Європи. Науково-методична рада з естетичного виховання і художньої освіти при Академії мистецтв СРСР та Мінвишу СРСР за щорічними матеріалами всесоюзних виставок дипломних робіт студентів художніх вишів у Вільнюсі (1978), Києві (1979), Санкт-Петербурзі (1980), Баку (1981), Тбілісі (1984) високо оцінювала нові пошуки та професійний рівень виконання дипломних проектів дизайну інтер'єру, меблів та одягу Львівської школи. На цих форумах професор І. Середюк виступає вже не як представник української архітектурно-дизайнерської школи, а ректор Національної академії образотворчого мистецтва і архітектури (м. Київ), Народний художник України, професор Олександр Лопухов – образотворчого мистецтва. Зустрічі з провідними митцями, академіками Академії мистецтв, керівниками республік, де проводились форуми, сприяли налагодженню організаційних і творчих контактів.

Перші особи Азербайджану – Г. Алієв та Грузії – А. Шеварднадзе окремо приймали Львівську делегацію, оскільки львів'яни готували національні кадри для цих республік. ЛДПДМ стає в один ряд з Литовською і Латвійською академіями мистецтв, МДХПУ ім. С. Г. Строганова (Росія). Цьому сприяла велика праця професора І. Середюка на науково-педагогічній ниві та його високий авторитет.

У період ректорства І. Середюка укріплюється соціальна та матеріально-технічна база ЛДПДМ. Будується новий експериментально-лабораторний корпус інституту (арх. М. Вендзилович) та комбінат харчування (арх. А. Консулов). Проектування і обладнання цих корпусів його працівниками та вихованцями виконують згідно з львівською традицією зі спорудження та оформлення навчальних корпусів, започаткованої ще ректором Львівської політехніки Ю. Захарієвичем.

У 1982–1985 рр. він став експертом ЮНЕСКО та керівником від Міністерства вищої та середньої спеціалізованої освіти України з багаторічних, міжнаціональних досліджень за темою № 11 «Нові технології в освіті». У 1992 р. стає кореспондентом від України міжнародного журналу «L'Arca» (Італія, Мілан).

У 1988–1999 рр. І. Середюк – професор кафедри архітектурного проектування Львівської політехніки. У 1999 р. професор І. Середюк відзначає на архітектурному факультеті Львівської політехніки своє 70-річчя та переїжджає жити у Прагу до своєї доньки, яка там працювала і жила. Відійшов у вічність І. Середюк на 87 році життя у Празі, де жив останні роки.

Професор Ігор Середюк – автор близько 80 статей. З них вісім статей у зарубіжних виданнях (Франція, Росія, Італія, Камбоджа), три монографії «Культура вашей квартиры» (1970), «Восприятие городской среды» (1979), «Городская среда и оптимизация деятельности человека» (1987, у співавторстві). Остання монографія закладає основи школи психофізичного аналізу в архітектурі, що визнано інститутом соціальної психології Страсбургського університету (проф. А. Моль). Опубліковані матеріали з цієї проблеми отримали позитивні рецензії у Чехії, Німеччині, Франції, Італії.

Публічні виступи, лекції, численні статті професора Ігора Івановича Середюка значно вплинули на розвиток проектної ідеології та практики.

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7. **Conclusions** should emphasize main achievements of the work, underline its importance and give examples of possible application.

8. The **gratitude** for financial support, technical assistance and other forms of assistance can also be mentioned at the end of the article.

9. **References** should be numbered in the order of their appearance in the text in square brackets. Names of the books should be referenced, titles of articles – shouldn't. Authors' first and lastnames and names of journal originally written with Cyrillic alphabet should be typed with Latin letters without translation.

Example:

Book: The author (s) or editor (s), book title or chapter, publisher, city, year.

[1] Kovalskiy D. and Plekhov V.: Neorganichna Khimiya. Naukova dumka, Kyiv 1990.

[2] Hess M.: High Performance Polymers [in:] W. Brostow (Ed.), Performance of Plastics. Hanser, Munich-Cincinnati 2000, 277–289.

Journalpaper: Authors (4), journal (all the words with a capital letter), year, volume, initial page

[3] Yamamoto T., Furuhashi T., Arai N. et al.: Energy, 2001, 26, 239.

[4] Novakivskiy V., Gerber D. and Malynovskiy D.: Dopovidi Nats. Akad. Nauk Ukrainy, 2007, 66, 198.

Patents: Authors, country and patent number, date of publication

[5] Vaynberg M., Horn H. And Horn R.: Pat. US 6981377, Publ. Oct. 13, 2006.

Conference: author, title of the conference, country, city, year, initial page.

[6] Young C. And Jordan T.: Proceed. 10th Annual Conference on Engineering, Greece, Patras 2008, 34.

10. **Illustrations** (figures, graphics, photos) must be inserted in the text and be given by separate graphic files as separate objects, suitable for corrections or changes, and which fit the page size. All illustrations should be signed and numbered (if more than one) under the illustrations, with centered alignment, font size – 9. Photos and photocopies must be of high quality, suitable for copying.

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Units. All data should be given in International System of Units (SI units). If other units used, provide SI equivalents.