ARCHITECTURE OF AVANT-GARDE IN UKRAINE IN 1921-1939: ORIGINS, WAYS OF SPREADING, MAIN FEATURES

Case study of Volyn

Olga Mykhaylyshyn

ABSTRACT: The heritage of the architectural Avant-garde in Ukraine, formed in the interwar period (1921-1939), is large-scale in the number of objects and diverse in their typology, techniques and forms of expression of modern architectural ideas. Volyn – a historical Ukraine region that, at that time, was part of Poland (the Second Polish Republic) – plays a special role in this context. To date, the region has preserved a significant array of objects that demonstrate the specifics of the interpretation of European and Polish Avant-garde concepts. The article attempts to analyze the architectural context, ways of spreading and formation features of the architectural image of residential and public buildings as part of the European heritage of Interwar Modernism. Lack of professional evaluation and recognition of the objects' value leads to their gradual degradation, reconstruction or destruction. Methods of comparative and stylistic analysis, archival research and field surveys of architectural objects were used in this research. The study showed that the spread of the Avant-Garde style in the architecture of Volyn was significantly delayed compared to similar processes in the architecture of Western Europe and Poland and reached its peak at the end of the interwar period. The use of formative techniques of Avant-Garde architecture in housing construction became an identifier and symbol of the social prestige of certain social groups. The design of public buildings reflected Volyn's rapid social modernization.

KEYWORDS: Architecture, Avant-garde, Heritage, Volyn, Ukraine

INTRODUCTION: In 1921-1939, Volyn – a historical Ukraine region that, at the time, was part of Poland (the Second Polish Republic) – was at the epicenter of radical political, socio-economic and cultural transformations. As in other parts of the Polish state, architectural activities played an important role in their visualization. The change in the quality and structure of the environment at the material level reflected the architectural trends and social order of the time.

In terms of quantity and, sometimes, quality, buildings constructed in the interwar period in Volyn differ significantly from the legacy of the interwar period in other regions of modern Ukraine. The explanation lies in the region's weak "starting" socio-economic position for future development and the modest role of the largest cities in the region (Lutsk and Rivne) in the national economy of the Polish state. For obvious reasons, there was a significant shortage of specialists in the architectural sphere in the region, which hampered its development and reduced the artistic and aesthetic qualities of the designed objects.

Since the beginning of the 21st century, the interest of researchers in the architectural heritage of the Avantgarde in Volyn has increased significantly. The research is carried out against the background and under the obvious influence of a wide global interest in the architecture of the 20th century. There is a consistently high activity of Polish scholars in the sphere of interwar architectural heritage in European and global contexts. The analysis of the development of the architecture of the Second Polish Republic in the context of similar processes in Western Europe was carried out by P. Begansky, R. Tschetsyak and P. Krakowski. The problem of architectural innovation in the context of perception and adaptation of Avant-garde concepts to Polish realities is analyzed in the works of B. Lisowski and O. Cherner. J. Wislocka explores the Polish version of the architectural Avant-garde as a separate integral epoch in national architecture. M. Lesniakowska made a periodization of the Polish Avant-garde in architecture and a detailed description of each of the stages of style development.

The aim of this article is to identify the features of the influence of architectural Avant-garde ideas and their interpretation in the interwar architecture of Volyn (1921-1939) as one of modern Ukraine's regions. To achieve this goal, empirical research methods are used: archival search of primary sources (project documentation), field surveys of architectural objects and comparison – to determine the common and different trends in the development of Avant-garde architecture in Volyn in the 1920s and 1930s and similar phenomena of European and national scale.

THE RESEARCH

Polish interwar architecture reflected two views on the implementation of the principles of Avant-garde ideology. The first is to comprehend the expressive possibilities of the Avant-garde in the context of finding a dialogue with the national architectural tradition; the second is a radical modernization of shaping methods. The Polish transcription of radicalism was based on the social utopias of Le Corbusier, W. Gropius, H. Meyer and O. Hezler and the practicalism of J. P. Aud, as well as the need to modernize architectural and technological means aimed at implementing social programs. Closest to this understanding of the relationship between society and architecture was the ideological platform of Constructivism, the first phase of Avant-garde architecture.

It is well known that in Poland, new formative approaches were developed and tested first in the conceptual works of representatives of the artistic environment (Avant-garde artists M. Szczuka and T. Żarnowerówna as part of the group Blok (1924-1926)). Polish Avant-garde architect L. Nemojewski denied the political affiliation of the early Avant-garde in the Second Polish Republic, emphasizing the social factor: the changing generations of architects and the role of this process in creating the style of a new era: "Our constructivism is not a movement with the features of modernist leftism. It did not appear as a slogan thrown by the determined youth, although it found warm support among these young people" (Niemojewski, 1934, 814).

The implementation phase of avant-garde ideas lasted from 1925 to 1934 and, in Poland, was represented mainly by the activities of the Praesens group (1925-1930) led by S. Syrkus, who was a representative of the "younger generation" of Polish modernists. The main slogan of the new direction promoted by Praesens was expediency – the most important step towards a functionalist shaping method.

Against the background of large-scale and semantic-morphological revolutionism in large cities, projects implemented in the spirit of the architectural Avant-garde in Volyn were marked by smaller scale, some typological limitations and a narrower range of experimentation with form. In fact, new buildings, based on "avant-garde" forms, appeared here only in the late 1920 – quite late compared to other regions of Poland, not to mention the countries of Western Europe or the USSR.

The impetus to rethink the expressive capabilities of the architectural form was transferred to Volyn from outside. The introduction of new approaches took place directly through the activities of architects and indirectly through state institutions that contributed to the development of housing and public buildings. A characteristic feature of the professional environment of Volyn in the 1920s and 1930s was the simultaneous presence on the regional "architectural market" of metropolitan and local specialists, as well as those who did not have higher architectural education but only special technical training. Naturally, the latest trends in Polish and foreign architecture were reflected in the works of the former. Often, they were authors of formative concepts, prominent representatives of certain trends in Avant-garde architecture or had been formed as specialists influenced by innovative academic ideas in leading architectural schools in Lviv, Poland or Wilno. The second group, in their work, tried to embody the ideas of modern architecture, creatively interpreting and adapting them to local resources and requirements. In the absence of basic knowledge of architectural design in general and the latest concepts in this field, in particular, the design practice of the third group was guided mainly by intuition, not caring about functional and aesthetic problems, of which they mostly had little knowledge.

The application of new shaping techniques had several results. First, it testified to the professional level of the designers and their ability to keep up with the times, which attracted the attention of potential customers. Secondly, it radically influenced the transformation of the urban environment, pushing out of the minds of Volyn residents the architectural stereotypes of provincial cities formed during the Russian Empire and, consequently, stimulating the formation of a new quality of living (both spatial and symbolic), at least formally bringing it closer to the idealized image of the "modern city".

The need to restore the housing stock of cities after World War I, on the one hand, and its quantitative and qualitative growth, on the other, actualized and stimulated the development of new construction technologies and generated new concepts of housing development. Such motivational dualism created the preconditions for forming different ways of solving this problem in the Polish and, accordingly, Volyn architecture of the 1920s and 1930s. The first provided for the active use of standard projects in construction; the second envisaged the development of individual projects based on new shaping principles. Therefore, we can speak about another effective way to spread the ideas of modern architecture in Volyn – through

01 Residence for officers: a. Bilokrynytsia; b. Lutsk, c. Sarny, Ukraine. © Olga Mykhaylyshyn, 2008-2013.







the construction of residential buildings in standard projects that reflected new ideas about the structure of modern housing, set requirements for its planning parameters, sanitary and hygienic standards, and were a model of new design standards.

Influenced by Western European experience, the Second Polish Republic developed two main, inextricably linked concepts of the development of residential architecture: mass housing construction and its derivative, construction of minimal housing. The path toward producing mass affordable housing lay in using an industrial method similar to the method of building machines during construction. In Poland, particularly the well-known fascination with reinforced concrete in Western Europe during the 1920s, a universally established building material that allowed experimentation with or standardization of architectural form, was perceived positively with an emphasis on cheapness and industry. Similar arguments have been made about the benefits of wood, especially in individual housing.

The Polish development of minimal housing concepts, as well as industrialization, was the next step in implementing housing programs. Extensive material for the development of standard projects, including the smallest housing, was provided by architectural competitions, which were held in the late 1920s to early 1930s, in particular, on the initiative of the Military Billeting Fund (1928, 1932), the Ministry of Public Works (1929), the Bank of State Economy – BGK (1933, 1934), the Society of Worker Settlements (1936), amongst others.

The solutions proposed in the typical projects of apartment buildings for officers reflected the stylistic polarization of images (from rationalized neoclassical to extreme modernist). Their construction was to become an experimental ground for the use of new materials and structures (reinforced concrete).

In particular, the projects of 12- and 18-apartment sectional buildings (architects B. Lachert, J. Shanajca, W. Winkler), implemented in Kovel (1929), became the first examples of the Warsaw architecture school of constructivism in Volyn. In the design process, the authors adhered to the principle of function delimitation, both in a separate apartment (2- and 3-room) and in the house as a whole. The volume of the building is formed along the vertical nucleus - the staircase. A gradual refusal to expose different types of housing cells in the structure of the house in favor of their visual unification, hiding everything in a single block, was reflected in the monumental integrity of the volume parts of houses for officers and non-commissioned officers in Lutsk (architects L. Torun, K. Tollochko), Sarny (architects V. Polkovsky) and Bilokrynytsia, Ternopil region (architect B. Rudzinsky) 1937-38 [FIGURE 01].

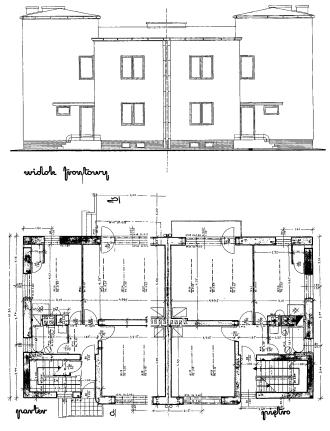
The State Economy Bank focused on the preparation, selection and spreading of projects of individual houses of various types. The "Catalog of typical houses for small-scale housing construction" (Bank Godpodarstwa Krajowego, 1934), formed by the Bank and based on the results of the architectural competition, included 83 projects, which were provided to small investors for a small fee in the form of working documentation.

In the Volyn cities of Zdolbuniv, Dubno, Kovel, Kremenets, Lutsk and Rivne, typical wooden design projects ("BGK 8", "BGK 16") and brick design projects (BGK 15, "BGK 19", "BGK 206", BGK 210" [FIGURE 02]) were used. The model quarters were built according to the same type of projects, which ensured stylistic unity (Tsegielnya and Boyarka districts in Rivne: type "BGK 8"; housing on the Dyrektorska Street in Kremenets: type "BGK 15", settlement for non-commissioned officers "Surmychi" in Dubno: type "BGK 16").

Members of the Praesens group (B. and S. Brukalsky, B. Lachert, J. Shanajca, J. Najman) and beginners (P. Begansky, A. Brzozowski, J. Reda) continued their activities in 1930-1933 directed at developing the idea of minimal housing in the design office at the Social Insurance Institution (ZUS), including for administrators and workers. The action covered the largest cities in Poland: Warsaw, Lodz, Krakow, Lviv, Lublin, Poznan, Gdynia, Bialystok, amongst others. It was also planned to design and build the ZUS housing in Kovel, Lutsk, Rivne, Ternopil, Stanislav (Ivano-Frankivsk) and other cities of the eastern provinces (voivodships).

Projects of several types of sections and apartments developed in ZUS were used in Volyn in Lutsk in 1939. The obtained result (asceticism, purity, integrity of forms) was a consistent embodiment of the idea of an apartment building as a universal form that contains a perfect function ("shared apparatus").

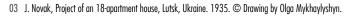
Despite the active intervention of standard projects in the architectural and construction practice of interwar Volyn, the percentage of residential buildings constructed in individual projects was much higher. And although the quality of architectural and planning decisions was quite

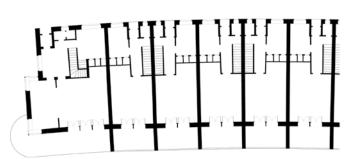


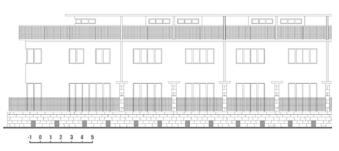
02 House design, type BGK-210. © State Archive of Volyn region (DAVO).

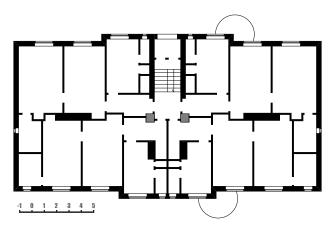
different, this group of objects allows us to determine the specifics of the spread of the Avant-garde style in the housing architecture in the researched area. Social conditions of Volyn cities, lack of engineering infrastructure, etc., led to the numerical advantage of individual and 2- to 3-room-apartment buildings over larger apartment buildings. Changes in the layout of apartments were aimed at expanding the functional range of residential (living room, bedroom, office) and auxiliary groups (block of sanitary facilities, kitchen and dining room). A special place among the residential construction projects in Lutsk made in the 1930s are blocked houses projects. Their spatial planning structure is obviously influenced by the solutions in the villages of Pessac (France) and Dammerstock (Germany), as well as individual objects in Warsaw (Poland).

The ribbon shape of the 18-apartment house in Lutsk (architect Yu. Novak, 1935) [FIGURE 03] consists of two types of apartments. One is the embodiment of the concept of minimal housing, the other a version of a country villa.









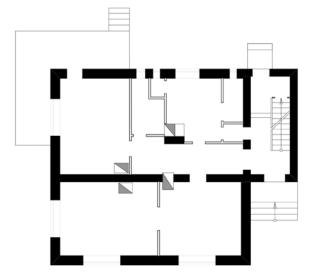
04 Project of an 8-apartment house, Lutsk, Ukraine, 1935. © Drawing by Olga Mykhaylyshyn.

The compactness of each of the two-level apartments is provided by an internal staircase connecting the representative and residential tiers. The horizontals of the open terraces, surrounded by an ornate metal fence and the pergolas on the roofs, emphasize the spatial interpenetration of the building and the environment, opening the volume towards a new residential district located among the gardens. The development of this district, consisting of sectional 8-apartment buildings of the same style [FIGURE 04], was supposed to demonstrate a model of the architectural and spatial organization of the environment in a new quality, in contrast to the existing urban landscapes. The use of reinforced concrete structures and the finishing of facades with cement plaster was aimed at the maximal structural approximation of the designed objects to the prototypes. It emphasized the industrial construction methods of these buildings. The social status of the residents (administrators) for whom the district was designed determined the architectural novelty of the complex. This approach in the Polish and Volyn realities became a sign of exclusivity, refined sophistication and comfort, available only to members of certain social groups, in contrast to Western Europe, which pursued the goal of social security of the broadest masses of the population.

In Volyn, the identification and application of a new constructive principles in individual housing was quite

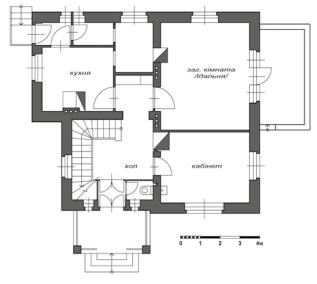
05 K. Stellecky, individual house, Rivne, Ukraine, 1936. © Photo and drawing Olga Mykhaylyshyn, 2010.





S. Tymoshenko, individual house, Kremenets, Ukraine, 1933.
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07 Houses in S. Tymoshenko Street, Lutsk, Ukraine, 1930s. © Olga Mykhaylyshyn, 2010.

problematic. "New structures» (as reinforced concrete), accentuated in the architectural appearance of individual housing, were often an imitation made of traditional materials (e.g. wood). After all, in most cases, the construction methods and materials have not undergone radical changes and were, therefore, literally not modern. Therefore, Volyn architects focused most of their attention on identifying formal stylistic features by full or partial imitation of new constructions in traditional materials (wood, brick) [FIGURE 05, FIGURE 06]. Samples of utilitarian construction, with a standard composition of lapidary geometrized blocks accentuated by the projecting main entrance or the volume of the staircase, are presented in Lutsk, Kovel, Kremenets, Rivne and other cities.

When designing a large number of mansions and villas, the main emphasis was put on articulating the three-dimensional composition, detailing and decoration, the use of appropriate architectural and compositional techniques – the contrast of blocks, materials and textures (e.g. apartment buildings in Lutsk on Tymoshenko Street, 17, 21, 23, 24, etc. [FIGURE 07]).

The "aesthetics of the machine", promoted by apologists of the architectural Avant-garde in the 1920s at the turn of the decade, was quite organically designed for the formative and expressive capabilities of the American Streamlined Style, which gained popularity in Poland in the 1930s. The style of airplanes, ships and cars, as noted by A.K. Olszewski, became the antidote to geometrized Functionalism. In Volyn, the use of elements of this style in residential architecture was treated as a tribute to architectural fashion. The formal features included emphasizing the tiered structure, the contrast of the horizontal main block and vertical dominants, rounding the corners of the volume (most often, staircases, metal railings, balconies, terraces, outdoor stairs) and simultaneous use of round and ribbon windows in facades.

Public buildings of interwar Volyn demonstrate the high quality of architectural solutions and a clear compliance with the formal and aesthetic principles of the architectural Avant-garde. In particular, the implementation of

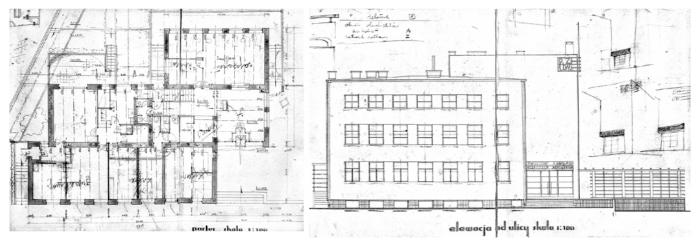


compositional-spatial principles and morphological tools of modern architecture is expressed in the image of post office buildings in Rivne (architects J. Najman, Y. Puterman-Sadlovsky, 1935) and Lutsk (Y. Puterman-Sadlovsky, 1936)) [FIGURE 08]. Post office buildings have become perhaps the brightest symbols of the region's entry into the technical-industrial era as qualitatively new elements of urban space. A vivid illustration of refined Polish Constructivism – a peculiar departmental style of the 1930s – had a number of characteristic features: strict composition of the volume with several elements, colonnade, rhythm of window openings, flat roofs and facade lining with clinker bricks or stone.

According to the conceptual and theoretical principles of the Streamline Style, the architectural volume was interpreted as an abstract-geometrized sculptural work. The departure from rigid functionality in favor of elegant versatility of form, as in the previous case, allowed the creation of characteristic buildings using the most concise volumes. A striking embodiment of the idea is the building of the Polish Mutual Insurance Union in Lutsk (architect

08 Post offices: a. Rivne, b. Lutsk. © Olga Mykhaylyshyn, 2011-2012.



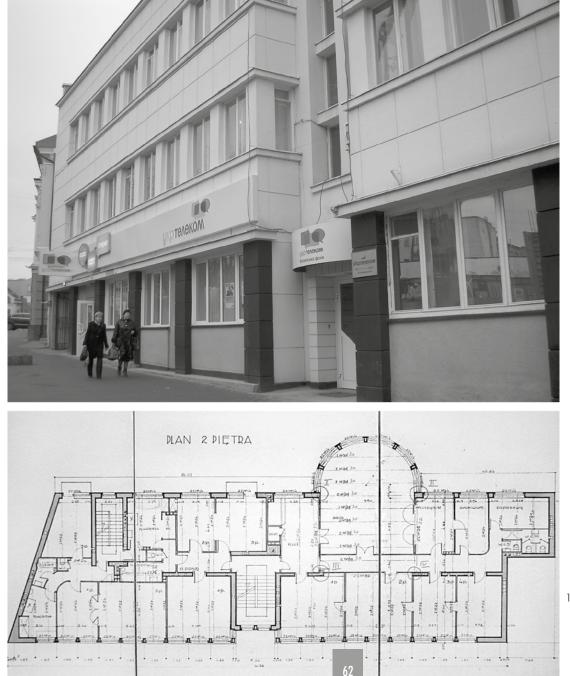


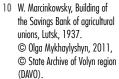
09 W. Rittel, Building of the Polish Mutual Insurance Union, Lutsk, 1930s. © State Archive of Volyn region (DAVO).

W. Rittel in the 1930s) [FIGURE 09]. The building consists of three blocks of different heights, offset from each other in a horizontal plane. The three-dimensional composition is built around the central core; a staircase, which is a vertical accent on one of the facades and, at the same time,

an element that separates different parts of the volume, structuring the interior space on each of the three floors.

The evolution of Polish Avant-garde views from radical Functionalism to "monumentalism of the 1930s" (according to A.K. Olszewski), which took place after 1933 in the





context of changing socio-aesthetic paradigm in Western Europe and the USSR, is reflected in the architecture of the Savings Bank of agricultural unions in Lutsk (architect W. Marcinkowski, 1937) [FIGURE 10]. The facade is built according to Le Corbusier's five principles of modern architecture. The stylistic compromise was reached by returning to the classic symmetry, emphasizing the compositional axis with the volume of the stairwell, cut through the vertical window. The architectural form acts as a monumental shell: the front facade wall, which opens to the street, is only a screen decoration that separates the interior from the external environment and does not reflect the structural, technological and functional feasibility.

CONCLUSIONS

The spreading of the Avant-garde style in the architecture of public and residential buildings in Volyn took place only at the beginning of the 1930s and reached its peak at the end of the researched period – with a significant delay compared to similar processes in the architecture of Western Europe, the USSR, Central and Western Poland.

Several circumstances contributed to the active use of new design approaches and methods in the design of typologically diverse objects in Volyn. First, the construction of typical residential buildings and educational institutions, which were considered architectural and stylistic prototypes for objects designed on-site; second, the emergence of a new generation of architects in the region – graduates of advanced schools of the Polish architectural Avant-garde, who transferred formative concepts to Volyn in pure form; third, the identification of the Avant-garde style with a high social or financial status of residents in individual housing construction.

A characteristic feature of the interpretation by local experts of the styles of Constructivism, Functionalism and Streamlined Style was the varying degree of conformity of the formed architectural image to the primary conceptual and aesthetic principles, formalization, imitation and rather limited arsenal of architectural expressiveness, which led to utilitarianism and schematic solutions.

The spread of architectural Avant-garde concepts in Volyn played a significant integration role, equating the formal and semantic categories of "modern" and "national" in relation to architecture, expanding the area of its influence on all types of buildings. Universal figurative systems of Functionalism, Constructivism and Streamlined Style, repeatedly interpreted in the architecture of public and residential buildings, became one of the important means of constructing Volyn's national and cultural identity. The typification potential of the new style turned out to be a tool for a quick solution to one of the social problems (residential construction). The use of formative techniques of Avant-garde architecture in housing construction has become an identifier and symbol of the social prestige of certain social groups. In the design of public buildings, it reflected the rapid social modernization of the region.

The modernist architectural heritage of Volyn, formed in the interwar period, suffered partial losses during World War II as well as due to urban development in the region in the second half of the 20th century in Soviet Ukraine. Because of the biased and ideologically defined attitude in the 20th century and the small scale of research in the 21st century, the opinion about the low quality of the interwar architecture of this Ukraine region remains sufficiently rooted in professional circles even today. Lack of information often leads to the fact that housing and public facilities undergo reconstruction and modernization (superstructures and extensions, replacement of windows, use of unsuitable materials, etc.), because of which they lose their architectural and stylistic features. Only further research, popularization and official acknowledgement of these buildings as architectural monuments can stop the process of degradation and loss of the heritage of the architectural Avant-garde.

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Olga Mykhaylyshyn (Ukraine, 1968) Architect,

Doctor of Architecture, Professor, Head of Architecture and Environmental Design chair at the National University of Water and Environmental Engineering, Rivne (Ukraine). Since 2000, she has been working in the field of history of architecture and restoration of architectural monuments. She is the author of three monographs, two books and numerous articles on the architecture of Western Ukraine and the historical region Volyn in the first half of the 20th century in the context of general European architectural processes.

Damages at Svoboda Square, Kharkiv. © Svitlana Smolenska, 2022.

