Introduction of conceptual project ideas into the realia of modern Ukraine architecture. (Based on the example of an international student’s design seminar concerning renovation of an assembly hall in the first academic building of Lviv Polytechnic National University with extending theatrical function)

Identifying the problem and analyzing the latest scientific researches and publications

Department of architectural environment design was created by a degree of Lviv Polytechnic National University rector on November 28, 2003 No. 183-10 at execution of resolution of Academic council as of September 23, 2003 (protocol No. 20). In 2004 there was the first bachelors’ graduation with the speciality “Architecture”. In December 2005 the department had a successful defense of diploma projects with the speciality “Architectural environment design”. In 2007 there was the first masters’ graduation. For over fifteen years 6 doctors of architecture (PhD), more than 120 masters, hundreds of specialists, over 500 bachelors have defended their theses at the department. Depart- ment teachers published 7 monographs, 8 textbooks, over 200 articles. The department has participated in 100 confe- rences and 90 exhibitions of various levels where more than 200 articles. The department has participated in 100 confe- rences and 90 exhibitions of various levels where more than 200 articles. Teachers and students of the department have taken part in designing and building of over 100 architectural objects.

Academic cooperation with Vienna, Dresden, Kielce, Dnipro, Kyiv and Toronto has helped gain such significant results at the department. Common academically-proje- cted seminars which our architecture school conducts in Ukraine and abroad have become an important element of speciality deve- lopment.

Modern times demand for a change of an old paradigm in Ukrainian national architecture – and the science about architecture in broad meaning, achieving higher level of scientificly-practical generalization which from presen- ting certain projected-building achievements or researches dedicated to certain problems of architecture existence and specificity of activity, shift gradually to a single phenome- non in its indissoluble unity, in interaction of all constituents which form it. It all demands for wide practical and theoretical worldview of architecture creators in order not to be dissolved in one certain solution, stage, period, sty- le and solve the problem in its evolution, from the simplest shapes of space and architecture environment to the most modern ones, treated in symetric unity and, most importantly, in syncretic unity and, most importantly, in extending theatrical function.

Comparison to the achievements of world architecture expe- rience.

This last comparison, use of world experience and its role in conception of Ukrainian national activity – science, prac- tice and education is one of the least adapted parts of our architecture. It especially concerns projective-academic ex- perience in its all possible manifestations. Although over the recent years in Ukraine of V. Proskuryakov, V. Timokhin and others [1], [2], [3], [4], [5] it is still unclear which forms of world professional experience adaptation have place in mod- ern national architecture creativity. It concerns both artistic and organizational experience. The very creativity algorithm of particularly practicing architects in Ukraine stays unclear – do they simply copy the ex- amples of foreign architecture and mechani- cally transfer worldwide known solutions into conditions of post-Soviet environment in Ukraine or do they apply authentic achieve- ments and phenomena. All these questions look rather weird since practical majority of issues of “ААС”, “Будуємо інакше”, “Є”, “Ватерпас”, “Архітектурний вісник” and others publish various projects and con- structions. However, there is no the most im-
important in all diverse Ukrainian architecture activity – there are no international common projects, educational projects, contests, conceptual, search, experimental ones etc., and especially the analysis and the very results of such activity – open discussions, exhibitions, reviews in press, interviews in mass media as lower level as well as ordered contexts, real projects and constructions as the highest levels of the separate what is happening in Ukraine nowadays.

Against this background it does not look "scholasticism" at all what Ukrainian architecture schools achieved in project competition activity during 2000–2015 in Kyiv, Lviv, Dnipro as this kind of activity is the most popular form of checking its artistic courses by practicing architects (they attend such events much more actively than any others) as well as manifesting progressive architectural ideas in general.

From this perspective certain interest might be called by the results of an architecture event which took place in May 2017, it was organized by Lviv architecture school and the department of architectural environment design, having invited students and teachers from Ryerson University (Toronto, Canada), Technical University (Dresden, Germany), Prydniprovska State Academy of Civil Engineering and Architecture (city of Dnipro) to participate in an international design seminar which is known in both Ukraine and Europe as "International design seminar on restoring the assembly hall of the 1st academic building of Lviv Polytechnic National University with widening theatre functions". Conceptual part of the seminar was made by professor V. Proskuriakov from Lviv and Sh. Dolgoi and P. Bosyi from Toronto.

2. Presentation of the main material
The topic of the seminar did not emerge accidentally, for a few years the department had been cultivating academic design in a way that one of the semesters is completely connected with the themes of architecturally-environmental problems of Lviv Polytechnic National University which later grew into real projects which were crowned to be built in kind. It is worth remembering arrangement around the main building or the projects of academic buildings in Ustyianovycha or Sheptytskyh str (see ill. 1, a, b, c).

Academic lecture and laboratory building No.1 was the first building of Lviv Polytechnic complex, it was designed by Student's designing-construction agency of Lviv Polytechnic University. Professor I. Bagenyski and architecture teachers of construction faculty R. Lypka, A. Rudnytskiy and M. Mykula worked on the project. Designing main plan, operation group followed the principles of combining a new building with an existing one as well as desire to achieve laconism in the plan of a building with rectangular corners which would maximally allow to use typical assembly constructions. Therefore, the shape of a new academic building reminds letter "Z" (ill. 2. General view of the academic building). The building was divided into three functionally-planning parts: central, right and left. Second floor of a central part was occupied by a double-height assembly hall with 1000 seats with galleries where another 300 people could be seated. With a necessity to conduct events in the assembly hall during academic time it could be isolated on the level of the second floor from side wings where studying took place (ill. 3. General view of the hall). However, at the beginning of 2000 the hall ran out of technical and technological capabilities as well as functional ones. Lviv Polytechnic National University student's population grew to an amount of 30000 people, their culturally-academic and aesthetic needs grew as well. Apart from academic, methodical, ideological elements significant space in the hall was occupied by artistic ones, however during 60% of time this biggest of university spaces was kept half empty. At the request of the Rector the head of the department of architectural environment design and its leading pedagogues decided to broaden functional palette of an existing hall. Extending theatrically-performing function was chosen as the main renovation vector and it would satisfy the needs of not only students but also citizens and city guests.

All seminar participants, students and teachers came to Lviv before its opening. On 22 May seminar started with identifying project tasks and creating artistic groups. One of the solutions at the event was organizing international project student’s groups which were supervised by teachers and postgraduates of the department of architectural environment design of Lviv Polytechnic National University. Altogether 31 students participated in the seminar. Working part of the seminar ended on 27 May with the presentation and discussing searching solutions in the form of parti diagrams of projects.

Among some ideas suggested by the students from Lviv, Dnipropetrovsk, Dresden and Toronto in the form of projects-pari diagrams, conceptual as well as bachelor's qualification works the ones which deserve the biggest attention are the following works which were prepared by the students Jenny Hong (Ryerson University), masters D. Dulov, K. Tverdoklib (Lviv Polytechnic National University), bachelors O. Kotous, M. Nagorna, A. Zykova (Lviv Polytechnic National University) under the supervision of a postgraduate of the department of architectural environment design (Lviv Polytechnic National University) Yu. Filipchuk they decided to provide stage space with a number of the following possibilities.

III. 2. Main façade of the first academic building from Konovaletsia street in Lviv
According to them, existing stage-bay in the hall could transform into stage-arena, deep, diametrical and trihedral stage due to transformation of board constructions and equipment. Parameters of stage and hall space could also be changed by mobile portal which would perform the function of light bridge with placing light batteries on it. The project also presupposed placing softs on the pillars at the height +11.00. The project suggested substituting the seats in parterre, removable front rows, possibility of placing small playgrounds deep in the hall for better play communication with the audience. Higher levels of the hall had a box designed for people with special needs and event guests. Behind the arriere scene, in the hall spaces at the mark +3.60 artistic group presupposed men's and women's make-up rooms from which actors would have the possibility to conveniently and quickly get onto the stage. Due to the fact that the hall was designed for various using functions it was decided to install movable wooden blinds in existing windows which would let fast and quality control over natural lighting depending on the genre of work. In order to strengthen acoustics in the hall it was suggested to install suspended acoustic panels under the ceiling.

Moreover, attention should be paid to the project of students under the ceiling. The hall was designed for various using functions it was decided to extend the possibilities of functional palette as well as modernizing its aesthetic components. Among those changes it is possible to distinguish the following: provide the possibility of changing stage configuration by means of introducing lifting mechanisms, this in its turn would lead to transformation of an existing stage into trilateral, stage-arena, pinnular; stage portal would also be enriched. Parameters of stage and hall space could also be changed due to transformation of board constructions and equipment. According to them, existing stage into trilateral, stage-arena, pinnular; stage portal would also be enriched. According to those changes it is possible to distinguish the following: provide the possibility of changing stage configuration by means of introducing lifting mechanisms, this in its turn would lead to transformation of an existing stage into trilateral, stage-arena, pinnular; stage portal would also be enriched. Parameters of stage and hall space could also be changed due to transformation of board constructions and equipment.

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III. 5. Project by the results of parti diagram was prepared by a student T. Gorodchuk, supervisor prof. V. Proskuriakov, with the participation of prof. postgraduate O. Krasnykhvuk and K. Yanchuk, where the attention is paid not only to innovatory decisions concerning renovating assembly hall but also to architecturally-functional organization of space of the whole building. According to the idea of the group assembly hall was to undergo certain changes directed at extending the possibilities of functional palette as well as modernizing its aesthetic components. Among those changes it is possible to distinguish the following: provide the possibility of changing stage configuration by means of introducing lifting mechanisms, this in its turn would lead to transformation of an existing stage into trilateral, stage-arena, pinnular; stage portal would also be enriched.

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