

Oleg Sleptsov  [orcid.org/0000-0001-5441-5453](https://orcid.org/0000-0001-5441-5453)  
o.sleptsov@me.com

Margaryta Yakovenko  [orcid.org/0000-0002-1080-3443](https://orcid.org/0000-0002-1080-3443)  
kumee4ka@gmail.com

Department of Technical Fundamentals of Architecture Design, Kyiv National  
University of Construction and Architecture

ROLE OF THE DEPARTMENT OF ARCHITECTURE FUNDAMENTALS  
AND ARCHITECTURAL DESIGN OF KYIV NATIONAL UNIVERSITY  
OF CONSTRUCTION AND ARCHITECTURE IN SHAPING  
THE KYIV ARCHITECTURAL SCHOOL

ROLA KATEDRY PODSTAW ARCHITEKTURY I PROJEKTOWANIA  
ARCHITEKTONICZNEGO KIJOWSKIEGO NARODOWEGO UNIwersYTETU  
BUDOWNICTWA I ARCHITEKTURY W TWORZENIU  
KIJOWSKIEJ SZKOŁY ARCHITEKTONICZNEJ

**Abstract**

The article is focused on identifying the role of the Department of Architecture Fundamentals and Architectural Design in shaping the architectural school of Kyiv National University of Construction and Architecture (KNUCA) as part of the Kyiv architectural school. It is performed by applying the deductive method, i.e. consistent analysis and study ranging from Kyiv architectural school elements. The article provides analysis of the key historic landmarks of its development, its fundamental principles, determined for the first time, methodological approaches, and prospects of development. Having undertaken the analysis, KNUCA was found to be playing a prominent role as a leader in methodology of training architects.

**Keywords:** architectural school, Kyiv National University of Construction and Architecture, historical landmarks, methodological fundamentals, graduates, scientific and creative achievements

**Streszczenie**

Głównym celem tego artykułu jest określenie roli Katedry Podstaw Architektury i Projektowania Architektonicznego w tworzeniu szkoły architektonicznej Kijowskiego Narodowego Uniwersytetu Budownictwa i Architektury w kontekście szkoły architektonicznej w Kijowie. W tym celu zastosowano dedukcyjną metodę polegającą na sekwencyjnym ruchu analizy i badania elementu kijowskiej szkoły architektonicznej. Pod uwagę brano główne historyczne etapy formacji, po raz pierwszy zdefiniowano podstawowe zasady metodyczne i perspektywy departamentu. Przeprowadzone badania udowodniły, że KNUCA jest liderem w dziedzinie metodologii nauczania na liście miejsc kształcących przyszłych architektów.

**Słowa kluczowe:** szkoła architektoniczna, Kijowski Narodowy Uniwersytet Budownictwa i Architektury, historyczne kamienie milowe, zasady metodyczne, absolwenci, osiągnięcia naukowe i twórcze.

## 1. Introduction

Term “architectural school” is mainly used in the meaning of a specific educational institution. This is a special concept different from semantically similar definitions of “scientific schools” and “art school”. The architectural school stands out among other training institutions, since in its work it combines elements of scientific and art schools. This stems from the very nature of architecture, as high quality architecture is impossible without scientific knowledge in geometry, structural mechanics, fundamentals of structures, and artistic skills – the ability to express the idea using artistic means. Thus, we can say that the architectural school is a cultural phenomenon that was developed and shaped at a specific historical period and is characterized by prominent architectural artistic ideas, tectonic accuracy and commonality of artistic paradigm of school representatives.

Natalia Kondel-Perminova in her dissertation “The role of educational institutions in the development of architecture and urban construction in Ukraine: end of 19<sup>th</sup>-early 20<sup>th</sup> century” [6] analysed the work of educational institutions in Ukraine, given the historical evolution of the construction profession and the profession of architect, looked into social, economic, cultural and historic prerequisites for architectural and construction educational institutions to appear in Ukraine and the stages of their development. She determined content and training methods in Ukrainian educational institutions at different stages in these time spans. She established the nature of the interconnection that gradually developed between educational institutions and professional internship. Yuliana Petrovska’s thesis “The interconnection of architecture and art in the Lviv architectural school’s development” [4] and Natalia Horojan’s “Kharkiv architectural school at the time of its establishment and development: end of 19<sup>th</sup>– early 20<sup>th</sup> century” [8] respectively examined the establishment, shaping and development of Lviv and Kharkiv architectural schools. Kyiv National University of Construction and Architecture (KNUCA) and its influence on the establishment and development of architecture in Ukraine was not the subject of these studies, though. Oleksandr Kaschenko, dean of the Department of Architecture, KNUCA, examines the issues of training architects in Ukraine in a number of scientific articles. However, the role of the Department of Architecture Fundamentals (AF) and Architectural Design (AD) in the shaping of Kyiv architectural school has not been researched yet.

Leading architectural and design schools in Ukraine and the CIS can be best identified when reviewing the results of annual International Competitions of the best diploma projects and works in the architecture, design and artistic professions. For many years, top of the list as to the number of international awards, certificates and diplomas at the competition has been reached by Kyiv National University of Construction and Architecture, Kharkiv National University of Construction and Design, National University – Lviv Politechnika, National Academy of Fine Arts and Architecture, National Aviation University and others.

## 2. Formation, fundamental principles and methodological approaches

Using the method of systematization, the main historical landmarks of the Department's formation were identified, for which archival data and literary sources were used [3].

In 1930, the continuous hereditary line of the Faculty of Architecture and the present Kyiv National University of Construction and Architecture began as a promising integral institution.

From 1939 until Ukraine acquired its independence it was called the Kyiv Civil Engineering Institute (KCEI). The Department of Architecture Fundamentals and Architectural Design has been an integral part of the Department of Architecture since 1964. It was established by breaking away from the Department of Architectural Designing and was initially called the Department of Interior, Furniture and House Devices. Until 1969, the Department was headed by Oleg Sveshnikov. At that time, in addition to in-depth study of new specializations, the faculty taught fundamental subjects on the typology of housing, designing residential buildings, introduction to specialization, and history of art and architecture. The faculty members were actively involved in scientific research, with many lecturers defending their PhDs.

In 1969 the Department was headed by Victor Savchenko, a KCEI graduate of 1950, Doctor of architecture (1983), Professor, Honorary Architect of the USSR (1985). In 1972, the department changed its name into Fundamentals of Architecture and underwent reorganization. There was a postgraduate course at the department. In 1982 the department faculty was actively involved in constructing and designing a new building of the department and today the building of the architectural department remains the only national example of a single specialized university campus for architects.

In addition to teaching specialization, interior and reconstruction, the faculty provided instruction on fundamental subjects on the typology of housing, designing residential buildings, introduction to specialization, and the history of art and architecture. The faculty were actively involved in scientific research. The experimental design laboratory played a prominent role at the Department: it was here that the scientific accomplishments and methodological projects of the Department were developed, tested and implemented.

It was a time when new educational approaches were employed in teaching key architectural subjects: Sociology of architecture, Psychology of perception of architectural constructions, Fundamentals of architectural composition, Synthesis of arts in architecture, etc. There was a postgraduate course at the department, lecturers and professors were actively involved in scientific research.

This period was the time of formation of the scientific school of the faculty of architecture, and leading departments, from the 1960s, began to form distinctive and vibrant research centres. Such a centre, significant for education and architecture in Ukraine, the Department of Architecture is included in the controversial 1980s.

In 1987 Valentyn Yezhov, a KCEI graduate from 1949, Doctor of architecture (1983), Professor (1990), People's Architect of Ukraine (1999), author of numerous projects, was elected the head of the Department and the Department's name was changed again into Department of Architecture Fundamentals and Architectural Design.

By that time, the Department had already become a leading one at the architectural department, teaching specialised courses (History and theory of interiors, Accessories and fitting material, Furniture and devices in interior, Psychology of architectural perception, Fundamentals of typological analysis: History and theory of reconstruction and restoration, Urban aspects of reconstruction, Reconstruction and new construction in historic environment residential and public houses etc.) for senior students, as well as lectures delivered on architectural education – Theory of architectural composition; Introduction to specialization; Fundamentals of architectural designing; History of architecture: Architecture of ancient world, History of architecture of Middle Ages and Early Modern Period, Modern national (Soviet) architecture, Modern world architecture, History of art, History of urban planning, History of Russian architecture, History of architecture of Asian, African and Latin American countries, and a Regional architecture-practical course introduced by Viktor Chepelyk in 1998. The principle of inheritance in lectures from the History of Ukrainian architecture was clearly traced (initiated by Victor Chepelyk in 1988 coauthored with Associate Professor Volodymyr Zabolotnyi in 1990–1999) [2].

This period of activity of the Department also unfolded during the turbulent historical events in Ukraine, when all spheres of life were subjected to complex tests and entered a state of rethinking the basics and guidelines. The complexities of politics, economics, architecture and construction have combined with a systemic renewal and the beginning of a difficult integration into the European space of education and science. And, as before, in the difficult and decisive nineties, again it was necessary to preserve the reproduction of knowledge and training of new teachers and scientists. The head consistently implemented the idea of training, on the basis of graduate school, a group of promising scientists who, learning from professors' teaching, organically become their followers. This group has preserved its integrity and became the basis of the Department staff today.

In 2010 the Department was headed by Oleg Sleptsov, the KCEI graduate of 1980, Doctor of architecture (1999), Professor (2002), Honorary Architect of Ukraine, laureate of State Award of Ukraine in Architecture (2000), member of the National Association of Architects, member of the Ukrainian Academy of Architecture (2000), author of numerous urban centres, buildings, and constructions in Ukraine and abroad.

With the help of the method of comparative analysis all the departments of the faculty of architecture were analysed. The Department of Architecture Fundamentals and Architectural Design is multidisciplinary and is the largest at the Faculty of Architecture. In the 2018–2019 academic year, the Department employs doctors and candidates in architecture – 34 teachers, including: professors – 10, associate professors – 16, senior lecturer – 1, assistants – 7. Teachers of the Department are involved in teaching 55 disciplines. At the same time, other departments have no more than 25 teachers in their composition.

In 2017–2018, there are 14 postgraduate students at the Department. Since 2010, 3 Doctor's dissertations and 16 PhD dissertations have been defended. Over the past 25 years, about 45 Doctor's and PhD dissertations have been defended.

Recently, the Department of Architecture Fundamentals and Architectural Design was joined by Valentyn Shtolko, People's architect of Ukraine, President of the Ukrainian Academy

of Architecture, member of the International Academy of Architecture, laureate of the State Award of the USSR, laureate of the State Award in Science and Technology, twice laureate of the State Award of Ukraine in Architecture; Yuriy Serogin, Distinguished architect of Ukraine, member of the National Association of Architects, corresponding member of the Ukrainian Academy of Architecture, twice laureate of the State Award of Ukraine in Architecture; Yanosh Vig, Distinguished architect of Ukraine, member of the Ukrainian National Association of Architects, member of the Ukrainian Academy of Architecture, laureate of the State Award of Ukraine in Architecture.

In 2017, the Department launched a programme of international scientific and methodological cooperation with the Faculty of Architecture of Harbin Polytechnic University (Harbin, China).

Groups of students of the Department, uniting in teams with design students and other departments regularly receive the highest prizes in the prestigious National architectural student competition “Steel Freedom”.

Since 2018, students of the Department have been taking part in the program of architectural double degree, performing two parallel theses in KNUCA and Lublin Polytechnic during training at 5 and 6 courses. This is the principle of integration with educational institutions in other countries.

Using the interview method, graduates of the Department were interviewed [7]. On the basis of their answers to the question of the questionnaire, another principle of development of the architectural school of KNUCA was formed – the principle of innovation. Time does not stand still and today new technologies are used, but the academic approach to training architects in KNUCA makes it different from the system of training abroad. Its advantage, though, is the artistic element maintained by KNUCA as a prominent element in the architectural school. So, during the first year of study the focus remains on academic training to prepare students for creative designing, developing their ability to graphically represent measurements, drafting architectural buildings, orders and their details, teaching method of drawing (mono- and polychromic). The students, therefore, can acquire the taste for their future profession by doing practical assignments, mastering knowledge about landmark architectural objects, developing skills to enable light/shadow modelling of architectural forms, and developing spatial thinking.

### **3. Prospects of development**

It keeps expanding by adding new specializations for masters in educational and scientific programmes and masters in educational and professional programmes, namely: specialization Architecture of Buildings and Constructions: reconstruction and restauration of architectural objects, Architecture of Buildings and Constructions: sacral architecture, Architecture of Buildings and Constructions: innovative architecture. This renewal and expansion of specializations started in 2017. New curricula and relevant disciplines have been developed. Of particular importance nationwide is specialized training in the field of sacred architecture,

along with general reconstruction and restoration, as it is developed and implemented for the first time in Ukraine.

KNUCA graduates and their works and creative input are a sign of quality of training at the higher educational institution. Among KNUCA graduates there are laureates of the Stalin Award, the State Award of the USSR, the State Award of the Ukrainian SSR named after Shevchenko, the Lenin Komsomol Award in Architecture, public officials, scholars, and architects with major accomplishments in other areas as well [5].

Given the identified specificities of its development, the Department has developed methods of improving architectural schoolwork and its prospects. KNUCA's model of architectural education for the future is primarily a student-centered approach that was developed in 2015 at the European conference "Education in European countries". Secondly, developing the essence of architectural education: flexible educational syllabi; democratization of the educational process to meet the needs of modern society; its universal nature linked to the resolution of social, scientific, technical, architectural, and environmental challenges taking into consideration the artistic and aesthetic aspects. We have already embarked on this path and the first steps made here are the introduction of selective courses that students are entitled to, provided they have a clear idea as to the goals they are pursuing.

#### **4. Summary**

On the basis of the three specific principles of development of the architectural school of KNUCA: the principle of continuity, the principle of innovation, and the principle of integration, it can be concluded that KNUCA plays a crucial role in developing the methodology of training architects in Ukraine. Historically, it is here that a scientific and pedagogical school has developed which has a significant impact on the establishment and development of architectural education at the university level in Ukraine. In the course of development of architectural education in Ukraine, KNUCA represented Ukraine in the central educational methodological union. KNUCA serves as the basis for scientific and methodological commissions on architectural education at the Ministry of Education and Science of Ukraine. That is why it is here where fundamental syllabi are developed that serve as the standard to be disseminated to other departments of higher educational institutions in Ukraine. Other departments in their turn add variable elements to them. KNUCA representatives are permanent members of accreditation commissions and define licensing standards in the regions. KNUCA has the strongest faculty of high potential that plays a crucial role in the philosophy of architectural education in Ukraine, its policy and strategy.

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