

Andrii Shtendera

PhD student, Lviv Polytechnic National University

Report on The Study of The High-Rise Buildings in Historic Cities

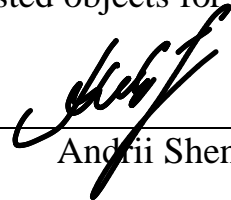
In March 2020, I received the possibility to study at Technische Universität Wien, thanks to the financial and contact support of OEAD and under the guidance of a Dr Hofer. During the internship in Vienna as part of dissertation research on "Evolution and architectural aspects of modernization of high-rise buildings of historic cities" was an analysis of literary sources in the library of TU Vienna and the Center for Architecture, including - The image of the city. Kevin Lynch (1960), STEP 2025 - High-rise buildings (2015), High-rise is a must! (2000), The Slender City (1995), Living Sky-High, 100 years of high-rises in Rotterdam, typically American. As I, together with other researchers, Solomia and Uliana, came to Austria on March 2, we started working on the research the very next day, but unfortunately, we could not finish our work there, as the COVID-19 pandemic had raised, and Ukraine closed all the borders so that on March 16, 2020, we had to urgently come back to Lviv. In given circumstances, I continued to work on the research topic in the next months, and now it laid the basis of my dissertation research part.

The difference in approaches to the urban policy of high-rise buildings, namely Vienna, Paris, Berlin, Warsaw, Bratislava, Rotterdam, London, Madrid, and Frankfurt, is described, which provides a basis for developing a scenario for improving Lviv's urban policy in this regard. Analysis of the population density of historic cities and the number of skyscrapers, the average height of buildings, as well as historical aspects of development (periods of the greatest welfare, the level of destruction of the city during wars and cataclysms, etc.), are also taken into consideration.

At different times, the term "high-rise buildings" meant objects of a various number of stories and heights, even at the moment, there are significant differences in the definition of high-rise buildings in the regulation documents of Europe and North America. High-rise buildings are those that have seven or more floors, according to some standards, or more than 50 meters high according to others. Instead, the State Building Norms of Ukraine define high-rise buildings only by quantitative characteristics - from 73.5 to 100 m. Given these differences, as well as taking into account the harmonization of definitions with the norms of European countries, on the one hand, and given the context of historically formed cities on the other, research in Vienna became the basis for creating a conceptual apparatus for studying high-rise buildings in our country. The next step of the study was the juxtaposition of the changes

in the panorama of Lviv and Vienna during the twentieth century through the use of archival materials. This comparison would be a part of the development of a formula for determining the height of a high-rise building for each city and historical period separately. The study also indicates a change in the height of the so-called "background buildings" in both cities.

One of the most important stages of the study in Vienna was the opportunity to collaborate with Dr Andreas Hofer, who helped with the selection of literature, shared his ideas and experience in the field of research, as well as suggested objects for field surveys in the city.



Andrii Shendera