

POLITECNICO DI TORINO  
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**Space and (no) stone. Composition in the elaborate process of architectural idea: avant-garde Russian rationalists and N. Ladovsky's exercises**

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I studied architecture at university in Russia and in Italy. This long learning experience allowed me to compare the different methods of teaching in Russian and Italian universities. Specifically, during the Russian period I learned different composition methods that help students to develop their imagination and give an impulse to the design. Studying in Italy instead I found that the methods used are different, almost opposites. Exactly this fact inspired me to do research and understand our different views on the formation of architecture and review the methods of design.

The main theme of this thesis is a Soviet phenomenon, the original architecture of the twenties years of the twentieth century - the Nicholay Ladovsky's creative school. He is a principal leader of the artistic rationalist movement, who through his discipline "Space" founded the school of architecture in contemporary Russian. In the Soviet Union, those which have the power - rationalism, are the first among the architects, who have consciously decided to make contacts with representatives of the creative "left" arts.

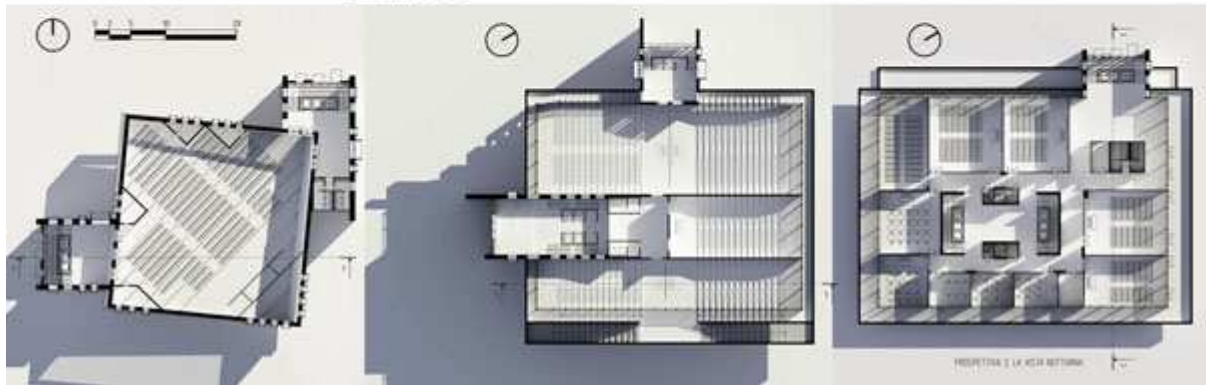
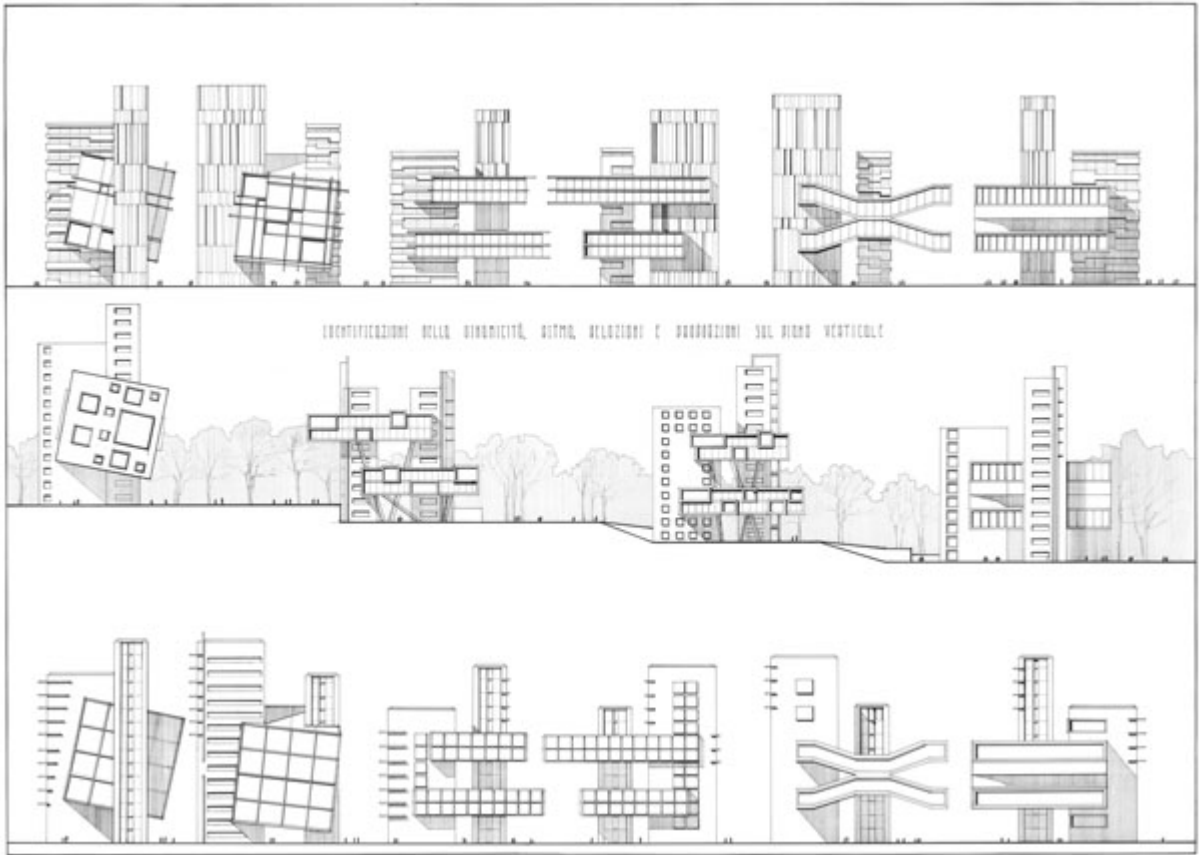
In the twentieth of twentieth century emerged special artistic organizations and unions. Among them are: INChUK (Institute of Artistic Culture) and VChUTEMAS (State Laboratory Institute of Arts and Technology). The teaching and methodology of architectural avant-garde school (VChUTEMAS) that generated the contemporary Russian school, is the subject of my research.

I chose the period between 20 and 30 years because exactly at that time, denying the traditional and radically rejecting the past, the current rationalist begins to form the first educational project that provides the basis of the methodology in the Russian school of composition. What concerns the thematic limitations, the work focuses primarily on discipline "Space" which was the core subject in the laboratory VChUTEMAS.

Ladovsky did not believe that the compositional technique must "die" in the image arts. He taught his students how to select in a wide palette of tools and techniques of artistic expression, the dominant ones are important for a specific project.

### **The rationalist approach principles:**

- **The attempt to develop spatial-thinking of students.**  
**The attention to the potential of three-dimensional artistic composition.**  
Ladovsky intentionally did not set the students' attention on the front, trying to move away from traditional facade and pay attention to the potential to create three-dimensional artistic composition.
- **The combination of utilitarian function and design with the formal-esthetic function and the perception of the building.**  
In the search for formal beauty, Ladovsky with his students try to expand the objective conditions in the creation of architectural form, sought to include in the perception of the building as well as a utilitarian purpose and design solutions including the rules of perception.
- **Main slogan: "Architecture cannot be replaced from engineering."**  
The architecture was changed from engineering, and creative problem were replaced with the practical matter of convenience. Melnikov said that despite the fact that architecture was linked to the cost of millions, should still be treated as fine art.
- **Special attention to the means of composition: rhythm, proportions.** For example, in many projects rationalists considering that man perceives not so much the absolute quality of the shapes, colors, lighting, etc., as their relations and proportions.
- **The development of imagination through composition exercises.** Exercise of discipline "space" can be useful as training exercises that help the student improve professional experience and develop the imagination. Exercises founded by Ladovsky are still used during the first academic year in architectural schools in Russia.





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