THE VISION OF A RATIONAL ARCHITECTURE

Rationalist is something you become not for rational reasons but because you have a vision. This article will try to deal with the vision of some Soviet architects in the 1920s as to what a rational architecture might look like. I also intend to say something about the roots of this architecture and about the rational arguments used to support the vision. The Soviet rational architecture of the 1920s is perhaps best illustrated by some of the projects for collective houses. The new way of life was not necessarily connected with what might be called a rational architecture from the beginning. This could be seen in an early “communal house” (komunal’nyi dom) from 1920, which shows a rather romantic or expressionistic way of treating the building. A “phalanstere” (falunster) from 1921 shows the inspiration from the French utopian socialists in a rather palace-like classical architecture.

Around 1925 the various sources of a rational architecture found their form. The vision got a gestalt which made it visible and easy to propagate. The Narkomfin building (Narodnyi Komissariat Finansov RSFSR, the building’s client) may be used as an example even though it was not built until 1928-30. The work of a group of architects under Moisei Ginzburg, it exhibits all the characteristics of rational architecture: the smooth façade, the big glazings, the ground floor on pillars, the overall appearance of an ocean liner, including the captain’s bridge on top of it, where the minister himself, Nikolai Miliutin, was living. Beneath the surface of the Narkomfin building we find the following characteristics of rational architecture: purism in the simple geometric forms and smooth surfaces; functionalism in the separation of different functions (like living, cooking, and child care), each given a space of its own; constructivism in “honestly” showing the construction, like the pillars of the ground floor; scientism in using the methods of natural science as a model for the architect to follow.

I would like here to concentrate on the last point, the scientism of rational architecture, since the other points are well treated in the growing literature on Soviet architecture.¹ The whole Narkomfin building could be said to be

¹. Among the bibliographies in English on Soviet architecture there could be mentioned. S. F. Starr, “Writings from the 1960s on the Modern Movement in Russia,” Jour.
founded on a diagram which shows the efficiency of different spatial solutions (A - F) for different apartment sizes. The simple idea behind the diagram is that the building volume is what you pay for and the apartment area is what you use. The efficiency coefficient is calculated by dividing the cubic volume of the whole building by the total apartment area (corridors and staircases excluded). The diagram shows that for apartment sizes above 50 square meters the conventional solutions A and B are the most effective. A major desire in the Soviet Union of the 1920s was, however, to give every family an apartment of its own; for economic reasons that had to be small apartments. This led to the solution of type F with a corridor and kitchen and other subsidiary rooms on one side of the building and a large living room with a high ceiling on the other side. The argument for this derived from sanitary, economic, and aesthetic reasons. The corridor had the additional advantage of being an indoor way to a communal kitchen and a day nursery. The point of all this is not so much to explain why this house was built in the way it was, but rather to show the rationalistic way of arguing.

Two more examples will show how natural science and technology were exalted as ideals in all fields of society. The first is a project for a communal house from 1929. The project, which was made by the two young architects Barshch and Vladimirov, was never built but has been widely used as a perfect example of new form for a new content. In a kind of Cartesian coordinate system there are inserted 1000 adults (in the high-rise north-to-south building block), 360 children under 8 (in the left arm), and 320 children of 8 to 16 (in the right arm). Everything is neatly analyzed and spatially separated according to function (which means age in this case). The only meeting point of adults and school children is the stolovaya (dining room) in the origo of the coordinate system. There dinner is served on a conveyor belt in a room which looks like an assembly hall in a factory. Thus reproduction and production are organized according to the same principles. This conveyor belt principle was carried to its utmost consequence in Miliutin’s Linear City. A whole town