

The Influence of Hannes Meyer and the Bauhaus Brigade on 1930s Soviet Architecture

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Abstract

This paper aims to clarify the influence of Hannes Meyer's concept of "psychological effects" on socialist cities and architecture in the Soviet Union by analyzing two 1930s projects: Meyer's plan for the development and reconstruction of Greater Moscow, and the Bauhaus Brigade's design proposal for the Palace of the Soviets competition. Meyer's design, especially his idea to place skyscrapers in a widened Red Square, was intended to psychologically enhance the effect of mass demonstrations. Similarly, the Bauhaus Brigade's design employed technologically augmented flexible spaces and wide swaths of greenery to accommodate mass demonstrations. The objective of "psychological effects" was that the Soviet population would be conscious of constructing a new society in the Soviet Union. These concepts were heavily influenced by Meyer's early work in Weimar Germany, when he concluded that "psychological effects" elevated functionalism to a new level. A review of original design plans and unpublished documents yielded direct parallels with socialist realist architecture of the time, such as the People's Commissariat of Heavy Industry and the general redesign of Moscow, suggesting the ideas of Meyer and the Bauhaus Brigade strongly influenced the fundamentals of 1930s monumental architecture in the Soviet Union.

Keywords: Hannes Meyer; Bauhaus Brigade; Palace of the Soviets; psychological effect; mass demonstration

1. Introduction

1.1 Research Background

The Soviet Union's Central Committee of the Communist Party settled upon Moscow's city planning scheme during the First Five-Year Plan in June 1931. This resolution marked the Soviet Union's first socialist city development policy (Shimotomai, 1994). Lazar Kaganovich's report written at that time attaches greater importance to reconstructing existing cities than to building new ones. To reconstruct existing cities, Moscow needed new concepts for street networks and public buildings; plans were created and many competitions were held, including a competition for the development and reconstruction of Greater Moscow from 1931 to 1932, and the competition for the Palace of the Soviets in 1931.

The Soviet government invited international architects and city planners to supervise reconstruction efforts, including the architect Hannes Meyer (1889-1954). Believing that the Soviet government would

provide a plethora of architectural opportunities, Meyer, with seven exceptional Bauhaus students, formed the Bauhaus Brigade: René Mensch, Konrad Püschel, Tibor Weiner, Antonin Urban, Klaus Meumann, Bela Scheffler, and Philip Tolziner.

Hannes Meyer was one of seven teams invited to the competition for the development and reconstruction of Greater Moscow. Tolziner, Urban and Weiner, with Meyer acting as consultant, participated to the second stage of the 1931 Palace of the Soviets competition, where their proposal was ultimately rejected in favor of Boris Iofan's design in 1934. Moscow's general reconstruction, meanwhile, was determined in 1935 under the design direction of V. N. Semenov (Tafari, *et al.*, 1979).

In the Soviet Union, Meyer and the Bauhaus Brigade failed to receive the acclaim they deserved. Meyer disbanded the Bauhaus Brigade in 1932. Mensch left the Soviet Union in 1934, Meyer in 1936, and Püschel and Weiner in 1937. Urban and Tolziner were arrested in 1938, and Meumann and Scheffler either disappeared or were arrested in the late 1930s. Their work still fails to receive sufficient recognition.

The value of the Bauhaus Brigade's work in the Soviet Union should be reconsidered for three reasons. (1) Meyer's work in Weimar Germany focused on the power of "psychological effects" to improve upon the principles of functionalism (Tomita, 2008). Meyer

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and the Bauhaus Brigade incorporated this concept into their Soviet redesign proposal. (2) Meyer's work in the Soviet Union generalized his Weimar-era theoretical activity (Meyer, 1933). (3) Meyer's Bauhaus achievements influenced his decision to participate in Soviet reconstruction.

The early 1930s were a turning point not only for the Soviet Union under Stalinism, but also for modernist architecture. Though most modernist architects yielded to or recanted under totalitarianism in general, the relationship between both elements deserves attention in light of the viewpoint that socialist realism developed from the avant-garde movement (Groys, 2000).

1.2 Aims, Method, and Previous Research

This paper aims to clarify the influence of Hannes Meyer's concept of "psychological effects" on socialist cities and architecture in the Soviet Union, a concept rarely analyzed in prior research.

Parts 2 and 3 of this paper analyze, compare, and contrast the features of two projects: Meyer's proposal for the development and reconstruction of Greater Moscow, and the Bauhaus Brigade's entry into the competition project for the Palace of the Soviets. Part 4 evaluates the results of parts 2 and 3 in the following contexts: (1) Meyer's concept of "psychological effects" in architecture, and (2) Moscow city planning in 1934-35.

K.C. Jung (1989) pointed out that Meyer invented the "Elastic Schema" concept, which he then adapted to his city plans for the Soviet Union, including the reconstruction of Moscow. According to K.J. Winkler (1989), this project was an architectural translation of Meyer's manuscript, *Theses About Marxist Architecture* (undated). Similar to our paper, W. Richardson's analysis (1991) focused on Meyer's influence on the "Stalin" plan of 1935, but was limited to discussion of a particular ring road, as the paper used only published reference materials.

Regarding the Palace of the Soviets competition, Yatsuka (1993) presented a comprehensive discussion, from outline to principal proposals. However, despite the inclusion of the Bauhaus Brigade's drawings in Hannes Meyer's monographs (Kleinerüschkamp, 1989), their work has never been analyzed.

The materials consulted for this paper include Meyer's unpublished manuscripts in Frankfurt's German Architecture Museum, competition drawings in Moscow's Schusev State Museum of Architecture, and Philip Tolziner's materials held by the Bauhaus Archive in Berlin. Excepting those of Tolziner, all of these materials have been analyzed in past studies, some of which included accompanying drawings. However, we focused our analysis on original and unpublished materials in order to investigate the underlying concepts in detail.

2. The Role of "Psychological Effects" in the Plan for the Development and Reconstruction of Greater Moscow

2.1 Documentation of the Design Process

(1) Adoption of Elastic Schema: December 2, 1931

To commemorate the Russian Revolution, the city of Moscow used to hold annual competitions for festal urban space, especially mass ceremonies and demonstrations, of which the 1931 Palace of the Soviets competition is a well-known example. These competitions required the redesign of architecture, space, and routes to accommodate attendance.

The competition for the development and reconstruction of Greater Moscow in which Meyer participated may not have required demonstration spaces; rather, Meyer's plan may have been more influenced by the political climate at the time. His team examined five city planning schemas at the first recorded discussion on December 2, 1931. A concentric schema and a parallel schema, both of which focused the Kremlin at the center of the national structure, were initially rejected. (This rejection of a concentric structure echoed the work of Arturo Soria y Mata, who pioneered the linear city theory in 1882.) Meyer rejected the concentric schema on economic grounds, but affirmed it would be politically effective, as it would put the Kremlin at the center of the city.

Three schemas were ultimately adopted, including the Elastic Schema, which corresponded to the extension and reduction of the city and arranged satellite cities diagonally, as shown in Fig.1. This schema is a key feature of Meyer's project.

The main roads extend in four directions from the Kremlin (represented by the central triangle) to the satellite cities (represented by small circles). Meyer includes a note next to the schema advising that mass demonstrations should be considered:

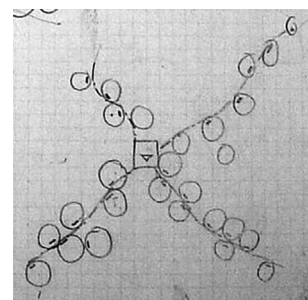


Fig.1. Hannes Meyer, Elastic Schema, December 2, 1931

"The four diagonal trunk roads are not only developed as experimental arteries, but also ideologically regarded as organic limbs of the city center. As the main entrance roads to a mass demonstration, they become more important as they approach the city center" (All quotations in this section are attributed to Meyer, 1931-1932).

(2) Mass Demonstration: December 8, 1931

Mass demonstrations had been the topic of ongoing discussions since December 2, 1931, particularly the question as to how the satellite cities' transfer system should relate to mass demonstrations. Meyer's design incorporated this discussion in the form of a unified area or *rayon* representing the unity of all Moscow in a national festival. His project notes provide some insight into these considerations:

"The loosening of the city outskirts automatically raises the question of whether the mass demonstration from the new city outskirts can reach the center by public transportation. At the same time, a primary question is raised:

a. Should all newly organized districts also carry out their own demonstrations on May 1st and November 7th? And, at the same time, should the mass demonstration in Red Square be shaped more as a regional celebration with appropriate delegations?

Or:

b. Must transportation be offered for all spectators so that all 400 million participants can take part in the event, and so these districts can make a living connection with the capital city?"

(3) Elastic Schema: December 25, 26, and 28, 1931

The Elastic Schema emerged as a core theme during these discussions in 1931. The theme originated with Meyer's rejection of concentric forms as inherently capitalistic and unviable. He also rejected the simple grid system used by German architect Ernst May to design the new city of Magnitogorsk. Meyer then proposed the Elastic Schema.

The Elastic Schema uses the schema of a linear city to create satellite cities. The satellite cities, comprising 200,000 people, were composed of plural linear cities. Each satellite city was connected to the city center by a public transportation system.

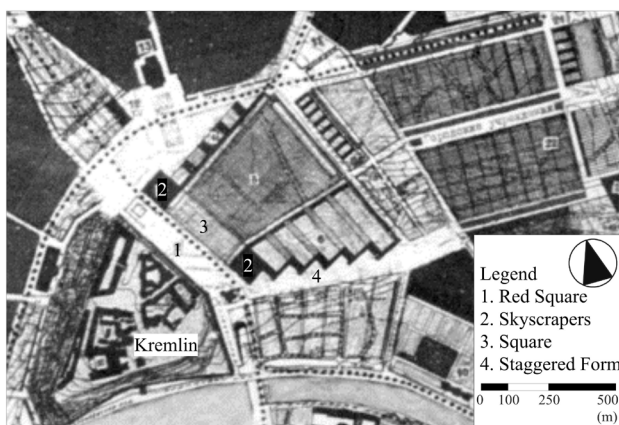


Fig.2. Hannes Meyer, Competition Project for the Development and Reconstruction of Greater Moscow, 1932
(Annotations by the Authors)

2.2 Final Plan: the Symbolism of the Socialist City

During the creation of the final plan, Meyer initially set the fundamental schema of the city, and then

discussed the applicability of the transportation system to mass demonstrations. He ultimately designed a city system that connected satellite cities, which were composed of linear cities, with the public transportation system.

Discussion of plans for the city center continued. Meyer's final proposal explains the center of Moscow focusing around the Kremlin:

"A carefully devised traffic plan for the mass demonstrations of May 1st and November 7th was intended to facilitate the passage of 1.5 million demonstrators through the center of Moscow and Red Square" (Meyer, 1938).

Meyer planned a symbolic urban space for the climax of a mass demonstration (Fig.2.) as follows:

"The Red Square remains as a 'demonstration gateway,' being absolutely inviolable near the Kremlin Wall and Lenin Mausoleum. The square extended up to 130 meters will contribute to faster passage of demonstrations [...] The square is crowned by the 30-story skyscraper of the Party Central Committee to the north, and by the identical Communist International building to the south." (Meyer, 1932)

A meeting hall was planned with a suspension structure between the two skyscrapers to "provide a view overlooking the new demonstration area." Meyer wanted people to see the skyscrapers flanking the Kremlin as a symbol of all Moscow, a plan intended to exert a "psychological effect" on viewers.

Additionally, the south skyscraper was connected to a staggered arrangement of buildings. The suspension structure, staggered formation, and psychological intent were all recognizable elements of Meyer's work in Germany, and could be regarded as an architectural continuity from the German to the Soviet era. For these reasons, Meyer is considered to have developed the architectural methodology of the German era and used it to design an important urban space in the Soviet Union.

2.3 Originality of Meyer's Proposal

Jung (1989), who compared Meyer's proposal to those of the other six teams, claimed Meyer's proposal for the reconstruction of the center of Moscow was completely unique. However, recent research (Flierl, 2011) has shown similarities with Ernst May's proposal. Based on the literature we have reviewed, we will outline the similarities and differences between May's and Meyer's proposals for the reconstruction of Moscow.

The proposals shared three similarities: (1) the Kremlin was preserved and its circumference was developed with various features, such as high-rise buildings. (2) Ring road A was widened to incorporate a green zone. (3) Significant architecture was placed in the heart of Moscow to accommodate mass demonstrations.

However, the proposals differed in two important respects: (1) Meyer's plans involved widening and

building skyscrapers in Red Square, while there is no indication that May's plans involved any concrete description of development plans for the center of Moscow. (2) To accommodate mass demonstrations in the heart of Moscow, Meyer placed skyscrapers beside Red Square, while May envisioned a massive congressional hall, similar to the Palace of the Soviets.

While Meyer's and May's proposals shared some key similarities, the originality of Meyer's proposal lay in widening Red Square and incorporating skyscrapers to accommodate mass demonstrations.

In the above discussion, we have shown that Meyer's plan for the reconstruction of Moscow considered the "psychological effects" of an urban space. Meyer proposed this project as a typical demonstration of proletarian ideology and mass art, designing the urban space, particularly the skyscrapers in the widened Red Square, to exert a "psychological effect" on the viewer. Because Meyer's plan was not implemented, its concrete design remains unknown.

3. "Psychological Effects" of the Project for the Palace of the Soviets Competition (1931)

3.1 Demonstration Route and "Psychological Effects"

The Bauhaus Brigade's goal for this project was to plan a demonstration route around the palace to accommodate all of Moscow (Figs.3. and 4.). The Brigade described the plan as follows:

"The party's decision generated the development of the master plan for Greater Moscow; the plan has to organically incorporate the Palace of the Soviets into the new city, which has a population of four million [...] When marching through this new green connection zone, demonstrators will pass a number of new public buildings. A park will be laid out along the Moscow River from boulevard 'A' to the Crimea Bridge westward of the Palace of the Soviets, and to Kropotkin Street northward. The green zones

consequently become connected with the Park of Culture and Recreation." (All quotations in this section are attributed to the Bauhaus Brigade, 1931)

The Bauhaus Brigade accordingly planned a citywide demonstration route that connected the Palace of the Soviets to the Kremlin, Red Square, and the park to the south. The demonstration routes are described as follows:

"However, judging from the site location on a factory map, one may consider two main demonstration routes: one from the east (from the city center), and one from the west (from the boulevard ring 'A')."

In the perspective drawing, demonstrators walking through the site were engulfed by the proposed space (Fig.5.). The line in the site plan indicates the demonstration route (Fig.4.). The large hall and the pilotis of the small hall also show processions of demonstrators. In the Bauhaus Brigade's plan, many people would enter the large hall through the completely opened front gate during the demonstration. Demonstrators would then pass through the large hall to boulevard ring A on the connecting ramps beside the sculptures. The pilotis on the square side of the small hall open the ground level to demonstrators, while the north side is a large cantilever. The stage of the small hall and the roof level of the commandant's office are used as a podium for the event. The demonstration route for the site is described as follows:

"The construction also ensures unity in terms of traffic due to the passageway going through both halls and the public event venue on the ground level."

The demonstration route was clearly well planned inside and around the construction site. The project concept makes explicit the group's psychological objectives for the demonstration route:

"This intentional mass psychological arrangement of the two main demonstration routes will certainly result in the strong emotional experience of every participant."

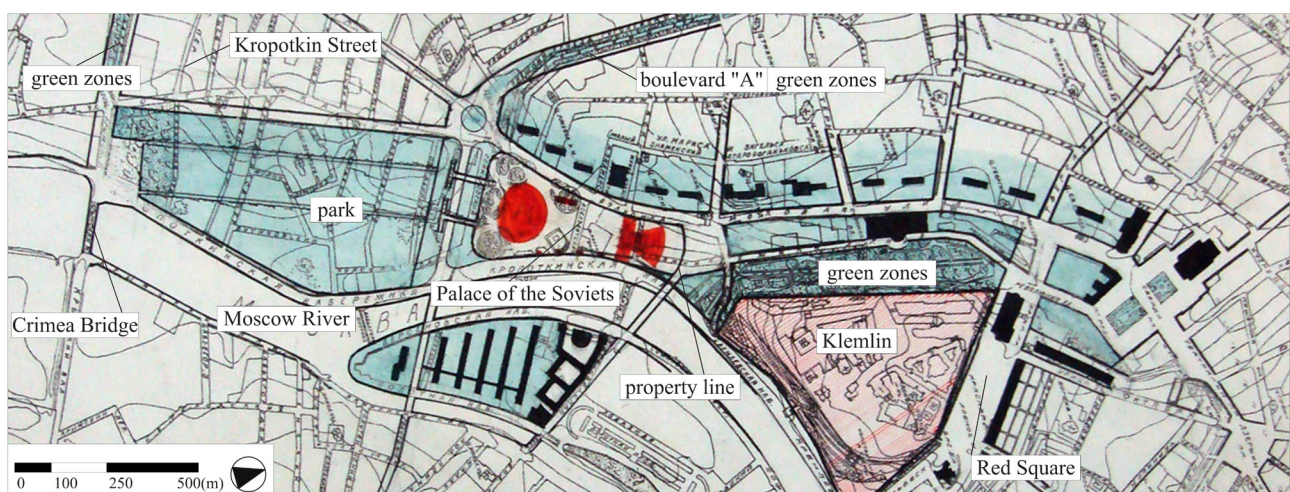


Fig.3. Philipp Tolziner, Antonin Urban, Tibor Weiner (Design), Meyer (Consultant), Competition Project for the "Palace of the Soviets", Site Plan, 1931, (Annotations by the Authors)

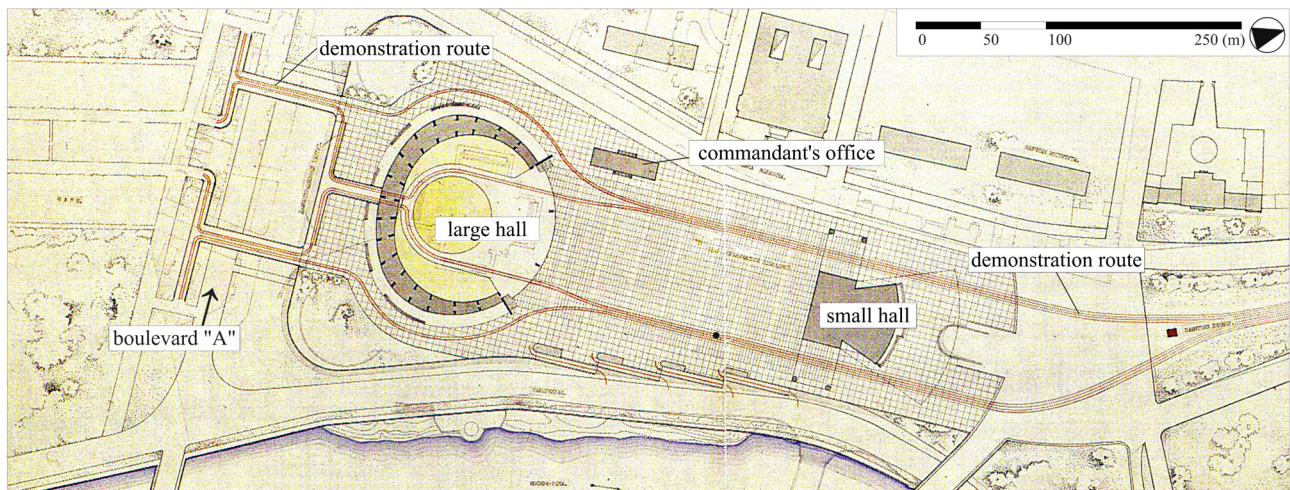


Fig.4. Site Plan, 1931, (Annotations by the Authors)

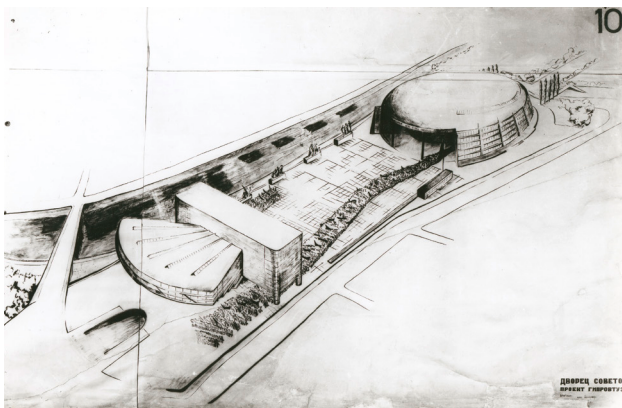


Fig.5. Perspective Drawing

The Bauhaus Brigade clearly designed the Palace of the Soviets by considering its role in a mass demonstration route, and intended the architecture of the structure to exert a strong "psychological effect" on demonstrators.

3.2 Role of Technology in Generating "Psychological Effects"

This was a large-scale project that required a variety of functional solutions and technologies. Although the project was composed of two independent halls, the whole site was unified:

"The unity of construction must be considered when discussing the project: the large hall and small hall as well as the public event venue located between the halls make an integrated complex, which provides room for public events in various combinations." (All quotations in this section are attributed to the Bauhaus Brigade, 1931)

With this in mind, both halls were planned with movable parts for flexibility, and each supported the construction of the other. For example, one of the small hall's outer walls could also serve as a screen for the audience in the large hall. The large hall also had lower seating that could move with the audience, allowing the seating arrangement to change in accordance with

the hall's use. The gate on the square could be opened despite its considerable size (30 meters by 80 meters), visually and spatially connecting the space and opening the square to demonstrators.

Although a variety of technologies were proposed to achieve this, they would not be externally visible, only the two huge and simple halls. The technologies are not expressed outside of the architecture, which is described as follows:

"The Palace of the Soviets is a direct creation of the proletarian class state as long as its functional area layout encourages a proletarian mass. By spatial and technical means, this construction must support mass activities, both political and cultural, as flexibly as possible."

Thus, the technological and functional spaces were intended to support the activities of the general population, and to support the creation of a socialist state in three ways: (1) The large hall, small hall, and square were designed unitively. (2) Flexible architecture using movable gates was planned to enable both halls to face the square between them. (3) These functional spaces were intended to support the activities of the general population and to support the birth of a new country. The goal of sensitizing the general population was expressed as follows:

"We must repeatedly make the proletarian masses aware of the features of our age of reconstruction, using all available artistic means."

The objective of "psychological effects" was that the Soviet population would be conscious of constructing a new society in the Soviet Union.

By analyzing the Bauhaus Brigade's plans, it is clear that a variety of technologies were used in this design not for superficial effect, but rather to exert "psychological effects" on the population.

3.3 Comparison with Other Proposals

The demonstration route and use of technology were features that originated with the Bauhaus Brigade — they were a requirement of the competition:

"It must be easily accessible for great multitudes of demonstrating laborers and workers. The Palace should be fitted with the best equipment and provide the technical apparatus necessary for revolutionary events including theatrical and musical productions." (The Public Committee for the Promotion of the Construction of the Palace of the Soviets, 1931)

Therefore, in order to illustrate the original features of the Bauhaus Brigade's design, we will contrast it with other typical proposals, focusing in particular on the street plan outside the property line, from the viewpoint of the demonstration route.

Proposed street plans outside the property line can be classified into four types (Table 1.). (A) Retain the existing streets. (B) Build a wide new street with a green zone on its north side (toward the Kremlin). (C) Build a new street on the west side. (D) Build new streets on multiple sides. Both the Bauhaus Brigades' proposal and the winning proposal by B. Iofan took the approach described in (D), featuring a gentle north-south axis. While, unlike the Bauhaus Brigade, Iofan's preliminary proposal also included a west-east axis (Fig.6.), the Bauhaus Brigade proposed a greenbelt and a vast park on the south side of the complex, features absent from Iofan's design.

Thus, despite some similarities to Iofan's proposal, the Bauhaus Brigade's gentle north-south greenbelt and large, green park, both of which were incorporated to accommodate mass demonstrations, distinguish the proposal as original.

The above analysis illustrates that the Bauhaus Brigade's proposal for the Palace of the Soviets competition incorporated technology in their demonstration route design, taking into account the "psychological effects" of urban space and architecture, particularly with regard to the greenbelt and park. The intended cumulative effect of these features was to facilitate the spread of Soviet ideology.

Table 1. Proposed Street Plans Outside the Property Line

	Typical Proposals	Stage	New Street		
			North	West	South
A	Hans Poelzig, Ivan Zholtovsky	2			
	Joseph Urban, Walter Gropius				
	Hector Hamilton	3			
	Oskar Stonorov <i>et al.</i> Anatoli Zhukov <i>et al.</i>				
B	Viktor Olenev	1	○		
	Le Corbusier <i>et al.</i>	2	○		
	Auguste Perret <i>et al.</i>				
	Berthold Lubetkin, G. Sigalin <i>et al.</i>	3	○		
	Vopra Brigade (K.S.Alabian <i>et al.</i>) Vopra Brigade (Leningrad section)				
C	Iakov Doditsa <i>et al.</i> , Naum Gabo	3		○	
	Leonid Vishinsky				
D	ARU Brigade	1	○	○	
	The Bauhaus Brigade	2	○		○
	Boris Iofan	1	○	○	○

1: preliminary stage, 2: second invitation stage, 3: third open stage

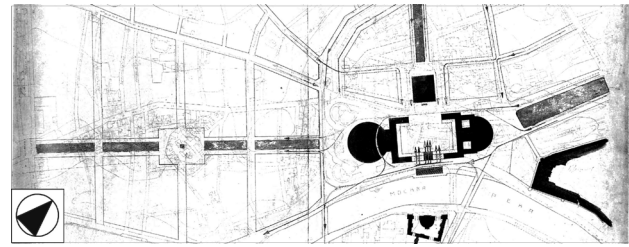


Fig.6. Boris Iofan, Competition Project for the "Palace of the Soviets", Site Plan, 1931 (Annotations by the Authors)

4. Evaluation of Meyer and Moscow

4.1 Meyer's Concept of "Psychological Effects"

While Meyer's undated manuscript on Marxist architecture incorporates his ideas from the German era, it also reflects a new development in Meyer's architectural theory: the mass psychology of an urban space:

"So, the psychological organization of cities and their buildings must be formed in accord with the results of psychological science." (Meyer, undated)

In this same text, Meyer expresses his ideas about the concept of the demonstration route:

"The strongest impression in socialist architecture is the conscious organization of the demonstration course on November 7th and May 1st in the approach to building a socialist city." (Meyer, undated)

Meyer applied these "psychological effects" to his architectural design in Germany (Tomita, 2008), as evinced by the ADGB Trade Union School, built just outside Berlin between 1928 and 1930, particularly with regard to its three chimneys (Nerdinger, 2004) and square hall (Sugimoto, 1979).

Through the introduction and use of "psychological effects", Meyer significantly shaped modern architecture, helping propel it to the next stage. In the Soviet Union, Meyer applied these concepts to the socialist urban space to heighten the "psychological effects" of mass demonstrations.

4.2 Moscow City Planning, 1934-35

(1) The Competition for the *Narkomtiazhprom*, 1934

In 1934, a competition was held for the design of The People's Commissariat of Heavy Industry (*Narkomtiazhprom*) at the same site where Meyer had planned to build a skyscraper, immediately adjacent to Red Square (Fig.7.). Various styles of proposals were submitted, including constructivist, socialist realist, and eclectic designs.

It is not clear whether the outline for this competition was inspired by Meyer's ideas for the development and reconstruction of Greater Moscow. However, many proposals involved widening Red Square and building multiple skyscrapers connected by a bridge, just as in Meyer's design (I. Leonidov, the Vesnin brothers, I. Formin, M. Ginzburg, A. Mordvinov, Fig.8.). Like Meyer's vision, the intent of these features was to influence mass psychology in Moscow.

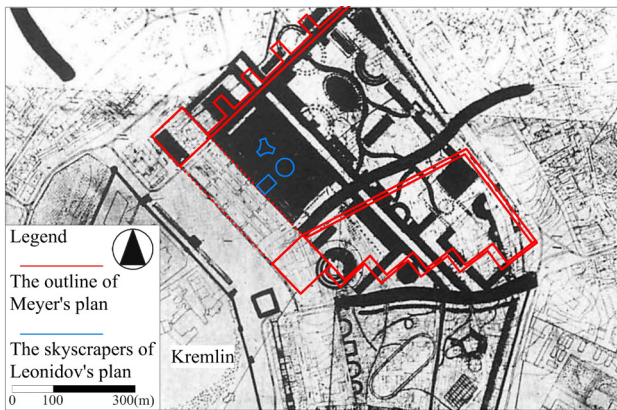


Fig. 7. Ivan Leonidov, Proposal for the *Narkomtiazhprom* Competition, 1934 (Annotations by the Authors)



Fig. 8. A. Mordvinov, Proposal for the *Narkomtiazhprom* Competition, 1934

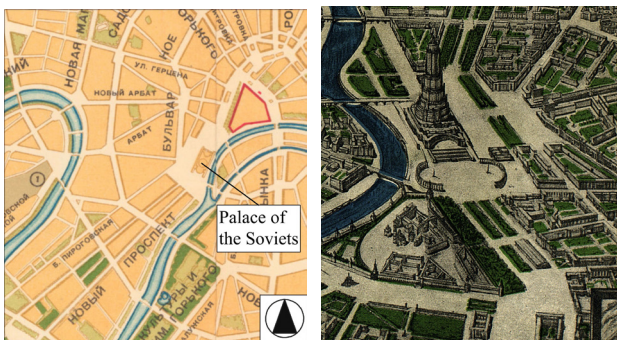


Fig. 9. General Plan for the Reconstruction of the City of Moscow, 1935 (Annotations by the Authors)

(2) Semenov's General Reconstruction Plan, 1935

Essentially, Meyer's concept of "psychological effects" in an urban space found its place in the context of socialist realism. Just as Meyer thought that "psychological effects" propelled functionalism to the next level at the end of the 1920s, socialist realism sought to overcome modernism in the 1930s.

The proposals for the Greater Moscow development and reconstruction competition were opened to the public in May and June of 1932, after which the discussion was led by APU and Gosplan. In 1935, the general plan of Moscow was designed under the direction of Semenov, incorporating streets radiating

from the center and a concentric arrangement of seven skyscrapers. From the plans published in 1936 (Fig. 9.), we can see elements of Iofan's proposal for the Palace of the Soviets competition (1931), particularly the north-south and west-east axes. However, similarities to the Bauhaus Brigade's competition entry are also evident. For example, Semenov's design incorporates two streets with a greenbelt extending southwest from the Palace of the Soviets to the entrance of Red Square, and also features a vast green park on the south side of the palace. It is unclear whether these elements were directly pulled from the work of the Bauhaus Brigade. However, it is important to note that the Kremlin-centered design in the approved 1935 plans first appeared in the Bauhaus Brigade's 1931 proposal.

5. Conclusions

The influence of Hannes Meyer's concept "psychological effects" on socialist cities and architecture in the Soviet Union can be summarized as follows. Meyer's plan for the development and reconstruction of Greater Moscow was a typical demonstration of proletarian ideology and mass art, incorporating "psychological effects" into the design of urban space, particularly his original idea to build skyscrapers in the widened Red Square.

The Bauhaus Brigade, meanwhile, used technology to heighten the "psychological effects" of their demonstration route design for the Palace of the Soviets competition, as well as vast swaths of green space, such as their gentle north-south greenbelt and large greened park on the southern side of the palace. The objective of "psychological effects" was that the Soviet population would be conscious of constructing a new society in the Soviet Union.

We evaluated these concepts in terms of Meyer's pioneering ideas about the "psychological effects" of architecture, beginning with his work in Weimar Germany. Meyer thought that "psychological effects" elevated functionalism to a new level, as reflected in the design of urban spaces and structures to enhance the effect of mass demonstrations. Meyer's influence is also clearly evident in socialist realist designs of the time, such as the design of the *Narkomtiazhprom* and Moscow's general city plan. Ultimately, the concepts pioneered by Meyer and the Bauhaus Brigade played a key role in establishing the fundamentals of Soviet monumental architecture in the 1930s.

Illustration Credits

Figs. 1., 2.: Deutsches Architekturmuseum. Fig. 5.: Bauhaus-Archiv Berlin. Figs. 3., 4.: Shchusev State Museum of Architecture. Fig. 6.: *Naum Gabo and the Competition for the Palace of Soviets, Moscow 1931-33*, Berlin: Berlinische Galerie (1993). Fig. 7.: *OPPOSITIONS*, No. 2, New York: The Institute for Architecture and Urban Studies, 1974. Figs. 8., 9.: *General'ny Plan Rekonstruktsii Goroda Moskvy*, Volume I, Moscow: Moskovsky Rabochy, 1936.

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