

TRACING THE CONSTRUCTIVIST INFLUENCES ON THE BUILDINGS OF EKATERINBURG, RUSSIA

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The Sources

In the formerly closed Soviet city of Sverdlovsk, now Ekaterinburg, architects undertook a massive building campaign of hundreds of buildings during the Soviet Union's first five year plan, 1928 to 1933. Many of these buildings still exist and in them can be seen the urge to express connections between concept and making. These connections were forged from the desire to construct meaningful architectural iconography in the newly formed Soviet Union that would reflect an entirely new social structure. Although a great variety of innovative architecture was being explored in Moscow as early as 1914, it wasn't until the first five year plan that constructivist ideas were utilized extensively throughout the Soviet Union.¹ Sverdlovsk was to be developed in the 1920s and 1930s as one of the most heavily industrial cities in Russia. The construction of vast factories, the expansion of the city, the programming of new workers and the replacement of Czarist and religious memory was supported by an architectural program of constructivist architecture. More buildings were built in Sverdlovsk during this era, per capita, than in either Moscow or Leningrad.² These buildings may reflect more accurately the politics and social climate in the Soviet Union than the well examined constructivist architecture in both Moscow and Leningrad.

To understand how the buildings in Sverdlovsk are tied to constructivist theories of architecture, one must examine the architectural influences on that city at that time. There were four main influences:

1. Architects from Moscow who were members of the Society of Architects (OSA).
2. Architects who had been students at the Vkhutemas or other OSA schools in Moscow or Petrograd, who then came to Sverdlovsk to build.
3. Sverdlovsk OSA membership, meetings and activities.³
4. *Sovremennaiia Arkhitektura*, Contemporary Architecture, (SA), OSA's journal which was distributed to all provincial architecture schools.

Clearly, the OSA was the most highly influential organization of architects at that time throughout the Soviet Union. OSA's chief theoretician, Moisei Iakovlevich Ginzburg, wrote *Style and Epoch* in 1924, a book strikingly similar to Le Corbusier's *Vers Une Architecture* in its appreciation of industry and the machine, though through a collectivist lens and with far greater historical depth.⁴ Ginzburg elaborates a theory of architecture based on the

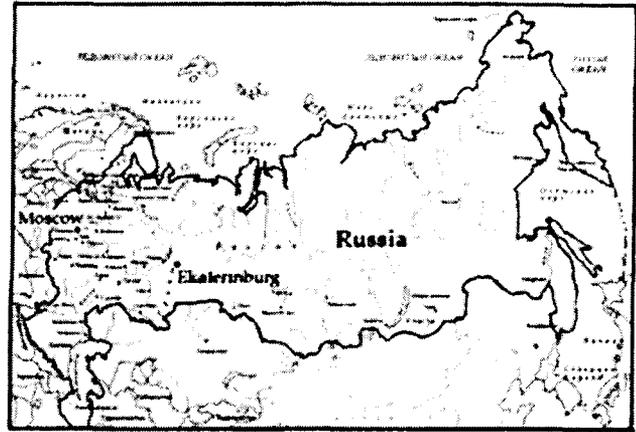


Fig. 1. Russia.

notion that new styles are the product of changing structural techniques and changing social, functional requirements. He theorizes that architecture, since antiquity, expresses itself cyclically: The youth of a new style is reflected in "constructive" form, maturity expressed in organic form and the decay of style is expressed in decoration.⁵ At the Vkhutemas Ginzburg taught the "functional method," a very thorough and systematic process of design. It took into account the functional requirements of a building; the new social programs of the Soviet Union, new technologies and materials, site, context; based on the architect's interpretation.⁶ As an intended consequence, this process of design did not create canonized form or type, rather, the "functional method" was expected to bring about individual solutions to every project.

Ginzburg was the co-editor of *Sovremennaiia Arkhitektura* and used the journal as a vehicle to elaborate the theories of architectural constructivism from 1926-1933. He saw the future role of the architect as a collaboration of architect, engineer and construction worker. In 1927 Ginzburg was appointed to head the Standardization Section of the Construction Committee for the Russian Republic, (RSFSR), to develop collective housing prototypes for the workers of the country based on a complete rethinking of Russia's traditional social framework. This gave Ginzburg the ability to connect theory with the collective practice he envisioned.

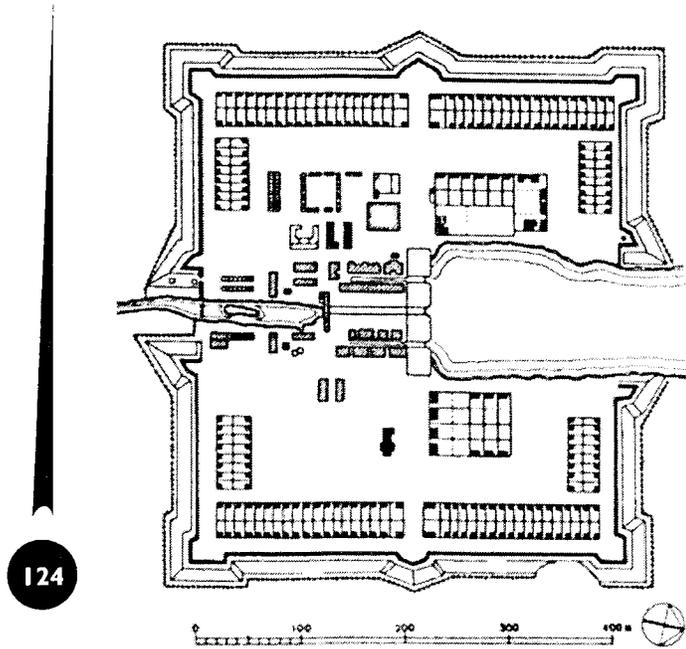
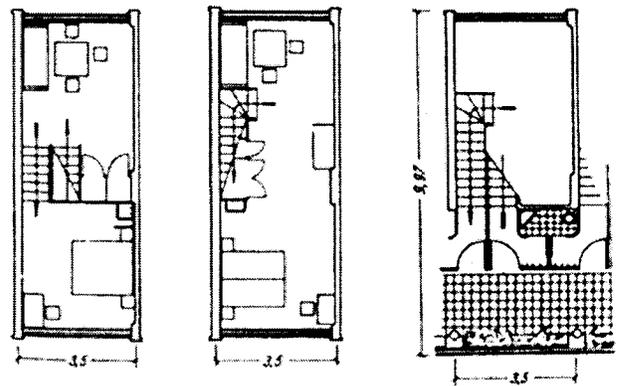


Fig. 2. Plan of Ekaterinburg, 1723.

Sverdlovsk: An Ideal Site for Constructivist Experimentation

Ekaterinburg was founded in 1723 as a military/industrial outpost. The specific river site for the square ideal plan with its north, south and east, west axes, was chosen so that the dam would bisect the plan in the east-west direction. The layout of the city, with its first industry, a coin-making plant powered by the dam in the center, and workers housing on the periphery, is indicative of a strong collaboration between the engineer and the architect. This type of collaboration was also at the foundation of constructivist beliefs.

The city center grew along the length of the dam with two large churches and public plazas anchoring the east and west ends. In the climate of the 1920s it was no surprise that those churches, along with other buildings and plazas symbolic of Czarist Russia were targeted for destruction or revision. The Czar and his family, who were in exile here, were murdered in their home in 1918. In Moscow, architectural theorists realized that the buildings from Czarist Russia were no longer appropriate to house the activities of this new society. Completely new buildings would have to be developed. In Sverdlovsk, because of the geometries and site lines of the city center, there was the opportunity for new buildings to have a strong urban presence throughout the city by occupying or appropriating newly available sites. These new buildings were the first physical, infrastructural manifestations of stability of the new Soviet Union. It is still unclear if local architects adopted constructivist theories from colleagues or media, sought to create a regional approach or merely used the constructivist look decoratively.



Figs. 3 & 4. Ginzburg, Pasternak, Prokhuorov, *Dom Kommuna, Communal Housing, 1928-29*, left; view, right; upper, lower and middle floor plans.

Programs of Social Change

From the early to late 1920s, as a result of the grave problems in Russia from civil war and famine, there was an exodus to Sverdlovsk of mostly farmers, former serfs, in search of food and work. The population swelled from 88,400 people to 335,000.⁷ These were the people who were to make up this "new society," to work in the new factories and to occupy the new prototype housing.

At the most extreme, this new society was conceptualized to provide workers for industry and to solve the severe housing shortage by dissolving the family household as a private economic entity. Traditional domestic life would be replaced with the collective domestic economy: communal preparation and distribution of food, and communal child care. The collective domestic economy would free women from the traditional roles of child-rearing and food preparation to become workers in one of the factories. It was hypothesized the each individual needed privacy for relaxation, sleeping, personal hygiene and sexual life. These activities, it was thought, could easily be accommodated in one room. Communal activities outside of work took place in the cafeteria, worker's club, gym, stadium and rally spaces.

Ginzburg, the RSFSR, and the OSA sought to find public consensus for an architectural interpretation of

the new society, and, of course, for their own theories. They surveyed comrades and architecture professionals about the present state of housing in order to find out their opinions and to promote thinking about the new way of life.⁸ Their research was applied, using the "functional method" in the development of prototype housing. One of Ginzburg's six prototype housing projects was built in Sverdlovsk. It is the most direct connection in Ekaterinburg to the discourse on constructivist architecture taking place in the late 1920s in Moscow.

Architecture as Vehicle of Social Change

I have selected six built projects in Ekaterinburg which exhibit strong constructivist influences. The first three projects have clearer ties to Moscow and greater resolution according to constructivist principles than the last three.

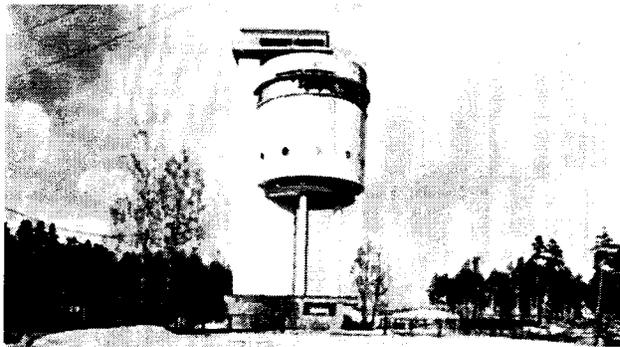
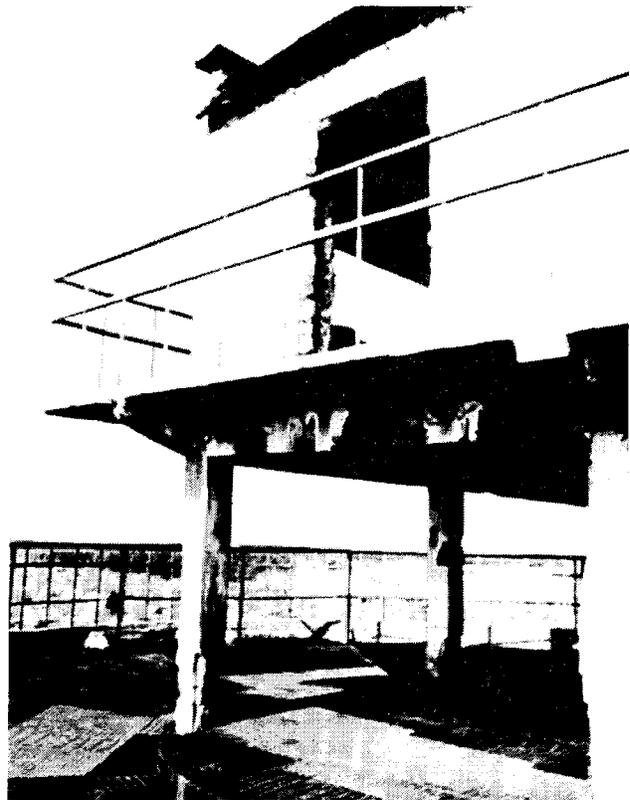
Dom Kommuna, Communal Housing, built 1928-29 by Moisei Iakovich Ginzburg, Alexander Leonidovich Pasternak and S. L. Prokhurov, is perhaps the most theoretically constructive project built in Sverdlovsk. The housing prototypes developed by Ginzburg and his housing team for the RSFSR in Moscow were comprised of different unit types for different needs. All the types were intended as a transition for the occupants from the traditional Russian dwelling and way of life to the way of life in the new society. The most extreme unit, the F type, was also the most economical because of its innovative interlocking section requiring a hallway only every third floor. Type F is utilized at Dom Kommuna in one of four buildings. These type F apartment units had tiny bathrooms and a shelf for food preparation. A communal cafeteria was located on the top floor of the type F building with an adjacent terrace. It is evident in the layout of the Sverdlovsk type F unit that the lifestyle resulting from this space would be a transition toward the collective domestic economy.⁹ Ginzburg's project for Dom Kommuna connects the new social changes both internally and externally with a spatial and dynamic architectural language.

Along with and crucial to the new concept of housing was the worker's club. The Soviet Construction Trade Workers Club, 1928-30, is across town from Dom Kommuna and was intended for a different group of workers than the housing. The Workers Club is significant for its volumetric communication of the club's activities through forms realized externally. The architect is Iakov Abramovich Kornfeld from Moscow, a 1927 graduate and colleague of Moisei Ginzburg at the Vkhutemas. In his design of the Workers Club, Kornfeld employed the "pavilion method" of composition, an elaboration of Ginzburg's functional method. Here, the complex was divided into blocks or units of space according to purpose, then dynamically linked with corridors and bridges. The building's mass and section become elevation and form in an effort to inform and educate the collective about the spirit of new social change and behavior.

Belaya Bashnia or Uralmash Water Tower, 1930, by M. V. Reisher, Boris Iakovlevich Mitelman and S. L. Prokhurov, allowed the collective to clearly understand the constructive engineering employed in harnessing the physical phenomena of water and gravity and illustrates



Fig. 5. Kornfeld, *Soviet Construction Trade Worker's Club*, 1928-30.



Figs. 6. & 7. Reisher, Mitelman, Prokhurov, *Belaya Bashnia, Uralmash Water Tower*, 1930, above; view from top, below; view.

the constructivist aim to educate through public monuments. The stair element allows the visitor to occupy and observe the function of the tower and view back toward the city from the top.

It is no accident that the form of Uralmash Water Tower is distinctly similar to the motion and balance studies taught in the basic course at the Vkhutemas where the OSA was based. Reisher was a graduate of the Siberian Technical Institute (STI) in Tomsk. In 1928 his career was launched when he exhibited the constructivist work of the Tomsk OSA chapter at the Vkhutemas in Moscow. Mitelman and Prokhurov, OSA members, were best known for their collaborations with Ginzburg in developing prototype housing.

The projects, Dom Kommuna, Soviet Construction Trade Workers Club and Uralmash Water Tower, are consistent with the constructive ideas elaborated by Ginzburg. All three buildings express the specific phenomena of their interior functions externally for the city to observe. They express their individual constructional elements integrated with programmed space, making the connection between form and ideas accessible to both the inhabitant and the viewer.

The three following projects from Sverdlovsk are cited here to establish a polemical comparison with the former three in order to reveal that many architects built what appeared to be constructivist buildings that were in fact traditional nineteenth century buildings cloaked in a modern/constructivist exterior. These buildings, though

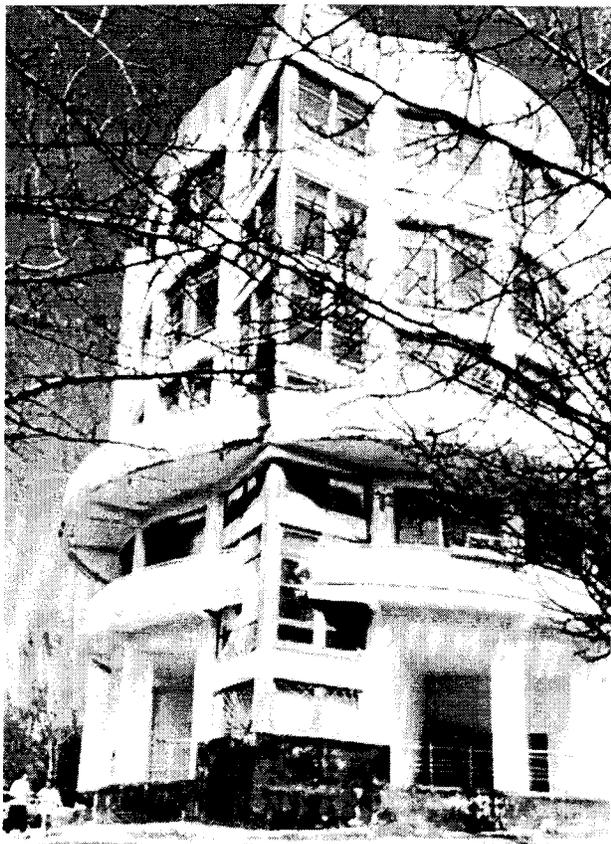


Fig. 8. Sokolov, Dinamo Sports Center, 1931.



Fig. 9. Solomonov, Dom Svyazi, House of Communications, 1931.

sited strategically to give the appearance of dynamic form, do not in fact contain the suggested interior volumes. These buildings neither illustrate new, constructive uses of material nor integrate social change in built form deeper than their constructivist wrappers. They are, however, expressive and authoritative externally, with an iconographic power at the scale of the city. These buildings also house new social programs; gym, house of communication and collective housing yet the interior space is not designed to reflect these programs.

In Dinamo Sports Center, 1931, architect Veniamin Dmitrievich Sokolov, designed a building that sits in the city pond and is viewed from the dam in the center of the city and acts as a reminder that in Ekaterinburg, water was the initial reason for the city's founding. The form of the building is a ship that makes metaphoric reference to the 1905 revolution as captured in Eisenstein's 1925 film, *Battleship Potemkin* and Ginzburg's 1923 photos of warships in *Style and Epoch*. Internally, however, the gym has none of the dynamic interplay advertised on the exterior. Each of the rooms are small, single height volumes with an enclosed stair occupying the prow which faces the Sverdlovsk dam.

Dom Svyazi, House of Communications, 1931, by Kasyan Ivanovich Solomonov has become the starting point for parades, civic celebrations and is the major meeting place for all people in Ekaterinburg. Though its external massing suggests large volumes, internally it is a typical office building of nineteenth century stacked floors with no dynamic spatial qualities. The modern window treatments are simply covering a traditional building.

Finally, Chekist Gorodok, Housing for the Cheka Police, 1931-32 by I. P. Antonov, Veniamin. D. Sokolov and Arseny Mikhailovich Tumbasov, literally takes the iconography of the hammer and sickle as plan which is then extruded vertically to ten floors. This housing, workers club, hospital, kindergarten and hotel/restaurant complex, occupying one full city block, was built for the elite Cheka police, the local equivalent of the KGB. Apartment sizes were generous and well equipped by then Russian standards. There is little evidence here of drastic changes in the domestic economy in the organization of the housing. Though program and image

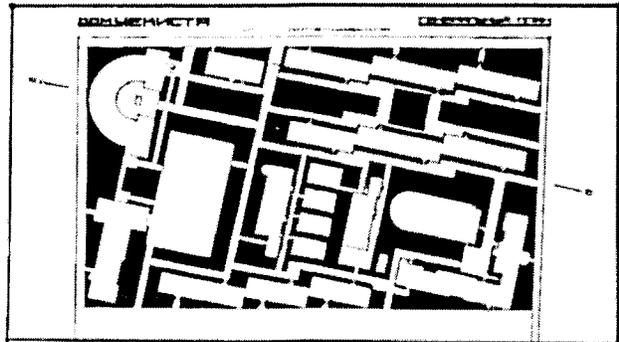


Fig. 10. & 11. Antonov, Sokolov, Tumbasov, Chekist Gorodok, 1931-32, above; view, below; site plan.

imply it, clearly, this was *not* experimental housing for the “new” Russian way of life. Monumental forms sheathed in modern skin are sited here to create a strong presence in the city. The Southwest corner of the complex, the ten story hotel/restaurant, makes a forceful urban statement by jutting into a major car and trolley intersection. The building can be seen for kilometers in all directions. It, in turn, has a panoptic view of the city. The force of the sickle in the plan of Chekist Gorodok pivots the entire composition at an 11 degree angle to the surrounding context, expressing the power and authority of the users. It is innovative in form externally but has no large internal volumes and no larger collective aims. Instead innovation is used here in service to the authoritative presence of the Cheka police in the city.

Monuments of Social Change

An unbuilt but no less concrete example of the intentions of an architecture for social change is the Uralmash Housing Commune for Heavy Metal Workers of 1931 by Moscow architects Ilya Golosov and Boris Mitelman. In this project the force that generates the urban shift in the worker housing is a reference to the Uralmash Water Tower, Belaya Bashnia, which radially activates the entire plan. This housing project is more in keeping with a constructivist notion of socialist ideas because the water tower is a public utility that becomes a monument for collective housing. It was intended that the worker could perceive the buildings as a representation of the collective system of government.

Only the three projects, Dom Kommuna, the Soviet

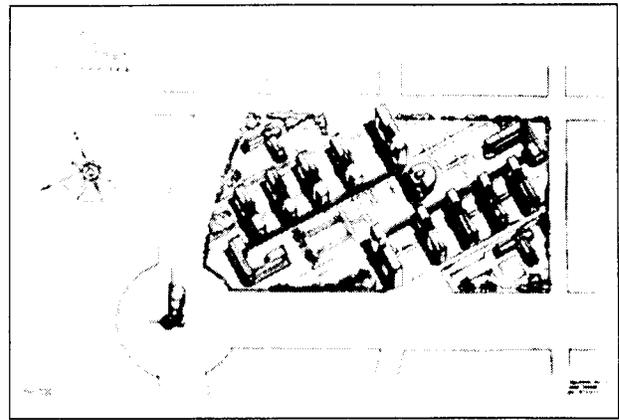


Fig. 12. Golosov, Mitelman, Uralmash Housing Commune for Heavy Metal Workers, 1931.

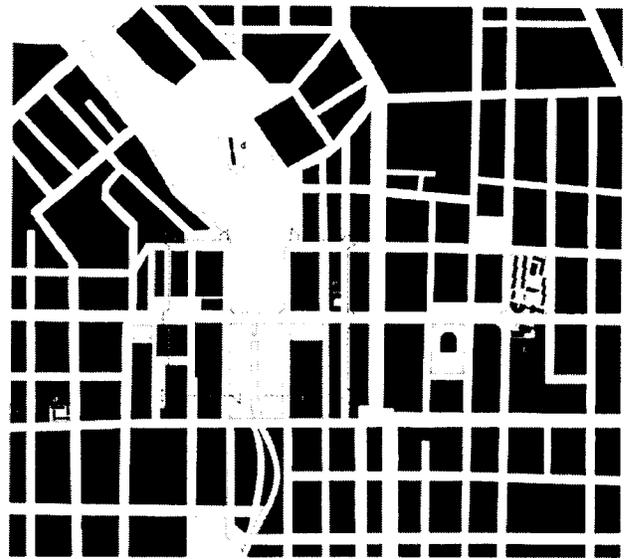


Fig. 13. Ekaterinburg/figure ground.

Construction Trade Workers Club and the Uralmash Water Tower are directly influenced by forces from Moscow, particularly Ginzburg. The subtext of the new way of life as interpreted in these three projects suggests a view looking back *toward* the city from the building, a view that transforms the viewer toward an understanding of collective life through architecture.

- a) Ginzburg, Pasternak, Prokhurov, Dom Kommuna, Communal Housing, 1928-29
 - b) Kornfeld, Soviet Construction Trade Worker’s Club, 1928-30
 - c) Reisher, Mitelman, Prokhurov, Belaya Bashnia, Uralmash Water Tower, 1930
 - d) Sokolov, Dinamo Sports Center, 1931
 - e) Solomonov, Dom Svyazi, House of Communications, 1931
 - f) Antonov, Sokolov, Tumbasov, Chekist Gorodok, 1931-32
- Though Dinamo Sports Complex, Dom Svyazi, and Chekist Gorodok are not strictly constructivist, all six buildings are located at strategic vantage points in the city to be viewed by the Russian people as the new symbols



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Fig. 14. Dom Svyazi Workers Pin.

of Soviet life.

In the worker's pin these buildings are miniaturized to remind the individual of the stability of the collective. These buildings have not, in the recent past, been part of a discourse on architecture. Yet, in the 1920s, new architecture in Sverdlovsk represented an ideal for the new Soviet city and the new Soviet way of life. Today

these landmarks have a prominent status in the city of Ekaterinburg. This may be attributed to the monumental siting of each building and the individuality of each solution. The strength of these buildings continues to be that the dynamics of external form communicates the architectural concept.

NOTES

- ¹ "Constructivist" refers specifically to theories developed by the most prevalent organization of architects throughout the Soviet Union in the late 1920s, the OSA.
- ² V. P. Bukin, V. A. Piskunov, *Sverdlovsk. Perspectives of Development to the Year 2000* (Sverdlovsk Mid-Urals Publishing, 1982), chart, p. 21.
- ³ Zhizn Vuzov, (The life of the Schools), *SA*, no. 1, (1926), pp. 23-4 and "Pervaia konferentsiia OSA v Voskve" (First conference of OSA in Moscow) *SA*, no. 4, (1928), pp. 116-23.
- ⁴ Moisei Ginzburg, *Style and Epoch*, Anatole Senkevitch, Translation/Introduction, Kenneth Frampton, Foreword, (Cambridge, MA: Oppositions Books, MIT Press, first published 1924).
- ⁵ *Ibid.*
- ⁶ Ginzburg's 'functional method' is clearly outlined in, Catherine Cooke, *Russian Avant-Garde, Theories of Art, Architecture and the City*, A.D. (London: Academy Editions, 1995), pp. 120.
- ⁷ Shelushinin, *A History of Architecture in Ekaterinburg* (Sverdlovsk: Ural State University Press, 1954).
- ⁸ Anketa, survey addressed to comrades and specialists, OSA, 1927.
- ⁹ Former tenants in the type 'F' apartments say that the collective domestic economy never worked in Sverdlovsk. The people who lived in type 'F' units were, thus, disadvantaged without a kitchen or spaces in which to grow, prepare or store food.