

Natalia Dushkina

From "Metropolitan" to "Underground"

The Moscow metropolitan is in a class of its own not merely as a piece of Soviet architecture, but also as a phenomenon in 20th-century world architecture and urban design. This is becoming increasingly clear with the passing of time, as the oldest metropolitans in the world – those of London, Budapest, New York, Chicago, systems that at the dawn of the metro age were outstanding pieces of engineering, – have gradually lost their uniqueness and merged with the infrastructure of the enormous cities in which they are located. Having lost its technological innovativeness and without any programmatic architectural idea to express, the metro has turned into an ordinary and unrespectable form of transport – a subway, underground, or *podzemka* [the Russian word for 'underground railway'].

In Moscow, where the metro was built much later, opening only in 1935, a different situation exists. Based on the English method of tunnelling, the Moscow metro was created, in vivid contrast with systems in the West, as an underground space that would make sense as a work of art. We may say with absolute certainty that there is nothing like it in world architecture of the end of the 19th century to the middle of the 20th century. For the Moscow metropolitan destroyed the Western stereotype of the transport structure and created a unique functional space dressed in the forms of 'high' architecture and art.

Over the years of its existence, the Moscow metro passed through all the various stages in the development of Soviet architecture. It now has 165 stations (50 of which were built during the launch of the system in the 1930s to 1950s, when the total length of the lines ran to 66 km), and may be considered a monument to a whole era in the history of the country. In this sense, the metro may be regarded as the realisation of a universal programme to transform life in post-Revolutionary Russia. It is not simply part of Moscow's transport infrastructure, but the embodiment of a utopia of a new type of life – a utopia which was taken to an absurd extreme: 'palatial' halls



Electrozavodskaya metrostation in Moscow, 1944, arch. V. Gelfreikh, I. Rozhin. Current condition

flooded with artificial light, built for the people and profoundly democratic in character, but hidden in the bowels of the earth, out of sight of those who live on the earth's surface. Designed by the leading masters of the age and decorated with precious materials not usually used in underground systems, this architectural space contrasted with living conditions above ground – with the difficult, messy everyday life of the Soviet citizen. Here was another world: 'beautiful', filled with light, heightened by the contrast between above and below ground.¹

By the middle of the 1940s, the most fruitful stage in building the metro was over. The first stations were full of the ideological purity and austere logic of Constructivism, qualities which announced the Moscow metropolitan as a phenomenon in a class of its own. These stations established the bases of the Moscow school of metro construction and laid down principles for organising 'windowless' underground space. Such principles included: *exposure of structural basis; lack of ballast masses and volumes; unity of structure and décor; and use of light as the principal means for creating an architectural image.*² Thanks to these qualities, many stations became world-famous, taking grand-prix or gold medals at international exhibitions in Paris (1937), New York (1939), and Brussels (1958). By the middle of the 1950s, Moscow had gained an underground copy of itself in the form of an integrated urban ensemble. A second, extensive urban organism had been created – a 'metropolia', a daughter city to Moscow itself, a formation stamped with many of the latter's most recognizable features. The Moscow metro became part of Russian culture and heritage.

The last two decades have seen a rapid deterioration in the condition of the entire metro system. The inten-

¹ It is important to emphasise that the extensive construction carried out underground saved Moscow from far more destructive reconstruction on the surface. The metro has undoubtedly performed a conservational role with regard to Russian heritage. If the creative power of, and desire for, transformation had not been channelled underground, the city would have suffered still greater destruction.

² Wording used by Aleksey Dushkin himself. See: Natalija Duškina, 'Metropolitana: l'architettura di Duškin' *Mosca. Abitare*, Novembre 2004, N. 444, pp. 168–173.



*Mayakovskaya metrostation in Moscow, 1938,
arch. A. Dushkin, artist A. Deineka. Condition in 2006*

sity of traffic and extremely large operational load on the whole network have had a damaging effect especially on the earliest lines, which are in a poor technical state and have suffered losses. The drainage and ventilation systems, which are of primary importance in all under-

ground spaces, need replacing. Structural elements and expensive materials used to decorate the stations are in danger of disintegration due to damp. Another source of danger is existing projects to reconstruct stations built in the 1930s–1950s to meet Moscow's transport needs.

There is still insufficient recognition of the fact that stations on the Moscow metro need to be restored in accordance with contemporary world practice for restoring monuments, or that restoration projects are extremely expensive affairs. Given the existing tendency to replace authentic materials with new ones that considerably alter both the concept of 'heritage' and the buildings' appearance, the fate of these 'station monuments' remains highly uncertain. This is all the more so since what is needed in the present case is new methods of conserving artificially created underground spaces that are under constant and extreme pressure due to difficult terrain, heavy use, and damp.

There is a very clear need today to secure official protection for the entire network of stations from the 1930s to 50s as a unified urban ensemble – a unique monument of international importance that deserves to be included in UNESCO's World Heritage List as one of the most famous underground systems in the world.

Several actions have been launched since the late 1980s to establish a programme on the protection of Moscow metro. Currently, the outcome of these activities reveals the necessity

1. to continue the permanent campaign in the mass media to raise conservation awareness (of both authorities and public at large) regarding this unique system;
2. to treat the programme on metro protection as a national priority of strategic importance aimed at security and preservation of this historical transport infrastructure;
3. to register the whole complex of Moscow metro stations of the 1930s–1950s as an integral urban ensemble;
4. to list this monument as a cultural property of Federal significance leading to the World Heritage nomination;
5. to work out a conservation methodology (for short-term and long-term perspectives) for the man-made underground spaces being under permanent transportation, ground and water pressure, based on the multidisciplinary involvement of hydro-geologists, engineers, architects, restorers, designers, technicians. Otherwise, the metro's degradation is inevitable.