

# Shaping Moscow from Above: Pioneers of High-Angle Architectural Photography

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**Abstract:** High-angle architectural Photography has a long tradition in the history of photography. As Davide Deriu claimed, at the beginning of the 21st century, Moscow, with the tallest buildings in Europe, once again witnessed the revival of photographic practice with the roof as a viewing platform [1]. This paper aims to study how the collective impression of Moscow is shaped by introducing the most important pioneers in the history of high-angle architectural photography in Moscow and studying the interaction between Moscow and photographers, photography and architecture.

**Keywords:** High-angle architectural photography, High-angle shot, Architectural photography, Moscow

## 1. Introduction

The development of photography opened the era of mechanical reproduction, and architectural photography could intuitively sell to the public a new way of life advocated by the authorities. Therefore, architectural photography became an essential means of shaping the collective impression of the Soviet Union.

Alastair Sooke quoted Joseph Goebbels's words in 1933 to show people's distrust of propaganda. Joseph Goebbels argued that propaganda was so maligned and often misunderstood that the layman used it to mean something inferior or even despicable [2]. Joseph Goebbels was the propaganda minister in Hitler's government, and his words may sound ironic. Nevertheless, for the beginning of the Soviet Union, propaganda was not entirely a negative word. During the 1920s, Soviet architectural images were not chosen by the authorities but by artists and the public. After the October Revolution, the Russian people got rid of the Tsarist government, the social atmosphere was relatively relaxed, and everyone spontaneously worked hard to realize a beautiful vision. Artists are keenly aware of the dramatic changes in the creative atmosphere and the surge in artistic demand, which significantly stimulates their desire to create. Many great photographers who have profoundly influenced the later generations have emerged. Soviet architectural photographs, montages, and collages were spread from home to the world through posters and magazines. In this period, high-angle architectural photography was invented and was still widely used well into the Stalin period.

## 2. The Rodchenko Angle

Alexander Rodchenko began residing in Moscow for an extended period starting in 1916. For Rodchenko, Moscow is not just a place of residence but where he draws knowledge and creates. In Rodchenko's work, Moscow is a city of modern industrial dynamics, looking forward to the future [3].

In 1919, Alexander Rodchenko fantasized about new architectural structures and building types, such as high-rise buildings [4]. He proposed the concept of "a city with an upper facade" because he believed that in the future, with the development of aviation, the ground will be vacated for transportation, and people will fly over the city, either from the air or on various observation deck to appreciate the city [4].

In 1921, the Constructivists declared that the painting was dead, and El Lissitzky pointed out that the painted picture and the old world it had created fell apart [5]." Nikolai Tarabukin said: "Current social circumstances dictate new forms of art [6]." Rodchenko gave up painting and began to explore new forms that were more in line with the needs of the times and had more artistic value [6].

Rodchenko realized the potential of montage and began experimenting with the technique in the publishing industry. With no distracting elements, a montage has a massive advantage over painting, and a concise collage becomes the most accurate way to convey non-verbal information [7].

The study of photographic technology has broadened Rodchenko's creative fields, and at the same time, he is also seeking new technologies to replace traditional photographic methods [7]. Alexander Rodchenko called conventional angle photography "navel shooting" and advocated "top-to-bottom" and "bottom-to-top" photography because Rodchenko believes that only standing in unexpected positions and shooting daily life from unexpected angles [8]. *The Untitled* (figure 1) is one of the earliest photographs of Rodchenko, with the most striking features of Rodchenko's photography: diagonal perspective, looking down from the roof, emphasizing rhythm and repetition. In the *Columns of the Museum of the Revolution* (figure 2), Rodchenko highlights the columns' height. He compared the volume of the columns and visitors to emphasize the columns' size. He leaned the camera to show its weight, implying the strength and firmness of the revolutionary forces.



Fig. 1 Alexander Rodchenko, *Untitled*, 1925 [9]



Fig. 2 Alexander Rodchenko, *Columns of the Museum of the Revolution*, 1926 [10]

Rodchenko used shots from unusual angles, dynamic rhythms, and diagonal compositions, a method known as the Rodchenko Angle. Few masters can boast that their photographs of cities have become symbols of an entire era, but Rodchenko deservedly. In 1928, Sovetskoe Foto criticized Rodchenko "formalism" and imitated Western artists such as Moholy-Nagy. Defending himself in a series of written rebuttals, Rodchenko said that all innovators always seem similar and that culture can only develop if people absorb the experience [7].



Fig. 3 Alexander Rodchenko, *House from top to bottom*, 1928 [11]

In 1928, the first five-year plan began. Massive industrial and architectural projects were carried out across the country, and photography gained an advantage over painting in the cultural sphere due to the need to quickly reproduce images documenting the progress of the First Five-Year Plan (1928-32). Photography was seen as at the forefront of visual experimentation, with a pressing political agenda, creating novel channels of expression for the architects and designers of the era and an ideal vehicle for documenting and interpreting new architectural wonders [12]. Like other architects, Rodchenko used photography as an effective tool for social change, praising industrial production and scientific technology. In *At the Telephone* (figure 4), a woman is on the phone. She occupies the left side of the picture. The overlooking perspective made her face invisible and blurred her individuality. Her left hand holding the wall was almost invisible, but her black shoes, the phone shining in the sun, and her right hand holding the microphone were emphasized [13]. The photo also symbolizes Rodchenko's strong interest in technological development, and he tries to encourage women to use new technologies to participate in production and life. *Stairs* (figure 6) was taken in 1930 and is one of Rodchenko's most famous photographs. In this photo, the woman holding a child was walking up the steps. The steps are placed diagonally in the typical Rodchenko style. Rodchenko often used female figures because encouraging people to foster awareness of gender equality was part of the Soviet ideology.



Fig. 4 Alexander Rodchenko, *At the Telephone*, 1928 [14]



Fig. 5 Alexander Rodchenko, *Stairs*, 1930 [15]

Due to being accused of bourgeois formalism, Rodchenko tried to adapt to the so-called socialist realism propaganda and began contributing to *USSR in Construction* in 1933 [16]. Rodchenko was asked to follow up on the building of the Baltic White Sea Canal. Rodchenko used his typical high-angle to show the project's greatness and high efficiency under the socialist order [16] (figure 6).

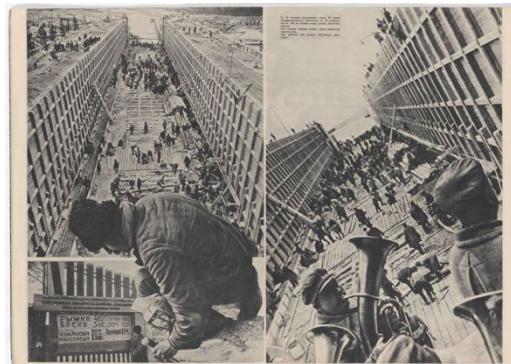


Fig. 6 Alexander Rodchenko, An image of the Baltic-White Sea Canal, 1933 [17]

### 3. Boris Ignatovich

In the spring of 1922, Boris Ignatovich came to Moscow, and he developed a keen interest in photography, and the young artist began to understand the inseparable connection between photography's technical and creative components. He studied photographic techniques and optical properties and learned the secrets of handling photographic materials [18]. Rodchenko influenced Boris Ignatovich in finding the shooting location and shooting angle, and he used high-angle shots in his architectural photography attempts.



Fig. 7 Boris Ignatovich, Staircase without steps, 1929 [19]

Boris Ignatovichk is one of the earliest aerial photographers in Moscow. Sitting in a P-5 plane without professional equipment, he shot the *Dome of Isaac* (figure 8) in 1931 with a wide-angle lens. An amateur pilot even operated the plane [19]. They tried their best to reach the lowest possible altitude, and Ignatovic got excellent photographs, which again confirmed his talent.



Fig. 8 Boris Ignatovich, St. Isaac's cathedral, 1931 [20]

#### 4. Georgy Petrov

Georgy Petrusov is one of the most important pioneers of Soviet photography, and he was good at using unexpected angles. Anri Vartanov commented to Petrusov that he knew how to structure his compositions with an incredible height that only easel-painters could in *Sovetskoe Foto* [21]. Petrusov began contributing to *USSR in Construction* in 1930. Rodchenko also joined *USSR in Construction* and became a colleague of Petrusov in 1933. In *View from Airplane* (figure 9), Georgy Petrusov took in the largest aeroplane at that time to get the high angle. He uses oblique composition, a strong contrast between sunlight and shadow, to express constructivism [21]. In *Caricature of Alexander Rodchenko* (figure 10), Georgy Petrusov exposed the face of his friend and colleague Rodchenko on the back of his bald head, interrogating viewers in a typical inversion of proletarian portraits, the photo exemplifies the avant-garde move towards subordination under Stalin. The picture recalls the revolutionary spirit of the early days of the Soviet Union [22].



Fig. 9 Georgy Petrusov, *View from Airplane*, 1930 [21]

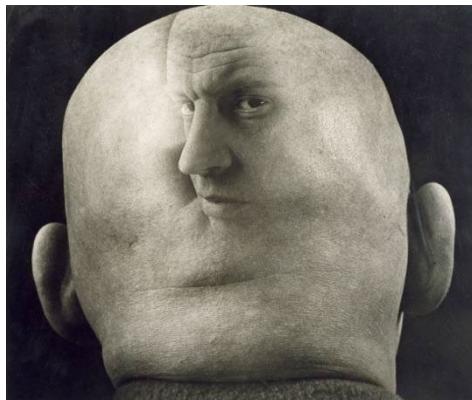


Fig. 10 Georgy Petrusov, *Caricature of Alexander Rodchenko*, 1933-34 [21]

#### 5. Arkady Shaikhet

Arkady Shaikhet came to Moscow in 1922, and he did not disdain innovations considered almost standard at the time, such as unexpected angles and other techniques used to make pictures more expressive in the spirit of Alexander Rodchenko [23]. Distinct from other Constructivists, his angles could be sharper and more straightforward, mainly visible and inner semantic plasticity. In figure 14, the asymmetry of the picture makes the image dynamic. The photographer looked down and photographed the two residents from above (who looked like a mother and child), and the two residents also looked down at the stacked stairs. The repetition of the elements also gives people a sense of order, such as *Automobiles from the Gorky factory* (figure 12).



Fig. 11 Arkady Shaikhet, *From Upstairs, New Apartments at the Usachevka Housing Complex, Moscow, 1928* [24]



Fig. 12 Arkady Shaikhet. *Automobiles from the Gorky factory. 1930* [24]

## 6. Naum Granovsky

Talking about the photographers who love Moscow, it is impossible not to mention Naum Granovsky, who worked from the 1920s to the 1980s and shot a lot of photographs in his life [25]. Naum Granovsky likes strict composition, high-angle shooting and avenues leading to distance, and as a national photographer, it was not difficult for him to get on the roofs of various buildings [25]. Although greatly influenced by avant-garde photography, the authorities affirmed Naum Granovsky's career, unlike avant-garde photographers like Rodchenko. Naum Granovsky became a member of the Union of Soviet Architects as a photographer, which is very unusual. Granovsky elevates the great style under Stalinism to a degree, extending it to the level of human perception [25]. In *Gorky Street* (figure 13), Naum Granovsky shot the street from a high point with ultra-focal length sharpness. The shape of the buildings is consistent with people's physiological feelings, and everything in the photos can be seen clearly, which makes it an important image that reflects the living scenes of that time.

Granovsky loved Stalin's skyscrapers. He is often incorrectly regarded as the prolocutor of Stalin's Moscow, but it is worth mentioning that Granovsky did not photograph Moscow for political speculation. In 1955, the State Committee published *The Resolution of the Central Committee and USSR Council "On elimination of excesses in design and construction."* All excess was hastily erased from the drawings of buildings [26]. After the end of the Stalin era, he still did not stop using the camera language to praise them (figure 14). Naum Granovsky's photo is not only a technical experiment. He also used the camera to preserve a period.



Fig. 13 Naum Granovsky, Gorky Street, 1939 [27]



Fig. 14 Naum Granovsky, View of the Kalininsky bridge and the high-rise building of the hotel "Ukraine," 1966 [28]

## 7. Conclusion

During the early twentieth century, Moscow experienced extensive reconstruction, and high-angle architectural photography emerged in direct response to these developments. As new buildings appeared across the city, the pioneers sought higher points that allowed them to observe the city from above.

Alexander Rodchenko was one of the earliest photographers to systematize the use of the high-angle shot. For Rodchenko, the roof was not only a physical platform but an instrument for reorganizing visual information. His photographs reduced streets and staircases into diagonal structures and turned buildings into geometric units, emphasizing industrial dynamics and collective movement. Through these images, Moscow appeared as a modern city shaped by technological progress. Other pioneers such as Boris Ignatovich and Georgy Petrusov extended this practice by working from rooftops, bridges, and even airplanes. Their images revealed patterns and spatial relationships that were invisible at street level, which played a central role in forming a shared visual record of Moscow's modernization [29].

In modern architecture research, photography is considered to have affected the architectural design and the way people look at the building, architect design photography. The building also has a significant influence on photography because the building is not only the object of shooting but also provides the physical basis for photography. It can go through, in some cases, as an observation platform or frame equipment to expand the photographer to participation in the building space [1]. The city's culture, history and ideology influence the way the photographer shoots, and the angle of the photographer's shoots also affects people's impression of Moscow. Moscow and photographers shape each other, just like photography and buildings influence each other.

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