

STAGES OF DEVELOPMENT OF ROAD NETWORKS AND STREETS IN TASHKENT

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Annotation: Each city has its own stages of development. In this process, the role of the road network for the development of the city is very important. This article will focus on the role of the road network in the formation of the city of Tashkent and the processes of their change.

Key words: Road networks, city structure, transport routes, old Tashkent, city gates.

Introduction. Tashkent is considered one of the ancient cities. Throughout the city's long period of development, its outward appearance has changed due to many factors. Historically, citadels (ordas), fortresses, houses, residential districts, and mahallas (neighborhoods) emerged and took shape during these developmental stages.

It is difficult to know exactly what cities looked like in ancient times. The history of Tashkent's fortress walls and gates has always been a subject of interest and study. Sources state that these walls surrounded the city and protected it from enemy attacks and other external threats. The number of fortress gates varied across different periods. For instance, in the 10th century, Tashkent was named Binket, and various sources record that the city had seven gates. Later, with the city's expansion, their number reached 12 by 1864. After Tashkent was occupied by Russian troops, there is information that residents of the "new city" demolished the walls for construction materials. According to reliable data, between 1865 and 1872, a 3,700-meter section of the wall between the Kashgar and Beshyogoch gates, including the Kokand and Koymas gates, was demolished.

Main Part. Last year, in accordance with the state program, it was determined that the 12 gates should be restored based on their historical appearances. Implementing this is a complex process because previously, the locations of these gates were based on maps from 1890. However, by that time, a large portion of the walls and gates had already been destroyed. Nevertheless, using unique archive materials available today, it is possible to determine the exact locations of Tashkent's gates.

One of the oldest maps showing the stages of Tashkent's development was compiled between 1865 and 1872. This map was preserved not in Uzbek archives, but in an archive in the Russian Federation. The existing map measures 180x194 cm with a scale of 1:8400. It covers an area of approximately 15x15 km of the Tashkent oasis.

Furthermore, the city's area at that time was much smaller than it is now. Some data indicates that in 1865, Tashkent's territory within the walls was 17 square kilometers. During that period, about 52,000 people lived in the city. Today, the area of our capital exceeds 434 square kilometers, occupying a territory 25 times larger than before. It can also be observed that the population is more than 50 times larger than it was 150 years ago.

The following map identifies all of Tashkent's ancient gates, allowing one to see the scheme of the main street and road networks of that period. Additionally, the map shows the entire length of the Tashkent fortress wall (indicated by a red line).



Figure 1. Map of Tashkent city and its surroundings in 1865-1866

By comparing this map with modern ones, we can determine the exact locations of Tashkent's gates, the city's main road networks, and where the fortress walls once stood. Through this process, we can also identify the streets and roads that were formed then and continue to develop to this day. This allows for the restoration of the appearance of the city's historical streets and the analysis of existing problems in the transport systems on these roads.

Generally speaking, many aspects must be taken into account during the reconstruction of cities. These include developing and specializing all sectors of the national economy necessary for the city within the projected population growth, improving technological processes, and automating production. It involves creating large-scale enterprises with the best sanitary and hygienic working conditions, providing the population with necessary housing, and further developing mass housing construction without damaging the city's existing historical parts. Furthermore, it is essential to develop a network of cultural, educational, and domestic service institutions to fully meet the needs of the population. Developing city transport, analyzing transport structures in historical areas, and finding the right solutions are also vital. This includes expanding and reconstructing the street network and creating a system of city roads and highways for continuous movement, allowing for a high level of individual transport use. To improve the microclimate, landscaping and irrigation should be implemented to create public recreation areas. Developing the city's planning structure and forming an integrated construction system are key, as is developing a city center that meets Tashkent's growing importance as a major socio-political and cultural center. In short, organizing the proper development of Tashkent and its surrounding areas—turning landscaped recreation areas, parks, and alleys into a cohesive whole with the city's historical part—should be a primary principle.

In the process of studying Tashkent's history, it is observable that a roughly 350-meter section of the old city's fortress wall was used as the wall for the new fortress built after Tashkent was occupied in 1865. Between 1810 and 1821, the Kokand fortress, specifically the Orda (the citadel where the city ruler lived), stood on the site of the new fortress. Later, it was moved to the north. After the relocation, the Orda measured approximately 420x480 meters (the dimensions of the old fortress are unknown). The ruler's palace (the Khan's palace) was located within the Orda.

Historical documents confirm that immediately after Tashkent was captured in 1865, the Orda was rebuilt and new quarters appeared. Plans for these new quarters were drawn up by military topographers. Military engineer Kolesnikov led the development of the urban construction plan. In the section between the Anhor canal and the Chovli stream, the city was designed using a rectangular (grid) method. By 1870, the area between the Anhor canal and the Chovli stream was occupied by residential houses.

On Ensign Vasilyev's 1870 map, the layout of the first buildings between the Chovli stream and the Salar canal can be seen. Radial planning (lines originating from a single point) was applied here, a method that is still preserved in the center of Tashkent today (Amir Temur Square).



A

B

D

Figure 2. Vasilyev's Map.

A-Shape of the Square in 1870, B-Shape of the Square in 1872, D-Modern shape of the Square

During the study of these maps, it can be seen that 700 meters south of Amir Temur Square, there was also the 12-hectare Mingirik garden. This garden is visible in the lower right corner of the first two maps and in the upper central part of a map fragment in subsequent images. Near the Northern Railway Station, an archaeological monument of the same name—the ruins of Mingirik—is preserved. Previously, its area was 16 hectares. Following the capture of Tashkent and the construction of the "new city," the Mingirik archaeological monument gradually disappeared, with only a very small portion remaining.

From the 20th century onwards, Tashkent's transport networks began to develop extensively. Tashkent's railway transport, one of the largest in Central Asia, developed rapidly during this period. In 1926, the first bus lines were launched in Tashkent. Ten years later, tram lines began to be used on a large scale. In 1947, the trolleybus was introduced.

The street network underwent radical reconstruction. Dozens of kilometers of new main streets were built, connecting city districts. However, today, there are numerous problems in the city's transport systems. It is evident that the current transport situation still lags behind the needs of a constantly growing city. Improving public transport remains one of today's urgent issues.

While improving urban transport systems, it is necessary to develop a separate concept for the street and road networks in the historically significant parts of the city. In the process of studying historical maps, establishing transport hubs correctly serves as an important factor in restoring the original appearance of some significant streets.

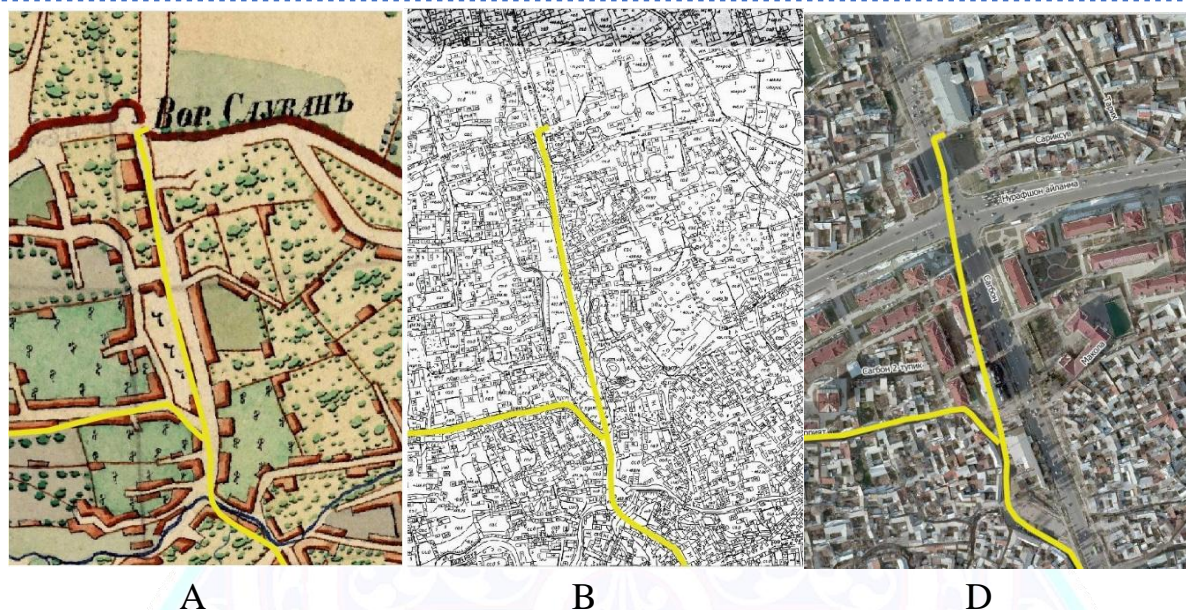


Figure 3. Sag'bon Street.

A- Sag'bon Gate on the 1865-1866 map. B- Sag'bon Street on the 1977 map. D- Sag'bon Street on a modern map.

The image above shows the stages of change for the current Sag'bon Street. Image A shows the road leading to the Sag'bon gate indicated by a yellow line. In Image B, looking at the 1977 topographic plan of Tashkent, we see that this same road is preserved as Sag'bon Street. In Image D, we can determine where the Sag'bon gate was located relative to today's landmarks. In this same way, we can identify the locations of all of Tashkent's gates.

In conclusion, such research conducted on the example of Tashkent can also be applied to other cities. The process of matching maps from specific periods serves as an important factor in determining the degree of preservation and the existing location of historical parts of cities, streets, and road networks. These processes enable the correct organization of transport structures in historical areas.

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