



## Lighting Systems of Khudoyorkhan Palace and Their Importance Today

**Zakirova Gulnozaxon  
Maxammadjon qizi  
Turgunboyev Azizbek  
Abdubannob o'g'li**

Fergana Polytechnic institute assistant  
[gulnoza899318@gmail.com](mailto:gulnoza899318@gmail.com)

Fergana Polytechnic institute student  
[azizbek11111996@gmail.com](mailto:azizbek11111996@gmail.com)

### ABSTRACT

In the 19th century, Khudoyorkhan Orda, a huge palace, had a system of baladiya, or communal services, adapted to the capabilities of the time and local conditions. However, this system is not currently in use and is one of the problems that will cause the building to lose its historicity.

### Keywords:

Hudoyorkhan, horde, palace, ballad, building, zogata, torch, dekchamashal, Egyptian lamp, peshgoh, fonus, payraha, lamp base, brass.

### Introduction

If we look at the world, many of the ancient cities have architectural monuments, which are more or less remarkable architectural symbols. For example, the architectural symbol of Paris is the Church of Notre Dame and the Eiffel Tower, the Pyramid of Egypt, the Taj Mahal of India and many other countries. In Uzbekistan, the symbol of Samarkand is Registan Square (Sherdor, Amir Temur and Ulugbek madrasas), the symbol of Bukhara is the Kalon Minaret, the symbol of Khiva is the Islamkhoja Tower, etc. Almost all of our provinces have their own iconic tower architectural monuments. Kokand also has its own architectural symbol. Khudoyorkhan Orda can be easily recognized as an architectural symbol of Kokand. This architectural symbol, which gives beauty, grandeur and splendor to Kokand Latif, has aroused pride in Kokand residents, admiration and interest in guests.

### Main Part

The construction of Khudoyorkhan Orda began in 1865 and was completed in 1870. The Orda building is one of the largest palace buildings of its time and covers an area of eight hectares. It is surrounded by tall buildings and thick walls. A well was dug outside the wall, and a stream from Ulkansay flowed from it. It is also a means of self-defense.

The structure consisted of four components:

1. Outer palace (fortress)
2. Middle Palace
3. The inner palace
4. The Garden

The structure is not rectangular (Figure 1). The relief of the place (low-altitude), the location of the surrounding buildings, the structure of the garden from the time of Umarkhan and other factors did not allow to achieve geometric

accuracy<sup>1</sup>.

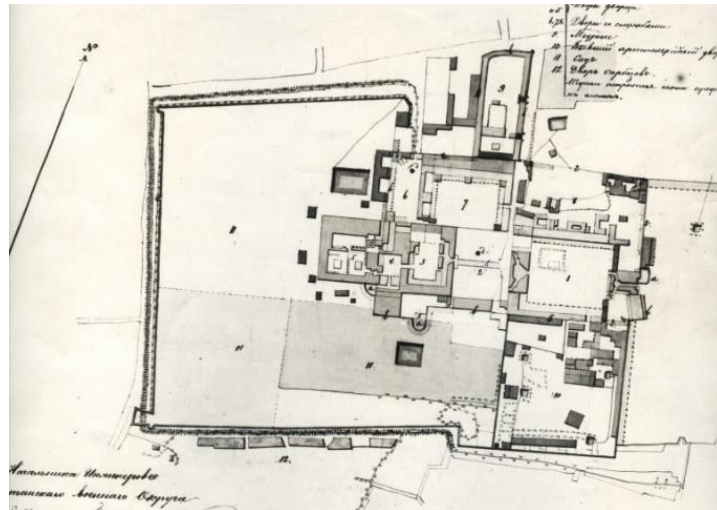


Figure 1. History of the master plan of the Khudoyorkhan Orda complex  
(Drawn by A.P. Fedchenko, a Russian tourist, 1871)

One of the largest structures of the time, the Hudoyorkhan Horde was illuminated by all the means of lighting common in the 19th century. Reusable torches are made as follows: they are made of a piece of iron and placed on a wooden pole. He wrapped the old rags and

blankets in ice and twisted them several times. Then they were soaked in oil. Disposable torches are made of iron without rags, and the wooden handle itself is made of cloth. The torches are mounted on the walls with a special base (cell) (Figure 2).



Figure 2. Torch.

In addition, in some parts of the yard there are torches, which look like big candlesticks. Another type of torch is called the Dekchamash'al. The cast-iron deccha (pot) is mounted on an iron ring with a saw blade and covered with linseed oil or lard. After the flood absorbed the oil, some more oil was poured on it. The fire was extinguished by a flaming torch. The flames erupted from the deck and lit up a large area. When there is no need for lighting,

the lid is closed when the sun rises.

Lanterns were also used to illuminate courtyards and gardens. A lantern is one that can be carried by hand or mounted somewhere. Inside the lantern is a candle or a candle, which is a means of lighting protected from the wind and rain by the installation of windows on all four sides. (Figure 3).

<sup>1</sup> "Khudoyorkhan Horde" Muhammad Yahyahan Khokandiy  
Namangan 2016

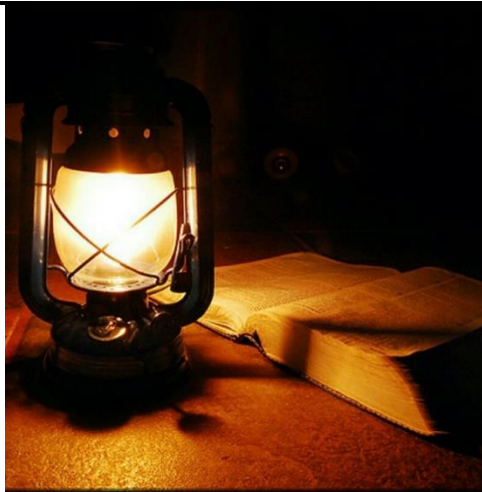


Figure 3. Lamp

Hudoyorkhan Orda Rooms are illuminated by fatila lamps (ie lanterns, kerosene lamps) and candles. Fatila lamp is a lantern or kerosene lamp that is well known to the elderly . This type of lighting device was invented in the ancient Egyptian state and was called the "Egyptian lamp" in the eastern countries. Until the 19th century, this lamp was filled with oils from plants, mainly linseed oil. By the second half of the 19th century, kerosene was mainly used . Khudoyorkhan also had a kerosene factory on his private farm . Lighting fixtures are mounted on shelves, walls and light poles .

In the mid-1980s, there were several reliable lanterns in front of the front. The outdoor chandeliers are made of wood and are a masterpiece in the art of carving. The khan's own room is made of silver, and the other room is made of brass (Jez is an alloy of copper and zinc (up to 50%))<sup>2</sup>.

Candles are still widely used in the rooms of Khudoyorkhan Orda. The original, clean candles were made of white wax, and the ordinary candles were made of animal oil. Candles made of white wax were lit for a long time, almost without holding. The flow of such candles (melted and solidified under the candlesticks) was not wasted. The maidens chewed gum with apricot paste. White wax was a pure, sweet substance made by bees. Such

candles were mainly used in Khudoyorkhan's own room, in harems, in inner palaces.

This historical monument, which belonged to the last khan Khudoyorkhan Kokand, consisted of 3 parts and 114 rooms. Today, the interior of the palace and its Although Khudoyorkhan Orda did not have a long history, its history is being lost today. This is due to the fact that the building was not restored, but reconstructed. Another problem that is causing it to lose its history is the changes in the system. The repair system of Khudoyorkhan Palace is equipped with modern electrical equipment. I think this building is one of the historic ones to lose<sup>3</sup>.

### Conclusion

In short, the restoration of ancient architectural monuments, as well as the main principle of their use is to keep the building as original as possible. It is here that, on the one hand, the desire to preserve the monument remains unchanged, and on the other hand, the need to find a function for each monument that corresponds to its existing structure. However, this is not only an architectural problem, but also a spiritual one. The use of the building and its territory should not disturb the historical and natural landscape during operation. On the contrary, it is a demonstration of cultural-historical and artistic riches

<sup>2</sup> "Khudoyorkhan Horde" Muhammad Yahyahan Khokandiy Namangan 2016

<sup>3</sup> <https://cyberleninka.ru/article/n/architectural-appearance-of-khudoyorkhan-palace-requirements-for-preservation-and-restoration/viewer>

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