

and Technology

The history of housing construction among the karakalpaks in the 19th-20th centuries

Eshmuratov Muratbay Saparbaevich

Teacher of the Faculty of Construction of Karakalpak State University, Uzbekistan

Received: 27 January 2025; Accepted: 26 February 2025; Published: 28 March 2025

Abstract: The history of housing construction among the Karakalpaks in the 19th and 20th centuries reflects a transition from traditional nomadic dwellings to modern urban structures influenced by Russian colonization and Soviet policies. Initially, Karakalpak housing consisted of portable yurts and mud-brick houses suited to the region's climate and lifestyle. However, with increased contact with neighboring cultures and political changes, construction methods evolved, incorporating new materials and architectural designs. The Soviet period brought significant shifts, introducing standardized housing and urban planning while diminishing traditional architectural elements. Furthermore, environmental and economic factors, such as the Aral Sea crisis and industrialization, shaped housing development. Despite modernization, efforts to preserve Karakalpak architectural heritage continue. This study highlights the dynamic interplay between tradition and modernization in Karakalpak housing construction and its broader socio-cultural implications.

Keywords: Karakalpak housing, traditional architecture, yurts, mud-brick houses, Russian colonization, Soviet modernization, urbanization, environmental impact, architectural heritage, housing transformation.

Introduction:

Throughout history, the housing construction of the Karakalpak people has reflected their way of life, climatic conditions, and socio-economic development. In the 19th and 20th centuries, Karakalpak dwellings underwent significant changes due to external influences, including Russian colonization, Soviet modernization, and evolving technologies. This article explores the traditional architectural features of Karakalpak houses, their transformation over time, and the factors that influenced these developments.

To begin with, Karakalpak housing in the 19th century was largely adapted to the nomadic and semi-nomadic lifestyle. The most common type of dwelling was the yurt (or qara uy), a portable, circular tent made of wooden frames covered with felt. This structure provided insulation against the harsh winters and heat resistance during the summer. Additionally, the yurt was easy to assemble and disassemble, making it suitable for a society that relied on livestock herding. However, in areas where the Karakalpaks settled permanently, they constructed mud-brick (pakhsa) houses. These structures were built using locally

available materials such as clay, straw, and reeds, making them sustainable and cost-effective. The walls were thick, ensuring thermal stability, while the roofs were often flat or slightly sloped. Furthermore, the interior space was designed for both living and storage, with a separate cooking area and a raised sleeping

The Karakalpaks inherited the yurt from their Turkic ancestors, as the key features of the collapsible trelliswalled felt yurt had already been developed before the Karakalpak tribal confederation emerged in the 15th or 16th centuries in the lower Syr Darya region.

The yurt remained the primary dwelling of Karakalpak families until the early Soviet era. Its construction required various craftsmanship skills, making it a significant part of Karakalpak culture and folklore. The yurt has many advantages: it is both portable and durable, easy to assemble and dismantle while remaining stable and secure. It provides warmth in harsh winters and stays cool in scorching summers. Affordable for livestock breeders, it was also suitable for use by Khans. Over nearly 1,500 years, the design of the Turkic yurt evolved through a process akin to

American Journal of Applied Science and Technology (ISSN: 2771-2745)

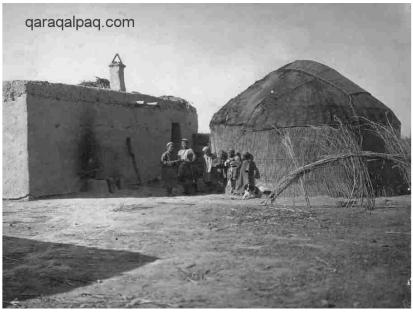
natural selection. Each tribal confederation developed its own distinctive style, incorporating unique features. As a result, despite living alongside Uzbeks, Qazaqs, and Turkmens in the Aral region, Karakalpak yurts remained easily recognizable [1].

Yurts are typically associated with nomadic pastoral societies, but it is essential to remember that the Karakalpaks were not nomads. They were traditionally "semi-settled," meaning that each clan had a designated wintering ground, qıslaw, and a summering ground, jazlaw, which were usually located relatively close to one another. During the winter, yurts were set up within a windbreak fence for protection, while a separate fenced enclosure, known as qora, was built to shelter the cattle. With the arrival of spring, the yurts were relocated to the summering ground near cultivated fields, allowing livestock to graze on the surrounding pasturelands and marshes. Working bullocks were used for plowing the land.

The villages of individual clans were often situated near

a water channel to which the clan had hereditary rights. In winter, they relied on agricultural by-products such as hay, wheat and millet straw, sorghum stems (ju'weri), and cane for animal feed. In autumn, fodder was harvested and transported to the wintering ground using bullock carts or arba. In marshy areas, particularly in the northern delta, local rushes were also collected to supplement the livestock's diet.

The Karakalpak yurt bears resemblance to the yurts of the Turkmen, Uzbek, Qazaq, and Kyrgyz peoples but features distinct elements, including a uniquely structured shan'araq (roof wheel). A key distinguishing trait of the Karakalpak yurt is its cone-shaped roof, which contrasts with the traditionally dome-shaped roofs of Qazaq and Turkmen yurts. However, in recent times, Qazaq yurts manufactured in Karakalpakstan have also adopted a cone-shaped design. In the 19th century, some Qazaqs covered their yurt roofs with animal skins instead of felt [3].

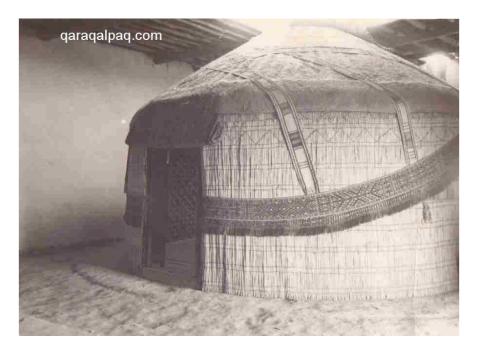


In the past, the lower reaches of the Amu Darya and Syr Darya rivers were home to a rich and diverse natural environment. The landscape was shaped by winding channels, oxbow lakes, and freshwater pools, surrounded by vast marshes and swamps. These wetlands were often overgrown with dense reeds and rushes, some reaching heights of up to 8 meters.

The riverbanks were covered with thick tugay forests, which gradually transitioned into reed beds, gallery

forests, shrub thickets, sedges, and eventually desert, where patches of low-quality grazing land could be found. The forests were dominated by native poplars and willows, while tamarisk and elaeagnus grew abundantly in the undergrowth. This dense vegetation provided a habitat for a wide variety of wildlife, including birds, waterfowl, mammals, amphibians, and, during the spring, large numbers of mosquitoes.

American Journal of Applied Science and Technology (ISSN: 2771-2745)



In the 20th century a few Karakalpkas erected a yurt inside their home

maintaining a tradition from the time of ibn Fadlan, one thousand years earlier

As time went on, Karakalpak housing began to evolve due to increased contact with neighboring cultures and Russian influence. In the late 19th century, Russian colonization introduced new construction materials, such as bricks and wooden beams, which led to the gradual shift from traditional mud-brick houses to more durable structures. Moreover, urbanization contributed to the establishment of more permanent settlements, reducing the prevalence of yurts.

Another important factor in housing transformation was economic change. As agriculture and trade expanded, families sought to build larger, more elaborate homes with multiple rooms. These new designs often included separate guest rooms, storage spaces, and even enclosed courtyards. Additionally, windows and doors became more common, improving ventilation and lighting in homes.

The most profound shift in housing construction occurred during the Soviet period. In the 1920s and 1930s, collectivization policies aimed at settling nomadic populations led to the widespread construction of standardized houses. Consequently, many Karakalpaks moved into government-built dwellings, which followed Soviet architectural principles. These houses were often rectangular, with gabled roofs and brick or concrete walls.

Furthermore, urban planning became a key focus of Soviet authorities. New settlements were designed with straight streets, public squares, and uniform housing units. As a result, traditional mud-brick houses declined, and Soviet-style apartment blocks emerged in cities such as Nukus. Although these modern buildings

provided better infrastructure, they also led to the gradual loss of traditional architectural elements.

On the other hand, rural areas retained some aspects of traditional construction. While Soviet policies encouraged modernization, many Karakalpaks continued to build using clay bricks and reeds, incorporating Soviet design elements such as larger windows and chimneys. Nevertheless, the overall trend was towards industrial materials and prefabricated housing units [2].

In addition to political changes, environmental and economic factors played a crucial role in shaping Karakalpak housing. The Aral Sea crisis, which worsened in the mid-20th century, led to drastic climatic changes, making traditional construction materials less effective. As desertification increased, new building techniques were necessary to withstand extreme temperatures and dust storms.

Economically, state-sponsored housing projects provided access to modern construction materials, but they also created economic dependency. Many Karakalpaks who previously built their homes independently now relied on government housing programs. At the same time, urbanization continued, leading to high-rise apartment buildings that replaced single-family homes.

Despite modernization, efforts have been made to preserve Karakalpak architectural heritage. In recent years, cultural organizations and historians have emphasized the importance of traditional housing as part of the region's identity. Consequently, some modern homes incorporate elements of traditional design, such as decorative wood carvings, domed roofs, and interior layouts that reflect Karakalpak customs.

Moreover, local artisans and architects are working to revive traditional building techniques using sustainable

materials. This movement not only helps preserve cultural heritage but also promotes environmentally friendly construction methods.

CONCLUSION

In conclusion, the evolution of Karakalpak housing construction in the 19th and 20th centuries highlights the complex interplay between tradition and modernization. Initially, the Karakalpaks relied on yurts and mud-brick houses, which were well-adapted to their nomadic and semi-nomadic lifestyles. However, with Russian colonization and Soviet influence, housing gradually transformed, incorporating new materials, designs, and urban planning strategies. Although Soviet policies introduced modern infrastructure and standardized housing, they also led to the decline of traditional architectural elements. At the same time, environmental and economic factors, such as the Aral Sea crisis and urbanization, further influenced housing development. Nevertheless, efforts to preserve Karakalpak architectural heritage continue, as local communities and cultural organizations recognize the importance of maintaining historical construction techniques. Ultimately, the history of Karakalpak housing construction reflects broader social, political, and economic changes in the region. While modernization has altered traditional living spaces, elements of Karakalpak architectural identity remain visible today. Thus, by studying this transformation, we gain a deeper understanding of the resilience and adaptability of the Karakalpak people throughout history.

REFERENCES

Berdiev Zh.T. Reflections in legends and folk traditions of the history of the Karakalpaks of the XIII-XVII centuries. // Abstract of candidate. dissertation, Nukus, 1995.

Esbergenov H.E. Konyrat - tariikhy ham madeniy estelikleri. Nokis: "Karakalpakstan", 1993.

Zhdanko T.A. Essays on the historical ethnography of the Karakalpaks. M.-L.: Ed. Academy of Sciences of the USSR, 1950.

Zhdanko T.A. Karakalpaks of the Khorezm oasis.//TKHAEE. M.: Publishing house of the Academy of Sciences of the USSR, 1952.t-1.

Zhdanko T.A. Works of the Karakalpak ethnographic detachment of the Khorezm expedition in 1957.// Field research of the Khorezm expedition in 1957. M.: Ed. AN SSSR, 1960. four.

Kamalov S.K. Karakalpaks in the 17th-19th centuries Tashkent Ed. Fan, 1968.

Kaulbars A. V. Lower Amu-Darya, described according to his own research in 1873 // ZIRGO. SPb., 1881.t-IX. Materials on the survey of nomadic and sedentary indigenous economy and land use in the Amudarya department of the Syrdarya region, V.I, Tashkent, 1915