Central Asian köshks from the Islamic period before the Mongol conquest: fortified, semi-fortified or unfortified?

Abstract: In their external appearance, the Islamic-period köshks in Central Asia, especially the characteristic buildings with corrugated outer walls, dated broadly speaking from the 7th–8th century AD to the times of the Mongol conquest at the beginning of the 13th century, are apparently fortified. However, they lack a number of features characteristic of defensive buildings. Their interpretation as residential structures in this period is indisputed, hence their apparent defensiveness has been attributed to a line of evolution from pre-Islamic architecture of this type, which played a military role. A review of various defensive elements present in these structures, compared with buildings from an earlier period, highlights this process. An apparent exception is the Great Kyz Kala at Merv, Turkmenistan, which may have not lost its defensive capacity immediately, as recent research by the UCL Institute of Archaeology Ancient Merv Project has demonstrated.

Keywords: Central Asia, Middle Ages, köshks, residences, fortifications, war technique

Köshks, widely recognized as seats of feudal aristocracy, constitute a problem for researchers of Central Asian Islamic fortifications from before the Mongol conquest. Apparently fortified, yet they lack a

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I would like to thank Prof. Barbara Kaim, Head of the Polish Archaeological Mission in Iran and Central Asia for the opportunity to visit on several occasions the State Historical and Cultural Archaeological Park “Ancient Merv”.
Piotr Piekarz studies number of features characteristic of defensive buildings. The term “köshk”, derived from Persian, indicates a non-defensive structure, contrary to the external appearance and some local names that suggest a military function, at least in the pre-Islamic period. Unsurprisingly, the difference in interpretation of köshks in the literature is considerable. However, in view of recent research on the Great Kyz Kala at Merv, Turkmenistan, many of the ideas on the subject of köshks have been corroborated, including that köshks from Islamic times did not immediately lose their defensive capacity.

**RESEARCH INTERPRETATION OF THE TERM “KÖSHK”**

The modern meaning of the word “köshk” remains in contrast to the defensive or semi-defensive character of most interpretations put forward by researchers. It derives from the Persian language and is present today in Tajik, Turkish and Turkmen. In general, it means a palace (in Persian, Tajik and Turkmen), a villa (Tajik, Turkish), a summer manor (Turkish) or pavilion (Persian, Turkish) (https://en.wiktionary.org/wiki/). In medieval written sources, its meaning was already quite broad. It denoted both regular buildings and “rich” buildings (Voronina 1959: 89). It also had military significance, at least in the pre-Islamic period. Abu Bakr Muhammad ibn Jafar Narshakhi (or Narshaki) (about 899–959), the first known historian of Central Asia, in his *History of Bukhara* written in Arabic, mentioned a king of Buckhara (bukhar-hudat) having been killed in his köşk in the Varakhsha kah. Since kah in Central Asia is interpreted as a fortified farm, köşk in this case must have denoted a residential tower located inside the farm (Tolstov 1948: 151).

Many place names in the Merv oasis (Turkmenistan), which in the 10th century geographical work *Hudud al-Alam* was reported to have many köşks, contain the word as a qualifier: Porsy-köşk, Akujli-koshuk, Kharam-köşk, Ovlijali-köşk, Sulu-koshuk [Fig. 1]. Sometimes this can be misleading, as in the case of Kharoba-koshuk, which is interpreted as a Christian temple (Brykina 1999: 22). Reference to military function occurs occasionally: Kasr al-Bakhili (Bakhili’s Castle) and Kasr al-Rikh (Wind Castle) in what was formerly Sogdiana (Nemceva 1983: 141), as well as Kyz Kala (Girl’s Fortress) near Old Merv. The Turkmen name Kyz Kala refers to a real fortress on the Amu-darya in the Khwarazm region. G.A. Pugačenkova interpreted the köşks in Merv oasis as castles of local aristocracy known as dihkans; she referred to them as feudal fortresses (Pugačenkova 1958: 140, 144). A similar interpretation appeared in later works (Lunina 1963: 82; Brykina 1999: 21). Some of the pre-Islamic köşks in Sogdiana were also referred to as fortresses (Brykina 1999: 53). The term has been used occasionally to designate a separate type of castle (Masson 1955: 217; Voronina 1963: 84; Nemceva 1983: 141; Brykina 1999: 53).

The term “fortified farms-köşks” has also been used for buildings in pre-Islamic Khwarazm (Voronina 1959: 89). However, as said above, Tolstov interpreted the
köshk as a residential tower in a fortified homestead or castle keep (Tolstov 1948: 138, 151; Brykina 1999: 38). It could have been a fortified caravanserai (Pugačenkova 1958: 165) as well as a defensive house, which in the area around Old Merv provided the elites with shelter from the heat in the summer months as well (Williams 2002/2003: 41; 2005/2006: 54).

Other interpretations of the köshk have referred to semi-fortified or entirely unfortified buildings. Pugačenkova remarked on the gradual shift from a feudal castle to a fortified building of public utility or a rich residential house (Pugačenkova 1958: 166; 1963: 234). The term is also known to refer to a fortified palace of the Iranian aristocracy (Kennedy 2010: Figure between pages 160 and 161). Semi-fortified köshks also appear in recent research on the Great Kyz Kala, interpreted there as residences for the elite, far from the noise and smell of the city, like the medieval defensive courts (Williams, Campbell et al. 2018: 153).

**ISLAMIC-PERIOD KÖSHKS**

An Islamic-period köshk is, by the most widely accepted definition, a storeyed buildings with residential function, the ground floor taking on the appearance of...
a platform with clearly sloping edges and the upper floor formed of vertical walls with vertical corrugated (Pugačenkova 1958: 150, 151, 154, 156; Brykina 1999: 21; Williams, Campbell et al. 2018: 153) [Figs 2, 3].

However, prior to the Mongol conquest of Central Asia at the beginning of the 13th century, there were buildings with a köşk-like external appearance that were not köşks. One should mention: 1) the caravanserais at Rabati Malik (Pugačenkova 1958: 292), Akcha-kala (Masson 1955: 246; Pugačenkova 1958: 226), Nasrak (Pugačenkova 1958: 165), and Danguz-Tugoj (Pugačenkova 1958: 295); 2) towers with corrugated walls at the Durnali site (Pugačenkova 1958: 157–158), at Turgaj-Gugurdzli in the ruins of Ishak-rabat (Pugačenkova 1958: 295); 3) residential dinka-

Fig. 2. Interpretative reconstruction of the Great Nagim Kala in Merv oasis (After Pugačenkova 1958: 136)

Fig. 3. Great Kyz Kala at Merv, view from the west (Photo P. Piekarz)
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towers, such as Munon-tepe (Pugačenkova 1958: 160); 4) signaling towers, e.g., Koj-kala (Itina 1991: 14). One might also mention a building located near the palace on the Shahriyar Ark in Old Merv [Fig. 4]. It did not have a housing function and was referred to as a library, administrative building—diwankhana, or kepter-khana (dovecote) for some economic purposes suggested by the rectangular plan (21.50 m by 7.65 m) and the rows of evenly spaced niches inside (Herrman and Petersen 1997: 50–51; Dżepbarov 2014: 27–28).

The latter, rather late building, from the 11th–12th century, with the appearance of a köşk, may actually exemplify the ultimate transformation of köşks from representative residential homes into structures of secondary and utilitarian importance.

**CASTLES OR RESIDENCE?**

While it is accepted that in Islamic times the köşk was foremost a residence, its defensive function has been raised repeatedly. In order to answer the question whether a köşk was a castle or not, one must go back to the pre-Islamic period, when this kind of building or its prototype, was not an independent defensive object as a rule, but part of a defensive complex. This is evidenced by a text by Narshakhi about the death of a high official in the Varakhsha kah (castle-palace) in his köşk, which must have been a residential part of a defensive abode (Tolstov 1948: 151).

A castle in European terms invokes a defensive structure, regardless of whether it is an independent fortification or a residence with defensive properties (Szymczak 1988: 233). The former is a brick or stone fortification, consisting of at least three elements: a defense wall, a courtyard inside this circuit and a residential building in the courtyard (Poklewska-Koziell 2012: 42). Castles for military purposes were intended for battle, but also as ware-

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Fig. 4. Köşk in Shahriyar-Ark at Merv (Photo P. Piekarz)
house for weapons and food. Active defense included towers, arrow slits, hoarding and machiculation, whereas passive defense called for high, thick walls with a limited number of openings, protecting against attackers, but not responding to attack (Poklewecki-Koziell 2012: 86–87, 139). In medieval Arab and Persian written sources concerning Central Asia, castles were referred to as qasr or hysn (Tolstov 1948: 150; Nemceva 1983: 141). Accounts of medieval authors such as Al-Maqdisi, Istakhri, Narshakhi and Ya’qubi indicate the existence of a significant number of castles. Al-Maqdisi, for example, counted up to 12,000 in the border district of Mizdakhana. Researchers consider the so-called hovels or keda, that is, family settlements consisting of a residential building, farm buildings and a courtyard, surrounded by a high wall, which looked like a medieval fortress, as castles (Tolstov 1948: 150–151; Nerazik 1976: 67). Thus, the military castle in European terminology was perceived in Central Asia as a complex of buildings and a courtyard surrounded by a defensive wall.

The beginnings of a köshk as part of a castle, in the form of a residential tower, a donjon, consisting of a huge pedestal above which the proper residential part was erected, was connected on the one hand with the emergence of a new landowner type, the so-called dihqan and, on the other hand, with an effort to deal with the threat posed by the introduction of siege engines (for a discussion of war techniques, including extensive use of siege engines, during the Arab conquest of Central Asia, see (Łukawski 1996: 65, 66, 68; Voronina 1964: 41, 42; Brun and Annaev 2000–2001: 63) [Fig. 5]. Further

cast in Sogdia, small fortresses, often in the form of square köshks, characterized by strongly extended corner towers, are present already in the 5th and 6th centuries (Brykina 1999: 53). At Khwarazm, this type of building appeared at the turn of the 7th and 8th centuries (Tolstov 1948: 138, 153; Brykina 1999: 38).

The earliest examples in the environs of Merv feature a corrugated structure of the walls of the upper, residential part (Tolstov 1948: 33; Nerazik 1976: 172; Brykina 1999: 42). The corrugated form of the outer walls, reminiscent of a row of engaged columns standing side by side is a characteristic feature of Islamic köshks. The idea was known already in buildings from the Bronze Age (Nemceva 1983: 136).

One of the earlier examples of this element in Central Asia are the corrugated facades of pre-Islamic towers adjacent to the citadel in Varakhsha, Sogdia (Brykina 1999: 56). The towers of the Chilbujt

Fig. 5. Siege machine depicted in a mural discovered in Panjakent (Tajikistan) (After Isakov 1977: 165, Fig. 64)
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(Turkmenistan) defensive walls with their corrugated facades are even earlier (2nd–3rd century AD) (Pugačenkova 1958: 52, 53). The Great Nagim Kala, which is dated to the 6th–7th century (Pugačenkova 1958: 134), is widely presented as the earliest example of a classic corrugated form of köşk around Old Merv [see Fig. 2], but this dating is questioned by recent research by the University College of London Institute of Archaeology Ancient Merv Project.

DEFENSIVE ELEMENTS

Architectural features as well as location determine whether a structure can be described as defensive or not. Location is very important to assess combat value. The better-known Islamic köşks in Merv oasis were erected on flat ground, generally outside larger settlements which were surrounded by its own fortifications. The köşks inside the walls of Giaur Kala and the köşk at the Tachmalaj site, which is built on a hill, are an exception (Pugačenkova 1958: 149, 166). They often appeared in an isolated rural settings near the canals. Only in the case of the Great Kyz Kala, it has been suggested that köşk actually lay within a walled enclosure (Williams, Campbell et al. 2018: 153, 165).

In Central Asia, buildings situated outside the fortifications of urban settlements could have served defensive purposes during war. These were the ribats, border forts, which played a military role, especially during the Arab conquests (Nemceva 1983: 112); watchtowers on high ground, convenient observation points arranged along roads; they were particularly widespread in Khwarazm. A fire burning on top of these towers signalled approaching enemies (Voronina 1959: 97; Voronina 1964: 49; Nerazik 1976: 203).

With regard to the architecture, features defensive in their origin that were gradually lost over time as the köşks and castles lost their defensive role after the coming of the Arabs (Pugačenkova 1958: 338; Tolstov 1948: 47) included foremost the outer fortification. Defensive walls can be observed in the the pre-Islamic köşks in Khwarazm. The keep-towers of the 7th and 8th centuries in particular were surrounded by defensive walls forming a compound that could be entered only through a fortified entrance protected by a foregate structure or flanked by two towers. Additional barrier walls and moats were found outside the defensive walls (Brykina 1999: 41, 42) [Fig. 6]. The only köşk from Islamic times to have such a wall is the Great Kyz Kala, but its thickness (2 m with circular towers about 3.20 m in diameter at intervals, see Williams, Campbell et al. 2018: 165) can hardly be said to be impressive. Indeed, it is comparable with the so-called “walls of orchards” (Masson 1949: 72).

Fig. 6. Interpretative reconstruction of the castle at Yakke Parsan (Uzbekistan) (After Piskadło 1977: 419, Fig. 167)
Another distinctive, potentially defensive feature is the entry to the kōshk. Before the coming of the Arabs, access to a kōshk was via a drawbridge, directly to the upper floor from where there was a connection with an additional tower, e.g., the kōshk at Yakke Parsan (Brykina 1999: 39, 42). A similar way of entering a kōshk was recognized in the 9th–10th century buildings in al-Tachmalaj. The bridge was situated between the kōshk and the roof of a building in a nearby courtyard (Pugačenkova 1958: 166). One could also enter the upper floors of kōshks via a ramp, as in the early kōshks from the area around Old Merv: Great Nagim Kala (Pugačenkova 1958: 133) and probably also the Great Kyz Kala (Williams, Campbell et al. 2018: 163) [Fig. 7; see also Figs 2, 3]. A significant part of the kōshks was entered from the ground floor, e.g., Ovlijali-kōshk (Pugačenkova 1963: 228, 229, 230, 231) [Fig. 8], Kharam-kōshk with two entrances (Pugačenkova 1958: Figure on page 154) and Kel'te-Minara with four entrances (Pugačenkova 1963: 235, Fig. 8). This type of entrance represented a complete absence of defensive function.

An underground exit from the kōshk, used for forays against the enemy, was identified at Afrasiyab, but the structure is associated with the pre-Islamic period (Brykina 1999: 55).

Kōshks were also sometimes furnished with corner towers in pre-Islamic times. These could actually dominate the body of the building, as in the Sogdian kōshk of Aktepa in Tashkent (Brykina 1999: 53). With regard to Islamic-period buildings, wooden towers at the corners of the apices have been suggested for the kōshk of the Great Kyz Kala (Williams, Campbell et al. 2018: 157, 166).
The platforms on which köşks were constructed were undoubtedly of a defensive nature. In the case of larger buildings in Khwarazm before the Arab conquest, these could be even 6–8 m high. In Sogdia, the platform of the köşk at Bad Asija, near Tashkent, was also significant, reaching over 5 m in height (Brykina 1999: 41, 66). These platforms were made of rammed clay and their sides were steep and sloping in order to eliminate the dead area at the base of the building (Voronina 1964: 43). Such platforms were rare in buildings after the coming of the Arabs, the Great Kyz Kala in the Merv area, featuring a 2-m-high platform of rammed clay covered with mud bricks on the outside, being again an exception (Williams, Campbell et al. 2018: 156). In a number of other cases, the lower part of a köşk was shaped in imitation of a platform. This part reached a height of 4 m. It could be made of either mud bricks (Little Kyz Kala), alternating layers of mud bricks and rammed clay (Great Nagim Kala and Shahriyar Ark) (Pugačenkova 1958: 132; 1963: 228; Williams 2011: 371).

Another difference to be noted between the earlier fortifications and the structures from after the coming of the Arabs is the wall thickness. The outer walls of the residential part of defensive structures in pre-Islamic Khwarazm had a thickness at the base equal to 2.50–3.00 m (Brykina 1999: 40). In the case of the Great Nagim Kala, walls up to 3 m thick were found at ground level, forming a platform, but on the upper floor they ranged in thickness from 1.20 m in the recessed sections to 2.10 m in the place of the buttresses (Pugačenkova 1958: 132, 133).

A telling difference is the absence of arrow slits in the later köşks, replaced by windows, which were an evident handicap in the event of an attack (Williams, Campbell et al. 2018: 166).

Crenellated parapets instead of simple cornices could have existed, but this is purely speculative in view of the destruction of the wall tops (Pugačenkova 1963: 229; Williams, Campbell et al. 2018: 157).

The logistics of food and water provisioning inside the buildings is another important feature to be considered when looking at the defensiveness of any structure. Food storage was possible on the ground floor of the köşk at Great Kyz Kala, which also had a well or cistern in the inner courtyard (Williams, Campbell et al. 2018: 137, 159). For other structures from the period after the coming of the Arabs there is no data to prove or disprove whether they had direct access to water as was frequent in the pre-Islamic köşks, e.g., Yakke Parsan (Brykina 1999: 39, 40).

**CORRUGATED WALLS: DEFENSIVE OR DECORATIVE?**

Corrugated walls [Fig. 9] were present in both fortifications and buildings that were not meant to be defensive. The military significance of this element has been explained as protecting a wall from destruction during bombardment with stone balls thrown by siege engines; the balls sliding off the indented surfaces were to lose some of the impact force (Voronina 1959: 97). Reinforcement and protection from adverse wind action on the walls have also been proposed, and rejected, as possible reasons for the existence of this feature (Pugačenkova 1963: 229).
It is generally assumed today that the recessing is a relic of a structural or functional element of some kind (Voroni-na 1964: 51) and if it once had military significance, it lost it in Islamic times, becoming purely decorative (Nemceva 1983: 136) and certainly somewhat forbidding (Pugačenkova 1958: 220) as well as dignified.

**KÖSHK INTERIORS**

Köshks were as a rule two-storied buildings, although there is suspicion of a third storey in the case of the Great Nagim Kala (Pugačenkova 1958: 132) [see Fig. 2]. The plan does not seem to have been standardized, but in Khwarazm

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Fig. 9. Recessed wall of the Great Kyz Kala at Merv Oasis (Photo P. Piekarz)

Fig. 10. Castle in Yakke Parsan (Uzbekistan) (After Nerazik 1976: 176, Fig. 105)
there was a trend toward a central scheme already before the coming of the Arabs. At Yakke Parsan, for example, a room in the middle of the castle keep had a well [Fig. 10]. Such central rooms were either rectangular or square in plan and they provided access to other rooms (Brykina 1999: 39, 41). A central room preceded by a vestibule was also present in the köshk-keep of the 7–8th century castle of Bad Asija in Sogdia (Brykina 1999: 66).

In Islamic times, some of the köshks retained the principle of centricity in the layout of the interior. In the center there would be a larger room on a square plan, around which there were different rooms of smaller dimensions, as in the Little Kyz Kala [Fig. 12] (Pugačenkova 1958: 137) and in the building located in the southwestern part of Sultan Kala (Pugačenkova 1958: 150). The central composition of the köshks actually became a model for the homes of wealthier residents (Nerazik 1976: 188) [Fig. 13]. In some köshks, such as Kel’te Minara, Kharam köshk and Akujliköshuk (Pugačenkova 1958: 231, 152, 156), there was a larger room in the middle or closer to one side, furnished with lateral rooms or niches on all sides on a cruciform plan [Fig. 11].

Fig. 11. Kel’te Minara köshk in Merv Oasis: facade and plan (After Pugačenkova 1963: 235, Fig. 8)

Fig. 12. Little Kyz Kala at Merv: plan of the ground (left) and first floor (After Pugačenkova 1958: 138)
A departure from centricity in the layout of the interior is also observed in, for example, the köshk at the site of Al-Tachmalaj, where the plan comprised a number of identical square rooms (Pugačenkova 1958: 166), and the upper floor of the building at Sulu köshuk, which had a square room acting as a vestibule for a long room placed on axis and sided by three small rooms (Pugačenkova 1958: 154). Also, the Great Kyz Kala did not show any principle of centricity in its interior layout. A courtyard was located closer to the north wall and a series of rooms were placed around it. A long hall probably of special function was located in the southern part of the complex (Williams, Campbell et al. 2018: 156, 158, 159, Fig.8, 161, Fig.11, 163). Finally, the köshks in Shahriyar-Ark had a completely different interior plan with rows of niches along the inner walls, at equal distances from one another (Herrman and Petersen 1997: 50–51).

CONCLUSION

Köshks both in Khwarazm and in Sogdia were defensive in nature in pre-Islamic times when they constituted an important part of a castle, designed to defend against trained enemy units equipped with siege engines. After the Arab con-

Fig. 13. Residential house east of Gyaur Kala: left, view from the outside; right, reconstruction of the facade and plan (Drawing after Albaum, Brentjes 1976: 51, Fig. 14; photo P. Piekarz)
Central Asia

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References


Masson, M.E. (1949). Gorodišt Nisy v selenii Bagir i ih izučenie (Settlements of Nisa near the village of Bagir and their study). Trudy Úžno-Turkmenistanskoj arheologičeskoj kompleksnoj èkspedicii, 1, 16–107
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