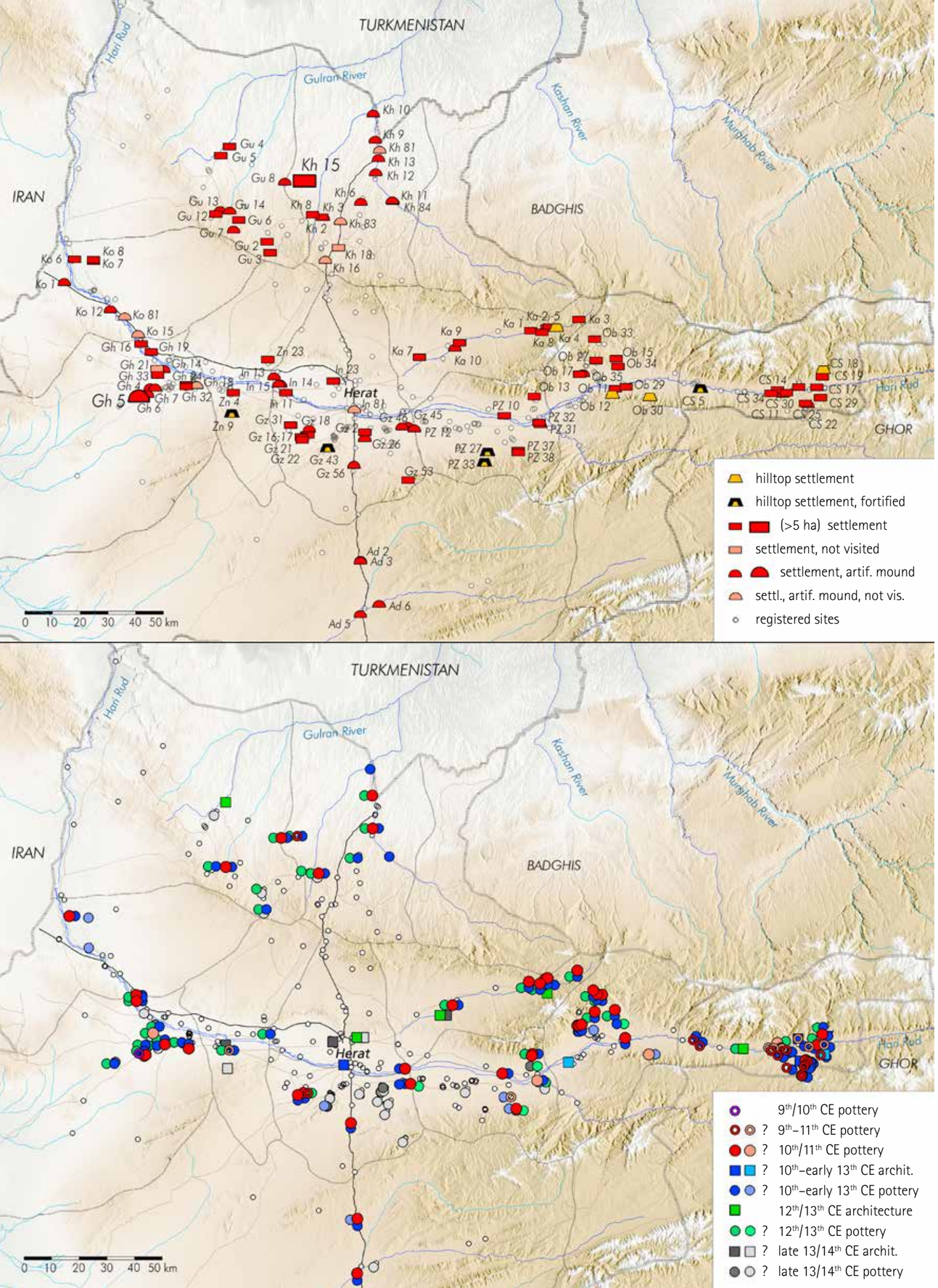


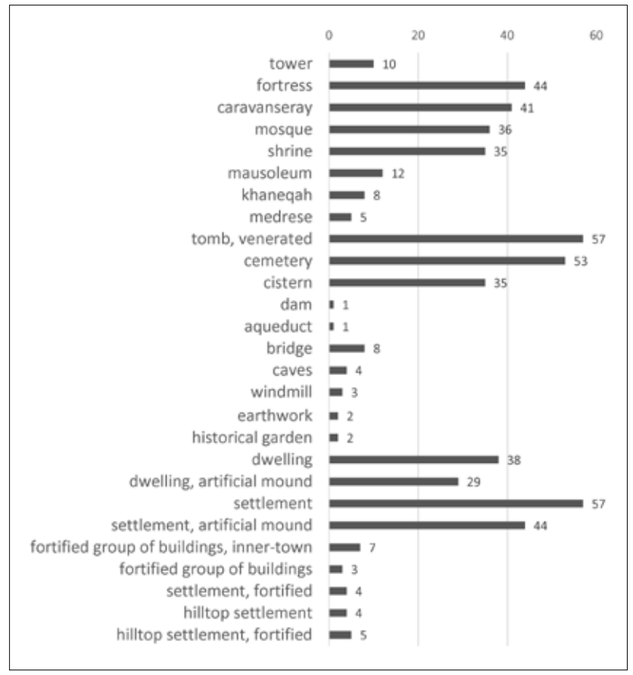
Concluding Remarks. First Approaches to the Cultural Landscape of Herat

Ute Franke

Having presented the data collected during the project in as much detail as possible, with the aim of facilitating subsequent studies, we will not attempt to close the book with an all-encompassing evaluation and interpretation. Aware of the pitfalls and limitations of a quantitative-qualitative interpretation of the data, our focus here is rather on some aspects that are important in this initial approach to developing an idea of the wider cultural *hinterland* of the city of Herat on the basis of archaeological evidence. These topics include the spatial distribution of certain types of sites and monuments, and of particular cultural elements, especially pottery, on which the dates are based.

The patterns revealed by plotting selected types and features on a topographic map are patchy. As the survey was not systematic, frequencies of occurrences[1] and spatial as well as typological clusters are also determined by visibility and accessibility, routes taken and time spent in an area. Chronological patterns, on the other hand, depend on the availability of datable evidence. Furthermore, the number of sites discovered in a district is not a meaningful absolute measure, as districts vary greatly in size and topography, and the current administrative boundaries are historically meaningless.[2]

However, certain patterns are predictable. *Caravanserays* are likely discovered near communication routes and passes or bridges, while monuments are more likely to be traced in agricultural areas than shallow settlements or small dwellings. The latter are particularly difficult to locate in the Hari Rud Oasis due to the high rate of fluvial sedimentation, which is maximised by intense irrigation. Furthermore, the expansion of human land use leads to a massive destruction of archaeological sites, exacerbated by the widespread use of clay for construction, which accelerates the deterioration of abandoned and neglected buildings. This is exemplified by a *caravanseray* at Chest-e Sharif, which reveals how quickly and completely even large buildings can disappear (Figs. 1807–1810).



Tab 6 Diagram of recorded sites

In order to obtain information on long-term settlement patterns and their change over time, the spatial distribution of types must be correlated with chronological information. Dating is primarily based on pottery, supplemented by architectural, art-historical and, for a small number of sites, epigraphic evidence. However, some sites produced little or no pottery, and the pottery of certain periods is less easy to date than that of others. This problem may be overcome in future, when primary and stratified material becomes available. On the following pages, the distribution patterns of selected types of sites and monuments as well as of certain pottery types are discussed, followed by concluding remarks on the overall evidence within a chronological perspective.

1 The overall amount of types is provided in the Classification chapter, pp. 37–52, and in Tab. 4, p. 38.

2 These topics have been briefly addressed in the general Introduction chapter (pp. 11–14), in D. Knitter's contribution (pp. 23–27), in the Methodology chapter (pp. 31–33), and, in more detail, in the introductions to the districts.

◀ *Spatial distribution maps: selected settlement types, larger settlements are shown with larger symbols (above); chronological ranges of sites and monuments dating from the 9th to the 14th century (below); '?' = questionable*

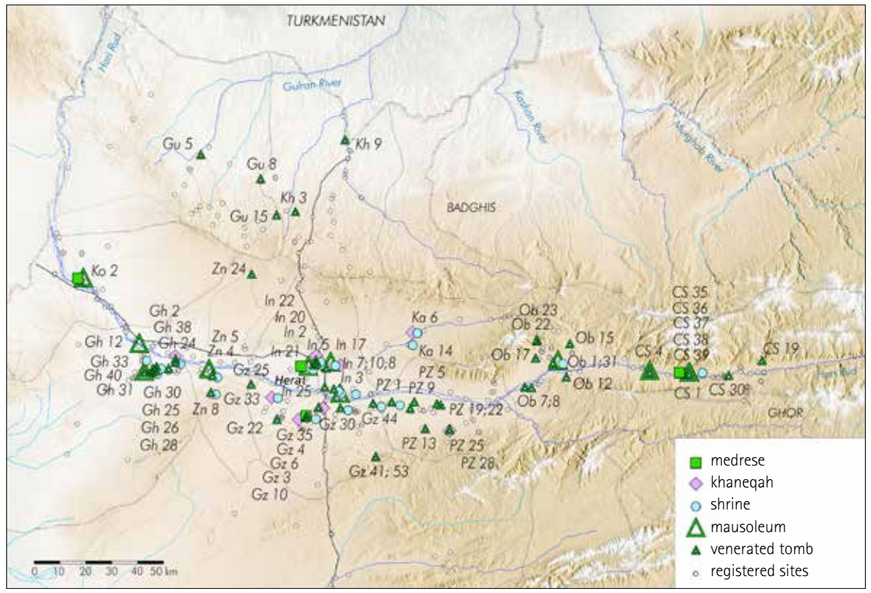


Fig. 1802 Spatial distribution of buildings with a religious significance

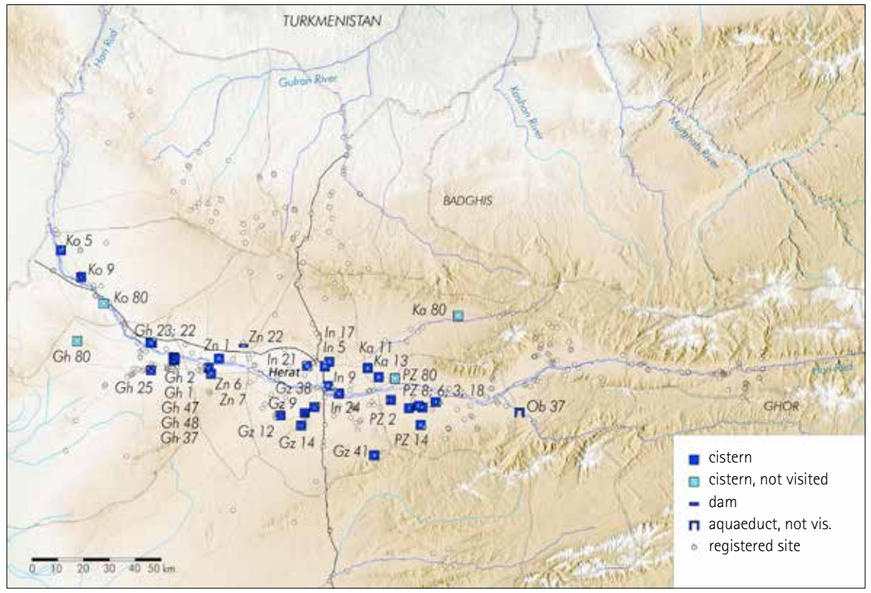


Fig. 1803 Spatial distribution of water-related structures

Selected Monuments and Sites. Features and Distribution Patterns

While some types of sites lend themselves to spatial analysis, others do not, for various reasons: they are too few, not distinctive enough or not systematically recorded because they were too numerous and often remote. The first group includes structures subsumed under the heading 'Other' in the classification part of the Methodology chapter (Tables 3; 4), the second comprises, among others, caves, 'fortified groups of buildings', cemeteries, venerated tombs and water-related structures except cisterns.

The group of historic religious monuments is selective as well as it was not possible to visit a representative number of villages and to explore remote areas in search of historic mosques, *medreses*, *khaneqahs* and sanctuaries in order to obtain representative distribution patterns.

In addition, many prominent buildings and their architectural elements have already been documented and studied by a number of scholars, as discussed in the Introduction (pp. 14–21). These can often be linked to imperial, religious or public patronage and are rather well preserved and relatively accessible due to their location near urban centres or along major communication routes (Fig. 1802). Shrines in remote areas may be places with a special aura and be visited by pilgrims, but they are rather visited by the local population or travellers passing through. Although religious monuments are more likely to survive than secular ones, especially if they are still in use, they are far too few to give an idea of the historical religious landscape. This is evidenced by the large number of unidentified vernacular mosques and shrines, which are often in an advanced state of disrepair. Historical or epigraphic records are therefore particularly important sources for this group, as they could add a great amount of information. Although a correlation of the historiographic evidence with extant sites and monuments has proved difficult, their potential is illustrated by T. Allen (1981; 1983) for Herat and its surroundings (see Tab. 2, p. 21).

Cisterns, a structurally fairly consistent group, are often associated with religious monuments or complexes and sponsored by royal or civic commitment. However, in the absence of historical information and diagnostic architectural features, they often remain undated as well. They are discussed first in the following summary of characteristic features and spatial distribution patterns of selected monuments and sites, followed by towers, fortresses and *caravanserays* as protective or defensive structures, and by settlements as places of habitation.

Cisterns

A total of 35 cisterns were documented.[3] Most of them are located within current settlements, often in a state of disrepair, but for the most part still in use as water reservoirs. Some are associated with religious buildings (Houz-e Ziyaratgah [Gz 9]; Houz-e Zamzam, Gazorgah [In 17]), with a historical garden (Bagh-e Nazargah [In 5]) and, in a simple open form without preserved rising architecture, with a *caravanseray* (Qal'e Sukhte [Gz 32]) as well as, possibly, a fortress.[4]

The shape of the basin determines the layout and the type. It is possible to distinguish cisterns with a rectangular basin and a barrel vault, and those with a square basin and a dome, both with different ground plan details (Fig. 55). Of the surveyed and classified cisterns, 80 % have either an *iwan* or a porch in the entrance area, consisting of a wide doorway flanked by two rooms or deep niches, often structured by pilasters or simple projections and insets, which accentuate the main façade and give the buildings a representational character. These flanking elements play an important structural role as lateral supports for the façade.[5]

Depending on the ratio of the basin's diameter to the overall width of the entrance *iwan* and side rooms, the overall plan of the cisterns is either T-shaped or rectangular (Fig. 55). Most of the T-shaped cisterns have a hemispherical dome[6], only one has a barrel vault (Houz-e Salemi [PZ 2]).

The position of the main entrance of the cisterns is probably determined by the spatial environment and the location of the canals, as well as by climatic conditions, especially the 120-day wind, which transports large masses of sand. Many cisterns show a similar deviation from the exact north–south axis (Fig. 55b–d; f–h, p. 51).[7]

Rectangular cisterns most often have either a barrel-vaulted basin and an entrance *iwan* with side rooms[9] or a square basin with a dome, with[9] or without[10] side rooms. Less common are rectangular barrel-vaulted cisterns without porches.[11] Special forms have a second entrance *iwan* at the rear with a barrel vault or hemispherical dome.[12] Octagonal cisterns have an accordingly

3 See Tab. 6 and p. 39, Tab. 4 and pp. 50; 51. Allen has listed six cisterns, see Tab. 1, p. 20.

4 Kafer Qal'e (Gz 5) and Houz-e Kafer Borj (Gz 14) with the fortress Qal'e Essar.

5 If the lateral structural elements are dilapidated or completely destroyed, deep cracks form in the ceiling and endanger the stability, clearly recognisable e.g. at Houz, Ziyarat-e Barnabad (Gh 37).

6 Houz-e Kheshti (Zn 6); Houz-e Barnabad (Gh 1); Khaje Wahid al-Din, south (Gh 2) (?); Houz, Ziyarat-e Barnabad (Gh 37).

7 22% of the cistern walls are oriented exactly north-south, while 78% are oriented off-axis, only 9% to the west and all others to the east. The deviation varies between 5° and 35°, but for more than three quarters of the structures (77%) it is within a narrow range of between 17° and 25°.

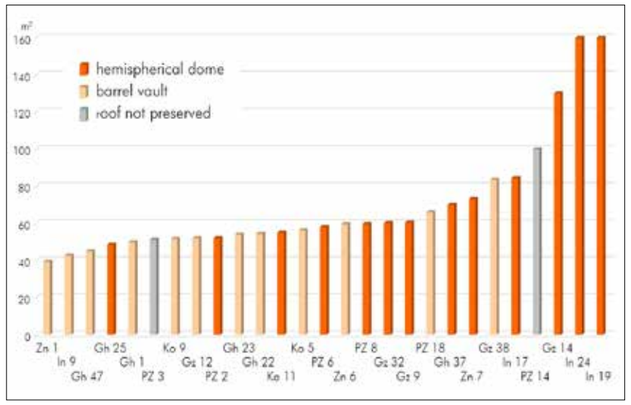
8 Houz-e Palawan Piri (Ka 11); Houz-e Taryak, north (In 19); Houz-e Taryak, south (In 24); Houz-e Ziyaratgah (Gz 9); Houz-e Gholami (Zn 7); Khaje Wahid al-Din, north (Gh 2).

9 Bagh-e Nazargah (In 5); Houz-e Ser Pushdi (Gz 12); Houz-e Khalek Wardi Khan (Ko 9).

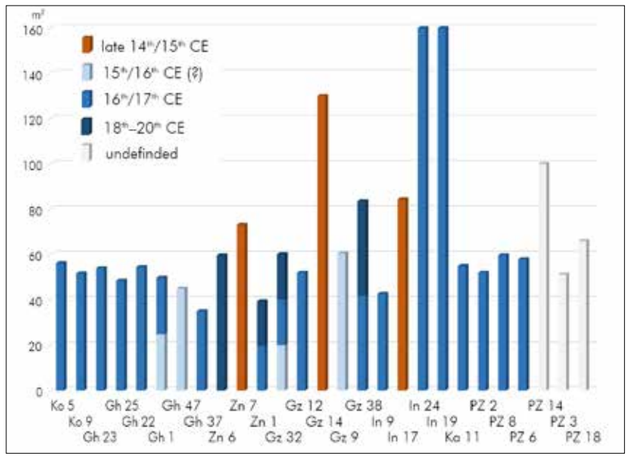
10 Houz-e Sharzara (Gh 23); Houz-e Barnabad, east (Gh 48).

11 Houz-e Pokhte (PZ 6); Houz-e Kheshti Golmir (PZ 8); Ziyarat-e Khaje Jaman (Gh 25).

12 Houz-e Khajehar (Gz 38); Houz-e Zamzam (In 17).



Tab. 7 Cisterns, display of basin size and type of roof



Tab. 8 Cisterns, basin size; distribution from west to east, and datings. For all tables: colour bars show presence, not proportions

shaped basin covered by a dome and an entrance *iwan* with[13] or without[14] side rooms. Cisterns with an overall square plan always have a hemispherical dome and no porch (Ko 5), or just a wider entrance[15] instead of an entrance *iwan*. In some cases shallow blind niches on all four sides are present.[16]

A few individual square or rectangular cisterns either do not have, or never had, a roof.[17] Unusual is a several metres deep underground cistern, with an irregular basin and a long flight of steps leading to it.[18]

13 Houz-e Barnabad (Gh 47).

14 Gendekhan (Ka 13) (?); Houz-e Tabaq (In 9).

15 Houz-e Khesht Pokhte (PZ 18); Houz-e Aysare (Gh 22).

16 Houz-e Wali Mohammad Khan (Zn 1).

17 Houz-e Shahabad (PZ 3); Houz-e Kafer Borj (Gz 14); Qal'e Sukhte (Gz 32).

18 Tagab-e Khosrou Jan (PZ 14).

The construction is generally simple. With the exception of the underground reservoir, cisterns are plain buildings with a solid stone foundation and rising masonry, mostly made of flat, square bricks[19] and lime mortar, with the exterior either unrendered or covered with clay plaster. Only one cistern is built with stone-masonry (Gz 41), like the adjacent houses of traditional mountain architecture. Occasionally, objects were used as repair material (millstones, cenotaphs or tombstone fragments), and some cisterns were subsequently underpinned with cement mortar. Only a few buildings have a more elaborate stucco[20], tile mosaic or glazed-tile decoration (e.g. Houz-e Zamzam, Gazorgah [In 17]).

Given the variation in layout, basin size and proportions, it is difficult to speak of a standardised type, as the amount of similar buildings is rather small. Only the size of the domed tanks is relatively uniform, between 40 m^2 and 80 m^2, with two thirds of all cisterns (18 out of 27) varying between 40 m^2 and 60 m^2. The average basin size of cisterns with domed square or octagonal tanks is 54.55 m^2; varying between 39.4 m^2 (-28 %) and 66 m^2 (+21 %). This corresponds to a tank diameter between 6.30 m and 8.10 m (Tab. 7). The exception is Gz 38 with a basin size of 83.6 m^2 (+54 %) and a diameter of 9.10 m. The variance is greater for barrel-vaulted cisterns with rectangular tanks: the average is 84.3 m^2, but the dimensions vary between 48.5 m^2 (-42.45 %) and 160 m^2 (+89.8 %).

Only two of the eight cisterns with larger tanks are domed structures, the largest basins are barrel-vaulted. Almost all of them are located in the centre of the study area, within a radius of 20 km around the city of Herat, with only one larger cistern (Zn 7) situated 40 km further west, near the village of Zendejan. This observation is confirmed by an overview of the cisterns in the urban area of Herat, whose average basin area is 70 m^2, excluding the two largest cisterns, Houz-e Malik with 124 m^2 and Chaharsu with 437 m^2.[21]

19 On building types in general, with examples of Timurid buildings and further reading, see O'Kane 1987, 16, 335–337 no. 53; Pugachenkova 1981, 39–41; Saljuqi 1967, 57.

20 Houz-e Palawan Piri (Ka 11); Houz-e Taryak, north (In 19); Houz-e Taryak, south (In 24).

21 Asim/Ando 2020; Asim/Shimizu 2022, 5–7; Herawi 2005 (this book has not been available to us).

The spatial distribution shows a higher number of cisterns with rectangular basins and barrel vaults in the east of the study area, whereas the number of cisterns with square or octagonal basins and hemispherical domes increases towards the west. While cisterns in Pashtun Zarghun still make up 12 % of all registered sites, they are completely absent further east. All the more elaborate cisterns, probably funded by royal or elite investment in public welfare, are located on the Hari Rud plain and fed by one of the many canals that irrigate the oasis; rarely is the water supplied by rivulets coming down from the mountains.

O'Kane mentions several cisterns near Timurid buildings, including Houz-e Zamzam in Gazorgah[22], one in Ziyaratgah[23] and one situated in the historical garden Bagh-e Nazargah (In 5). These three cisterns, which certainly date to the 15th century, are among those with larger reservoirs, the latter two have hemispherical domes. For all other cisterns dating is difficult. The only reservoir[24] associated with pottery is located in the mountains and structurally unspecific as it is ruined; the sherds date to the late 13th/14th century. While an association with a dated building complex may provide a clue, the complexes were often developed over time and their components are not necessarily contemporary. Furthermore, the recorded cisterns show no specific correlation between date and layout[25], and only a few are associated with dated buildings. Some architectural details, such as a main façade decorated with jutties and pilasters, are reminiscent of rather recent cisterns, for example from the Qajar period, hence a larger number may date to the 18th/early 19th century.[26] According to O'Kane (1987, 335), cisterns are the most difficult of all 'utalitarian buildings' to date[27] unless they have a foundation inscription. Since reliable dating and a chronological differentiation have not been possible, a prolonged time span is attributed to several cisterns, from the 15th/16th to the 19th/20th centuries.

Towers and Fortresses

Ten towers and 44 forts were documented, representing 13 % of all recorded sites. The towers clearly stand out from the fortifications, both in terms of distribution and dating.

Towers

Towers are the smallest type of fortification, but most examples in the study area have adjoining structures[28], they were rarely solitary. They are generally located in an elevated position at the end of a village or valley and built of large mud bricks (no *pakhsah*) on a stone base; the diameters range from 4 m to 8.8 m, the height is up to 11 m. All have one to three superimposed rows of embrasures, some have internal niches and spiral staircases, but none of the catalogued towers had a fully preserved upper floor or ceiling. The ground plan is generally circular. Only two rectangular structures, Qarye Dehran (CS 21, 33 m^2) and Qarye Khaje Brahne (CS 31, 97.5 m^2) are considered towers rather than fortresses because of their small footprint. Like the round towers, they probably served the same function.

Their distribution is limited to the easternmost part of the survey area, exclusively Chesht-e Sharif. Compared to the towers documented by Ball (2002) in the neighbouring eastern province of Ghur, they form a small group and are therefore more likely to be seen as the western extension of the Ghur defences (Fig. 1804).[29]

In contrast to the numerous towers there and in the Bamiyan valleys, no decoration was found on the towers in the study area. The surface was often so badly washed away by rain and wind that it was not even clear whether they were originally plastered, although it is reasonable to assume that they were. However, Ball (2002) describes constructional similarities (size, proportions, stone foundations, embrasures) of the towers at Chesht with those at Ghur, and compares them to the fortifications at Bamiyan. Herberg (1982, 70), Ball (2002) and Thomas (2018, 173–184) suggest that the towers[30] there functioned primarily as part of a network or line of communication.[31] However, this is unlikely to be the case for the towers at Chesht, at least according to current knowledge, as there are too few to

22 Gazorgah (In 17), inscription, built under Shah Rukh.

23 Houz-e Ziyaratgah (Gz 9), next to the Friday Mosque.

24 Houz-e Kafer Borj (Gz 14).

25 Studies by Asim/Anzo (2020) and Asim/Shimizu (2022, 5–6) associate different roof forms (domical vaults, domed roof, vaulted roof) with three construction periods, but the listed buildings do not provide sufficiently reliable datings.

26 For the most comprehensive historical information on various aspects from the Timurid period onward see Noelle-Karimi (2014; 2016), Szuppe (2004) and Gammell (2016); for Barnabad see also Szuppe (2017). A list of cisterns in and around Herat with inscriptions was compiled by Herawi (1970, 38–44).

27 Along with bazaars, *caravanserays* and baths.

28 E.g. Borj-e Kamal Yari, Qarye Deh Khan (CS 9); Borj, Qarye Sang-e Duruyeh (CS 20); Qeshlaq Kohne, Qarye Khwarwazar (CS 26); Borj, Qarye Tahi-ye Jarmin (CS 28).

29 The towers shown by Ball (2002, Fig. 2.1) are included in the distribution map (Fig. 1804), as far as they lie within the margins of the map.

30 Which must have been even more common, according to Ball, based on local informants.

31 *'The Ghurid state was never strongly centralised, consisting of many different clans under different chiefs, all ultimately bound to the Ghurid sultan. In this way Ghur may have been more a confederation than a single state, and the fortified valleys may reflect this with each chief or prince responsible from defending and fortifying his own valley as much against a rival chief as against a common enemy such as the Ghaznavids or Saljuqs - the sources amply support such a picture.'* (Ball 2002, 42, see also note 13). See on that topic also Paul 2016, discussed above on pp. 41 and 43.

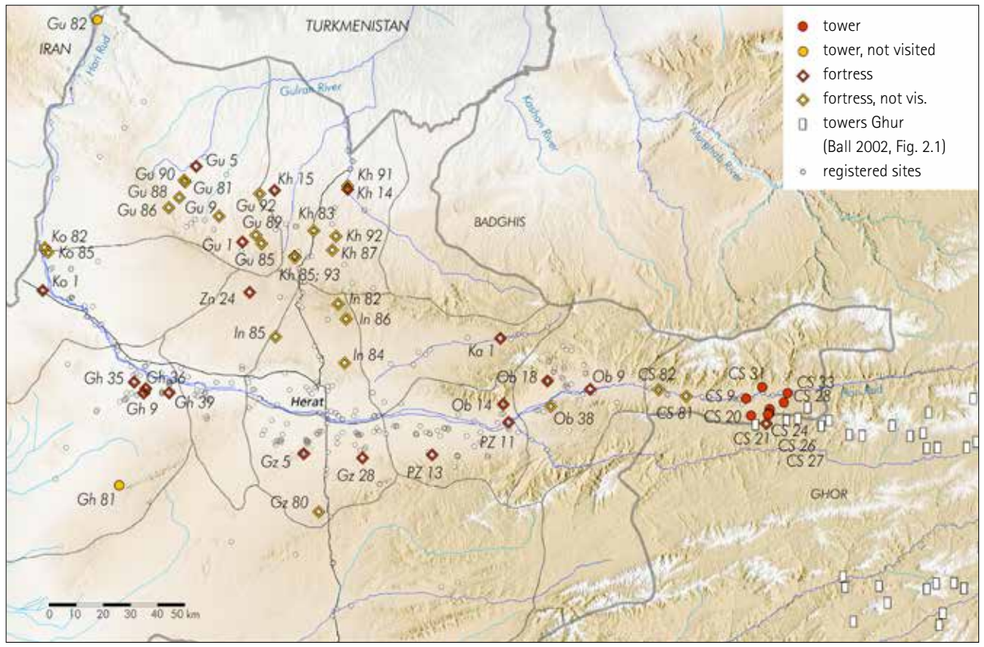


Fig. 1804 Spatial distribution of towers and fortresses

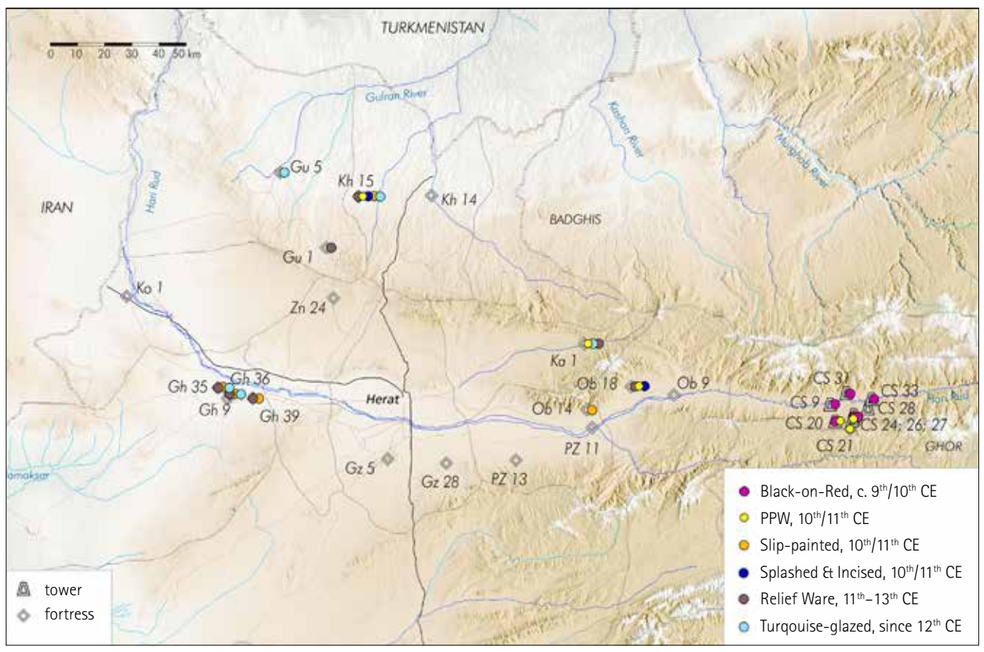


Fig. 1805 Spatial distribution of towers and fortresses and associated pottery types

fulfil this function. As some of them are located at the entrance to a (present) village, it is likely that they were used to protect individual settlements. In the absence of unambiguously datable construction elements, such as e.g. wooden fittings or decorative details, on the documented towers, it is not possible to date them directly. However, the pottery found in the immediate vicinity, exclusively painted Pseudo-Prehistoric Ware and Black-on-Red painted specimen, suggests a date between the 10th and the 12th century (Fig. 1805).[32] This period corresponds in part to the dates proposed for the towers at Ghur, which have been analysed in detail by Herberg[33], Ball[34], Thomas[35] and Fischer[36], and for the sites at Bamiyan.[37]

The towers and fortresses in the Bamiyan area are dated from the 5th/6th century to the early 13th century on the basis of architectural features and associated pottery, with the majority falling between the 8th and the 10th century. Historically, they are associated with the conflicts between the Ghurids, the Ghaznavids and the Khwarazm Shahs in the 11th/12th centuries[38], and with the Mongol conquests in the early 13th century.[39]

The lack of related settlement remains is explained by a possible nomadic lifestyle, with people living in tents.[40] In this context, the absence of glazed and relief decorated sherds in the towers of eastern Herat is noteworthy, as

32 See below for more details on the pottery.

33 Herberg 1979. - Herberg 1982.

34 Ball 2002.

35 Thomas 2012, 167–172. - Thomas 2018, 105–121.

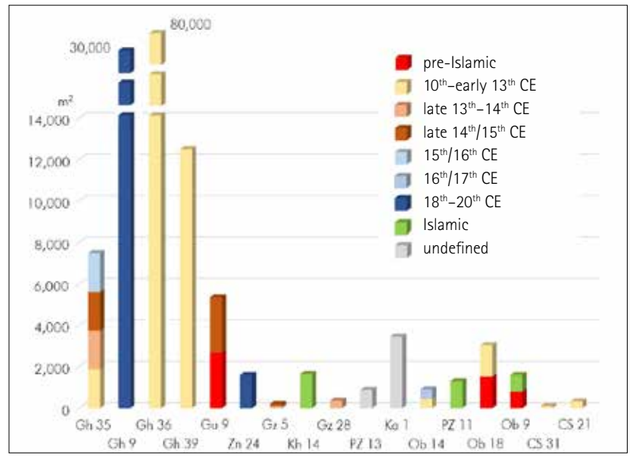
36 Fischer 1978a.

37 Le Berre 1987. - Gardin/Lyonnet 1987. - Baker/Allchin 1991. – Ball 2002, 25; 41.

38 Ball 2002, 42–45.

39 Thomas 2012, 135–139; 172; 177. To quote Ball (2002, 42): *'All one can say for certain is that both the Ghur and the Bamiyan fortifications systems belong to the same broad architectural traditions, and that the Ghurid dynasty of the 12th–13th century is the only state structure that is common to both.'*

40 *'Nowhere in Ghur have any traces of urban remains or actual settlement been definitely recorded. The question remains, therefore, that if these fortifications complexes were guarding focal points, exactly what were they guarding?'* (Ball 2002, 42). On this topic see Thomas/Gascoigne 2016. This leaves open the possibility that settlement remains may be found during a larger ground-based survey.



Tab. 9 Size of forts (from west to east) and datings (based on pottery found in or near the structures). The time spans are based on associated pottery

it is hardly a coincidence. However, although the Pseudo-Prehistoric Ware (PPW) and its Black-on-Red painted variant are easier to produce, they are elaborately decorated and stylistically distinctive.

Fortresses

The terms 'fort' and 'fortress' refer to buildings of various shapes and sizes (Tab. 9), with a distinctly fortified character, high walls, narrow embrasures at the top and additional secured entrances. Smaller forts, with an area of between 300 and 3,000 m², are rather fortified buildings, irregularly distributed over large parts of the survey area. The largest forts (up to 80,000 m²) are found exclusively in the western part of the area (Tab. 9). 24 of the 44 mentioned sites were not visited, they are published or were located in aerial images.

The function of a fortification depends on the structure and size of the complex. Relatively small structures, such as Qal'e-ye Badeyi (Gz 28) with 260 m², 9 rooms and a small courtyard, can be interpreted as small 'castles', i.e. a place of residence of local chiefs (cp. p. 43) or as temporary retreats for a small group of persons, while larger fortifications may also have served as temporary accommodation for a higher number of people, for elites and their entourage, or as military outpost. The former vary greatly in structure and defence facilities. The main common feature is a massive enclosure wall with corner towers and a varying number of semi-towers. At Qal'e-ye Kohne Gaze (Gh 35) only parts of the outer wall have survived, Qal'-e Mangewan (Gh 36, 80,000 m²) and Qal'e-ye Khaje (Gh 39, 12,500 m²) have a separate fortified citadel area and a surrounding rampart. Qal'e Ghuriyan (Gh 9), on the other hand, has an additional outer ring of walls, towers and gates.

The building materials are as varied as the size and structure of the fortifications. The larger forts are predominantly *pakhsah* structures, only the outer walls of the small fort Qal'e-ye Badeyi (Gz 28) have an additional stone facing and a few layers of stone near the tower foundations; they lack, however, the full-stone substructure of the towers located further to the east. Another relatively small fort, Qasr-e Shirin (Zn 24, 1,600 m²), was built