Qal'eh-i Yazdigird

A Sasanian Palace Stronghold in Persian Kurdistan

BY

E. J. KEALL

Reprinted from

IRAN, *Journal of the British Institute of Persian Studies*

Volume V, 1967

QAL'EH-I YAZDIGIRD*

A Sasanian Palace Stronghold in Persian Kurdistan

By E. J. Keall

The site of Qal'eh-i Yazdigird[1] occupies a naturally fortified position in the Zagros range of mountains in western Iran, near Qasr-i Shīrīn. It is bordered on the western and northern sides by a sheer escarpment that falls away to the plain of Zuhāb, and on the eastern side by steep cliffs that build up into the higher reaches of the Dālāhū mountain. A broad shoulder overhanging the Diyala plains forms a saucerlike plateau, which has created a catchment area for the winter streams that have worn a precipitous ravine through the scarp, plunging down to join the main stream of the Halwān River on the Plain of Zuhāb (*v.* Fig. 1).

It is across this plain that the approach to the fortress can be made from the direction of Sar-i Pul-i Zuhāb, which is generally accepted as being the site of the medieval city of Halwān.[2] This involves a journey of four *farsakhs*, including the ascent of the formidable escarpment. An even more difficult ascent to the tableland could be made at the northern end of the plateau.[3] The easiest approach to the site—despite the fact that it entails crossing the stream of Rījāb, which in time of flood is quite unfordable—is that which leads over a distance of four *farsakhs* from Tāq-i Gīrrāh, a solitary arch of limestone masonry, which marks the physical division between Babylonia and Media,[4] and lies just short of the summit of the pass termed the " Zagros Gates ", the ancient line of communication between these two provinces.

The highroad from Baghdad rises gradually over the low eroded dunes from Qasr-i Shīrīn until it meets the foot-hills of the Zagros just beyond Sar-i Pul. From this point it is a steep ascent to the top of the pass at Pā-i Tāq-i Bālātar (gendarme post), which marks the last difficult rise before the long gradual climb towards the plain of Kirind and beyond to Kirmānshāh.

The Tāq-i Gīrrāh has already been studied exhaustively, though the conclusions drawn have been almost as numerous as the studies made.[5] It is now generally accepted that it does not date to the Seleucid period, but more probably to the Sasanian. It has been variously described as a toll house marking the boundary of Media ; as a hunting lodge ; or as a royal resting station beside the great highway.

Rawlinson suggested that the Tāq-i Gīrrāh may have formed part of the palace of Mādharūstān which is recorded by the Arab geographers who described this region.[6] Both Yāqūt and Qazvīnī state : " Madharūstān, a place on the road to Khurasan from Baghdad, situated two days' march from Halwān towards Hamadan ; and Marj-al-Qal'eh is one march from it. At this place there is a large

* The Editors apologize for discrepancies between the transliteration of place-names on the maps and figures and that in the text.

[1] The site is mentioned under this name, together with a short description, by Major Rawlinson, " Notes on a march from Zohab, at the foot of the Zagros, along the mountains to Khuzistan, and thence through the province of Luristan to Kermanshah ". *Journal of the Royal Geographical Society*, vol. IX, 1839, p. 33: Colonel E. I. Tchirikov, " Journal de voyage du Commissaire arbitre Russe pour la délimitation de la frontière Turco-Persane en 1849–52 " (in Russian). *Mémoires de la section Caucasienne de la Société Géographique Russe*, vol. IX, 1879 : and P. Schwarz, *Iran im Mittelalter nach dem arabischen Geographen*, vol. VI, Leipzig, 1929, p. 683.
I am indebted to S. C. R. Weightman for my original information regarding the existence of the site. I made my first visit, acting on his instructions, in the spring of 1964.

[2] Rawlinson, " March from Zohāb ", *J.R.G.S.*, IX, p. 35 : G. le Strange, *Lands of the Eastern Caliphate*, Cambridge, 1930, p. 191 : and Fr. Sarre and E. Herzfeld, *Archäologische Reise im Euphrat und Tigris Gebiet*, vol. II, Berlin, 1920, p. 83.

[3] Rawlinson, in examining the possibilities of an alternative route in antiquity from Mesopotamia to Kirmanshah, remarked that this was not a feasible route for general communications. " March from Zohāb ", *J.R.G.S.*, IX, p. 35.

[4] *Idem*, p. 34.

[5] E. Flandin and P. Coste, *Voyage en Perse, 1840–41*, vol. I, Paris, 1843–54, p. 465 ; vol. IV, p. 172–3, 215 : J. de Morgan, " Recherches Archéologiques ", *Mission Scientifique en Perse*, vol. IV, Paris, 1896, p. 335–9 : Fr. Sarre and E. Herzfeld, *Iranische Felsreliefs*, Berlin 1910, p. 232–5, pl. XLVII : E. Herzfeld, *Archäologische Mitteilungen aus Iran*, vol. II, 1930, p. 80: and O. Reuther, " Sasanian Architecture ", *Survey of Persian Art*, vol. I, p. 493, 509, 570, fig. 136 ; vol. IV, pl. 153C.

[6] Rawlinson, " March from Zohāb ", *J.R.G.S.*, IX, p. 34 ; and cf. Le Strange, *Lands of the Eastern Caliphate*, p. 191 : and Schwarz, *Iran im Mittelalter*, vol. VI, p. 693.

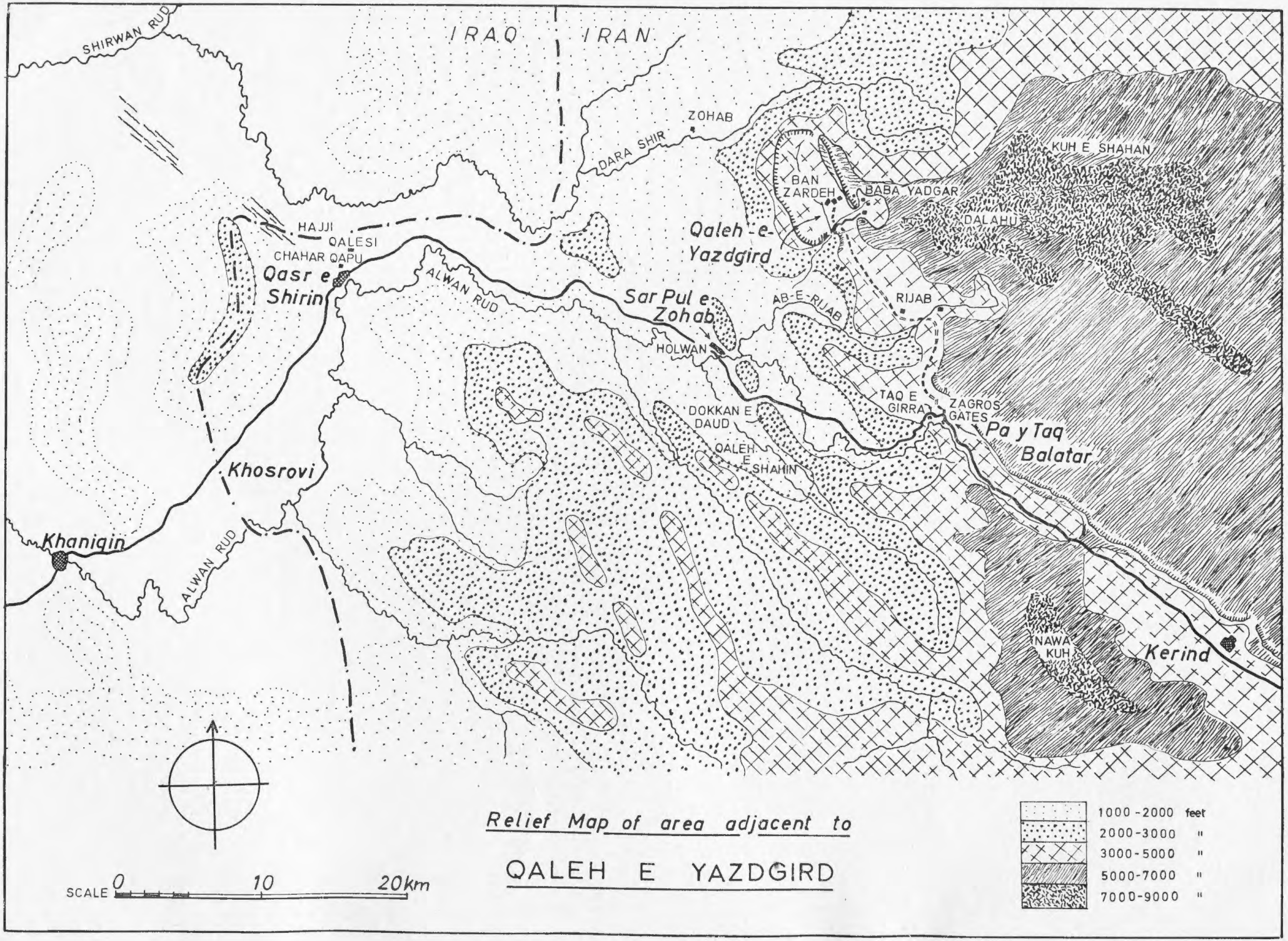


Fig. 1. Qal'eh-i Yazdigird: Relief Map

aivān and a great terrace in front of it, and the traces of a ruined garden built by Bahrām Gūr. They declare that the snow falls in the quarter of the hilly district ; but never falls on the side which faces Iraq."[7]

However, the arch of Tāq-i Gīrrāh does not fit the description of the *aivān* at Mādharūstān. It is an isolated monument by the highway. There are neither signs of there having been water courses and terraced gardens nor traces of any subsidiary building, which would have been essential if there had been a palace. Indeed, the hillside presents a most rugged boulder-strewn terrain. Furthermore, the total distance between Sar-i Pul and Kirind (identified with Marj al-Qal'eh) is no more than fifty kilometres, or eight *farsakhs*, which can hardly have represented three days' march, unless a considerable detour was made from the highroad. It must be remembered that in Yāqūt's time Mādharūstān had long been abandoned, and there may no longer have remained an accurate record of the distances. On the other hand, the earlier records of Ibn Khurdadbih and Qudāma indicate that the distance of Mādharūstān from Halwān is only four *farsakhs*, while Muqaddasī gives " two postal stages ".[8] These are the distances favoured by Le Strange and Schwarz in their respective works.[9]

The shorter distances may mean that it would be possible to correlate Qal'ch-i Yazdigird with Mādharūstān, particularly as the description of the site seems appropriate. The north-western portion of the plateau overlooks the Iraqi plain, and it is unlikely that the snow would lie for long in this area. The citadel, by contrast, is considerably more elevated, and even in summer is noted for the coolness of its breezes. In winter the massive hills behind carry a perpetual blanket of snow, while the area of the orchards is subject only to falls that very soon melt away. It would be difficult to find a more appropriate situation to fit the description of variations in climate within such a limited distance from Halwān. Moreover, the reference to the gardens and a great arched building may also seem fitting when the subject of the ruined pavilion and enclosure wall of Gach Gunbad is discussed. (*v. infra.*)

Dīvār-i Gach[10] (*v.* Fig. 2)

An impressive line of defences stretches for two and a half kilometres across the southern and open neck of the plateau, and thus completes the total circumvallation of the tableland, which on its other sides relies more on the strength of natural protection. The defensive wall of field stone and mortar follows an irregular course, hugging the bank of a deep gully, and climbing up towards the cliffs that mark the back edge of the tableland (*v.* Pl. Ib). The only weak point is at the lower end where the ground is reasonably level and open to approach from the direction of Tāq-i Gīrrāh. In the lower reaches the wall is approximately 4 m. wide. In other places the single thickness is in the region of 2·50 m. At the upper end, where the defences are carried up the cliffs, the width is reduced to 2 m. In this section the stones employed are relatively small, owing to the steepness of the terrain which has made the importation of materials difficult. Vertical bands of plaster mark clearly the emplacement of formwork to construct a solid mass entirely dependent upon the bonding powers of gypsum mortar.

Except for some brick walling found in Gach Gunbad, the standard building material throughout the site is this stone and mortar masonry. Reuther states that " in this type of construction the stones are not really built up like masonry, but are simply piled on top of each other, without any bond, the walls being modelled, as it were, in the rapidly setting mortar, and the stones packed in only as a filling. Were it not for the mortar, the walls would immediately tumble into a shapeless heap."[11] This method of construction is not possible with lime mortar which hardens more slowly, binding the bricks or stones by forming a chemical compound, in contrast to the mechanical bond of gypsum mortar.[12] It is a technique found in both early and late Sasanian structures in Fars, where " . . . the method was

[7] Zakariyā b. M. b. Maḥmūd al-Qazvīnī, " Athāru-l-Balad", *Bibliotheca Geographorum Arabicorum*, ed. B. J. de Goeje, 1906, 2, 302, 23 : and Yāqūt ibn 'Abd Allāh al-Hamawī, " Mu'jam al-Buldān ", *Geographisches Wörterbuch*, ed. Wustenfeld, Leipzig, 1866, C7, 354, 7. I am indebted to Dr. A. D. H. Bivar for the translation of the passage from Qazvīnī.

[8] Qudāma ibn Ja'far, *B.G.A.*, de Goeje, vol. VI, 198, 4 : and Muḥammad ibn Aḥmad al-Muqaddasī, *B.G.A.*, de Goeje, vol. III, 135, 6.

[9] Schwarz, *Iran im Mittelalter*, vol. VI, p. 693 : Le Strange, *Lands of the Eastern Caliphate*, p. 191.

[10] The local names provide convenient labels to refer to the different parts of the site. The use of the word " *gach* " (gypsum) is frequently found to apply to ruins of a Sasanian date in Iran, where this material abounds. Here it means " gypsum wall ".

[11] Reuther, " Sasanian Architecture ", *Survey*, vol. I, p. 498.

[12] Reuther, " Parthian Architecture ", *Survey*, vol. I, p. 427.

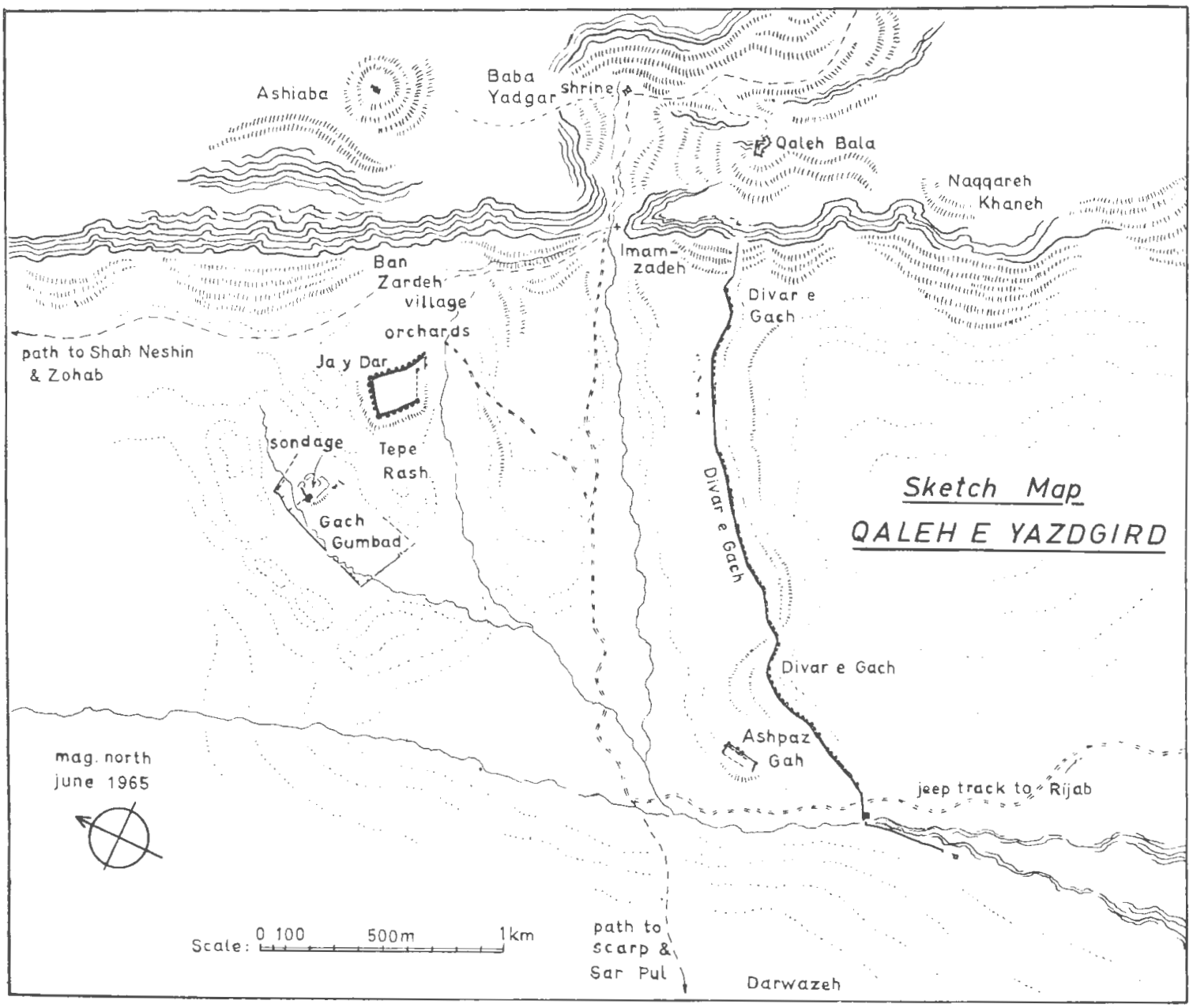


Fig. 2. Qal'eh-i Yazdigird: Sketch Map.

obviously indigenous, and spread from there to the frontier districts between 'Irāq-i 'Arab and Ardilān, where similar conditions prevail."[13] Even assuming that the architects of the early Sasanian palaces were employing for the first time in major construction a material that had previously been used only in domestic architecture in Fars, it can be argued that the technique was already known under the Parthians. However, it was exploited most fully by their successors. Once established as the mean for palace architecture, it was readily adopted in the western portion of Iranian plateau, as at Qasr-i Shīrīn, when this area became popular for the development of royal residences.[14] Its use there, and at Qal'eh-i Yazdigird, must be considered typically Sasanian.[15]

Throughout the main length of the Dīvār-i Gach, the wall is strengthened on the outer flank by a series of rounded towers, of a typically Sasanian type: a stilted semi-circular tower, in which the length

[13] Reuther, " Sasanian Architecture ", *Survey*, vol. I, p. 498.

[14] The best general survey of the ruins of Qasr-i Shīrīn is in G. L. Bell, *The Palace and Mosque at Ukhaidar*, Oxford, 1941.

[15] It is noteworthy that the buildings of Qasr-i Shirīn are constructed in a crude style and lack any refinements of structural detail. The Chahār Qāpū, though impressive from its sheer size and dome span which measured 18 m. across, relies entirely on the massiveness of its solid piers for the load-bearing support. Though later in date than the monuments of Fars, the palaces of Qasr-i Shīrīn represent a deterioration of architectural principle and the blind adoption of a material without realizing its full properties. cf. Reuther, " Sasanian Architecture ", *Survey*, vol. I, p. 553.

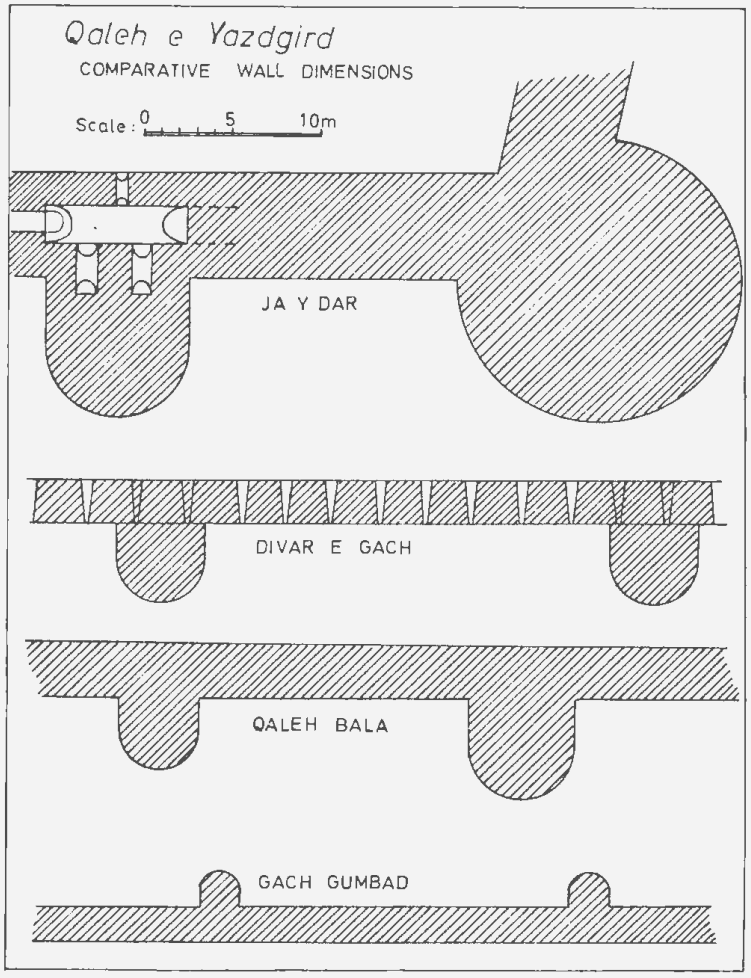


Fig. 3. Qal'eh-i Yazdigird: comparative wall dimensions.

extending from the face of the wall is equal to its own diameter, and the sides are initially straight (*v.* Fig. 3). A similar type of tower occurs at Ctesiphon, Takht-i Sulaimān, Qal'eh-i Gabrī, and Dastigird (the latter in baked brick).[16] It is notable that when Khusrau II ordered the rebuilding of Antioch in A.D. 540, at its new site near Ctesiphon, the buttress towers were constructed with a rectangular form that was more typical of the West.[17] Indeed, although the rounded tower was known and employed in Mesopotamia as early as the Assyrian period, it did not really come into vogue until post-Seleucid times. Unfortunately our knowledge of the Parthians is too limited to make dogmatic statements on the prevalence of either architectural form in that period. There is, for example, a mixture of types in northern Mesopotamia. But as far as the Sasanians were concerned, the rounded tower was employed almost without exception in stone construction. It is concluded, therefore, that these walls are of Sasanian date.

The towers seem to vary in size according to their position and strategic importance, extending from between 4 m. to 8 m., with a similar variation in breadth. On the cliff section they are reduced to 3 m. by 3 m. Accurate measurements cannot be recorded until the foundations can be exposed in excavation ; because of stone robbing and decay, it is impossible to record the intervals between each

[16] At Ctesiphon the es-Sur city wall (mud brick) is 10 m. thick, with towers 9·30 m. in diameter ; the turrets of the al-Tuwaibah wall are smaller. O. Reuther, *Die Ausgrabungen der deutschen Ktesiphon-Expedition im Winter 1928/9*, Berlin, 1929. (English Translation in "The German Excavations at Ctesiphon", *Antiquity*, vol. III, 1929, p. 451). At Takht-i Sulaiman the towers of the stone perimeter wall are similarly stilted. H. H. von der Osten and R. Naumann, *Takht-i Suleiman. Vorläufiger Bericht über die Ausgrabungen 1959*, Berlin, 1961, p. 39–53. At Qal'eh-i Gabrī the stilted turrets flank a wall of rubble masonry 2 m. thick. A. Stein, "An Archaeological Tour in Ancient Persis", *Iraq*, vol. III, 1936, p. 142. At Dastigird towers of baked brick, measuring 11·60 × 10·20 m., flank a wall 16·60 m. thick. Sarre and Herzfeld, *Archaologische Reise*, vol. II, p. 91, fig. 176.

[17] Reuther, "Sasanian Architecture", *Survey*, vol. I, p. 574.

tower. Heaps of rubble which seem to indicate their remains are generally spaced from 15 m. to 25 m. apart. In one stretch where the wall is better preserved, the curtain measures 23 m. and is pierced by a series of loopholes (*v.* Pl. IIIa). Each embrasure cuts through the full 2·50 m. thickness of the wall, narrowing from 60 cm. on the inner face to a gap of 20 cm. on the outer face. The loophole is 1·20 m. deep, with its base 50 cm. up from the foundations. There is an interval of 2 m. between each embrasure. One loophole is blocked by an adjoining tower, suggesting that though contemporary, the towers were constructed in a secondary stage of the building process. In addition, there are traces of chambers abutting on to the inner face of the wall, from which refuge point there was a clear view to the outside.

Āshpaz Gāh[18]

In all probability there were a number of these apartments attached to the defences. The best preserved examples are a group towards the lower end of the Dīvār-i Gach, in the area known locally as the Āshpaz Gāh. Measuring 5 m. long by 3·30 m. wide, they are roofed by a barrel vault which is the standard form of ceiling in Sasanian buildings.[19] Such vaults, formed of the same rubble and mortar composition as the walls below, can be produced either with or without centring.[20] In the former case only light framework is necessary to produce a soffit in rapidly setting mortar, over which the rubble infill can be added. The removal of the centring leaves a slight recession where the springing of the archivolt is set back on the impost. The effect could be enhanced in stucco to create a cornice, as in the Qal'eh-i Dukhtar at Fīrūzābād.[21] That such an interval was attractive to the Sasanian architects is known from the arch at Tāq-i Bustān, where it is executed in solid rock as a purely stylistic device and not as a structural necessity.[22]

Alternatively, a barrel vault can be constructed without centring by the gradual shift of masonry from the extremities of the impost to the central point of the arch. To achieve this, the springing may often begin quite low down ; the resulting parabolic or half elliptical section, which is not a consideration of strength, is a direct result of this structural method. It is this type of construction that appears at Qal'eh-i Yazdigird. In some cases the workmanship may be faulty, producing a slightly pointed arch; such discrepancies were remedied by the application of plaster. In these cases the diameter of the intrados would be less than the full width of the interval spanned, in the same way that the corbelling at Sarvistān reduced the interval spanned by the vault.[23] The Sasanian builders seem to have deliberately avoided the visual effect of the pointed arch. For no Sasanian building has yet been discovered in which this form is revealed, whether in corbelled construction or true vaulting. There are a few examples of the pointed arch illustrated in arcades on metal-work of the period, in which the form tends to be more akin to the ogee or keel shapes of India.[24]

The chambers in this part of the defences must have formed part of the garrison barracks in conjunction with an isolated but adjacent building that takes advantage of a spur at the end of a natural ridge. This seems to represent the quarters of the officers of the garrison. A series of small chambers run on either side of the entrance ; the walls have been pierced by loopholes similar to those in the main defences. The compound is extremely denuded (one wall has been eroded away down the steep incline), but can be seen to measure 145 m. by 35 m. The walls, 2·20 m. thick, were flanked with towers *circa* 3 m. by 3 m., and roughly 20 m. apart.

Darwāzeh

At a point where the defensive wall crosses the head of the ravine (already mentioned as the outlet for the streams from the tableland), and follows the brink of the cliffs until their steepness prevents any access, a large shapeless block of masonry survives in its position of guarding what may have been the

[18] These ruins are interpreted locally as having been the " kitchen " of the great palace.

[19] e.g. A. Stein, *Old routes in Western Iran*, London, 1940, p. 68 ; 118 : and " Ancient Persis ", *Iraq*, vol. III, p. 142 sqq.

[20] Reuther, " Sasanian Architecture ", *Survey*, vol. I, p. 499 ; fig. 128 : and K. A. C. Creswell, *Early Muslim Architecture*, vol. II, Oxford, 1940, p. 61.

[21] M. Dieulafoy, *L'Art Antique de la Perse*, vol. IV, Paris, 1885, fig. 24-26; 43.

[22] E. Herzfeld, *Am Tor von Asien*, Berlin, 1920, pl. XXXI, XXXIII.

[23] Dieulafoy, *L'Art Antique*, vol. IV, p. 12 sqq.; fig. 14-19; pl. I.

[24] Reuther, " Sasanian Architecture ", *Survey*, vol. I, p. 512–14.

gateway area. It is in this region alone that there is a reasonably level track ; and there is no evidence of an entrance further up the wall.

Great attention has been paid by the builders to the total encirclement of the plateau—isolated stretches of walling still cling to the actual rim of the precipice. Wherever a gulley offers access to the top, the fissure has been blocked off with masonry, so that the complete circumference of the enclosed area amounts to approximately twenty kilometres. Similar attempts to secure an elevated tract, though on a lesser scale, may be seen in the defences of Qal'eh-i Dukhtar at Fīrūzabād and Qal'eh-i Gabrī near Fasā.[25] There too the walls have been carried up to towering pinnacles and can be traced along the edges of formidable escarpments.

The local name of "gateway" has been applied to this segment of the plateau. It is from this point that the weekly caravan from the village of Bān Zardeh leaves to visit the *bāzār* town of Sar-i Pul, following a tortuous path down to the plain. Slightly to the north of this track there are signs that a pathway had once been engineered—its purpose being to bypass a gully that can be dangerous in winter. These aids to navigation have long since disintegrated, but even in its pristine condition the original route must have presented a fearsome ascent.

Qal'eh-i Yazdigird (Upper Castle)

The cliffs that form the back-cloth to the plateau are in their turn surmounted by eroded pinnacles, and finally by the massive range itself. It is upon one of these pinnacles that the defences culminate in a lofty citadel which has given its name to the whole site (and is referred to as Qal'eh-i Bālā on the map to avoid confusion). It perches above the cliffs, with steep slopes of scree on all sides, except for a narrow neck of land which links the fort to the higher ground behind (*v.* Pl. Ia). The path from the lower tableland follows the stream of Āb-i Ghuslān round in a steady rise past its source near the shrine of Bābā Yādgar,[26] until it reaches the further side of the castle which it approaches by crossing the neck of land already mentioned. Beyond this point the track climbs up to the summer grazing grounds, and eventually passes on to Gāwāreh.

In its lower stages before the path reaches the Upper Castle, it has to pass through the jaws of a narrow gorge through which flows the stream of Āb-i Ghuslān. The jagged cliffs of these narrows have been made accessible to movement along their tops by the addition of masonry, to give a completely commanding control of the pathway. As a last line of defence it would present an overwhelming obstacle, and properly manned, would be impervious to direct onslaught from either direction. However, the theory of Rawlinson that this was the ultimate refuge for Yazdigird can be discounted in view of the difficulties of maintaining supplies of food and water if it were once cut off from the rest of the stronghold. The function of the castle can best be interpreted as a sort of barbican against attack from the high ground. Any invaders who forced their way down to the jaws of the gorge, the last obstacle before reaching the tableland itself, would by their very action have turned their backs on the defenders of the castle, and become entrapped within the narrows.

The entrance to the fort is marked by an extended length of walling that curved round like an arm and protected the gateway. It also served as a stabling quarter, if the small divisions on the inner face of the wall can be interpreted as stalls. The main wall is obliged to cross some very steep ground, so that the towers are really supporting buttresses, and in some cases project outwards at the base to accommodate the incline. Set at close intervals of between 6 m. and 16 m., they vary in size between 2 m. and 6 m. in diameter (*v.* Fig. 3 and Pl. IIIb). A broad tower at the north-eastern corner measures 11 m. across and includes a room within its span. Within the fort, the barrel-vaulted ceilings of some of the small chambers span an interval of 3 m. A deep cellar beneath the gateway area measures 9 m. long, 3·70 m. wide, and has a vault standing 4·50 m. above the floor level. A large proportion of the perimeter walling is standing to a height of 5 m., and in one section there is an intact face 10 m. high.

Almost half the castle, on the southern side, is at a much lower elevation than the rest. In this quarter a few fragments of polychrome glazed pottery indicate that the buildings were occupied during

[25] Stein, " Ancient Persis ", *Iraq*, vol. III, p. 123; 142 sqq.

[26] For the significance of the shrine and a full bibliography see V. Minorsky, *Notes sur la Secte des Ahle Haqq*, Paris, 1921.

the early years of Islam. The masonry does not, however, suggest that they were constructed after the building of the site as a whole. The castle forms a logical part of the defensive network. These potsherds probably represent squatter occupation, since it is unlikely that a garrison was housed here by the conquering Arab army. The position is a defensive rather than a commanding one, and is too difficult of access to provide a satisfactory home for any other than the militia. It would, however, have afforded the ideal refuge for an organized band of robbers intent upon plundering the caravans of the great highroad.

As part of the defensive network, the view that the castle enjoys is supplemented by two adjacent and smaller structures, which surmount similarly isolated pinnacles above the line of the cliffs. From the combination of these three it is possible to command a view over the whole of the tableland and to trace the highroad running through Sar-i Pul, some 15 kilometres away as the crow flies, and three thousand feet below. The more northerly post is called "*āshiabā*", and the other "*naqqāreh khāneh*".[27]

Jā-i Dār (*v.* Pl. IIb)

The watered gardens of Bān Zardeh, which are limited in extent by the volume of water that the Āb-i Ghuslān can provide, partly cover the ruins of a heavily fortified palace. The entrance to the Jā-i Dār compound is provided with the same shielding arm to the gateway as found in the Upper Castle. Flanked by huge buttress towers, measuring 8 m. in diameter on a stilted semi-circular plan, the ruins reveal traces of an internal communication system within the defences—narrow corridors and small chambers running the whole length of the wall, which is itself 6 m. thick. The best example is on the north-eastern side, where a tower accommodates a chamber 8 m. long and 2·10 m. wide ; at one end, the doorway of 1·30 m. width and a sloping roof indicate that there was a passage leading upwards from this point. A window with embrasure 60 cm. wide penetrates the remaining 2 m. thickness of the wall through to its inner face. On the other side of the chamber, two approaches, 1·20 m. wide and at different levels, form the connection from the main corridor system into the tower itself (*v.* Fig. 3).

A similar pattern was probably repeated at all the other towers. The north-western and south-western sides of the enclosure each have five towers as well as the corner bastions along a face measuring 160 m. The south-eastern stretch splays out at an angle, so that the whole forms an irregular square. The north-eastern reaches continue for another 100 m. beyond the 160 m. mark to form part of the gateway extension, with a further 60 m. at right angles to this to complete the shielding arm, which faces down towards the Darwāzeh area—the suggested entry-point to the tableland.

The centre of the enclosure, of which the whole is subject to the considerable slope of the terrain, is distinguished by a raised mound whose surface is liberally sprinkled with potsherds, suggesting that it is composed of occupational debris. But the prospect of excavation is rendered extremely difficult by the fact that the slopes have been terraced to accommodate ploughing ; the area has been exposed to the attention of treasure seekers ; and the clearance of rubble from such a collapse of walling presents what may be an overwhelming obstacle.

The question now arises as to who might be expected to have been the aristocratic residents of the palace stronghold. The region of Qal'eh-i Yazdigird is by no means subject to severe winters and the summers are sufficiently warm to warrant the migration of sheep, while herds of goat remain on the lower ground. The trees represented in the orchards which cover the site include apricot, pear, pomegranate, fig, walnut, apple, almond, and grape vines. In Yāqūt's day the figs of Rijāb were "not to be equalled anywhere in the world".[28] The most perfect season is autumn, which in conjunction with the fruit harvest is particularly pleasant. This is in contrast with Qasr-i Shīrīn which is more favourable in winter, and Hamadan, which provides an ideal summer residence.

Qal'eh-i Yazdigird might have provided an ideal autumnal residence for the king. There is in addition the reference of Yāqūt to the gardens of Bahrām (probably Gach Gunbad). But "it was natural for later Arab writers to pick up local attributions of the type, and we may increasingly have to

[27] According to J. Blau, *Dictionnaire Kurde, Correspondence d'Orient no. 9*, Bruxelles, 1965, *aγē bayī* can be translated "wind mill", and *dar* means "tree" (in this case, "Orchard Place"). *Naqqāreh Khāneh* can be translated "Drumstand": see S. Haim, *New Persian-English Dictionary*, Tehran, 1960.

[28] Rawlinson, "March from Zohāb", *J.R.G.S.*, IX, p. 34.

deal in the field with the constructions of great noblemen."[29] There was, for instance, at the time of Bahrām, an intensive scheme of development undertaken in Fars by his First Minister, Mihr Narsē, who according to Ṭabarī[30] founded (in the region of Fīrūzābād) villages, plantations, and fire-temples.[31]

The fact that such exhaustive efforts have been made to secure the area at Qal'eh-i Yazdigird rather suggests that it was not the supreme monarch who was involved. A permanent residence would possibly have embarrassed the resources of the district, and it would be quite unnatural for a city not to have grown up around a royal residence. Nor does its explanation as a mountain retreat for hunting expeditions seem convincing. There would be no need for extreme fortification in this case, for any king who felt so insecure would hardly venture even beyond his own city walls. Furthermore, it does not seem to have been the habit of Sasanian monarchs to indulge in safaris. If they can be compared with the Safavid kings, it can rather be expected that game was driven into a walled enclosure for the pleasure of the nobles to hunt without danger to themselves.[32] There would be no need for the king to travel to such remote parts to enjoy this kind of sport.

The mountain stronghold does seem more appropriate for a great noble. It may be that he actually had designs upon the throne himself, in the same way that Ardashīr must have secured his position at Fīrūzābād in preparation for the overthrow of the Parthian monarchy.[33] The numerous occasions when the royal authority was subsequently challenged would perhaps lend support to this theory. Conversely, the noble may have been established there by the king in order to prevent such disorders from arising. Situated on the fringe of a wild mountain tract, the stronghold acts as a police post, a fortress to deter local attempts to secure autonomy and resist the collection of taxes. It would also reduce the possibilities of the caravan traffic being disrupted by ambush on the great highway at its hazardous point of entry on to the Iranian plateau.

Tepe Rash (*v.* Pl. IIa)

To the west of the palace, a number of low hillocks can be traced roughly in the shape of a horse-shoe. The more easterly of these have been terraced and ploughed in the same way as the Jā-i Dār mound, while on the surface there appears the same scatter of sherds—mainly of a coarse quality and reddish or reddish-orange in colour. It seemed likely that these slopes represented the occupational debris of the quarters of the artisans and servants dependent upon the palace. But trial excavation showed that bedrock was no more than one metre below the ploughed surface, which suggests that the occupation was relatively limited. Such material as might have offered dating evidence has been scattered over the slopes and ploughed away.

It had been hoped that the work at Qal'eh-i Yazdigird with stratified evidence would contribute towards remedying the lack of knowledge about Sasanian pottery in western Iran. The excavation was, therefore, disappointing in this respect. However, it may be profitable to discuss briefly the nature of the sherds recovered from the surface.

It is misleading to think in terms of a standard ware throughout the empire, with its vastly different cultural traditions and variations in local material. There are, however, sufficient characteristics to link the local pottery of this period with that of other sites on the Iranian plateau. There is too a marked similarity between this collection of surface sherds and those gathered from the remains of the town that lies immediately to the east of the arch at Tāq-i Bustān,[34] and which might also be dated as Sasanian.

The use of a burnished slip is not nearly so apparent here as at Qasr-i Abū Nasr in Fars,[35] but the fine grit-tempered red clay with reddish-orange slip is reminiscent of the unglazed wares from Sarvistān.[36]

[29] I am grateful to Mrs. Deborah Thompson for this suggestion.

[30] Muḥammad ibn Jarīr al-Ṭabarī, *Geschichte der Perser und Araber zur Zeit der Sassaniden aus der arabischen Chronicle des Ṭabarī*, ed. Th. Nöldeke, Leyden, 1879: and *Chronique de Ṭabarī*, ed. M. Hermann Zotenberg, Paris, 1867.

[31] These constructions have been shown by Vanden Berghe to be situated in the plain of Farrāshband. L. Vanden Berghe, "Récentes Découvertes de Monuments Sassanides dans le Fars", *Iranica Antiqua*, vol. I, 1961, p. 187.

[32] I am indebted to Mr. Ronald Ferrier for this comparison.

[33] E. Herzfeld, *An Archaeological History of Iran*, London, 1935, p. 95.

[34] E. F. Schmidt, *Flights Over Ancient Cities of Iran*, Chicago, 1940, p. 80; pl. 95.

[35] W. Hauser, "The Persian Expedition", *Bulletin of the Metropolitan Museum of Art*, November, 1933, section ii: and "The Persian Expedition 1933–34", *B.M.M.A.*, December, 1934, section ii (pottery by J. M. Upton).

[36] Survey of the author 1965.

There is the same tendency towards incised wavy lines,[37] both combed and single grooving, and an extensive use of raised ribs or " pie-crust " moulding. Punched holes in continuous rows are also a feature. The rims of heavy storage jars are characterized by thick nail-head or bulbous profile, often with a sharply defined shoulder just below the rim.

The excavations at Qasr-i Abū Nasr, Istakhr, and Dāmghān in the 1930's produced evidence to show that glazed wares were not much in existence at these sites before the Abbasid period.[38] It was concluded that Iran had no share in the development of glazed wares, and that the mountain ranges between the Persian highlands and the plains of Iraq were a dividing line between two ceramic cultures. It is particularly interesting to note that at Qal'eh-i Yazdigird there is also a marked lack of glazed wares. It is unfortunate that little surface pottery can be recovered for comparative purposes at Qasr-i Shirīn which topographically belongs more to the plains, and which might be expected to produce a greater proportion of glazed wares.

A further point of interest is that there were amongst the surface sherds at Qal'eh-i Yazdigird two examples of a fine, hard ware—grey core, fired red on the outside and burnished—comparable perhaps to the " pieces of unusually fine pottery, almost as hard and smooth as polished stone " from Qasr-i Abū Nasr, and dated as Parthian or Seleucid.[39] This type of pottery has recently been found at a number of sites in the Kirmanshah province, and, termed " clinky ware ", has been tentatively dated as Parthian.[40] The fineness of the clay so distinguishes it from the coarse red wares that it must be assumed that it was a luxury product and possibly the substitute or equivalent of a glazed ware during this period on the plateau.

Gach Gunbad

Separated from the Jā-i Dār palace by the mounds of Tepe Rash, and assuming a central position surrounded by a ring of hills, the traces of a walled enclosure can be followed for a distance of 535 m. stretching down in the direction of the Darwāzeh. The eastern reaches are no longer evident on the surface, but the whole area can be seen to have formed a rectangular layout measuring 265 m. along the southern end, and possibly slightly less at the northern limit where the hills encroach upon its regular, rectangular shape.

At the lower end, two piers of masonry standing at right angles to the curtain wall, and 8 m. apart, mark the entrance to the enclosure at a point 210 m. from the south-west corner. Near this corner a stretch of wall stands to a height of 3 m. and reveals that there was a regular series of slender buttresses on the inner face, comparable with those found in the al-Dhabai compound immediately adjacent to the Tāq-i Kisrā at Ctesiphon, which the excavators interpreted as an arena[41] (*v.* Fig. 3). The large enclosure at Tāq-i Bustān has been associated with a hunting park.[42] It seems that at Qal'eh-i Yazdigird the concept is the same—an irrigated garden or paradise.

In the northern section of Gach Gunbad, there survives a huge block of shapeless masonry which Rawlinson had assumed was the base for a pavilion or temporary superstructure[43] (*v.* Pl. IIa). Its function is not at all clear, except that any building imposed above would tend to resemble a tower. A deeply cut stream-bed has broken through the ruins at this point, but it is still possible to trace the lines of small chambers, constructed of the same rubble masonry as the perimeter walling. Immediately adjacent to the huge block (Gach-i Buzurg) on the eastern side, and covering an area 80 m. square, the ground is coloured red by powdered fragments of baked brick, amongst which are pieces of stucco plaster. This stretch of land has been cleared to facilitate cultivation, with the result that there is a slightly sunken area, bounded by heaps of field stone. It is here too that the villagers recover fragments

[37] There is no reason to suppose that these features are not Sasanian, though in a different context, in the northwest of Iran, they could easily be confused with second millennium B.C. material, cf. R. H. Dyson, Jr., " Problems of Protohistoric Iran as seen from Hasanlu ", *J.N.E.S.*, XXIV, p. 193.

[38] Qasr-i Abū Nasr, see n. 35: Istakhr. E. F. Schmidt, *The Treasury of Persepolis and Other Discoveries in the Homeland of the Achaemenians*, O.I.C. 21, Chicago, 1939, p. 101: and Damghan, see also *Treasury of Persepolis*, p. 101.

[39] Hauser, " Persian Expedition ", *B.M.M.A.*, 1934, section ii.

[40] I am indebted to Mr. David Stronach and Dr. T. Cuyler Young Jr. for this term and the information.

[41] Reuther, *Die Ausgrabungen, 1928/9*; and " The German Excavations ", *Antiquity*, vol. III, p. 444.

[42] Reuther, " Sasanian Archaeology ", *Survey*, vol. I, p. 569.

[43] Rawlinson, " March from Zohāb ", *J.R.G.S.*, IX, p. 33.

of gypsum plaster, which they resmelt to provide the facing for the dome of the Bābā Yādgār shrine.[44]

Two trenches were opened up where the red colouring was strongest on the surface.[45] The edges of baked brick appeared only 20 cm. below the topsoil, scarcely damaged by the wooden plough (*v.* Pl. IVd). The impression was as if a wall had gently toppled over intact. The prospect of removing heavy brick tumble did not seem justifiable in view of the limited time available, and the work was halted. An adjacent area produced the same results, whereupon close examination revealed that the bricks were actually in their original position ; these same bricks were found to be standing to a height of 4 m. above the level of the floor (*v.* Fig 4).

The bricks are square, their measurements varying from 30 to 31 cm. along the sides, and from 6·5 to 8 cm. in thickness. From the great variation in one building it is evident how misleading a comparison of brick sizes can be. A number of recognized Sasanian sites also show marked inconsistencies in brick dimensions. At Aivān-i Karkheh[46] they measure 32 × 37 × 8 cm.; at Ctesiphon,[47] 39 × 39 × 12 cm. ; at Sarvistān[48] 27 × 27 × 8 cm. ; at Damghān[49] 37 × 37 × 8 cm. ; at Gumush Tepe[50] in Khurasan 35·5 × 35·5 × 8 cm. ; and 35·2 cm. square at Dastigird.[51] The unconditional acceptance of size as the criterion for dating can be seen to be misleading in the mud brick walls of the Qal'eh-i Dukhtar in Kirmān.[52] The upper levels with bricks measuring 20 × 20 × 5 cm. were clearly Islamic. But the original foundations, in which three different sizes had been used in the same single building process, reveal two courses of baked brick 30 × 30 × 6 cm. laid over a rubble pack on the cliff face, followed by fourteen courses of mud brick 52 × 52 × 15 cm., and topped by standard courses 38 × 38 × 8 cm. The excavators at Barghuthiat assumed that the 36 × 36 × 9 cm. size could be attributed to the Sasanians, while the 40 × 40 × 12 cm. and 44 × 44 × 12 cm. sizes were Parthian (but only from the observation that they were larger).[53] In view of these discrepancies it would be fair to state that the brick sizes at Qal'eh-i Yazdigird tend to corroborate a Sasanian date but are not conclusive proof on their own.

The individual bricks have been marked before firing by a crude finger scratch. Three types have been recovered—a plain cross, a small crescent, and the impression of three finger points. In construction, they are laid in vertical courses turned alternatively through 90 degrees, and reinforced at intervals with horizontal lays, and bonded with gypsum mortar.[54] Vertical lay construction occurs at Assur ; at Tell 'Umar (A.D. first century) ; in the foundations at Tāq-i Kisrā ; in the Sasanian palace at Dāmghān ; and in the eighth-century Tārīk Khāneh there as well. It cannot, therefore, be specifically pin-pointed to either the Parthian or Sasanian period. Reuther suggests that it may relate to an unknown form of building material, but his assertion that this technique was associated with the plano-convex bricks of Mesopotamia is unsatisfactory, and the reason for its employment must remain obscure.[55]

A length of walling measuring 8·35 m. was exposed, which made a right angle turn, and seemed to continue beyond the three metres actually exposed. A shallow pilaster marks the corner, extending 42 cm. along each face, and projecting 8 cm. out from the wall (Pl. IVa). From the corner, 3·95 m. along the main length, another pilaster 1·80 m. wide also projects outwards for 8 cm. (Pl. IVc). Both pilasters run to the full height of the wall, the entire surface of which carries a double layer of gypsum plaster. Each layer is 4 cm. thick, plain for the most part, except for the upper 60 cm. of the wall's

[44] Hence the name *Gach Gunbad* (gypsum dome) does not reflect the survival of an ancient tradition of a magnificent domed building, but indicates the abundance of stucco fragments to be found in the topsoil. It is a corroboration too of the ease with which stucco can be handled. Simply by heating in a kiln, gypsum is reduced to a powder, and by the addition of water is rendered in a plaster form, cf. N. C. Debevoise, " The Origins of Decorative Stucco ", *A.J.A.* 45, 1941, p. 48.

[45] The trial excavation and survey of the site, which lasted for three weeks in June 1965, was conducted by myself with the help of Mr. Rahnamoun from the Department of Antiquities, as the Representative of the Ministry of Culture. I would also like to acknowledge the support of the British Institute of Persian Studies, and in particular the continual encouragement and guidance of the Director, Mr. David Stronach.

[46] Survey of the author, 1965.

[47] S. Langdon, " The Excavations at Kish and Barghuthiat in 1933 ", *Iraq*, vol. I, 1934, p. 117.

[48] Dieulafoy, *L'Art Antique*, vol. IV, p. 2.

[49] F. Kimball, " A Sasanian Building ", Excavations at Tepe Hissar, *Pennsylvania Museum Bulletin*, 1932.

[50] C. E. Yate, *Khurasan and Sistan*, p. 272–73.

[51] Creswell, *Early Muslim Architecture*, vol. II, p. 22: and Sarre and Herzfeld, *Archäologische Reise*, II, p. 90.

[52] Survey of the author, 1963.

[53] Langdon, " Excavations at Kish ", *Iraq*, vol I, p. 117, cf. note 47.

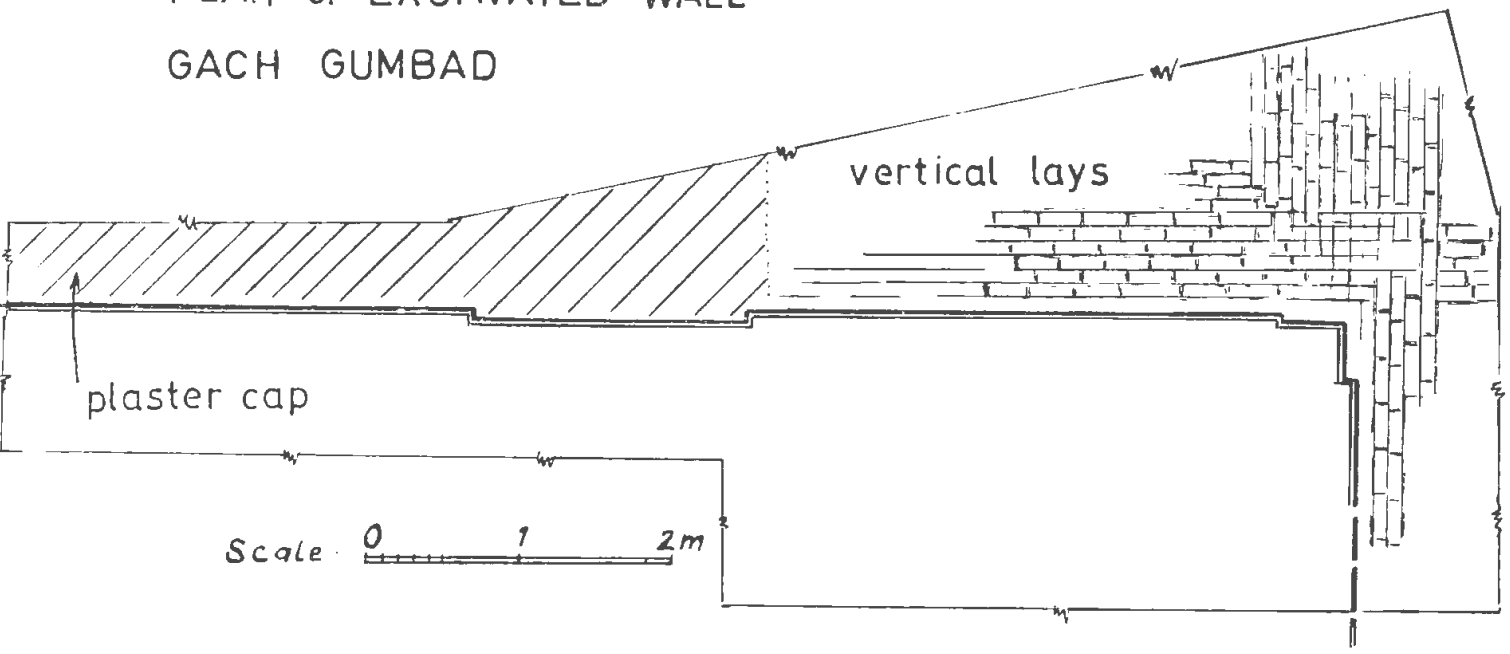
[54] cf. Reuther, " Parthian Architecture ", *Survey*, vol. I, p. 423, fig. 99.

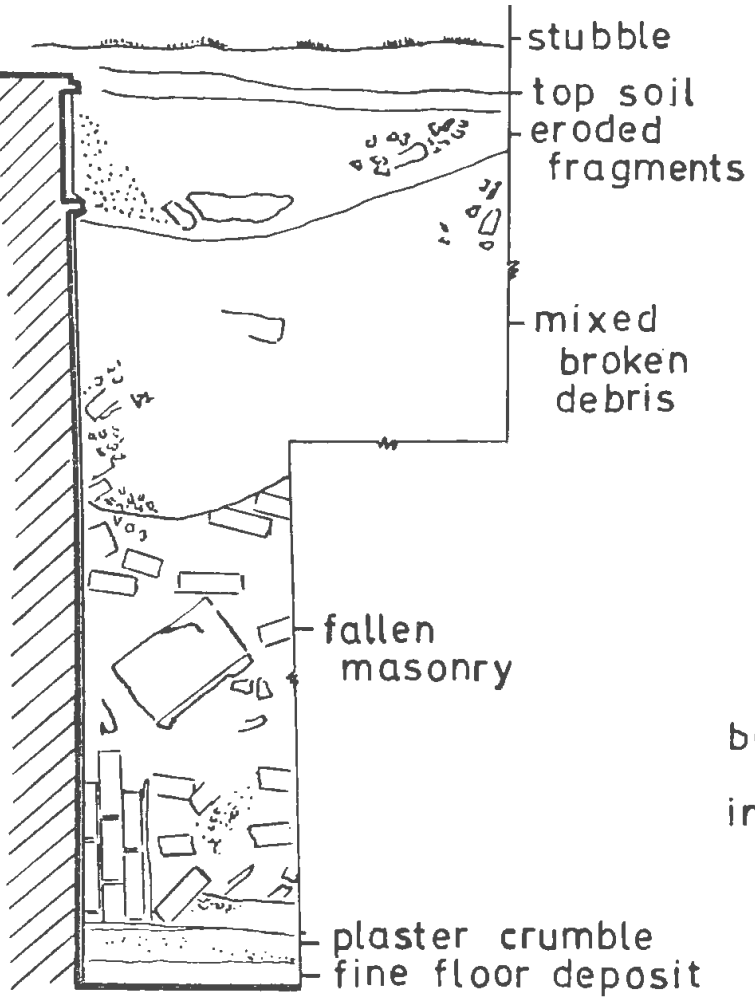
[55] *Idem*, p. 422–23.

Qaleh e Yazdgird

PLAN of EXCAVATED WALL

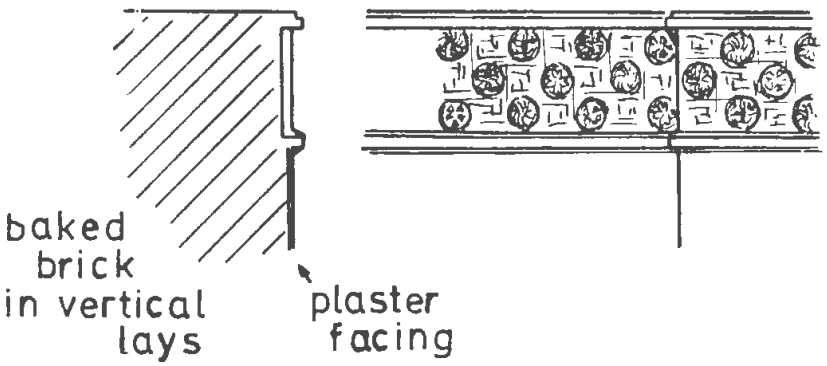
GACH GUMBAD





SECTION & DETAIL

stucco panelling & pilaster



june 1965

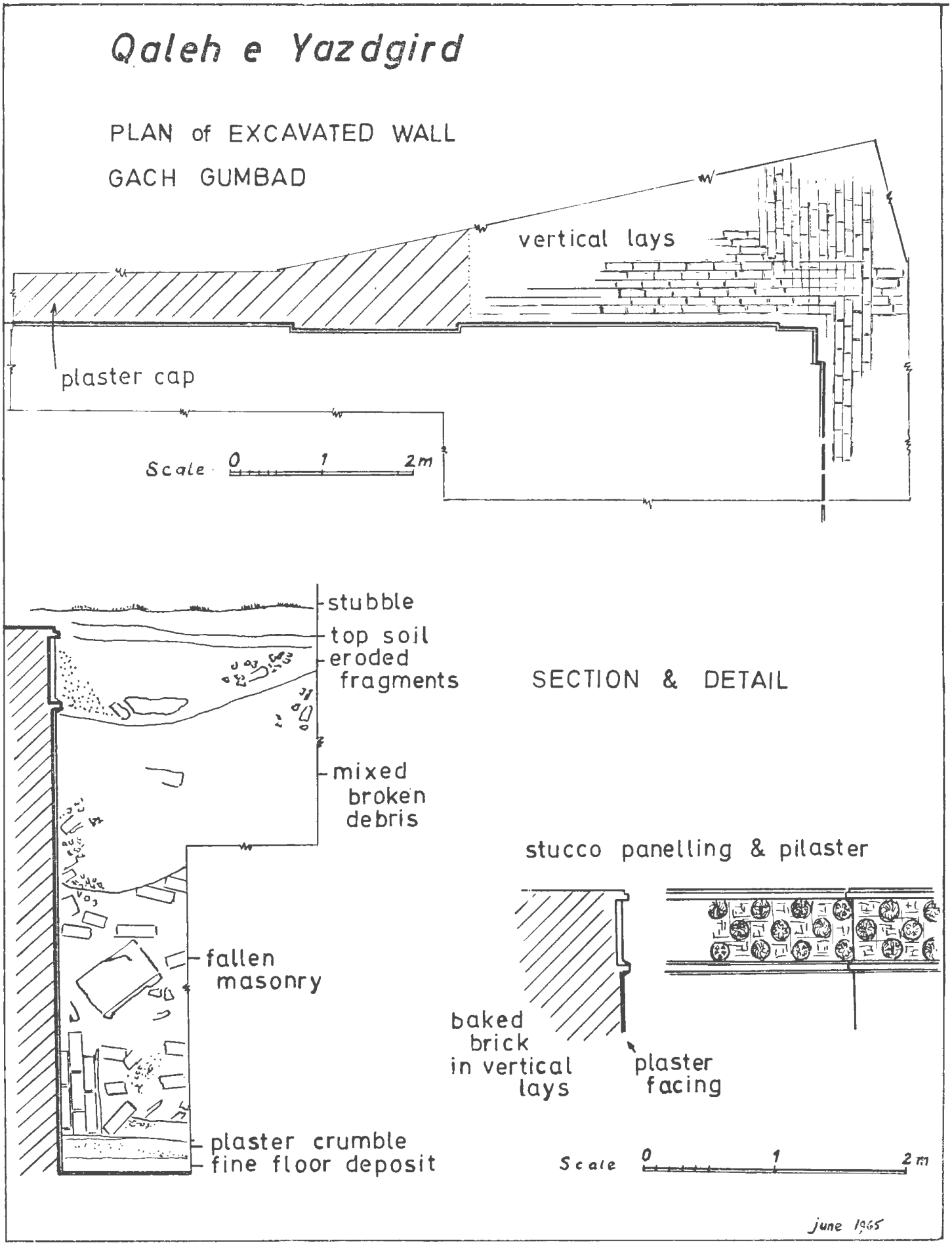


Fig. 4. Gach Gunbad: plan and section of excavated trench.

total height of 4·20 m. Two flat horizontal ribs or fillets mark the limits of a frieze which contains a series of panels in three bands, displaying a repetitive design of interlocking key patterning and intermediate medallions (Fig. 5 and Pl. IVb). The upper rib or cornice fillet, marking the top of the wall, indicates that it is a single storey structure, perhaps the curtain wall of a courtyard, as found in the temple precincts at Assur.[56] The cement cover to the top of the wall still survives in places.

A large enough area of this cement surface has been cleared to show that it extends back too far to be considered a step-back on the impost before the springing of the archivolt. There is no evidence for such a vault, but the section reveals that a considerable number of stucco fragments, both of panelwork and sculptured figures, have fallen down together with a heavy collapse of masonry from a height greater than the four metres of the wall itself. It would be wrong to think in terms of a flat roof. " All known Sasanian buildings are vaulted, whether they are built in the rubble technique indigenous to Fars, or in brick ".[57] Perhaps it would be more feasible to suggest that rather than being capped by a barrel vault, the wall was surmounted by a colonnaded balustrade or parapet.[58] The close proximity of many of the fragments recovered, as well as the fact that there are duplicates in some cases, points to their emplacement in horizontal bands. None of the pieces excavated were curved in section, in a way that would have seemed natural had they been connected with a barrel vault.

In view of the fact that the excavated trench lies to one side of the ruined complex, it would be possible to accommodate the theory of a single-storey wall flanking the main *aivān*, which was a strong feature of Oriental architecture from Parthian times. On the other hand, the *aivān* had tended to become subordinate to the domed structure, particularly in religious architecture.[59] But the *aivān* still survived, and perhaps enjoyed a revival towards the end of the Sasanian period. There was also a tendency to combine long linking corridors with a central domed structure. The section shows that the building was exposed in an abandoned state for some length of time before its total collapse. There is no sign of burning, but the floor is covered with a thick layer of greenish clay deposit—such as one might associate with a building exposed to rain and the accumulation of wind-blown particles on its deserted floors. Following this there was a sudden collapse, and one large block of masonry still has stucco decoration intact upon its face. It may have come from an adjacent double-storey structure, for the wall has been preserved to its standing height by the accumulation of this debris, which is too extensive to be explained away simply as the collapse of a parapet. Pending further excavation it can only be stated categorically that there has been a fall of stucco fragments, together with brick masonry, which has originated from a height greater than that of the wall itself.

The Stucco Decoration

The history of stucco has already been thoroughly investigated by Debevoise, though not all his interpretations are universally accepted.[60] He suggests that the introduction of stucco, particularly with elaborate and painted designs, coincides with the appearance of the *aivān*, which reflected a general reaction against Hellenism in the first century A.D. Brick glazing was no longer practised, and the stucco provided a convenient base, often with an additional coating of fine plaster wash, for large-scale painting. It is sufficient to stress here that, as a malleable form which covered the building like a garment, the stucco lent itself readily to the application of mould impressions of continuous and interlocking floral and geometric designs, and the abandonment of the architectural details of Hellenistic tradition.

Goldman classifies the different stucco patterns from Seleucia-on-Tigris as follows:[61]

(*a*) stucco pattern composed of a single element either carved or moulded into the stucco, e.g. the circular medallion with turning wheel design.

[56] W. Andrae and H. Lenzen, *Die Partherstadt Assur*, W.V.D.O.G. 57, p. 86, abb 42.

[57] Reuther, " Sasanian Architecture ", *Survey*, vol. I, p. 499.

[58] cf. the al-Dhabai structure at Ctesiphon. Reuther, *Die Ausgrabungen, 1928/9*, and " The German Excavations ", *Antiquity*, III, p. 444.

[59] cf. Debevoise, " Origins of Stucco ", *A.J.A.*, 45, p. 60.

[60] Debevoise, " Origins of Stucco ", *A.J.A.*, 45, see also J. Baltrusaitis, " Sasanian Stucco, Ornamental ", *Survey*, vol. I.

[61] B. Goldman, " The Allover Pattern in Mesopotamian Stuccowork ", *Berytus*, vol. X, 1952–53.

(*b*) stucco pattern composed of a series of repeated elements arranged in a band or ribbon, e.g. the gamma cross meander.

(*c*) stucco pattern composed of interlocking and intersecting repeated elements over an area, e.g. the rosettes composed of overlapping arcs of circles.

(*d*) miscellaneous patterns, e.g. the multiple saw-toothed flutings on attached columns.

The patterns have in common a "light and dark" effect gained by the sharp differentiation of the face of the design from the background, and the result of deep narrow cutting.

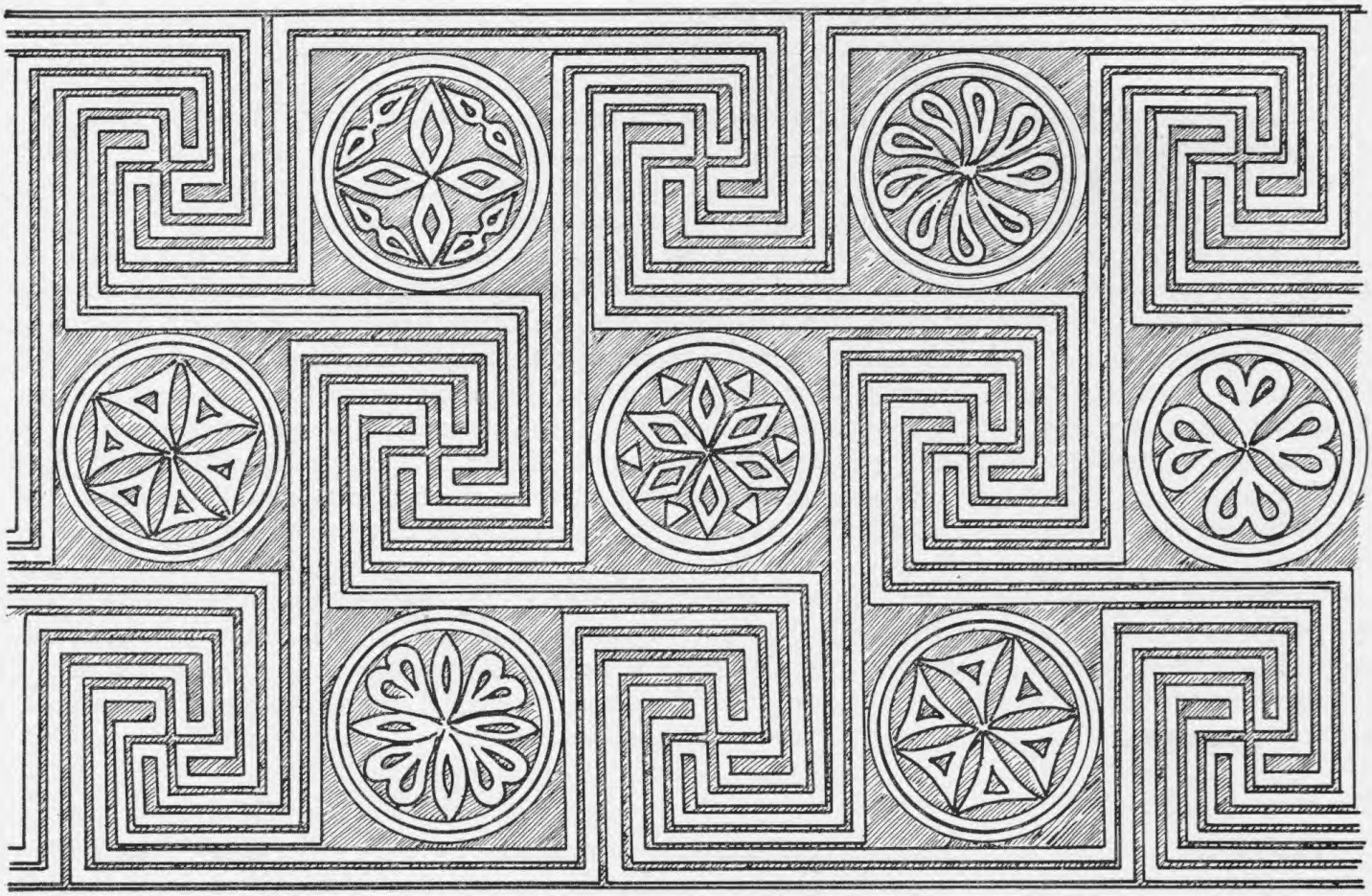


Fig. 5. Stucco panelling.

At Qal'eh-i Yazdigird the decoration includes type (*b*)—the gamma cross meander or running key pattern, which had already been liberally employed during the Parthian period, for example in the stucco cornice of the west *aivān* of the palace at Assur.[62] Here it echoes closely the Classical fret design which was a popular motif on the cornice corona of Greek monuments. The Sasanian artists had added their unmistakable touch by transferring the key pattern from a purely linear concept to forming part of an overall design covering the entire wall face. But the swastika cross cannot be ascribed to any origin in particular, since it is an obvious variation of a plain cross, and in fact was used freely from the earliest times in Mesopotamia and Anatolia.[63] It has been noted that the key pattern can be interpreted in two basically different ways—either as a repetition of successive swastika crosses, or with the emphasis placed on the long linking axes.[64] In the case of Qal'eh-i Yazdigird the latter explanation is

[62] W. Andrae and H. Lenzen, *Die Partherstadt Assur*, W.V.D.O.G. 57, Taf. 14.

[63] cf. F. Petrie, *Decorative Patterns of the Ancient World*, London, 1930; and E. D. Van Buren, "Symbols of the Gods in Mesopotamian Art", *Analecta Orientalia*, no. 23, 1945.

[64] Baltrusaitis, "Sasanian Stucco", *Survey*, vol. I, p. 602–6 fig. 180.

more satisfactory, since each line of the design is constituted by a double raised bar divided by a narrow groove. The double bar and groove effect is a fairly sophisticated rendering of this form of decoration. The visual effect here is that the arms interlock as a gamma cross, while the swastika impression is obscured. It is perhaps closer to the Classical version than many Oriental examples, being restricted to a horizontal frieze, with three bands of decoration. At Ctesiphon the design covers the entire surface, and is set diagonally instead of on a regular horizontal plane.[65]

In every case a series of rosettes alternates in each row with the key design. At Ctesiphon these are positioned so that they are free-standing, whereas the Qal'eh-i Yazdigird examples form the centre-piece of a medallion, comparable with those from Kish. There is a variety of six different types of rosette: a quatrefoil with heart-shaped leaf; a combined plain quatrefoil and heart-shaped leaf; a lozenge-shaped sexfoil with independent triangles; a lozenge-shaped quatrefoil with independent bows; a turning whorl; and a sexfoil of triangles with slightly concave sides (which is really the reverse negative of circles with overlapping arcs).[66]

In addition to these purely repetitive features of decoration which remain in situ, there are a number of sculptured figures, fragmented pieces of friezework, and relics of a balustrade, which were recovered in excavation from the main sondage. These will be discussed individually.[67]

Hermaphrodite Figure[68]

From a study of the three naked figures, which seem to have been identical in their pristine condition, the problem arises of deciding whether the artist had intended to portray a hermaphrodite or simply an effeminate youth. Certainly there is a clear indication of the male genitalia. The difficulty is not one of acknowledging the male qualities, but of deciding whether the figure is sufficiently feminine to deserve the term "hermaphrodite".[69] It is not very much more feminine than the youthful picture of Hermes in a terracotta statuette excavated at Dura Europos,[70] and does not really match the sophisticated image of a mature woman in the figurines from Seleucia.[71] But it must be remembered that Hermaphroditus was still a youth when he bathed in a fountain of Caria, and by his union with Salmacis became a dual entity.

The Iranian artists did in fact find it difficult or undesirable at this time to express the subtleties of the female form. It is noteworthy that the nude did not appear in Sasanian art until about the sixth century. Ghirshman notes that its appearance was certainly due to foreign influence; and even though the makers of the mosaics at Bishapur had already shown an appreciation of the beauty of the human form, the nude found its full flowering only in silverware.[72] It is true that they occasionally portray "languorous attitudes, the strong yet supple bodies of young women with swaying movements and frankly sensuous appeal".[73] The most voluptuous rendering is perhaps that of a nude dancing-girl depicted on a boat-shaped silver bowl of the sixth or seventh century.[74] But even here the artist fails to realize the true nature of a supple breast, and resorts to a more typical button shape, which appears almost without exception on both silverware and rock reliefs.[75] The bull-necked version of Anāhīta, the

[65] *Survey*, vol. IV, pl. 172 E; and E. Kühnel, *Die Ausgrabungen der zweiten Ktesiphon-Expedition*, Berlin, 1933, fig. 25.

[66] The rosette has been used as a decorative motif from the earliest times, and the heart-shaped leaf and swastika have been frequently employed in a variety of contexts. Goldman analyses the geometric all-over pattern, in particular the interlocking circle (with special reference to Seleucia-on-Tigris). He suggests that it appears to have been based on a fabric antecedent, perhaps of Assyrian origin, which was translated by the Parthians into stucco grill-work, and that the mode of carving points to a perforated, wooden screen ancestry. Goldman, " The Allover Pattern ", *Berytus*, vol. X, 1952–53.

[67] It is unfortunate that thorough cleaning of the objects was not possible during the 1965 trial excavation. Proper treatment promises to aid the interpretation significantly.

[68] The statuette measures 46 cm. high × 18 cm.

[69] In the case of some figurines from Seleucia-on-Tigris, there is simply an exaggeration of the female pudenda, rather than there being a fully hermaphroditic quality. W. Van Ingen, *Figurines from Seleucia-on-Tigris, 1927-32*, Ann Arbor, 1939, p. 43.

[70] C. Hopkins, " The Season 1934-35 at Dura ", *A.J.A.* 39, no. 3, fig. 5.

[71] Van Ingen, *Figurines from Seleucia-on-Tigris*, Pl. LVI, no. 868.

[72] R. Ghirshman, *Iran: Parthians and Sassanians*, 1962, p. 214. It is also significant that these figures at Bishapur were executed under very strong Classical influence, and possibly even by western craftsmen.

[73] *Idem*.

[74] Boat-shaped bowl: Walters Art Gallery, Baltimore. Ghirshman, *Iran*, fig. 258.

[75] e.g. Kalar Dasht jug: Iran Bastan Museum, Teheran. Ghirshman, *Iran*, fig. 256.

goddess of fertility, at Naqsh-i Rustam[76] is equalled in sturdiness by the robust queen of Bahrām II at Sar Mashhad.[77]

The small wings that are clearly visible behind the shoulders of one of the statuettes suggest that it may portray a cupid, although in a very effeminate rendering. The face is moulded in a distinctly Romano-Classical style, rather moonlike, with the same full roundness that is shown in the twin Victories adorning the spandrils of the main arch at Tāq-i Bustān.[78] Certainly the appearance of the cupid in Sasanian art is quite frequent, being included on silver bowls, and shown in particular accompanying royal personages on rock reliefs, in the form of a victory. They are obviously western in inspiration, and usually, as at Qal'eh-i Yazdigird, the Classical qualities survive. The artist here has positioned the head and hands in such a way that they express an attitude of coyness—the head is tilted to one side, with the cheek resting on the right hand as it comes up to cover the left shoulder. A close parallel in the facial features is the head of a lunar goddess on a marble relief from Hatra. Ingholt compares the subtle smile of this figure with the charm of the ancient Greek "*korai*".[79]

But in view of the traditional reluctance to acknowledge the real essence of feminine proportions, the meagre rendering is no reason on its own to doubt that it is a female figure. If the conclusions of Lensen should be taken as a standard guide,[80] the distinction between the female breast and the overdeveloped male chest depends upon the shape of the cleavage—that is that the female breast is pendulous in profile and assumes a round and separated position frontally, whereas in the male they meet in front to form a letter Y cleavage. On this score again the figure is probably feminine. From the combination of these female characteristics with their undoubtable male qualities, it is reasonable to conclude that the Qal'eh-i Yazdigird figures, in which the western artistic influence predominates, also reflects a western tradition: the hermaphrodite.

Reclining Figure

The same Classical influence can be recognized in the several pieces that form part of a continuous and repetitive scene in a horizontal frieze,[81] which shows a reclining male form and a boyish figure, who with wings extended behind faces away from the divan and takes up a stance to grasp the tail of an animal. The slight bulge at the end of the tail seems to imply that the low-slung, smooth hindquarters belong to a lion, only the rump of which survives.

It would be difficult to ascribe the reclining form to any one prototype, for the attitude is merely a repetition of the normal western reclining position. The Oriental is usually shown to be seated cross-legged, so much so that the king, except when viewed frontally mounted on a throne, is shown as maintaining a decorous position on a divan by crossing one leg over the other. There is however very little difference between the western attitude of the reclining figures at Palmyra—in the triclinium of Maqqai and the tomb of Varkai[82]—and that of a Sasanian king supported by cushions at a royal banquet depicted on a silver bowl of the sixth century.[83] There is a similarly oriental attitude at Tang-i Sarvak.[84] The Seleucid statue of Hercules at Bīsitūn portrays the god in a horizontal position, repeating a Hellenistic tradition which often shows him lying on a lionskin cover. It would be a temptation to assume that the lion and the reclining form indicated that this was in fact a portrayal of Hercules.

[76] L. Vanden Berghe, *Archéologie de l'Iran Ancien*, Leiden, 1959, pl. 30 C: and Ghirshman, *Iran*, fig. 218.

[77] Ghirshman, *Iran*, fig. 217.

[78] Vanden Berghe, *Archéologie*, pl. 128 C: and Herzfeld, *Am Tor von Asien*, pl. XXXVI.

[79] H. Ingholt, " Parthian Sculpture from Hatra ", Orient and Hellas in Art and Religion, *Memoirs of the Connecticut Academy of Art and Science*, no. 12, New Haven, 1954, pl. III.

[80] V. F. Lensen, " The Triumph of Dionysus on Textiles of Late Egypt ", *University of California Publications in Classical Archaeology*, no. 5 (i), 1960. I am indebted to Mrs. Deborah Thompson for this reference. I would also like to acknowledge her valuable criticism of my suggestions regarding the dating and styling of the stucco.

[81] The frieze is 20 cm. deep, of which a length of 55 cm. can be reconstructed.

[82] Ghirshman, *Iran*, fig. 83; 90.

[83] Silver bowl: Walters Art Gallery, Baltimore. Ghirshman, *Iran*, fig. 259. cf. also Kühnel, *Ausgrabungen der Zweiten Ktesiphon-Expedition*, 1933, fig. 36.

[84] W. B. Henning, " The Monuments and Inscriptions of Tang-i Sarvak ", *Asia Major*, *N.S.*, 1951–52, pl. II and III: Ghirshman, *Iran*, fig. 67; and Vanden Berghe, *Archéologie*, pl. 88 A.

Entwined Beasts (Fig. 6)

Perhaps the most interesting piece of all is a square block, of which the narrow sides are plain, while the two faces display on the one side a simple rosette pattern, and on the other a scene of two entwined beasts.[85] The initial impression is of a griffin-like creature—streamlined, with low-slung hind quarters, long lean bodies, and sharp pointed snouts; goatee beards and peaked ears; and ferret tails just brushing the ground. The creatures have assumed symmetrically an "X" position, linked to each other by a single turn about the midriffs, so that their heads and short fore-legs create an impression of straining away from each other in antagonism. The positioning of the half raised limbs is consistent with the Sasanian concept of the beast rampant.[86] The form is recognizable in many animals executed in both stone and silverwork, particularly in versions of the *sīmurgh*[87] and in scenes depicting horses captured pictorially in mid-flight.[88]

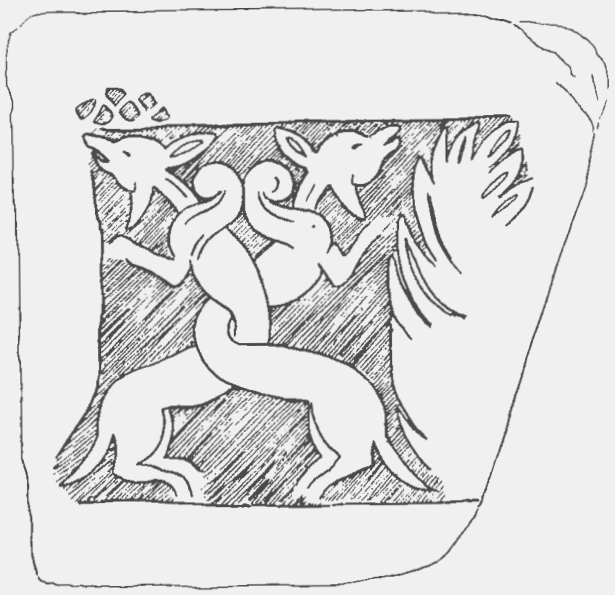


Fig. 6. Stucco capital.

The short wings, confirming a dragon-like appearance, are again typical of those borne by griffins and *sīmurghs* in Sasanian art.[89] Being foreshortened with blunt base and volute scroll tips they are in distinct contrast with the streamlined wings of Classical griffins. There was already a tendency for the wing tips to splay outwards in Achaemenian art (continued from the Assyrian tradition),[90] and this was still apparent in Parthian times, with a drake's tail curl evident in the winged sphinx from Nysa[91] (second century B.C.). It became the standard shape for the wings of hybrid beasts in the Sasanian period, and the curl was emphasized even more until it approached the nature of a volute scroll.[92] The wings of the horses that support the throne on the "Cup of Solomon"[93] are the closest example to the highly stylized form of the Qal'eh-i Yazdigird animals.

The beasts are flanked on the one side by a stylized tree of life. Ghirshman refers to the abundance in Sasanian metal and silkwork of confronted and addorsed animals and notes that according to the Avesta their function was often to guard a spring marked by a sacred tree.[94] Touching upon the popularity in Sasanian art of all manner of exotic and startling creatures, he offers the explanation

[85] The scene measures 24 cm. square. The block is 37 cm. high, tapering from 37 cm. along the top edge to 27 cm. along the base.

[86] e.g. the crossed lions on a sixth-century ewer in the Bibliothèque Nationale, Paris. Ghirshman, *Iran*, fig. 404.

[87] e.g. Ghirshman, *Iran*, fig. 271–76; and *Survey*, vol. IV, pl. 177 F.

[88] e.g. Ghirshman, *Iran*, fig. 247–52.

[89] I am indebted to Mr. Charles Wilkinson for this comparison.

[90] e.g. the sphinx in the Tripylon and the bull in the Gateway at Persepolis.

[91] Ghirshman, *Iran*, fig. 40 B.

[92] e.g. R. Pfister, "Gobelins Sassanides du Musée de Lyon", *Revue des Arts Asiatiques*, Paris, 1930, pl. II.

[93] Ghirshman, *Iran*, fig. 401; and *Survey*, vol. IV, pl. 203.

[94] Ghirshman, *Iran*, p. 232.

that "the fierce, demonic aspect of many of these animals has been interpreted as an expression of their supernatural powers. Probably they were also meant to satisfy the taste for tales of travel in fabulous lands, for romances, for all that was mysterious—even terrifying. The Iranian craftsmen did not hesitate to cater for this taste by depicting legendary creatures calculated to startle and intrigue."[95]

The purpose of the block is enigmatic. What is clear is that two faces were intended to be exposed to view, though possibly the side with the rosette was destined for a rather obscure position. One vertical edge of the block tapers inwards, with a slightly rounded corner, which may indicate that it was a pilaster capital. The pillars and discs from the al-Dhabai structure at Ctesiphon were conceived as belonging to a balustrade,[96] and a stucco pilaster capital was recorded at Tel 'Umar.[97] A comparable parallel may perhaps be found in the frame of a stucco grill recovered at Qasr-i Abū Nasr.[98] Except when deliberately attempting to echo Greek capitals, Sasanian versions lack well-defined mouldings or contours, relying on pictorial decoration for effect. If the concept of a balustrade surmounting a single storey wall should be acceptable, this block may have formed the capital of a pillar in the parapet.

Fig. 7. Stucco plaque.

Male Portrait (Fig. 7)

Several fragments of identical circular plaques can be used to reconstruct a picture of the original work,[99] which consisted of a male head in medium relief, encircled within a border of egg and dart moulding. The head bears the characteristics of a type that is depicted on many of the rock reliefs and statues executed during the Parthian period. The finest example of the trappings and gear that accompany these personages is displayed on the bronze statue recovered from the temple of Shāmī in 1936 by Stein.[100] Apart from the details of the accoutrements, the style of this figure is under strong Hellenistic influence. Perhaps more typical are the heads depicted on the reliefs at Mālamīr,[101] Shīmbār,[102] and Tang-i Sarvak.[103] A close parallel can be seen in one of the marble heads excavated at Shāmī.[104]

[95] *Idem*, p. 219.

[96] Reuther, *Die Ausgrabungen 1928/9* and "The German Excavations", *Antiquity*, III, p. 444; and see E. Porada, *Ancient Iran*, London, 1965, p. 211.

[97] L. Waterman, *Second Preliminary Report upon the Excavations at Tel 'Umar*, Ann Arbor, 1933, pl. II.

[98] W. Hauser, "The Persian Expedition, 1932–33", *Bulletin of the Metropolitan Museum, New York*, November, 1933, sect. ii, fig. 7.

[99] The reconstructed disc measures 40 cm. in diameter.

[100] Stein, *Old Routes*, p. 130 sqq., pl. 46–7: A. Godard, *L'Art de l'Iran*, Paris, 1962, fig. 159–61; and Ghirshman, *Iran*, fig. 99.

[101] L. Vanden Berghe, "Le Relief Parthe de Hung-i Nauruzi", *Iranica Antiqua*, vol. III, Leiden, 1963, pl. 53.

[102] A. D. H. Bivar and S. Shaked, "The Inscriptions at Shīmbār", *B.S.O.A.S.* XXVII, 1964, pl. II.

[103] Henning, "Tang-i Sarvak", *Asia Major, N.S.*, 1952, pl. II.

[104] Marble head: Iran Bastān Museum. Stein, *Old Routes*, pl. 49; and Ghirshman, *Iran*, fig. 107 A.

Pl. Ia. The Upper Castle: view north-west, showing the enclosed plateau area beyond.

Pl. Ib. Divar-i Gach: view south-west from the cliffs towards Darwazeh.

Pl. IIa. Gach Gunbad: view south-east, from west of the enclosure. Tepe Rash beyond to the left.

Pl. IIb. Ja-i Dar: view east, showing the Upper Castle beyond the gorge.

Pl. IIIa. Divar-i Gach: loopholes seen from the inner face of the wall.

Pl. IIIb. The Upper Castle: buttress towers along the north face.

Pl. IVa. Gach Gunbad: corner pilaster and panelling.

Pl. IVb. Gach Gunbad: stucco panelling.

Pl. IVc. Gach Gunbad: pilaster, panelling, and plaster cap.

Pl. IVd. Gach Gunbad: vertical brick lay and collapse.

The same characteristics can be distinguished in all the examples: bobbed hair, drawn into thick bunches on either side of the neck by a broad head-band just above the temples. This is in distinct contrast with the closely cropped "Caesar" look of Mithridates I on the Hung-i Naurūzī relief at Mālamīr.[105] The features are variable, not least owing to very crude workmanship, but there is a general tendency towards gauntness, and the beard is usually closely shaped and slightly pointed, without the "ring and knot" extravagance favoured by Sasanian monarchs.[106] Long moustaches complete a very striking facial treatment. There is also adequate evidence to suggest that the Qal'eh-i Yazdigird bust was decorated with a necklace, of a simple banded nature. This tends to distinguish it from the figures of a later period, for a beaded necklace is invariably found on Sasanian portraits.[107] Although the lack of detail may in some cases be the result of poor craftsmanship, from the evidence of coinage and the Shāmī statues it can be assumed that a banded form was more normal in Parthian times.

It is true that the bobbed style of hair enjoys a long history, and can be distinguished in some of the Achaemenian figures at Persepolis. But in these cases there is an almost overworked stress on the curled effect. The nearest approach to the Parthian style is that worn by the Bactrians. Most of Achaemenian figures are shown wearing some form of head gear, which is replaced in the Parthian period by a head fillet. Under the Sasanians there is tendency towards a loosely curled style, and the side bunches are much less reserved, often being shown to be floating in the breeze. In short, this style enjoys a continuous tradition right through Persian history. In this example the pieces are nearest in inspiration to the Parthian version. As such there is some difficulty in dating them, since they are associated with other pieces in a Sasanian context. The only satisfactory explanation is that the artists were indulging in deliberately archaic practices or were simply very conservative in their taste.

Engaged Half-Column[108] (Fig. 8)

Equally Parthian in inspiration—if the comparison be made with the stucco finds of Warka,[109] Assur,[110] and Kūh-i Khwājeh[111]—is a semi-circular half-column, which is decorated with a limited number of motifs, divided by runs of reel and bead moulding. These are quite exceptional in that, by dividing up a diaper pattern, they have lost all allegiance to the continuous linear concept of their origin.

Of the individual motifs, the stepped crenellation can be traced at least as far back as Assyrian architecture.[112] The crenellated battlement first appears as a defensive feature in conjunction with loopholes below. The latter were sometimes replaced by decorative medallions. Later the battlement is repeated as a purely decorative cresting, with the loophole reduced to a slit between the merlons. It has already reached this stage by the time of its employment in Achaemenian architecture. At Assur, in the façade of the Parthian palace, it is produced as a decorative form in a stucco frieze, while at Kūh-i Khwājeh and Warka it abandons the linear tradition and becomes an isolated motif, being employed in repetitive grill work. The ultimate in this trend is achieved at Qal'eh-i Yazdigird, where it forms a part of varied diaper pattern. The earlier tradition also survives elsewhere in this period, for example in the battlement of a pavilion illustrated on a silver plate of the sixth century.[113]

The other surviving designs decorating the half-column are a plain quatrefoil, a quatrefoil with heart-shaped leaf, and a gamma cross swastika. They echo the patterning of the wall frieze.

[105] Vanden Berghe, "Le Relief Parthe", *Iranica Antiqua*, vol. III, pl. 55.

[106] e.g. Ghirshman, *Iran*, fig. 216 (Bahrām II at Sar Meshed); fig. 157 (Ardashīr I at Naqsh-i Rustam); fig. 196 (Shāpūr I at Bishāpūr).

[107] Ghirshman, *Iran*, fig. 164, 209, 212. cf. figs. 135–155 with 304–326: and Godard, *L'Art de l'Iran*, pl. 100–104.

[108] A length of 60 cm. was recovered; the diameter measures 28 cm.

[109] W. K. Loftus, *Travels and Researches in Chaldea and Susiana*, New York, 1857, p. 225.

[110] Andrae and Lenzen, *Die Partherstadt Assur*, p. 17, i.

[111] Herzfeld, *Archaeological History*, p. 66.

[112] Reuther, "Sasanian Architecture", *Survey*, vol. I, p. 418; Debevoise, "Origins of Stucco", *A.J.A.*, 45, p. 51; and W. Andrae, "Die Festungswerke von Assur", *W.V.D.O.G.*, 23, Leipzig, 1913.

[113] Silver plate: Iran Bāstān Museum, Tehran. Ghirshman, *Iran*, fig. 246: The arch at Tāq-i Būstān is similarly decorated with a battlement cresting. Vanden Berghe, *Archéologie*, pl. 128: and *Survey*, vol. IV, pl. 159 B.

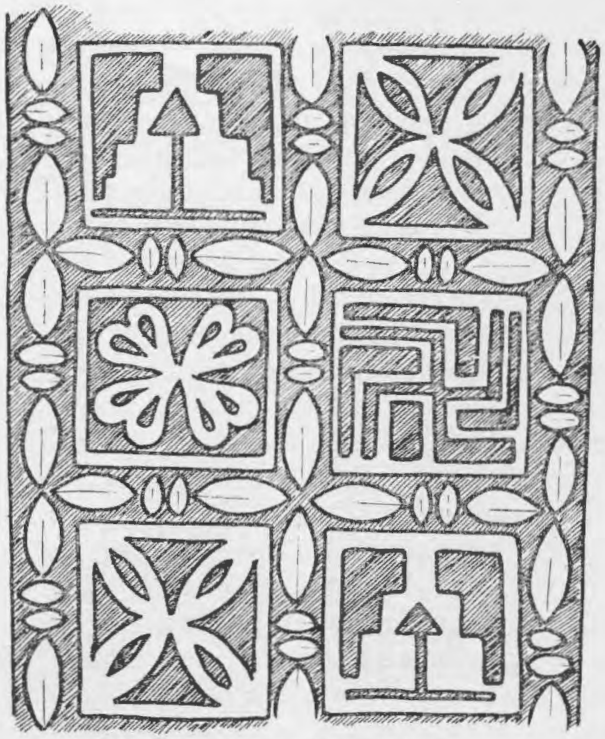


Fig. 8. Engaged stucco column.

Anahita Statuette[114]

The much broken torso of a small female figure gives a clear indication of its original significance by the positioning of its arms "represented in the typical posture of the great goddess of fertility, thousands of times reproduced in late Babylonian terracottas and alabaster statuettes, i.e. supporting her breasts with her own hands."[115] This stance enjoys a seemingly uninterrupted history, being particularly apparent in figurines, of which Zachner illustrates a fine example.[116] Van Ingen states that "the type in which the woman presses or supports the breasts, which was also used from the earliest times, continued in popularity during the later periods."[117]

Although in this example the stance and style are reminiscent of a figurine, the statuette formed part of a relief panel, like all the stucco figures at the site, being moulded in high relief, but with the back attached to a flat surface in the manner of a rock-carving.

Classical Moulding[118] (Fig. 9d)

A perfect example of the degeneration of Classical motif and moulding is to be seen in the several fragments of a continuous cornice decoration, which is strictly western in inspiration. The lower fillet bears a perpetual wave or rope scroll pattern; the ovolo carries an egg and tongue enrichment (though the tongue has become a vertical reel); and the ultimate cavetto moulding shows a simple and very stylized honeysuckle anthemion. It is conceivable that this cornice was a top member in a balustrade which included the frieze with the "reclining figure" already described.

Miscellaneous

There are several pieces of *grill-work*, or rather panelling—for they do not constitute open lattice-work, but simply recessed patterning. The merlon and loophole motif appears here too: as a separate

[114] Existing height: 23 cm. tall × 13 cm. wide.

[115] M. Rostovtzeff, " The Squatting Gods in Babylonia and at Dura ", *Iraq*, IV, p. 20.

[116] R. C. Zaehner, *The Dawn and Twilight of Zoroastrianism*, London, 1961, pl. 29: cf. also Loftus, *Travels*; and Vanden Berghe, *Archéologie*, pl. 101 A, B.

[117] Van Ingen, *Figurines*, p. 18.

[118] The height is 14 cm.; and the largest piece measures 33 cm. long.

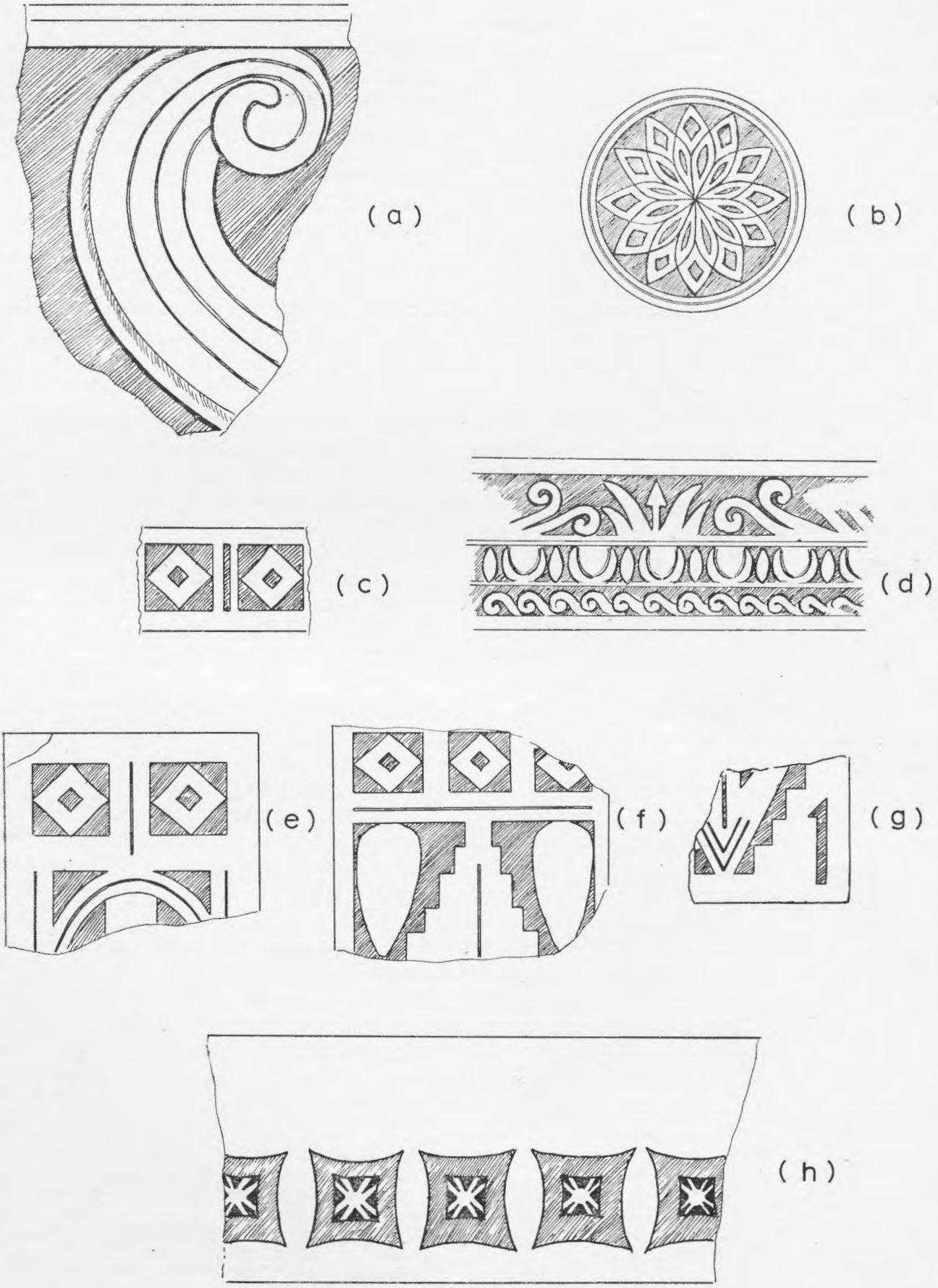


Fig. 9. Miscellaneous stucco fragments.

feature, removed in concept from its original function as a linear cresting; and in conjunction with other designs, including a square set diagonally within a square. The development of the merlon and a comparison with the material from Assur and Warka has already been discussed in the case of the half-column, *q.v.* (Fig. 9c, e, f, g).

A *medallion*,[119] or roundel with convex face is decorated with a geometric flower composed of two sets of twelve petals, so arranged that the tips of the inner ring meet the interstices of the outer layer. The resulting effect is somewhat peony-like (Fig. 9b).

A fragment of *wing*[120] with volute scroll tip is reminiscent of the pair of eagle wings frequently employed in Sasanian art to frame a subject.[121] It appears in this way in some stucco panel-work from Chāh Tarkhān,[122] and is a persistent embellishment on the crowns of the kings of the latter part of the empire.[123] The curl of the feather tips is heavily exaggerated in the manner of the "entwined beasts" *q.v.* (Fig. 9a).

Two broad bands of stucco,[124] plain apart from a series of recessed squares with a central cross pattern, suggest an *architrave*—which is perhaps feasible in view of the theory of a wall parapet (Fig 9).

Conclusion

The overall impression of the site is unmistakably Sasanian: in the use of rubble and mortar masonry, with a stilted semi-circular tower; and in the parabolic arch construction without centring. There are no known examples of monumental Parthian buildings constructed entirely of this material. This negative condition is not, however, a positive proof, for the technique must have been known in domestic architecture in Fars. But generally speaking, on the basis of archaeological evidence, the Parthians are not known to have favoured monumental fortifications, and the intense work undertaken at Qal'eh-i Yazdigird was rather atypical of their tradition. Brick construction cannot on the other hand be associated with either period in particular. But it may be noted that the earliest example is dated to the first century A.D. The paradise enclosure, with Gach Gunbad representing a pavilion within the gardens, is perhaps more Sasanian in concept, and has parallels at Tāq-i Bustān, and especially the al-Dhabai enclosure at Ctesiphon.

The historical record indicates that the site may be Mādharūstān, since there is no trace of another site that fits the description so well. Its association with Bahrām may be the result of romanticism on the part of the Arab geographers, particularly as those who attribute the site to such a founder were writing five hundred years after the fall of the Sasanian empire. The legendary association with Yazdigird III, which Rawlinson favoured, can be discounted too.[125] For although it was in this region that the all but last battles were fought against the Arab armies, it is hardly likely that the Sasanian monarch contemplated the necessity for an isolated retreat before the time when flight was the only escape. The Upper Castle can in no way be regarded as an ultimate refuge. It is rather a barbican against attack from the higher ground. Qal'eh-i Yazdigird could not support a large defending garrison indefinitely, and in fact the purpose behind the system of fortifications seems more appropriate for the residence of a great nobleman than the retreat of the monarch of an empire.

Pope has pointed out that "with our present knowledge (i.e. 1938) stucco does not justify the division of the Sasanian period into sub-periods each representing an artistic phase, but implies rather a great variation in the historical course of different types of elements within an ornamental repertoire".[126] The relief figures show elements of Classical influence, but more in the original inspiration than the actual rendering, emphasizing the strong orientalizing of western traditions. An anti-Hellenistic phase had

[119] Diameter 17 cm.

[120] Height 33 cm.

[121] cf. Creswell, *Early Muslim Architecture*, vol. I, p. 198/9; and Debevoise, " Origins of Stucco ", *A.J.A.*, 45, p. 53.

[122] Panel-work: Philadelphia Museum of Art. Ghirshman, *Iran*, fig. 229.

[123] e.g. Coin of Yazdigird III from Susa: Bibliothèque Nationale, Paris. Ghirshman, *Iran*, fig. 329: see also Porado, *Ancient Iran*, p. 212, fig. 114.

[124] Breadth 20 cm.

[125] The retention of the name of Yazdigird, though quite natural in view of the last scenes of an epoch which were enacted in this area, has been reinforced by the doctrines of the Ahl-i Haqq sect, which states that Bābā Yādgār, whose tomb lies at the source of the Āb-i Ghuslān, was a reincarnation of Imam Husein. The latter became the son-in-law of Yazdigird by marrying his daughter, Shahrbānū. See Minorsky, *Notes sur la Secte des Ahle Haqq*.

[126] A. U. Pope, " Sassanian Stucco; Figural ", *Survey*, vol. I, p. 645.

already set in during the first century, only to be reversed for a short time by the influence of the invasions of Trajan and Hadrian. If this site is of Sasanian date there is an exceptional western flavour about some of the pieces, though the mouldings show that they are sufficiently removed from their original tradition to make their appearance at this date feasible.[127]

Certain aspects are remarkably Parthian in inspiration, though the very fact that the crenellated battlement was employed continuously as a decorative motif from the first millennium B.C. shows how conservative the native artists could be. If the stucco was produced by Sasanian craftsmen, there are some peculiarly archaic elements, including the merlon design and the bobbed hair style. But equally typical of their period are the Sasanian wings of the entwined beasts, the volute scrolled wing, and the running key pattern and medallion frieze-work.

There can be no compromise over the question of dating. The stucco fragments are connected with a building that suffered decay following what seems to have been a single period of occupation; and that building forms a normal and logical part of the residential layout of the site, protected by a thorough and well-integrated system of defensive fortifications. From the aggregate of various indications, the weight of evidence falls most heavily on the Sasanian side. The use of rubble masonry, without any of the inspired structural techniques that were shown in Fars during the early Sasanian period, suggests that the site may be close in date to the monuments of Qasr-i Shīrīn. But the absence of involved arabesques and heavily intricate stucco decoration are a sign that it is earlier than Ctesiphon.

In view of the literary attribution to Bahrām Gūr, it is conceivable that Qal'eh-i Yazdigird, or Mādharūstān, was constructed in the fifth century A.D., around the time of the reign of Bahrām, possibly by one of his nobles.

[127] The dating of the stucco at Ctesiphon was complicated by the presence of Hellenistic elements as well as more schematic decoration showing all the characteristics of the late Sasanian epoch. M. S. Dimand, " The Second Expedition to Ctesiphon 1931–32 ", Summary in English, *Die Ausgrabungen der Zweiten Ktesiphon-Expedition*, Berlin 1933, p. 34.