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# STUDIES IN THE EARLY MEDIAEVAL

# ARCHITECTURE OF IRAN AND AFGHANISTAN

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## A GIST OF THE THESIS.

Early mediaeval era covers the Sasanian (3rd to 7th cent. A.D.) and early Islamic (7th to 12th cent. A.D.) periods. This era plays an important role in the history of architecture of the world, since many of the building techniques, such as those of squinched domes and pointed arches, were developed during this period. Yet very little of the architectural heritage of this period has survived. Many of the structures were destroyed during the Islamic invasion and many more were destroyed at the time of the Mongols. Whilst many of the surviving buildings of this period are already well known, there are several other structures which are still little known or even unreported . In the present thesis, an attempt has been made to study in depth, some of the sites of the latter category in Iran and Afghanistan. Except one of the sites, "The Jāme' of Fahraj," the rest of the structures have never been studied before and some of the sites such as Deyr-e Gachin, the Kohandeź of Herat and its monuments and the forts of Dārzin are introduced here for the first time. The monuments have been arranged in a chronological order as follows:

1. Deyr-e Gachin, is a Sasanian caravanserai in the desert between Rey and Qom. It has been mentioned in several historical sources from the 10th to 19th century, but its present existence has been unknown to scholars. It is a fortified enclosure, square in plan, with six towers and has been built in large Sasanian bricks. The actual Sasanian structure is to be seen in the curtain walls, the towers and the passages roofed with elliptical vaults. In the rest of the structure, the Sasanian foundation stands upto over one metre above the present ground level and the piers and the roofs have been rebuilt during Islamic period. The structure is colossal in size and has forty rooms, sixty six raised niches, used as accommodational chambers, a mosque, a bath and a royal courtyard, all being still in fine condition.

2. Masjed-e Birun stands outside the old city wall of Abarquh. It is oriented about 18 degrees to the south of the correct direction of Mecca and is built with elliptical vaults and earlier forms of arches which could be of either the late Sasanian or early Islamic period. The bricks in a pier of the building are set both horizontally and vertically, in alternate courses. Such a method is an old tradition which continued until the 8th century. Moreover, the plan of the structure is similar to that of a fire temple. All these clues suggest that the building has originally been designed for such a purpose. An inscription in the building, datable not later than 15th century, indicates the building of a minaret there, as a significance of Islam. This indication may be a reference to the conversion of the structure to a mosque in this date.

3. Masjed-e Jāme' of 'Aqdā is situated in an old Zoroastrian centre. It is not oriented in the correct direction of Mecca and its plan is typical of a fire temple. It stands on a platform about 240 cms. above the natural ground level. This platform is not a local tradition and in 'Aqdā can only be seen in this particular building. All of these clues prove that the structure has an older origin and probably has been a Zoroastrian fire temple, converted to a mosque after the change of religion in 'Aqdā. The mosque bears an inscription dated 847 H. (1443-44 A.D.). This date falls close to that given by the local historians mentioning the village as a Zoroastrian centre. So it refers to the date of a restoration when the building was finally adapted as an Islamic mosque.

4. The site of the Kohandeź in Herat and the two shrines located there, are very little known to scholars. The name Kohandeź (old fort) is applied to a number of ore Islamic ruins in Afghanistan and Iran. In Herat, ruins of some of the walls built in stone can still be seen. Though one of the shrines of the site is locally accepted as the tomb of Abolqasem Mohammad eba Ja'far-e Sādeq, but historical evidence

suggests that he did not die in Herat. The plan of the sanctuary of this shrine, with its four niches is indeed very similar in appearance to a chāhār-tāq, the typical plan of a Sasanian fire temple. A further examination of the structure proved that it is built of stone set in lead and sand cement. This material represents a rare technique of construction practised only during the Sasanian period. Therefore, the shrine should have been originally a pre-Islamic fire temple and converted to a Muslem shrine during later periods. The other shrine (tomb of 'Abdōllah ebn Mo'āvie) is a 15th century structure.

5. The Jāme' mosque of Fahraj, in central Iran is now accepted as one of the earliest examples in Islamic Iranian architecture. Yet there is still very little literature published about this monument. This mosque provides new information about architectural development of its period. Fahraj is unique in preserving the vaults, arches and incidental decorations all of which represent the survival of Sasanian methods of construction during the early Islamic period. On the other hand many details of this mosque are similar to those of the 8th century Islamic buildings in Syria. These connections show that during the early Islamic period the technical exchanges involved included the transmission of Iranian motifs to the westward of the Eupherates. In particular the similarity between the decorations of Fahraj and the monuments of the 8th century indicates that it belongs to this century.

6. Dārzin, in south-east Iran, is shown by the Persian and Arabic texts to have attained some prominence by the 10th century. The ruins of the three forts, now standing there, have close structural analogies in Umayyad and 'Abbasid works of the eighth century A.D.. This impression is re-inforced by the use of elliptical vaults and large bricks in these structures. The characteristic form of the entrance at Dārzin - a small gateway flanked with two semi-circular towers - and the plan itself, square with round towers in the corners and an intermediate tower on each face, are also relevant to such a dating. There are also arrowslits at Darzin which have the form of an upright lance. In their minor details they agree exactly with those of al-Ukhaidar. Once more this similarity supports our dating of the forts at Dārzin to be the 8th century.

7. The monuments of Bost. In 1948 the Delegation Archeologique Francaise en Afghanistan began a large excavation at Lashkari-bāzār, a site near Bost, as a result of which several Ghaznavid sites were uncovered. The present writer has studied the fort of Bost and all of the standing structures, which had been built in fired brick i.e. the Arch of Bost , a multistoreyed underground feature known as the Well of Bost and the shrine of Shāhzāde Sarbāz. The Arch of Bost has already been studied by some other scholars , but there is very little literature about the other monuments and the fort itself. The shrine of Shāhzāde Sarbāz is an octagonal structure enriched with brick and terra-cotta decoration. on the building methods and the decorations used in the shrine, we date the building to the Ghaznavid period.

The weel of Bost consists of an overground structure and four levels underground. It has a fine ventilation and lighting system. Upto 25 metres below the ground level, it is lighted naturally. Moreover, the structural problems of an underground construction are all finely solved. The form of the arches of this building is more advanced than those of the Ghaznavid period, and the feature is datable as a late 12th or early 13th century.

8. The shrine of Emām-e Kalān is situated at Sar-e Pol in north Afghanistan. Itwas originally a square chamber with a low dome, and there is an adjoining antechamber which is a later addition. The main chamber is designed on the old Khorasani tradition of tomb building, having its roots in the form of the pre-Islamic fire temples. In particular it is very similar to the tomb of Esmā'il the Sāmānid and that of 'Arab-atā. Its interior is enriched with carved stucco decoration and inscriptions. Whilst the style of the construction of the shrine is similar to that of 10th century, the decoration and inscriptions suggest a later dating - around the mid 11th century.

# Studies in the Early Mediaeval Architecture of Iran and Afghanistan

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PART ONE

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PREFACE

PREFACE

The present study is concerned certain the early mediaeval sites, in Iran and Afghanistan, which were little known and in many cases, unknown to scholars. It is mainly based on direct field work in both of these countries. During the study, great help was given by Dr. A.D.H. Bivar of the School of Oriental and African Studies, University of London. who guide the present writer in every aspect of this study. The writer owes a particular debt to Mr. Peter Whiston, Director of the Envrionmental Conservation Unit, Heriot-Watt University, Edinburgh, who encouraged him in his idea of studying,in depth, the early mediaeval architecture of this area, and provided all the facilities for starting the study. During 1977 and 1978 Mr. Peter Speakman of the Heriot-Watt University kindly gave help for the work to be carried out.

During the field study, the writer was assisted by Miss A.M. Parisio, who helped immensely with the surveying and photographing of the sites. Both in Afghanistan and Iran, the authorities cooperated very cordially, but the writer is indebted to Dr. Zamaria Ṭarzi, Director of the Afghan Institute of Archaeology,who gave him very useful information about unrecorded sites;to Mr. Sharif, who provided a lot of facilities during the study of the site of Bost;and to Mr. Abdol-Karim Pirnia of the National Organisation for the Protection of the Historical Monuments of Iran, who gave the writer his kind permission for a further study of the Jāme' mosque of Fahraj which was first reported by him. He also encouraged the writer to visit the Jāme' mosque of 'Aqdā and Masjed-e Birun of Abarquh. At the end, the writer must express his gratitude to all those authorities and individuals who directly or indirectly helped him in this study.

# INTRODUCTION

INTRODUCTION.

The early mediaeval era in covers the Sasanian and early Islamic period, both having an important position in the field of art and architecture of the area. These are the transitional periods between pre-Christian architecture and the magnificent Islamic works. Many of the architectural techniques of the world, such as pointed arches and squinched domes have actually developed in this particular area during this period. Yet very little survives.

Many Sasanian structures were destroyed during the Arab conquest. The destruction of some of these structures, such as the palace of Ctesiphon is not only recorded in history but also reflected in Iranian literature and folklore. After the Islamic conquest, many of the old buildings were rebuilt and others constructed for the needs of the new religion. Early Persian, and Arab literature tells of many mosques, palaces, fortresses and other private or public buildings in several towns of Iran, but little remains even of these structures. Many of these were destroyed in the 13th century by the Mongols and later by Teymur. However, a few of the monuments did survive and many of them have already been studied. In fact, the outline of the present history of early mediaeval architecture of Iran is based on the information provided by such monuments. Yet there are still several other monuments which are little known or scholarly unreported. A number of such sites have, of course, been recently discovered and extensively added to our knowledge of the subject. For example, upto the last decade only two mosques in the plateau of Iran were known which are built on a colonnade type plan (Arab plan). Now two other examples have been discovered during excavations at Sirāf and the Jāme' of Isfahan. Moreover, the Jāme' mosque of Fahraj, which has recently been reported, not only has an Arab plan but survives in fine condition and represents many details which have not been seen elsewhere in Iran. This mosque is one of the topics of the present paper.

In this paper it is proposed to study some of these little known or

unreported structures of the early mediaeval period.

In the spring and summer of 1977, the present writer made a visit to Afghanistan and Iran in search of such buildings. As the aim of the study was the architectural aspect of the sites, the writer was more interested in the existing structures which were still in an acceptable condition. Amongst several sites thirteen buildings could be visited all of which have been surveyed and presented here. In Afghanistan the following sites were studied: The Kohandež of Herat and two shrines located there, the fort of Bost and all of the existing fired brick structures of the area, i.e. the Arch of Bost, the Well of Bost and the shrine of Shāhzāde Sarbaz; and the shrine of Emām-e Kalān in Sar-e Pol.

In Iran the research was mainly focussed on the sites in central Iran (Yazd district) and Kermān. In Yazd district the Jāme' mosque of Fahraj, the Masjed-e Birun of Abarquh and the Jāme' mosque of 'Aqdā, and in Kerman the site of Darzin and its three forts were studied. Moreover, between Rey and Qom, the Sasanian Caravanserai of Deyr-e Gachin was traced. This caravanserai is well known from the literature, but its present existence was unknown to scholars. The present writer succeded in finding the site and was surprised by the condition of the monument, well preserved in the desert.

It must be mentioned that while each of the monuments studied in this paper, is of different area and has different functions, all of them represent similarities in their details. They are all built in mud and fired brick. Stone, which was especially used in pre Islamic buildings of Iran is not present on these sites, except in one of the structures in the Kohandez of Herat (the shrine of Shāhzāde 'Abolqāsem). The arches and the vaults of the sites have either an elliptical or a two-centred profile. This is, in fact, a characteristic of early mediaeval buildings in Iran. In the case of the Jāme' of Fahraj and the forts of Dārzin, many details are also similar to those of the 8th century Islamic

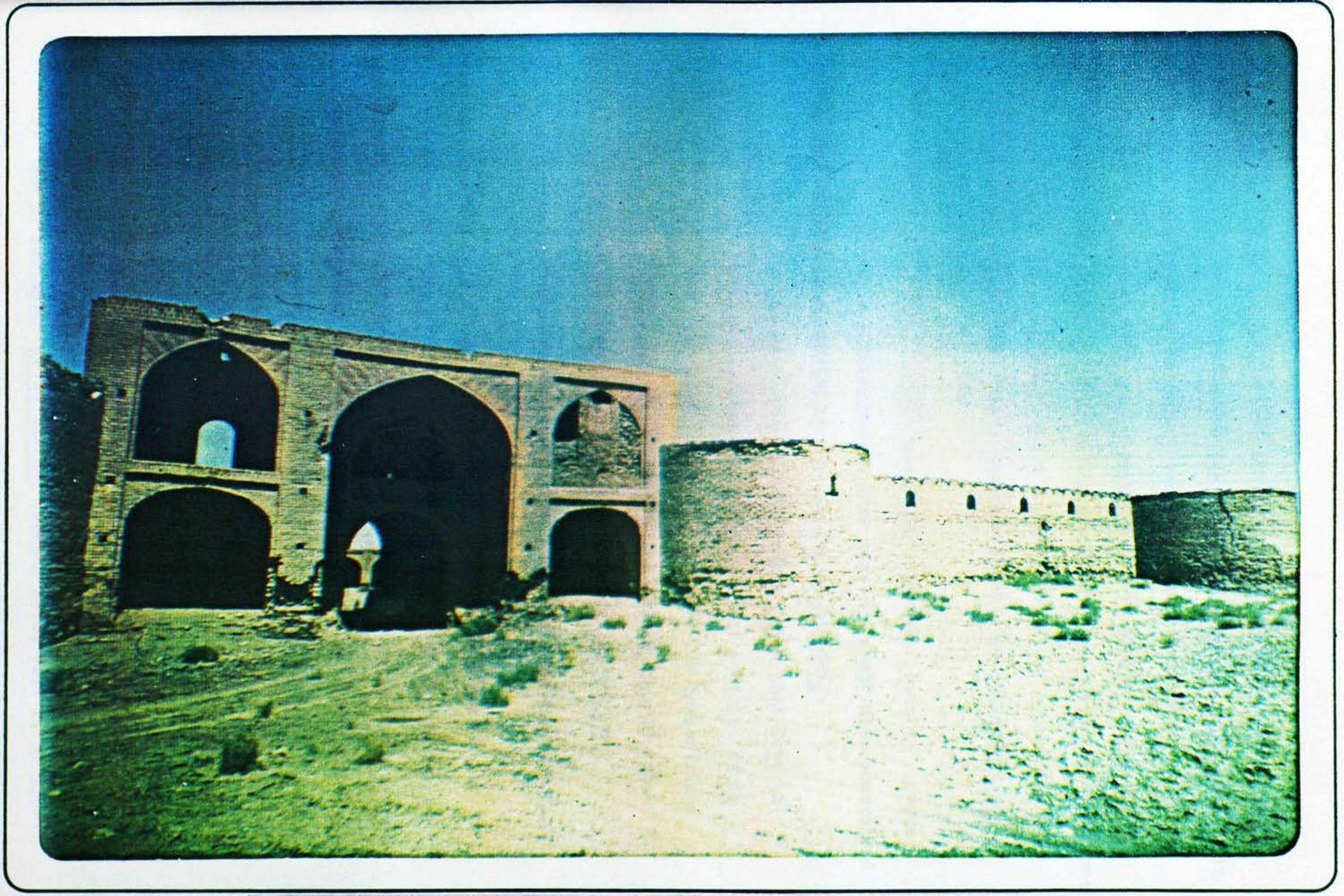
buildings in Syria. Such similarities are particularly worthy of attention because they emphasise the unity of technological background in the Islamic world both east and west of the Euphrates, a unity that is especially notable in architecture, and which some of the commentators have intended to minimize. Though this characteristic is increasingly appreciated in the work of the Ghaznavids and later dynasties, it was already present at the close of the Umayyad suzerainty.

The matter in this paper has been arranged in chronological order. But two tables have also been given of which one is arranged in alphabetical order of the name of the monuments and the other in alphabetical order of the towns.



Colour plate 1-Deyr-e Gachin . General view from the south west .

1. DEYR-E GACHIN



Colour plate 2 - Deyr-e Gachin . View of the entrance .

# DEYR-E GACHIN

Numerous Arab geographers and Persian Literature texts refer with various details to an important desert caravan serai known as Deyr-e Gachin (Ar. Deyral Jess) and situated in south of Rey. The present writer's attention was drawn to the problem by the historical references, and later we shall describe the circumstances of our search for the monument on the ground. First, however, it will be convenient to examine the texts.

Deyr, meaning in Arabic 'monastery', perhaps 'hospice', seems a natural term for a caravan serai. That the term could also comprehend a fire-temple is suggested by a quotation of Anandraj:

> "It is written in the Bahare 'Ajam that Deyr is a dome in which the pagans conduct worship. It is the equivalent of ḫaram (shrine). The Zoraastrians (Pārsiyān) use it in the general meaning of 'dome' ".[1]

This hint is supported by a description of al-Mo'jam

"منزلی گی از طرف اصفهان برصوب ری هست و آن را دیرگچین می خوانند ، گنبدی مجصّص بوده است."

"There is a stage on the way to Ray from the direction of Isfāhān, and they call it Deyr-e Gachin. There was a dome built with gypsum".[2] Our survey will show that in the existing structure there existed a sanctuary which may have been roofed with such a dome.

While discussing the toponymus of this site, it must be noted that Yaqut in a passage, to be considered later, uses the name Deyr-e Kardashir. This seems a reflection of an original Sasanian name, since the word 'Deyr' would hardly have been used in Iran

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1. Mohammad-e Padeshāh: Farhang-e Ānandrāj, Tehran, 1956, p. 1984.
2. See H. Karimiān: Rey-e Bāstān, Tehran, 1970, vol. 2, p. 550.

before Islamic times.

The position of Deyr-e Gachin is already fixed by Ahmad ebn Omar in Al A'lāq al-nafise in the second half of the third century H. (10th cent. A.D.): "When one went out from Qom to Rey, from Qom to Qāres is 8 farsakhs; from there to Deyr-e Gachin is a farsakhs; from there (one went to) Dezah and from to Rey."[3]

The distance between Deyr-e Gachin to Dezāh is not recorded in the A'lāq, but on another page, it gives the distance between Dezāh to Rey as 7 farsakhs.[4] It is noticeable that in this early text, written in Arabic, Deyr-e Gachin is recorded in its Persian form.

More detailed information, both for the location and the building of Deyr-e Gachin, is given by Estakhri:

> "The route from Rey to Isfahan (Esbehān) - from Rey to the town of Dezāh, where there is a mosque, is one stage. From Rey to there is all built up except for two farsakhs in the middle of the way. From Dezāh to Deyr al-jess is one stage. Between Dezah and Deyr al-jess lies a desert between Karkas Kuh 'vulture mountain' and Siāh Kuh 'black mountain'. Deyr al-jess is a caravanserai (built of) gypsum and fired brick. The sultan's guards live in it. It is a stage for travellers and there are no farmlands and no trees. Inside there is a well of salty water which cannot be drunk. Their drinking water comes from the rain (collected) in two reservoirs, outside of this hospice (deyr). The desert surrounds it on both sides. From Deyr al-

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3. Al A'lāq, Leiden, 1891, vol. 7, p. 191.

4. ibid. p. 190.

> Jess one goes to Kāj which used to be a village, but it was ruined and there are no inhabitants.... And from Kāj to Qom (is) one stage."[5]

Estakhri does not record Qāres as stage between Deyr-e Gachin and Qom, but describes a village known as Kāj, abandoned in his time. After Estakhri this village is always mentioned by the geographers[6] as the only stage between Deyr and Qom. We shall see that the village was re-occupied and still exists. It is shown in the Drawings no. 2, 3 and 4 at the north east of Qom.

Ebn Hugal repeats the account of Estakhri about the caravan serai,[7] then adds more information about its location:

> "The route from Rey to Isfahan (passes) between Siāh Kuye and Karkas Kuye. Karkas Kuye stands at the left side of the traveller and Siāh Kuye at the right side. Siāh Kuye is also a haunt of thieves and there is no building in it. From Karkas Kuye to Deyr al-jess is 4 farsakhs and from Deyr al-jess to Siāh Kuye is 5 frasakhs. The latter is a black mountain evil of aspect and a source of news. Between Siāh Kuye and Karkas Kuye, for 9 farsakhs to Deyr al-jess are all tortuous routes, hills and gorges. From Karkas Kuye to Dezāh is 7 farsakhs."[8]

Hasan ebn Mohannad ebn Hasn-e Qomi (about 378 H. , 988-989 A.D.) mentions that the caravan serai is located near the basin of the rivers Qomrud and Sanābād:

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5. Estakhri: Al masālek wal mamālek, Cairo, 1961, p. 134.
6. Ebn Hugal, Al masālek val mamālek, Leiden, 1873, p. 290; Mogaddasi, Aḥsan al Taqāsim, Leiden, 1906, p. 401.
7. Al masālek val mamālek, Leiden,1872, pp. 189-190.
8. ibid. pp. 190-191.

"هرگاه که آب رودخانهٔ قم زیاده بر احتیاج ضیعتهای حوالی قم بودی آن زیاد را به قم روان کردندی پس آن آب بقمرود، بموضعی که آنرا صحرای مسیله خوانند فرو می رفت وناپدید می شد وبعضی روایت کرده اند... آن آب... از رودخانه های قمرود و قارص و سناباد می رفت تا بیابانی که به نزدیک دیرگچ است که آن موضع را بیاض خوانند و آنجا سوراخی بزرگ است، آن آب در آنجا می رود ونمی داند از آنجا به کجا می رود."

"Whenever water of the river Qom is more than the need of the surrounding farms the overflow was led to Qom. Then that water flowed to the Qomrud and subsided in a place called the Desert of Masile. Some say it goes through the rivers Qomrud, Qāres and Sanābād to a desert near Deyr-e Gach. This place is called Bayāż; there is a large hole which the water runs into it and nobody knows where it goes."[9]

The building itself and its constructional material are also described in several historical sources. According to Mogaddasi:

"Deyr-al jess is (built) of fired bricks, each one of them in the size of a large mud brick. It is spacious and very commodious and it has gates of iron. At its gates a grocer is established, and there are ponds of water outside of it, round ones, which collect rain water. Except that I saw that it (i.e. the building) was cracked."[10]

A more detailed picture of the caravan serai comes through the information by Abu dolaf ebn Mohalhel:

"Tence to Rey, in a salt desert in which are caravan serais, watch-towers, and armed camps. In the middle of this desert stands a huge

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9. Tārikh-e Qom, Tehran, 1934, p. 47.

10. Aḥsan al Taqāsim, Leiden, 1906, p. 491.

> stronghold of Ādite work formidable of construction. It possesses towers, excessive in size and height, and its walls are thick and high, a built of large fired bricks. Inside there are buildings, vaults and arches. The court-yard occupies two jaribs in extent, or more. On some of its columns are written: each fired brick of this castle costs one drachma and two thirds, three ratls of bread, one dānaq of spices and a flask of clear wine; whoever is willing to believe this, (may do so), and if not, let him knock his head against whichever of these piers he wishes. So this Deyr al-jess is known as Deyr-e Gachin and around it are reservoirs cut in the rock, wide and huge. There are no relices of the Zoroastrians, ( Al 'Ajam,) because the Arabs obliterated all traces of the (ancient) Persians and diminished (the number) of their buildings".[11]

Yaqut quotes the words of Ebn Mohalhal but gives the caravan serai the name of Deyr-e Kardashir.[12] Thus it is clear that Deyr-e Kardashir can only be a name of Deyr-e Gachin. This pre-Islamic designation suggests that it was an original Sasanian foundation, a belief for which our next authority gives confirmation. Qazvini describes Deyr-e Kardashir as stands in the middle of a parched and deadly desert between Rey and Qom:

> "Were it not for this Deyr, there would be absolutely no facility (for crossing the desert). Ardashir son of Bābak built it."[13]

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11. Al resālat al-thānie, ed. U.Minorsky, Cairo 1955 p.19 (Arabic Text) and p. 51 (English translation).

12. Mo'jam al-Boldān, Leipzig, 1867 p. 690.

13. Āthār al-belad, Beirut, 1960, p. 371.

Minorsky suggested the name should be etymologised as Kard-Ardashir (Ardashir made it).[14] Thus it seems highly probable that the building was founded by Ardashir I.

The Sasanian origin of Deyr-e Gachin is also mentioned in the Tarikh-e Qom. It quotes a well known work of Sasanian origin, no longer extant:

" درکتاب سیرملوک عجم مسطور است که ملک روم قومی را از عمالقه ازبقایای قوم عاد پیش کسری انوشروان
فرستاد وایشان را جثه های بزرگ و قامت های بلند بود چنانچ بعضی مردم که ایشان راخلقی عظیم می باشد
تشبیه به قوم عاد می کنند و می گویند که مردم عادی اند. چون آن طایفه عمالقه پیش انوشروان آمدند
بر دست ایشان دیرجص را در راه قم بنا نهاد و گویند که این دیر پیشتر ازاین زمان به زمانی بعید بنا نهاده اند.
واللہ اعلم . "

"It is written in the book Siyar-e Moluk-e ʿAjam that the king of Rum sent the clan of the Amalekites, which are the remnants of the nation ʿĀd, to Kesrā Ano_shervān. They had big bodies and tall stature, so that some scholars, who form a large body of opinion, merely liken them to the people of ʿĀd, but say they are in fact ordinary human beings. When that clan of Amalekites came before Anoshervān, by means of their labour (he) built Deyr-e jess on the route to Qom. They also say that this Deyr was built earlier than the time mentioned at a very remote period. God is the most knowledgeable."[15]

It is noticeable that Tarikh-e Qom gives the name of Anoshervan as the patron of the caravan_serai. It also mentions other tales current at the time, to the effect that Deyr-e Gachin had been built

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14. Al resalat al-thaine, p.99.

15. Hasan ebn Mohammad-e Qomi, Tarikh-e Qom, Tehran, 1934 p. 26.

at an even earlier date. This fact tends to confirm our earlier text that the building may have been constructed before Anoshervan, but rebuilt or repaired during his time. The legend of construction by the mythical people of ʿĀd was, however, developed to explain the great scale of thestructure, the unusual size of its bricks and the desolate setting.

Deyr-e Gachin is even reflected in the Iranian legend. According to the anonymous Mojmal al tavarikh val qesas (c. 520 H. , 1126 A.D.):

> "In Deyr-e Gachin, between Rey and Isfahan Bahman was swallowed by a dragon and he gave his kingdom to his daughter Chehrāzād, who was known as Homāy."[16]

Despite the mythical character of the story, it may be worth mentioning a suggestion made by Dr. A. D. H. Bivar that the name Bahman could here allude to the post-Achaemenid wars of the Successors, when Eumenes, the former secretary of Alexander, fought a campaign north of Isfahan, and was killed probably in the neighbourhood of Dodehak. Although the death of Eumanes took place at some distance from our Deyr-e Gachin, it appears from the narrative of his campaign that he may have operated widely across the desert of central Iran, and his movements may have left traces in popular legends.

The ancient route from Rey to Qom remained in use and was carefully mentioned up to 19th century. Under the Seljuqs, when a programme for the building of caravanserais was in progress, Deyr-e Gachin was also repaired. According to Naser-al-din Monshi-ye Kermani (ف. 527 H. , 1133 A.D.):

> "Some of the famous land-properties of the vezir (Moin

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16. Mojmal al Tavārikh val qesas, Tehran, 1939, p.54 and p. 463.

al-din Mokhtaṣṣ al moluk Abu Naṣr Aḥmad-e Kāshi, vezir of Sultan Sanjar) are the caravan_serai of Qohrūd, Ahmadābād and Deyr-e Gachin. He repaired the road and Deyr-e Gachin, which is between Rey and Qom, with the stone and gypsum. The village of Kāj was a property of Abol-'abbas żabbi, Vezir Mo'in al din bought it from the hiers of Nezām al-molk and made it into an endowment for that (caravan_serai)."[17]

Thus we see that under the Seljuqs not only Deyr-e Gachin and the road between Qom and Rey were repaired, but also Kāj was re-inhabited and, as being the property of the vezirs, its income was applied to the maintenance of the caravan_serai.

From the time of the Safavids the road from Qom to Rey, took its name from the caravan_serai, being known as the route of Deyr (rāh-e Deyr). According to the Tārikh-e Jahān ārā this road was used by Shah Esmā'il in his battle trip from Fars to Firuzkuh and Māzandarān,[18] Qājār Documents show that both the route and the caravan_serai remained in good condition.[19] In 1305 H. (1887-88 A.D.) Mohammad Taqi Beg Arbāb describes the caravan_serai as a building "with the bricks each one 7 man in weight."

At the end of the 13th cent. H. (1785-1881 A.D.) the Qājār premier Mirzā Ebrāhim Amin Soltān constructed a new road to Qom, on the present-day alignment. According to M. Tabātabāi:

"Mirzā Ebrāhim owned several estates between Rey and Qom, such as Qal'eh Mohammad Ali Khan, 'Aliābād, Kushk-e Noṣrat, Manẓariye and some others. They were worth less

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17. Nasa'em alasḥar, Tehran, 1959, p.68.

18. Qāżi Ahmad Ghaffāri Qazvini: Tarikh-e Jahān ārā, Tehran, 1964, p.268.

19. M.Tabātabā'i: Rāhnamā-ye Joghrāfia-ye Tārikhi-ye Qom, Qom 1976, p.66.

> because they were far away from the main road. With government funds he built a new road from Tehran to Qom which passed through his properties. He also forbade travelling on the old route. However, because of the extra length and steep contours of the new road many caravans preferred the older. Mirza Ali Aṣghar Khān, the second Amin Soltān, ordered the diversion of the rivers Rudkhāne Shur (Qom) and Sāve to the desert of Howz-e Soltān in the direction of the old road. The desert was soon turned into a large lake, which still exists."[20]

Thus soon after the abandonment of the old road the caravan_serai was surprizingly forgotten. Its location and present condition seems to have remained unknown to modern scholarship.[21] In 1955 Minorsky turned his attention to the subject and studied the literary notices. He concluded: "at two fifths of the distance from Rey to Qom, the ruins of a caravan_serai are found by Stahl just south of, and between two hills; this is the probable site of Deyr-e Gachin."[22] It must be remembered that Minorsky's "Two hills" cannot be Siāh Kuh and Karkas Kuh since those are two ranges of the mountains flanking a valley nine farsakhs[23] in width.

In 1970 several other historical texts referring to the caravan-serai were published by H. Karimiān,[24] but the present existence of the site was unknown to this scholar. In 1976, a 19th century travel narrative, the 'Aliābād nāme, an account of the construction of the

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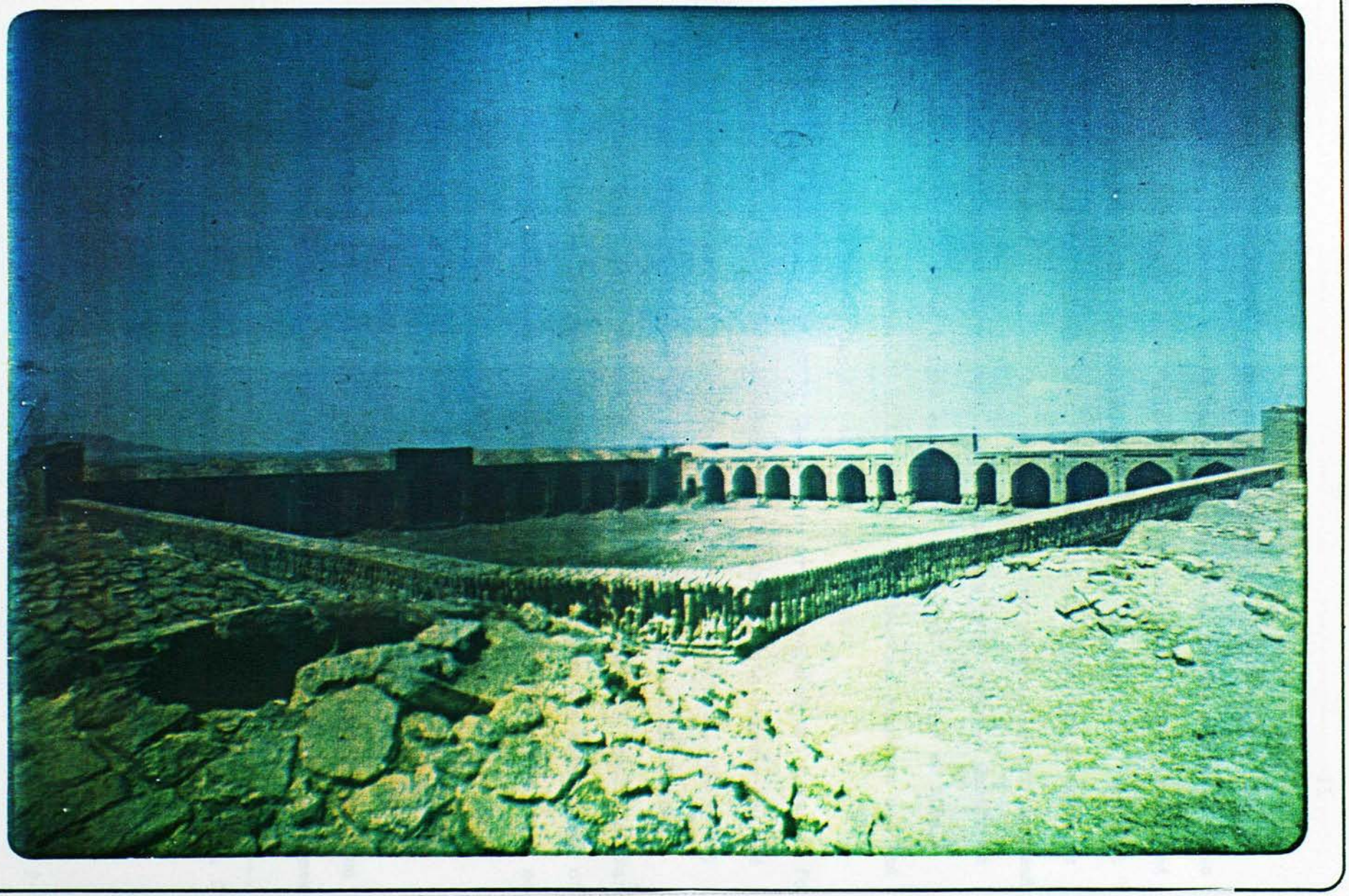
20. ibid. pp. 208-209.

21. Abu Dolaf ebn Mohalhel: Al-Resalat al-thanie, ed. V.Minorsky p.51,99.

22. ibid.p. 99 - Stahl: Petermanns Mitteilungen, Erganzungsheft, p.118,map 1.

23. Ebn Hugal: Al masalek val mamalek, Leiden, 1872, p. 190.

24. Rey-e Bāstān, Tehran, 1970, pp. 550-555.



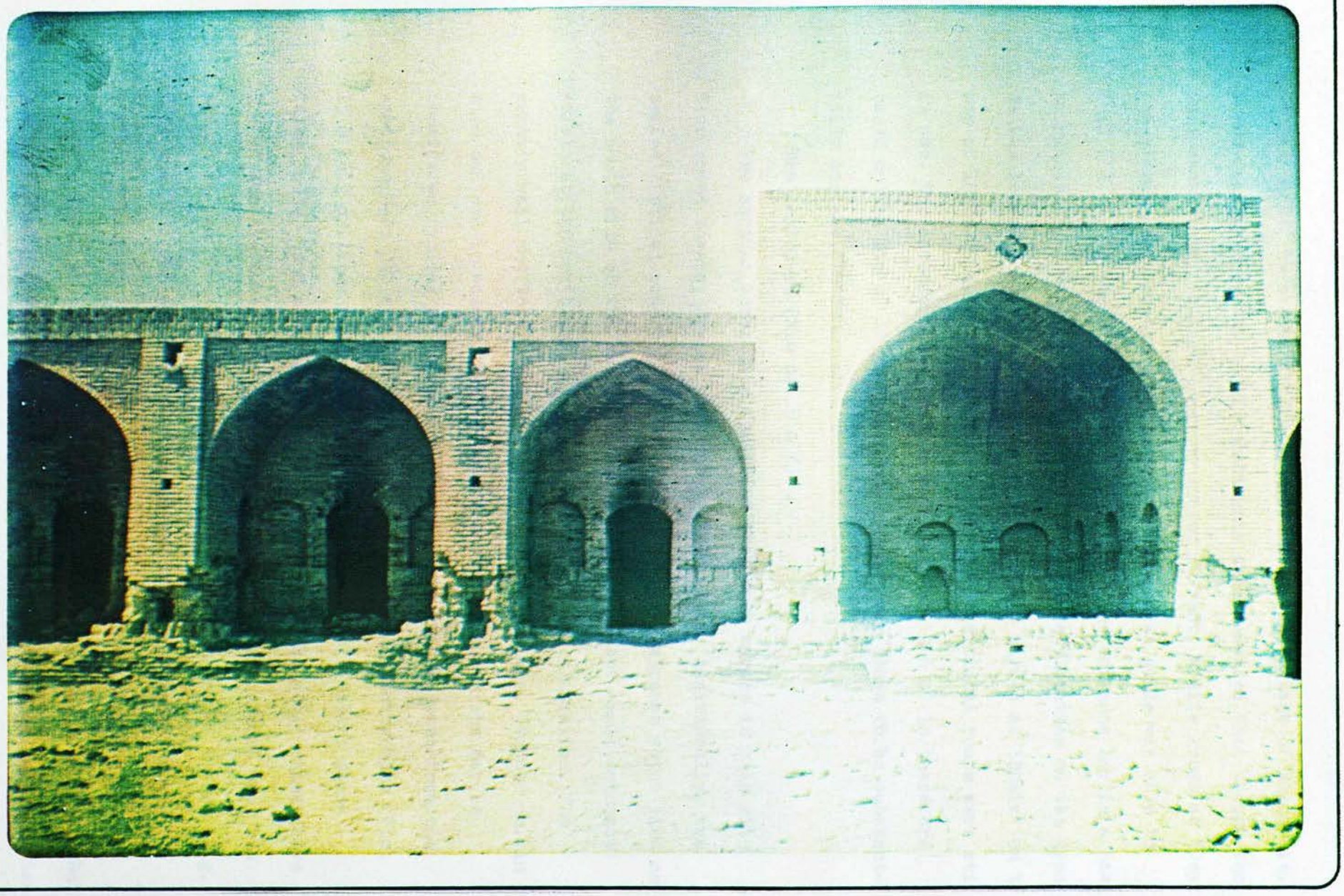
Colour plate 3 - Deyr-e Gachin . General view of the interior .

new road from Tehran to Qom was published by M. Tabātabāi.[25] It describes in detail an old caravan serai, built with stone and gypsum mortar near the village 'Aliābād. This building was partly demolished by Mohandes al-Mamālek to reuse its stones in a new caravan serai, built at the village for Amin Soltan.[26] Tabātabāi claims this caravanserai as Dyer-e Gachin,[27] but had not noticed the clear description of Mohammad Taqi Beg (quoted above) published in his own book: "Deyr-e Gachin is built with the fired bricks each 7 man in weight".[28] Thus we should conclude the caravanserai of Aliabad is not the one that concerns us, and that the true Deyr-e Gachin was built of bricks.

In the summer of 1977, the present writer carried out a search for the remains of the Deir-e Gachin. The Sasanian route between Rey and Qom is not immediately obvious from traces on the ground, but we may reasonably infer that it ran along the general line of the Tehran - Verāmin road, being perhaps marked by the architectural remains at Tape mil and Chal-e Tarkhan.[29] It must have passed round the eastern end of the line of hills marked on the 1897 map[30] as Kuh-e Kinargird (Fig. no. 3 and 4) a short distance south west of Verāmin town, and then turn south west across the desert that stretches toward Qom. The writer undertook to search an area of 30 miles square below Rey, Aliābād, Verāmin and the Tehran-Qom motorway currently under construction, and basing his inquiries on the main Tehran-Qom road. Following tracks east

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25. Rāhnamā-ye Joghrāphia-ye Tarikhi-e Qom, vol. 1, Aliabad name p. 207.
26. ibid., pp. 248-250.
27. ibid., pp. 209 - 210.
28. ibid., p. 66.
29. L. Vanden Berghe: Archaeologie de l'Iran Ancien, Leiden, 1959, p.122.
30. Map of Persia, compiled in the Silma Drawing Office, 1897- Dehra-Dun, Survey of India, Sc. 1:1.013 760.

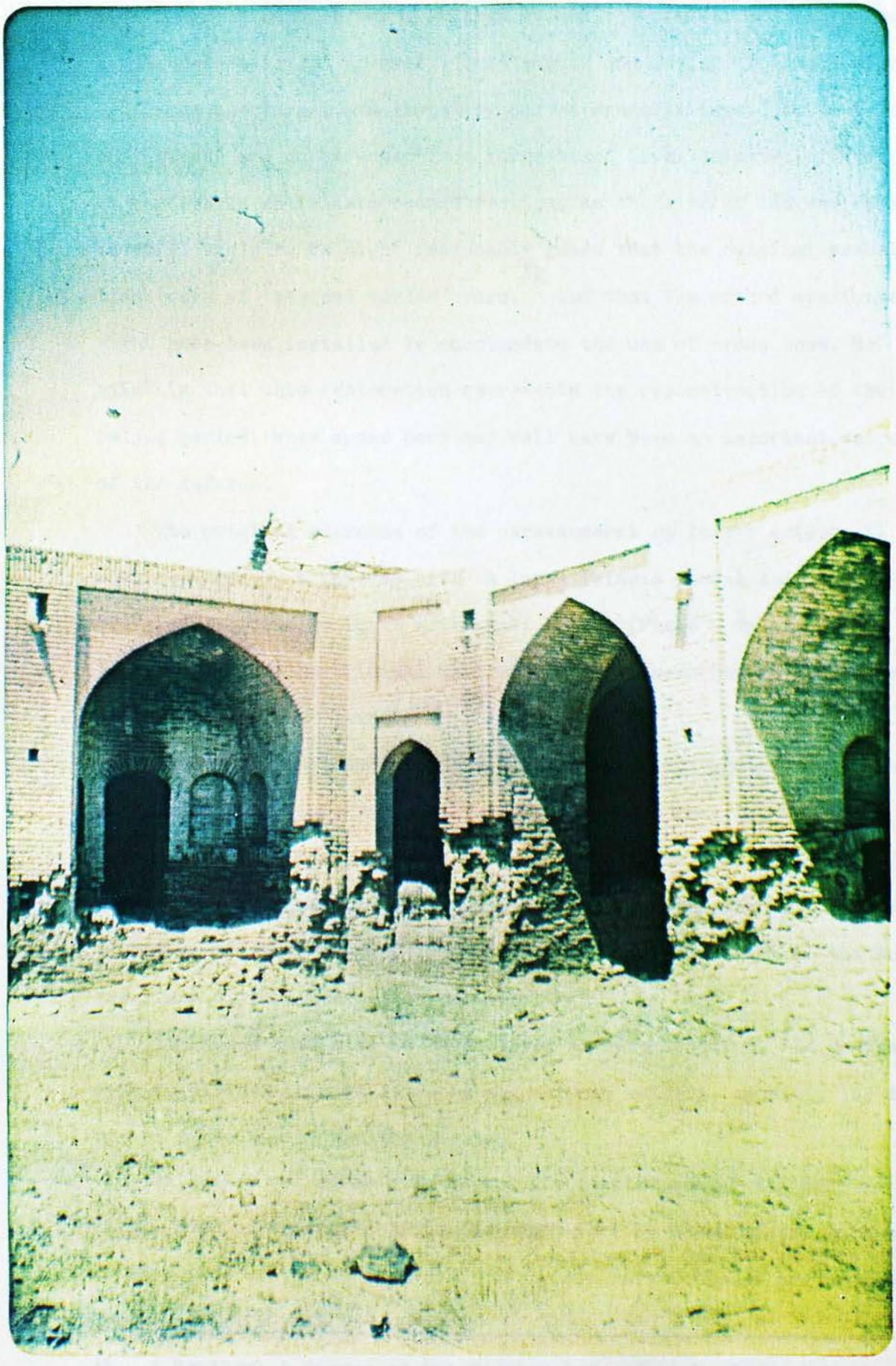


Colour plate 4- Deyr-e Gachin. Western ivan and two of the main rooms .

of Hasanābād, he eventually found his way to the village of Bolqeytas, where inquiry from the local inhabitants soon revealed that though the full name of Deyr-e Gachin was no longer current, a site known as 'Deyr' was widely known to the older generation. A local guide was able to lead his car to the site, no easy task since the entrance lay in a basin surrounded by low hills. Since undertaking the exploration on the ground, he has learnt that the caravanserai is actually marked as 'Dhair' on the map of 1897, (Fig. no. 3) a period when the traditional route were still in use. The accompanying location map (Fig. no. 2 & 4) is therefore based on the map of 1897, which local experience shows to be substantially correct.

The enclosure (Fig no. 5 & 6).

The caravan serai is a fortified enclosure square in plan with four round towers, one at each corner (Pls. 1-6). Additionally, two semi-elliptical towers (29 & 26) flank the main entrance which lies on the south side of the enclosure (Pls. 2-3). A second small entrance exists at the north (Pl. 4 ) but it may be a later alteration. The curtain wall and towers are all built of fired bricks, 36x36x8 cm. in size and red in colour, set in gypsum mortar. Such bricks may be considered typical of the Sasanian period. As will be seen from the sections B-B, C-C and E-E (Fig. 11, 12 and 14) and photographs (Pls. 15 & 16), ceilings presenting the appearance of elliptical domes - -false domes - and closely resembling Sasanian work, still stand above all of the six towers. Squinches of parabolic form are used over the square in the corners of the chambers within the entrance towers (Fig. 6-2a and 2b). The walls of the towers and the lower parts of the curtain wall are over 3 metres thick. Such substantial thickness and strength would enable the walls to resist military assault with all but the most highly developed siege engines. These massive walls still stand,



Colour plate 5- Deyr-e Gachin . North-western corner .

with their original bricks, as high as the roof level. Above the roof level there exist,at present, battlements consisting of a wall pierced by large apertures, and lapped by curved crenellations. Although these battlements are constructed from large-sized (i.e. Sasanian)bricks, it is manifestly an Islamic reconstruction, as the line of the new work is still visible. We might reasonably guess that the original crenellations were of 'stepped merlon' form,[31] and that the arched apertures might have been installed to accommodate the use of cross bows. We maintain that this restoration represents the reconstruction of the Seljuq period, when cross bows may well have been an important weapon of the defence.

The original entrance of the caravanserai no longer exists. It has been replaced by a gateway with a large Islamic portal and two double storeyed side inches built with small bricks (Fig.6 - No. 1, Pls. 2 and 3), yet part of the original well can be still seen behind the niches at the ground floor level.

Inside the enclosure is formed a very spacious central court-yard surrounded with four ivans and forty rooms. Each room has a private verandah in the front. In each of these residential units two open fire places are provided, one inside the room and another one in the verandah. As no chimneys are constructed for the fire places all of the rooms are black with a layer of carbon-deposit.

The ivans seem also to have served as accommodation. The northern ivan is divided into three rooms and a front gallery, possibly for the use of officials or wealthy guests.

Galleries served as stables and are located behind the residential units. Each of them opens into the court-yard by means of two entrances in each side of the caravanserai. Sixty six raised niches are provided

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31. A.Reuther: A Survey of the Persian Art, ed. A.U. Pope, Oxford, 1964 - 65, vol. 2, pp. 522-23.



Colour plate 6- Deyr-e Gachin . Sasanian dome of the western Entrance-tower.



lour plate 7- Deyr-e Gachin . Sasanian squinch of the western Entrance-tower.

inside the stables as rooms. They vary in size to accommodate from a single person to a group of guests. In each of the niches are provided open fire places, similar to those in the main rooms and ivans. Small apertures in the roofs of the galleries help the lighting and ventilation of the stables.

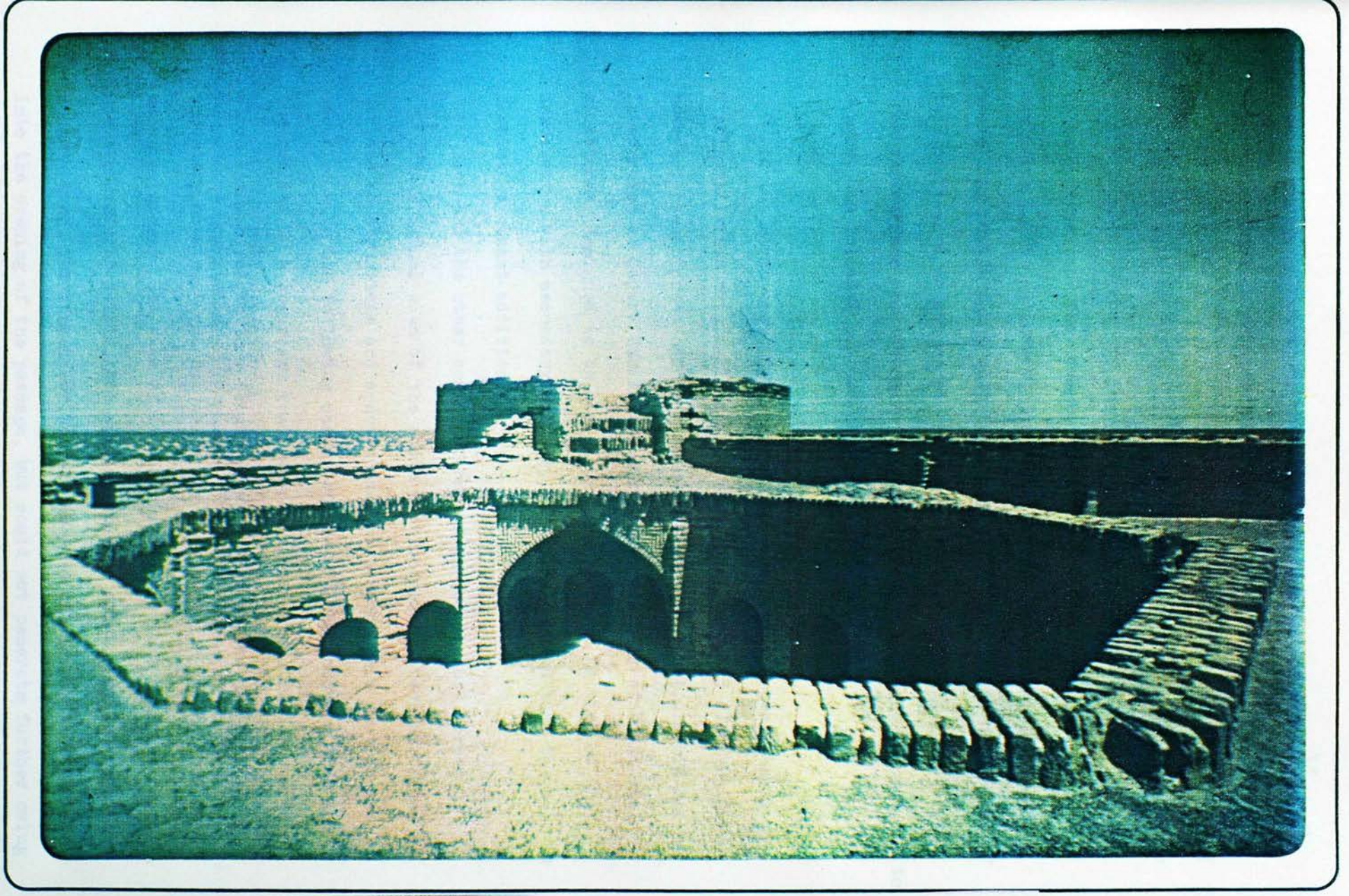
The Mosque.

At each corner of the enclosure is a section with a special function. That at the south eastern corner (no. 4 in Fig. 6) is a square hall, about 15.50 X 15.00 m., with four interior piers. A mihrab provided on its southern wall indicates that it was used as a mosque in its final stage. The similarity between the plan of this section and that typical of a fire temple raises the possibility that the section was originally designed for that purpose. Examination of the piers shows (Fig. 13) that the foundation to over one metre above the present floor is built with large bricks, set in gypsum and clay mortar. Above this level up to the imposts of the arches the structure is again built with the same bricks but with a different, having more gypsum than the previous one. We conclude that this phase represents a reconstruction perhaps of Seljuq date, using Sasanian materials (Pls. 17 and 18). However, the arches and the vaults are all built with the Islamic bricks, 25 X 25 X 5 cm. size and white in colour. This phase represents a later restoration which, as it will be explained, should be of Safavid period.

In the original structure,it is reasonable to suppose that,the four piers would have supported a dome above the sanctuary, and the space around the piers was used for sircumambulation.

Private Section.

The north eastern corner of the enclosure is occupied by a private section (No. 5 in Fig. 6 - Colour Pl. No. 8). It is built on the four



Colour plate 8- Deyr-e Gachin.Royal court yard .

ivan plan around an octagonal court-yard. Four niches at the sides between the ivans are also semi octagonal in plan. Since the octagonal plan is not used in the Sasanian architecture, but is a characteristic of the Islamic period, we may consider this private court-yard as an Islamic structure. The area in question was obviously the most exclusive in the enclosure, and would have provided accommodation for travelling royality and high officials. So far as the Sasanid phase of this court-yard is concerned, later restoration makes it impractical from the surface inspection to determine the original ground plan, or to suggest the intended purpose of the section.

The Mill.

At the north west corner of the caravanserai the two lateral stable galleries originally met by the corner tower (3 d). They have, however, been blocked off by a secondary partition wall, which may be interpreted as Qajar. Beside the partition is a pair of horizontal millstones; designed to be worked by animal-power. In view of the association with secondary walling, it may be assumed that the mill is a relative recent addition.

Bath and the other constructions of the south west corner.

The original plan of the south west corner has been disturbed by various constructions and conversions. At present this section is occupied with the following constructions. On the southern side are the remains of a staircase leading to the roof-area. Also a corridor which leads straight to a flight of ascending steps, now blocked by secondary construction, but which may once have led to the roof or to an upper storey. The side of the corridor opens into a narrow passage, now blocked with debris, but appears to have originally led into the corner tower. The present writer was able to crawl from the corridor into the opening of the passage, but could not penerate further owing

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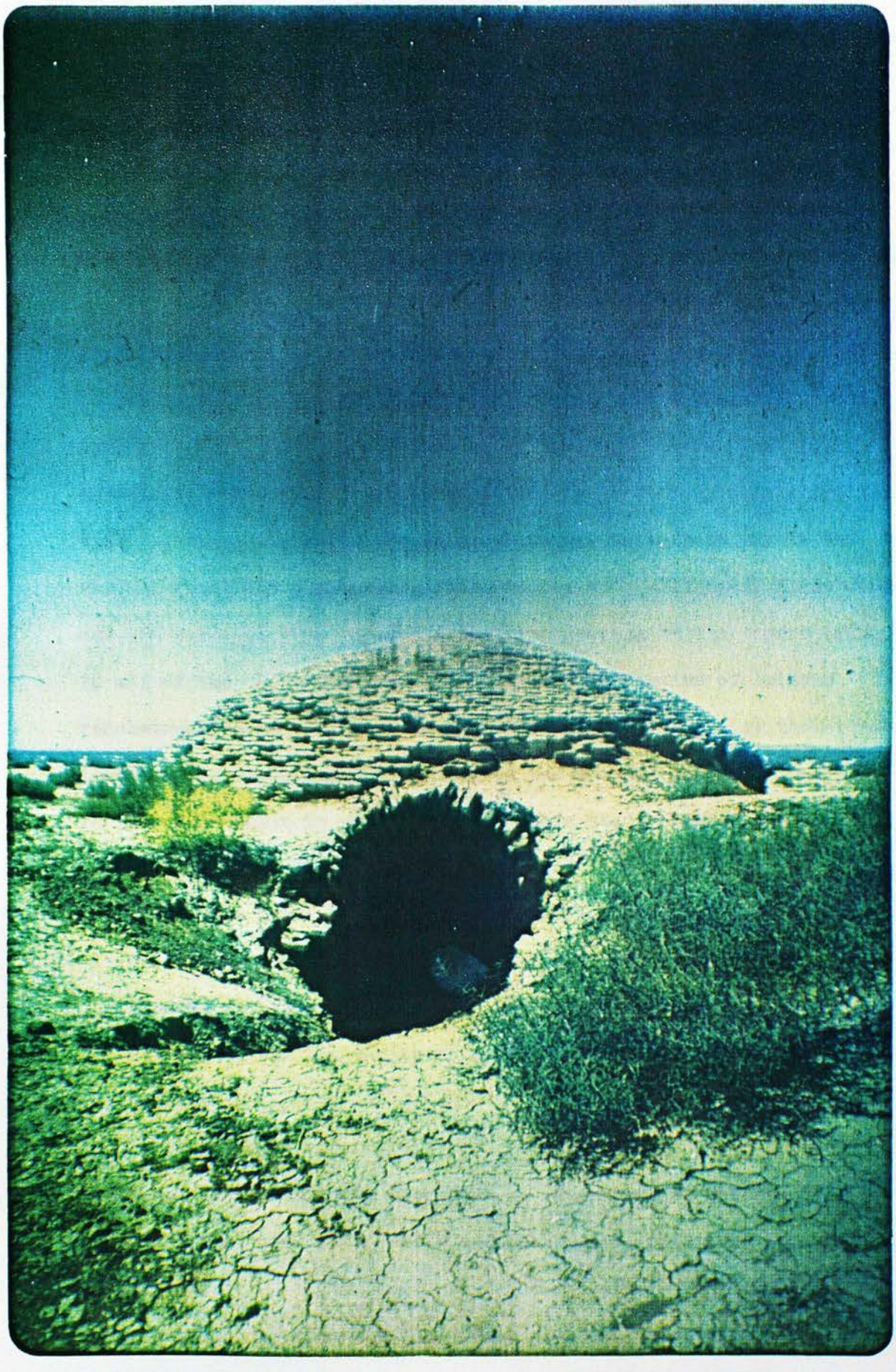
to lack of space. The corridor in turn once opened from a room which now shows signs of refurbishing in the late Islamic period. It occupies the interior angle of the perimeter wall, but its interior partition is a later work and the original function is no longer clear.

To the east of the above features is a bath which consists of a Frigidarium and a Caledarium and two vaulted water tanks (6a and 6b in Fig. no. 6). Both of the rooms are octagonal in plan and roofed with pendentive domes (Pls. 25 and 26). The bath is entirely built with Sasanian bricks, but its octagonal chambers and developed four-centred arches are both indication of an Islamic origin. On the other hand, pendentives domes were seldom used in early Islamic times, and later, were totally discarded in Iran. Only during the time of the Qajars did this technique come back into fashion. Thus it seems that the present bath-house must have been built during the 19th century.

At the north west of this section is a private court-yard which is entered from the western stable. This court-yard gives no access to the bath, but provides it light by means of a small, high window.

Water Supply.

As we have seen, Estakhri and Mogadasi record a well inside the enclosure and round reservoirs outside. At present, no traces of the well can be seen, but two of the reservoirs, still exist, and stand to the west side of the enclosure (Fig. no. 5). They are covered with a flat dome, pointed in profile, and built with Sasanian bricks, but their roof cannot be an original construction as the form of such dome represent a late Islamic technique. Thus it must have been reconstructed during the Islamic times. One of the reservoir is remarkably in good condition and still full of water (Pl. 27 Colour Pl. 9). During the work on the spot, the present writer witnessed that the local caravans pass by the site, take a rest near the reservoir and use its water.



Colour plate 9- Deyr-e Gachin.Reservoir .

Conclusion and Dating.

The Sasanian origin of Deyr-e Gachin is mentioned in several historical texts. The building, described here, its location and its large bricks all correnspond to the descriptions of Deyr-e Gachin in the literary sources. The towers and the curtain wall of the structure are all built with bricks which may be Sasanian. There are none the less extensive signs of later reconstruction, and the major problem is to determine how much of the plan is original and how much is rebuilt during the various Islamic periods, by means of reusing the older materials. The actual Sasanian structure is to be seen only where the original walls and roofs are still standing, that is to say in the curtain wall, the six towers, still roofed with elliptical false domes and the passages with parabolic vaulting leading to the towers (Fig. 10). In all of the other parts of the building the remains of Islamic reconstruction can be seen. We have observed above (p. 14) that three levels of construction are visible in the present mosque:

1- The foundation to over one metre above the present floor built with Sasanian bricks set in gypsum and clay mortar.
2- Above this level to the impost of the arches the building is again built with the same bricks but with different mortar having more gypsum.
3- The arches and the vaults which are all built with the Islamic bricks.

This state of affairs can also be seen in many other parts of the building. To this extent, therefore, a large part of the ground plan, including the thick outer walls and the towers, preserves the Sasanian design.

On the other hand the four-ivan plan and the niches inside the stables are known in caravanserais only since Seljuq period. According

to the account of al-Mogaddasi, noticed above, the caravanserai had been affected by cracking and would, therefore, have been in need of repair. Abu Dulaf ebn Mohalhel (p.6) is perhaps guilty of some exaggeration if he claims that the Arabs had left no traces of the Sasanians (lā athar fihā lel-'Ajam)[32] though it may be true that many other buildings of that period had been demolished, and there may have been a heavy damage at the Deyr, particularly to upper levels no longer preserved. We may none the less accept his report that the caravanserai was in a dilapidated and ruinous state in his days, and as we have seen from Monshi-ye Kermāni, it had to be restored in the time of Seljuq Sultan Sanjar. So it seems that the present four-ivan layout with its Islamic characteristics must have been imposed on the older plan during that restoration, for which purpose Sasanian material from demolished structures would have been re-used, as we have indeed observed.

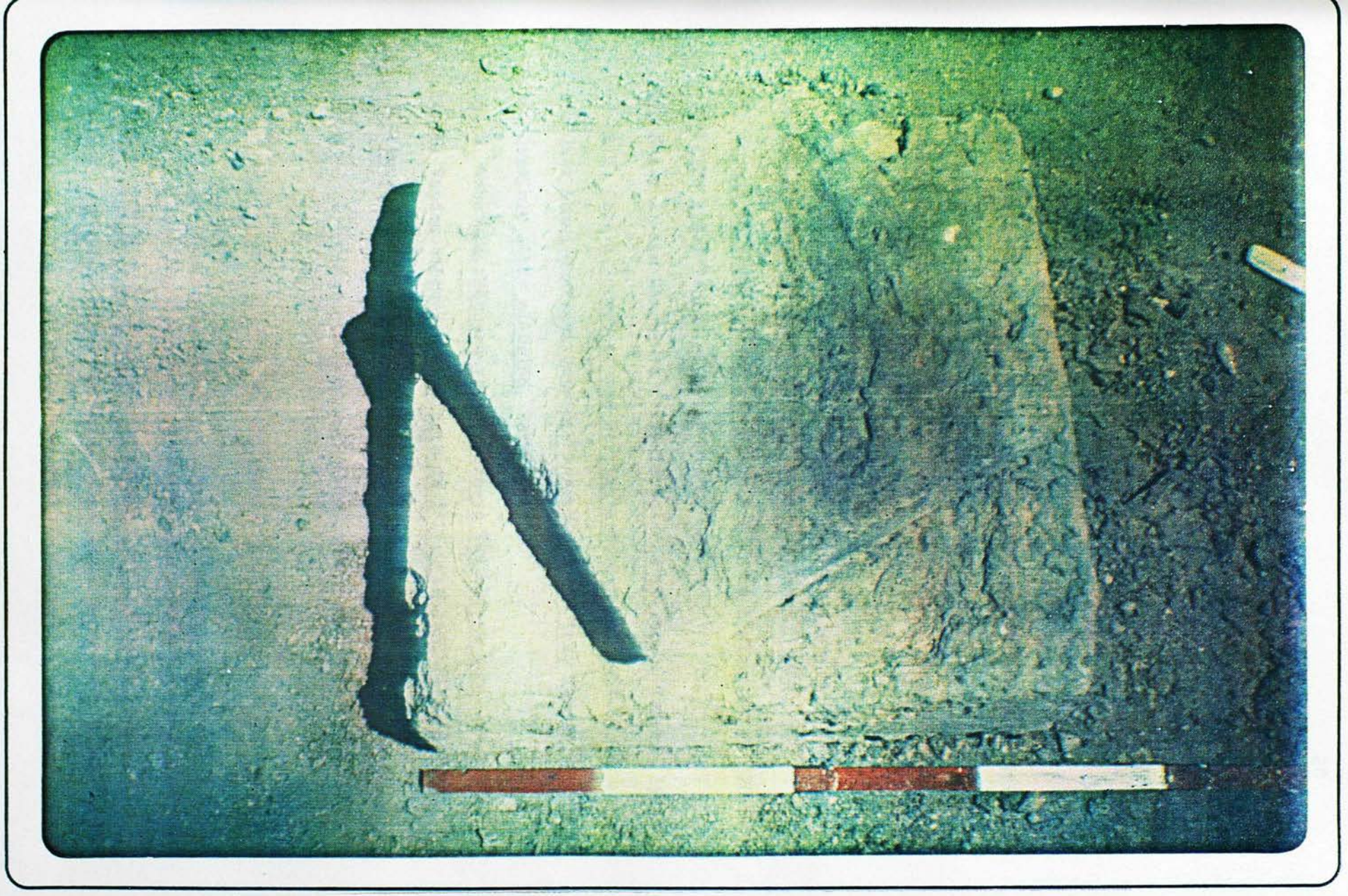
The dating of the reconstruction of the roofs with new Islamic bricks needs more attention. The main rooms are roofed with "squinch-vaults (Pl. 23) which are of a more developed type than those typical of the Seljuqs and are, rather, characteristic of Safavid architecture. In the court-yard also the simple zig-zag brick patterns in the spandrels of the arches are similar to those used in Safavid caravanserais between Tehran to Isfahan. It is therefore, likely that during the Safavid period, in the large programme of caravanserai-building the Seljuq roof of Deyr-e Gachin also had to be replaced with a new roof, naturally in the contemporary style. The present entrance, too, is built with the smaller Islamic bricks, and must have been built at the time of the reconstruction of the roof.

The renovation of the roof has left a large quantity of old material. Some of it was later used to build the partition walls inside the stables, not all of which were actually finished. Many more bricks,

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32. Al resalat al thaine, Cairo, 1955 (Arabic text) p. 19.

however, have been utilized for a building, now ruined, a hundred metres to the north of the enclosure. With this, however, we are not at present concerned. In addition several hundred bricks are still there to be seen scattered over the area. The bath, to the south west of the enclosure must have also been built with these bricks. The date of this section shown, as we have seen, by the pendentive dome and other details is as late as the 19th century. Such dating is evidence of construction at this famous desert caravanserai, where activity covered over one and a half millennium. The bath must have represented the latest building on the site having been executed, as it seems, just before the abandonment of the caravanserai.



Colour plate 10-Deyr-e Gachin.Sasanian and Islamic bricks.

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2. MASJED-E BIRUN OF ABARQUH.



Colour plate 11-Abarquh, Masjed-e Birun . Northern view .

THE MASJED-E BIRUN OF ABARQUH.

Abarquh stands between two ranges of the mountains of Central Iran, 48 kms. from Surmaq on the Isfahan Shiraz Road (Fig 17). Its name has been mentioned in the Hodūd al Ālam, Mo'jam al boldān and Nezhat-al qolub.[1] Still the existence of a mosque in the town seems to have been recorded first by Ebn al Balkhi:

> "Abarquya is a small town, with a broad district round it, having a temperate climate, somewhat cooler than that of Yazd.... The town is populous and there is a mosque for the Friday prayers."[2]

However, Ebn al Balkhi has been actually referring to the famous Jame' of Abarquh and not to the masjed-e birun. There is no historical record of this mosque except one belonging to the 19th century. In 1256 H. (1840 - 41 A.D.), a surveyor of Mohammed Shāh describes both the fortification and location of Masjed-e Birun:[3]

> "... Truly its circumwallation is excellent, and its fortification/city wall is on stone (rū-ye yek pārche sang). The stature of its towers is like Afrasiab- the brazen-bodied-and the aspect of the walls resembles Isfandiar - the destroyer of courage. In some places its fosse cut from the living rock. Between the north and west of the town stands the citadel (arg),

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1. Hodūd al 'Alam, Tehran, 1962, p. 124 and London, 1937, p. 23.
2. Fārsnāme, London, 1921, p. 23.
3. Siāhatnāme-ye Jonube-e Iran, Majles e Shurā-ye Melli Library No. 701. The original manuscript is not published. An abstract from it, about Abarquh, is first published in "Dānesh", 1949, pp. 232-234 later in S.M.T. Mostafavi: Eqlim-e Pars, Tehran, 1964, pp. 329-340.

> separate from the inhabited portion, and to one side. Its length is 250 paces and its width 150 paces. The actual foundation/site of the citadel is entirely of rock, very strong and heavy (by nature). Its perimeter wall is built of stone and fired bricks on a foundation of rock, 4 Zar[4] in thickness, with embrasure (mazghal hā) for archers, but without positions for canon... Outside of the town wall there are many ruins and graveyards. Amongest these ruins there is a mosque of which the construction is excellent (nīk), and worthy (khūb) and acceptable to the heart. From these remains it can be understood that in ancient days its prosperity was greater and its population numerous (ābādi-ash besyār va jam'iyat-ash bi shomār)."

Part of this surrounding wall is still standing to the south-east of Abarquh near the site of Masjed-e Birun. "Birūn" literally means "outside" and refers to its location beyond the town wall.

PREVIOUS SURVEYS OF ABARQUH.

The principal structures of Abarquh were surveyed by A.Godard in 1936. He described the following seven monuments here listed in a chronological order:[5]

1- Gonbad-e 'Ali, 448 H. (1056-7 A.D.) 2- tomb of Pir Hamze Sabz Push

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4. Zar' in Iran during Qajars (19th century A.D.) has been measured equal to 81.63 cms.. W. Hinz: Islamische Masse und Gewichte, Leiden, 1955, p. 64.

5. "Abarkuh", Athar-e-Iran, 1936, pp. 46 - 72.

8th cent. H. (14th cent. A.D.); 3- Tomb of Hasan ebn Keykhosrow 718 H. (1318-9 A.D.); 4- Gonbad-e Seyyedun (the same epoch); 5- Gonbad-e Seyyedun-e Gol-e Sorkh (the same epoch); 6- the portal of Nezāmiye mosque (the same epoch) 7- the present main structure of Masjed-e Jame' (818 H. or 1415-16 A.D.). It may be noted that at the time of the present writer's visit, No. 3 no longer existed. It is said to have been demolished after having become unstable and consequently unsafe. No. 7 has been extensively restored and only a small part of its original structure could be seen. Its marble mihrāb has been removed to Tehran (Reg. No. 3661). There is also, at Tehran, another mihrāb (Reg. No. 3311) said to be from this Jame'.

Later studies are mostly based on the account of Godard.[6] Subsequently, I. Afshār made a separate visit to the site and listed some additional structures of minor importance on, and around, the town.[7] He visited Masjed-e Birūn and recorded its only inscription above the entrance which will soon be explained.

SITE OF MASJED-E BIRŪN.

From the south western hills down to the plain and the present city walls, there are many ruins indicating that the old site of the town must have been in this vicinity, where "on the mountain" would have a real meaning. Masjed-e Birun stands on this site between a few deserted and semi-ruined structures, not far from the remains of the town wall at the south west of Abarqūh (Fig. 16). The structure is deserted but is in good condition. The presence of an electric light on the dome and a simple kelim, rolled up and left in the sanctuary,

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6. D. Wilber: The architecture of Islamic Iran: The Ilkhanid Period, Princeton, 1955 p.

7. Yade gārhā-ye Yazd, Tehran, 1969, p. 324.



Colour plate 12_Abarquh, Masjed-e Birun . Western view .

show that the structure was abandoned not so long ago. The present structure has no remains of any reservoir, well or other water supply.

DISTRIBUTION OF SPACES.

The plan of the Masjed-e Birun, in its present state, is that of two ivans with a central court-yard (Fig. 17). The western ivan (2) opens into a domed sanctuary (1), square on the inside and semi-circular on the outside. The walls in some places are more than 1.70 m. thick. The eastern ivan (3) is small and its axis does not exactly conform to one of the structures (Fig. 31). The only entrance to the mosque, at present, is, 4, on the north side. It opens through the chamber 5 into the western ivan. In addition, there are two other passages, 10 and 6, from the east into the court-yard; and from the west, through a corridor, 7, to the sanctuary. The remains of the single minaret of the mosque, 9, also open into the latter. The major part has collapsed, the remains being utilised as a staircase to the roof (Pl. 43). On both the north and south sides of the court-yard, there are covered arcades, each with two arches. A part of the vault of the south arcade is missing, and a new arch, built in place of the previous one, was once connected to a chamber that no longer exists. Its doorway in the wall is simply bricked up (Pl. 38).

The eastern ivan, (Pls. 35 and 36), open from three sides, is connected with two small chambers to the north. The southern and eastern sides of the ivan open outwards without any structure around. They are partly bricked up in an attempt to keep the mosque a closed environment. The southern opening was once definitely a passing way to some sort of structure. This is proved by the remains of a vault outside the south-eastern corner of the mosque wall (Pl.34).

On the south side of the western ivan there are also two chambers 12 and 13. The later has been connected to a, now destroyed, southern

construction possibly of a later period.

Outside the main structure, to the west of the entrance, stands a complex of three chambers 20 and 21 (Pls. 29 & 31) possibly attributable to later periods as the joints between the walls of these chambers and the main structure can be seen clearly, especially the connecting place with the minaret (Pl.43). These chambers seem to have had different functions and were probably constructed at different times, since they differ from the mosque both in details and in orientation. On the other side of the entrance three other chambers, 17, 18 and 19 are attached to the mosque. Chamber 19 has a doorway joining directly to the interior of the main building. The other two are inter-connected and have only one doorway to the exterior of the mosque.

ORIENTATION.

One of the basic factors of any religious Islamic structure is its orientation in the direction of Mecca that is known as qeble. The first Muslems of Iran were unable to calculate their qeble exactly, and directed their mosques approximately to the west. According to Sonni tradition, such early mosques, used by the Sahābe, were to be used without change. Thus the existence of an approximate qeble is an indication of an early mosque. Since 10th century A.D., muslim mathematicians have calculated various methods of determining this direction.[8] Al-Battāni[9] (929 A.D.) and Ebn Yunes[10] (1009 A.D.) used a simple method which is practically accurate for the towns of central Iran. An exact mathematical method based on spherical trigonometry was suggested by Hosein ebn al Haitham (1039 A.D.) which is very similar to

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8. Encyclopaedia of Islam, Leiden, 1927, Vol. 2, pp. 985 - 989.

9. Ibid., p. 987.

10. ibid., p. 987.

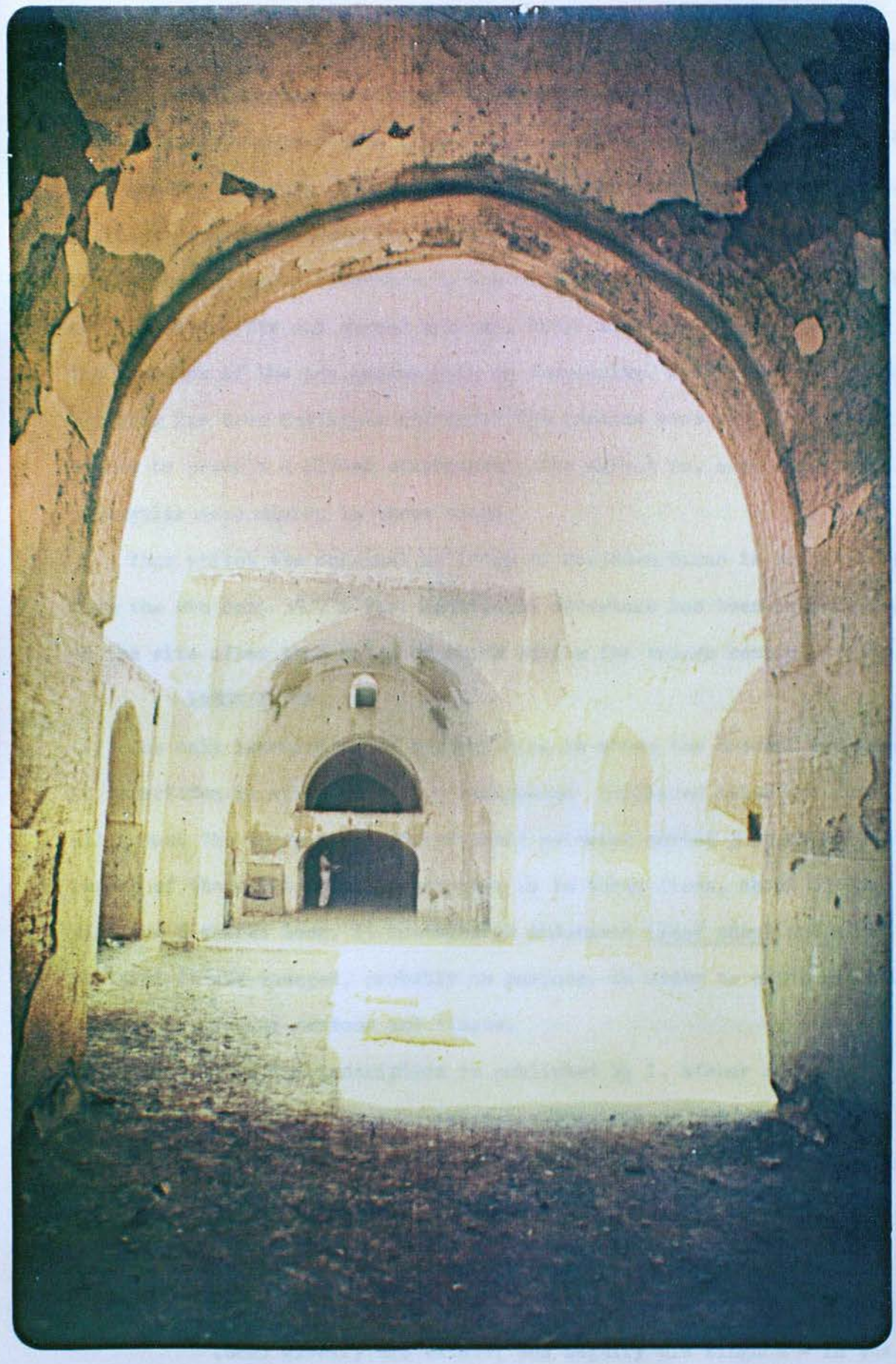
the method of Al-Birūni[11] given in Qānun-e Mas'udi. However, Al-Biruni (1048 A.D.) has collected[12] various methods of calculation which were used upto his period.

In actual practice, the accurate calculations of the qeble begin to appear in the towns of Iran in various periods. From the old structures of Abarquh it appears that this direction was unknown in this town until, atleast, upto the early 8th century H. The bearing of the correct direction of Mecca, based on both the practical methods of Al-Battāni - Ebn Yunes and the spherical geometry one of al-Haithām, is about 234 degrees from the north[13] (Fig.19). The qeble of Gonbad-e 'Ali (Fig.21) constructed in 448 H.[14] (1056-7 A.D.) has a bearing of 258 degrees. Three hundred years later, in about 718 H. (1318-9 A.D.),[15] the tomb of Hasan ebn Key Khorsow was built in the same direction of about 251 degrees. Masjed e Birun has an orientation of 252.5° from the north, which is somewhere between the orientation of the other two structures (Fig. 20). At present the qeble of Masjed-e Birun is corrected by the use of a triangle set in the floor of the mihrab (Pl. 42). In Gonbad-e 'Ali a new mihrab directs the corrected qeble. A drawing of Godard from the, now demolished, tomb of Hasan ebn Key Khorsow shows that by an addition to the exterior of the southern wall, the direction of Mecca has also been corrected in that building.

Therefore, in Abarquh any structure oriented in the direction of Mecca should, therefore, be later than the date of the tomb of Hasan

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11. Al Qānun al Mas'udi, Heyderabad, 1955, p. 526.
12. Taḥdid nehāyaṯ al amākin, Beirut, 1967, pp. 241 - 264.
13. On the base of Abargūh longitude, 53° 18' E and latitude 31° 09' N. The Times Atlas, London 1959, Vol. 2, p. 1. Also see Farhang-e Joghrāfiā-ye Iran, Tehran, 1953, Vol. 10, p. 2.
14. A. Godard, "Abarkūh", Āthāre Iran, 1936, p. 49.
15. ibid. p. 63.



Colour plate 13-Abarquh, Masjed-e Birun . View from the eastern ivan to the west .

ebn Key Khosrow, i.e. 718 H. (1318-19 A.D.). At Masjed-e Birūn the traces of a large additional structure, having this new orientation, are visible. The two small chambers (No. 12 and 13 in plan) to the north of the eastern ivan are the remnants of such an addition. The joint, arches and angles in these rooms illustrate the complications that the builders faced when they wished to add a structure to the old building but determined in the new direction. The old arches are cut, their loads being diverted into the haunches of the new arches with no regularity. Most of this additional building has been destroyed and later the remains were walled with mud bricks to provide a closed environment. The effect is, now, some small triangular deep niches in these rooms.

Thus whilst the original building of Masjed-e Birun is built earlier than the 8th cent. H., a vast additional structure has been constructed on the site after this date, of which only a few traces remain.

INSCRIPTION.

The only inscription of the building is above the present entrance. It is written in white,over blue background on glazed tiles and runs all around the three walls of the small exterior portal just under the impost of the vault. The inscription is in three lines, about 65 cms. high and 5 metres long. It contains an endowment (Vaqf nāme) and many parts of it are damaged, probably on purpose, in order to eradicate the name of particular persons and places.

The text of the inscription is published by I. Afshar and the following translation is given after his reading:

> "God! He is that grants success and is the Defender ! O Lord, accept (this)from us ! Thou art the All-Hearing and the Omniscent !
>
> When His Sublime highness (hażrat-e samadiyat) - may (God) glorify his estate, and magnify his kingdom - in the epoch of the Refuge of the Caliphate (khelāfat-panāh), the

Suzerain of Islam (Pādeshāh-e Eslām), the Greatest and Wisest of the Sultans of the times - may the glory of his Sultanate (?) never cease - [---- 60 cms. ---- May][16] Allah [prosper] his patronage, who has ordained that the prosperity of the monuments ('emārāt ?) of religion at every time, and in every place, be associated with renovation (towfiq-e 'emārat-e kheyr ... tajdid-rafiq farmūd), at the time of his transit through Abarqūh has established the custom [---- 50 cms. ----] with --- he has endowed the door of the mosque that was the halting-place of the Immaculate Emām 'Ali ebn Musā al Rezā, on whom be peace, (and) has built a minaret, which is one of the indications of Islam; and in front of the shrine of the Ṭāwusiye an upper Mosque; and a residence for the Supervisor of Religion (khāne-ye ra'is al-dini); then on top of the Sang-e Namā, which (is) Ab'azā (?)[17] a mosque; and a Dar al-Hadith and a hostel college (?) for the seyyeds and shorafā' [---- 60 cms. ----] these two shops attached to the mosque afore-mentioned, and the half-share of a bath in the Bolqadriye bāzār; and the half-share of a bath in the Bāsib bāzār, in the middle of the town; and the half-share of a ---[18] and the half-share of the 'Ashrafi' orchards which have been planted by the founder of this endowment, bounded

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16. This broken section covers a change of subject from the designation of ruler in whose time the endowment was established, to that of the benefactor of the endowment, known to us only as hażrat-e ṣamadiyat
17. We have no means of confirming the exact reading of this unfamiliar word, perhaps an old local name for the feature known as Sang-e Namā
18. The asset designated begins with the Persian letters mash...

by the farm afore-mentioned[19]; and the half-share of the garden of Mo'inābād, between the 'fourfold' water-mill (ṭaḥūne-ye chahārgāne) and the "Neẓami" water-mill,[20] and Fotuḥābād; and the quarter-share of the spring and the farm of Chāhak in Farāghad. All the properties of the afore-mentioned endowment are delivered as the endowment of the revered shrine inscribed above --- (60 cms.) --- if there should be persons... whosoever should effect any change or alteration (in the provisions), or install persons other than those of religious probity in this meritorious shrine, may Allah ...."[21]

Unhappily, for our purposes the name of the ruler has been destroyed in the inscription, as also has that of the benefactor. Nor does any fragment of the date survive. Indications of its period have therefore, to be derived from its forms of script, an overlapping naskh, and from what survives of the protocol of titles ascribed to the ruler.

Overlapping naskh was the fashionable style of inscription under Timurids in the 9th century H. (15th century A.D.). Such style of calligraphy can be seen in the inscriptions on the friezes of the mosque of Gowharshad[22] built in 821 H. (1418 A.D.), and the minaret of Mosallā in Herat[23] built between 820 and 841 H. (1417-37 A.D.). In both of these

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19. The 'Ashrafi' orchards could perhaps designate orchards named by a notable bearing a title such as Ashraf-al-din etc., or might merely designate orchards of royal foundation.

20. The 'Nezâmi' water-mill might be one founded by a personage named Nezam al-din, or bearing a title of similar form; or it may be used in the common sense of 'military'.

21. Yādegārhā-ye Yazd, Tehran, 1969, Vol. 1, p. 357.

22. A.U. Pope: A Survey of Persian Art, Oxford, 1964-65, Vol.8, p. 430.

23. ibid., p. 426, pl. b.

cases the script is in white over a blue background and on glazed tiles, which is similar to the characteristic of the inscription in Masjed-e Birun.

The protocol of the ruler's title of the Abarquh inscription: "khalāfat panāh, pādeshāh-e Eslam, a'ẓam va a'lam salātin-e ayyam, lāzāl jalal, soltan ...", may also be compared with those of the Timurids.[24] The words such as "khalafat panah," and "padeshāh-e Eslam"[25] often[26] appear in titles of the rulers of that period. However, more important than the words is the method of composition and the rime of the script which may well resemble those of early 15th century. A good example of such titles is the one used for Soltan Bahādor Khan: "Ḥażrat-e khalāfat dastgāh, pādeshāh-e din panāh, khosrow-e Jamshid ashbāh ..."[27] However, the title of Ebrāhim Soltan, son of Shāhrokh, in his inscription at Perspolis[28] shows a close similarity with the one of Abarquh:

| Abarquh | Perspolis |
|---|---|
| Dar 'ahd-e khalāfat panāh, | Ḥażrat-e khalāfat panāh, |
| pādeshāh-e Eslām, | pādeshāh-e jahān, |
| a'ẓam va a'lam salātin-e ayyām, | a'dal khavāqin-e Irān va Turān, |
| lāzāl jalal, soltan... | moghis al haqq va-l saltane va-l donya |
| | Abolfatḥ Ebrāhim soltan. |

With regard to these similarities, whilst all attempts at an

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24. For Timurid titles see A. Navāi: Documents et correspondance historique de Tamerlan a Isma'il 1^er., Tehran, 1963.
25. ibid., p. 174 and 178.
26. ibid., p. 133, 145, 195 and 215.
27. V. Minorsky: "A civil and military review in Fars in 881/1476, "Bulletin of the School of Oriental and African Studies, 1940-42, p. 148.
28. M.T. Mostafavi: Eqlim-e Pars, Tehran, 1964, p. 348.

exact dating for the inscription of the masjed-e Birun have been unsuccessful, it is reasonable to suppose that it would be of early 15th century, if not, indeed, belongs to one of the princes of the court of Ebrāhim Soltān who was actually the ruler of Fars and Kerman at that time. Such a date, as it will be explained, is, however, much later than the structure. Yet as it indicates the construction of a minaret in the mosque, it helps the dating of a restoration phase in the life of the monument.

ANALYSIS OF THE STRUCTURE AND DATING.

A chronological scheme of the structure may be established by an analysis of the constructional methods and distribution of the spaces in the plan, and the evidence of the fragmentary inscription mentioned above. An analysis of the arches of Masjed-e Birun (Fig. 30) shows that they are built in an early form. Such arches are the reminiscent of the dating from the late Sasanian and early Islamic period. Moreover, behind the exposed arches,the vaults are actually built in elliptical shape. Again they are similar to those of the Sasanian period. Such vaults, of course, were also used during the early Islamic period and can be seen in the Tarikhane of Damghan[29] and Masjed-e Jame' of Fahraj.[30] In Masjed-e Birun, however, the form of the arches and the vaults indicate an early date for the structure.

In the north-west corner of the courtyard stands a pier built in an unusual method (Pl. 44). The bricks are set both horizontally and vertically in alternate courses (Fig. 28). At the corners, the bricks are laid in the opposite direction. Similar brickwork occurs in Mesopotamia from very early epochs. Reuther[31] describes the chronology of the method:

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29. A.U. Pope: A Survey of Persian Art, Oxford, 1964-65, Vol. 8, p. 258.

30. Present study, chapter 5.

31. O. Reuther: A Survey of Persian Art, ed. Pope, Oxford, 1964-65, Vol. 1, pp. 242-3.

"Brcik walls with upright courses appear in Babylon as early as the Sumerian period, and then this technique gives way to the normal method of flat lay, though the older scheme occasionally reappears in the foundations of dwelling houses in Babylon."

The same method is seen in the Parthian palace of Ashur. Reuther[32] says:

"... in Ashur the older constructions are built of bricks, the walls being either of unfired bricks, usually on a stone foundation or of fine bricks laid in a very unusual fashion, the upright courses being turned alternately about 90°. This lay, very impractical according to our ideas, is reinforced at intervals with flat courses. The same system is used also for the columns of the peristyle of the palace " (Fig. 29A).

What was considered unusual by Reuther not only continued in the dwelling houses of Babylon, but also as a rare technique during the whole of the Sasanian period, for example, in building the fire temples. Thus at Qal'e Zohhāk in Azerbaijan similar brickwork is used, for the construction of the walls[33] (Fig. 29B). Even during very early Islamic times, this method was used for the building of the circular columns such as those of the Tarikhāne (Pl. 45). It seems that because of the simplicity of building a circular form in this manner, it remained in use for column construction during early Islamic period. But it was soon replaced by more common methods.

The very old form of the arches, vaults and brickwork of Masjed-e Birun poses the question: was the structure originally built as an early

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32. ibid..

33. W. Kleiss, Qal'eh Zohak in Azerbaijan, Archaeologische Mittelungen aus Iran, 1973, pp. 163 - 188.

mosque or is this an ancient structure converted to its later Islamic function. The provinces of Fars and Kirman were the large settlements of Zoroastrians after the Islamic conquest. In fact, in the whole of Iran, Yazd and Kirman are still the only two traditional settlements of Zoroastrians. Istakhri, during the 4th century H., says:[34]

وأمّا بيوت نيران فارس فأكثر من إحصائي وحفظي، إذ ليس من بلد ولا رستاق ولا ناحية إلا وبها عدد كثير من بيوت نيران إلا القليل، غير أن المشاهير التي تفضل على غيرها في التعظيم منها بيت نار الكاريان ويعرف بأرنوا، وبيت نار بخوه ينسب إلى دارا بن دارا، وبه يحلف المجوس في المبالغة بإيمانهم، وبيت نار عند برکة جور ويسمّى بارين، وحدثني من رأى به قد كتب عليه بالفهلوية أنه أنفق عليه ثلاثون ألف درهم، و بيت نار على باب سابور يعرف بشبرخشين، وبيت نار بباب سابور أيضاً على باب ساسان يعرف ببنبد كاووس، وبه كازرون بيت نار يعرف بجفته، وبكازرون أيضاً بيت نار يعرف بكلازن، و بهشيراز أيضاً بيت نار يعرف بالكاريان، وبهشيراز بيت نار آخر يعرف بهرمز، وعلى باب شيراز بقرية تعرف بالبركان بيت نار يعرف بالمسوبان ومن دين المجوس أن المرأة إذا زنت في حملها أو حيضها لم تطهر، إلا بأن تأتي هذه النار فتمر لبعض الهرابذة فتطهر ببول البقر.

ذکر آتشکده های پارس - هیچ ناحیتی و روستائی که نه در او آتشگاهی هست. آنچه بزرگتر ست و معروف تر از آن یاد کنیم کاریان آتشگاهی است نزدیک برکهٔ جور و آن را بارین خوانند و به زبان پهلوی بر آن نبشته اند که سی هزار دینار بر آن هزینه شده است. آتشگاهی بر در سابور هست شبرخشین خوانند، هم در سابور آنجا که باب ساسان گویند آتشگاهی هست گنبد کلوش خوانند. به کازرون آتشگاهی هست آنرا جفته خوانند و دیگری هست کلازن خوانند. و به شیراز آتشکده ای هست مسوبان خوانند و در گبر کی چنانست کی هر زنی کی به وقت آبستنی یا به وقت حیض زنا کند پاک نشود تا آنگاه به آتشگاه آید و پیش هربذ برهنه شود و به کمیز گاو خویشتن را بشوید.

"... About the fire temples of Fars, [there are more than can be recorded or remembered][35]. There is no town or village or

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34. Estakhri: Al Masālik wal Mamālik, Cairo 1961, p. 74 for the Arabic text; Masālek va Mamālek an anonymous translation of 5th or 6th cent.H., Tehran, 1961, p. 106 for Persian text. The English translation is given from the original Arabic text.

35. Phrases in brackets are not in the Persian text.

area which does not have a fire temple. Except for the greatest and most famous ones I shall not write about the others. In Kāriān [(there is) a fire temple known as Bārnava; and in Kharra[36] the fire temple built by Dārā ebn Dārā, which the Majūs believers exaggeratedly worship; and] near the pond of Jur a fire temple called Bārin, and it is written about in Pahlavi that thirty thousand Drachmas had been offered for its building;[37] and a fire temple in Sābur region known as Shabarkhasheyn;[38] and another in Sābur region; also in Bab e Sāsān (Sasan region), a fire temple called Jonbadh Kawūs;[39] and in Kāzerun, the fire temple of Jofta;[40] and also in Kāzerun, the fire temple called Kalāzan; and in Shirāz there is also a fire temple [called Hormoz, and in Shiraz district, in the village known as Barkān, a fire temple] called Masubān, and in Majus religion if a pregnant or menstruating woman copulates she will not be clean unless she goes to this fire temple and in front of the priests washes herself with bull's urine."

So far as the Masjed-e Birun is concerned, it has an early structure which as explained above dates not later than the first centuries of Islam. In this period, in Iran, as elsewhere, the mosque used to be built on an

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36. Kharra is a corrupted form of Jerra the famous fire temple which is still standing.

37. In Persian text "thiry thousand Dinar".

38. It must be a corrupted pronunciation of Shab-rakhshin which literally means "shining at the night."

39. In Arabic text the phrase is vague. The Persian text is different to that in Arabic: "... in Sabur region, where is called Bab Sāsān, there is a fire temple called Gonbad-e Kolūshan".

40. In Persian text Chefte.

Arabic plan such as Tarikāne of Damghan,[41] the ancient site of the Jame' of Isfahan,[42] the mosque of Sirāf,[43] the Jame' of Nain[44] and the Jame' of Fahraj.[45] The Masjed-e Birun, as it seems today, resembles a mosque with two ivans and a domed sanctuary (Fig. 22). On the other hand the regularity of a plan with two ivans is such that the mihrab is located at the end of the main ivan and there should be no domed sanctuary behind it (Fig. 26). The early mosques with two ivans like those of Forumaz, Neyriz and Zāwzān, all follow the basic rule of this design (Fig. 27). It is interesting that in Abarquh, the eastern ivan seems to be an addition to the earlier building. This ivan is not situated on the correct axis of the structure and the brickwork of its vault is different from that of the other vaults. Therefore, the main building seems to be originally built not with two ivans, but only with one at the western end. Such an arrangement of a domed chamber with an ivan is a typical form for the Sasanian fire temples (Fig. 23), looking back to a much older tradition in the building of places of worship.[46] The fire temple of Hatra, probably a Parthian structure, has a plan not so different than Masjed-e Birun. Here, again, an ivan leads to a square sanctuary flanked by three little chambers on either side (Fig. 24a). In Atashkuh, the Sasanian fire temple is also a domed, square chamber situated behind a great ivan and, again, like Masjed-e Birun, it is flanked by some smaller chambers[47] (Fig. 24b).

During the writer's visit to Iran Mr. Pirnia pointed out to him a

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41. A.U. Pope: A Survey of Persian Art, Oxford, 1964-65, Vol.3, p. 933.

42. E. Galdieri: Isfahan: Masǧid-i Ǧum'a, Rome, 1973, Vol. 2, p. 28.

43. D. Whitehouse: Excavation at Sīrāf, Iran, Vol. 7, 1969, p. 41.

44. A.U. Pope: A Survey of Persian Art, Oxford, 1964-65, Vol. 3, p. 935.

45. Present study, chapter 5.

46. K. Schippmann: Die iranischen Feuerheiligtumer, Berlin 1971, p.490.

47. ibid., Figs. 69 and 70.

similarity between the plans of Masjed-e Birun and the Sasanid palace of Qal'e Dokhtar in Firuzābād. The function of a palace and a fire temple is, of course, different, but the design of an ivan, flanked by some rooms and in front of a domed chamber has been seen in many Sasanian palaces. In the palace of Qal'e Dokhtar the similarity is even greater.[48] The domed chamber is square from the inside and circular on the outside and, in front of the ivan, a central courtyard is flanked by four vaulted rooms, as it is in Masjed-e Birun. However, as Masjed-e Birun is a small structure, it is hard to believe that it could have been possibly built as a palace. But its early construction and the type of its plan suggest that it may have been originally a Sasanian fire temple, and later converted to its present function.

The function of the chambers around the ivan on the main sanctuary of a fire temple is not known. Godard suggests the possibility that one of these chambers was usually the permanant residence of the sacred fire. According to this theory the sacred fire was not kept in the main sanctuary, but rather in a directly connected, smaller, holy room hidden from the eyes of the congregation. It were only the chief priests who could view and look after the fire, and then, during services, bring a flame of it to the main sanctuary for the public to see.[49] This theory is not accepted by all of the scholars such as Boys, who suggests the fire was always kept in the sanctuary.[50] However, in some of the fire temples a special chamber for the holy fire has actually been discovered. The fire temple of Takht-e Soleyman in Azarbaijan is a good example of a sanctuary

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48. D. Huff "Qal'a-ye Dukhtar," Archaeologische Mittelungen aus Iran, 1971, pp. 125-171.

49. K. Schippman: Die iranishen Feuer heilightumer, Berlin, 1971, p.309-57.

50. M. Boys: "On the Zoroastrian temple cult of fire," Journal of the American Oriental Society, 1975, p. 464-65.



Colour plate 14.Abarquh, Masjed-e Birun . Interior; view of the eastern ivan .

and a separated chamber for the fire[51] (Fig. 25). This plan is again based on the design of a domed sanctuary with original location of the entrance, since the entrance of a fire temple never opens to the north. In fact, such an entrance is not even usual for a mosque, since the chamber is directly connected to the main Ivan. In a mosque, the entrance traditionally opens to other spaces that lead to the central courtyard. However, chamber (No. 5 in plan) seems a suitable space for the permanent fire, for it is connected to the main sanctuary by a corridor behind the walls of the audience ivan. It must be noted that the only pier built with the old method of brickwork stands as a supporting member of the little dome of this chamber. It might have become the entrance at a much later date, perhaps, not earlier than the date of the inscription above its doorway.

CONCLUSION.

Masjed-e Birun of Abarquh is an abandoned building (yet in a fine condition) which stands outside the city walls - possibly on the site of the ancient town. It is oriented about 18 degrees to the south of the correct geble of the town which is an indication that the building is an old structure. Masjed-e Birun is built with the elliptical vaults and an earlier form of arches which could be of either late Sasanian or early Islamic periods. In one case, at the north-west corner of the courtyard, the bricks of a pier, are set both horizontally and vertically in alternate courses. Such method is an old tradition which has continued until the earliest period of Islam. Moreover, the plan of the main part of Masjed-e Birun, both in general form and in detail, is similar to the Sasanian fire temples. All these similarities suggest that the building has originally been designed for such a purpose.

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51. K. Schippman: Die iranishen Feuerheiligtumer, Berlin, 1971, pp. 331-3.

The date of conversion of the building to a mosque is not certain. The inscription above the present entrance pinpoints the addition of the minaret to the building and mentions it as "which is one of the indications of Islam". It could be supposed that the inscription actually refers to the change of the function of the building. So the date of the inscription may be that of conversion of the building to its present function. However, the date of the inscription does not exist any more, but an indication of its period may be derived from its form of script, as described above (p.31). Both the style of inscription and part of the surviving protocol of ruler's title suggest that the date of the inscription cannot be later than early 15th century.

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3. MASJED-E JAME' OF 'AQDA



Colour plate 15- 'Aqdā; view of the Hoseyniye square in front of the Jame'mosque .

# THE MASJED-E JAMEʿ OF ʿAGDĀ

The small town of ʿAgdā stands at the foot of the central mountains of Iran, 73 kms. from Nāin and 45 kms. from Ardekān (Fig. no. 15). In historical documents ʿAgdā is mentioned as one of the northern most towns at the borders of the province of Fars. Estakhri records its name as ʿOgde: "around the desert (between Yazd and Kermān) are many famous towns: in the district of Fars, Nain and Yazd and ʿOgde and Ardestan of Isfahan."[1] This name is also found in the works of Ebn-Ḥuqal,[2] Yaqut[3] and Moqaddasi.[4]

This area has always been an important centre of Zeroastrianism and according to Ja'fari, the 15th century historian of Yazd:

> "... Yazdegerd-e Bahrām was a glorious king and ʿArabs and non ʿArabs were under his command... When he reached Katha, the climate pleased him and it is said that he vowed to build a city there in the deity of Yazdān. (They) assembled the masons of many countries and astrologers fixed the foundation of Yazd to the ascent (tāleʿ) of Virgo.... Yazdegerd ordered his three commanders (Sarhangs) Bide, Meybod and ʿAgdā to build three settlements. Bide built Bide, Meybod built Meybod and ʿAgdā built Deh-e Gabrān (the village of Zoroastrians)."[5]

The same legend is recorded at the end of the same century by Ahmad-e Kāteb.[6] Afshār (depending presumably on oral tradition at Yazd)

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1. Al Masālik wal Mamālik, Cairo, 1961, p.134. Masālek va Mamālek, Tehran 1961, p. 185.
2. Al masālek wal-Mamālek, Leiden, 1872, p. 289.
3. Mo'jam al-Boldan, Cairo, 1906, p. 193.
4. Ahsan ul-Taqasim, Leiden, 1906, p. 488.
5. Ja'far ebn Mohammad Ja'fari: Tarikh-e Yazd, Tehran, 1960, p. 13.
6. Ahmad ebn-e Hosain ebn Ali Kateb: Tarikh-e Jadid-e Yazd, Tehran, 1966, p. 32.



Colour plate 16-ʿAqdā, the Jāme'mosque . Southern ivan and the eastern arcade .

concludes that just after the Islamic conquest, "the Vahrām fire" was kept at Haftādor, a village three kms. from ʿAgdā. Then it was taken to Torkābād near Ardekān and brought back afterward to a place called Eshkoft Yazdan in the mountains of ʿAgdā, there the fire remained hidden for a long time.[7]

The contemporary Zoroastrian scholar, R. Shahmardān[7a] connects the name of ʿAgda with the Persian word ʿaqd, (marriage-) contract, and maintains that the name arose with reference to forced marriages between Zoroastrians and the newly-converted Muslims, enforced at the order of the Seljuq vazir Naṣer al-din Ṭusi, as a consequence of which the name of Deh-e Gabrān was abandoned. He gives no authority for his statement, but it is true that an oral tradition exists at ʿAgdā that the vazir once sojourned there, and that the town wall was constructed at his order.

It is likely that after the end of the 17th century the connection mentioned above between the village and the Zoroastrian community may have been forgotten, or have lost its importance. The 18th century local historian of Yazd, Mofid-e Mostowfi, who used in the compilation of his book the works of his predecessors Jaʿfari and Aḥmad-e Kāteb, repeats a version of the legend: "Some 20 farsakhs from Yazd ʿAgdar dug an unprecedented water channel (qanāt), and built a village, which he called ʿAgdā."[8] Here Mostowfi omits the mention of Deh-e Gabran, probably because the Zoroastrian connection had disappeared in his day.

Sykes visited ʿAgdā during his eight years sojourn in Iran and gives an interesting statement about the change of religion:

> "Thence we passed the fertile oasis of Ardakān and reached ʿAgdā in one long stage; it is evidently the

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7. Yadegar ha-ye Yazd, Tehran, 1975, vol.1, p.49; vol.2 p. 829-830.

7a. Parasteshgah-haye Zartoshtian, Bombay, 1957, p.157

8. Mohammad Mofid-e Mostowfi Bafqi: Jame-e Mofidi, Tehran, 1961, p.721.



Colour plate 17-'Aqdā, the Jāme'mosque . Northern ivan and the eastern arcade .

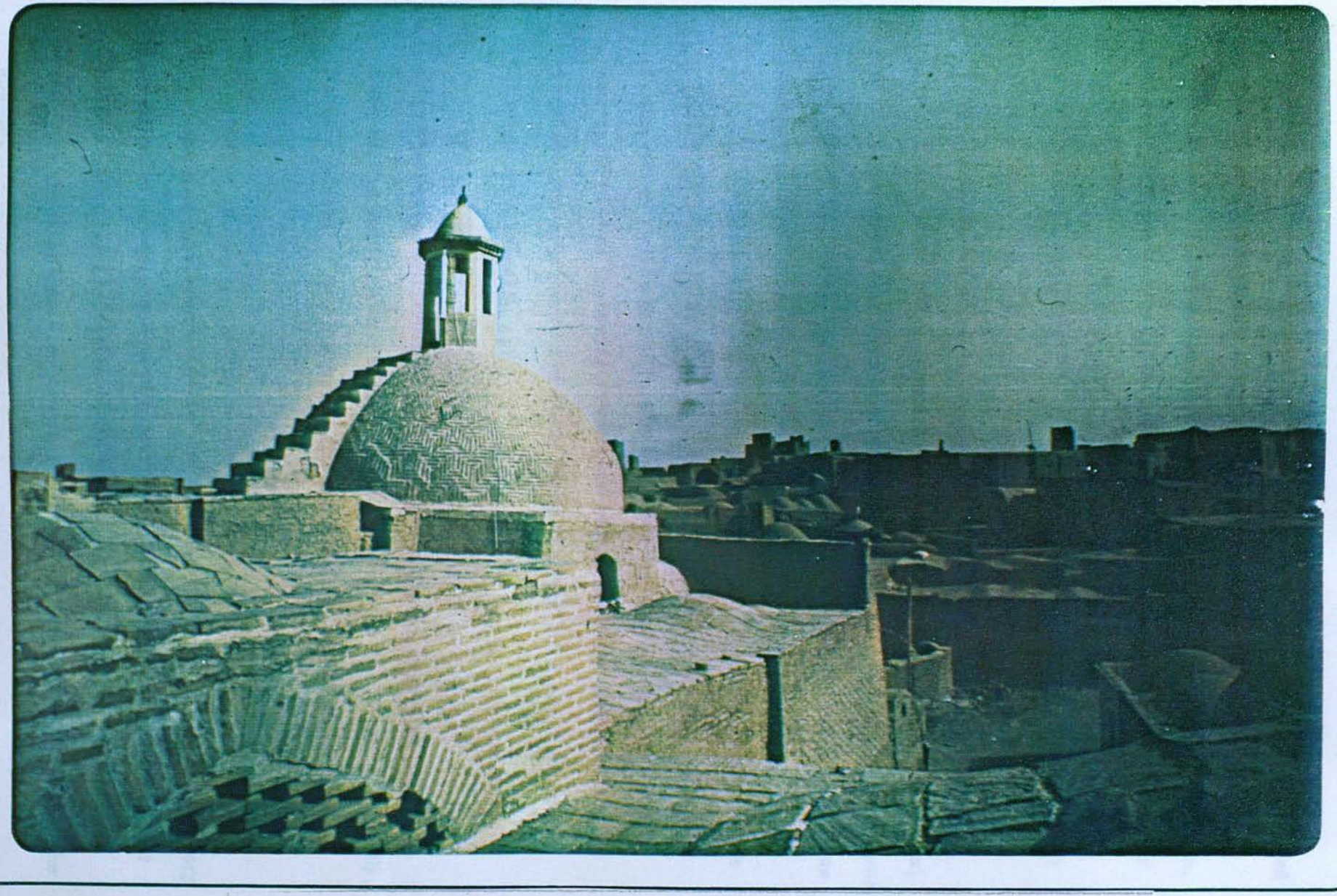
> Guered of Josafa and his remark anent the "Abraini" is of considerable corroborative value, as I find that I wrote in my notes that the Seiids of Agdā considered the Parsis their kinsmen, and were, in fact, converted Zoroastrians... A famous Parsi centre was off Josafa's route, he probably only met Zoroastrians at 'Agdā, although why they were termed Abraini it is difficult to say, except that Zoroastrians sometimes identify Zoroaster with Abraham. The fact that it is still the custom to give a little of honour to those who become Mohamedans would satisfactorily account for the inhabitants being Seiids."[9]

In the middle of the old town, the Masjed-e Jame' serves as an active religious and social centre. Like many other mosques in the central desert of Iran, it is divided into two sections for the summer and winter services. The main summer part has a two-ivans plan, with a domed (fig. 33) sanctuary (G). The main ivan (E), dimensionally larger in all respects, stands at the southern side of the court-yard (Pls. 54 and 55). It is flanked by two openings to the two galleries and also linked directly with the domed sanctuary (G). The interior walls of the sanctuary are decorated in simple architectural patterns (Pl. 57). Surrounding the mihrab (H) there is a blue glazed ceramic bowtell decorated by twisted cords (Pl. 56). In the ceiling, at the top of the dome, an inverted old blue ceramic bowl with black decoration has been installed in the place of the Shamse - the last brick at the top of the dome (Pl. 58).

Two arcades which flank the central court-yard on the east and west sides have a two storeyed facade of which the 3 bays of the upper level are false. In fact the building is only a single-storeyed structure

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9. Ten thousand miles in Persia, London, 1902, p. 156.



Colour plate 18. ʿAqdā, the Jāme'mosque . View of the roof .

and behind the decorative arches of the second floor there is no roofed area with the exception of two chambers above the entrances. Building decoratively false second-storey facade is a tradition in Central Iran, exemplified at the Masjed-e Hakim in Isfahan and the Masjed-e Jame' of Abarquh.

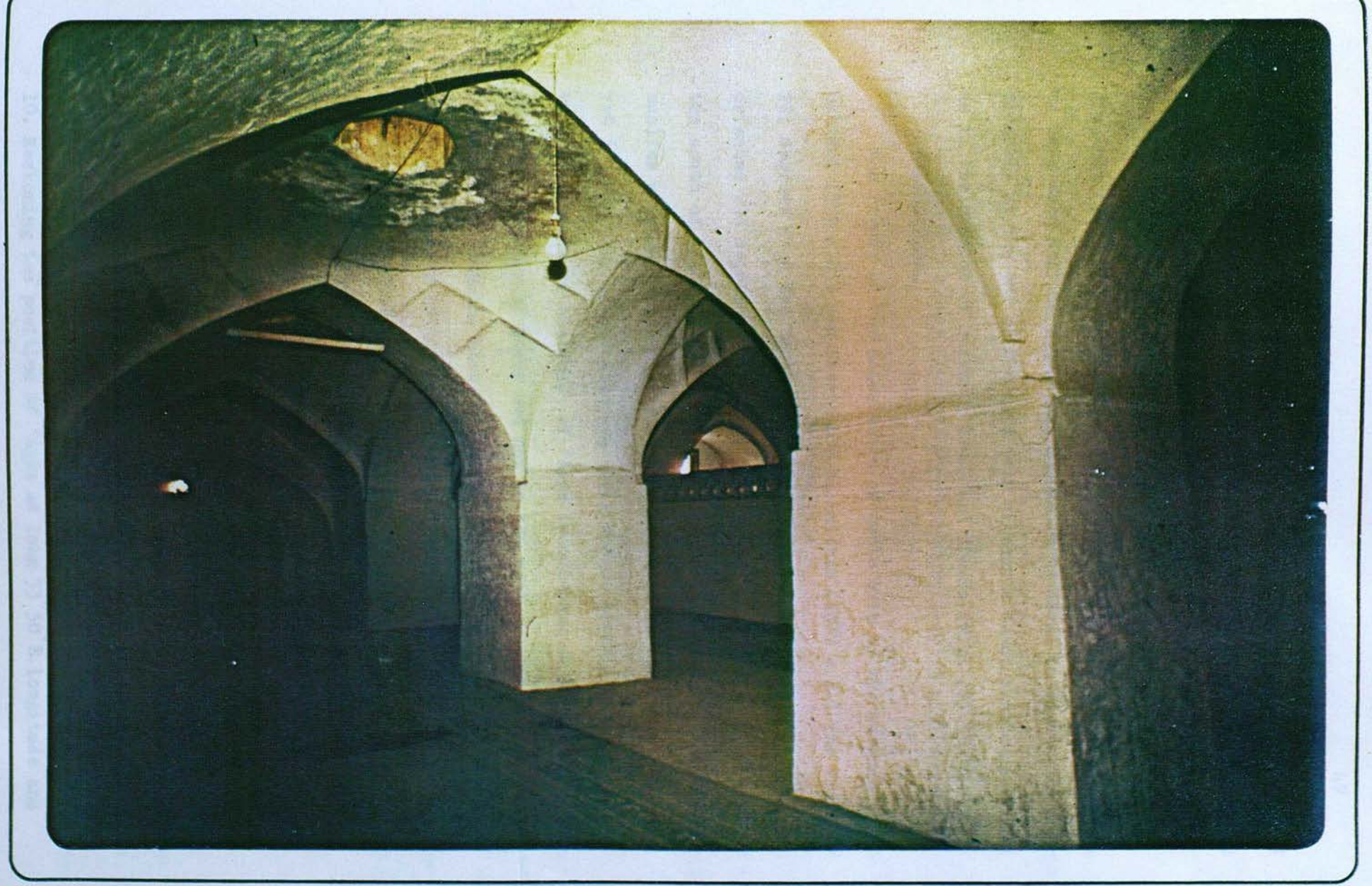
The small entrance (B), at the east, has remained in its original form. It includes a pair of decorated wooden doors with octagonal and star-shaped patterns (Pl. 52). The western entrance (A) is relatively new - having been built in the 19th century (Fig. 53). The large portal of this entrance, with its poor workmanship, seems to be still unfinished, for around and above the doorways are vacant spaces left blank for some inscriptions or decorated tile work.

To the north east of the central courtyard, the small ivan (F) is flanked by two even smaller chambers, again with the decoratively upper storey facade (Pl 62). The eastern-most chamber connects the courtyard to the Shabistan. This ivan stands about 25 cms. above the level of the courtyard, its floor being the roof of a small vaulted storage room beneath.

THE SHABESTAN.

The winter gallery, Shabestan, is structurally separated from the rest of the building and about 180 cms. lower than the courtyard (Pl.69). It is composed of two chambers (K) and a main vaulted hall with a balcony at its eastern and northern ends for the use of women during services.

Two doorways connect it to the outside: one from the main sanctuary by means of a staircase to the courtyard, the other through a long and narrow barrel vaulted gallery (C) to the outside. The latter ensures that its function can also remain independent from the main part of the mosque.



Colour plate 19. ʿAqdā, the Jāmeʿ mosque . Shabestān .

The plan of the main portion of the building consists of a domed sanctuary, and flanking galleries. This layout, as it is explained in the previous chapter, is more characteristic of a fire temple than a mosque. Such a plan can be seen, for example, in the fire temples of Ātashkuh (Fig. 24) and Takht-e Soleymān (Fig. 25). On the other hand, we have seen that in a two-ivan mosque it is usual to locate the mihrab directly at the end of the main ivan without a domed sanctuary behind as in the mosques of Forumaz, Negriz and Zāwzān (Fig. 27).

ORIENTATION.

The result of the calculation of geble both by the methods of Al-battāni (929 A.D.) and Hoseyn ebn al-Haitham (1039 A.D.) for 'Agdā is 231 degrees from the north (Fig. 35).[1] However, the Masjed-e Jame' is oriented 208 degrees. Therefore, this approximate qeble is 23 degrees to the south of the correct direction (Fig. 36). It is true that the first muslims were unable to determine the direction of the geble properly, yet in Iran they always directed their mosque approximately to the west. The geble of the Jame' of 'Agdā is oriented to the south of the correct direction of Mecca and not to the west, such an error cannot be explained by deducing that the building is an early mosque. The only reasonable answer to this error may be that the building is originally designed for another function and later is converted to a mosque. Analysis of the spaces in the plan, mentioned above (p.45) may explain the original function of the structure as a fire temple.

ANALYSIS OF THE STRUCTURE AND DATING.

The Masjed-e Jame'is the only structure in 'Agdā of which the floor stands 240 cms. above the natural ground level (Fig. 34). Since, in this are, there is no local tradition of building structures on an

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10. Reckoning the position of 'Agda as long. 53°38' E. longitude and 32°26' N. latitude for 'Agda. Times Atlas, London, 1959 vol.2 Pl. 32, p.3.

artificial platform, the readiest explanation is that the mosque is built on the remains of a previous building. This feature corresponds to our conclusion for the qeble that the mosque is a conversion of another structure. Thus the presence of the platform may be explained by deducing that the old piers were re-used and the empty spaces filled up to the present floor level with the masonry rubble of the previous building.

An approximate dating of the structure is possible, since the style of arches construction varies from period to period. In Jame' of 'Agdā three different kinds of arches can be recognized. Those inside the main sanctuary are of an earlier form, with more circular haunches continued by segments of circles with relatively larger radii than the others. The average proportion of the radii to the span is 1:1.9 (Pls. 56 & 59). This kind of arches have been commonly used during the Seljuq period in central Iran such as those in Davāzdah emām (429H.- 1037 A.D.) at Yazd,[11] and in the small dome chamber of the Jame' of Isfahan (481H. - 1088 A.D.).[12] Therefore, the sanctuary of Jame' of 'Agdā can be dated as an 11th century structure.

The arches in the Shabestan are of a relatively later style than those in the sanctuary,with longer span and lower radii having an average proportion of 1:2.2 (Pls. 60 & 61). As it will soon be explained, the date of construction of the Shabestān appears in an inscription as 847 H. (1443 A.D.). The form of the arches does actually resemble those of the same period especially in Yazd district, such as the arches on the entrances to the sanctuary of the Masjed-e Mir chakhmaq(841 H. - 1437 A.D.)[13] and those in the oratory of the Jame' of Yazd (846 H. -

11. A.U.Pope, A Survey of Persian Art, Oxford, 1964-65, vol. 8, p. 273.

12. ibid., p. 289 and 291.

13. ibid., p. 440.

1442 A.D.)[14].

It must be noted that the Shabestan is built 180 cms. lower than the courtyard but still 80 cms. above the natural ground level (Fig.34). As it does not stand on the same platform as the main structure, it is likely to have been designed and added to the earlier plan. The low vaults and the thick piers of the Shabistan give the impression of an underground structure, in fact an actual characteristic of any Shabistan as they are usually built as the basements of mosques.

The arches utilised in the arcades of the courtyard vary in form at each storey. At the ground level, the arches are the facade of a pointed vault covering each portion of the arcade. They have a very low radii averaging $\frac{1}{3.7}$ to their span. The arches of the roof decorative arcade have a higher radii $\frac{1}{2.6}$ to their span (Pls. 62 to 65). However, both types of the arches represent a late date in the development of the technique of arch-building. Such arches are used since the Savavid period up to the present date. Therefore, the arcade should have been reconstructed during one of the restorations of the site not earlier than 17th century.

INSCRIPTIONS.

1. The only dated inscription of the mosque, set in the southern wall of the Shabistan, is a small glazed ceramic tile, 36 X 35 cms. in size, (Pl. 69). Written in Naskhi style, it is black on a dark blue background. In some places the glaze is damaged or the colour is faded. Around the edge of the tile reads:

" بسم الله الرحمن الرحيم قل هو الله احد ... etc. عافيت [15].

The script in the middle of the tile is in Persian:

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14. ibid., p. 446.

15. Quran S. 112, Al Tanhid.

"God is most great — الله اکبر

Built this mosque — این مسجد بنا کرد

Ayisha Bibī (daughter of) Mohammed — عایشه بیبی (بنت) محمد

Aghdai ..in the year — اغدائی .. تاریخ سنه

eight hundred forty seven" [16] — سبع (ربع) اربعین ثمانمائه

It is noticeable that whilst the inscription is set in the geble wall of the shabestan indicates the whole building as "this mosque" and gives the date of its building. Yet as it appears from the forms of the arches, shabestan may be the only part of the structure which could have been built in 874 H. (1443 A.D.). So the date of the inscription may represent the time that the original building was converted to a mosque and the shabestan was added to it.

2. Above the old portal is another inscription incised into the stucco, yellow in colour and set in white new gypsum plaster frame (Pl. 52). It is written in decorative bannā'i style containing the famous Persian verse:

غرض نقشی است کز ما باز ماند — که هستی را دمی بیثم بقائی

CONCLUSION

Masjed-e Jami of 'Agdā stand on a site being known as an important Zoroastrian centre. Its disorientation from the direction of Mecca cannot be explained by deducing that it may be an early mosque. Its plan is a characteristic of a fire temple and stands above a platform, 240 cms. above the natural ground level. This platform is not a local tradition and in 'Agdā can only be seen in this particular building. All of these clues show that the building has an older origin and probably has been the Zoroastrian fire temple being converted into the mosque after the change of religion in 'Agdā.

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16. Afshar reads: الله اکبر. این مسجد بنا کرد آسیه بی بی بنت محمد اغدائی در تاریخ سنه اربعین و ثمانمائه

Yadegarha-ye Yazd, vol.1, p.452.

It is significant that the date of restoration provided by the tile-inscription falls close to that of the historical reports provided by the Yazdi historians. It is likely to have been during the 9th century H. that the building finally took its place as an Islamic mosque.

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4. THE MONUMENTS AT THE KOHANDEŽ OF HERAT



Colour plate 20-Herat; Kohandež . General view of the shrines .

## THE MONUMENTS AT THE KOHANDEŽ OF HERAT.

The site of the Kohandež in Herat and the shrines, located there, are very little known to scholars. The shrines are recorded by Nidermayer in his map of Herat, without any discussion in his text.[1]

The name of Kohandez, "old fort", is applied a number of ancient forts and citadels of Afghanistan and Khorasan, and in particular, perhaps, to those which lay in ruin at the time of the Islamic conquest. That at Herat is recorded in Hodud al-'Ālam[2] as Qahandaz and in Mojmal-e Faṣiḥi[3] as Kahandaz, but at present it is not only locally known by its original name, but also, on account of its shrines, as Marqad-e Shāhzādehā.

The site is a mound at the north west and of the city towards the middle, and at the side, of the road leading from the citadel to the madrase-ye Hoseyn Bāyoqrā (Fig. 38). Surrounded, as it is, with buildings, it cannot be seen from the street, but a narrow lane gives access to the site from the main road.

At the north side of the mound, the ruins of some walls can still be seen which are built with stone set in strong lime and sand mortar (Fig. 39). Débris of the same material covers the area. The surface of the site is much disturbed by the presence of a grave yard, which has come into existence as a result of the religious importance of the shrines. Both of the two tombs stand on the mound, and at its south-eastern side (Colour Pl. 20).

### THE SHRINE OF SHĀHZĀDE ABOLQASEM.

The eastern most structure, locally known as marqad-e Shāhzāde Abolqasem, is accepted by the Muslims of Afghanistan, to be the tomb of Abolqasem Mohammad ebn Ja'far-e Sādeq, a son of the sixth Shi'it imam.

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1. O. Niedermayer; Afganistan, Leipzig, 1924, plan 3 (last page).
2. Huded al-Alam, Tehran, 1962, p. 91.

Not only is there no historical indication that proves this personage was buried in Herat, there are actually literal sources which mention other places where he allegedly died. According to Ṭabari, Mohammad spent most of his life in Mecca.[4] In the year 200 H. (815-816 A.D.), when Ma'mun was in Marv, trying to establish his power throughout his father's empire, Mohammad proclaimed himself Caliph, under influence, so it is said, of his son 'Ali and Hoseyn ebn Hasan, known as al-Afṭas. He was soon defeated by Eshaq ebn Musā, commander of the Yeman army, and forced to leave Mecca, but reaching Jahine was interrupted by the army of Hārun ebn Mosayyeb, the governor of al-Madina for Ma'mun. He again lost the battle and was taken back to Mecca. On saturday, when ten days remained of Zu al ga'de 200 H. (815-816 A.D.) he alsdicated and acknowledged the caliphate of Ma'mun. Then he was taken to Iraq until 201 H. (816-817 A.D.), when al-Hasan ebn Sahl sent him to the court of Ma'mun in Marv. Ebn al Athir reports that at the time of Ma'mun's return to Iraq, Mohammad ebn Ja'far was in his camp and died in Jorjan.[5] A similar account is recorded in several sources of later periods such as the Kholasat al boldān which state that Mohammad was actually buried at Jorjan.[6]

Another burial-place for Mohammad ebn Ja'far is recorded by Hendu Shah ebn Sanjar in 724 H. (1324 A.D.):

> "They captured Mohammad ebn Ja'far and sent him to Ma'mun. Ma'mun was in Khorāsān. When he saw him he forgave him and Mohammad died, after a short time, and was buried in Sarakhs. Now his tomb, there, is

3. Fasih Ahmad ebn Mohammad Khawfi: Mojmal-e Faṣihi (v. 845 H.), Mashhad, 1961, Vol. 1, p. 207.
4. Tabari: Tārikh al-rosol wal-moluk, Lugd. Bat. 1881, pp. 189-995.
5. Ebn al Athir: Al Kamel fi al-tārikh, Leiden, 1871, Vol. 6, p. 220.
6. Mohammad ebn Mohammad Hashem Qomi: Kholāsat al ḥoldān (1079 H.), Qom, 1976, p. 96.

a great shrine."[7]

This piece of evidence alters-yet another version of the story - whether genuine or not, shows that another place has been famous for Mohammad's shrine during the 8th century H.. There is, therefore, some uncertainty about the historicity of the tradition at Herat. The present writer was kindly favoured by Mr. Mazaheri, the elderly administrator (motevalli) of the two shrines he has established from his study of local records that the building was damaged by the Mongols and left in ruins until the time of Safavid Shāh Esmā'il I, when the building was restored. In fact the present writer was able to see some of the documents in question, and had no doubt that they were all earlier than the 20th century, some perhaps considerable so.

Since our historical sources suggest that Mohammad ebn Ja'far did not die in Herat, the shrine of the Khohandež should have a different origin. A closer look at the building itself gives more information. The structure (Figs. 40 & 41), in its present state, is a domed chamber with four large niches in the sides (Pls. 75, 76, 77). An ivan portal (Pl. 74) situated at the west is the only entrance to the sanctuary. As the door opens towards the direction of Mecca (qeble) no mihrab could be built. Four chambers, irregular in shape, stand at the four corners of the building. They open towards outside and have no connection with the domed sanctuary. On the south side,the structure is attached to the house of the administrator. The interior of the building is plastered and decorated with simple patterns painted in blue, but, according to the records of Mr. Mazaheri, the interior re-plastering and wall-painting were executed at the time of Amir 'Abd al-Rahmān Khān (c. 1900). The exterior walls were restored only a few years ago.

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7. Hendu Shah ebn Sanjar ebn Abdollah Ṣaḥebi Nakhjavāni: Tajāreb al-salaf, Tehran, 1934, p. 160.

The plan of the sanctuary with its four niches is indeed very similar in appearance to a chahār-tāq - the typical plan of a Sasanian fire temple. Yet it was a result of a fortunate chance that the writer was able to confirm that this resemblance is no accident. In conversation, the administrator mentioned that during the recent restoration work, the massive core of the building, constructed from stone and lead mortar, proved difficult to work. This reference to the archaic structure of the core prompted the writer to examine the materials more closely. Only at a few points on the roof and corner chambers was it possible to lift up the modern facing to inspect the core. However, investigation to produce the accompanying analysis of the building materials (Fig. 42). They proved that the building was constructed in two periods from entirely different materials. The core of the structure, that is to say the four piers of the domed chamber, is built with stone set in lead and sand cement. The parts built with these materials survive as far up as the springing of the dome and the vaults. Of course, such materials represent a rare method of construction practised only during Sasanian period. It is evident that the core of the structure was actually used asa fire temple of the usual chahar tag form (Fig. 43) in the time of Sasanians. Later the ruin would have been reconstructed and converted as an Islamic shrine. The dome of the sanctuary and the vaults of its niches were all rebuilt with Islamic bricks. The different materials of the Sasanid and Islamic periods have left a visible dividing line in the colour of the interior plaster work. This line between the two different types of materials can be seen on the walls of the domed sanctuary (Pls. 75 - 77). It may be seen that the four corner-chambers and the portal ivan are all Islamic additions, but the core of the building preserves its Sasanian outline. There is no historical inscription to assist our dating of the reconstruction, but

the form of the Islamic elements, such as the arches, agree very well with Mr. Mazaheri's claim that they were added in the time of Shāh Esmā'il.



Colour plate 22.Herat, shrine of Shāhzāde Abdollāh .View from the south - west .

## APPENDIX.

### THE SHRINE OF SHĀHZĀDE 'ABDOLLĀH.

To the west of Shāhzāde Ablqasem stands the other shrine, known in Herat as Margad-e Shāhzāde 'Abdollāh. As is well known locally, this personage was in fact 'Abdollah ebn Mo'aviye, the well known Shi'it rebel, a great grand son of Ja'far-e Tayyar, brother of 'Ali ebn Abu Tāleb.[8] Having revolted at Kufe in 127 H. (744-745 A.D.) he was defeated there and later at Madine and Baṣre, by the Umayyad forces, and escaped to Iran. He established his camp in Jebāl, where several troops of Khārejids joined his army. He soon extended his power with taking all of Kermān, Fārs and Khuzestān under him. As recorde by Tabari[9] and Ebn al Athir,[10] in the year 129 H. (746-747 A.D.) he went to Herat to visit Mālek ebn Hāshem, the governor of the region for Abu Moslem. His intention was for Abu Moslem to help him in his wars against the Caliph, but after a friendly initial he was arrested by his host and later put to death by Abu Moslem's order at Herat.[11] According to Mojmal-e Faṣiḥi, his body was buried in the Kahandaz. A. H. Habibi writes that in the year 706 H. (1306-1307 A.D.), Malek Ghiyāth ed-din Mohammed ebn Shamsed-din, local king of the Kart dynasty built a shrine above Abdollah's grave in the Kohandež. His information is perhaps derived from the records of Mr. Maẓaheri as the present writer has also seen.

### THE STRUCTURE.

The tomb of 'Abdollah ebn Mo'aviye is a semi-octagonal structure

8. Encyclopaedia of Islam, Leiden, 1960, vol. 1, p. 48 - Mac Guckin De Slave: Ebn Khallikan's Biographical Dictionary, London 1852, vol. 1, p. 74 - Mir Khvānd: Raużat al Safā, Tehran, 1270 A.H. vol. 3.
9. Tabari: Tārikh al-rosol val-moluk, Leiden, 1885-89, p. 1978.
10. Ebn Athir: Al Kamel fi al-Tarikh, Leiden, 1871, vol.6, p. 285.
11. Faṣiḥ Aḥmad-e Khawfi: Mojmal-e Faṣiḥi, Mashhad, 1961, vol.1,p.207.

with exterior ivans on four sides (Figs. 44-46). Originally, the building had two entrances through the eastern and western ivans (Pls. 78, 81 and 82), but at present the eastern ivan is walled up and used for burial space (Pl. 79). In the central domed chamber are provided two rooms at the eastern side, both square in plan with semi-octagonal niches in their walls. Two other rooms are constructed at the western side which are connected to the western portal ivan and have no direct access to the sanctuary. Except the main piers, carrying the load of the dome, the rest of the walls are thin without taking any usable space. Several niches recessed into the wall reduce the thickness of the walls and give an effect of lightness and plasticity to the building.

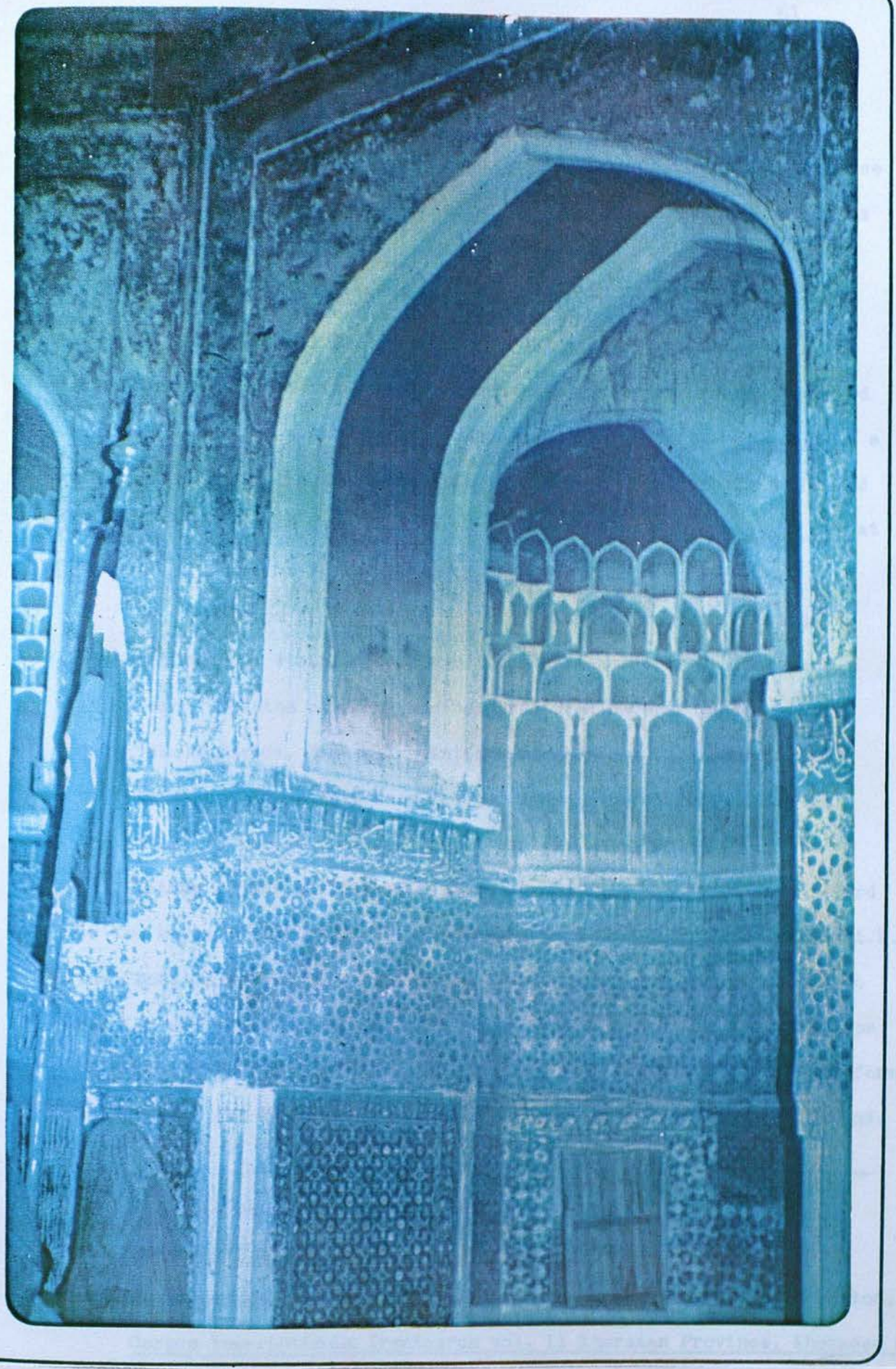
The plan and the engineering of the tomb of 'Abdollāh is a Timurid example of architecture in the area. According to John Hoag this type of plan is used in Tymurid Tombs such as the Eshratkhāne in Samarqand and the tomb of Oloqbeg in Ghazne.[13] Later this form influenced the Mogul architecture of India and in its advanced stage can be seen in the plan of the Homayun's tomb and the Taj Mahal.

For the case of the shrine of 'Abdollāh, the date 706 H. (1306-7A.D.), given by Mr. Habibi seems unlikely to be given to the present structure. Not only the plan is in Tymurid style but also the decorations represent the fashion of the same period. The entrance (Pl. 82) and the interior (Pl. 85 - 86) are all decorated with mosaic tile work. The main colours used in the tile work are blue, yellow, brown, red, white and black. They are designed in geometrical patterns, familiar from the other buildings of the area as below. Similar geometrical forms can be seen

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12. Tārikh-e Afghānistān ba' d az Eslām, Kabul, 1966, pp. 190 - 191.

13. J. Hoag: "The tomb of Ulugh Beg and Abdul Rassaq"... etc. The memorial volume of the fifth international congress of Iranian art and archaeology, Tehran - Isfahan - Shiraz, in 1968, Tehran, 1972, vol.2, p. 102.



olour plate 23-Herat, shrine of Shahzade Abdollāh. Interior view of the outh- west corner .

in the mihrab of Ziarat-e Abu Valid[14] and in the tile-work of tymurid restoration in the Jame' mosque of Herat. The fragmentary tile-work remaining in the Mossālla of Herat have also some similarity with those of the shrine of 'Abdollah ebn Mo'aviye. Such tile-work also resembles those of the Madrase of Oloq beg (1420 A.D.) in Samarqand.[15] All this tile-work is, of course, of tymurid period.

An inscriptional frieze bearing a Quranic text, painted in white on a blue background in free flowing naskhi script run round the domed chamber. Above is a repetition border being the words al-molk lellah, a late Kufic script. A close analysis for this association of naskhi and Kufic script can be found in the inscriptions of the Masjed-e do dar at Mashhad,[16] which is again a Timurid structure.

In the shrine of 'Abdollāh ebn Mo'aviyethe traces of several restorations are visible. Moreover from the records of Mr. Maẓaheri it appears that the building has been restored several times, mainly under the Safavids. The wall paintings may be from this period. Parts of tile works, which have been damaged are plastered and painted in the manner to imitate the original material.

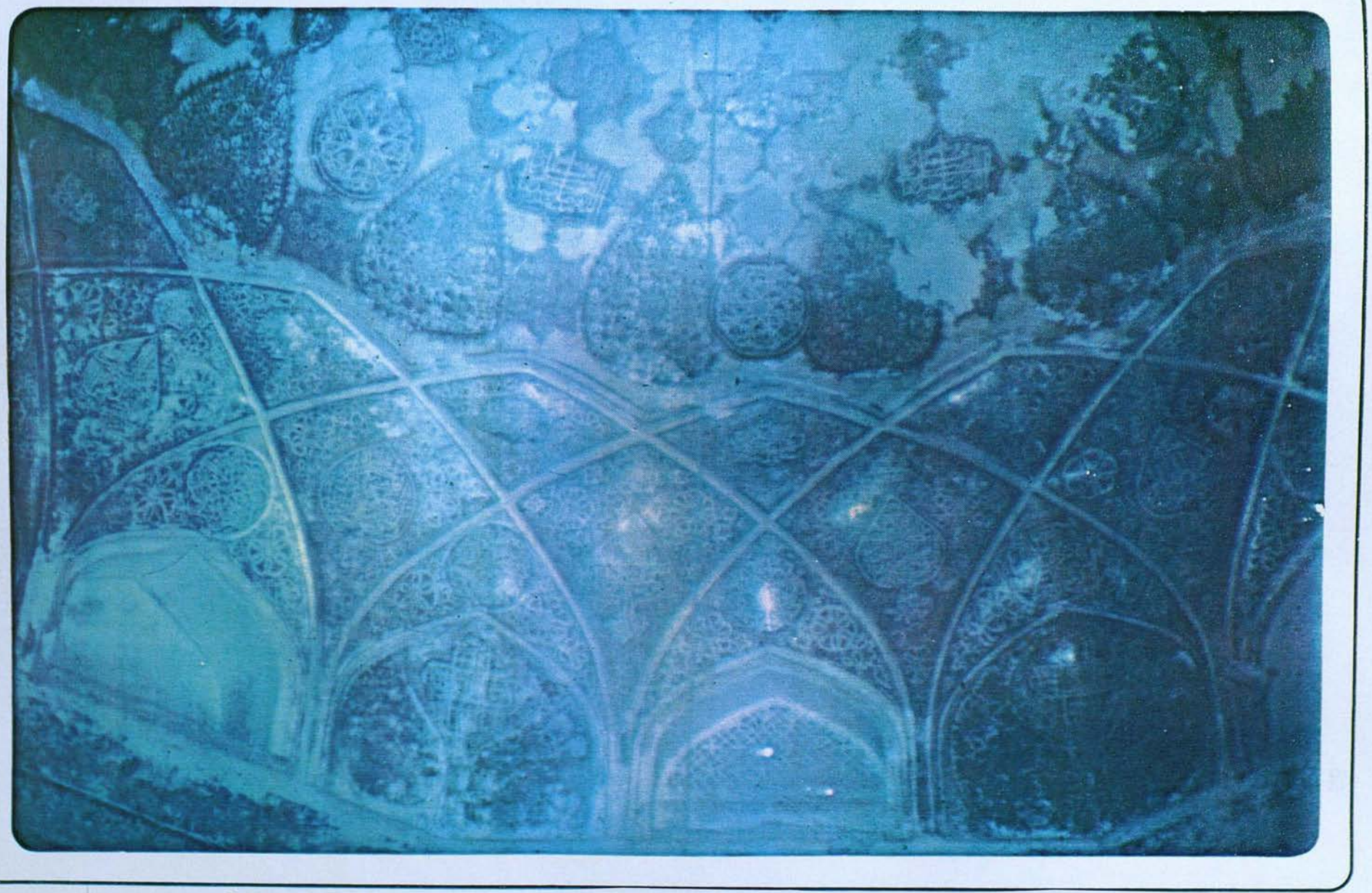
Dating of the building can, however, be only explained with regard to the style of building. It is possible that in 706 H. (1306 - 1307 A.D.), the first mausoleum have been constructed, but it is very difficult to say the present building could be built as early as that date. The type of plan and the form of decoration are all from Timurid period; therefore the present strcuture must have been built sometimes during this period.

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14. O. Niedermayer: Afganistan, Leipzig, 1924, pl. 174.

15. Historical monuments of Islam in the U.S.S.R., Tashkent, p. 63.

16. W. Hannoway: "Persian inscriptions down to the early Safavid Period, Corpus Inscriptionum Iranicarum vol. II Khorasan Province, Khorasan I, pls. 6, 14 and 18.



Colour plate 24_Herat, shrine of Shāhzāde Abdollāh . Interior view of the dome .

It is, however, possible that parts of the earlier structure remain hidden under the Timurid materials, as we have seen that it had happened to the other shrine of this site.

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9. Hudud al-'Alam, Tehran, 1962.

10. Mac. Guckin De Slane: Ebn Khallikan's Biographical Dictionary, London, 1852.

11. Mir Khvānd: Rauzat al-Safā, Tehran, 1270 H..

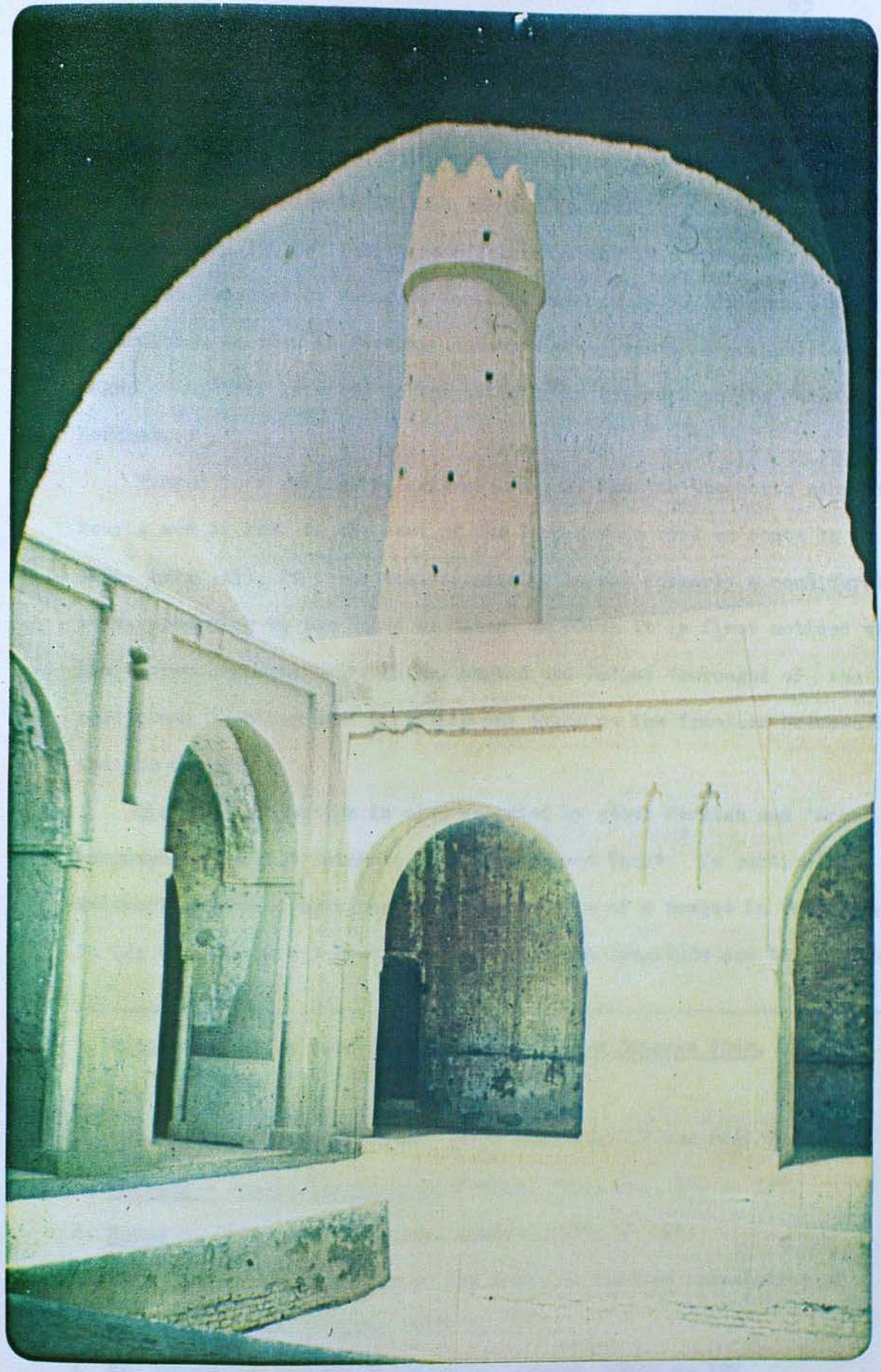
12. Mohammad ebn Mohammad Hāshem Qomi: Kholasat al-boldan, Qom, 1976.

13. O. Niedermayer: Afganistan, Leipzig, 1924.

14. Tabari: Tārikh al-rosol wal moluk, Lugd. Bat. 1881.



5. MASJED-E JĀME' OF FAHRAJ.



Colour plate 25-Fahraj, the Jāme'mosque . South-west view of the court yard .

# THE JĀME' MOSQUE OF FAHRAJ.

Scholars are familiar with the name of the, recently reported, Masjed-e Jāme' of Fahraj. This small structure is accepted as one of the earliest examples in Islamic Iranian architecture. However, there is still very little literature published about this monument. The site was first reported by Mohammad Karim Pirniā[1] in 1971. His report was in an article, written in Persian, accompanied by sketch drawings. Later Eugenio Galdiery referred to the building in his work on the Jame' of Isfahan.[2]

Fahraj is a village in central Iran, 24 kms. to the north east of Mehriz and 12 kms. to the east of the Yazd-Kermān road en route to Bāfq[3] (Fig. 15). It seems that apparently it was formerly a considerable town, according to the Hodud al 'Ālam[4] in which it is first noticed with its sister boroughs Anār, Katha, Meybod and Nā'in: "boroughs of the cold zone, much favoured by nature and lying on the frontier between Pars and the desert."

Similar information is also reported by other Persian and 'Arab geographers such as Estakhri,[5] Ebn Huqal,[6] and Yaqut.[7] In particular Estakhri and Yaqut both mention the existence of a mosque in the town. In 721 H. (1321 A.D.) Ab-olfeda'[8] records the longitude and the latitude

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1. Masjed-e Jāme'-e Fahraj, Bāstān shenāsi va Honar-e Iran, 1971, No. 5, pp. 2 - 12.
2. Isfahān: Masğid-iğumà, Rome, 1973, vol.2, p. 27 and Fig. 2C.
3. Farhang-e Joghrafiai-ye Iran, Tehran, 1954, Vol. 10, p. 143.
4. Hodud al 'Ālam, ed. Minorsky, London, 1937, p. 129.
5. Masālek va mamālek, a 5th or 6th cent. H. Persian translation of the Arabic text, Tehran, 1961, p. 117.
6. Ebn Huqal: Al masālek wal mamālek, Leiden, 1873, p. 182.
7. Yaqut: Al mo'jam al Buldan, Cairo, 1906, Vol., 6, p. 406.
8. Taqwin al Boldan, Tehran, 1970, p. 378.

of Fahraj in his book "Taqwim al boldan". Such calculations were made only for the principal cities and towns, and mainly for the sake of an exact determination of the qeble. Fahraj is very close to Yazd and the fact that its co-ordinates were specially calculated suggests that it was intended to determine the orientation for a mosque.

According to Ja'far ebn Mohammad-e Ja'fari,[9] the 16th century author of the Tārikh-e Yazd, at the time of the Islamic conquest of Iran, Fahraj was one of those strong centres of Zoroastrianism, which offered persistent opposition to the Arabs:

> "When the kingship descended to Yazdejerd ebn-e Shahriār, all of the army of Islam came to do battle with him... From the route of Yazd, Yazdejerd went to Khorāsān, and Mālek-e Za'ab and Mālek ebn 'Amr went to Khorāsān after him. When the army of Islam returned from Khorāsān, the camels lost their way in the desert and many of them died of thirst there. With difficulty they reached the village of Fahraj. The people of Fahraj made a night attack on them (shabikhun zadand) and killed the standard bearer of the flag of, Commander of the Faith and Emām of the Abstemious Ones, 'Ali ebn Abitāleb, (by name) 'Abdollāh ebn Abol sarin... When the time of 'Othmān came, he sent an army with his son Sa'id and Qathm ebn 'Abbās to Neishābur. They fixed a poll-tax there, returned and came to Yazd. The people of that region accepted Islam, so they took their army to Fahraj and they did great execution there. The tribe of the Arabs (qaum-e Tazian, i.e. beduwins of Syria) and Bani Tamim established

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9. Tārikh-e Yazd, Tehran, 1960, p. 15.

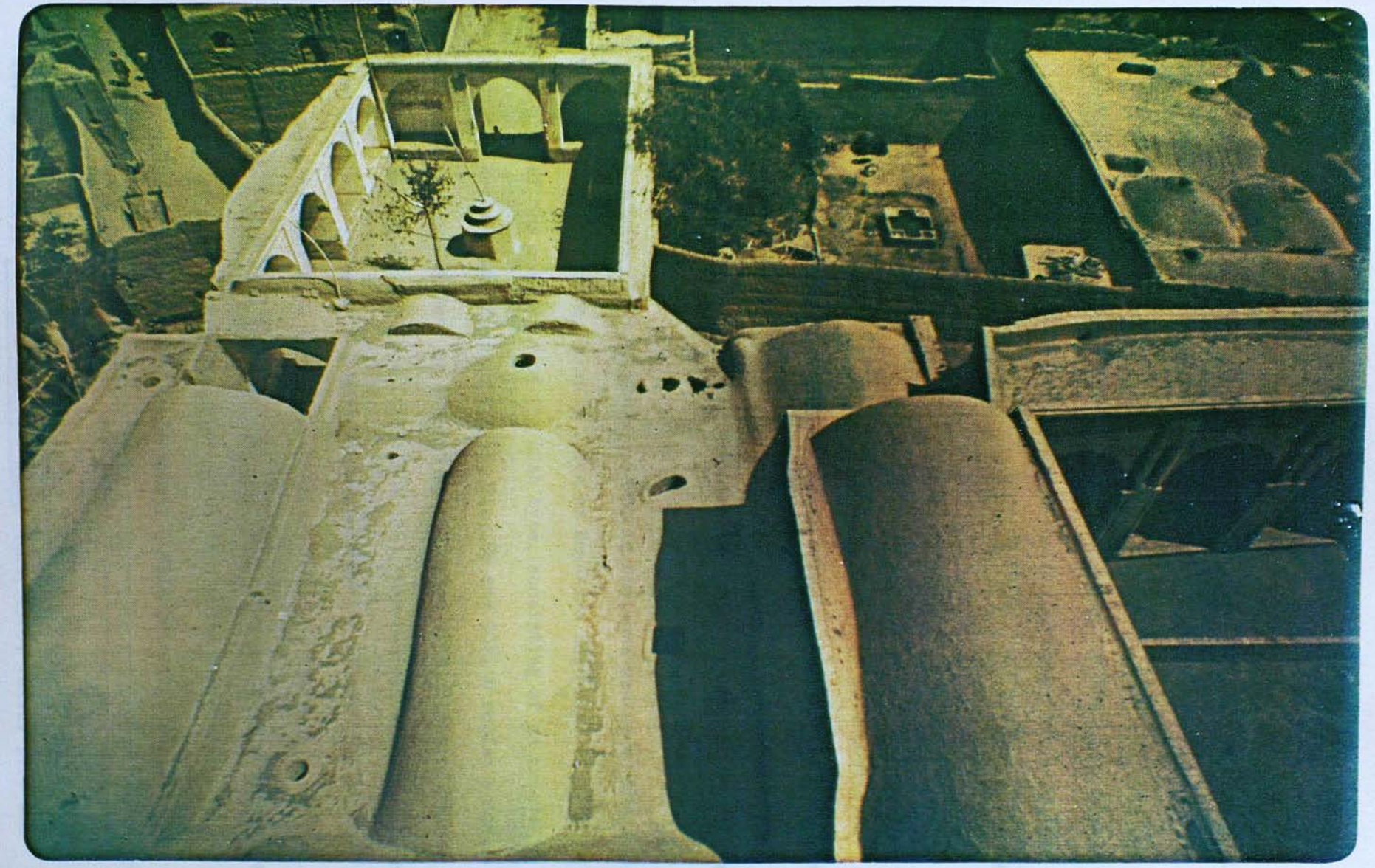
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9. Tārikh-e Yazd, Tehran, 1960, p. 15.



Colour plate 26_Fahraj, the Jâme'mosque, and Hoseyniye square .

themselves in Yazd and all Zoroastrians of the province of Yazd accepted the poll-tax."

Ja'fari does not mention the mosque of Fahraj, but it is reasonable to suppose that the Arabs would have built a mosque there at the time of its conquest.

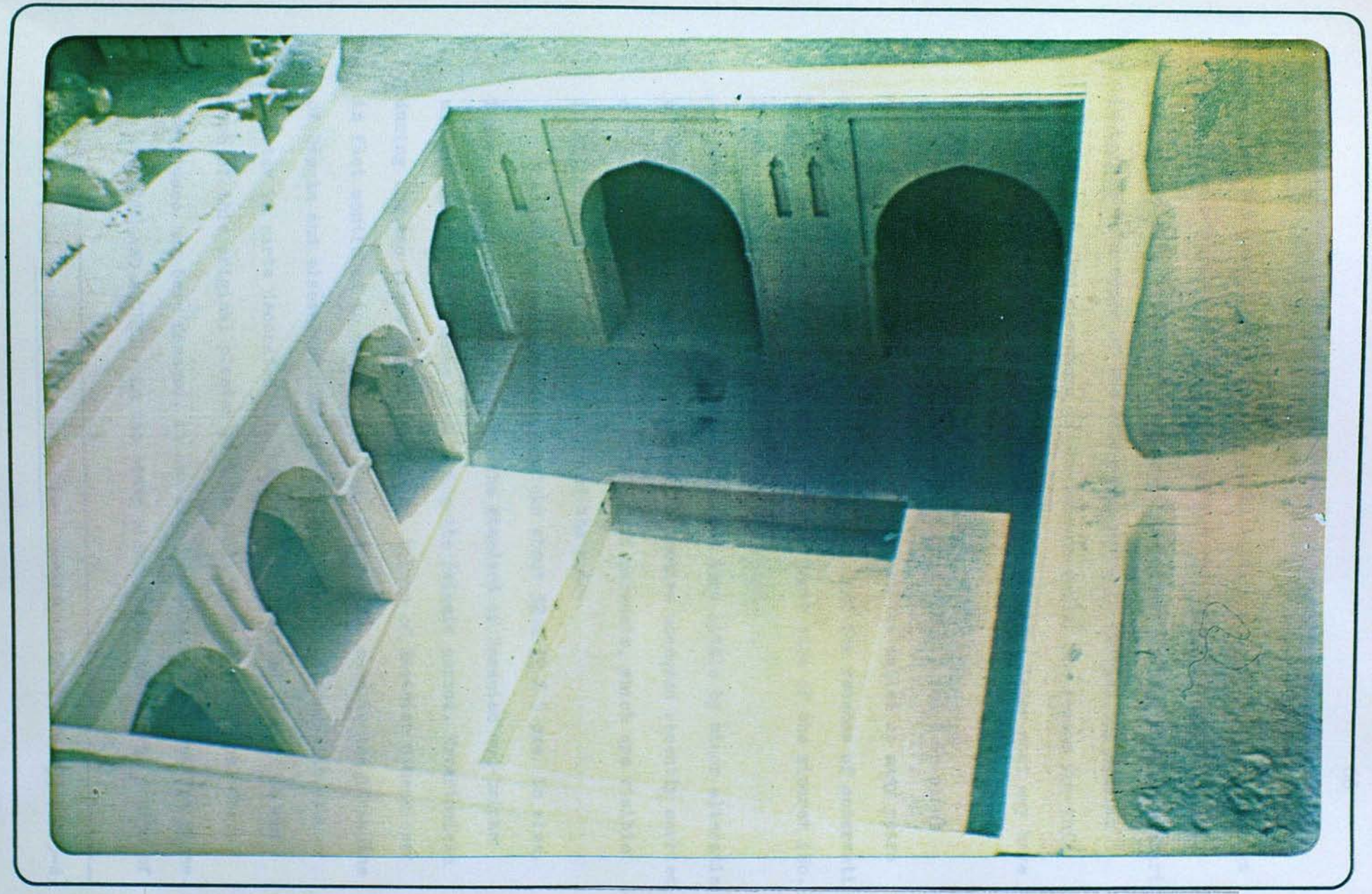
STUDY OF THE SITE

In the summer 1977, the present writer visited Mr. Pirniā of the National Organization for the Protection of the Historical Monuments of Iran, and proposed a new survey of the site, in order to obtain more detailed drawings and photographs. We are grateful to Mr. Pirniā for providing full information, and also making available an unpublished drawing of the site prepared by the above organization. Whilst both the sketch drawings by Mr. Pirniā[10] and the one mentioned above were very helpful, the drawings submitted here are based on a fresh survey carried out by the writer.

The Masjed-e Jāme' of Fahraj stands in the town centre on the south-west of a small square, locally known as Meydān-e Hoseyniye (Fig. 47). The plan of the mosque is of the Arab type, consisting of an arcade around a court-yard (Fig. 48 and 55, Pls. 89 and 90). A roofed space, arranged in five aisles, is located at the qeble side, three of which open on the court-yard (Pls. 93, 100 - 103). The central aisle in which the mihrab is situated is, however, wider than the others (Pl. 100). This is a typical form in Iranian mosques, built on the Arab Plan, and is already known from the other two standing examples of this type. The Tārikhāne of Dāmghān and the Jāme' of Na'in. In the Buyid plan of the Jāme' of Isfahan, revealed by Galdieri,[11] this principle can also be

10. "Masjed-e Jame'-e Fahraj," Bāstān shenāsi va honar-e Iran, 1971, No. 5, p. 11 and 12.

11. E. Galdieri: Isfahān: Masğid-i Ğumá, Rome, 1973, Vol.2, p.28 and the drawings.



Colour plate 27_Fahraj, the Jāme'mosque. Central court-yard .

seen.

In the Jāme' of Fahraj, the north eastern arcade has four openings to the courtyard (Nos. 6 - 9 in plan and Pls. 92 & 96), and does not correspond with the three openings of the opposite side. Such irregularity is unique in mosques of the Arab plan, not only amongst the Iranian example, but also elsewhere in the Islamic world. The reason for this irregularity is not apparent, and we shall consider later what may have been its cause.

Two entrances, open on the north east arcade (7 and 8 in plan) originally existed in the mosque. One of them was walled up many years ago, and the other has been temporarily blocked for reasons of coservation. Today the only entrance is that at the south side of the minaret (No. 17 in plan) and that opening is relatively new.

The original plan has been disturbed very little by minor alterations of the mosque during the centuries. Protective measures recently carried out have included the removal of the roof parapets, which are visible in Mr. Pirnia's early photographs of the site.

The mosque is built of mud bricks about 32 X 32 X 5 cms. in size. These deimensions are similar to the standard of Sasanian mud-bricks and are larger than those used during the Islamic period. Nevertheless during the two first Islamic centuries, bricks of Sasanian dimensions in fact continued to be used in Iran, and can be seen in the Tārikhāne of Dāmqān and elsewhere.[12] The structure was once covered with stucco plaster in parts decorated with mouldings and painted overall in red. Much of this original plaster work is still in good condition. Where the stucco has been damaged, it has been replastered with mud and straw.

VAULTS AND ARCHES - On the heavy piers stands the barrel vaults of

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12. A.U. Pope: A Survey of Persian Art, Oxford, 1964-65, Vol.3, p.933-4.

the aisles, rising almost twice as high as the level of the ordinary houses of the area. The vaults are elliptical in profile (Figs. 49 & 51), and so very similar to those of the Sasanian period. On the qeble wall under the vaults, and opposite the ends of the aisles, there are decorative cusped arches moulded in the stucco (Fig. 53a). In addition several small niches with cusped heads decorate the piers around the courtyard (Pls. 93 - 100). A window with cusped top can be seen above the central aisle, and opposite to the mihrab (Pl. 105). Cusped decorations on the arches are first to make their appearance in Sasanian architecture, in arch mouldings of the Tāq-e Kasrā. Later they appeared in Islamic architecture at both ends of the Islamic world. In the east under the Ghaznavids this kind of arch was in use in monuments such as the palace of Mas'ud[13] and the tomb of Shāhzāde Sarbāz[14] in Bost. In the west it was favoured under the Omayyad and Abbasids, and can be seen in the Palaces of Qasr Kharāna (mid 8th cent. A.D.),[15] al Ukhaidar (late 8th cent.)[16] and the great mosque of Motavakkel in Samarra[17] (234-7 H., 848 - 852 A.D.). On the plateau of Iran, however, this arch was unknown to scholars until the discovery of the Gurgir portal of Isfahan.[18] The discovery of such arches both there and in the Jame' of Fahraj proves that after the Islamic conquest this type of arch was indeed in use in Iran as in other Islamic regions. It seems to have been a dominant fashion for a period lasting from about 5th to 10th century; but it must be acknowledged that the form is purely decorative, and does not contribute

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13. D. Schlumberger: Lashkari Bāzār, Paris, 1978, Vol.8, pl. 152 h.

14. Present study, p.101

15. Creswell: Early Muslim Architecture, Oxford, 1969, Vol.1, Part II, pp. 646 - 647, pl. 139 b.

16. ibid., 1940, Vol.2, pp. 89 and 90, pl. 19 b.

17. ibid., Pl. 66.

18. L. Honarfar: Ganjine-ye āthār-e tāriki-ye Esfehān, Isfahan, 1965, p. 42.



Colour plate 28.-Fahraj, the Jāme'mosque . Aisle 2 looking to the north .

to the structural function of the arch. After the 10th century when technique of arch building developed further, special emphasis was rather placed on the structural role of the various arch forms, and the somewhat artificial cusping seems to have been abandoned.

SQUINCHES AND THE PIERS - The north east arcade is roofed with semi domes, built in Sasanian profile (Fig. 50 and Pls. 195-6), and each of them has two elliptical squinches (Pl. 197). In spite of the fact that the squinches are Sasanian in form, they are more decorative rather than functional. They do not support any loads applied by the dome as they are built from two corbelled mud bricks (Pl. 198). False squinches are seen in early Islamic structures such as those of Qasr al Kharāne in Syria,[19] but their appearance in Fahraj is unusual. On the plateau of Iran real squinches had been employed over a long period, so that their structural function was well known at the beginning of the Islamic era. In fact, there is no structural requirement for squinches at Fahraj, since the semi domes associated with them are quite small. The use of the squinch form here is purely decorative and its aim may be to create an impression of larger domes.

The piers in the Jame' of Fahraj are massive, but they are lightened by engaged columns, at each of their corners (Pls. 101-2). This feature is again characteristic of Sasanian architecture and later plays an important role in the Islamic period, particularly in eastern Iran. Similar columns decorate the entrances of the tomb of Ismā'il the Sāmānid, the shrine of Arab-atā in Tim,[20] Shāhzāde Sarbāz[21] in Bost and many more.

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19. G. Bell: Palace and mosque at Ukhaidir, Oxford, 1914, p. 115, pl. 80.

20. G.A. Poga chenkowa: "Decovertes et etudes des monuments architecturan de Mavara'al Nahr et de Khurasan (1957-67)", Fifth international congress of Iranian Art and Archaeology in 1968, Tehran, 197?, memorial volume 2, p. 373.

21. Present study, p. 101



lour plate 29_Fahraj, the Jāme' mosque . aisle 5 looking to the qebla wall .

that the building should be of similar date to the buildings mentioned, that is to say, of the mid 8th century.

As for our second point of dating evidence, the patterns moulded in the stucco work in the Jaime' of Fahraj are also similar to those of the Sasanids. The cusped-arch motifs moulded in the stucco of the qeble-wall have already been discussed. There is another feature at the north end of the side aisle (1). Above the overhanging arch there is the decorative outline of a merlon (Fig. 53b and Pl. 95) which has the form of Achaemenid and Sasanian parapet-crenellations. Before the Islamic invention this form was not used as a pattern for interior decoration, so far as we can judge. At Al-Ukhaider,[25] however, it is extensively used in the interior of the mosque. Thus we find yet another analogy with al-Ukhaider, which again supports an 8th century dating for Fahraj.

A very interesting feature at Fahraj is constituted by the three false doorways carved in the stucco of the south-east wall (Fig. 50, Colour Pl. 30 and Pl. 104). These imitation doorways are almost twice as large as the actual entrance or indeed any other real door in the building. Decoration with false doorways is an unusual feature in Persian architecture in any period. Its appearance in Fahraj may best be exlained by the theory that the builder was actually trying to imitate another building. In fact there are more than one detail in the mosque which would support such theory. An attempt has been made to represent the arches as more shapely pointed than they really are. The false squinches, already mentioned, serve no structural purpose but are purely decorative. Moreover the fact that four arches of the north-east arcade face three aisles on the qeble side is a most artificial detail which serves no purpose here. Here again architectural imitation is suggested, but it is

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25. G.L. Bell: Palace and the mosque of Ukhaidir, Oxford, 1914, pl.20 a & b.



ur plate 30-Fahraj, the Jāme'mosque . Stucco decoration in the form of a door.

impossible to specify what the intended prototype would have been; and since Fahraj is entirely alone in its period, we must assume that the prototype must in any case be lost.

LATER ADDITIONS- In the Jāme' of Fahraj there are some additions to the main structure (Fig. 54). To the south-west there is a shabestān, no. 11 in plan, which is now in ruin (Pl. 107). As it appears from the remaining walls and piers,it has once been roofed with eight cross vaults. Such technique of vaulting is much later than the elliptical barel vaults of the main structure. The building materials used in the Shabestān are also different from those of the original construction. The mud bricks used in the Shabestan are smaller in size, similar to the standard of the Islamic bricks. So this section should have been added to the building during later period and not earlier than the 10th century, since the cross vaulting was unknown in the area before this date.

To the north-west of the mosque, there stand a minaret and several chambers. The minaret (Fig. No. 49 and 51, Pl. 91) is built of the same bricks as those of the shabestān. It is, therefore, reasonable to suggest that it has been added to the mosque at the time of the shabestān. So far as the chambers are concerned, three of them, nos. 10, 12 and 13, open directly to the mosque and their doorways with the overhanging arches, already mentioned, should have been original. In the foundation of some parts of their walls, large bricks, similar to those of the original building, are used, but their walls and vaults are all built with the smaller bricks. So it seems that whilst the chambers are all built on a later date they are actually constructed on the foundation of an earlier site.

CONCLUSION.

Knowledge of the early Iranian mosque is in fact limited: before the Jāme' of Fahraj came to notice, only two standing mosques of Arab plan

were known in Iran - the Tārikhāne already mentioned, ascribed to the 8th century,[26] and the Jāme' of Nā'in, to about 960.[27] The latter is a late example of the type, with more developed structure and finer details. Others are known from excavated traces. Besides examples now awaiting publication, relics of such a plan have recently been discovered at two other mosques, those of Sirāf[28] and Isfahān.[29] However, in these instances, only the foundations survive; yet they add significantly to our picture of the chronology and distribution of such structures.

Now the jame of Fahraj provides new information about architectural development in this period. Survival of Sasanian structural methods is already illustrated in the Tārikhāne, but there neither the original roof nor its ornamental detail survived. Thus the jame of Fahraj is unique in preserving - as we have seen, and in remarkably fine condition - its vaults, arches, and incidental decorations. It proves conclusively that Sasanian structural and decorative traditions not only survived, but found a place in the tradition of mosque building. On the other hand, many details at Fahraj are similar to those of 8th century Islamic buildings in Syria, which we have already discussed (p. 70 above). These connections show that during the early Islamic period, not only was the Arab plan introduced in Iran, but the technical exchanges involved included the transmission of Iranian motifs to the westward of the Euphrates. Such similarities as the overhanging arches of certain doorways, the decorative plaster 'merlons', the false squinches, and the use of cusped arches at Fahraj, are paralleled (in respect of the first) at the Tārikhāne and (in respect of all) at al-Ukhaider, and indicate that Fahraj belongs to the 8th century A.D..

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26. A.U. Pope: Persian Architecture, London, 1965, p. 78.

27. ibid., p. 85.

28. D. Whitehouse: Excavation at Siraf, Iran, Vol. 7, 1969, p. 41.

29. E. Galdieri: Isfahān: Masǧid-i Gum'a, Rome, 1973, Vol.2, p. 28.

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12- A. Pirniā: "Masjed-e Jam'-e Fahraj", Bāstānshenāsi va honar-e Iran, 1971, No. 5.

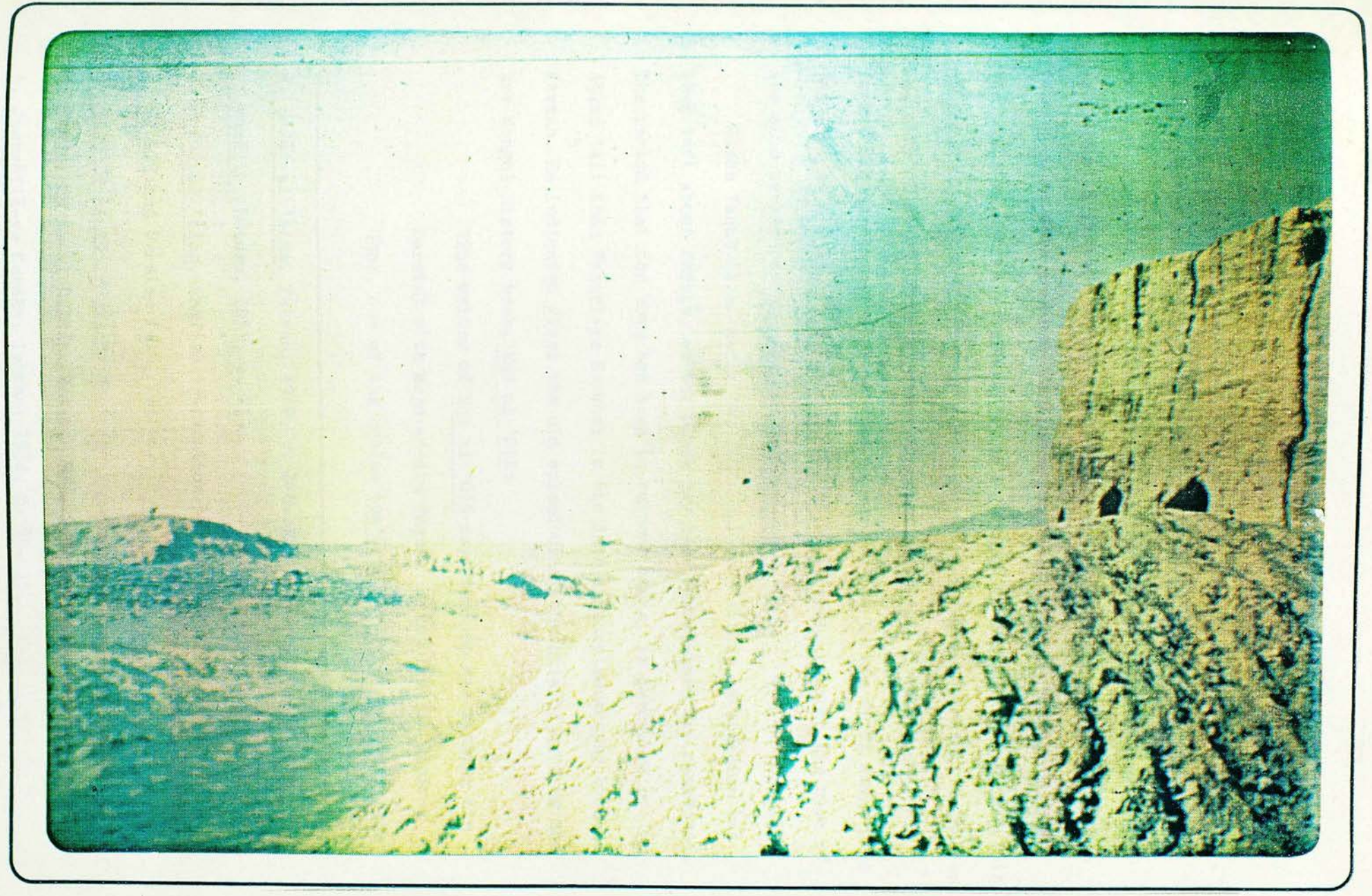
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14- A.U. Pope: A Survey of Persian Art, Oxford, 1964-65.

15- A.U. Pope: Persian Architecture, London, 1965.

16- D. Schlumberger: Lashkari Bāzār, Paris, 1978.

17- Yaqut: Al mo'jam al Buldān, Cairo, 1906.



Colour plate 31- Dārzin: View from Fort 3 to the west showing the other two forts .

## THE FORTS OF DĀRZIN.

Dārzin is a village located on the main road eastward from Kermān to Bam, at the point where the branch road diverges to Jirofot (Fig. 56). The new motor road was constructed in 1975 which passes a kilometre north of the archaeological remains; but previously the road junction was situated in the village (Fig. 57). From the 4th century H. until the 7th (11th to 14th century A.D.), Persian and Arab geographers, who use the spelling Dārjin,[1] describe it as a town of considerable size. According to Hodud al 'Alam: "Dārjin is a borough between Bam and Jirofot, prosperous and very pleasant. From it comes cinnamon (darchini)."[2] Ebn Huqal[3] and Yaqut[4] also mention the place, the former calling it the first stage from Bam towards Sirjan. It must be mentioned that Yaqut records the name of the site as Dār-razin.

Since Yaqut (i.e. early 7th cent. H.) very little information has been left about Dārzin, as the place may have been ruined and abandoned. The period that the town has been in ruinous state, is described by Aḥmad 'Ali Khān Vaziri-ye Kermāni in his 19th century geography book of Kērman.[5] He indicated first the old splendour of the site by quoting the pre Mongol History book, 'Eqd al 'Olā:

> "The writer of 'Eqd al 'Olā says that he was sitting (in Darzin) with Majd ad-din Nāṣeḥ, Vezir of Malek Dinār-e Ghoz, one of the nobles (ma'āref) of Fars. On every side

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1. Hudūd al 'Ālam, Tehran, 1962, p. 128. Ebn Huqal: Al masālik wal mamālik, Leiden, 1873, p. 219.
2. Hudūd al 'Ālam, English translation by V. Minorsky, London, 1937, p. 125 and Persian Text, Tehran, 1962, p. 128.
3. Al masālik wal-mamālik, p. 225.
4. Yaqut: Mu'jam al Buldān, Cairo, 1906, Vol. 4, p. 9.
5. Joghrāfiā-ye Kermān, Tehran, 1974, p. 96.

> that the line of vision fall there were chequer-board (mottasaq) cultivation-plots, flowing (motarrad) water-courses, verdant landscape and agriculture. The man from Fars took an oath that whilst they say Fars, is half the world, and famous for its freshness and high standard of its crops, I have seen no district of that region comparable with this land for its refreshing gardens, agreeable ponds and quality of products."

Then Vaziri adds his own account:

> "For a long time Dārzin was in ruins. Now by hard endeavour and adequate ambition of the late Mohammad Esmā'il Khān-e Vakil al Molk, a stream, from the mountain-range (qahestān) of Abāreq, is brought to that region and today it is inhabited."

In his other book, Tārikh-e Kermān,[6] Vaziri records that under the Taymurids a battle between the armies of Mirza Abābakr, the commander of Shahrokh, and Soltān Oveys took place in Dārzin. He does not give the details of the event, but indicates that his information came from the Bam nāme,[7] a work now untraceable, but still altered in the 19th century and also reported by Sykes.[8] Such battle may have led to the abandonment of Dārzin, of which there is subsequently no mention in the sources.

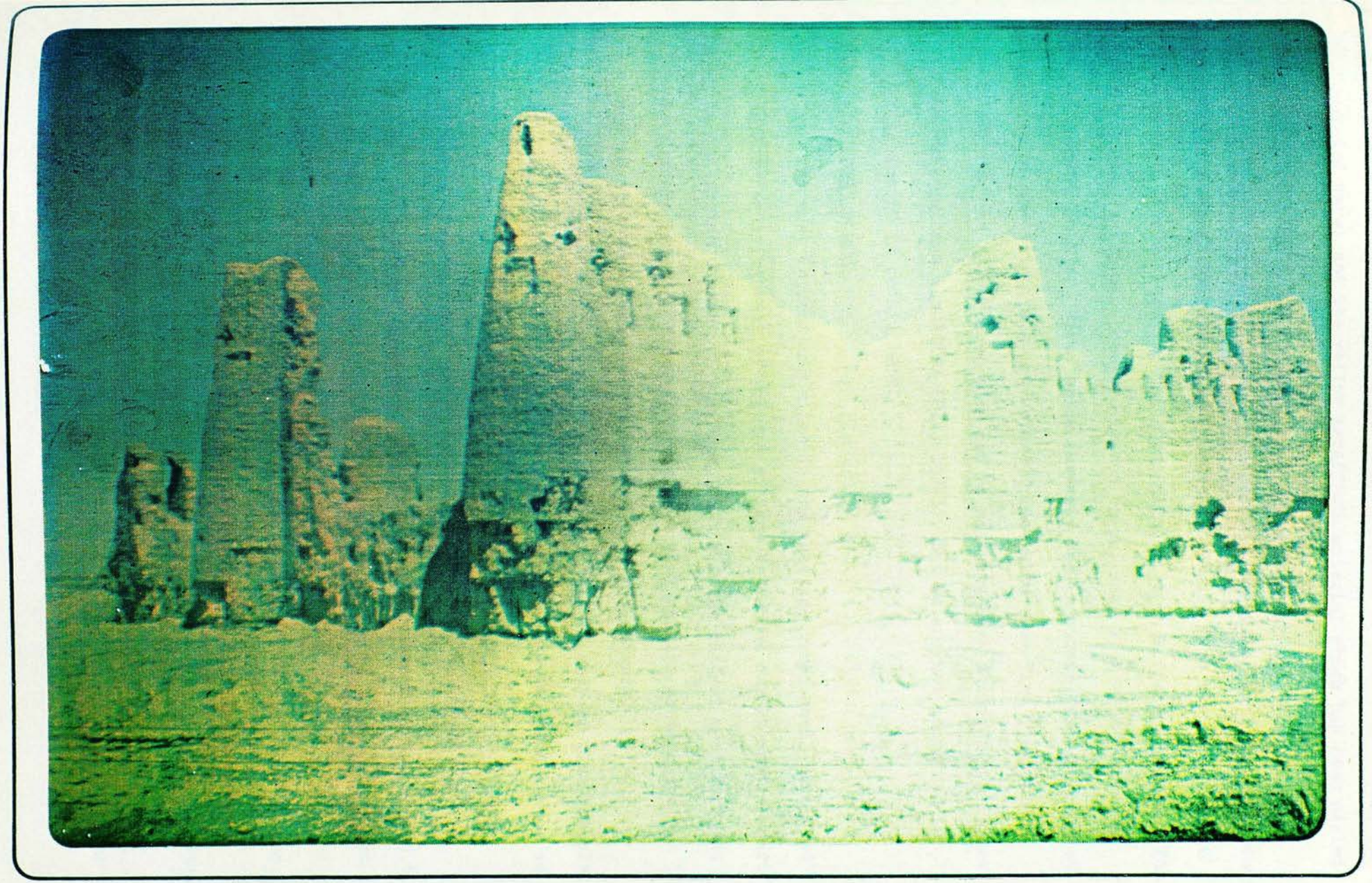
THE ARCHAEOLOGICAL SITES.

The ruins of the old Dārzin lie east of the present village covering an area 3 kms. by 1·5 kms (Fig. 57). There is copious sherd cover, most of the pottery being under-glazed painted ware (c. 14th - 15th century), but with earlier fabric also present. They include slip

6. Aḥmad 'Ali Khān Vaziri-ye Kermāni: Tārikh-e Kerman, Tehran, 1961, p. ?43.

7. ibid., introduction by M. Bāstani Pārizi, p. نکو

8. P.M. Sykes: A History of Persia, London, 1915, Vol. 2, p. 84.



Colour plate 32- Dārzin, Fort 1 . South - west view .

painted ware, and the yellow sgraffiato material which has been called "electric sgraffiato".

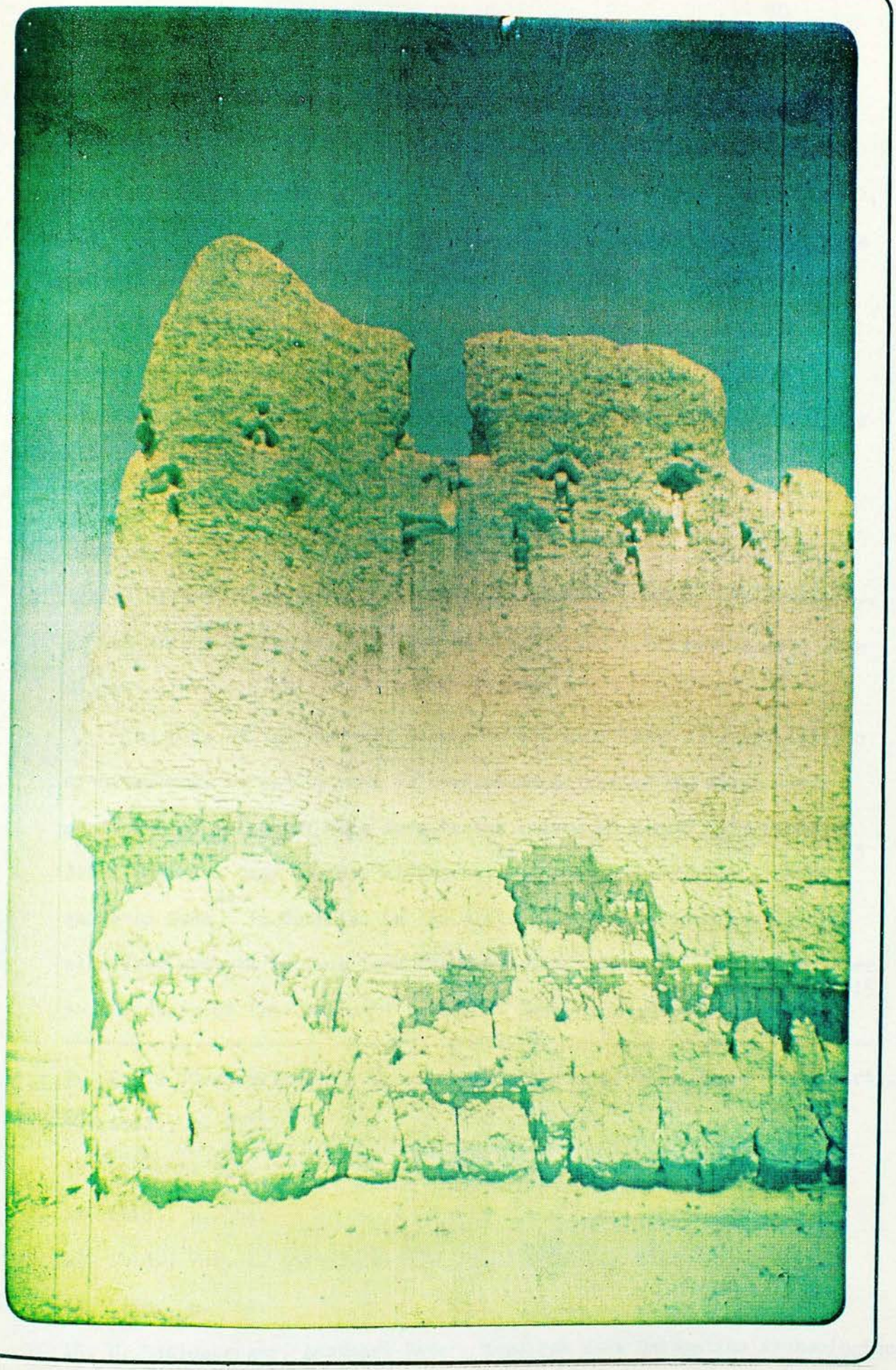
Several ruins are still standing to illustrate the former splendour of the town. Since the building material varies from one structure to another, one may assume that these were built in different periods. The favourite material, however, is mud brick, some 27 X 27 X 7 cms. and elsewhere smaller. Fired brick (usually red in colour) is also used at some of the sites, e.g. structure 4 (see site plan Fig. 57). This building has a four ivan plan and so may have been a mosque. It is now in very ruinous condition (Pls. 132-3), but we are not concerned to describe it in detail here.

THE FORTS.

The most interesting sites in the area are three small fortified enclosures lying east of present village and about one kilometre apart. In our sketch drawing of the area (Fig. 57) the eastern most fortress is numbered as 1, the one in the middle as 2 and the western most as 3, and in this paper they are designated by their numbers.

All three enclosures share a similarity, not only of plan but also of details and materials. They have a square plan with round towers in the corners, and an intermediate tower on each face, except at the entrance. The doorway, relatively small, occupies the middle of the fourth side and is flanked by two semi-circular towers (Figs. 58 and 60). The towers are all solid upto roof level, but above, some show traces of a former chamber (Pls. 116 and 124).

At Forts 1 and 2, some of the interior walls of the lower storey still stand above the present ground level; Fort 3 is in a state of advanced ruin (Colour Pl. 31) and only the northern curtain wall survives (Colour Pl. 39). Though the present writer was, therefore, unable to prepare its plan during his visit, traces on the ground made it clear that its form was originally similar to the others.



Colour plate 33_Dărzin, Fort 1 . Detail of the south-west corner .

While the enclosures are relatively small in dimensions, they possess very high curtain walls which are about 1·50 m. thick at the ground level. The interior consists of tunnel-vaulted chamber arranged round a central court-yard. Such few vaults, as survive in Forts1 and ?, are built with elliptical profile (Pls. 115 and 124). This type of arch is, of course, characteristic of the Sasanian and earliest Islamic period in Iran. Their appearance in the forts of Dārzin indicates the age of those sites. There are, however, traces of other vaults, four centred in profile, which should belong to later periods (Fig. 127). As the materials of these four centred arches differ from those of the fundamental structure we assume that they were added as secondary restoration at later dates. In Forts 1 and 2, above the ground floor, traces of two other storeys can be seen. In fact at Fort 2, two chambers of the second storey stand intact on the western side, both roofed with elliptical vaults (Fig. 62 and Pls. 122-6).

The plan of the forts of Darzin is one well known in early Islamic architecture. It can be seen in several monuments of the first two centuries of Islam. Of this form is the palace of Menya,[9] the rebāt of Jabal Sayes,[10] Qaṣr al-Ḥayr al-gharbi,[11] Khirbat al-mafjar,[12] ʿAtshān[13] and even Susa[14] in Tunisia. On the plateau of Iran, enclosures of this plan seem not yet to have been the subject of scholarly reports. However, an enclosure of the Ghaznavid period at Bost, only recently published,[15]

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9. K.A.C. Creswell: Early Muslim Architecture, Oxford, 1940, Vol.1,part1,p.385.

10. ibid., p. 473.

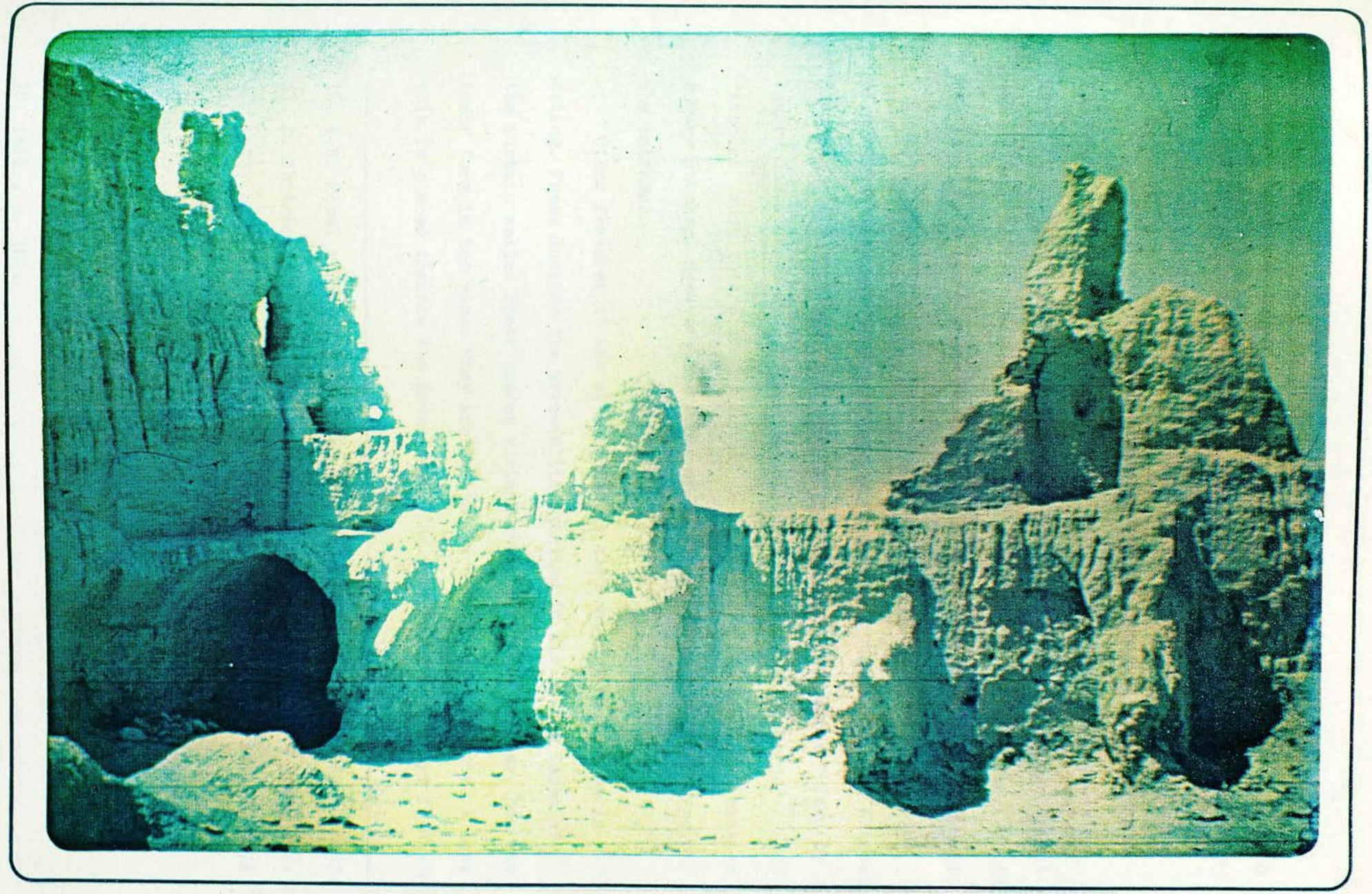
11. ibid. p. 509.

12. ibid., p. 554.

13. ibid., Vol. 1. part 2, p. 93.

14. ibid., p. 169.

15. D. Schlumberger: Lashkari Bazar; Memoires dela Delegation Archeologique Francaise en Afghanistan, Paris, 1978, Vol. 18 part 1 A, p.93,pl. 36.



Colour plate 34.Dārzin, Fort 1 . Western wall, interior view .

shows some similarity to those of Dārzin. At Bost only the curtain wall and the towers of the enclosure resemble our examples. The gateway, both in position and form is entirely different and so is the arrangement of the interior chambers.

Entrance gateways, flanked by semi-circular towers, such as those at Dārzin, are familiar already in the Sasanian period. The feature is found at Takht-e Soleyman,[16] at the Sasanian fortress at Sirāf,[17] and at the caravanserai of Deyr-e Gachin.[18] The same type of entrance remained in use in early Islamic times, in both enclosures of Qaṣr al-Ḥayr al-Sharqi.[19] Defensive considerations, especially requirements for the installation of a portcullis, led to the evolution of more elaborate forms. At Khirbat al-Menya[20] the entrance is formed by two semi-circular towers joined by square domed chamber. In later examples such as Khirbat al-Mafjar[21] and ʿAtshān[22] such towers are no longer used. They are replaced by a massive square chamber. However, the forts of Dārzin preserve the older type of the entrance.

Other features at the site of Dārzin also support such an early dating. These include the arrow-slits existing in all of the faces of the curtain walls. Their number varies from one site to another, but the their form is the same. They are in the shape of an upward lance. A loop hole is placed towards the lower part. The triangular upper part is again

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16. A.U. Pope: A Survey of Persian Art, Oxford, 1964-65, Vol.14, p. 3052.
17. D. Whitehouse and A. Williamson: Sasanian Maritime trade, Iran, Vol. 11, 1973, p. 34. D. Whitehouse: Excavations at Sirāf, Iran, Vol.12, 1974, p. 7 and 8.
18. Present study, chapter one.
19. Cresswell: Early Muslim Architecture, Oxford, 1940, Vol.1, part 1, pp. 323 - 325.
20. ibid., p. 382.
21. ibid., p. 553.
22. ibid., Vol. 1, part II, p. 91 and 93.



Colour plate 35.Dārzin, Fort 2 . View from the south-west .



Colour plate 36_Dārzin, Fort 2 . View from the south- east .

divided into three smaller triangles by means of a square constructed in the middle of the larger triangle. A very close analogy for this type of arrow-slit is provided by the enclosure of Al Ukaider.[23] Those of Dārzin show similarity with the arrow-slits of al-Ukhaidar not only in general forms but also in precise details and proportions. Such similarities suggest that during early Islamic period this form of arrow-slit were vastly used all over Syria and Iran.

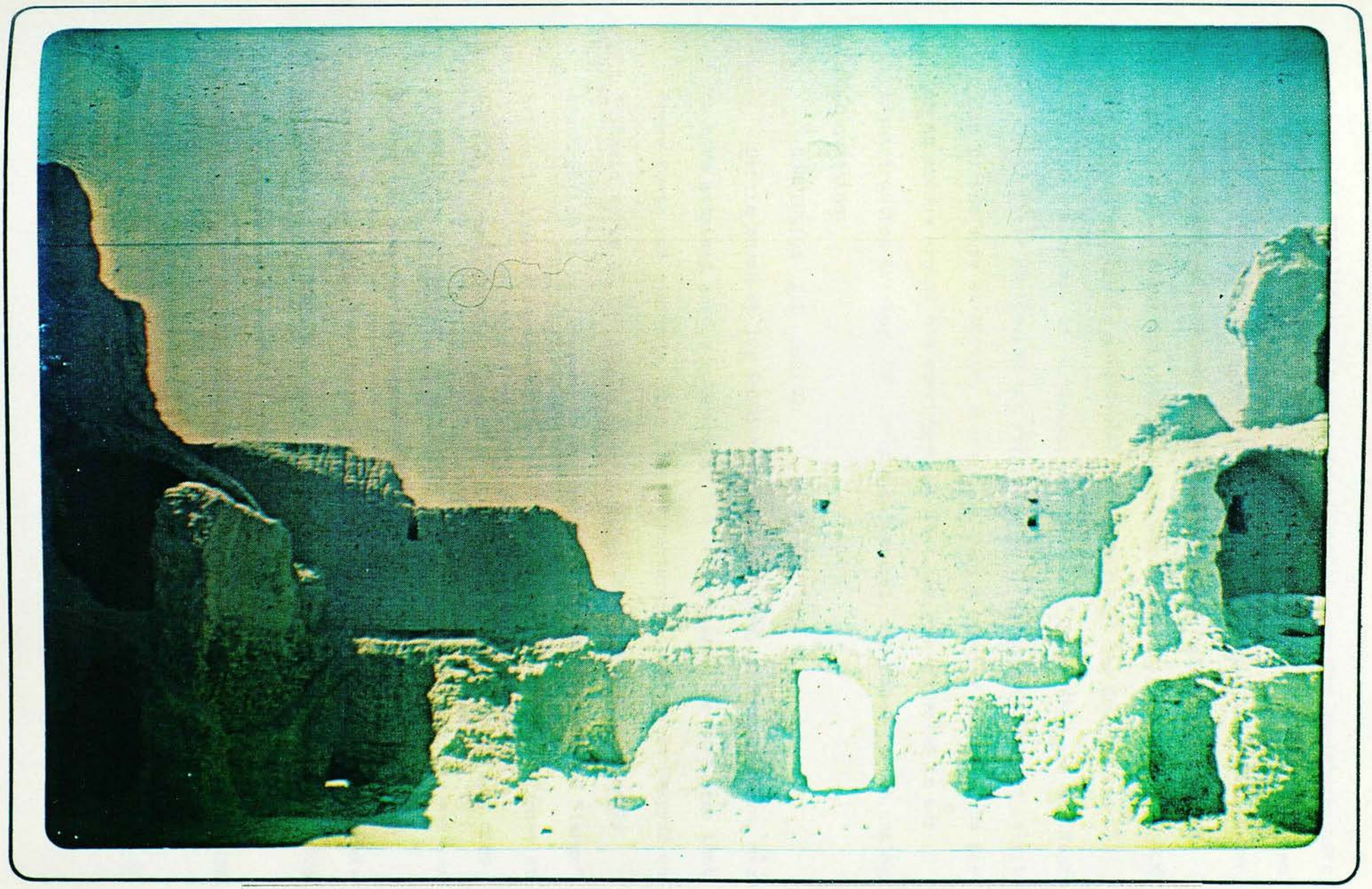
In Dārzin the building materials of the forts are rather interesting. The sun-dried bricks, used in these sites are 27 X 27 X 7 cms. in size, which is, of course, larger than the standard of Islamic bricks. Bricks of this type were used during the Sasanian period and the two first centuries after Islamic invasion. Their appearance in the forts of Dārzin is further evidence of the age of these sites. The bricks of the forts are made of mud and straw. This mixture is well known in Iran as a plastering material or, in a few cases, as mortar. However, in contrast to the well known proverb , in Iran, it is not the usual practice to use straw in bricks. Straw reinforces the rigidity of the mixture, especially against heavy strokes and tensional forces. So it seems that an extra stability has been aimed in the forts of Dārzan perhaps for military purposes.

Fragments of the fired bricks with usual Islamic dimension, and red in colour, are observed on these sites, especially at Fort 2. Yet it is clear that they did not serve as a major constructional element. They are nowhere to be seen in situ, and do not appear to have performed an important function. Though they may have been used for decorative facing of the walls or paving the floors, or even employed in connection with later restorations.

From surface survey of the sites at Darzin, there are problems in

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23. G. Bell: Palace and Mosque at Ukhaidir, Oxford, 1914, Pl. 10, Fig. 2.



Colour plate 37_Dārzin, Fort 2 . Interior view of the west sid .

the way of establishing an accurate reconstruction. The structures have undergone several repairs, and old materials have, here and there, been re-used, a practice which has tended to mask the original plan. However, for the purpose of a drawn reconstruction, Fort 2 appeared to be the most suitable, since its original plan was better preserved (Figs. 65-6). The reconstruction is established on the basis of the Omayyad and 'Abbāsid analogies, in particular the palace of Jabal Sāys and the Rebāt at Sūsa. These enclosures are very similar in arrangement of the interior plan to the site at Dārzin. However, at Dārzin nothing is now to be seen of an arcade around the courtyard, so that the one suggested in our reconstruction drawing, is purely hypothetical, and based on the analogies in question.

CONCLUSION AND DATING.

Darzin shown by the Persian and Arabic texts, discussed above, seems to have attained some prominence by the 10th century. We have seen that these forts now standing, have close structural analogies in Umayyad and 'Abbasid works of the eighth century A.D.. This impression of early construction is re-inforced by the use of elliptical vaults and "large" bricks in these structures. The characteristic form of the entrances at Dārzin, a small gateway flanked with two semi-circular towers, is also relevant to the dating. We have seen that this type of entrance was used during the Sasanian and early Islamic periods, but towards late 8th century A.D. different forms were introduced, primarily to accommodate the portcullis. Since the gate at Dārzin represent the early form, this is once more an evidence to place them in the 8th century.

There are also arrow-slits at Dārzin which have the form of an upright lance. In their minor details they agree exactly with those of al-Ukhaider. Once more this similarity supports our dating of the forts of Dārzin to the 8th century.



Colour plate 38-Dārzin, Fort 2. An arrow-slit .

It is important that many sites comparable to the forts of Dārzin are located in Syria and so far from the plateau of Iran. In the previous chapter we observed that the Jāme' of Fahraj presents similarities with the early Islamic architecture of Syria. Such similarities are practically worthy of attention, because they emphasise the unity of technological background in Islamic world both east and west of the Euphrates, a unity that is especially notable in architecture, and which some commentators have tended to minimize. Though this characteristic is increasingly appreciated in the work of Ghazanavids and later dynasties, it was already present at the close of the Umayyad suzerainty, as the evidence recorded here makes sufficiently clear.



Colour plate 39.Dārzin, ruins of the Fort 3 .

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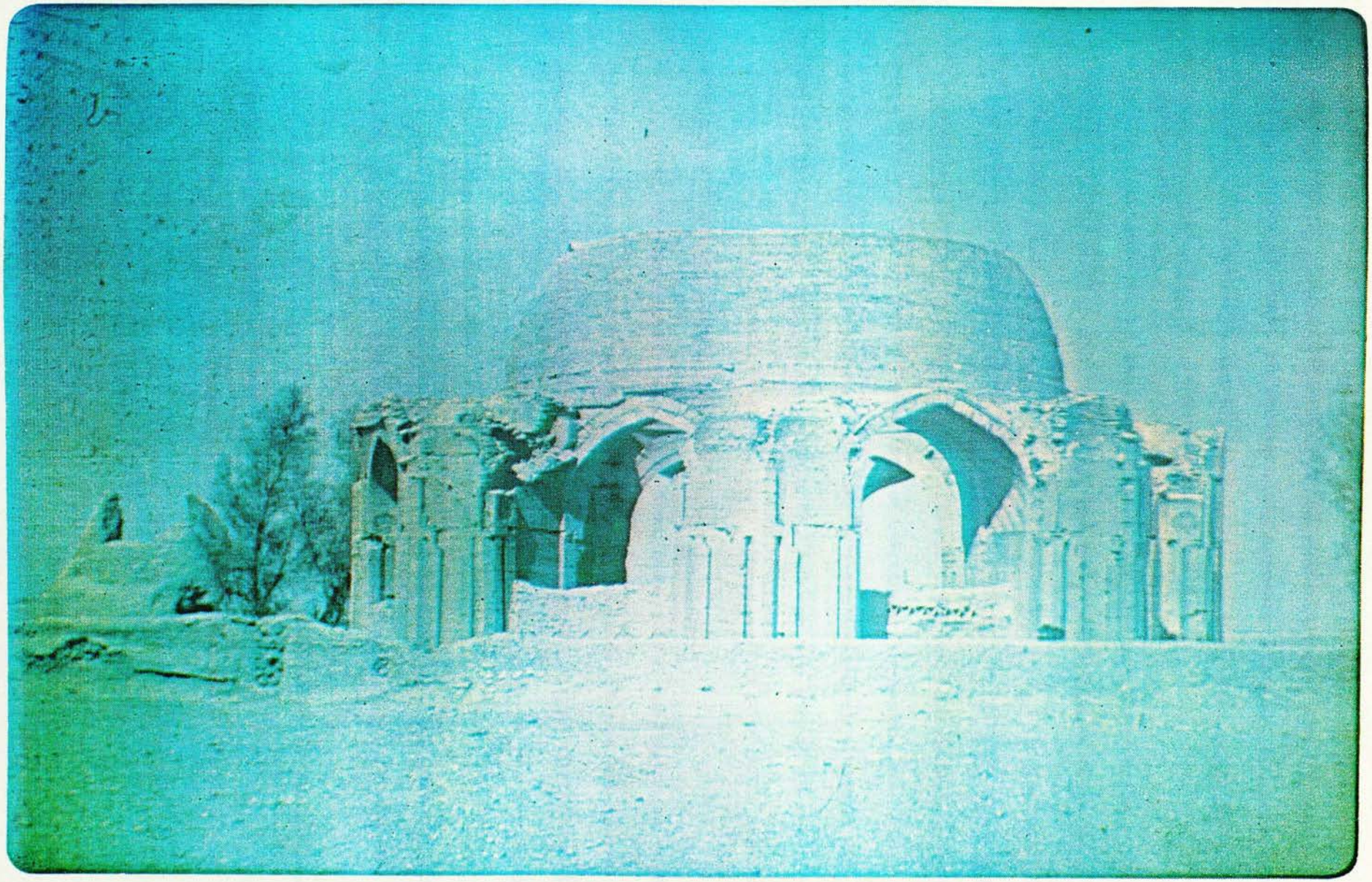
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13- Yaqut: Mu'jam al Buldān, Cairo, 1906.

7. THE MONUMENTS AT BOST.



Colour plate 40-Bost, shrine of shāhzāde sarbāz .

## THE MONUMENTS AT BOST.

The ruins of Bost, in southern Afghanistan, stand at the confluence of the rivers Arghandāb and Hirmand. It is 125 kms. from Qandahār and 40 kms. from Girishk.

Bost appears to be mentioned already in the Parthian period by Isodor of Charax (1st century B.C.), not only in paragraph 16 as Bis between Phra (i.e. Farāh) and Nie (i.e. Neh), but also in paragraph 19, where Biut has[1] presumably to be amended as Bist. Pliny's Parabestem Arachosiorum[2] evidently results from misread Greek passage containing the name. Bost is also shown in the map of Peutinger as Bestia Desolata.[3] In accordance with these indications, certain architectural elements of Hellenistic style are found in the area, and now are stored in the shrine known as Shāhzade Sarbāz (Fig. 86, Pls. 180-1), where they were seen by the present writer during his visit.[4]

Under the Sasanians also, Bost must have played an important role in the development of Iranian influence in the area, since the name appears as Bst on coins of Q bad I and Khosrow I.[5] It is obvious that the lower levels of the present citadel of Bost represent the period of Pre-Islamic occupations.[6]

Bost remained an important centre during the early Islamic period; and it was there that the founder of the Saffarid dynasty, Ya'qub ebn Layth, first gained power in A.H. 258.[7] The city remained the second

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1-Parthian Stations, Philadelphia, 1914, par. 16 and 19

2-Pliny: Natural History, London, 1942, Book iv, 92 (vol. 2, p. 408)

3-Paulys Realencyclopadie Der Classichen Altertumswissenschaft, Stuttgart, 1897, vol. iii, 1, p. 551 under Biyt and xviii, 3 p. 1127.

4. See appendix to this chapter, p. 106

5. D.J. Paruck: Sasanian Coins, Bombay, p. 145 and 148.

6. See page 92

7. Tārikh-e Sistān, Tehran, 1935, p. 193.

metropolis of the Saffarid realm, and after the downfall of that state, came, for a time, under the rule of the Turkish Emir Bāytuz. Then Sabuktakin incorporated the town in his expanding Ghaznavid Empire, of which it later became an important royal residence. Mahmud established there a permanent camp known as Lashgargāh or according to Arab historian al 'Askar,[8] and later the city was extensively extended by Mas'ud. Beyhaqi writes:[9]

> "Amir Mas'ud ... chenān dānesti dar banāha ke hich mohandes rā bekas nashemordi ... be Bost dasht-e chowgān-e Lashgargah-e Amir pedarash rā chandān ziādathā farmud, chenān ke emruz ba'zi bar jāy ast."
>
> "Amir Mas'ud possessed such competence in building-work that he set no store by any architect ... In Bost he commissioned so many additions at the polo ground of the barracks (Lashgargāh) of the Emir, his father, such that today some of them are still standing."

Mas'ud spent there some of his successful years with his luxurious derbar, court, reflected in Tarikh-e Mas'udi.[10]

The short life of the Ghaznavids ended by the Ghurid Alā-e din Jahansuz who burned the palace of Mas'ud and several other structures of Bost. However, the city was not wholly destroyed. Soon after the Ghurid conquest, the damaged sites were reconstructed and the city repopulated by the governors of the region. Bost did not, afterward, recover its former importance, but survived upto the time of Khāwrazm Shāhs. Changiz Khan brought the life of area to an end by destroying the city in 618 H. (1221 A.D.). The small surviving community was exterminated by Teymur at

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8. Encyclopaedia of Islam, Leiden, 1960, Vol. 1, p. 1344.

9. Tarikh-e Mas'udi, ed. Sa'id Nafisi, Tehran, Vol. 1, p. 165-6.

10. Beyhaqi: Tarikh-e Mas'udi, ed. S. Nafisi, Vol. 1, p. 117.

the end of the 8th cent. H. (14th cent. A.D.).[11]

The ruins of the ancient settlements of Bost and Lashkargah cover an area of approximately 7 kms. by 3 kms. and are situated immediately south of the recently established township of Lashkargāh.

MODERN RESEARCHES.

The first reference to the site in travel literature was that of Niedermayer and Diez,[12] who printed a brief account of the fort and the standing arch. The latter feature was studied in detail by Pope,[13] who explained the archaeological significance of the area. The "Délégation Archéologique Francaise en Afghanistan" began in 1948 a large excavation project at Lashkargah (then known as Lashkari Bāzār), as a result of which three palaces, a mosque and many other private residentals were uncovered.[14] The main architectural elements of these buildings are now preserved at Kabul, and include Ghaznavid and Ghurid carved stucco and wall-paintings. Naturally such delicate elements are no longer to be seen

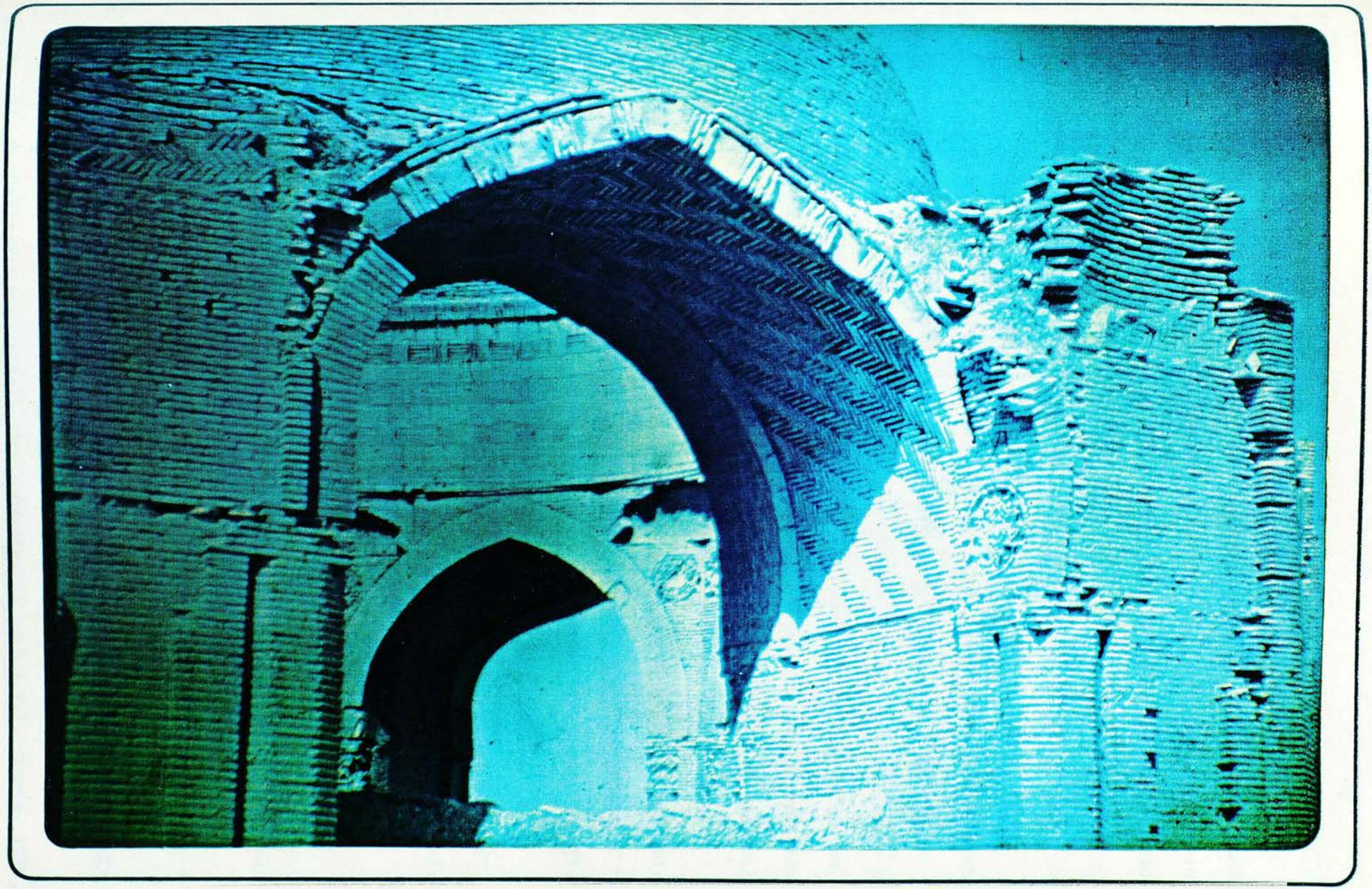
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11. Encyclopaedia of Islam, Leiden, 1960, under Bust. p. 1344.

12. Afganistan, Leipzig, 1924, pp. 67-8.

13. "The Mosque at Qal'a-i-Bust", Bulletin of the American Institute for Persian Art and Archaeology, Vol. 4, No. 1, June 1935, pp. 7-11.

14. D. Schlumberger: Les fouilles de Lashkari Bāzār, Afghanistan, Vol, 4, No. 2, 1949. D. Schlumberger: Le Palais Ghaznevide de Lashkari Bazar, Syria, Vol. 29, 1957. J.C. Gardin: Lashkari Bazar; Memoire de D.A.F.A., Vol. 18, Paris, 1963. D. Schlumberger and J. Sourdel-Thomine: Lashkari Bazar; Memoire de D.A.F.A. Vol. 18, Paris, 1978. The last reference was published when the present study was completed. It contains studies of several monuments which were not published previously. However, it does not deal in detail with the monuments which are the subject of the present study. Only some notes and photographs of these sites were published which we will refer to, in the following pages.



Colour plate 41-Bost, shrine of shāhzāde sarbāz . Exterior view of an arch .

on the site.

During the spring of 1977, the present writer visited the area and prepared a plan of the fort of Bost, and all of the standing fired-brick structures of the area. Kind help was given by Dr. Zamaria Tarzi, Director of the Afghan Institute of Archaeology. On the site, the executive engineer Mr. Sharif, provided the writer every facility for study.

THE FORT.

The fort stands on the southern most part of the plain, between the rivers, and on the east bank of the Hirmand (Helmand) (Fig. 68). The first scholarly description of the feature is by Nidermayer (above p.89), who published two photographs, one from the north and another from the east of the citadel[15] reproduced here (Pls. 134-5). The photographs show several constructions now ruined or much deteriorated, but are too small on scale for detailed reconstruction. He considered the site to be a Ghaznavid centre,[16] a view which is indeed partly true. Pope concurred, insisting the need for further study and presented new photographs of the arch which had been taken by H.J. Hackin, reproduced here (Pls. 140-3). There were little further studies of the fort of Bost since the excavations of the D.A.F.A. are mainly confined to the nearby site of Laskargāh (Lashkari Bāzār).[17] However, the recent publication of D.A.F.A., includes an introduction to the fort[18] which is accompanied by some photographs and an aerial plan of the fort and its surroundings.[19]

The fort is polygonal in plan and consists of three enclosures, marked on our plan (Fig. 69) as A,B, and C. A is the outermost enclosure, B is the one at the south eastern side and C is the citadel.

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15. Afganistan, Leipzig, 1924, Pls. 135 and 137.

16. Bulletin of the American Institute for Persian Art and Archaeology, Vol. 4, No. 1, p.7.

17. D. Schlumberger, Lashkari-Bazar, Memoire de la D.A.F.A., Paris, 1978, vol.18.

18. ibid., part 1A, p.9.

19. ibid., pls. 1 and 2.

CURTAIN WALL AND ENTRANCES.

Of the curtain walls of the fort little is standing today but its traces are plainly distinguishable on the ground (Pls. 138-9). They stood on a substantial earthen bank which may represent a pre-Islamic glacis. The ground plan of the towers, which no longer stand, is readily distinguishable. A fortified gateway (No. 1 in plan), still extant, is located on the east side and leads to the enclosure A. It is built with mud bricks faced with fired bricks, red in colour. The arches of the gateway are all of "four centred" type which is different from the usual type of the arches in the area. However, the only site with similar structural form is a complex of several chambers in the citadel, locally known as the well, and we will describe it in detail in the following pages. So far as the eastern gateway is concerned, it should have been of a later construction in the fort since its form and materials are both different from those of the neighbouring sites.[20]

In 1948 A.A. Na'imi[21] reported that the fort had two main entrances; one at the west and the other at the east. Schlumberger[22] also records this second gateway in his observation notes of the fort of Bost in 1950 and 1951. He especially mentions that western entrance is "très ruinée". At present a western gateway is not visible on the surface. However, at the place (numbered 3 in the plan), the wall is interpreted and remains of a tower projects beyond the wall-line. In the present writer's opinion this is likely to represent a part of the fortification of an entrance, though smaller in size than that in the east gate.

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20. Lashkari-Bazar, Paris, 1978, Vol. 18, part 1A, p. 99.

21. A. Na'imi: Boste, Afghanistan, Vol. 3, No. 4, 1948.

22. Lashkari-Bazar, Vol. 18, part 1A, p. 99.

The interior Cross-wall F is strongly fortified, and may represent the nucleus of the earliest period (Pl. 138). On this supposition, its towers would, at one time, have belonged to the outer perimeter. Enclosure B which it protects, is provided with a sophisticated entrance-system. A postern-gate (2) opens into a corridor (6) between the cross wall (F) and and an inner partition-wall (5). The corridor leads first to a gateway (4), which there is an access to the enclosure B, and then around enclosure B in a dog-leg, and back to the west, where it can be traced approaching the western postern (3). From surface inspection, the purpose and use of the corridor system cannot be ascertained.

CITADEL.

The square citadel (C in plan) stands about 30 metres above the natural ground level (Fig. 70, Pls. 134-7). The southern side of its platform is partly of solid natural rock, but the northern side rests on archaeological deposits which are presumably pre-Islamic. At each of the four corners stands a massive round bastion, the base of one atleast resting on the remains of an underlying square foundation. This foundation is reminiscent of such pre-Islamic fortifications as those discovered at Balkh.[23] The remains of several smaller semi-circular towers can be seen in the intervals between the four corner-bastions. At the north side there are the ruins of a structure which is connected to the remains of the northern wall. It may have been the gateway leading into the citadel.

The central area of the citadel is occupied by the fragmented walls and formations of a large structure which may have also been fortified. At the north eastern corner is a well-preserved feature locally known as "The Well" (Chāh). This underground shaft was provided with elaborate

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23. M. Le Berre and D. Schlumberger: Observations sur les remparts de Bactres, Memoires de la D.A.F.A., Vol. 9, 1964, pp. 67-105.

room and facilities which we shall soon describe in detail.

THE ARCH.

The arch stands at the north west of Enclosure B in the fort (D in Fig. 69, Pls. 134 and 138). It is built of fired bricks and decorated with floral terra-cotta elements (Fig. 71, Pl. 144). Two surviving side piers carry the fragments of a Kufic inscription (Pl. 141), which is recently read by J. Sourdel-Tomine.[24] In the spandrel is a floral motif (Pl. 141) which Pope quite properly observes:[25]

> "is very close to the patterns on some fragments of Sasanian stucco recovered in the excavations at Ctesiphon."

The patterns decorating the soffit of the arch (Fig. 73, Pls. 142 and 146) are not twelve-pointed, as alleged by Schroeder.[26] They consist of a combination of ten-pointed and five-pointed stars (Fig. 72). The patterns are made of moulded terra-cotta elements and cut bricks.

That this monument is a Ghaznavid structure was the suggestion of Niedermayer.[27] He did not support his opinion with any argument except that the site was once a major Ghaznavid centre. Pope[28] accepted his suggestion and argued that the building should be a Ghaznavid on account of the the early form of its two-centred arch. He also published a photographic detail of a horse-shoe arch decorating the wall of the northern side-chamber. This chamber no longer exists, but it appears from another photograph, reproduced here (Pl. 143), that it was covered by a

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24. Lashkari Bazar, Memoires de la D.A.F.A., Paris, 1978, Vol. 18, Part 1B, pp. 64-5.
25. A Survey of Persian Art, ed. Pope, Oxford, 1964-5, Vol. 3, p. 988.
26. Bulletin of the American Institute for Persian Art and Archaeology, 1935, Vol. 4, No. 1, p. 11.
27. Niedermayer, Afganistan, Leipzig, 1924, p. 67.
28. Bulletin of the American Institute for Persian Art and Architecture, 1935, No. 1, p. 11.

pendentive dome. In Pope's opinion: "Such a dome had already been used in the 9th century in Shiraz and the 10th century at Nā'in."[29]

Schroeder maintained that the structure was later than the Ghaznavid period, because of the form of Kufic script in its inscription. He claims that some of the letters have "a round courved without the high terminal flourish which marks earlier baroque tendencies in the monumental script." The same argument is made by J. Sourdel Tomine in her study of the decoration and inscription of the arch.[30] Moreover, she mentions that the pattern at the soffit of the arch is similar to another pattern discovered in one of the structures which may be dated later than Ghaznavid period. She concludes that therefore, the arch should be dated as Ghurid.

So far that the form of the inscription at the arch of Bost is concerned, since there is little systematic study into the early inscriptions of Afghanistan, this kind of arguments seem particularly vague, and more reliance is to be place on the earlier opinions. Of the motif similar to that of the arch, a photograph is published by Madame Sourdel[31] which illustrate that in both design and craftsmanship, it is constructed far less skillfully than the arch. Therefore, it is more reasonable to suppose the former is only an imitation of the latter.

The two-centred arch and the pendentive dome are familiar constructional methods until the 10th century. However, all the structures of a later date in Afghanistan and Soviet Central Asia such as Robāt-e Malek,[32] Sangbast,[33] Madrasa of Shāh-e Mashhad[34] and the shrine of Chesht[35] are constructed with

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29. A Survey of Persian Art, Vol 3, p. 988.

30. Lashkari Bazar, Paris, 1978, Vol. 18, part 1B, p. 67-8.

31. ibid., pl. 143.

32. A Survey of Persian Art, Oxford, 1964-65, Vol. 8, p. 271-2.

33. ibid., p. 260.

34. A. Habibi: Nokāt-e now dar tārikh-e honar va dānesh-e Khorāsān, Honar va mardom, No. 173, 1977, pp. 26-34.

35. Niedermayer: Afghanistan, pls. 182-4.

four-centred arches. All these considerations, therefore, support the Ghaznavid hypothesis, which deserves acceptance.

With regard to the function of the building, Niedermayer conjected that the arch had survived from the ivan of a mosque. Pope and Schroeder both followed the same view without giving any reason. However, the actual function of the building clearly appears in a part of the inscription, which has luckily survived, and is read, by J. Sourdel,[36] as a "dome" (Q bba). This word can only be applied to the mausoleums and never refers to a mosque. Therefore the arch is the surviving part of a shrine.

During the early 1960s, the arch was largely restored. On both sides two new chambers have been constructed, of which that to the north preserves a part of the original room (Fig. 71, pls. 144-5). A heavy protective concrete slab, built above the arch during the restoration (Pl. 146), introduced a new problem. Under the extra load the whole structure is in the danger of collapsing. During a new restoration project in 1977 (Pl. 144-6), directed by Mr. Sharif, it was proposed to remove the slab, a rather hazardous procedure, but wheter the work is yet completed is not known to the present writer.

THE WELL.

The feature which is locally known as "Chāh-e Bost", the well of Bost, is a complex of interconnected underground galleries chamber. Since its abandonment, it has become filled up with the earth and partly blocked,only the structure and part of the first underground level could hitherto be visited. Surprisingly previous reports of the area make no mention of the feature. However in the recent publication on Lashkargāh, the photographs of its ground level structure and central shaft are printed but accompanied by very little description.[37] During 1976 and

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36. Lashkari Bazar, Paris, 1978, part 1B, p. 65.

37. D. Schlumberger: Lashkari Bazar, Paris, 1978, Pls. 117-8.

1977 a project to excavate the well was put in operation by the Afghan Institute of Archaeology in the course of which four underground levels were opened.

The structure is built of fired bricks, red in colour and bonded with a strong mortar of lime, clay and gravel. At the ground level (fig. 74), the complex consists of a domed chamber standing above the main shaft (Pl. 149). It is circular inside, but polygonal on the exterior. To the north of this, there is an open space, probably a courtyard with an opening into the ceiling of the room below (Pl. 150), which provides the latter with light and ventilation. There were other rooms on the surface, south (Pl. 148) and east (Pl. 147) of the main shaft. Baked clay pipes passed round and through the wall of the eastern rooms, evedently carrying a water-supply, though its source is not evident. It appears, therefore, that a part of this building served as a bath.

The only entrance to the underground complex lies to the west of the surface features (Pl. 151). A surprisingly small vaulted entrance, 150 cms. wide, opens directly onto a staircase (Pl. 152) which leads to the underground levels. The entire underground complex develops around two focal points: the intersection of the axis XX with axes YY and ZZ (Fig. 77-9). The former is the centre of a domed chamber and the latter the centre of the shaft (Pl. 153). The first underground level (Fig. 75) is composed of several galleries and corridors all open to each other (Pls. 154-7). The same principle is also applied to the third (Fig. 77) and fourth storeys, but on a much smaller scale. Level 2 (Fig. 76), however, is alone in having separated rooms. They are arranged as balconies around the ceiling space of the high domed chamber 49, of which the floor is at Level 3. Thus the corridors do not intersect at the focal points, as the layout on the other floors would require. Room 36 is the largest chamber in the entire structure. It is the only room which is not

overlooked and has a secluded position. Its two entrances are more contracted than are the passages on the other floors, from which it appears they were originally provided with doors. Moreover, it alone possesses a modicum of decoration, for the remains of carved stucco can be traced on the walls, though today it is totally obscured by a thick layer of bat-droppings. To remove this, and expose the stucco without damage is a delicate task which would necessitate elaborate facilities; but it was possible to expose the plaster surface at one point and establish the fact of its existence. These prestige features suggest that room 36 represents the principal accommodation, a point to which we shall return shortly.

The Level 4, in 1977, was still under excavation, and accurate survey was not possible. The principle of the plan was similar to that of Level 1 and 3. It differed from 3 only in the position of its entrance, which lay immediately below Room 52.

LIGHTING AND VENTILATION.

Construction of a multi storey underground structure, such as the Well of Bost, involves several technical problems such as ventilation, lighting apart from the engineering difficulties. These problems need to be well studied before any design because during the execution of the project possibilities of change are very limited. In the case of ventilation and natural lighting, the architect has solved the problems by traditional methods. In southern Afghanistan, as also in many parts of Iran,[38] it is the north wind which is cool. To maintain agreeable temperature, the architect needs to lead it into the building, at the same time he seeks to exclude the hot south wind. Moreover, the admission of sunlight was important for lighting. In the words of Ebn Fandoq (late

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38. R. Rainer: Anonymes Bauen in Iran, Graz, 1977, p. 87.

6th cent. H. - 12th cent. A.D.):

> "If anyone wishes to arragne the layout (nehād) of his of his residence (sarāy) or (other) building in a favourable manner, he should orientate its front to the east, and make it open to the north wind, and should arrange that the beam of the sun fall in most of the rooms. He should make the roof of the rooms light, and the openings between the rooms always unobstructed."[39]

We shall now see how the well of Bost fulfils these requirements. The open niche to the north, at the shaft head leads the breeze directly down this shaft to the underground galleries. The open plan galleries help the current to circulate in the building and it passes out through the staircase and the opening at the ceiling of Room 17. Evaporation of water which is presumed to have existed at the foot of the central shaft, provides a cooling effect and humidifies the air. The degree of sunlight needed to be controlled sufficiently to light the building, yet not to heat it. For this purpose the designer evidently studied the direction of sunlight, at the different times of a day (Fig. 81), and provided the necessary openings for this purpose (Fig. 82). The second level is arranged so that the sunlight is not prevented from reaching the third level at certain hours. Two openings above Rooms 17 and 33 also admit sunlight to the first and second levels. The clear light and cool and humid atmosphere of the building must have been agreeable in the hot and dry climate of Bost.

STRUCTURAL PROBLEMS.

Another problem of an underground construction is the horizontal

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39. Ebn Fandoq: Tarikh-e Beyhaq, ed. A. Bahmanyar, Tehran, 1938, p. 27.

forces exerted by the earth upon the side walls. When masonry is the only building material, very limited methods are available to solve the problem. The traditional method is, of course, to increase the strength of the wall by adding to its thickness. For each storey in depth the thickness of the wall needs to be increased by 50 per cent. The resultant thickening of the brickwork usually appears in the form of steps beneath the soil on the outside of the revetment (Fig. 80a). In the case, however, of the well of Bost, though the principle is similar, the steps in fact appear on the inside (Fig. 80 b). To achieve this result each descending storey is made smaller than the above (Fig. 80 c). This not only provides the maximum usable space, makes possible a lighter constructional members at the higher levels.

It must be remembered that in 1977, excavation had not reached the floor of level 4. No lower structural feature, or trace of an underlying storey, had been exposed. Therefore, only an assumption can be made about what lay beneath. It can however, be seen that it was already very close to the water level of the river, Hirmand nearby (Fig. 70), and that a very modest continuation of the shaft would have reached the water-table. We may assume, moreover, that any lower installation would have been quite restricted, since the thickness of walls required at this depth would have left little space, and the possibilities of natural lighting below level 4 almost non-existant.

DATING.

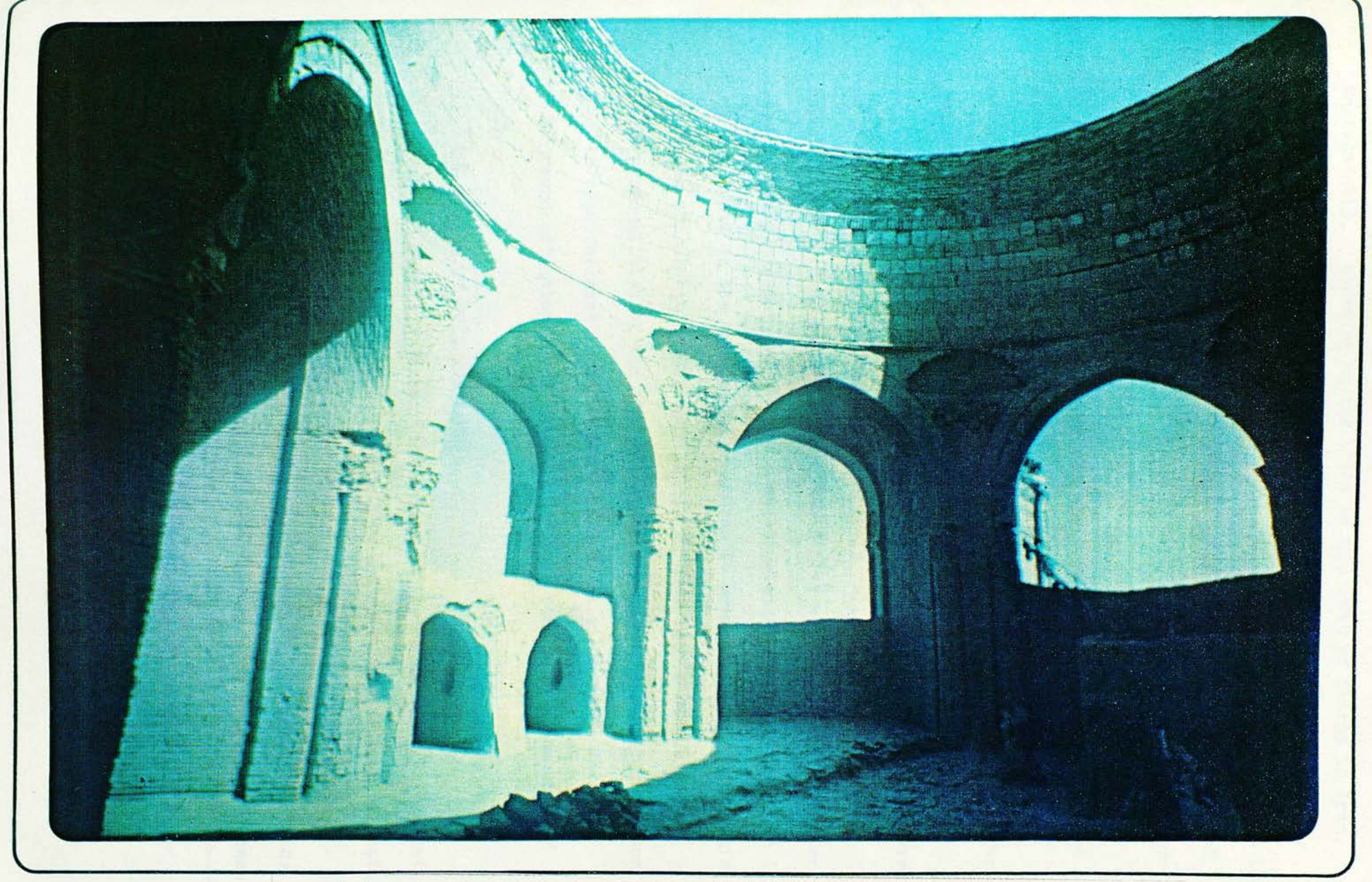
The arches of the structure are constructed in the four-centre style, and the rooms are all cross-vaulted (Fig. 83). In shape and method of construction they are both more advanced than those of the Ghaznavid period in this area. As it appears from the neighbouring sites, excavated by Schlumberger,[40] the Ghaznavid arches are either of horse-shoe or two-

40. Lashkari Bazar, 1978, Vol. 18, pl. 37.

centred form. On the other hand there is some evidence that four-centred arches were used in Afghanistan since the time of Ghurids, for instance at the shrine of Chest and the madrasa of Shah Mashhad. Moreover the colour of the red bricks of the well does not match the white Ghaznavid fired bricks which can still be found in Mas'ud's palace at Lashkargāh. The arch of Bost again, is indeed constructed with the same white bricks. For these reasons the well should have been constructed after Ghaznavid period. On the other hand, after the Mongol invasion, the area was largely devastated. The condition of the few inhabitants of the site, surviving after that disaster, does not suggest that they had the resources for the construction of such a complicated exercise of architecture and engineering. Therefore, well of Bost appears to have been constructed before the coming of the Mongols, when the occupants were still rich and powerful. That is to say under the Ghurids, or probably at the end of the 12th or the first two decades of the 13th century A.D..

THE FUNCTION.

Let us now consider the function of this construction. Single underground chambers in the sides of reservoirs (āb-anbārs) and underground canals (qanāts) are an ancient tradition in Iran, though they have seldom been mentioned in technical literature. Sometimes these chambers are simply excavated in the earth, but in towns they are also usually lined with fired bricks. In such cases the only function of the chamber is providing a space for persons collecting water. Another kind of traditional underground structure is the sardāb or zirzamin, a private cool resting room for use during the hot afternoons of summer. The sardāb might also have a small pool or even a running stream. None of these structures is similar to the well of Bost either in plan or scale. The only known feature which may be compared, is the Chāh-e Mortezā 'ali (the well of



Colour plate 42. Bost, shrine of shāhzāde sarbāz . Interior .

Morteza'ali),[41] standing on the hills to the north of Shirāz in Iran. Though much smaller in scale than that of Bost, it is composed of an overground structure (Pls. 182-4) and a few underground chambers (Pl. 185) at the two different levels. F. Bahari[42] claims that it is probably of Sasanian period. However, as the underground chambers and their staircase are partly natural, and for the rest, cut from rock, so it is very difficult to provide an evidence for its original date. The overground structure, in any case, may not be Sasanian as it is built with four-centred arches. The present finds the Sasanian dating unconvincing, for reasons which need not to be pursued in detail here.

So far as the function of the Shiraz well goes, it has long served as a meeting-place for dervishes, and their religious visitors. In accordance with this religious use, the Shiraz well has, in its chamber above ground, a decorated mihrab constructed at its qeble wall. In the well of Bost, on the ther hand, no mihrab is present, so that a religious use seems improbable. It is more likely to have been a resort of the chief personalities of the citadel, since the stucco decoration of room ( 36 in plan) atleast is an evidence of a prestigious role. This underground situation would provide a welcome refuge from the mid day heat.

THE SHRINE OF SHĀHZĀDE SARBĀZ.

Margad-e Shāhzāde Sarbāz (the shrine of the "Open-head" Prince-not "Soldier" Prince) stands about one km. to the north of the fort of Bost. According to the local report the unusual name is derived from its collapsed dome which left the shrine open to the sky. Inspection of the roof confirms the popular local tradition that several attempts had been

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41."Āthār-e nāshenākhte-ye Iran; Chāhe Mortezā'ali", Honar va mardom, No. 143, 1974, pp. 60-3.

42. ibid., p. 60.

made to repair the roof without avail, leading always to collapse, so the legend developed that the holy prince resented a roof above his head.

There are few previous scholarly accounts of this shrine. The Islamic marble tomb stones lying in the sanctuary are published by J. Sourdel-Thomine (pls.178-9)[43]. They are of Ghaznavid and Ghurid date down to the eve of the Mongol invasion. The earliest record made by Madame Sourdel, of Sadr al-din Ebrahim ebn Ahmad ebn Jom'e, is dated 55X H.. The latest, that of Khal al-din Mohammad ebn 'Abd al Karim (intact in the published picture, but now broken as is shown in pl. 179) bear the date 605 H.. There is no specific evidence as to the relation between these important early tombstones, and the shrine itself. The stones are now built into secondary mud walls in the bays of the shrine, where they were probably incorporated for reasons of preservation. There is no reason to believe that either of these grave stones has any essential connection with the building, since they are not in situ. However, their date provides a useful upper and lower limit for the floruit of the monuments.

Madame Sourdel, however, who considered the monument "asses tardif" and of limited interests for her purposes, records that she heard its name locally as the tomb of "Hoseyn Shāh." She was not concerned to discuss the architecture. Subsequently photographs of the ornamentation were reproduced by D. Hill and O. Grabar,[44] who named the shrine as that of "Ghiyāth al din" - strictly, from the present writer's observation, the name of the small mud brick tomb not far away. In the recent publication of Lashkari Bazar, which includes two photographs of the site,[45] it is mentioned by Schlumberger as "relatiement recente."[46] We will,

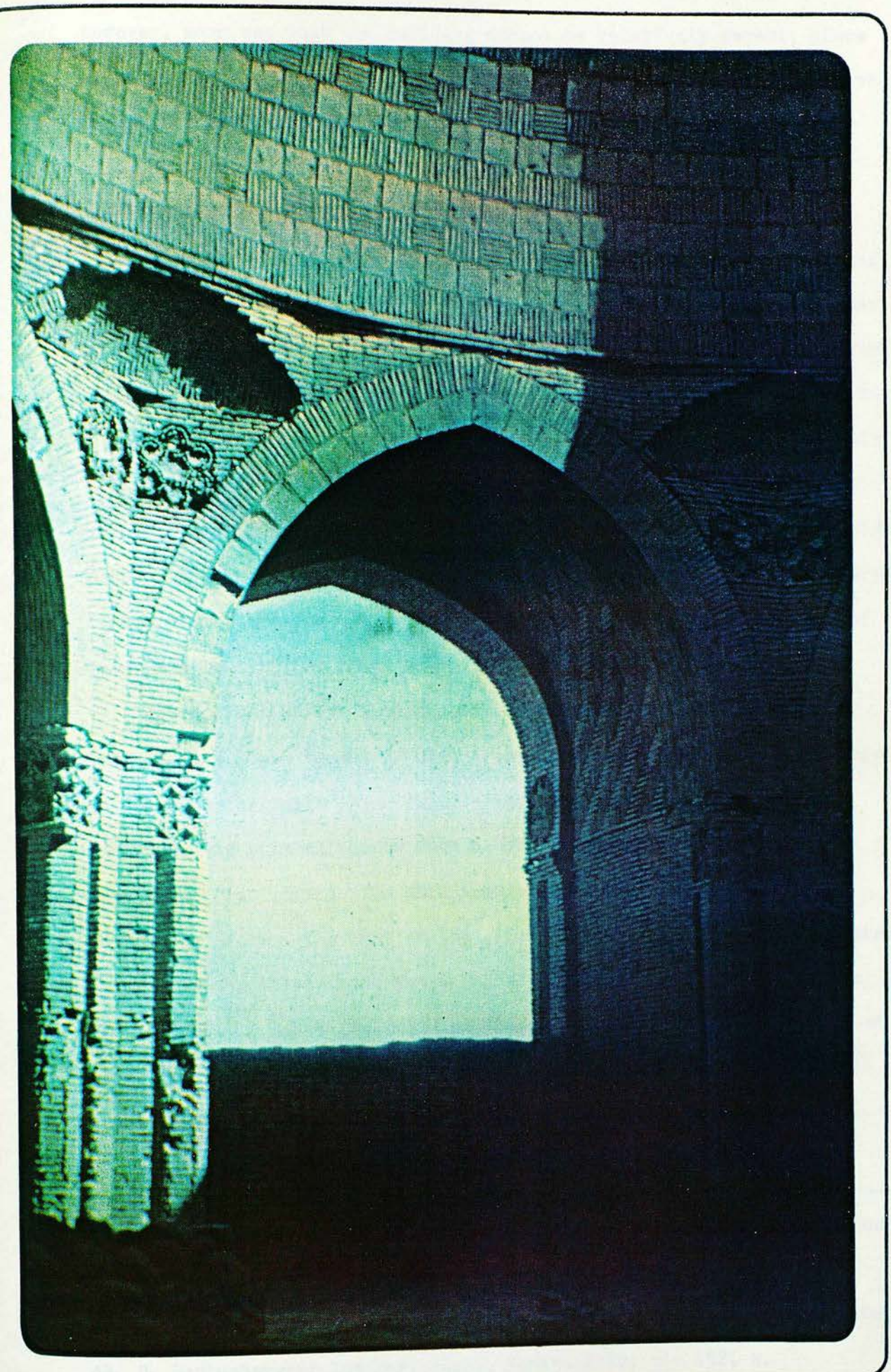
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43. Steles Arabs de Bust, Arabica, Vol. 3, 1956, pp. 285 - 306.

44. Islamic Architecture and its decoration, London, 1967, p. 57 and pls.155-160

45. D. Schlumberger: Lashkari Bazar, Paris, 1978, pl. 119.

46. ibid., Vol. 1 A, p. 8.



Colour plate 43. Bost, shrine of shāhzāde sarbāz. Interior view of an arch .

however, soon see that the building cannot be relatively recent, since it bears a Kufic inscription. However, apart from the well and the arch, it is the only building in both Lashgargah and Bost which is entirely built with fired bricks.

DESCRIPTION OF THE SHRINE.

The shrine is built in fired bricks, white in colour, very similar to the those which were used in the Ghaznavid sites of the area.[47] Grabar suggests that the building may have been part of a mosque, but in fact it is evidently designed as an individual funeral dome. It also once had a small private yard with an entrance, of which ruins are still visible (Pl. 162). This shrine has an octagonal plan 8.10 m. on each side. In comparison with the average minor local monuments the scale of Shāhzāde Sarbaz is substantial. The dome is 12.15 m. in diameter. The circumferential circle of the octagon has a diameter of 21.50 m. and the width each of open bays is 3.89 m. (Fig. 84-5).

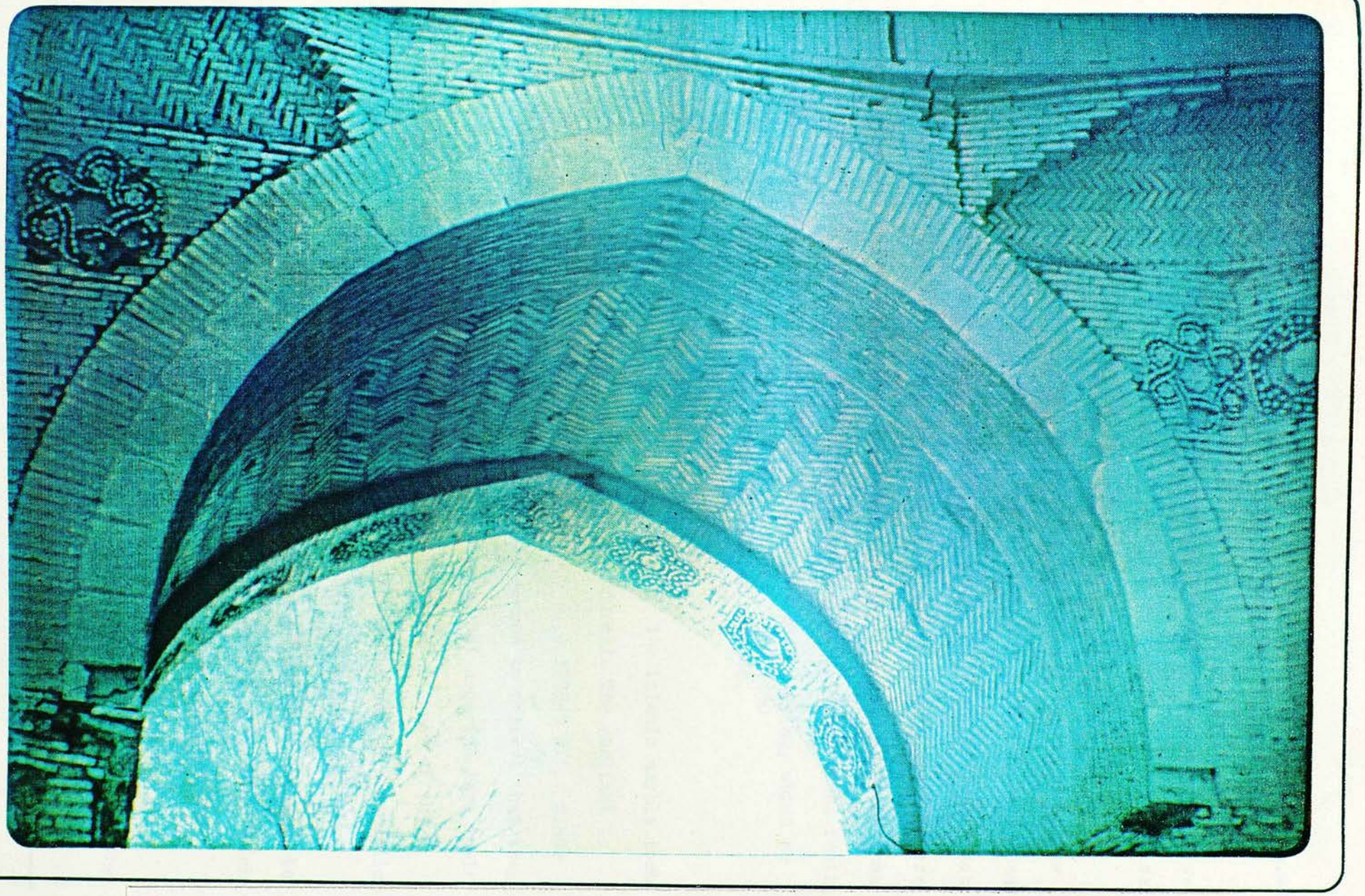
The decoration is elaborate, being executed in fired bricks and terra-cottas. Some traces of plaster decorations are also still visible on the exterior walls (Pl. 171). On the facade of each side of the building, the pointed arches show a horse-shoe curve above their springing (Pls. 163-6). The main arch on each side is flanked by two decorative niches. The head of the blind niches (Pl. 171) are decorated with a zig-zag brick-lays. These niches are similar to the one on the arch of Bost.[48] Below these niches there are smaller niches with cusped heads (Pl. 170). Cusped arches are a characteristic of the Ghaznavid architecture in the area and have already been noted in the description of the main palace of Lashkari Bazar.[49]

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47. D. Hill and O. Grabar: Islamic Architecture and its Decoration, London, 1967, p. 57.

48. A.U. Pope: A Survey of Persian Art, Oxford, 1964-65, Vol. 3, p. 989.

49. D. Schlumberger: Lashkari Bazar, Paris, 1978, pl. 152, h.



Colour plate 44-Bost, shrine of shāhzāde sarbāz . Detail of a decorated arch .

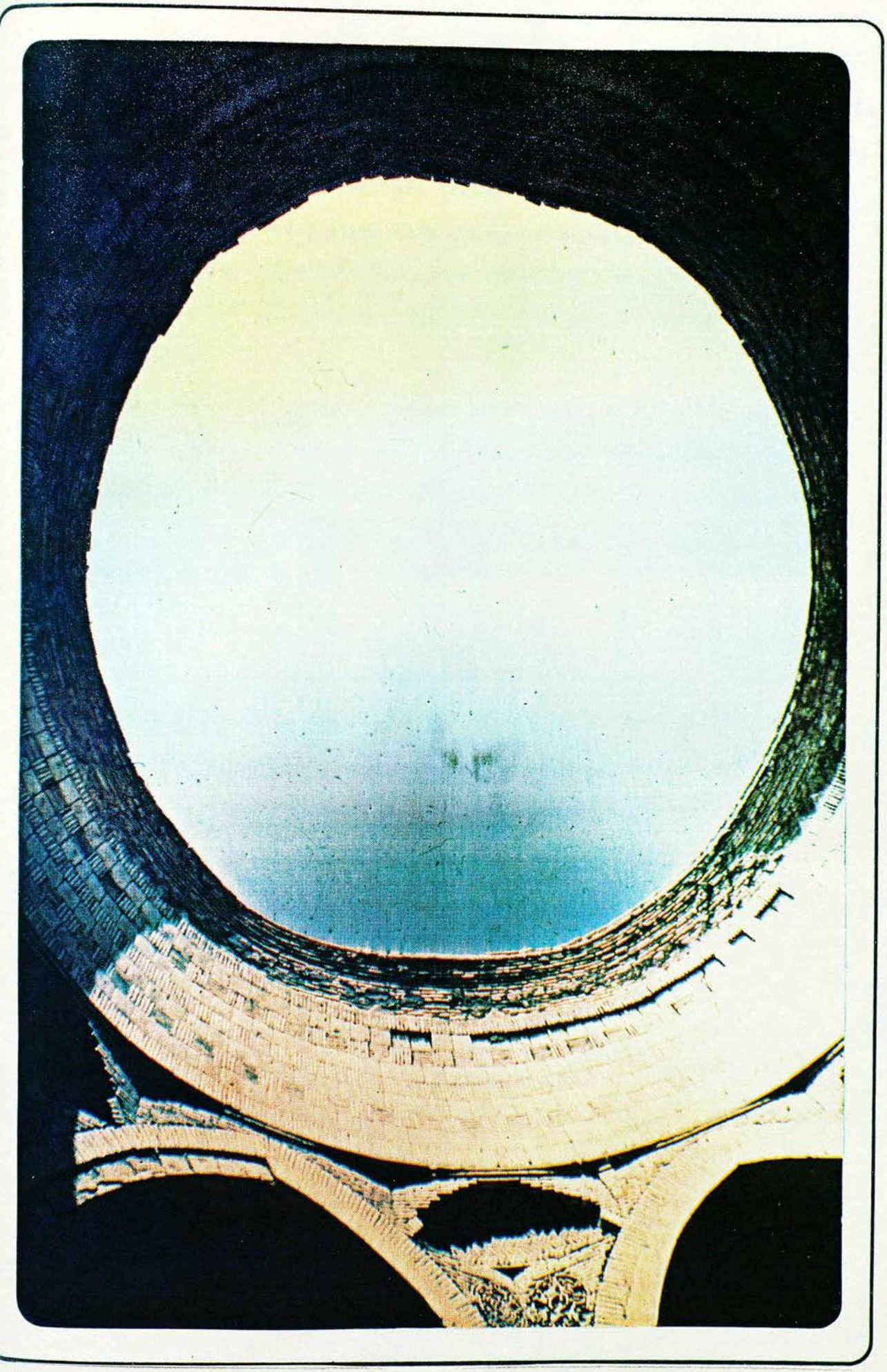
The remains of an inscribed frieze are still visible, running around the building. Its Kufic inscription is in fitted bricks (Pls. 164 and 171), but many are now displaced, and only a few characters survive. The soffits of the main arches are enriched with roundels, of geometrical terra-cotta decoration, from two to nine on each arch (Pls. 172-4). Similar roundels decorate the archi-vaults of the interior arches below the squinches (Pls. 175-7). On the interior,the main arches do not repeat the horse-shoe profile of the outside, but are of two-centred form, each rising on two octagonal engages columns (Pls. 167-9). Their capitals are likewise decorated with Terra-cotta patterns. We have seen that the dome was subject to late restoration, but the brickwork of the original footing still stands, and exemplifies an early style of brick laying, which we have noticed already in the context of earlier periods.[50]

DATING.

In the shrine one could still see, in 1977, the Islamic marble tomb-stones as described (as noted above) by Mme. Sourdel. The earliest is dated 55 X H.(from 1155 to 1165 A.D.) and the latest 605 H. - 1208-9 A.D.. Since the stones are not in situ, there is no firm reason to believe that they have any essential connection with the monument, but none the less their dates provide a useful upper and lower limit for the floruit of the monument. The fragmentary inscription of the frieze is not in a condition to provide immediate information, but its appearance proves that the building should be an old monument. Help for the dating can, however, be derived from examination of the structure and materials. The white bricks are similar to those used in the palace of Mas'ud at Lashkargāh. The two-centred form of the vaults and arches at Shāhzāde Sarbaz are an evidence of a date within the Ghaznavid period at Bost. We have used the same argument to atribute the "Arch of Bost" to be Ghaznavids and the

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50. Present study, chapter two.



Colour plate 45-Bost, shrine of shāhzāde sarbāz . The dome .

"Well" to be Ghurids. Moreover, the horse-shoe arches at Shāhzāde Sarbāz are in contrast to the four-centred arches typical of the Ghurid period (above p. 99) and later. For all these reasons the shrine of Shāhzāde Sarbāz should be recognized as a Ghaznavid structure.

## Appendix

As has already been mentioned above (p.87), the history of Bost goes back to the Parthian period. The citadel of Bost may indeed rest on pre-Islamic deposits, although in the absence of any excavations we cannot point to an explicit evidence that such is the case. The French excavations at other parts of the site were specifically aimed at the Islamic remains and were neither directed towards the area of possible pre-Islamic interest, nor carried down below the Islamic layers, where these may have covered earlier materials. However, during the present writer's visit to the Shrine of Shahzade Sarbaz, he observed several architectural elements, apparently of marble, and bearing carved decoration, which had been collected in the shrine.

The following elements were observed:

1- A drum of a fluted column of which the generally classical appearance suggests that it forms part of the Hellenistic tradition (Fig. 86, Pl. 180).

2- Two hemi-spherical elements, of similar material, decorated with three roundals, each incised with a six sided star and intervening flutings (Fig. 86, Pl. 181). Also on the site were three other fragments of stone which appear to come from architectural elements of the same form. The fragments were sufficiently large to provide evidence for the existence of a total of five such units. The function of these elements is not known to the writer and the fact that there are three ornamental motifs, raises a problem, since if the elements were used as column-bases, or capitals, the decoration would be assymetrical.

3- Several small fragments of carved marble with floral decorations, similar to elements of the frieze or cornice of a classical building.

According to local reports, all of these elements had been unearthed in the area nearby. If this account is true, at any rate, the writer saw no comparable example elsewhere on the ground. None the less, they seem

clearly to be an evidence of the former existence of pre-Islamic buildings. In view of the literary evidence of the existence of Bost in Parthian times, it is reasonable to infer that substantial pre-Islamic buildings await excavation in the area.

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8. THE SHRINE OF EMĀM-E KALĀN IN SAR-E POL (AFGHANESTAN).



Colour plate 46- Sar-e Pol; shrine of Emām-e Kalān. South-west view .

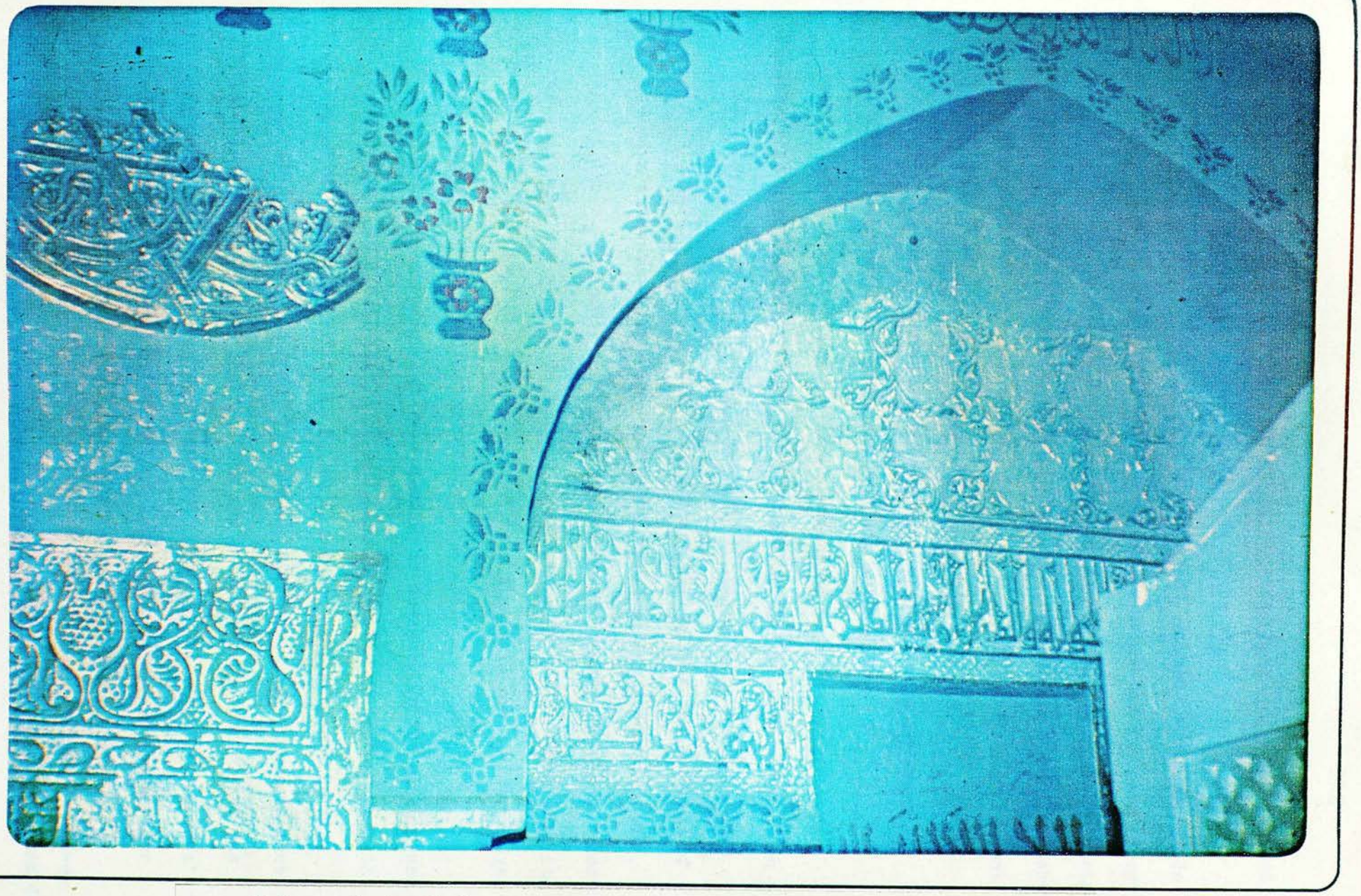
# THE SHRINE OF EMĀM-E KALĀN IN SAR-E POL - AFGHANISTAN.

The village of Sar-e Pol in the north-west Afghanistan is noted for two interesting monuments, the shrines (ziārats) of Emām-e Khord and Emām-e Kalān. The first, commemorating the martyrdom of Yahyā b. Zayd (killed 125 H. - 742-3 A.D.) was described, in 1966, by Dr. A.D.H. Bivar,[1] who also briefly noted the nearby Emām-e Kalān, and included photographs of two details. Since 1966, as it will be explained, the details shown in those photographs have been damaged or removed. So, as they are the only surviving documents of those features by kind permission of Dr. Bivar these photographs are reproduced in the present study of the monument.

Emam-e Kalān is a tomb situated about one kilometre to the south-east of the village (Pls. 186-9). Originally it was a square chamber with a low dome, and there is an adjoining ante-chamber which is a later addition (Fig. 88 and 94). As is evident when the monument is viewed from the outside, in each corner of the chamber stands an engaged column or rather a small solid tower, three quarters of a circle in plan. These serve only a decorative function. The walls are slightly battired and their upper part is decorated with a row of niches (Fig. 89-93). Above the niches an ornamental roof-parapet decorates the facade. On the south side (as we have noted) an antechamber and a portal ivan have been added to the building. Their construction differs from that of the main structure both in the type of its arches and in the decorative elements. Therefore, the ante-chamber and its portal can be taken as a latter addition. The addition has altered the original appearance of the tomb, but the northern elevation (Fig. 91, Pl. 188) still represents the original form. During the last ten years the building has been completely plastered, both inside

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1. Seljūqid Ziyārats of Sar-i Pul (Afghanistan), Bulletin of the S.O.A.S., 1966, pp. 57-63.



Colour plate 47-Sar-e Pol; shrine of Emām-e Kalān. Qeble wall .

and out, and the interior is painted by the community. This unqualified restoration has caused serious detriment to the magnificent stucco.

The original entrance of the building has, indeed, survived inside the present ante-chamber and still provides evidence for the reconstruction of the southern facade (Fig. 95). The doorway is flanked with two engaged columns suppoting the arch. A panel of carved stucco, inscribed in naskhi script, surrounds the arch and the columns (Pl. 191). Only two fragments of the inscription remain visible (Pls. 203 and 205), the rest of the details being all covered under the recent plaster work. However, Dr. Bivar's photograph (Pl. 204) show that the columns were originally decorated with cut bricks and carved stucco. Inside the main chamber, there is a niche in each wall, between two engaged columns and an arch above (Fig. 89-90, Pls. 194-5), similar to that of the entrance. From the surviving stucco fragments, it appears that all of the interior of the main chamber was once enriched with carved stucco decoration and inscriptions. Unhappily some have been recently removed, the most important of which was the mihrab. Dr. Bivar's photograph (Pl. 193) shows that it was excellent work. The former site of this mihrab is now plastered over and decorated with poor wall paintings (Pl. 194).

The main chamber of the Emam-e Kalan is designed on the old Khorasani tradition of tomb building. Such designs are already well known from the tomb of Esmā'il the Sāmānid in Bokhara, and that of 'Arab-atā in Tim, reported as recently as 1968.[2] The editor of the monument suggests that this architectural form derives from the Sasanian fire-temple, and has continued its development until the 12th century. In fact Pugachenkowa's examples of the latest period reflect little similarity to the earlier ones. Monuments such as the two composite tombs of Soltan Sa'ādat in

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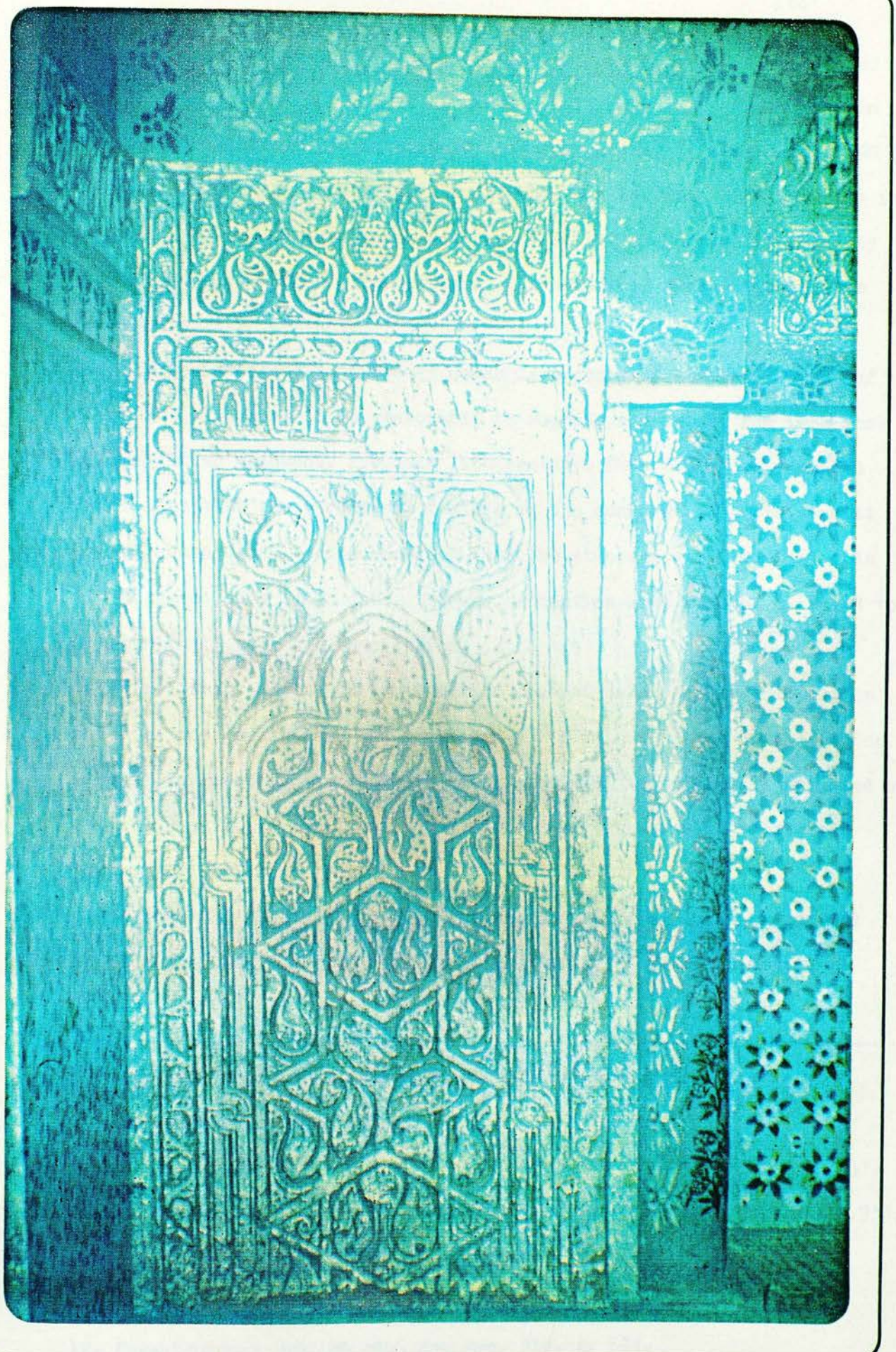
2. G.A. Pugachenkowa: Decouverts et etudes des monuments architecturaux de Mavara'al Nahr et de Khurasan (1957-67), 5th International Congress of Iranian Art and Archaeology, Tehran 1972, Vol. 2, pp. 368-78.

Termez, the tomb of 'Abdollāh ebn Boreydā in Vakil-Bāzār and the tomb of Fakhr-ad din Rāzi in Urgenj have very little in common with the tomb of Isma'il the Sāmānid, except the square plan. Thus it was a structural change in the type of tomb building in the 11th and 12th centuries. Emām-e Kalan, however, displays much more similarity with the latter and with the tomb of 'Arab-atā than it does with the later monuments. All of these structures share a square plan with engaged columns. The form of the interior niches and of the main entrances are, however, also similar to the earlier buildings, that is to say, the tomb of Esmā'il and Emām-e Kalān. The tomb of Esmā'il the Sāmānid also resembles our monument in respect of its walls, with their slight inward slope and crowning niches which surround the building below the cornice. There are similar niches in the 'Arab-atā. The former is datable 395 H. - 907 A.D.,[3] and Pugachenkowa suggested a mid 10th century (4th century H.) dating for the tomb of 'Arab-atā.[4] Though Emām-e Kalān is very similar to these two buildings, it can hardly be considered to be of the same period. We see that its interior decoration is an evidence of a later date. The mihrab is very similar to that of the tomb of Yaḥya b. Zayd, of which Dr. Bivar says: "This is plainly a piece carved stucco decoration of the Seljug period, if not, indeed, earlier."[5]

Both mihrabs can be well compared to the Jāme' of Nain together, in particular, with a guilloche pattern that surrounds both mihrab and inscription.[6] This pattern also reappears at Bābā hātam in the province of

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3. E. Schroeder, A Survey of Persian Art, ed. A.U. Pope, Oxford 1964-65, Vol. 3, p. 945.
4. Decouverts et etudes des monuments architecturaux ... etc., p. 370 and p. 374.
5. Seljuqid Ziyārats of Sar-i Pol, B.S.O.A.S., 1966, p. 59.
6. A Survey of Persian Art, Vol. 8, p. 267.



Colour plate 48 Sar-e Pol; shrine of Emām-e Kalān . Carved stucco panel .

Balkh.[7] A guilloche of similar, but simpler,form appears at the edges of the stucco work in the dome of Hakimi at-Tarmazi.[8] The Jame' of Nāin is dated by Schroeder[9] as late as 10th century,and by Pope[10] to c.960 ( 350 H.). For the tomb of Yaḥyā a date not earlier than 1058 (450 H.) is suggested by Dr. Bivar,[11] and the tomb of Hakimi at-Tarmazi is dated by Pugachenkowa to 11th or 12th century.[12] The tomb of Bābā Hātam is also dated early 11th century.[13]

As the decoration of Emām-e Kalān is especially similar to that of the tomb of Yaḥya, it is reasonable to suppose a date not far from that of the latter monument, i.e. mid 11th century. This dating is somewhat later than that the structural feature of the monument suggests, and it is, of course possible to consider that the stuccoes were installed in the monument on a later date. However, attention must also be directed to the examination of the inscription.

As already mentioned the interior decoration at Emām-e Kalān is in a rather poor condition, and its inscription is much damaged. Except for a small fragment on the southern wall, surviving texts are all situated on the qeble wall. For the reading of these inscription, kindly help was givne by Miss Manijeh Bayani.

Above the mihrab (Pls. 197-9) is Qur'an Sura 56 (Surat al-Mā'eda) in floriated Kufic script possessing also features of foliation:

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7. S. Melikian Chirvani: Baba Hatam, 5th International Congress of Iranian Art and Archaeology, Vol. 2, p. 112.
8. Pugachenkowa: Dec. et etu. des mon. arch. de Mav. et de Khu. p. 357.
9. E. Schroeder: A Survey of Persian Art, Oxford, 1964-65, Vol. 3, p.934.
10. A.U. Pope: Persian Architecture, London, 1965, p. 85.
11. Seljuqid Ziyārats of Sar-i Pul, p. 62.
12. Pugachenkowa: Dec. et etu. des mon. etc. p. 374.
13. S. Melikian Chirvāni: Bābā Hātam, p. 111.

On the qeble wall, on both sides of the niche, are situated carved stucco panels enriched with geometrical and floral patterns. Along the top, there are again inscriptions in interlaced Kufic, in another style Pls. 200 and 201):

North side: [Besmellāh], la elāha el [allāh]

In the name of God, there is no god but Allāh.

South side: [Mohammadan rasul al] lah 'Alian wali allah.

Mohammad is the prophet of God, 'Ali is the friend of God.

These inscriptions clearly confirm that the shrine is a Shi'it foundation. The tomb of Yahya is of course also a Shi'it shrine. As Dr. Bivar remarks:

> "The existence of these Shi'a shrines at Sar-i Pol on the route from Khurasan via Astarab valley to central Afghanistan may be relevant to the problem of the introduction of Shi'ism to this part of the world, where it has become in more recent times the prevailing cult amongst the mountain peoples of Hazārajāt."[14]

In Emām-e Kalān, on the southern wall of the main chamber a fragmentary inscription survives (Pl. 202) which indicates that not only the qeble wall but also the rest of the interior walls were once decorated with stucco works and inscriptions. In the style of the script this fragment is similar to the inscription above the mihrab. Its text is the Qur'ānic vers no. 144 of the Sura Āl 'Emran:

و ما محمد الا رسول قد خلت [من قبله]

In addition to the inscription inside the sanctuary the fragments of another one appear on the panel surrounding the original entrance. Such inscribed panels are naturally common in Islamic monuments of the early period, but the present example is remarkable for being inscribed in

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14. Seljuqid Ziyārats of Sar-i Pol, p. 63.

Naskhi script of a probably early style. The inscription is of carved stucco, but is badly damaged. Only two fragments of it still exist which during the recent restoration were white washed and so have lost many of their details. The fragment of the eastern side (Pl. 203) reads:

"... مما امر [بالبناء (؟)] هذا المشهد ... "

"... ordered... of this shrine..."

At the western side (Pls. 204-5) reads:

"...[المؤ]منين والمومنات في شهر شعبان تسع ... "

"..The men who believe and the women who believe. In the month of Sha'bān, (year) --9"

Unhappily the dating figures have not survived and the word explaining the purpose of the inscription could not be read. Even at the time of Dr. Bivar's report, these figures of dating for tens and hundreds could not be distinguished. Dr. Bivar suggested that the script cannot be earlier than the sixth Muslem century, since the first appearance of Naskhi is on the minaret known as Chehel Dokhtarān at Isfahan, dated 501 H. (1107 A.D.). He concluded that the Naskhi inscription of Emām-e Kalān should be dated after 1106 (500 H.).[15] Such dating is very late for both the style of the building and the form of its stucco patterns, which, as already noticed, are not later than mid 11th century.

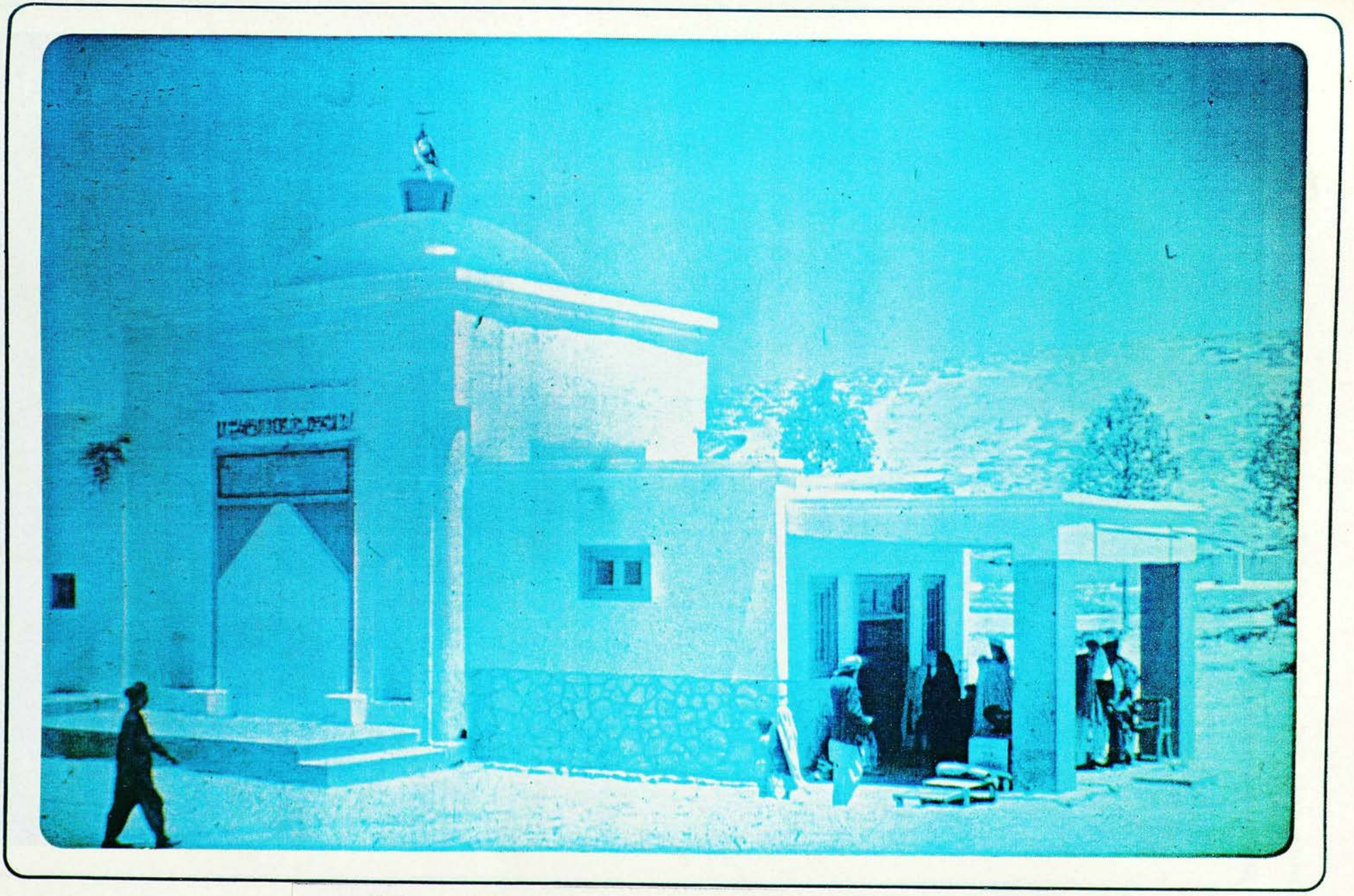
On the other hand, from the first fragment it appears that it was once indicating the name of the patron who probably "built" the structure. The word banā'a (built) is not clearly readable at present. If this reading can be accepted then the inscription should have been made just after finishing the building.

The reasonable dating of the building will remain as an early or mid 11th century (5th century H.). In this case the Naskhi script of Emame Kalan would be the earliest of its kind being appeared in a

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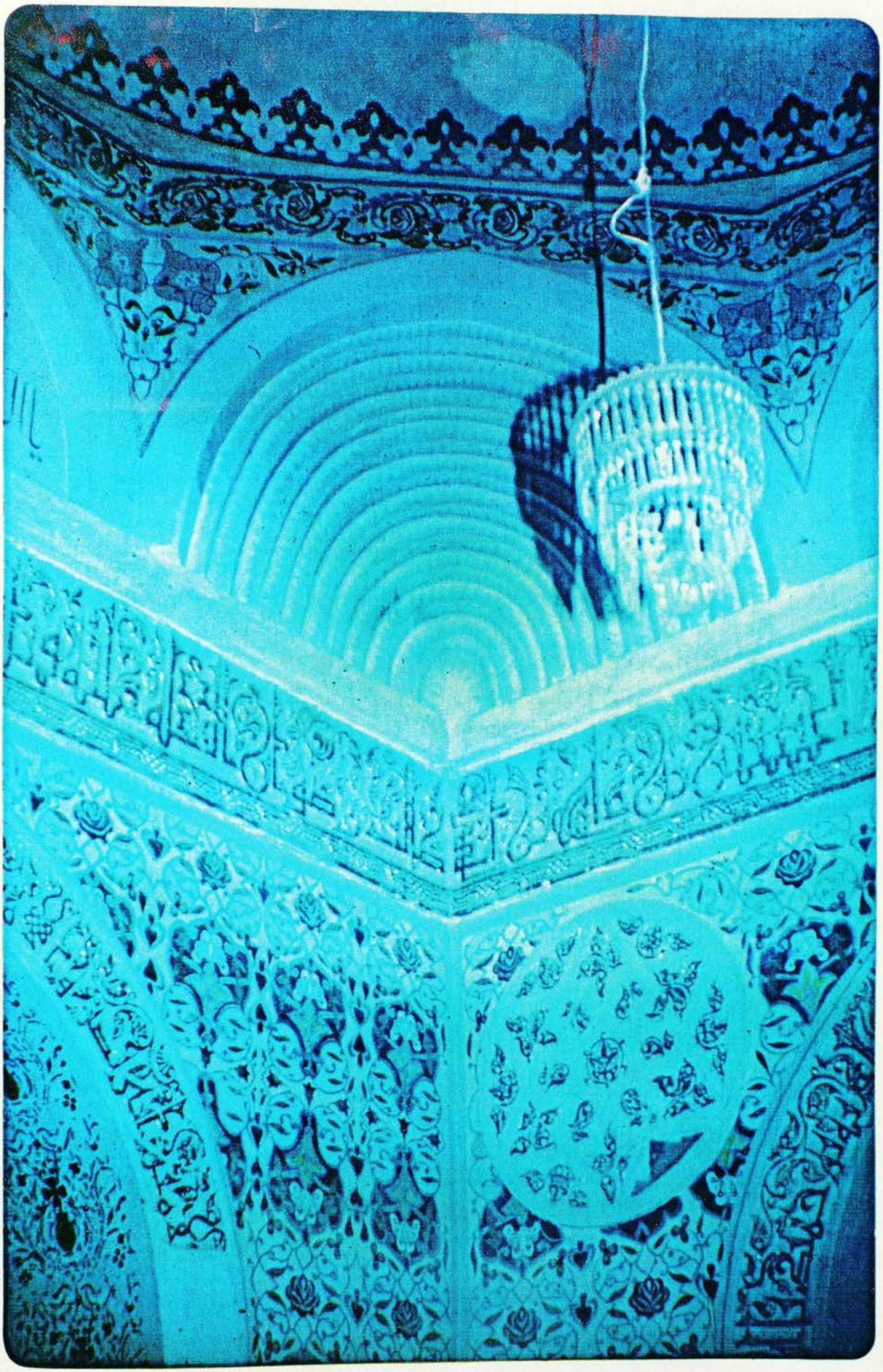
15. Seljuqid Ziyārats of Sar-i Pol, p. 63.

monumental structure. However, the text of the inscription may reveal a restoration, and not construction of the building. So, as Dr. Bivar suggested it should however, be not later than the early 12th century.



Colour plate 49 - Sar-e Pol; shrine of Yahya b. Zeyd .

colour plate 50 - Sar-e Pol; Shrine of Yaha b. Zeyd .Interior showing its early squinch .



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Chronological Table of the Sites

| | |
|---|---|
| 1- DEYR-E GACHIN, IRAN | Sasanian origin, Seljuq and Safavid reconstruction. |
| 2- MASJED-E BIRUN, ABARQUH, IRAN | Sasanian origin(fire temple) converted to mosque before 15th. cent. |
| 3- JĀME' MOSQUE OF 'AQDĀ, IRAN | Sasanian origin(fire temple) converted to mosque in v. 15th. cent. |
| 4- SHRINE OF SHĀHZĀDE ABOLQASEM, HERAT, AFGHANISTAN | Sasanian origin(fire temple) restored and converted to shrine in 16th cent. |
| 5- JĀME' MOSQUE OF FAHRAJ, IRAN | 8th century. |
| 6- THE FORTS OF DARZIN, IRAN | late 8th century. |
| 7- THE FORT OF BOST, AFGHANISTAN | early 11th century. |
| 8- THE ARCH OF BOST, AFGHANISTAN | early 11th century. |
| 9- SHRINE OF SHĀHZĀDE SARBĀZ, BOST, AFGHANISTAN | early 11th century. |
| 10- SHRINE OF EMĀM-E KALĀN, SAR-E POL AFGHANISTAN | mid 11th century. |
| 11- THE WELL OF BOST , AFGHANISTAN | late 12th or early 13th century. |
| 12- SHRINE OF SHĀHZĀDE 'ABDOLLĀH, HERAT, AFGHANISTAN | 15th century. |

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3- BOST, AFGHANISTAN;

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THE FORT 90

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| 3- DĀRZIN, THE FORTS- IRAN | | 76 |
| 4- DEYR-E GACHIN | | 1 |
| 5- KOHANDEŽ-HERĀT,AFGHANISTAN | | 54 |
| 6- MARQAD-E SHĀHZADE ʿABDOLLĀH-HERAT,AFGHANISTAN | | 59 |
| 7- MARQAD-E SHĀHZĀDE ABOLQĀSEM-HERAT-AFGHANISTAN | | 54 |
| 8- MARQAD-E SHĀHZĀDE SARBĀZ-BOST,AFGHANISTAN | | 101 |
| 9- MASJED-E BIRUN- ABARQUH, IRAN | | 21 |
| 10- MASJED-E JĀMEʿ OF ʿAQDĀ, IRAN | | 42 |
| 11- MASJED-E JĀMEʿ OF FAHRAJ, IRAN | | 64 |
| 12- QALʿE-YE BOST (THE FORT OF BOST), AFGHANISTAN | | 90 |
| 13- TAQ-E BOST (THE ARCH OF BOST),AFGHANISTAN | | 93 |
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