STUDIES IN MEDIAEVAL IRAQI ARCHITECTURE

Volume I

Text

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TO MY WIFE,

Dr. Ṣabīha Ismā'īl al-Janābī

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ABSTRACT

The period covered by this thesis extends from the mid-6th/12th century to the late 8th/14th century. These centuries saw the development, maturity and apogee of Islamic architecture in Iraq as regards plan, structure and ornament. They also saw the heyday of the atabeg system, the fall of the Abbasid caliphate with the sack of Baghdad, and the establishment and decline of Mongol power. Long and comparatively peaceful reigns, such as those of the Caliphs al-Nāṣir and al-Mustanṣir, Badr al-Dīn Lū'lū' and Shaikh Uwais, generated many notable buildings. Occasionally a ruler's change of creed might affect his patronage of architecture. Thus the conversion of Badr al-Dīn Lū'lū' to Shi'ism, possibly intended as a move against the 'Adawiya sect, caused not only the conversion of many Atābikid madrasas to maqāms and mashhads, but also the erection of mausolea to Shi'ite imāms.

This thesis was undertaken in the hope of shedding light on the comparatively little-known mediaeval architecture of Iraq. The majority of the foreign scholars who have worked in Iraq so far have concentrated on the pre-Islamic past and even specialists in Islamic art have tended to concentrate on the Umayyad and early Abbasid periods. Thus there seemed to be room for a comprehensive work which would not only summarise the present state of knowledge about already published buildings and their decoration but would also fill in the picture by dealing with little known and in some cases completely unpublished structures.

By re-examining hitherto accepted datings, providing

new readings of inscriptions and making stylistic judgments based on a wider range of material than was formerly available, it has been possible to put the study of mediaeval Iraqi architecture on a firmer and more scientific basis than had previously existed.

The pioneer work of Herzfeld is to date the single most important contribution to the history of mediaeval Iraqi architecture. But, as will be shown in detail below, this work is of uneven quality; many buildings are referred to only briefly or inaccurately and some are completely ignored. The specialised studies made by Iraqi M.A. students of recent years compensate only partially for these gaps. The native historians of mediaeval Iraq have tended to concentrate on political and dynastic history to the detriment of art history.

No attempt has been made here to draw up a complete catalogue of the Islamic monuments of Iraq from the later Abbasid to the beginning of the Ottoman period. Buildings which have been thoroughly dealt with in earlier publications have deliberately been omitted here. This is particularly true of the buildings on the Upper Euphrates and of Mosul, which have been covered by Herzfeld and 'Abbū. Only where it was possible to add new material was discussion of familiar monuments re-opened. Whenever their relevance demanded it, reference has been made to previous studies of monuments not considered in detail here. Thus, although the thesis does not provide a complete catalogue of the extant architecture of these periods, it can be claimed that the conclusions reached as to the development of local schools, structural

features and decoration have a validity which extends beyond the monuments discussed in detail. It was not possible, of course, to extend the research to cover all the problems raised by such a mass of material; for example, one can do no more than draw attention to the fact that the origins and decline of the architectural style practised in later mediaeval Iraq, including its relationship with the art of Samarra on the one hand and with that of the Timurids, Safavids and Ottomans on the other, is still an insufficiently unexplored subject.

Throughout the thesis the role of neighbouring countries in determining the development of Iraqi architecture has constantly been kept in mind. Particular attention has been paid to the contemporary buildings of Syria, Anatolia, and Persia, which frequently introduced new features of planning or decoration.

Unfortunately, many mediaeval Iraqi buildings have suffered damage or even demolition in the past few decades as part of a campaign for modernising cities such as Mosul and Baghdad. Perhaps the outstanding examples are Jāmi' al-Nūrī, al-Madrasa al-Mirjāniya and the gates of Baghdad. It is vital that surviving mediaeval buildings should quickly be recorded so that adequate documents can be assembled in case further destruction takes place. Indeed, it is noticeable that Iraq has far fewer surviving buildings from mediaeval times than, for example, Iran. Many reasons could be suggested for this. The major seat of temporal power during and after the decline of the Abbasids was often in Iran, not Iraq; monuments tended to be concentrated in the great cities, always

liable to organic change, development and even destruction, rather than in villages; and the saline soil of Iraq has always had a powerful destructive effect. No doubt the systematic neglect of earlier buildings, their use as quarries by brick robbers, and their demolition to make way for other sacred structures further reduced the quantity of buildings. Where the material allows it - as in the case of al-Madrasa al-Mirjāniya - an attempt has been made to reconstruct the appearance of the vanished building.

Some measure of success may be claimed in the accumulation and presentation of unfamiliar material. Occasionally a building or an object is published here for the first time; examples are the mausoleum of Muḥammad al-Sakrān, the stucco work of Jāmi' al-Nūrī, the mosque and turba of Dhū 'l-Kifl, the kitchen of al-Madrasa al-Mustanṣiriya, the door of the tomb of Imām Bāhir and al-Sifīna at Kūfa. Much unpublished material from the Iraqi Museum is also presented here. In general, buildings are given in plan, and often in section and elevation; there are 51 figures in all. Similarly, the photographic documentation is as full as possible (245 photographs) and mostly utilises the resources of the Iraqi Museum archives. This accumulated new material, together with a re-examination of material already published, has made it possible, perhaps for the first time, to sketch the major developments in Iraqi architecture during the mediaeval period. These are summarised in Chapter 7.

Virtually all the buildings under discussion fall naturally into one of two groups. In northern Iraq, in the area of Mosul, a style had developed by the 6th/12th century

which was characterised - though not exclusively - by the use of stone for both building and decoration, and by the popularity of the tent dome. In decoration, which is mostly found inside the building, animal and human subjects were popular there, although they are almost completely absent from central and southern Iraq. Carved marble decoration also employed trilobed frames usually filled with arabesques or figural decoration, arabesques used for panels, borders and bands, engaged colonnettes, joggled voussoirs, gandīls, muqarnaṣāt and scalloping for semi-domes. Varied depths of carving were used to secure effective contrasts of light and shade. Perhaps under the influence of the famous local school of metalwork, a technique of inlaying marble, which was later to spread to Syria and Egypt, was developed here. For this type of decoration, geometrical patterns were favoured, usually bordered by an inscription in naskh or Kūfic against a plain background. Two techniques were used: that of marble mosaic of different colours, and that of inlaying the marble with plaster, a device especially popular for inscriptions. Both types of inlaid marble are largely confined to the 6th/12th century and to northern Iraq.

The same restrictions apply to the use of carved stucco, a material only sparingly employed and not used for exterior decoration. Stucco ornament favoured the vine scroll; it testifies to the persistent influence of the Samarra styles in later centuries. A new development, however, was the epigraphic medallion; indeed, this school of stucco-work favoured the decorative use of Kūfic inscriptions. The popularity of architectural features in this stucco-work, and the way in which they are crammed with ornament - often borrowed

from brickwork or even metalwork - marks an advance on the style of Imām Dūr, itself derived from prototypes at Samarra.

The Mosul school of decoration can be seen as a vital bridge between the art of Samarra and the later Abbasid style of brickwork centred in Baghdad.

This brickwork style comprises the second major school of mediaeval Iraqi architecture. Its products, though found in Wāsiṭ, Kūfa and Baṣra, are concentrated in the caliphal capital, whose prestige rivalled that of Rome and Byzantium. This style outlasted the fall of Baghdad by more than a century.

Structurally, this style is marked by pronounced verticality, monumental arched entrances, daring vaulting systems and a predilection for the muqarnaṣ vault and dome, the cylindrical minaret and the arched Īwān.

From the decorative point of view two distinct styles may be isolated. Each of them is used for both interior and exterior decoration. The first, comprising brick bonding of hazārbāf type, has its roots in early Abbasid structures like Ukhaiḍir and the Baghdad gate at Raqqa. The designs become more complex, featuring swastikas, sacred names and joint plugs.

The second consists of carved terra-cotta and reaches its peak in the buildings of Baghdad, where it probably originated. Here, too, the work is of progressively finer quality, becoming increasingly refined as the arabesques - the favourite motif of this technique - become denser and veer towards abstraction, finally becoming mere incisions. Under the Jalairids a knot design, possibly derived from metalwork, became popular, as did multi-lobed frames reminiscent of Anatolian Saljuq tilework. Larger surfaces than ever before were now covered with this ornament. Various levels of relief were used, and, when found in conjunction with raised polygons and

discs, create a honeycomb effect. An outstanding feature of this ornament is the preference for long epigraphic bands in cursive script against an ornamental background composed of 4-petalled rosettes.

A few examples of painted plaster with scroll and disc decoration, mainly of Ilkhanid date and mainly in central Iraq, survive.

A few words may be said about the origins and influences of the two major decorative styles just discussed. The close political links between the Jazīra and Syria in the 6th/12th century help to explain the presence of similar marble inlaid work in both areas, and the analogies between the naskh of Mosul and that of Damascus and Ḥamā. More generally, the role of Samarra not only in the stucco of northern Iraq but also in other media such as marble and wood can scarcely be over-estimated, extending as it does to geometrical borders, arabesques and vine scrolls, eight-petalled flowers and lotus motifs.

The origins of the terra-cotta ornament of central Iraq are obscure and the lack of early examples of the technique makes it impossible to fix the early stages of its development. The technique is also found in eastern Iran in the early 6th/12th century but it is too soon to judge whether there were reciprocal influences. It is safe to say, however, that this style reached the peak of its achievement in central Iraq in the 7th-8th/13th-14th centuries.

In both structure and decoration, a noticeable feature of mediaeval architecture in Iraq is the consistent desire of the architect and craftsman to surpass earlier work. The vaults of Khān Mirjān illustrate this trend in structure as does the Mirjāniya madrasa in ornament.

The building types which survive from mediaeval Iraq and are discussed in this thesis may briefly be discussed. Most of them serve cultic purposes. Few mosques survive; only two of the jāmi' and masjid respectively. The fact that in the later Abbasid period more jawāmi' were built in a given city than before meant that they were now smaller. All the mosques under discussion had open courtyards and rectangular prayer halls with developed vaulting systems, usually featuring a major dome over the miḥrāb flanked by subsidiary domical vaults. In all cases the axis of the miḥrāb is emphasised by a wider central aisle. Minarets, mostly of pre-Ilkhanid date, survive in considerable quantities. All are built of brick and decorated in brickwork or terra-cotta of progressively finer quality until decline set in under the Jalairids. A very few incorporate glazed decoration. They are always sited in the northern part of the mosque, though not consistently to the north-east or north-west. The commonest ground plan is octagonal, with occasional square or dodecagonal plans. In all cases the shaft is cylindrical, with a single gallery (doubled at Sūq al-Ghazl) resting on muqarnaṣāt and topped by a domed sham'a. Three minarets have double spiral staircases; the rest have single spiral staircases. From the late Abbasid period onwards twin-minaret madrasas occur. Although the building of turbas was discouraged by numerous ḥadīths, this genre, known under various names, predominates among the mediaeval buildings of Iraq. Most of these turbas were built for Shi'ite imāms; only six Sunni examples survive. Square and octagonal plans were equally popular;

no examples of the circular or of the other polygonal plans known in Iran and Anatolia survive. Both types feature shallow recesses and usually have mihrābs so that they can serve as places of prayer. Often the turba is preceded by a vestibule, following in this respect pre-Islamic traditions. Mediaeval Iraqi turbas are mainly free-standing, though some are attached to mosques and madrasas.

Very few of the numerous mediaeval Iraqi madrasas mentioned in literary sources survive. Until recently, only the Mustanṣiriya and the Mirjāniya could be identified as such decisively, although the evidence suggests that the structures known as Sharābiya in Baghdad and Wāsiṭ are probably madrasas. The plan is roughly square or rectangular, with a central courtyard and one or two Īwāns facing a central courtyard. The buildings have two floors. No established rule governs the siting of any element except the muṣallā, which, along with the site itself and such factors as choice of madhhab and number of students, determines the arrangement of the component features. The evidence of Iraqi madrasas does not support the theory that the number of Īwāns corresponds to the number of madhhabs. The influence of local houses, rather than of foreign buildings, seems to have been decisive in the development of the madrasa plan as a series of rooms off a central courtyard, and the choice of Qur'ānic inscriptions with the word bait ("house")for these madrasas may give a clue as to their origin. In the post-Saljuq period the plan of the jāmi' exerted increasing influence on that of the madrasa.

No definite example of the zāwiya is known, though the inscription of the turba of Muḥammad al-Sakrān uses the

term zāwiya of the building. Another example of the type, which is also of octagonal plan, may well be at Sifīna in the courtyard of the Great Mosque of Kūfa. This displays, with an underground octagonal courtyard, a mixture of covered and uncovered areas, among them a small musallā with a miḥrāb. It is difficult to suggest why the building should be within a mosque or why it is underground.

All the building types mentioned above usually display miḥrābs, though few of these are now in situ. Two types predominate: the flat and the niched miḥrāb, the former always executed in marble. Brick and stucco miḥrābs are also found. The arrangement of these mediaeval miḥrābs nearly always features muqarnaṣāt, arabesque and inscription bands; sometimes the ornament includes qandīls or stars, both of them bearing religious associations. Multi-lobed arches frequently occur on flat miḥrābs.

Most of the furnishings of the cultic buildings under discussion are of wood; they include doors, a minbar and sarcophagi. The bevelled style also found on objects in marble and stucco is frequently employed; the decoration principally comprises small carved geometric units called hashwas so arranged as to form a larger pattern. The decoration, which can be attached by paste or by nails, is knitted together by inscription bands, whether plaited Kūfic (used only for side panels) or the conventional naskh used for horizontal panels.

Among the most important of the few secular buildings to survive from mediaeval Iraq is Khān Mirjān, which has the most well-developed system of transverse vaulting in Iraq.

Its unusual features include an intricately designed system of lighting which does not affect its stability, a gallery on muqarnaṣāt, and the system of enclosing two stories under one roof. Among the other secular structures considered in detail are bridges and a palace.

Most of the buildings under discussion bear inscriptions, whether in Kūfic (foliated, floriated, plaited or of "Chinese Seal" type) or in naskh of various degrees of crowding. The historical texts often give the name of the patron, craftsman and mutawallī (these are listed in the appendices) as well as the date of completion, the identification of the building and biographical detail about the person for whom the building is erected. Qur'ānic texts - often supplemented by quotations from ḥadīths or by pious formulae - are often especially appropriate for the type of building, such as the turba or the madrasa.

To summarise, the thesis considers the history of Islamic architecture in Iraq at a peculiarly fertile period of its development, which saw great advances being made in muqarnaṣāt, transverse vaulting, inlaid marble, terra-cotta and other forms of decoration. Never before or since in Islamic Iraq was daring, complex and monumental architecture clad in such resplendent decoration.

PREFACE

The idea of writing this thesis gradually materialised during my years of service with the Iraqi Directorate-General of Antiquities, which began in 1956. As a member of this organisation I have had at my disposal ample material, including official files and unpublished archives, plans, photographs and other documents. As a result of my job I began to be attracted more and more by the art and architecture of the mediaeval period, and was disappointed by the paucity of published work in this field. The gaps left by previous scholars were indeed formidable. This is all the more surprising since this material yields nothing in importance to the art and architecture of mediaeval Persia and Anatolia, both of which areas are much better known in the West.

Historical sources have been extensively employed in dealing with the identification of the buildings and objects and their history. Particular attention is paid to the works of those historians who lived within the period under discussion, such as Ibn al-AthĪr, Ibn al-Jauzī, Ibn al-Fuwaṭī, Ibn Ḥajar al-Asqalānī, and al-Ghaiyāthī.

Some readings of the inscriptions published by Massignon and Herzfeld have been corrected in this thesis.

The system of transliteration adopted for this thesis is the same system used by the Encyclopaedia of Islam with the substitution of "dj" by "j" and "ḳ" by "q". The final ha was deliberately omitted from such words as Ḥillah, Baṣrah and Kūfah. Yā occurs mostly as "Ī" or "ai" as in Ḥusain; "y" is substituted for "ia" as in Danyāl; and when the yā

has a shadda it is transliterated as "iy", as in waqfiya.

This thesis does not claim to cover all aspects of mediaeval Iraqi art and architecture but it may at least have succeeded in drawing attention to this area and to have filled certain outstanding gaps. I hope that this work will stimulate further work in this area and provoke discussion of the problems which it raises.

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Finally I must express my deep gratitude to my family. My father, my father-in-law and my brothers all gave generously of their time and energy in various matters relating to my work. But my greatest debt of gratitude is to my wife. Despite her heavy involvement in medical responsibilities she has watched over this thesis from beginning to end. She could not have been more understanding, especially in the inevitable times of difficulty. She has always been ready

with help and encouragement when it was most needed, and her constant interest in the subject has been a priceless stimulus. It is to her that this thesis is dedicated.

LIST OF ABBREVIATIONS

Only the commonest abbreviations are listed below.

EI[1] The Encyclopaedia of Islam (Leiden and London, 1913-38)

EI[2] The Encyclopaedia of Islam (Leiden and London, 1960 to date)

EMA K.A.C. Creswell, Early Muslim Architecture (Oxford, 1932, 1940).

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5. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): section and elevation (after Herzfeld).

6. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): detail of terra-cotta decoration on exterior (after Herzfeld).

7. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): detail of terra-cotta known as shashsha, on exterior (after Herzfeld).

8a. Baghdad. The minaret of Shaikh Ma'rūf: detail of terra-cotta niche showing tree of life (after Herzfeld).

8b. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): detail of hazārbāf combined with terra-cotta, on exterior (after Herzfeld).

9. Mosul. Al-Madrasa al-Kamāliya (Shaikh al-Shaṭṭ): composite drawing with plan, elevation, zone of transition and detail of brickwork (after Herzfeld).

10. Mosul. Mausoleum of Imām Yaḥyā ibn al-Qāsim: plan and elevation (after Herzfeld).

11. Baghdad. The minaret of Jāmi' al-Khaffāfīn: elevation.

12. Baghdad. The minaret of Jāmi' Qumriya: elevation.

13. Baghdad. Al-Madrasa al-Sharābiya (the so-called "Abbasid Palace"): plan at ground floor level.

14. Baghdad. Al-Madrasa al-Sharābiya (the so-called "Abbasid Palace"): plan at ground floor level (after Herzfeld).

15. Baghdad. Al-Madrasa al-Mustanṣiriya: plan, ground floor.

16. Baghdad. Al-Madrasa al-Mustanṣiriya: plan, first floor.

17. Baghdad. Al-Madrasa al-Mustanṣiriya: plan of the kitchen, ground floor.

18. Baghdad. Al-Madrasa al-Mustanṣiriya: plan of the kitchen, first floor.

19. Wāsiṭ. Al-Madrasa al-Sharābiya: the foundations of the structures behind the portal; plan (after Safar).

20. Wāsiṭ. Al-Madrasa al-Sharābiya: elevation of portal façade (after Safar).

21. Al-Jadīda (30 km. N.W. of Baghdad). The mausoleum of Muḥammad al-Sakrān: section and plan.

22. Baghdad. The minaret of Sūq al-Ghazl: plan.

23. Al-Kifl. The minaret of Dhū 'l-Kifl: detail of brick ornament.

24. Al-Kifl. The shrine complex of Dhū 'l-Kifl: plan.

25. Baghdad. Mausoleum of Shaikh 'Umar al-Suhrawardī: plan.

26. Baghdad. Al-Madrasa al-Mirjāniya: plan (after Herzfeld).

27. Baghdad. Al-Madrasa al-Mirjāniya: plan, ground floor.

28. Baghdad. Al-Madrasa al-Mirjāniya: plan, first floor.

29a. Baghdad. Al-Madrasa al-Mirjāniya, mausoleum of Mirjān: elevation (after Herzfeld).

29b. Baghdad. Al-Madrasa al-Mirjāniya, mausoleum of Mirjān: detail of hazārbāf on exterior of the dome (after Herzfeld).

30. Baghdad. Khān Mirjān: plan of ground floor (after Herzfeld).

31. Baghdad. Khān Mirjān: plan of ground floor.

32. Baghdad. Khān Mirjān: plan of first floor.

33. Baghdad. Khān Mirjān: cross section.

34. Baghdad. Khān Mirjān: longitudinal section.

35. Baghdad. Khān Mirjān: detail of the muqarnaṣāt of the gallery (after Herzfeld).

36. Baghdad. Khān al-Mashāhida: plan (after Herzfeld).

37. Kūfa. Al-Sifīna: plan and sections.

38. Kūfa. The bridge of Kirī Si'da: plan and elevation.

39. Samarra. The stucco miḥrāb of Samarra showing Kūfic inscription.

40. Kūfic alphabets of some Iraqi stucco, marble and wooden objects dating from the 3rd/9th to the 6th/12th century.

41. Mosul. The miḥrāb of the mausoleum of Imām 'Abd al-Raḥmān: detail of ornament and Kūfic inscription.

42. Mosul. Jāmi' al-Nūrī: marble capitals (after Herzfeld).

43. Mosul. The miḥrāb of the mausoleum of Shaikh Fatḥī: detail of ornament and Kūfic inscription (after Herzfeld).

44. Mosul. The miḥrāb of the mausoleum of Panja 'Alī: details of ornamental motifs.

45. Mosul. Jāmi' al-Nūrī: stucco façade over the miḥrāb. Detail of a panel with angular Kūfic inscription.

46. Mosul. Jāmi' al-Nūrī: stucco window-frame. Detail of ornamental motifs.

47. 'Amādiya. The minbar of the Great Mosque: detail of ornament.

48. Kūfa. Dār al-Imāra: stucco fragments showing carving technique.

49. Kūfa. Dār al-Imāra: stucco fragments showing moulding technique.

50. Mosul. The monastery of Mār Aḥūdh-Immī: entrance. Detail of upper part (after Herzfeld).

51. Near Sinjār. Al-Khān: entrance, bas-relief showing Badr al-Dīn Lū'lū' thrusting a spear in a dragon's mouth (after Herzfeld).

CHAPTER I

AN OUTLINE OF THE POLITICAL HISTORY AND ARCHITECTURAL ACTIVITIES IN IRAQ FROM THE 6th TO THE 8th CENTURIES A.H.

Introduction:

Iraq during the 6th-8th/12th-14th centuries was a theatre for great and momentous historical events, of which the most significant was the fall of the Abbasid Caliphate and of Baghdad itself in the year 656/1258. In 447/1055 the Saljuqs took over in Iraq and replaced the Buwayhids as protectors of the Abbasid Caliphs. From the time of al-Nāṣir onward however, the Abbasid Caliphs resumed control over the country. The disintegration of the last Saljuqs was an important factor in restoring their temporal power. The second half of the 7th/13th century was dominated by the Mongol invasion. Thereafter foreign dynasties, namely the Ilkhanids and the Jalairids, who lasted down to the end of the 8th/14th century, seized power in Iraq.

As regards architectural activities in Iraq, these centuries were also of considerable importance. New planning methods, new architectural forms and new decorative devices were developed.

From the historical point of view the 6th/12th century is dominated by three major dynasties which were contemporary with each other; these are the Saljuqs, the Abbasids and the Atābikids. In dealing with their architectural activities in this chapter an attempt will be made to treat them separately.

One must bear in mind that the Saljuq period in the

history of Iraqi, as of Persian, art and architecture may be said to comprise not only the years during which that dynasty held power in Iraq, but also the period of disintegration that followed, as will be demonstrated later in this thesis. Moreover artistic conventions persisted virtually unchanged long after the end of the Saljuqs.

This is not the place to treat the history of these three centuries in detail.[1] The available space here does, however, permit a general outline of these periods and their architectural activities.

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1. Adequate historical details of these periods are published by both western and native scholars. See for example: G. Le Strange, Baghdad during the Abbasid Caliphate (Cambridge, 1900); idem, Lands of the Eastern Caliphate (Cambridge, 1905); R. Levy, A Baghdad Chronicle (London, 1929); S. Lloyd, Twin Rivers (Oxford, 1943), pp. 152-191; M. Jawād and A. Sūsa, Dalīl Khāriṭat Baghdad al-Mufaṣṣal (Baghdad, 1958); S. al-Daiwachī, al-Mauṣil fi 'l-'Ahd al-Atābikī (Baghdad, 1958), hereinafter al-Mauṣil; Ḥ. Amīn, Tārīkh al-'Irāq fi 'l-'Uṣr al-Saljūqī (Baghdad, 1965); J.Ḥ. Khaṣbāk, al-'Irāq fī 'Ahd al-Maghūl al-Ilkhāniyīn (Baghdad, 1968).

Section 1

The Saljuq Period

The Saljuq period in Iraq started in the year 447/1055,[1] when Ṭughrul Beg occupied Baghdad as a result of a well considered plan agreed upon with the Caliph al-Qā'im (422-67/1031-75).[2] The Caliph at that time was facing grave difficulties and rebellions. His authority was challenged by the Turkish commander al-Basāsīrī who succeeded in trapping the Caliph in a castle at Ḥadītha.[3] Moreover at that time, fierce battles between Sunnīs and Shi'īs and between Turks and Dailamites were the order of the day.[4] This state of affairs did not cease until the Caliph called in Ṭughrul Beg who restored order in Baghdad as well as restoring the Caliph's authority. After that

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1. The Saljuqs were a Turkish princely family who ruled over wide territories in central and nearer Asia from the 5th/11th to the 7th/13th century. The following dynasties can be distinguished: the Great Saljuqs, the Saljuqs of Iraq, the Saljuqs of Kirmān, the Saljuqs of Syria and the Saljuqs of Asia Minor. For details about the origin and the history of the various Saljuq dynasties, see EI[1] IV, pp. 203-14, with bibliography.
2. Ibn al-Athīr, 'Izz al-Dīn 'Alī ibn Muḥammad ibn 'Abd al-Karīm, al-Kāmil fi 'l-Tārīkh, ed. C.J. Tornberg (Leiden, 1851-76), IX, pp. 418-22 (hereinafter, al-Kāmil); Ibn al-Ṭiqṭaqā, Muḥammad ibn 'Alī, al-Fakhrī fi 'l-Ādāb al-Sulṭāniya wa 'l-Duwal al-Islāmiya, ed. H. Derenbourg (Paris, 1895), pp. 392-4.
3. Ibn al-Ṭiqṭaqā, op.cit., p. 394.
4. Ibn al-Jauzī, Abū 'l-Faraj ibn 'Abd al-Raḥmān ibn 'Alī, al-Muntaẓam fī-Tārikh al-Mulūk wa 'l-Umam VIII, (Haiderabād, 1940), p. 72, 238-40 (hereinafter, al-Muntaẓam); al-Kāmil, X, p. 104; Ḥ.Amīn, op.cit., pp. 427-9.

the Abbasid Caliphate was under the powerful protection of the Saljuqs.[1] Ṭughrul Beg, the first of the great Saljuq Sulṭāns, died in 456/1063 and the line of the Great Saljuqs continued with Alp Arslān, Malikshāh, Maḥmūd ibn Malikshāh, Barkiyāruq, Malikshāh II ibn Barkiyāruq, Muḥammad ibn Malikshāh and finally Sanjar, who reigned from 511-52/1117-57.[2]

Sanjar while still alive handed over power to the son of his brother Muḥammad and allowed him to rule over Iraq, Fārs, Khūzistān and the western provinces. He contented himself with sovereignty over Khurāsān and the eastern frontier provinces. When he died childless in 552/1157 the line of the great Saljuqs came to an end.[3]

The Saljuqs of Iraq ruled from 511/1118 to 590/1194. The members of this line are tabulated below.[4]

1.	Maḥmūd ibn Muḥammad	511-26/1118-131
2.	Dā'ūd Maḥmūd	526-8/1131-3
3.	Ṭughrul I ibn Muḥammad	528-9/1133-4
4.	Mas'ūd ibn Muḥammad	529-47/1134-52
5.	Malikshāh II ibn Maḥmūd	547-8/1152-3
6.	Muḥammad II ibn Maḥmūd	548-54/1152-9
7.	Sulaimān Shāh	554-7/1159-61
8.	Arslān Shāh ibn Sulaimān	557-71/1161-75
9.	Ṭughril II ibn Arslānshāh	571-90/1175-94

1. EI[1] IV, p. 209.
2. EI[1] IV, p. 209.
3. Al-Kāmil XI, p. 146.
4. Ibid., XI-XII, passim; EI[1] IV, p. 210, Jawād al-Sūsa, op.cit., p. 278.

From the political point of view the reigns of these Sulṭāns were characterized by almost continual wars. As a result two Caliphs, al-Mustarshid and al-Rāshid were killed.[1] Baghdad itself had to suffer Saljuq sieges.[2]

After the last unsuccessful siege of Baghdad in 551/1157 by Sulṭān Muḥammad, the power of the Caliphs began to increase again. Finally Saljuq rule in Iraq came to an end after the death in 590/1194 of Ṭughrul II who was at war with the troops of the Khwārizimshāh. This was during the reign of the Caliph al-Nāṣir.[3]

In Iraq, despite these political upheavals, architectural activities during the Saljuq period went on more or less uninterrupted. Indeed, they witnessed a renaissance, which manifested itself in Anatolia and Iran too.[4]

The Saljuq Sulṭāns did not build much in Iraq, possibly because they did not reside there. Instead they took Iṣfahān and in later periods Hamadān as their capital.[5] As will be

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1. Al-Muntaẓam X, pp. 53-60, 76 ; al-Kāmil XI, pp. 16-17.
2. In 520/1126 by Sulṭān Maḥmūd during the reign of al-Mustarshid (al-Kāmil X, pp. 447-50); in 530/1135 by Sulṭān Mas'ūd during the reign of al-Rāshid (al-Muntaẓam X, pp. 54-60, al-Kāmil XI, pp. 22-4); in 543/1148 by Sulṭān Muḥammad ibn Maḥmūd who was an opponent of Sulṭān Mas'ūd, during the reign of al-Muqtafī (al-Kāmil XI, pp. 87-8), and in 551/1156 by Sulṭān Muḥammad for the second time during the reign of al-Muqtafī (al-Muntaẓam X, pp. 164-6; al-Kāmil, XI, pp. 140-2).
3. Al-Kāmil XII, pp. 69-70.
4. E. Schroeder, "Islamic Architecture, Saljuq Period", SPA II, p. 981.
5. According to Jawād and Sūsa, op.cit., pp. 151-2, the Saljuqs did not reside permanently in Baghdad because it was the seat of the Caliphs and because they did not speak the

(contd.

demonstrated shortly, the credit for erecting both secular and religious buildings during this period must go for the most part to the Abbasid Caliphs and their wives and mothers, the Saljuq wazīrs and governors, and the Atābikids of Northern Iraq.

The architecture of Iraq during the Saljuq period continued, as noted above, the conventions of the previous periods. Iraq in general, and Baghdad in particular, as the seat of the Caliphate, was full of famous and splendid monuments, both religious and secular, long before the arrival of the Saljuqs.[1] Unfortunately, apart from al-Ukhaiḍir and the remains of some outstanding architecture at Samarra (pls. 1-3) nothing remains standing which dates from before the Saljuq period.[2] It is evident from the contemporary authorities that the Saljuq period produced many types of buildings.[3] However, because of centuries of neglect added

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Contd.) Arabic language; instead, they used to speak both Turkish and Persian (see also EI[1] I, p. 567).

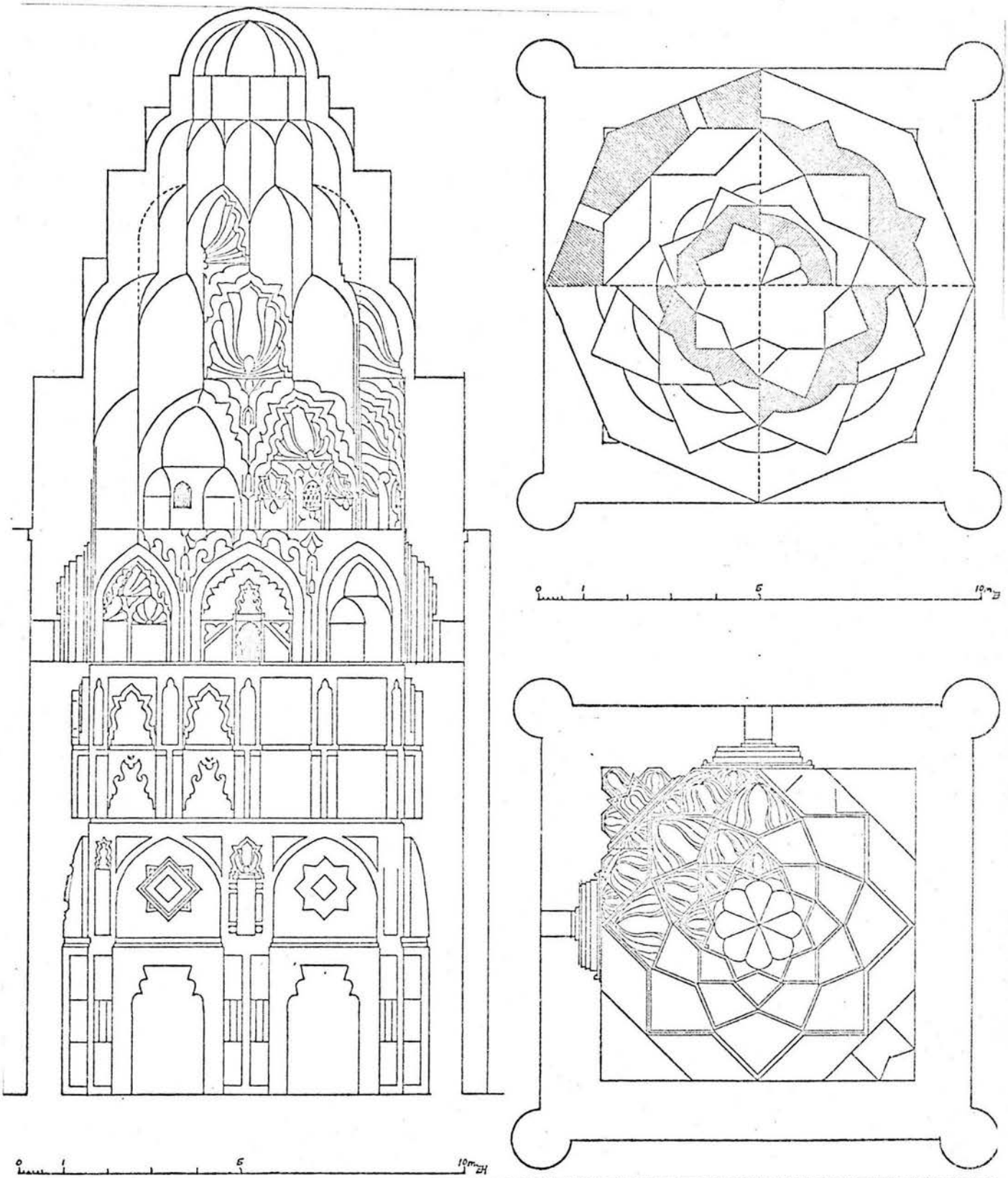
1. Adequate details are given by Jawād and Sūsa, op.cit., pp. 42-150.
2. On al-Ukhaiḍir see G.L. Bell, Palace and Mosque at Ukaidir (Oxford, 1914); O. Reuther, Ocheïdir (Leipzig, 1921); Creswell, EMA II, pp. 50-94. For details and bibliography about Samarra see ibid., pp. 227-45, 254-70 and 277-88.
3. Interesting historical information on this topic is given by M. Jawād. See for example "'Imārāt al-Qarn al-Sādis al-Ḍakhma fī al-Jānib al-Sharqī min Baghdad Khārij Dār al-Khilāfa", Sumer II (1946), pp. 55-76; idem, "'Imārāt al-Qarn al-Sādis al-Fakhma fī Dār al-Khilāfa al-'Abbāsiya", Sumer II (1946), pp. 197-213; idem, "al-Rubuṭ al-Baghdādiya" Sumer X (1954), pp. 218-49. See also A.N. 'Abbū, al-Qubāb al-'Abbāsiya fī 'l-'Irāq, M.A. thesis presented to the University of Baghdad in 1967 (unpublished), passim.

to natural disasters, climatic changes, soil salinity and the activities of brick robbers, very few still exist. Among the best which are still standing are the muqarnaṣ dome of Imām al-Dūr dated 478/1085 (pls. 4-5 and fig. I)[1] and Mashhad or ʿImārat al-Arbaʿīn at Tikrīt.[2]

The following study which is drawn from contemporary authorities concerns Saljuq monuments which no longer exist. It will not include monuments which can be clearly attributed to the Abbasid Caliphs or to the Atābikid Sulṭāns.

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1. It is situated on the south-western side of a village called al-Dūr about 20 km. south of Tikrīt on the left bank of the river Tigris. The name al-Dūr which now refers to both the village and the dome comes from the name of Abū ʿAbd Allāh ibn Mūsā ibn Jaʿfar ibn Muḥammad ibn ʿAlī ibn al-Ḥusain ibn ʿAlī ibn Abī Ṭālib, well known locally as Muḥammad al-Dūrī. According to the inscription of this dome published by Herzfeld the dome was built by Sharaf al-Dawla Muslim ibn Quraish, governor of the Jazīra between 453-78/1061-85. The tomb chamber is square in plan, 7.80 x 7.95 m. topped with a muqarnaṣ dome. For more detail see G.L. Bell, Amurath to Amurath (London, 1911), p. 214; Herzfeld, Reise I, pp. 231-4; idem, "Damascus I", pp. 18-20, figs. 14-15; ʿAbbū, op.cit., pp. 57-64. See also infra, p.147, 441-4.
2. It is situated about 500 m. to the west of Tikrīt. A large almost square enclosure, 47.5 x 47 m., includes a number of halls and rooms opening onto a central court-yard, 36.5 x 30.5. The walls were built of pebbles mixed with juss and revetted with bricks 25 x 28 cm. on the exterior façades. It was first published by Herzfeld, Reise I, pp. 221-4, Fig. 109. In 1964 the I.D.G.A. started large-scale restoration of this monument; see A.A. Ḥamīd, "ʿImārat al-Arbaʿīn fī Tikrīt fī Ḍaw' Ḥafā-'ir Mudīriyat al-Āthār al-ʿĀma fī Sanat 1964", Sumer XXI (1965), pp. 123-55. See also infra, p.184, n.3.



1. Near Samarra. Mausoleum of Imām Dūr: plans and section (after Herzfeld).

Among the early Saljuq monuments was the Dār al-Salṭana al-Saljūqiya in the northern part of Baghdad.[1] Originally it was a group of palaces for the Buwayhid amīrs, and was known as Dār al-Mamlaka al-Buwayhiya. This palace was demolished by the order of al-Nāṣir in 583/1187.[2] Malikshāh, who in the last year of his life intended to make Baghdad his winter residence, may have been responsible for building this palace.[3] He also laid the foundations of a great mosque near Dār al-Salṭana al-Saljūqiya known as Jāmi' al-Sulṭān.[4] Malikshāh died and the mosque was later completed by Bihrūz al-Khādim in 524/1129.[5] This mosque was seen by Ibn Jubair and described as one of the three great mosques of eastern Baghdad.[6] Ibn al-Athīr in describing the events of 479/1089 states that Malikshāh after visiting the shrines of 'Alī and

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1. EI[1] I, p. 567.
2. Al-Kāmil XI, p. 371. This palace was in the east side of Baghdad in a quarter known at present as al-'Iwāḍiya (Jawād and Sūsa, op.cit., p. 152).
3. EI[1] I, p. 567.
4. Al-Muntaẓam IX, p. 60; idem, Manāqib Baghdad, ed. B. al-Athari (Baghdad, 1923), p. 18.
5. Ibid., Bihrūz al-Khādim, also well known as Mujāhid al-Dīn Bihrūz was the Saljuq commander (al-Shiḥna) of the local police force at Baghdad (Ḥ. Amīn, op.cit., pp. 340-1).
6. Ibn Jubair, Abū 'l-Ḥusain Muḥammad ibn Aḥmad, Riḥlat Ibn Jubair, ed. W. Wright, revised by M.J. de Goeje (Leiden, 1907), p. 228.

Ḥusain went for a hunting journey in the desert to a place called al-Sibī'ī. There he ordered the building of al-Qurūn minaret.[1] In the same year the minaret of Jāmi' al-Khulafā' was completed as well as a ribāṭ near the Mu'allā canal in Baghdad built by Abū Sa'ad al-Ṣūfī al-Nīsābūrī, well known by his laqab of Shaikh al-Shiyūkh.[2]

Bihrūz al-Khādim in 502/1108 built two ribāṭs in Baghdad, one of them known as ribāṭ al-Khadam, the second as ribāṭ Bihrūz.[3] He also built a palace which was later burnt down in 515/1121.[4]

Khumārtakīn, who was a slave of Tutush ibn Alp Arslān, was also among the distinguished patrons of building during the Saljuq period. In Baghdad he built a hospital, a market and a madrasa, all of them bearing the name of his master Tutush.[5]

In the Saljuq period a most significant development, which at the same time led to great architectural achievements, was the growth of the madrasa as an independent institution. It is now generally agreed that the impetus for this growth

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1. Al-Kāmil X, p. 103.
2. Ibid., pp. 104-5. It will be argued that the present minaret of Jāmi' al-Khulafā' belongs to the Ilkhanid period; see infra, pp. 113-6.
3. Sibṭ ibn al-Jauzī, Abu'l-Muẓaffar Yūsuf ibn 'Abdallāh, Mirāt al-Zamān II (Ḥaidarabad, 1950), p. 27.
4. Ibid., p. 96.
5. Ḥ. Amīn, op.cit., p. 401. For more detail about Iraqī Saljuq māristāns see ibid.

was given by Niẓām al-Mulk, who built al-Madrasa al-Niẓāmiya in Baghdad for the Shāfi'ites in 457-9/1064-6.[1] At about the same time Sharaf al-Dawla Abū Sa'ad Muḥammad ibn Manṣūr al-Mustaufī, who was a financial agent of Alp Arslān, built a madrasa for the Ḥanafites and renewed the turba of Imām Abū Ḥanīfa in Baghdad.[2] In 480/1087 al-Madrasa al-Tājiya was founded in Baghdad in the quarter of Bāb Abraz on the east side by Tāj al-Mulk who was the financial agent of the Saljuq Sulṭān Malikshāh.[3] In general the Saljuq period in Iraq was marked by the erection of madrasas together with other types of religious buildings. The work was financed not only by Sulṭāns and their officials, but also by wealthy donors among the public.[4] By the time Ibn Jubair visited Baghdad in 581/1185 there were a considerable number of madrasas in the city. He states that "there are more than

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1. Al-Muntaẓam VIII, 238. Niẓām al-Mulk was the best known patron of this period; he dominates the history of Baghdad in the second half of the 5th/11th century. His name is linked to an extensive network of madrasas founded by him throughout the lands of the eastern Caliphate and called after him the Niẓāmiyās. Most widely known among them was al-Madrasa al-Niẓāmiya of Baghdad; see G. Makdisī, "Muslim institutions of learning in eleventh-century Baghdad", BSOAS XXIV (1961), p. 29. For the discussion of the causes behind the building of this madrasa see M. Jawād, "al-Madrasa al-Niẓāmiya bi Baghdad," Sumer IX (1953), pp. 317-42.
2. Al-Muntaẓam VIII, p. 245.
3. Al-Muntaẓam IX, pp. 38, 74.
4. Examples are given by G. Makdisī, op.cit., pp. 19-29.

thirty madrasas in the eastern part of Baghdad alone, each more magnificent than a palace, the greatest of them all being al-Niẓāmiya."[1] It is interesting to note that the mausoleum of Imām Mūsā al-Kāẓim which was built by Mu'izz al-Dawla in 334/945 was largely restored during the Saljuq period by Majd al-Mulk Abu 'l-Faḍl al-Barāwistānī al-Qummī who in 490/1096 ordered two new minarets to be built in this mausoleum as well as a guest house for the pilgrims.[2]

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1. Op.cit., p. 229. A historical survey of the Baghdadī madrasas which were built during this period is given by N. Ma'rūf, al-Madāris al-Sharābiya (Baghdad, 1966), pp.117-130 (hereinafter cited as al-Madāris al-Sharābiya).
2. Āl-Yāsīn, al-Shaikh Muḥammad Ḥasan, "al-Mashhad al-Kāẓimī fi 'l-'Aṣr al-'Abbāsī," Sumer XVIII (1962), p. 124 (hereinafter "al-Mashhad al-Kāẓimī"). According to al-Muntaẓam VIII, p. 286, Sharaf al-Dawla Muslim ibn Quraish (who died in 478/1085) also restored this mausoleum in 466/1073. This mausoleum contains two graves. One is that of the Imām Mūsā ibn Ja'far ibn Muḥammad ibn 'Alī ibn al-Ḥusain ibn 'alī ibn Abī Ṭālib who was buried there in 183/799; the second is that of Abū Ja'far Muḥammad al-Jawād ibn 'Alī al-Riḍā ibn Mūsā ibn Ja'far. The mausoleum is known at present as al-Kāẓimain ("the two restrainers of their anger"); see "al-Mashhad al-Kāẓimī", p. 121; Ṭ. Bāqir, Baghdad (Baghdad, 1959), p. 11 (hereinafter Baghdad).

Section 2

The Abbasid Caliphate During the 6th-7th Centuries A.H.

This period includes the reigns of ten Abbasid Caliphs. The reigns of the first seven of them coincided with those of the Saljuq and Atābikid Sulṭāns. They are as follows:[1]

1. Al-Mustaẓhir ibn al-Muqtadī	487-512/1094-1118
2. Al-Mustarshid	512-29/1118-35
3. Al-Rāshid	529-30/1135-6
4. Al-Muqtafī	530-55/1136-60
5. Al-Mustanjid	555-66/1160-70
6. Al-Mustaḍī'	566-75/1170-80
7. Al-Nāṣir	575-622/1179-225
8. Al-Ẓāhir	622-3/1225-6
9. Al-Mustanṣir	623-40/1226-42
10. Al-Musta'ṣim	640-56/1242-58

The architectural activities of earlier Caliphs mentioned in this list, especially those who were under the influence of strong Saljuq sulṭāns, were to a large extent limited. But after the end of the Saljuq period, when the last four Abbasid Caliphs from the time of al-Nāṣir onward resumed temporal power, a series of splendid buildings were erected. Among these four later Abbasid Caliphs the names of al-Nāṣir and al-Mustanṣir stand out as great patrons of architecture. Apart from this phase the Abbasid Caliphs continued the Saljuq style. The same enthusiasm was maintained for erecting religious buildings such as madrasas,

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1. The above list is that according to Ibn al-Ṭiqṭaqā, op.cit., pp. 403-48.

ribāṭs, turbas and other secular buildings, not only by the Caliphs but also by their wives, mothers and ministers.

Al-Mustaẓhir at the beginning of his reign was engaged in building a massive defensive wall to surround the eastern part of Baghdad which included Dār al-Khilāfa and its adjoining parts.[1] The work was later finished during the reign of al-Mustarshid.[2] Ibn Jubair saw the wall during his visit in 581/1185.[3] He states that "it had four gates, namely, beginning on the side next the Tigris on the north, Bāb al-Sulṭān,[4] Bāb al-Ẓafariya.[5] Bāb al-Ḥulba (pl.6),[6] and Bāb al-Baṣaliya".[7] This wall was to decide for centuries the

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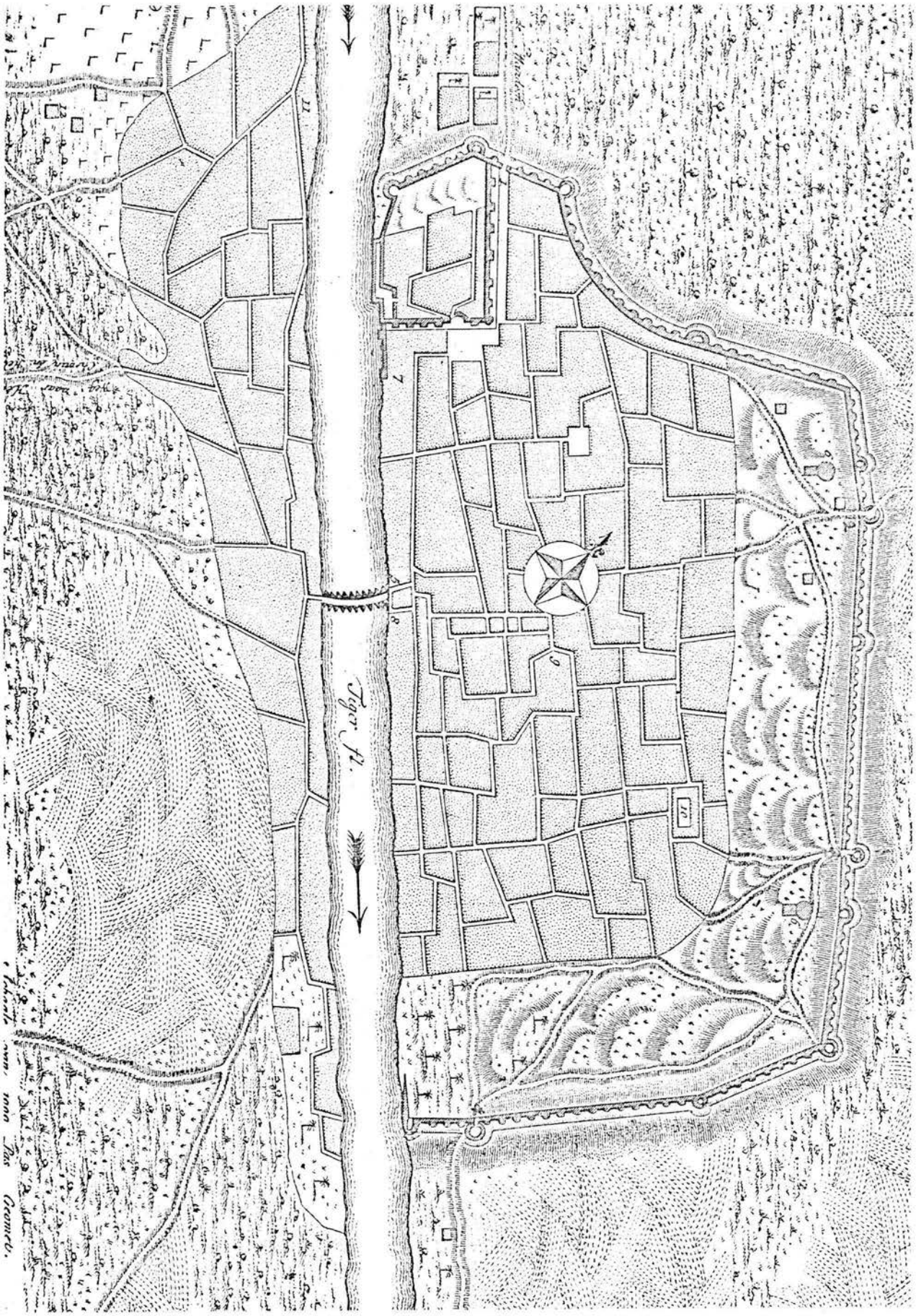
1. Al-Kāmil, X, p. 172.
2. Jawād and Sūsa, op.cit., p. 160.
3. Op.cit., p. 229.
4. The Sulṭān referred to here was Ṭughrul Beg (Jawād and Sūsa, op.cit., loc.cit.). This gate became known as Bāb al-Muʿaẓẓam. Nothing now remains of this gate, but an open thoroughfare and a locality nearby are still known as Bāb al-Muʿaẓẓam. The old gate was pulled down in 1925 to widen the road (Ṭ. Bāqir, Baghdad, p.8).
5. It was also known as Bāb Khurāsān. The name Ẓafariya is after a slave of the Caliph who was called Ẓafar (Jawād and Sūsa, op.cit., loc.cit.)
6. This bāb takes its name from a racecourse which used to be there before the wall was built. This door was later rebuilt by al-Nāṣir in 618/1221 and became known as Bāb al-Ṭilism. It was bricked up after the sack of Baghdad by Sulṭān Murād. It remained so until destroyed by an explosion of Turkish ammunition in 1917 (Ṭ. Bāqir, Baghdad, p. 9).
7. It was also known as Bāb Kalwādhā. The site of this south gate is now marked by the present-day modern bridge, situated in the modern quarter of Bāb al-Sharqī. The gate survived until 1935 (ibid.).

limits of eastern Baghdad. The wall survived to the time of the Ottoman governor Madḥat Pāshā in the last century (see map fig.2). At present the only remaining part of this wall is the Bāb al-Ẓafariya which later became known as Bāb al-Wasṭānī (pl.7 and fig.3).[1] It is built of brick in the form of a high circular tower. Inside, it has a vaulted octagonal courtyard surrounded by eight niches similar to Īwāns (fig. 3). The arch of the main entrance is surmounted by geometrical brick ornamentation and flanked by two lion figures in relief. Of these, only the lion on the south side is still intact (pl.7).

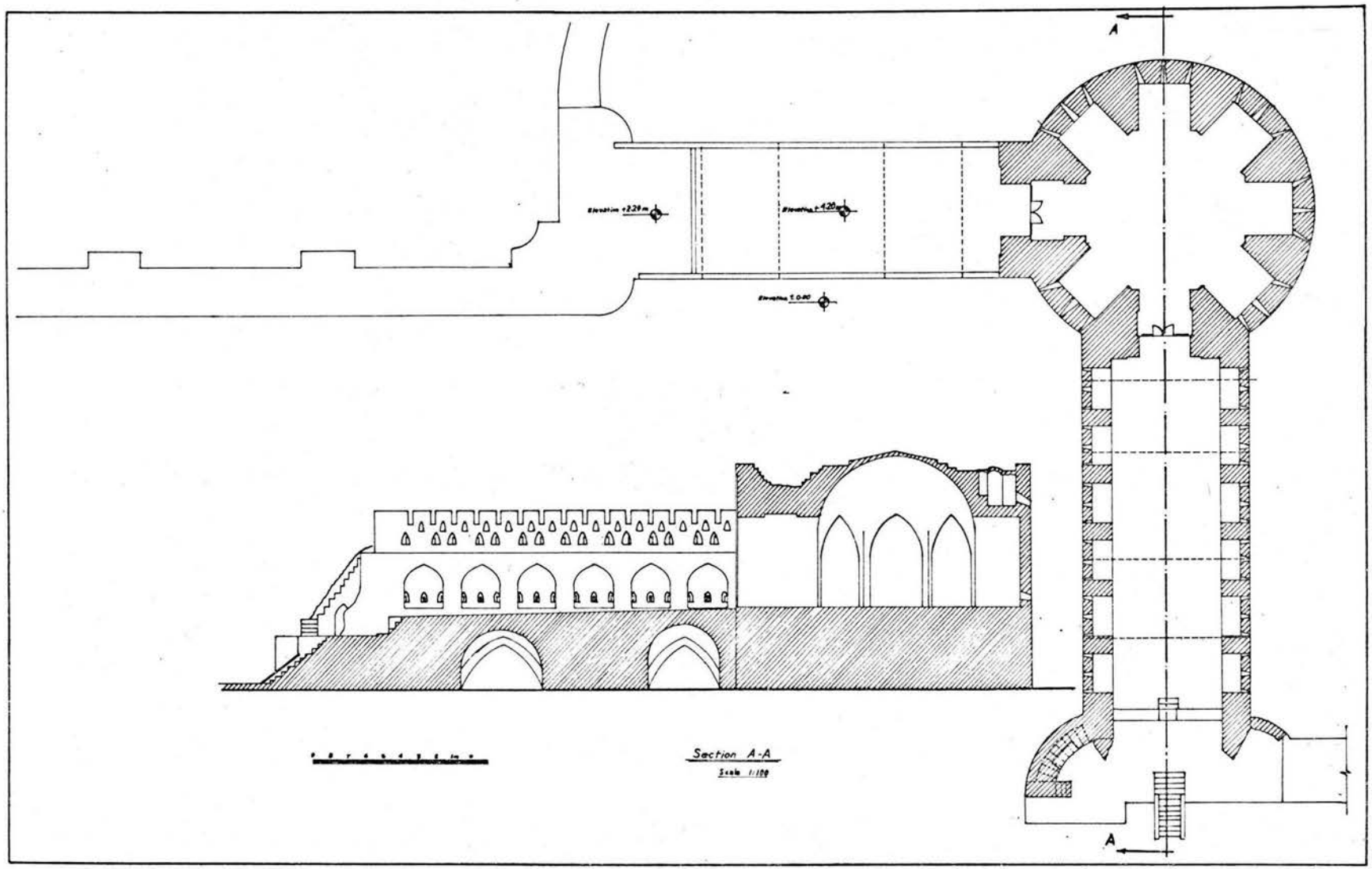
According to Ibn al-Jauzī, al-Mustarshid in 513/1124 built a palace in Dār al-Khilāfa which was known as al-Dār al-Muthamana, i.e., the octagonal palace.[2] The reigns of the following two Caliphs, i.e. al-Rāshid and al-Muqtāfī, were dominated by the Saljuq sieges, hence both Caliphs failed to leave buildings of their own. Al-Mustanjid who followed them built a palace in the vicinity of Dār al-Khilāfa known as the palace of al-Riḥāniyin after the name of the adjacent Sūq al-Riḥāniyin ("the perfume dealers' market").[3]

1. On this bāb see Herzfeld, Reise II, pp. 151-6. Recently the I.D.G.A. has converted Bāb al-Wasṭānī to a local museum for ancient Islamic armour.
2. Al-Muntaẓam IX, p. 249. There was an earlier palace with the same name built in Baghdad by al-Muṭī' (Jawād and Sūsa, op.cit., p. 147).
3. Ibid., p. 158. During the reign of this Caliph a turba was built in Baghdad for Ḥamza ibn Ṭalḥa, chamberlain of the Caliph al-Mustarshid who died in 556/1160 (Sibṭ ibn al-Jauzī, op.cit., VIII, pp. 236-7). Shaikh 'Abd al-Qādīr al-Gailānī

(Contd.



2. Baghdad. The eastern fortifications: map (after Niebuhr).



3. Baghdad. Bāb al-Wasṭānī: plan and section.

Al-Nāṣir during his reign, which lasted 47 years, erected a considerable number of religious and secular buildings in Baghdad.[1] Among the religious buildings which are attributed to al-Nāṣir was the turba of his wife Saljūqī Khātūn who died in 584/1188, and a ribāṭ attached to it near the shore of the Tigris in the western part of Baghdad in a quarter called Maḥallat al-Ramla.[2] The turba survived down to the end of the 12th/18th century and Niebuhr was able to visit it in 1766.[3]

Contd.) who died in 561 was buried in a turba with a muqarnas dome in Baghdad in a quarter known nowadays as Bāb al-Shaikh. This dome was pulled down in 941/1534 by Sulṭān Sulaimān and replaced by a new high dome of a different style (Bāqir, Baghdad, p.10). A list of the palaces which were built during these periods is given by Ḥ. Amīn, op.cit., pp.402-4.

1. A list of some buildings attributed to al-Nāṣir is given by Sibṭ ibn al-Jauzī, op.cit., VIII, p. 637. An interesting account of Baghdad while under the rule of al-Nāṣir is given by Ibn Jubair, op.cit., pp. 217-33.
2. Al-Kāmil, XII, p. 16.
3. Niebuhr incorrectly identified the building as being the ribāṭ of the Baktāshiya which according to him was built in 584/1188 by Qilīj Arslān ibn Mas'ūd al-Saljūqī. Niebuhr gives the fragmentary inscription which he states was on the entrance of the building as follows:

(• • • الملك العادل قليج أرصلان ابن الملك مسعود بن العادل قلج أرصلا ن
وذلك في سنه أربع وثمانين وخمسمائه •)

"...the just King Qilīj Arṣlān son of the King Mas'ūd son of the just Qilīj Arṣlān and that was in year 584." (Voyage en Arabie et en d'autres pays circovoisins II anon. tr. (Amsterdam, 1780), p. 244). Jawād, basing himself on Ibn al-Athīr who reported the death of Saljūqī Khātūn and the building of her turba in the events of the year 584 A.H., suggests that the inscription published by Niebuhr should

(contd.

In 587/1191 al-Nāṣir also built a turba for his father al-Mustaḍī' who died in 575/1180.[1] In 589/1193 al-Nāṣir ordered a ribāṭ to be built in eastern Baghdad. It was known as Ribāṭ al-Ḥarīm.[2]

The mother of the Caliph al-Nāṣir, Zumurud Khātūn, was also a distinguished patron of religious architecture. She died in 599/1202.[3] She ordered a madrasa for the Shāfi'ites called Madrasat al-Aṣḥāb and a ribāṭ in front of it.[4] According to Jawād these two monuments were near her turba which is popularly known as Sitt Zubaida. These two buildings survived to the end of the 12th/18th century when they were demolished by the Ottoman governor Sulaimān Pāshā (1779-1802) who reused their brick in building the western wall of Baghdad.[5] The building of Masjid al-Ḥaḍā'ir is also attributed to Zumurud Khātūn.[6] The turba of Zumurud Khātūn (the so-called Sitt

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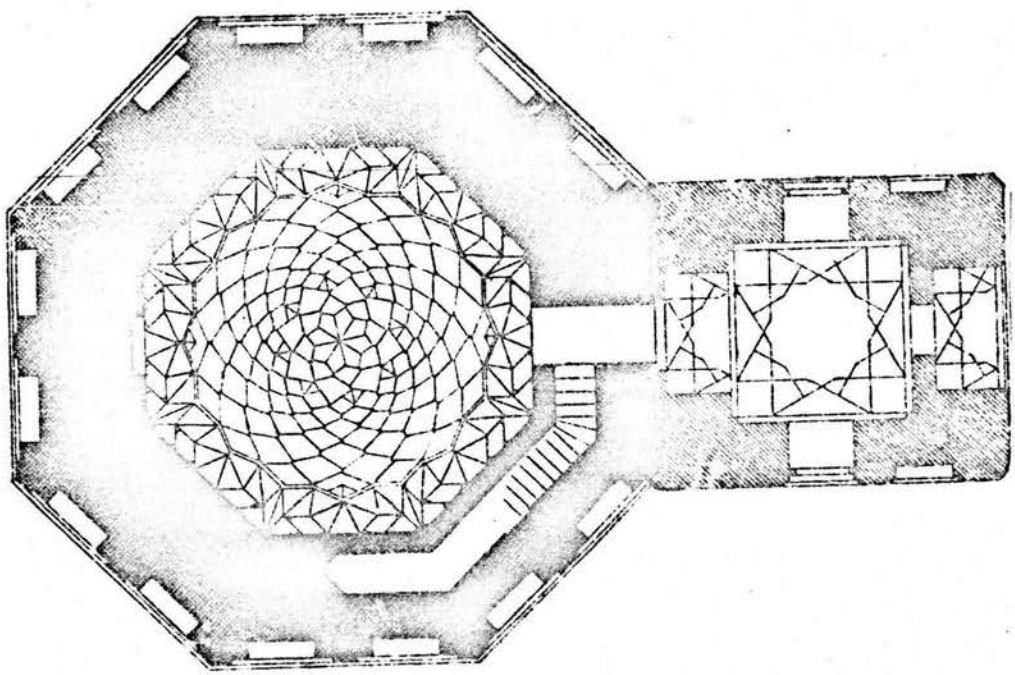
Contd.) start سلجوقي خاتون بنت الملك العادل Saljūqī Khātūn daughter of the just King...etc. (Jawād and Sūsa, op.cit., p.169; al-Kāmil XII, p. 16).

1. Al-Mustaḍī' was first buried in his palace, then later transferred to this turba (see Sibṭ ibn al-Jauzī, op.cit., VIII, pp. 356, 360).
2. Al-Kāmil XII, p. 67. In the same year al-Nāṣir completed the building of a library at al-Madrasa al-Nizāmiya; see ibid.
3. Sibṭ ibn al-Jauzī, op.cit., VIII, p. 513.
4. Ibid., p. 637.
5. Jawād and Sūsa, op.cit., pp. 191, 214.
6. For details see infra, pp. 42-4.

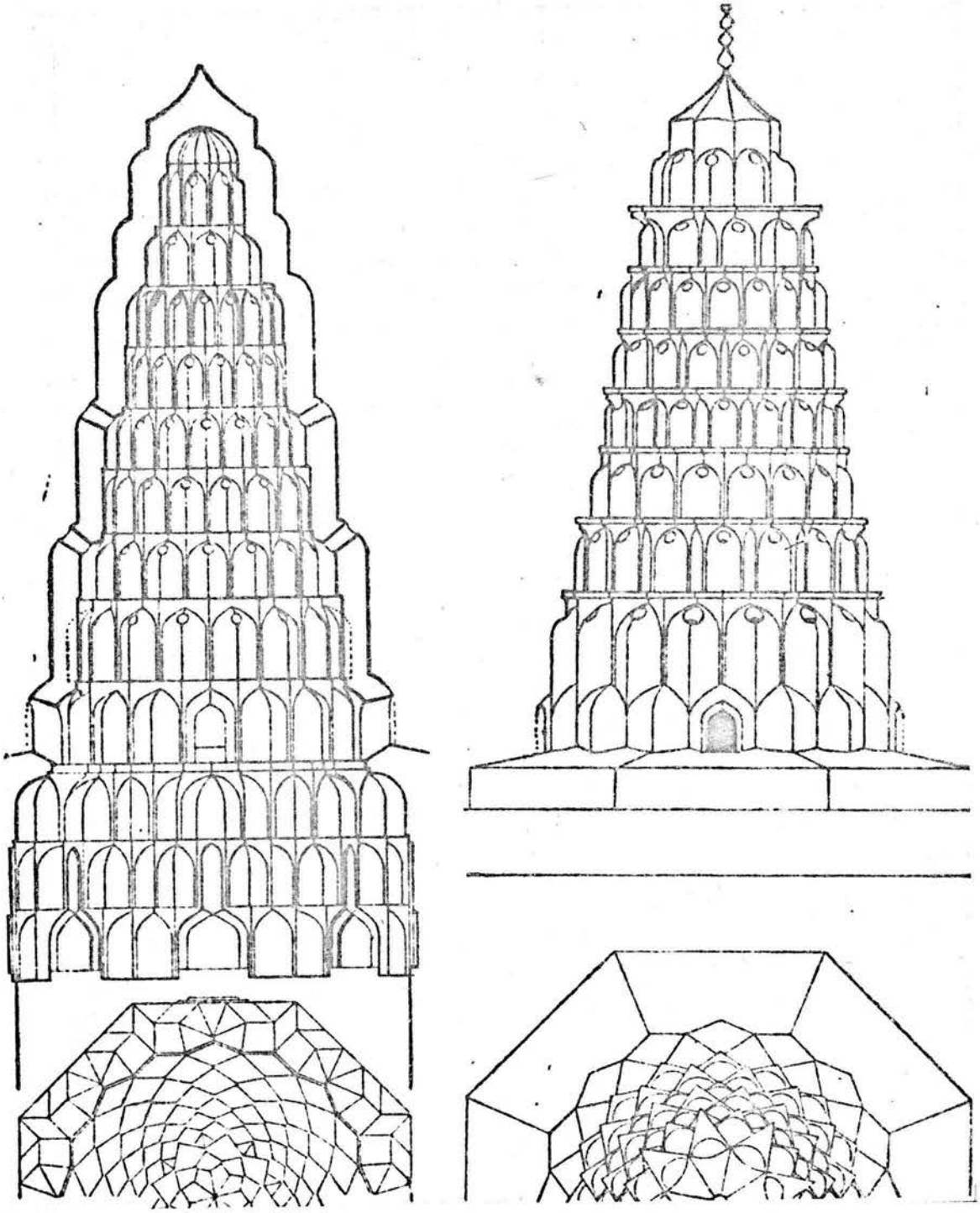
Zubaida) was most probably built by al-Nāṣir (pls. 8-9).[1] This turba with its impressive muqarnaṣ dome is still in good repair. It is octagonal in plan (figs. 4-5) and has elaborate brick ornamentation on its exterior façades (figs. 6-8).[2] In 605/1208 al-Nāṣir ordered a guest house for pilgrims to be built near the turba of his wife in the western part of Baghdad.[3] In addition to that this Caliph was responsible for erecting other religious buildings which no longer exist, such as Mashhad ʿAbdallāh and Turbat ʿAwn wa Muʿīn, both of which were near the turba of his wife, Masjid Sūq al-Sulṭān, and Ribāṭ al- Marzubāniya.[4] The mausoleum of the Imām Mūsā al-Kāẓim also attracted the attention of this Caliph, who ordered a minaret, a new courtyard surrounded by cells, and guest house to be built there.[5] Towards the end of the 6th/12th century several turbas were reported to

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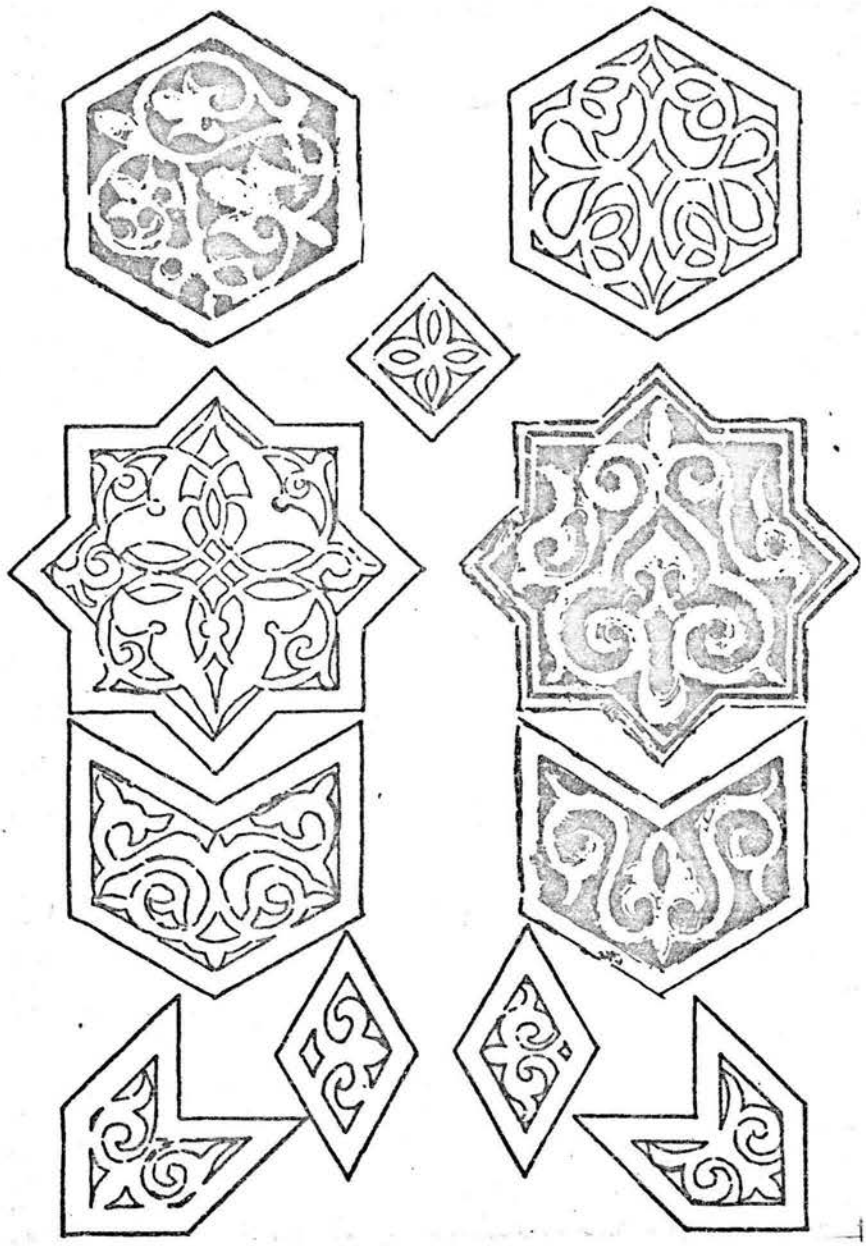
1. It had been thought that this tomb was that of Zubaida, wife of the Caliph Hārūn al-Rashīd (170-93/786-808). Herzfeld and Jawād both emphasised that the construction belongs in fact to the reign of al-Nāṣir (575-622/1179-1225) and was built for his mother Zumurud Khātūn (see Reise II, pp. 173-9; idem, "Damascus I", pp. 25-6; M. Jawād, Sayyidāt al-Bilāṭ al-ʿAbbāsī (Baghdad, 1950), p. 181; idem and Sūsa, op.cit., pp. 167-71.
2. The brick ornament of this monument may be regarded as the earliest example which has survived in Baghdad. For details of the muqarnaṣ dome of this turba see infra, pp. 147-8.
3. Ibn al-Sāʿī, Abu'l-Ṭālib ʿAlī ibn Anjab, al-Jāmiʿ al-Mukhtaṣar fī ʿUnwān al-Tawārīkh wa ʿUyūn al-Sīyar IX ed. M. Jawād (Baghdad, 1934), p. 258.
4. Sibṭ ibn al-Jauzī, op.cit., VIII, p. 637.
5. "Al-Mashhad al-Kāẓimī", pp. 124-5.



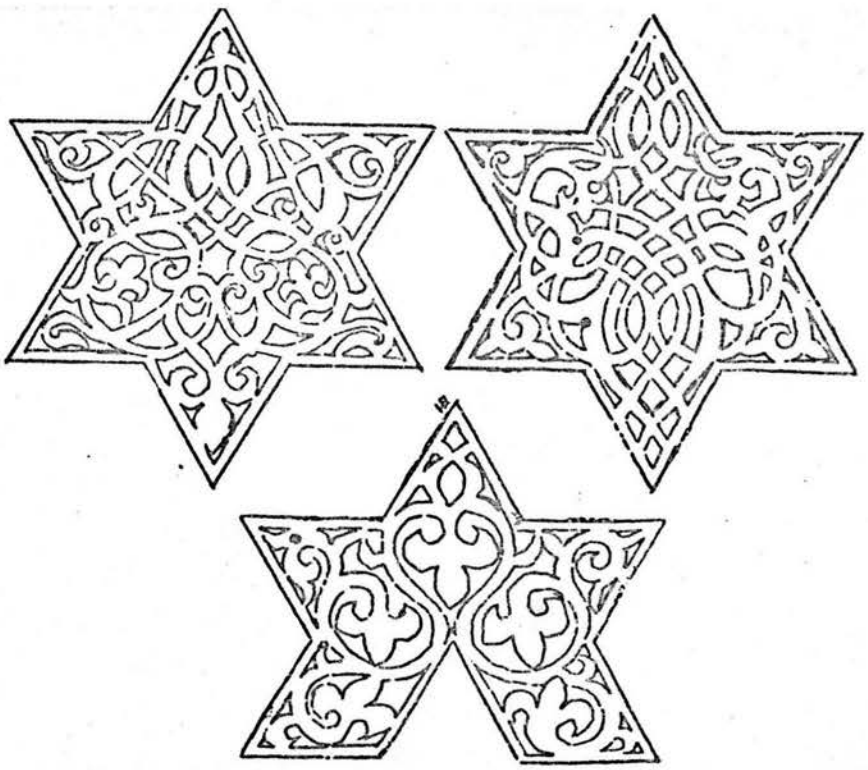
4. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): plan (after Herzfeld).



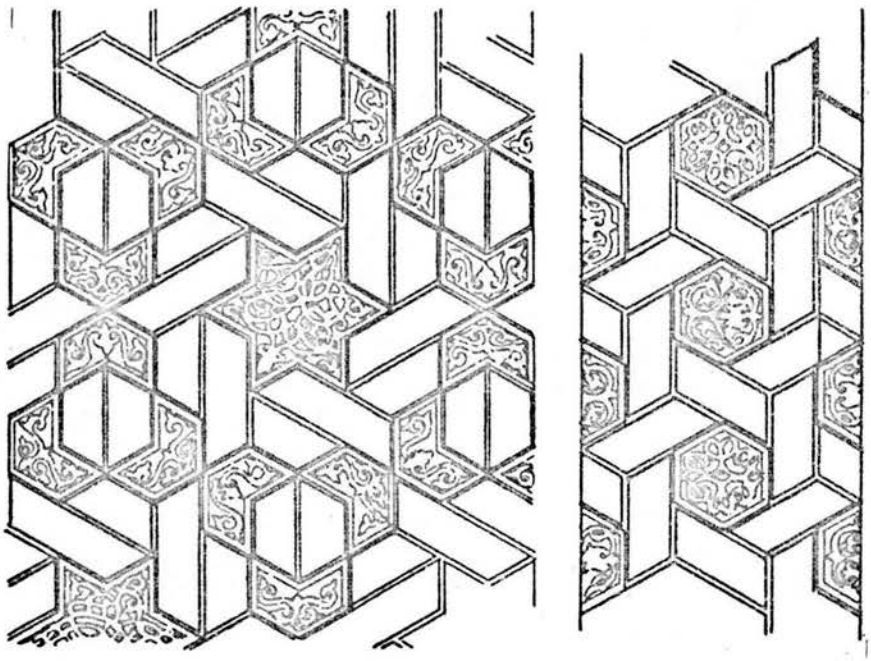
5. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): section and elevation (after Herzfeld).



6. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): detail of terra-cotta decoration on exterior (after Herzfeld).



7. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): detail of terra-cotta known as shashsha, on exterior (after Herzfeld).



8b. Baghdad. Mausoleum of Zumurud Khātūn (popularly known as Sitt Zubaida): detail of hazārbāf combined with terra-cotta, on exterior (after Herzfeld).



8a. Baghdad. The minaret of Shaikh Ma'rūf: detail of terra-cotta niche showing tree of life (after Herzfeld).

have been built for official persons.[1]

Another religious monument which was ordered by al-Nāṣir, and still exists, is the minaret of Shaikh Ma'rūf dated 612/1215 and situated near the so-called "turba of Sitt Zubaida" (pls. 10-11 and fig. 8a).[2] The mausoleum of 'Alī ibn Idrīs al-Ba'qūbī dated c. 619/1222, part of which is still to be seen in Ba'qūbā, may also be listed here as part of the religious architectural achievements of the reign of al-Nāṣir.[3]

Al-Nāṣir built several secular buildings. According to Sibṭ ibn al-Jauzī, he built three palaces in Baghdad, namely: Dār al-Musannāt, Dār al-Falak and al-Dār al-Baiḍā'.[4]

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1. For detail see Ibn al-Sā'ī, op.cit., IX, pp. 38, 56 and 130.
2. First published by Herzfeld, Reise II, pp. 172-3; see also Jawād, "Āthār Banī 'l-'Abbās fī 'l-Irāq," al-Hilāl XLI (Cairo, 1932), pp. 1061-2 (hereinafter cited as "Āthār Banī 'l-'Abbās"); idem and Sūsa, op.cit., pp. 89-90. The date of this minaret is inscribed on a niche in the muqarnasāt zone. Both Herzfeld and Jawād suggested that al-Nāṣir was responsible for erecting it. According to Jawād, "Āthār Bani 'l-'Abbās," p. 1061, this minaret was added to the turba of Shaikh Ma'rūf after the death of al-Nāṣir's son who was buried there in 612/1215 (al-Kāmil XII, p. 201). The turba of Shaikh Ma'rūf was originally built in 460/1067 (al-Muntaẓam VIII, p. 248).
3. It is known locally as Maqām Abū Idrīs. The remaining part is the burial chamber, which is square in plan. Apart from two layers of the muqarnaṣāt zone, the dome which used to top this turba no longer exists ('Abbū, op.cit., pp. 128-32, figs. 121-4).
4. Op.cit., p. 637.

According to some the first palace is identified with what is called at present the Abbasid Palace which still exists in Baghdad.[1] In 618/1221 al-Nāṣir renewed the buildings of Bāb al-Ḥulba (also known as Bāb al-Ṭilism, pl.6). Niebuhr was the first to publish its inscription.[2] The most remarkable feature of this bāb was a pair of dragons in relief flanking a seated human figure which probably represents the Caliph himself.[3]

Al-Ḍāhir who succeeded al-Nāṣir reigned only for one year during which he built a bridge in Baghdad.[4] Al-Ḍāhir before his death started the rebuilding of the dome of the mausoleum of Mūsā al-Kāẓim and it was completed later by al-Mustanṣir.[5]

Al-Mustanṣir, when he came to power, continued the programme of reform which had been started by al-Nāṣir. At the mausoleum of Imām Mūsā al-Kāẓim he also ordered the

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1. For details see infra, pp. 61-71.
2. Op.cit., II, p. 239. The correction to Niebuhr's reading is given by L. Massignon, Mission en Mésopotamie 1907-1908 II (Cairo, 1912) pp. 47-8.
3. F. Sarre, Der Kiosk von Konia (Berlin, 1936), figs. 26-7.
4. Ibn Ṭiqṭaqā, op.cit., p. 444. Ibn al-Jauzī reported an earlier bridge as being built in Baghdad by Banafsha, wife of al-Mustaḍī' (al-Muntaẓam X, p. 250). During the reign of her husband this lady was a distinguished patron of buildings. In Baghdad she also built a mosque, a ribāṭ and a madrasa for the Ḥanbalites which was handed over to the historian Ibn al-Jauzī in 570/1174 (al-Muntaẓam X, p. 252; Amīn, op.cit., pp. 375, 389).
5. Ibn al-Ṭiqṭaqā, op.cit., p. 444. This authority states that the dome was destroyed by a fire during al-Ḍāhir's reign.

building of minarets and the enlargement of the courtyard; the work was entrusted to Aḥmad Jamāl al-Dīn who completed it in 624/1226.[1] In the same year al-Mustanṣir also ordered two wooden sarcophagi for the two Imāms at this shrine. One of them, inscribed with the name of the Imām Mūsā ibn Ja'far, still exists and is to be seen at the Iraqi Museum.[2] In 626/1223 al-Mustanṣir built a ribāṭ in eastern Baghdad in a quarter known at that time as Dār al-Rūm.[3] The ribāṭ is known as al-Ribāṭ al-Mustajid. It was allotted to a group of Ṣūfīs who were under the leadership of al-Shaikh Abā Ṣāliḥ Naṣr ibn 'Abd al-Razzāq.[4] In the same year al-Mustanṣir completed the Jāmi' Qumriya in western Baghdad.[5] He also issued orders to Fakhr al-Dīn Aḥmad in 627/1229 to restore the mosques of western Baghdad.[6] In the same year al-Mustanṣir

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1. "Al-Mashhad al-Kāẓimī", p. 126.
2. First published by N. Naqshabandī and B.Faransīs," al-Āthār al-Khashshāb fī Dār al-Āthār al-'Arabiya fī Khān Mirjān" Sumer V (1949), pp. 55-6 (hereinafter cited as "al-Khashshāb").
3. Ibn al-Fuwaṭī, Kamāl al-Dīn ibn 'Abd al-Razzāq, al-Ḥawādith al-Jāmi'a wa 'l-Tajārub al-Nāfi'a fī 'l-Mā'a al-Sābi'a ed. M. Jawād (Baghdad, 1932), p. 2. In fact this work is written by an unknown author, and Jawād was mistaken in attributing it to Ibn al-Fuwaṭī (this work hereinafter cited as al-Ḥawādith).
4. Ibid.
5. For details see infra, pp. 53-6.
6. Al-Ḥawādith, p. 15.

further ordered the prince Shams al-Dīn Batkīn, governor of al-Baṣra, to reconstruct the great mosque of the city and to build a hospital.[1] In 629/1231 al-Mustanṣir completed the building of the Ḥarbā bridge which is still to be seen across the ancient bed of the river at al-Dujīl near Samarra about 90 km. north of Baghdad (pls. 12-13).[2]

According to Ibn Ṭiqṭaqā, al-Mustanṣir was also responsible for building a khān in the town of Ḥarbā near Samarra, the khān of Nahr Sābūs near Wāsiṭ and Khān al-Khirnīnā.[3] Apart from a brick miḥrāb at Khān al-Khirnīnā nothing remains of these monuments now.[4] Ibn al-Ṭiqṭaqā states that al-Mustanṣir was also responsible for building a great number of mosques, ribāṭs and guest houses.[5] The most splendid monument which was built by al-Mustanṣir in 631/1232, and which still exists, is al-Madrasa al-Mustanṣiriya.[6] In 632/1234 al-Madrasa al-Sharābiya was built in Wāsiṭ by Sharaf al-Dīn Iqbāl al-Sharābī who was the Commander-in-Chief of the Abbasid army during al-Mustanṣir's reign.[7] Apart

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1. Ibid., p. 33.
2. For details see infra, pp. 280-1. Amīn gave the date as 624/1226; see al-Madrasa al-Mustanṣiriya (Baghdad, 1960), p. 5, fig. 2. The above date is according to Jawād and Sūsa, op.cit., pp. 183-4.
3. Op.cit., p. 445. Khān al-Khirnīnā was situated midway between Tikrīt and Baijī.
4. For details about this khān and its miḥrāb see infra, pp. 297-8.
5. Op.cit., loc.cit.
6. On this building, see infra, pp. 72-81.
7. Details of this madrasa and its founder are given by Ma'rūf, al-Madāris al-Sharābiya, pp. 43-108, 271-83.

from a monumental portal which probably served as an entrance to this madrasa nothing now remains.[1]

In reporting the death of Shaikh 'Umar al-Suhrawardī which took place in 632/1254, the author of al-Ḥawādith states that he was buried in a turba prepared for him in al-Wardiya cemetery near Bāb al-Wasṭānī.[2] This turba no longer exists and the one which is to be seen on the site must probably dates from the Ilkhanid period.[3] In 633/1235 al-Mustanṣir largely restored Jāmi' al-Khulafā' and the inscription which recorded his work and its date was first published by Niebuhr.[4]

The last Caliph, al-Musta'ṣim, was not as eager as his two predecessors to erect monuments. Contemporary authorities bear this out. But as regards architectural activities his reign was no doubt a continuation of the previous period. During al-Musta'ṣim's reign his slave Bāb al-Bashīr built a madrasa in Baghdad for the followers of all four madhhabs: it was known as al-Madrasa al-Bashīriya.[5] Several turbas were also built during the reign of this Caliph, none of which now exists.[6] In 640/1242 a turba was built for al-Mustanṣir who died in 639/1241

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1. See infra, pp. 82-95.
2. Al-Ḥawādith, p. 74.
3. On this monument see infra, pp. 150-162.
4. Op.cit., II, pp. 241-2.
5. It no longer exists (al-Ḥawādith, pp. 274, 307).
6. Ibid., pp. 242-92.

and was first buried in al-Dār al-Muthamana.[1] In 641/1243 a turba was built for Qirān al-Nāṣirī at the cemetery of Aḥmad ibn Ḥanbal in Baghdad.[2] In 646/1248 a turba was built for Hājir, mother of the Caliph al-Musta'ṣim, near her ribāṭ in the western part of Baghdad.[3] In 653/1255 a turba was built in the cemetery of al-Shūnīzī for al-Shaikh Tāj al-Dīn Muḥammad ibn al-Ḥasan al-Armawī who was a teacher at al-Madrasa al-Sharafiya in Baghdad.[4] Towards the end of this Caliph's reign two muqarnaṣ domes were erected. Both of them are still standing. One of them is the Turbat al-Ḥasan al-Baṣrī (pl. 14) in al-Zubair to the south-west of Baṣra.[5] According to Ibn Khallikān, al-Ḥasan al-Baṣrī was born in al-Madīna in 21/641, then emigrated to Baṣra and died in 110/723.[6] Thus this dome was built for him long after he died. The second example is the muqarnaṣ dome of Dāqūq. It is in the northern part of Dāqūq situated 45 km. to the south of Kirkūk. This dome is attributed to Imām Muḥammad al-Bāqir ibn Zain al-'Ābidīn.[7] Plate 15 illustrates the minaret which has

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1. Ibid., pp. 155, 171.
2. Ibid., p. 227.
3. Ibid., p. 226.
4. Ibid., pp. 310-11.
5. Herzfeld dated this dome, by comparing it with Sitt Zubaida, to c. 600/1200 ("Damascus I," p. 29). 'Abbū argues that it should be dated c. 650/1251 (op.cit., pp. 174-7). For more details see infra, p. 148.
6. Abu 'l-'Abbās Shams al-Dīn Aḥmad ibn Muḥammad, Wafayāt al-A'yān wa-Anbā' Abnā' al-Zamān I, ed. M. 'Abd al-Ḥamīd (Cairo, 1948), p. 354.
7. W. al-Rubai'ī, "Dāqūq, Tārīkhuhā, al-Tanqīb wa 'l-Siyāna fīhā," Sumer XII (1956), pp. 36-64, see also infra, p.148.

survived from the Great Mosque of this city.[1]

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1. Herzfeld, Reise II, pp. 318-19, fig. 299.

Section 3

The Atābikids of Iraq

The Atābikids were of Turkish origin.[1] They first served during the Saljuq period as guardians for the sons of the Saljuq Sulṭāns. The name Atābik, which is of Turkish origin, is composed of two words: aṭā, "father" and bik, "prince."[2] During the reign of Malikshāh, Āq Sunqur, father of ʿImād al-Dīn Zangī, became an influential figure and was appointed governor of Ḥalab. After he died in 487/1094 his only child ʿImād al-Dīn was put under the care of both the Caliph and the Sulṭān.[3] In 521/1127 ʿImād al-Dīn was appointed as ruler of northern Iraq and part of Syria. He became the founder of the Atābikid dynasty.[4] On his death in 541/1146 his territory was divided into two parts between his sons. The western part was allotted to Nūr al-Dīn Maḥmūd (541-69/1146-73), who first took Ḥalab and then Damascus as his capital.[5] The eastern part went to Saif al-Dīn Ghāzī who made Mosul his capital.[6] The eastern part was in turn divided into three states governed

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1. S. Lane-Poole, The Muhammadan Dynasties (London, 1895), p. 159.
2. Ibn Khallikān, op.cit., I, p. 114.
3. Al-Mausil, pp. 16-20.
4. Al-Muntaẓam X p.5; al-Kāmil XI, p. 75.
5. Al-Kāmil XI pp. 73, 91-2.
6. Ibid., p. 73.

respectively by the Atābikids of al-Jazīra,[1] the Atābikids of Sinjār[2] and the Atābikids of Arbīl.[3]

The Atābikids of Mosul were as follows:[4]

1.	ʿImād al-Dīn Zangī	521-41/1127-46
2.	Saif al-Dīn Ghāzī ibn ʿImād al-Dīn	541-44/1146-9
3.	Quṭb al-Dīn Maudūd ibn ʿImād al-Dīn	544-65/1146-69
4.	Saif al-Dīn Ghāzī ibn Quṭb al-Dīn	565-76/1169-80
5.	ʿIzz al-Dīn Masʿūd ibn Quṭb al-Dīn	576-89/1180-93
6.	Nūr al-Dīn Arslānshāh ibn ʿIzz al-Dīn	589-607/1193-1210
7.	Al-Qāhir ʿIzz al-Dīn Masʿūd ibn Nūr al-Dīn	607-15/1210-18
8.	Nūr al-Dīn Arslānshāh ibn al-Qāhir	615/1218
9.	Nāṣir al-Dīn Muḥmūd	616-31/1219-33
10.	Badr al-Dīn Lū'lū'[5]	631-57/1233-59
11.	Ismāʿīl ibn Lū'lū'[6]	657-60/1250-61

The Atābikids were great patrons of art and architecture. Mosul became an important artistic centre and

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1. The Atābikids of al-Jazīra were: Muʿizz al-Dīn Sinjar Shāh, 576-605/1180-1208; Muʿizz al-Dīn Maḥmūd Sinjar, 605-39/1208-41; and Masʿūd ibn Muḥammad, 639-48/1241-50 (M.B. al-Ḥusainī, al-ʿUmla 'l-Islāmiya fi'l-ʿAhd al-Atābikī (Baghdad, 1966), p. 214).
2. The Atābikids of Sinjār were: ʿImād al-Dīn Abu'l-Fatḥ Zangī II ibn Maudūd, 566-94/1170-97; Quṭb al-Dīn Muḥammad ibn Zangī II, 594-616/1197-219; ʿImād al-Dīn Shāhanshāh Muḥammad, 616/1219; and Jalāl al-Dīn Maḥmūd ibn Muḥammad, 616-7/1219-20 (ibid., p. 213).
3. The Atābikids of Arbīl were: Zain al-Dīn ʿAlī Kuchuk, 539-44/1144-9; Zain al-Dīn Abu'l-Muẓaffar Yūsuf ibn ʿAlī, 544-63/1149-1167; and Muẓaffar al-Dīn Abī Saʿīd Kukbūrī, 563-86/1167-90 (ibid., p. 215).
4. The above list is according to Ibn al-Athīr, al-Bāhir fī Tārīkh al-Dawla 'l-Atābikiya fi-'l-Mauṣil, ed. A. Ṭulaymāt (Cairo, 1963), passim (hereinafter cited as al-Bāhir).
5. Al-Ḥawādith, p. 52.
6. Ibid., p. 338.

reached its apogee during their period. Ibn Jubair, who visited Mosul, particularly admired its mosques, hospitals and madrasas.[1] Again, very few are to be seen now. One of the earlier monuments which belong to the Atābikid period is a palace known historically as Dūr al-Mamlaka, but called at present Qara Sarāy.[2] It was built by 'Imād al-Dīn,[3] and later enlarged and restored by Badr al-Dīn Lū'lū'. Apart from two adjacent halls facing the west, and a façade two storeys high with windows looking on to the river, nothing remains of this palace (pl. 16).[4] At Sinjār north west of Mosul the remains of a minaret (pl. 17) are all that have survived from the mosque and a madrasa which were built by the ruler of Sinjār, Quṭb al-Dīn Muḥammad ibn 'Imād al-Dīn Zangī, in 598/1201.[5]

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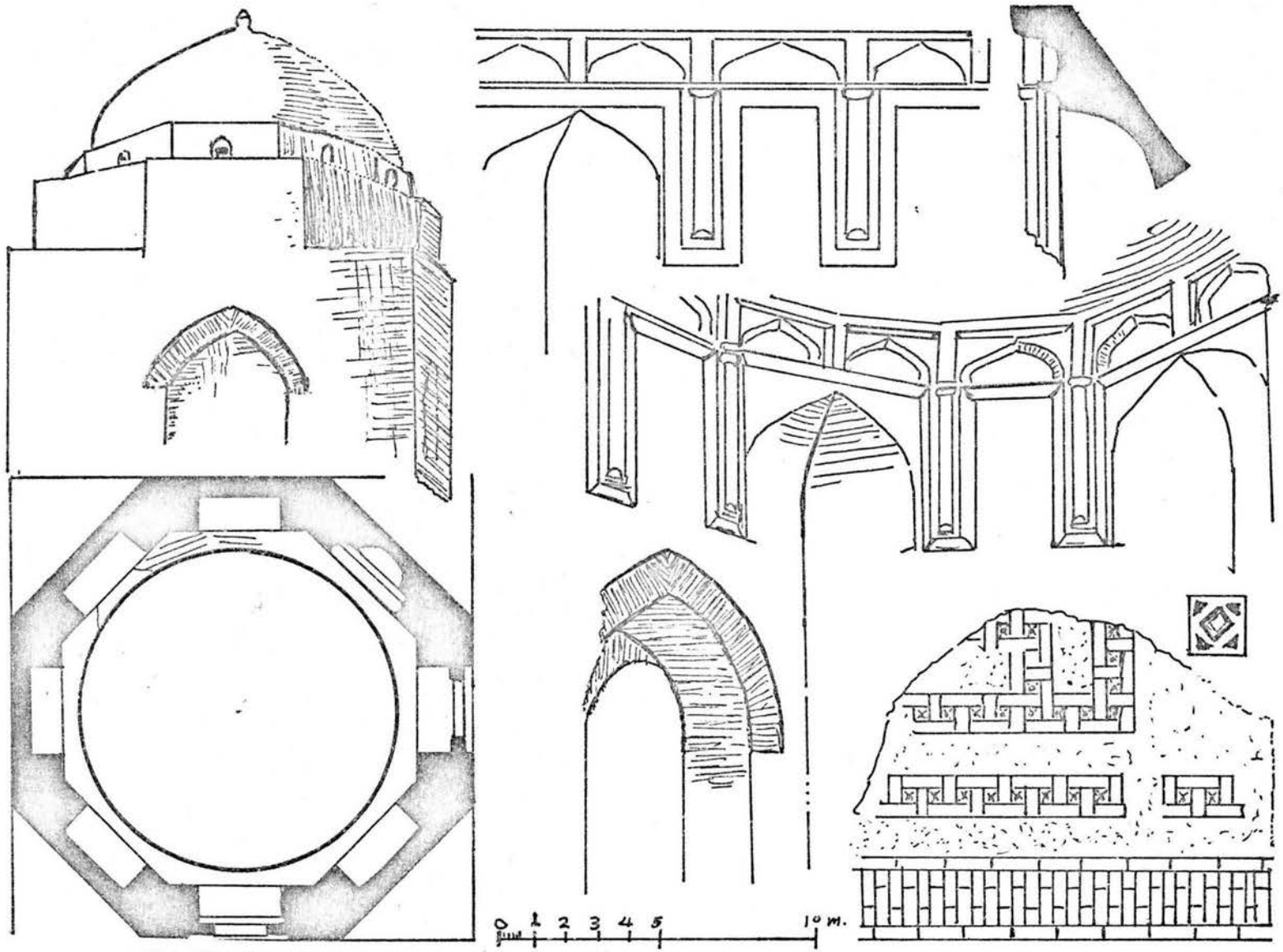
1. Op.cit., pp. 234-8.
2. Herzfeld, Reise II, pp. 238-49; al-Daiwachī, al-Mauṣil, pp. 117-18.
3. Al-Bāhir, p. 139.
4. The northern hall still retains an inscription in naskh mentioning Lū'lū'. There is also a row of circles 21 cm. in diameter each containing a seated figure (al-Mauṣil, loc.cit.).
5. The inscription of this minaret, which bears the name of the founder and the date, was first published by M. van Berchem in Reise I, p. 9, fig. 4; see also, Reise III, pls. 75, 76; S. al-Daiwachī, Jawāmi' al-Mauṣil fī Mukhtalaf al-'Uṣūr (Baghdad, 1963), p. 44 (hereinafter cited as Jawāmi').

Another monument which was largely rebuilt by the early Atābikids is the Castle and its wall, the remains of which are now known as Bāsh Ṭābiya (pl. 18).[1] These military buildings survived until destroyed by the Mongol general Sindaghū in 660/1261.[2] The Atābikids followed the Saljuqs and the later Abbasid Caliphs in building madrasas and ribāṭs.[3] Saif al-Dīn Ghāzī built in 541/1146 al-Madrasa al-Atābikiya al-'Atīqa for the Shāfi'ite and the Ḥanafite students in Mosul.[4] After his death, he was buried there. He also built a ribāṭ near this madrasa.[5] The madrasa and the ribāṭ no longer exist.

In 563/1163 Zain al-Dīn Abū 'l-Ḥasan 'Alī, father of Kukbūrī, built in Mosul a mosque known as Masjid Zain al-Dīn. It was also used for teaching and at the same time was known as al-Madrasa al-Kamāliya after the name of a faqīh who used to teach there and who was known as Kamāl al-Dīn Yūnis ibn Man'ah.[6] The remains of this building still exist in Mosul and are now known as Madrasat Ibn Yūnis or Shaikh al-Shaṭṭ (fig. 9).[7] Zain al-Dīn was also responsible for building

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1. On this building see S. al-Daiwachī, "Sūr al-Mauṣil", Sumer III (1947), pp. 117-28; idem, "Qal'at al-Mauṣil fī Mukhtalaf al-'Usūr," Sumer X (1954), pp. 94-111.
2. Al-Ḥawādith, pp. 346-7.
3. See S. al-Daiwachī, "Madāris al-Mauṣil fi 'l-'Ahd al-Atābikī," Sumer XIII (1957), pp. 101-18, (hereinafter cited as "Madāris al-Mauṣil").
4. Al-Kāmil XI, p. 91; al-Bāhir, p. 167.
5. Ibid.
6. Ibn Khallikān op.cit., I, p. 425; II, p. 419.
7. Herzfeld, Reise II, pp. 233-4; al-Daiwachī, "Madāris al-Mauṣil," p. 106, pls. 1,3-4. The only surviving part of the original Atābikid structure of this madrasa is an octagonal domed chamber built of stone (al-Daiwachī, al-Mauṣil, pp. 135-7).



9. Mosul. Al-Madrasa al-Kamāliya (Shaikh al-Shatt): composite drawing with plan, elevation, zone of transition and detail of brickwork (after Herzfeld).

another madrasa called al-Zainiya.[1] This, however, no longer exists. According to Ibn Khallikān, Zain al-Dīn was a patron of many other religious buildings.[2] In 566/1170, during the reign of Saif al-Dīn Ghāzī ibn Quṭb al-Dīn, Mosul was occupied by Nūr al-Dīn.[3] In that year Nūr al-Dīn ordered a mosque and a madrasa in Mosul.[4] In 568/1172 both of them were completed and named after him. The madrasa which used to be known as Madrasat al Jāmi' al-Nūrī no longer exists.[5] The mosque which is known as Jāmi' al-Nūrī, although much restored, survived down to 1942. The impressive minaret which belongs to this mosque is still standing (pl.9).[6] A miḥrāb, an inlaid marble slab, and stucco elements which were all transferred from this mosque to the Iraqi Museum will be discussed later in this thesis. In 572-6/1176-80 the Jāmi' al-Mujāhidī was built in Mosul by

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1. Ibn Khallikān, op.cit., I, p. 435.
2. Ibid. He also built a ribāṭ in Mosul known as al-Ribāṭ al-Zainī (al-Mauṣil, p. 155).
3. Al-Kāmil, XI, p. 238.
4. Ibid., p. 239.
5. "Madāris al-Mauṣil", p. 107.
6. This mosque with its minarets is excellently published by Herzfeld, Reise II, pp. 216-31, figs. 229-41; see also S. al-Daiwachī, "al-Jāmi' al-Nūrī fi'l-Mauṣil" Sumer V (1949), pp. 276-90; idem, Jawāmi', pp. 18-54. In 561/1165 Nūr al-Dīn renewed the Great Mosque of Raqqa. The inscription which celebrates his work was first published by M. van Berchem in Reise I, p. 4. On this monument see Herzfeld, Reise II, pp. 359-63, figs. 333-40; III, pls. 66-69.

Abū Manṣūr Qaymāz ibn ʿAbdallāh al-Zainī, known by his laqab Mujāhid al-Dīn (pl. 20).[1] He was one of the most important figures of the Atābikid period. In 571/1175 he became dizdār or governor of the Mosul citadel.[2] Mujāhid al-Dīn, who died in 595/1198, was also among the great patrons of Atābikid architecture.[3] Contemporary authorities attribute several other monuments to him; they are all named after his laqab. They include a madrasa and khānaqāh in Arbīl, and a māristān, bridge, ribāṭ, orphanage, madrasa and qaisariya or market in Mosul.[4] Apart from the mosque, which was seen by Ibn Jubair, nothing remains of these monuments.[5]

ʿIzz al-Dīn Masʿūd ibn Quṭb al-Dīn built a madrasa for the Ḥanafites and the Shāfiʿites in Mosul. It was known as al-Madrasa al-ʿIzziya, and when he died in 589/1193 he was buried there.[6] The remains of this madrasa are known today as Mashhad al-Imām ʿAbd al-Raḥmān.[7] His son Nūr al-Dīn Arslānshāh built a madrasa known as al-Madrasa al-Nūriya, which included a turba for him. He was buried there in

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1. Al-Kāmil XI, p. 305; al-Bāhir, p. 117.
2. Ibn al-Sāʿī, op.cit., IX, pp. 8-9; Ibn Khallikān, op.cit., III, pp. 246-8.
3. Al-Kāmil XII, p. 101.
4. Al-Bāhir, p. 117; Ibn Jubair, op.cit., p. 235; Jawāmiʿ, p. 56.
5. Op.cit., p. 235.
6. Al-Kāmil XII, p.66; "Madāris al-Mauṣil", p. 104.
7. See infra, pp. 301-6.

607/1210.[1] The remains of this madrasa are now known as Mashhad al-Imām Muḥsin.[2] Al-Qāhir 'Izz al-Dīn built al-Madrasa al-Qāhiriya.[3] It also included a turba for him. He was buried there in 615/1218.[4] Several other madrasas and ribāṭs were built in Mosul during the Atābikid period but none of them exist now.[5]

In Arbīl in the northern part of Iraq, a minaret now known as al-Manāra al-Muẓaffariya was built by Muẓaffar al-Dīn Abī Sa'īd ibn 'Alī Kukburī, governor of Arbīl (pls. 21, 22).[6] According to Herzfeld this minaret is the only monument which survives of the madrasa which he built in Arbīl in 596/1199.[7] Recent excavation on the site proved that this minaret was attached to a mosque of an earlier date.[8]

Al-Qāhir before he died in 615/1218 had appointed Badr al-Dīn Lū'lū', an ambitious slave, as a guardian for his son and successor Nūr al-Dīn Arslānshāh, who was then sixteen years old.[9] During the reign of this sulṭān (which lasted

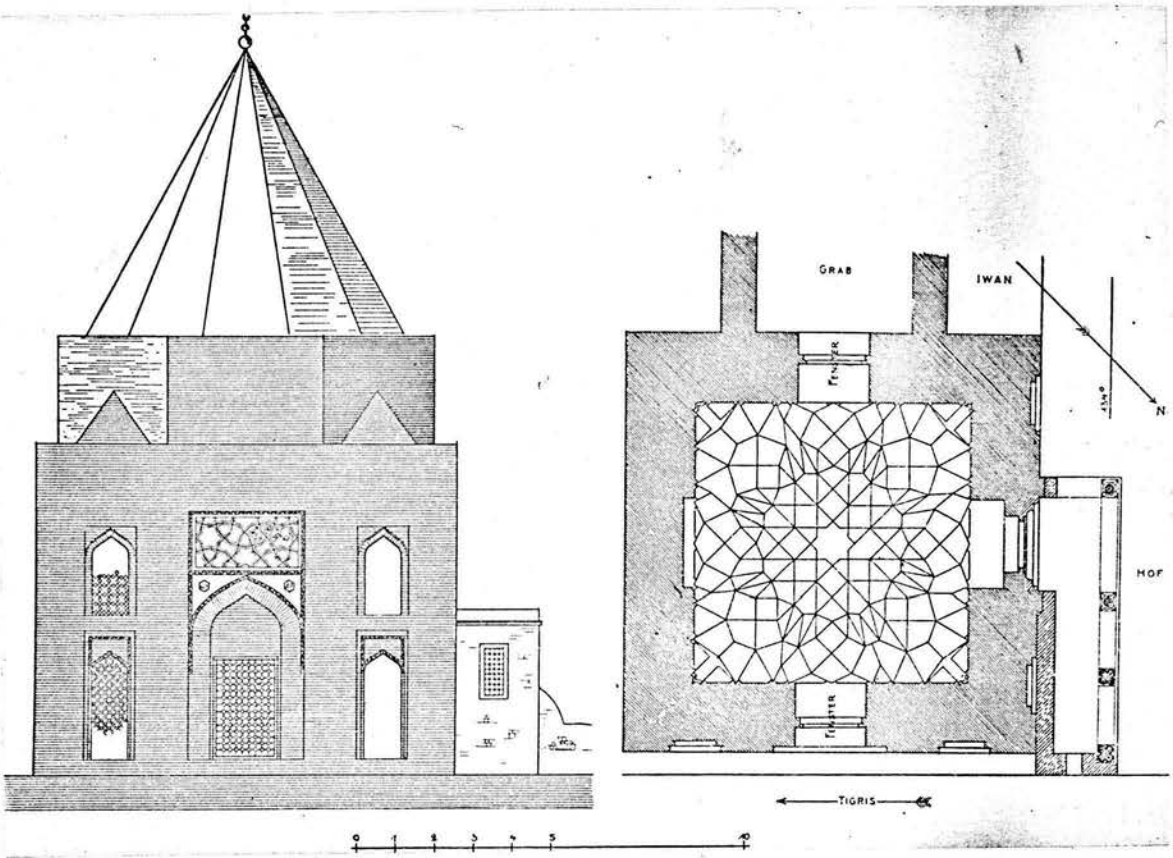
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1. Al-Kāmil XII, p. 191; al-Bāhir, p. 368; Ibn Khallikān, op.cit., I, p. 62.
2. An inlaid marble piece from the building survives; see infra, pp. 325-7.
3. Al-Bāhir, p. 201; Ibn Khallikān, op.cit., I, p. 173.
4. Al-Kāmil XII, p. 217.
5. For more examples see "Madāris al-Mauṣil", p. 108, pp. 113-18; al-Mauṣil, pp. 155-8.
6. First published by Herzfeld, Reise II, pp. 314-18 and figs. 295-8.
7. "Damascus IV", p. 122. Muẓaffar al-Dīn was husband of Salāḥ al-Dīn's sister Rabī'a Khātūn. He was born in 549/1154 and died in 630/1232 (ibid.).
8. K. Ḥusain, "al-Tanqīb Ḥawla al-Ma'dhana al-Muẓaffariya fī Arbīl", Sumer XVIII (1962), pp. 205-7, fig. 1.
9. Al-Kāmil XII, p. 218.

for one year) and during that of the last Atābikid Sulṭān, power was almost wholly in the hands of Badr al-Dīn. In 631/1233 Badr al-Dīn succeeded in putting an end to the Atābikid family and proclaimed himself as independent ruler of Mosul with the approval of the Abbasid Caliph himself.[1] Badr al-Dīn espoused the Shi'ite creed as part of his general strategy against a Sunnī political and religious movement led by al-Shaikh Ḥasan ibn 'Udī ibn Ṣakhr al-Umawī al-'Adawī, the founder of the 'Adawiya sect. The political objective of this movement was to re-establish Umayyad rule in Iraq.[2] Although this movement came to an end in 652/1254 after the massacre of the leader and one hundred of his followers by Badr al-Dīn,[3] it supported to a great extent such architectural activities as took place at that time in northern Iraq. As part of his plan against this movement Badr al-Dīn had converted many Atābikid madrasas into shrines for Shi'ite Imāms.[4] He also built several other new shrines for the same purpose. Most of them still exist. They are Mashhad al-Imām Yaḥyā ibn al-Qāsim dated 637/1239 (pl. 23 and fig.10),[5] Mashhad al-Imām 'Awn al-Dīn dated 646/1248,[6]

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1. Al-Ḥawādith, p. 52.
2. Al-Mauṣil, pp. 76-7.
3. Al-Ḥawādith, p. 271.
4. Examples are: al-Madrasa al-'Izziya, which became a mashhad for Imām 'Abd al-Raḥmān, and al-Madrasa al-Nūriya, which became a mashhad for Imām Muḥsin. Other Atābikid monuments were also converted to shrines for the Imāms: Ibn al-Ḥanafiya, 'Alī al-Aṣghar and Imām Bāhir (al-Mauṣil, p.134, pp. 142-3).
5. Published by Herzfeld, Reise II, pp. 249-63; see also S. al-Daiwachī, "Mashhad al-Imām Yaḥyā ibn al-Qāsim" Sumer XXIV (1968), pp. 171-81 (hereinafter "Yaḥyā ibn al-Qāsim").
6. Reise II, pp. 263-70, fig. 261. It is also known as Mashhad ibn al-Ḥasan.



10. Mosul. Mausoleum of Imām Yaḥyā ibn al-Qāsim: plan and elevation (after Herzfeld).

Mashhad Banāt al-Ḥasan,[1] and Mashhad al-Imām ʿAlī al-Hādī,[2] all in Mosul; and lastly, Maqām al-Sitt Zainab at Sinjār.[3] Badr al-Dīn also built a madrasa at Mosul near Mashhad al-Imām Yaḥyā ibn al-Qāsim; this was called al-Madrasa al-Badriya.[4] When he died in 657/1258 he was first buried there; he was then reinterred at the mausoleum of ʿAlī at Najaf.[5]

In addition to Mosul, Sinjār, Arbīl and al-ʿAmādiya, Atābikid architectural activities during the 6th/12th century extended to ʿĀna and Ḥadītha, both on the Euphrates.[6]

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1. "Yaḥyā ibn al-Qāsim", p. 175.
2. See infra, pp. 320-2.
3. Reise II, pp. 308-11, fig. 285; G. Reitlinger, "Medieval Antiquities West of Mosul" IRAQ V (1938), pp. 143-56.
4. "Madāris al-Mauṣil", pp. 114-6.
5. Al-Ḥawādith, p. 337.
6. Examples are the turba of Najm al-Dīn and turbat Awlād al-Rifāʿī at Ḥadītha (Reise I, pp. 321-2; ʿAbbū, op.cit., pp. 124-5), Mashhad ʿAlī at ʿĀna (Herzfeld, "Mashhad ʿAlī, ein Bau Zengis II a.H.589", Der Islam V (1914), pp. 358-69) and the dome of al-Mashhad al-Kabīr also at ʿĀna. It is also known as Jāmi Abū Rīsha (ʿAbbū, op.cit., pp. 98-100).

Section 4.

The Mongol Invasion and the Ilkhanid Period[1]

The Mongol invasion of the Islamic world started in 616/1219 under the leadership of Chingiz Khān who succeeded in uniting the Mongolian and Turkish tribes which were inhabiting the vast steppes of central and eastern Asia at that time.[2] Forty years later his descendant Hūlāgū ibn Cūbilai was able to put an end to the Abbasid Caliphate, when he invaded Baghdad and killed the last Caliph al-Musta'ṣim, an event which took place on Wednesday 14th Ṣafar 656 (20th February 1258).[3] The historical authorities give ample details of the devastation and bloodshed which overtook the city at that time.[4] After this tragic event Baghdad was no longer the seat of the spiritual leaders of the whole Islamic world and Iraq became like many other countries, merely a part of the vast new Ilkhanid empire.[5] The descendants of Hūlāgū were able to dominate the whole of Persia and Iraq for almost a century.[6]

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1. This era is adequately covered by a considerable number of publications, see for example H. Howorth, History of the Mongols (London, 1888); M. Prawdin, The Mongol Empire tr. Eden Paul and C. Paul (London, 1953), Juvainī, 'Aṭā Malik, The History of the World Conqueror, tr. J.A. Boyle (Manchester, 1958) and B. Spuler, The Muslim World, the Mongol Period, part II tr. F.R.C. Bagley (Leiden, 1960).
2. An interesting account of these events is given by Ibn al-Athīr, al-Kāmil XII, pp. 233-61.
3. Al-Ḥawādith, p. 327; Ibn al-Ṭiqṭaqā, op.cit., p. 455.
4. A full description of the fall of Baghdad taken from Arabic, Persian and Turkish authorities can be found in H. Howorth, op.cit., III, pp. 113-33. See also G. Le Strange, Baghdad during the Abbasid Caliphate, pp. 339-44.
5. Khaṣbāk, op.cit., p. 65.
6. Spuler, op.cit., pp. 1-7.

The Ilkhanids who indirectly ruled over Iraq were:[1]

1.	Hūlāgū ibn Qūbilai	656-64/1258-65
2.	Abāqā ibn Hūlāgū	664-81/1265-82
3.	Aḥmad ibn Hūlāgū	681-3/1282-4
4.	Arghūn ibn Abāqā	683-90/1284-91
5.	Ghaikhātū ibn Abāqā	690-4/1291-4
6.	Bāidū ibn Ṭarghāi ibn Hūlāgū	694-5/1294-5
7.	Maḥmūd Ghāzān ibn Arghūn	695-703/1295-1303
8.	Uljāitū Muḥammad Khudābanda ibn Arghūn	703-16/1303-16
9.	Abū Sa'īd ibn Uljāitū	716-36/1316-1335

Qūbilai had divided the domains of the Mongols into four principal parts. The part allotted to Hūlāgū included Iran proper, Khurāsān, Ādharbaijān, Iraq, Georgia, Armenia and a part of Asia Minor. Hūlāgū assumed the title of Ilkhān which can be translated as "subordinate Khān" or "ruler of the tribe". The title was passed on to his successors and was subsequently adopted for the whole dynasty.[2]

The Ilkhanids did not reside in Baghdad but in Persia, where they left most of their splendid royal monuments.[3] Hūlāgū, before leaving Baghdad, had ordered its restoration.[4] He also appointed six officials to run the country, five of

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1. Jawād and Sūsa, op.cit., 281.
2. D.N. Wilber, The Architecture of Islamic Iran. The Ilkhanid Period (Princeton, 1955), p. 8.
3. For a survey of Ilkhanid monuments with plans, illustrations and bibliography see ibid., passim.
4. Al-Ḥawādith, p. 333.

whom had previously worked under the leadership of the last Caliph.[1] The most important one was the Ṣāḥib al-Dīwān.[2] In 657/1259 Hūlāgū appointed 'Alā' al-Dīn 'Aṭā Malik Juwainī to this post in which he stayed for about 21 years as a governor of all territories that had been directly held by the Caliphs, i.e. Baghdad itself, Iraq and Khūzistān.[3] After the death of 'Aṭā Malik Juwainī in 681/1282, he was followed by a series of weak governors with much reduced authority.[4]

In Iraq, one monument built by Uljāitū at al-Kifl survives. Otherwise there is no mention in the literary sources of any building by the Ilkhanid Sulṭāns. The monuments belonging to this period were mostly built by local Ilkhanid governors and distinguished private citizens. Contemporary authorities give little information about architectural activities in Iraq during the Ilkhanid period. As Herzfeld put it "historians have forgotten the architectural achievement of the Mongols. In Baghdad in spite of the destruction the Mongols had built several new buildings because the new dynasty could not prevent the people from pursuing their traditional life."[5] According to the author of al-Ḥawādith many mosques, minarets, ribāṭs and madrasas

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1. Details and names are given by Khaṣbāk, op.cit., pp. 65-76.
2. Ibid.
3. Juvainī, op.cit., p.22; Khaṣbāk, op.cit., p. 67.
4. Al-Ḥawādith, pp. 437, 455, 458 and 490.
5. Reise II, pp. 181-2.

were built in Baghdad in the Ilkhanid period.[1]

The Iraqi monuments which belong to the Ilkhanid period and still exist are discussed in Chapter Three below. Others which no longer exist are mostly madrasas, some containing turbas for their founders. They include al-Madrasa al-'Iṣmatiya built c. 678/1279 by 'Iṣmat al-Dīn in eastern Baghdad for the followers of the four madhhabs. She was buried there in 678/1279. Later when her daughter Sitt al-Kirām, grand-daughter of al-Musta'ṣin, died in 685/1286, she was buried in this madrasa as well.[2] In c. 685/1286 Majd al-Dīn Muḥammad ibn al-Athīr built a madrasa in Baghdad and was buried in it after he was killed in 685/1286.[3] Madrasat ibn Qāḍī Daqūqā was built near the river Tigris in the quarter of Bāb al-Azzj for the Ḥanafites by Bahā' al-Dīn 'Abd al-Wahhāb, known as Qāḍī Daqūqā, who died in 688/1289 and was buried there.[4] This madrasa was originally stated to have been built in 664/1265 by Fakhr al-Dīn Abū 'Alī, brother of Bahā' al-Dīn.[6] In 693/1293 al-Madrasa al-'Alā'iya was built by 'Alā' al-Dīn 'Alī ibn Kurdmīr al-Turkistānī, near

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1. Op.cit., pp. 333, 404. The most distinguished patron of architecture in that period was 'Aṭā Malik al-Juwainī. He ordered the rebuilding of the minaret of Jāmi' al-Khulafā' in 678/1279 (infra, pp. 113-6) and in 681/1282 he built a khān near Bāb al-Ghurba in Baghdad; it survived until quite recently (Jawād and Sūsa, op.cit., p. 206). He also caused a canal to be dug from al-Anbār on the Euphrates to Kūfa and the holy city of Najaf and founded 150 villages on its banks (Juvainī, op.cit., p. 22).
2. Al-Ḥawādith, pp. 373, 410.
3. Al-Madāris al-Sharābiya, p. 131.
4. Al-Ḥawādith, p. 461.
5. Ibid.
6. Al-Madāris al-Sharābiya, pp. 131-2.

the bank of the river Tigris on the eastern side of Baghdad.[1] Al-Madrasa al-Ghāzāniya named after Sulṭān Ghāzān was built near Bāb al-Ẓafariya by Khwāja Rashīd al-Dīn al-Hamadhānī.[2] Finally al-Madrasa al-Imāmiya al-Bakriya was built in the quarter of Farāshā by Imām al-Dīn Yaḥyā, Ṣāḥib al-Dīwān of Baghdad, died in 700/1300 at Ḥilla and was reinterred in this madrasa.[3]

It is noteworthy that the competition between the followers of the four major Sunnī madhhabs had its effect on architecture, for it caused the erection of great numbers of madrasas from the Saljuq period down to the Jalairid period.

As will be demonstrated later, in the Ilkhanid period Iraqi architects had developed certain new architectural forms and methods which were previously unknown.

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1. Ibid.
2. Ibid., p. 132.
3. Al-Ḥawādith, p. 504.

Section 5.

The Jalairids[1]

After the death of Sulṭān Abū Sa'īd in 736/1335, the Ilkhanid dynasty practically came to an end, and after a few monarchs whose reigns were short-lived, Mongol power in Iraq and Western Asia disappeared completely.[2] During the turbulent period which followed, a number of dynasties divided the Ilkhanid empire. The best known of these in the western territories were the Jalairids.[3]

The founder of the Jalairid dynasty was Shaikh Ḥasan who after some bitter fighting with other rival amīrs was able in about 738/1337 to establish Jalairid supremacy over Iraq and western Persia.[4] He died in 757/1356 and was followed by his son Uwais. For a considerable part of his reign Uwais was also engaged in eliminating other amīrs who contested his rule.[5] He achieved that successfully and apart from Timur's attack during the reign of Sulṭān Aḥmad

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1. An important Persian MS. dealing with this period is the Tārīkh-i Shaikh Uwais written by Abū Bakr al-Quṭbī al-Ahrī for Sulṭān Uwais. It covers the years 663/1264 to 759/1357. It has been translated into English by J.B. Van Loon and was published at the Hague in 1954 (hereinafter cited as Tārīkh-i Shaikh Uwais). Another valuable source is the work of an Arabic historian called Tārīkh al-Ghaiyāthī written by Abu'l-Fatḥ 'Abdallāh ibn Fatḥ Allāh al-Ghaiyāthī who was alive during 883/1478. This unpublished MS is in the Iraqi Museum Library, No. 881 (hereinafter cited as Tārīkh al-Ghaiyāthī).
2. Tārīkh-i Shaikh Uwais, p. 5.
3. Ibid.
4. For a detailed historical survey see ibid., pp. 5-18; EI² II, p. 401.
5. Tārīkh-i Shaikh Uwais, pp. 11-13.

ibn Uwais, the rest of the Jalairid period was comparatively peaceful.[1]

Iraq was under the rule of the Jalairid dynasty for less than a century during which the following sulṭāns reigned:[2]

1.	Shaikh Ḥasan Buzurg	738-57/1337-56
2.	Uwais ibn Shaikh Ḥasan	757-76/1356-74
3.	Ḥusain ibn Uwais	776-84/1374-82
4.	Aḥmad ibn Uwais	784-95/1382-1392
5.	'Alī ibn Uwais	795-6/1392-3
6.	Aḥmad ibn Uwais (second time)	797-803/1394-1400
7.	Aḥmad ibn Uwais (third time)	808-13/1405-10
8.	Dūndī (daughter of Ḥusain ibn Uwais)	813-4/1410-11

The power of the Jalairid dynasty came to an end at the hands of the Qaraqoyunlu who held power in Iraq for sixty years after the Jalairids.[3]

The Jalairids, after settling in Iraq, pursued the traditional custom of building religious and secular buildings in Baghdad, their capital.[4] Mirjān, who was a governor of Baghdad during the reigns of Shaikh Ḥasan and Uwais, stands out as a distinguished patron of architecture during the

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1. Jawād and Sūsa, op.cit., p. 282.
2. The above list is given by Jawād and Sūsa, op.cit., p. 282.
3. Ibid.
4. Tārīkh-i Shaikh Uwais, p. 18.

Jalairid period.[1] Jalairid architectural activity was not confined to Baghdad. Kūfa, Karbalā' and Najaf were also embellished with buildings. Details and examples are given in Chapters 4-5. Buildings which no longer exist and are not mentioned there include al-Madrasa al-Mas'ūdiya which was built for the four rites in Baghdad by Khwāja Mas'ūd ibn Sadīd al-Dawla. He started to build it during the reign of Sulṭān Uwais and completed it during the reign of Sulṭān Aḥmad.[2] Aḥmad was also responsible for building a castle on the west side of Baghdad, called 'Imārat or Qal'at al-Amīr Aḥmad.[3] He also built a khān known as al-Qalindar Khāna or Khān al-Qalindariya, for a group of Ṣūfīs known by this name who sprang up during the 7th/13th century.[4] Another Jalairid building in Baghdad was 'Imārat al-Āykachiya, probably a madrasa built by Makhdūmashāh in 763/1361[5] and known by her laqab as Āykachī. Another Jalairid madrasa was al-Madrasa al-Ismā'īliya, built by the vizier of Baghdad, Ismā'īl.[6] Al-Madrasa al-Wafā'iya, built by Wafā' Khātūn c. 800/1400, is also attributed to this period.

As the Jalairid architectural activities in both Baghdad and Kūfa are dealt with in two separate chapters further details will be given there.

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1. See Chapter Four.
2. Tārīkh al-Ghaiyāthī, f. 165.
3. Ibid., ff. 234, 241, 258 and 274.
4. Ibid., f. 163.
5. Ibid, al-Madāris al-Sharābiya, p. 132.
6. Al-Madāris al-Sharābiya, loc.cit.

CHAPTER II

SOME STANDING MONUMENTS OF THE LATER ABBASID PERIOD

Section 1

The Minaret of Jāmi' al-Khaffāfīn

A. Historical background:

This monument is the earliest existing minaret in Baghdad (pl. 24). It is situated in the eastern part of Baghdad, very near to the southern part of al-Madrasa al-Mustanṣiriya. At present it is enclosed by an Ottoman mosque built by an unknown person. This mosque is known at present as Jāmi' al-Khaffāfīn.[1] This name, which originally referred only to the mosque, later came to include the minaret as well. Historically the original mosque, with its minaret, was known as Masjid al-Ḥaḍā'ir.[2] It was built by Zumurud Khātūn, wife of al-Mustaḍī' and mother of al-Nāṣir.[3] The contemporary authorities do not mention specifically the date of the building

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1. This name is derived from the name Sūq al-Khaffāfīn, which means "the market of the shoemakers", situated at the entrance of this mosque. According to al-Alūsī, this Jāmi' was known also as Jāmi' Sūq al-Ṣāgha ("the market of the goldsmith"); see Tārīkh Masājid Baghdad wa Āthāruhā ed. B. al-Atharī (Baghdad, 1927), p. 42.
2. This name was the original name of the Abbasid quarter in which this mosque was founded. It is situated at the end of Sūq al-Thalāthā'. This quarter contained the famous madrasa al-Niẓāmiya; see Jawād and Sūsa, op.cit., p. 154.
3. Ibn al-Najjār, Muḥib al-Dīn, al-Tārīkh al-Mujadad li-Madīnat al-Salām, MS. in the Bibliothèque Nationale, Paris, No. 2131, f.126 and 204 (apud Jawād and Sūsa, op.cit., p.189); al-Ḥawādith, p. 327.

of the mosque, which, apart from its minaret, no longer exists. Its original name, as well as that of its founder, are known through two historical texts. Muḥī al-Dīn ibn al-Najjār, in giving the biography of Abī Ḥafṣ 'Umar ibn Yūsuf al-Muqrī', who died in 611/1214, writes that he was appointed as imām in the masjid which was built by the mother of al-Nāṣir in al-Ḥaḍā'ir near the shore of Dijla (the river Tigris).[1] The author of al-Ḥawādith, in reporting the event of the flooding of Baghdad in 646/1248 states "and the water flowed out of the foundations of al-Mustanṣiriya and from Dār Sinqarjā (the chief of Khūzistān), which is adjacent to al-Mustanṣiriya and to the masjid al-Ḥaḍā'ir which was built by the mother of al-Nāṣir."

To find the approximate date of the building is in fact not a major problem, since the death of Zumurud Khātūn is mentioned by several authorities. Sibṭ ibn al-Jauzī in reporting the event of 599/1202 states "in this year Zumurud Khātūn, the mother of al-Nāṣir and wife of al-Mustaḍī' died. She was a virtuous lady who did many charitable deeds. She was also a distinguished patron of religious buildings. She founded a turba and a madrasa near the tomb of Shaikh Ma'rūf and endowed them with sufficient waqf."[3] Ibn Taghrī Birdī repeats almost the same information but he gives the month in which the death of Zumurud Khātūn took place as

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1. Op.cit., loc.cit.
2. Al-Ḥawādith, loc.cit.
3. Op.cit., VIII, p. 513.

Jumādā al-Aula in 599/1202.[1] Using this historical information it is quite possible to date this minaret some time before 599/1202.

The present mosque in its architectural features displays unmistakable Ottoman influence. It is also quite likely that this minaret underwent a major restoration during the rebuilding of the mosque in the Ottoman period. Apparently this undated Ottoman restoration did not much alter the original style of this later Abbasid minaret. The original elements of this minaret can also be detected by rigorous examination.

Despite the architectural importance of this minaret there is no mention of it in the works of western scholars such as Niebuhr, Massignon and Herzfeld who visited Iraq in the past two centuries. Among the native historians only Jawād devotes to this minaret a brief historical account and states that apart from this minaret nothing remains of the original mosque which he says was built by Zumurud Khātūn in 599/1202.[2] The minaret at present bears neither inscription nor date.

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1. Al-Nujūm al-Zāhira fī Mulūk Miṣr wa 'l-Qāhira VI (Cairo, 1350/1931), p. 182.
2. M. Jawād, "Āthār Banī 'l-'Abbās," pp. 1062-63; idem and Sūsa, op.cit., pp. 188-9; see also B. Faransīs, Baghdad Tārīkhuhā wa Āthāruhā (Baghdad, 1959), p. 14.

B. Plan

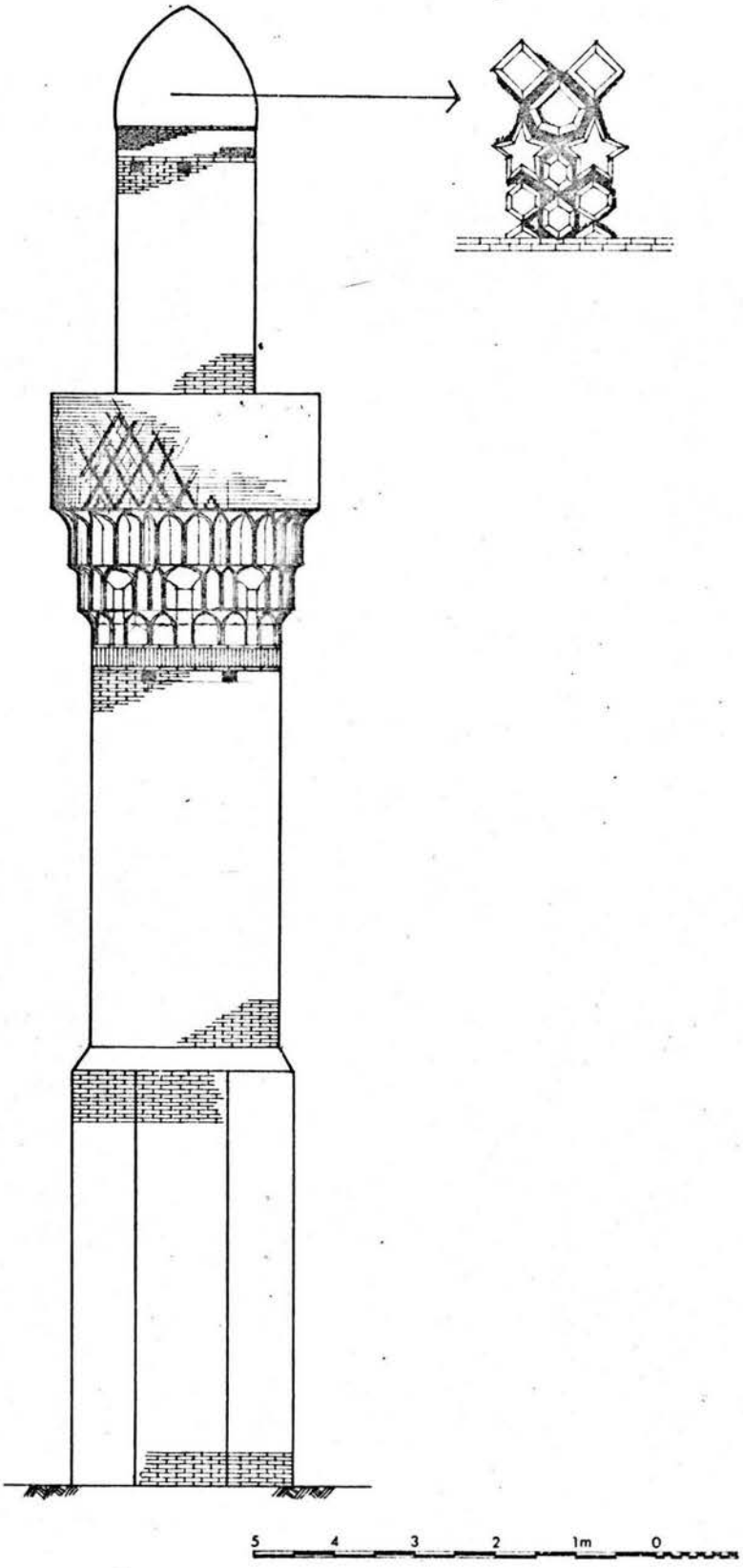
The minaret of Jāmi' al-Khaffāfīn has an octagonal base carrying a lofty cylindrical shaft (fig. 11). During the time of building this minaret the octagonal type of plan had reached its full maturity and was used by Saljuq architects in almost all religious and secular buildings in both Iraq and Persia. In Iraq earlier and contemporary minarets of octagonal base carrying a cylindrical shaft are quite common and are to be seen, for example, in 'Āna,[1] Dāqūq (pl. 15), Sinjār (pl. 17) and Arbīl (pl. 21). Thus the minaret of Jāmi' al-Khaffāfīn in fact follows a native prototype in its plan. In Persia the contemporary minarets show that the Saljuq architects there were following basically the same tradition.[2]

In Iraq the Saljuq cylindrical minarets were also constructed over square bases.[3] The earliest example of this type is the minaret of Jāmi' al-Nūrī in Mosul (pl. 19).

During the Saljuq period the octagonal plan was also favoured for erecting mausolea and other domed chambers.

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1. The minaret of 'Āna is situated on the upper part of the Euphrates. Herzfeld dated it to the 'Uqailid period (5th/11th century); see Reise II, pp. 319-21, IV, pl. 137; S. al-'Izzī, "Baldat 'Āna wa Manārataha al-Athariya", Sumer XVII (1961), pp. 197-200.
2. Examples are the minaret of Jār Kurgān, probably built towards the end of the 5th/11th century or beginning of the 6th/12th century (E. Schroeder, "Islamic Architecture", SPA II, p. 1027, fig. 363), the minaret of Gulpāyagān datable to c. 494/1100, the minaret of Chihil Dukhtarān in Iṣfahān dated 501/1107 and the minaret of Saribān also in Iṣfahān datable in the late 6th/12th century (SPA IV, pls. 361a,b and 362a).
3. See infra, pp. 379-80.



11. Baghdad. The minaret of Jāmi' al-Khaffāfīn: elevation.

Iraqi domes constructed over octagonal prisms are to be seen in Wāsiṭ, Baghdad, Samarra, Tikrīt and Mosul.[1] In Persia examples of octagonal domed chambers are to be seen in the Jabal-i-Sang, the Masjid-i-Jāmi' at Naṭanz, in the Gunbad-i 'Alī at Abarqūh in central Persia dated 448/1056, the so-called tomb of Chelebī Oghlu at Sulṭāniya and at the tomb in Shahristān south-east of Iṣfahān.[2]

The minaret of Jāmi' al-Khaffāfīn is built to the north of the present Ottoman mosque. Its position was probably the same before the destruction of the later Abbasid mosque.

C. Style of architecture

This minaret is built of brick and juss.[3] The minaret consists of four basic parts: the base taking the shape of a high octagonal prism, then a cylindrical shaft terminates with a circular gallery carried over three layers of muqarnaṣāt (pl. 24). The architectural function of these muqarnaṣāt

1. For details and examples see infra, pp. 100, 396-8.
2. E. Schroeder, op.cit., pp. 1116-29, figs. 353, 359, 363; SPA IV, pls. 281, 334a, 335 and 354a.
3. The most common size of brick is 22 x 5 cm., though bricks of 23 x 5 cm. also occur. It seems that the brickwork of the base as well as of the shaft and the gallery was largely restored during the Ottoman and other later periods.

is to create the projection needed for the gallery and to carry its platform. The last part of the minaret is the sham'a, which is in fact a continuation of the same shaft that stands in the middle of the gallery, but thinner and shorter, and terminating with a rounded summit.

At present the base of the minaret of al-Khaffāfīn lacks decoration and it displays only brick set in common bond. Iraq, during the Saljuq and later Abbasid periods, was of course quite famous for brick ornament, and contemporary buildings and minarets were lavishly ornamented.[1] Thus, it is not impossible to suggest that the base of al-Khaffāfīn minaret was once embellished with the usual brick ornament of the time. The same suggestion can be made regarding the shaft of this minaret which is also revetted at present with cut brick set in horizontal common bond. The shaft has only one entrance on the N.W. side. It is of rectangular shape, 1.20m. x 0.70m. The access for this entrance is from the roof of the present mosque. It might be suggested that this access was the same before the rebuilding of the mosque. The same type of access occurs subsequently at the Qumriya mosque, the Sūq al-Ghazl minaret and the Mirjāniya madrasa. The staircase consists of 37 steps[2] and ends at the gallery through an exit on the N.E. side of the same shape and

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1. Examples in Iraq may be seen at the minarets of al-Nūrī, Sinjār and Arbīl (pls. 17, 19, 21). Persian examples are the minarets of Sāva, dated 453/1061, Gulpāyagān, datable c. 494/1100 and Chihil Dukhtarān, dated 501/1107; see SPA IV, pl.365a,b and c.
2. The height of the steps varies between 25-35 cm. The width of each step ranges from zero to 40 cm., and the length is 50 cm.

dimensions as that of the entrance. The doorways of the entrance and the exit appear to have been restored, to judge by the brickwork surrounding them, and probably replace the original pointed arched ones. The upper part of the shaft under the zone of the muqarnaṣāt has four unplugged scaffolding holes, two on each side. These small rectangular holes act as windows for lighting and ventilation inside the minaret. The same number of scaffolding holes are to be seen in the upper part of the sham'a (pl. 25).

On the shaft immediately after the scaffolding holes is a row of cut bricks set vertically. This vertical row of bricks frequently appears on the Saljuq, Ilkhanid and Jalairid minarets of Iraq and it is usually applied to separate the ornamented brick panels and other inscribed zones of the minarets.[1]

Another Saljuq element of al-Khaffāfīn minaret is its zone of muqarnaṣāt which is similar to that of the minaret of Shaikh Ma'rūf in Baghdad dated 612/1215 (pl. 11). The structural muqarnaṣāt of the minaret of al-Khaffāfīn is composed of three corbelled layers. The first layer contains a row of pointed arched niches with salient faces. The points of these niches support the second muqarnaṣāt layer and directly bear its weight. The second layer is formed by a series of pointed niches, arranged so that a pair of rather narrow muqarnaṣāt with salient faces alternate with rather deeper and wider muqarnaṣ. The third layer is built

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1. On vertical setting see infra, pp. 366-7.

of another series of muqarnaṣāt containing one kind of muqarnaṣ which forms a star-like figure produced by the projecting points of the niches. On this the circular shape of the platform of the gallery is immediately established (fig. 11). Basically the system of these muqarnaṣāt is similar to a local model which is to be seen in the muqarnaṣ vault of the so-called Abbasid Palace and at the minaret of Shaikh Ma'rūf. These type of muqarnaṣāt later became a prototype for the Ilkhanid muqarnaṣāt which appear on the minarets of Sūq al-Ghazl and Dhū'l-Kifl.[1] The style of the muqarnaṣāt of al-Khaffāfīn is found on several Saljuq minarets spread over a quite vast area from the U.S.S.R. to Asia Minor. In all these instances the Saljuq architects demonstrated high skill and maturity in forming these muqarnaṣāt with a brick which is easily adapted to various uses. The earliest parallels for the muqarnaṣāt of al-Khaffāfīn are to be seen in the U.S.S.R. at the minaret of the Kalayan Mosque (the so-called tower of Death) in Bukhārā, dated 521/1127, and the minaret of Vabkent near Bukhārā dated 595/1193.[2] Persian contemporary parallels are the minaret of Basṭām dated 514/1120 and the minaret of Saribān in Iṣfahān, datable to the late 6th/12th century.[3]

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1. Cf. pls. 11, 28, 63 and 71.
2. D. Hill and O. Grabar, Islamic Architecture and its Decoration (London, 1964), pls. 10-11 and 13.
3. SPA IV, pls. 360b, 362b and 366.

In Asia Minor an almost identical kind of muqarnaṣāt is to be seen on an unnamed minaret of Saljuq origin at Aksarai.[1] All of these muqarnaṣāt represent strong evidence for verifying the authenticity of the muqarnaṣāt of the minaret of the Khaffāfīn mosque.

The exterior wall of the gallery of the Khaffāfīn minaret has been restored, like most of this minaret. Fortunately, it still retains fragments of its original ornament which is composed here of a purely geometrical pattern achieved by setting the glazed brick diagonally to create a lozenge and its derivative, the zigzag band (pls. 24, 25). This type of geometrical ornament can be considered the most popular and frequent pattern in brick buildings during the early Abbasid, Saljuq and later periods.[2]

The last part of the minaret of the Khaffāfīn mosque is the sham'a. The upper part of this sham'a is ornamented by a band of glazed tile, in white and blue. This band displays a geometrical pattern more or less similar to that on the exterior wall of the gallery noted above (pl. 24).[3] The sham'a is topped with a small dome of pointed profile. This part of the minaret is lavishly decorated with interlaced bands of glazed tiles of black and blue. These bands form a geometrical design composed of hexagons and five-pointed star (pl. 24 and fig. 11). The units of this design are filled with blue tile pieces. It is not easy to decide

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1. Hill and Grabar, op.cit., pl. 463.
2. On this type of brickwork see infra, pp. 453-7.
3. Recently, this band has been replaced by a blue tile band with a different type of geometrical design (pl. 25).

whether this ornament is original or of later date. In Iraq, apart from one later Abbasid example (pl. 27, fig. 12), Saljuq or even Ilkhanid minarets which display tile combined with brick ornament virtually no longer exist.[1] But Persia offers several examples of this kind of technique, for example in the minaret of Bāgh-i Qūsh-Khāna, the minaret of Khwāja ʿĀlam and the Du Minār Dār al-Baṭṭīkh, all in Iṣfahān and dated to the 8th/14th century.[2] Another Persian example is in the minaret of the khānaqāh in Naṭanz, dated 725-6/1324-5.[3] From this fact it might be suggested that this part of the Khaffāfīn minaret is original but was restored at an undetermined date. It is also possible to suggest that this restoration followed the original Saljuq design as happens in the minaret of Sūq al-Ghazl and other earlier buildings such as the Abbasid Palace and the Mustanṣiriya madrasa.

The foregoing discussion of the plan, architectural style and ornament of the Khaffāfīn minaret makes clear its close relation to minarets dated in the 6th/12th century in Iraq, Persia and Anatolia.

Features which do not seem to occur in Ottoman minarets in Iraq are its octagonal base, the distinctive form of its muqarnaṣāt and the fact that it is entered from the roof instead of at ground level. Moreover, while the written

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1. The only Iraqi minaret of this kind is the minaret of Jāmiʿ al-Kawwāz in Baṣra which is most probably datable to the end of the 8th/14th century (see infra, pp. 287-90, pl. 157b).
2. SPA IV, pls. 363a,b and 364.
3. Ibid., pl. 370.

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sources show that a minaret was built at this mosque in the later 6th/12th century, there are to my knowledge no sources which record Ottoman building or restoration in this case. Thus, although outwardly there are similarities to Ottoman minarets - indeed, the upper part of the decoration is almost certainly Ottoman, to judge by its range of colour - the evidence points rather to the conclusion that this minaret is indeed of later Abbasid origin. Since the great majority of Ottoman minarets in Iraq display elaborate all-over kāshī decoration, the very lack of such ornament here is a further indication that this minaret is of earlier date. In all probability, therefore, despite its lack of a dated inscription, it should be identified with the minaret ordered by Zumurud Khātūn at some unspecified period before her death in 599/1202.

Section 2

The Minaret of Jāmi' Qumriya

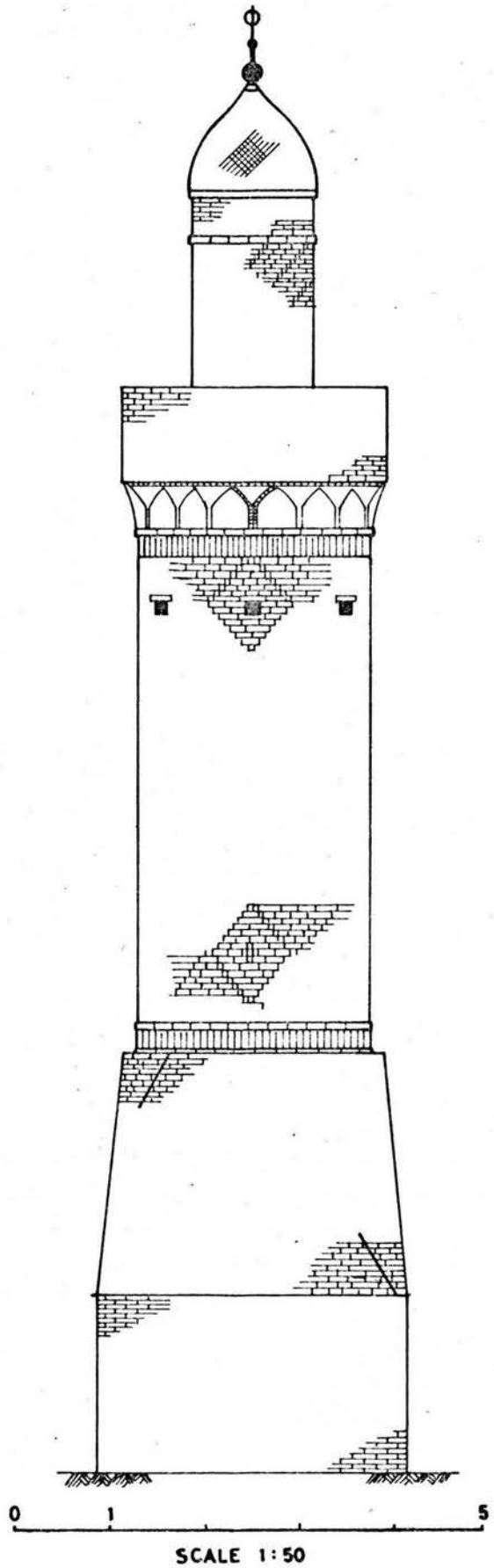
A. Historical background

This is the second later Abbasid minaret in Baghdad which is still intact and in an excellent state of preservation (pls. 26, 27 and fig. 12). Its condition is mainly due to its substantial structure. The jāmi' which this minaret belongs to no longer exists and the one which was built in its place during a later period retains the same name, Jāmi' Qumriya. It is situated in the western part of Baghdad near the right bank of the Tigris in a quarter known at present as al-Shaikh Bashshār. The minaret of Jāmi' Qumriya has no inscription and thus its date and the name of its founder is not certain. Nevertheless, it can be shown that this minaret is an original later Abbasid monument and that it is the only part of the original mosque which has survived.

Despite the considerable importance of this minaret it has not yet been examined and discussed thoroughly. The little information available deals mainly with the history of the mosque.[1] Among western scholars, it seems first to have been mentioned by L. Massignon who published a photograph of it and incorrectly attributed it to the reign

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1. Al-Alūsī, op.cit., p.114; M. Jawād, "al-'Imārāt al-Islāmiya al-Qāi'ma fī Baghdad", Sumer III (1947), pp.50-3 (hereinafter "al-'Imārāt al-Islāmiya"); idem and Sūsa, op.cit., pp. 189-90; J.K. Ibrāhīm, "Jāmi' Qumriya, Tārīkhuhu wa 'Imāratahu", Bain al-Nahrain I (1973), pp. 89-94, pls. 1-7.



12. Baghdad. The minaret of Jāmi‘ Qumriya: elevation.

of al-Nāṣir.[1] In this he was following al-Alūsī's opinion.[2] Neither of them were aware of a work attributed to Ibn al-Fuwaṭī (died 723/1323) which was edited by Jawād in 1932.[3] This contemporary authority clearly states that this jāmi' was completed in the month of Sha'bān in 626/1228, and opened in Ramaḍān; al-Shaikh 'Abd al-Ṣamad ibn Aḥmad ibn Abi 'l-Jaish was appointed as the leader of the prayer, and he was also given the duty of teaching the Qur'ān to thirty boys. The Shaikh Ḥasan ibn al-Zubaidī was appointed to teach them ḥadīth in this jāmi'. A library full of books was established here.[4] According to al-Alūsī the name of this jāmi' derives from Qumriya, a lady in the household of al-Nāṣir.[5] Ibn al-Jauzī states that the area in which this jāmi' was situated was known as the Qumriya quarter at the time of the siege of Baghdad in 552/1157 by Sulṭān Muḥammad ibn Maḥmūd ibn Malikshāh.[6]

As a result of successive restorations and renewals Jāmi' Qumriya, which was founded in 626/1228 during the reign of al-Mustanṣir and probably ordered by the Caliph himself, no longer exists and the mosque which exists on its presumed site at present is therefore later.[7] The first major

1. See Misson en Mésopotamie 1907-8, part II, in Mémoires de l'Institut Français d'Archéologie Orientale du Caire XXXI (Cairo, 1912), pp. 103-4 and pl. 26.
2. Al-Alūsī, op.cit., loc.cit.
3. Al-Ḥawādith.
4. Ibid., p.4. The year mentioned by this authority is in the reign of al-Mustanṣir; see Ibn al-Ṭiqṭaqā, op.cit., pp. 445-6.
5. Op.cit., loc.cit.
6. Al-Muntaẓam X, pp. 169, 171.
7. A description and plan of this mosque are published by J.K. Ibrāhīm, op.cit., pp. 92-3 and fig. 7.

reconstruction took place after 41 years. Ibn al-Fuwaṭī states that 'Alā' al-Dīn 'Aṭā al-Juwainī ordered the reconstruction of this jāmi' in 667/1268 after the flood in Baghdad.[1] Apparently the mosque survived unchaged until the Ottoman period, when a series of restorations and reconstructions occurred. In 1054/1644 Ḥusain Pāshā restored it.[2] 'Āi'sha, daughter of Aḥmad Pāshā, the governor of Baghdad in 1163/1749, and the wife of 'Umar Pāshā, governor of Baghdad in 1177/1763, had it restored as well, at an indeterminate date.[3] Finally in 1230/1814 Jāmi' Qumriya was entirely rebuilt by the governor of Baghdad, Sa'īd Pāshā.[4]

The site of the Jāmi' Qumriya is very near to the bank of the river Tigris and this was not a good place to build, because the almost yearly flooding of the Tigris caused constant damage to its foundations over the years, and ultimately affected its whole structure. In any case, it seems possible that all the above noted restorations were carried out on the mosque alone, for there seems to be no mention of any restoration done to the minaret. The evidence of the authorities cited above suggests that the

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1. Al-Ḥawādith, p. 319. Juwainī also restored this mosque for the second time in 706/1306 (ibid., p. 118).
2. Massignon, op.cit., p. 104; Jawād, "al-'Imārāt al-Islāmiya", p.53.
3. Al-Alūsī, op.cit., p.115; Massignon, op.cit., II, p. 104.
4. The date is included in a poem above the miḥrāb. Al-Alūsī, op.cit., p. 115; see also Ibrāhīm, op.cit., p.91.

original mosque has vanished; Massignon and al-Alūsī believe the minaret alone to be original.[1] This interpretation can to some extent be verified by an examination of the minaret proper, including its plan, style of architecture and brick ornament.

B. Plan

The minaret of Jāmi' Qumriya is constructed upon a substantial base of square plan, 3.30m. per side, and is attached to the north-eastern side of the present mosque (pl. 26, fig. 12). The minaret of the Nūrī mosque shows that the square plan was used for the bases of minarets (as well as the commoner octagonal plan) during the Saljuq period in Iraq, and the minaret of the Jāmi' Qumriya offers further evidence on this score. These two examples in fact follow an earlier native model.[2] In Persia a contemporary Saljuq minaret composed of a lofty shaft built on a square base is the Minār-i Khusrugird, near Sabzavār, dated 505/1111.[3] The minaret of the Great Mosque of Mārdīn also has the same type of elevation.[4] From these examples and the above-mentioned Saljuq example in the Jāmi' al-Nūrī one can state with some confidence that the plan of the minaret of Jāmi'

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1. Massignon, op.cit., II, p.104; al-Alūsī, op.cit., pp. 114-15.
2. See infra, pp. 379-80.
3. SPA IV, pl. 358b.
4. The Great Mosque of Mārdīn was founded in 572/1176 but is much restored; the minaret, which was built at the same date, remains intact and unchanged. See Hill and Grabar, op.cit., p. 68 and pl. 404.

Qumriya is original and in accordance with the plans of other minaret bases of that time.

The square plan, like that of the octagon, was also popular in other types of religious buildings, such as domed mausolea, in Iraq during the Saljuq period.[1]

C. Style of architecture

The minaret of Jāmi' Qumriya is built of brick and juss.[2] In most parts this minaret displays horizontal courses of common bond. Vertical setting is used twice. It appears on the lower and upper parts of the main shaft (pl. 26).

The minaret of Jāmi' Qumriya comprises a rather bulky and short cylindrical shaft erected over a base made up of two parts, the above-mentioned cubic base and, above it, a polygonal section decorated with salient upright and flush reversed triangles (fig. 12). The architectural function of the second part is to transform the cubic base to a 32-sided figure and then to a circular form on which the main cylindrical shaft is built. The architectural importance of this base is apparent in carrying the thrust of minaret. In Iraq there is no parallel for such a composition at the base of a minaret. But it seems that Saljuq architects were responsible for introducing this architectural device in

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1. See infra, pp. 396-7.
2. The sizes of the bricks range between 20-23 cm. square; the height of the brick in all cases measures 5 cm.

religious buildings. Anatolia is the only area of the Saljuq empire which offers contemporary and later parallels to this system. These occur in its tomb towers. Examples of tomb towers which have square foundations transformed to a circular shape by means of triangles are to be seen in the Ulu Kümbet near Akhlāṭ (dated 672-80/1273-81) and in two mausolea nearby: the turba of Bughatay Ata, dated 680/1281, and the mausoleum of Erzen Khātūn dated 799/1396. The so-called Güdük Minare, or mausoleum of Shaikh Ḥasan Beyer, in Sivas, dated 748-9/1247-8, is a further example.[1]

The main shaft of the minaret of the Jāmi' Qumriya starts with a row of bricks set vertically and framed on both sides with a row of bricks, set horizontally. The upper part of the shaft ends just below the zone of the muqarnaṣāt with a similar composition. The architectural revetment of the shaft exhibits elaborate horizontal common bond ornamented with a pattern of intersecting bands forming lozenges; this is quite common on the Saljuq minarets of Iraq and Persia.[2] In this pattern each unit encloses four small square pieces of glazed blue tile. These form a small cross which is

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1. Hill and Grabar, op.cit., pls. 364, 391-395.
2. In Iraq similar patterns are to be seen in the minaret of Jāmi' al-Nūrī (566-8/1170-2) and the minaret of Jāmi' al-Khaffāfīn (c. 599/1202); (see pls. 19 and 25). In Persia this pattern appears on the minarets of Damghān, one dated 417-20/1026-9 and the other datable in the 5th/11th century (SPA IV, pls. 359a and b); Gulpāyagān (c. 494/1100; see ibid., pl. 361b); Basṭām (514/1120) and Simnān, attributed to the 5th/11th century (ibid., pls. 360a and b).

recessed in the middle of the unit. The intersecting bands which form the lozenges are also marked out by recessed brick. This elaborate bonding is characteristically Saljuq and its appearance here provides a useful dating control. The upper part of the main shaft contains six unplugged scaffolding holes, each measuring 15 x 15 cm. They serve to admit light and ventilation. The shaft has only one entrance on the S.W. side. It is of rectangular shape and measures 1.35 x 0.70 m. The access to this entrance is from the roof of the present mosque. This may have been the case in the original design too. The entrance leads directly to a staircase which rotates spirally around a cylindrical brick core. The staircase consists of 17 steps,[1] and ends at the gallery, which is reached through a doorway measuring 1.35 x 0.67 m., surmounted by a depressed arch (pl. 26). The shaft is terminated by a series of single layers of muqarnaṣāt in the shape of pointed arched niches with salient faces.

The gallery of the minaret is placed immediately over these muqarnaṣāt.[2] No more than one layer of muqarnaṣāt was needed to build up the projection for the gallery since the main shaft with its considerable thickness provided enough room for this purpose.[3]

1. Each step is 23 cm. in height and 85cm. in length. The width ranges between zero - 39 cm.
2. The gallery of this minaret was recently rebuilt by the Ministry of al-Awqāf (cf. pls. 26 and 27).
3. In this respect the minaret of Jāmi' Qumriya is unique in Iraq. In Persia, Saljuq and Ilkhanid minarets with a gallery carried over one layer of muqarnaṣāt are to be seen in Iṣfahān at the minaret of Masjid-i 'Alī dated in the

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In the middle of the gallery stands the sham'a, a thin short column. In fact it looks too small if compared with the thickness and length of the main shaft. The lightness of its mass has the apparent effect of decreasing the thrust of the other parts of this minaret. It seems that the architect was concerned more about the balance and the steadiness of this minaret than other purely aesthetic aspects. The sham'a for the most part exhibits an elaborate brick bonding in which the brick is recessed diagonally and forms decorative bands surrounding the shaft in a spiral pattern. The rest of the bonding of the sham'a is horizontal common bond slightly projecting from the former part. The sham'a is topped with a small dome of rather sharp pointed profile and crowned with the usual metal ornament. The exterior of this small dome was revetted with hazārbāf bonding (pl. 26).[1] This was recently replaced by glazed tile (pl. 27).

To summarize, the minaret of Jāmi' Qumriya shows many typical Saljuq features in its plan, style of architecture and ornament. Thus it seems likely that this minaret is the original minaret of the Jāmi' Qumriya which was built in 626/1228.

Contd.) Saljuq period, the Gulpāyagān minaret, datable circa 494/1100, and the minaret of Khwāja 'Ālam, datable to the 8th-9th/14th-15th centuries and destroyed in 1934 (SPA IV, pls. 361b, 362a and 363b).

1. On this technique see infra, pp. 453-7.

Section 3

The Abbasid Palace

A. Historical background

The so-called Abbasid Palace is situated in the quarter of al-Maidān in the eastern part of Baghdad, very near to the left bank of the river Tigris.[1] It was mentioned by Massignon in 1907,[2] but the most comprehensive study is that made by Herzfeld.[3] Despite the publications devoted to this building by native and western scholars there is still very little reliable evidence as to the exact date and purpose of this building. At one time the ruins were familiarly known as the Palace of al-Ma'mūn, but the evidence of style and planning all goes to suggest a much later phase in the Abbasid Caliphate.[4] Another opinion in the past identified it with Dār al-Musannāt,[5] the palace

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1. It is behind the present Ministry of Defence building attached to the old Citadel. The Citadel was built by Madḥat Pāshā who was wālī (governor) of Baghdad from 1869-72; see Ṭ. Bāqir, Baghdad, p. 6.
2. Op.cit., II, p. 84. Only the main Īwān and parts of the court were visible.
3. First published in Reise II, pp. 170-72, pls. 52, 111-12. In 1923 Herzfeld visited the building again and made more measurements. He republished the building in "Damascus" I, pp. 27-9. Since that date the I.D.G.A. has demolished the later buildings that cover the old ones, strengthened the foot of the wall, and published a booklet containing forty-seven photographs, see Remains of the Abbasid Palace in the Baghdad Citadel (Baghdad, 1935).
4. I.D.G.A. Some notes on the antiquities in the Abbasid Palace (Baghdad, 1956), p. 1.
5. The champion of this theory is Y. Sarkīs, see Mabāḥith 'Irāqiya II (Baghdad, 1948), p. 1. He is supported by

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of al-Nāṣir, mentioned by Ibn Jubair in his voyage.[1] A third suggestion, which appears to be the most relevant made, the building a madrasa rather than a palace - perhaps that founded by Sharaf al-Dīn Iqbāl al-Sharābī in 628/1230 during the reign of al-Mustanṣir.[2] As a matter of fact, none of these suggestions was based on any kind of documentary evidence; nor have recent investigations provided anything of this nature. But the clearing of the foundation and the gradual restoration of the building itself have tended to confirm the type of this building as being a madrasa. Moreover the stylistic indications confirm a date in the reign of one of the later Abbasids.

During the years 1934-35 the I.D.G.A. undertook preliminary work for the preservation and reconstruction of the building. In 1942 a more ambitious plan was drawn up by the I.D.G.A. for the complete reconstruction of the building and the gradual restoration of its unique brick vaulting and ornament. Part of this plan has now been accomplished. The greater part of the colonnade façades flanking the great central Īwān have been rebuilt and the Īwān itself refaced

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Contd.) M. Jawād; see "al-Qaṣr al-'Abbāsī fi'l-Qal'a bi Baghdad wa Huwa Dār al-Musannāt al-'Atīqa min Āthār al-Nāṣir li Dīn Allāh al-'Abbāsī", Sumer I (1945), pp. 61-104.

1. Op.cit., p. 238.
2. The supporter of this suggestion is N. Ma'rūf, who devoted a book to the problem of the identity and date of this building in which he presented remarkable architectural and artistic evidence to support his point of view, see al-Madāris al-Sharābiya, passim.

(pl. 29). The foundations of the building which completed the two missing sides of the courtyard have been excavated preparatory to rebuilding. Much of the brick ornament of the Īwān vault, the vaulted colonnade and the entrance vestibules on the west side has been repaired and reconstructed. During 1971 the I.D.G.A. resumed the reconstruction, this time at the northern and western parts of the building. The main entrance of the building on the western side is now completely rebuilt (pl. 34a). This was made possible by the agreement of the Ministry of Defence to destroy the old chambers which were attached to this side. After the removal of the old chambers was completed the western façade appeared for the first time and was found to be decorated with elaborate brick ornament.

Before discussing this new discovery it might be useful to have an idea of the original remains of the building, its plan according to the I.D.G.A. excavation and the evidence which has tended to prove that the building was a madrasa.

B. The original parts of the building

The most impressive and important original part of the whole building which has survived is the Īwān (pls. 28-9). It is similar to a large hall wholly open towards the west side. It is about 5 m. wide and 8.5 m. long, and its barrel-vaulted ceiling reaches a height of more than 9 m. above ground level.[1] The entire inner surface of the barrel

1. On this type of vault, see infra, pp. 432-5.

vault, the tympanum of the rear wall and the upper parts of the walls are ornamented with brick ornament composed of various geometrical units covered with minute arabesques (pl. 30). The ornamental upper parts of the walls project above the plain surface of the lower part, which extends to a height of 3.5 m. from the floor. This Īwān opens into an almost square courtyard 21.50 m. long and 20 m. wide. This courtyard is surrounded by an arcade with arches of pointed profile lined with muqarnasāt[1] (pls. 28 and 31). Most of the portions of the building standing at the present time lie on the southern side and form part of its southern walls. Some parts of the eastern, northern and western sides have also survived. The surviving part of the southern side consists of seven small cells, 2.32 m. by 3.80 m. (fig. 13). Each one of these cells originally had an upper cell above it, but the walls and ceilings of only four of these are still standing. The lower arcade comprises eight pillars, each 1.15 m. thick, the distance between the pillars being 2 m.

Behind this series of seven rooms on the ground floor extended a long and high corridor parallel to and corresponding with the arcade in front of the rooms. A similar corridor is to be seen in al-Madrasa al-Mustanṣiriya (631/1233) (pl. 40). This corridor is 1.23 m. wide, 26.70 m. long and 9.20 m. high.[2] Behind this corridor stand four high halls; the height of each hall is about 9 m. The

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1. On this element see infra, pp. 448-51.
2. On the vaulting system of this corridor see infra, pp.435-6.

corridor to the west of these halls is connected with a passage leading to five doorways. The one which is on the west opens out as a main entrance to the building from the river front. It is exactly opposite a niche with a highly ornamented chamber (pl. 33). The passageway and the chambers are in fact conceived as a mābain linking the river-front entrance of the building with its various important parts. In Baghdad these gates, constructed after the plan known as mābain "which is between", usually have a deep but blind Īwān and a passage either side of it, an arrangement which prevents one from looking directly into the building from the exterior, and which thus preserves the privacy of the place. The mābain of the so-called Abbasid Palace is shifted into the corner in such a way that only one of its passages leads into the court. The scheme was not invented at this time, but was an old and statutory architectural custom.[1] It first appears in the third of the three gateways of the palace of Balkuwārā at Samarra, and is still common to all large houses in Baghdad.[2]

The parts standing on the northern side consist of three small cells. Architecturally they are similar to the seven cells standing on the southern side. There are some remains of walls and foundations all indicating that the northern side was divided into a series of ground and upper floor cells much like those standing on the southern side.

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1. Herzfeld, "Damascus I", p. 29.
2. Ibid.

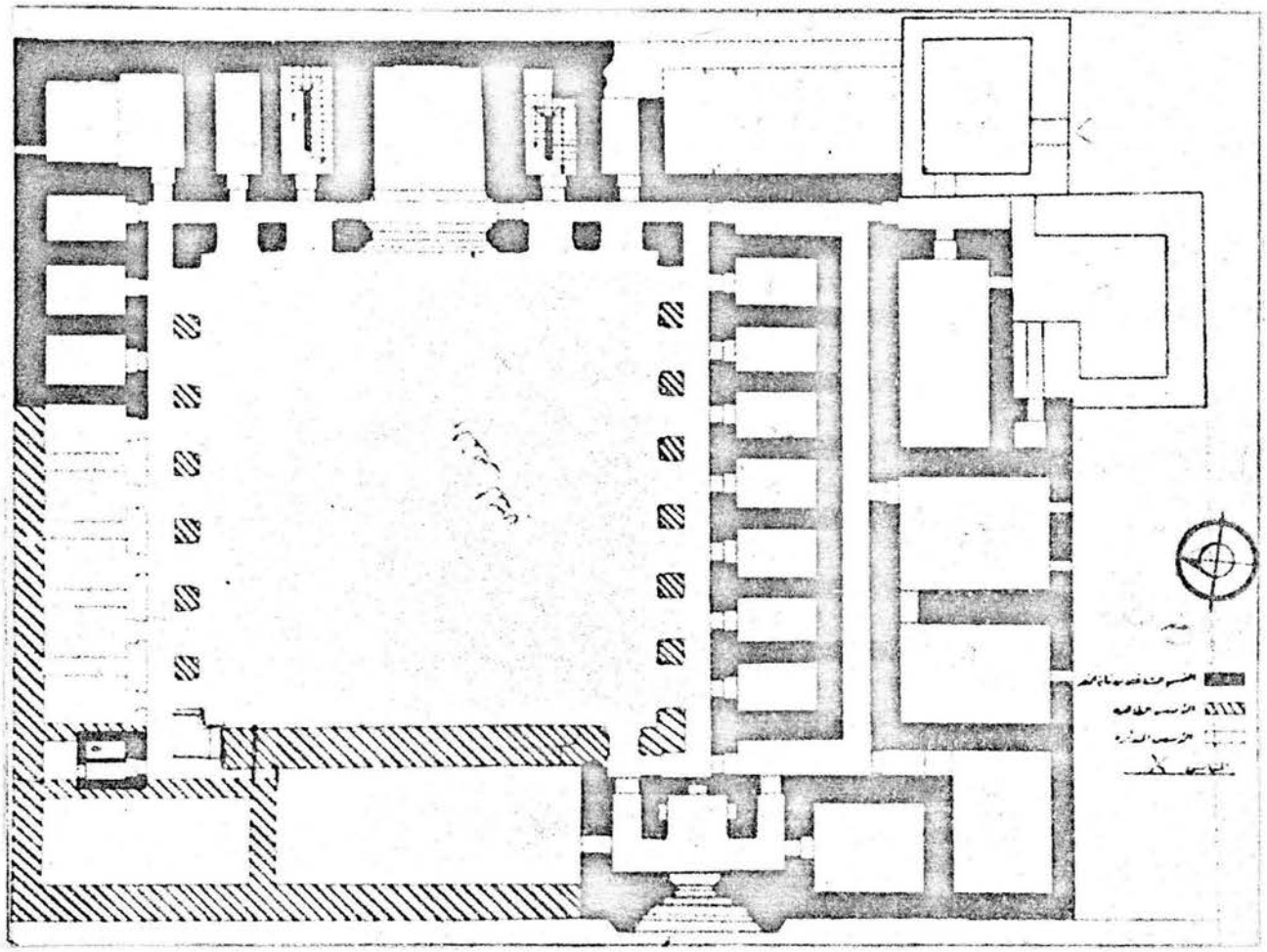
The doors of these cells also used to open into a long arcade supported by eight pillars, a common feature in similar brick buildingsin Iraq and Persia.

C. Plan

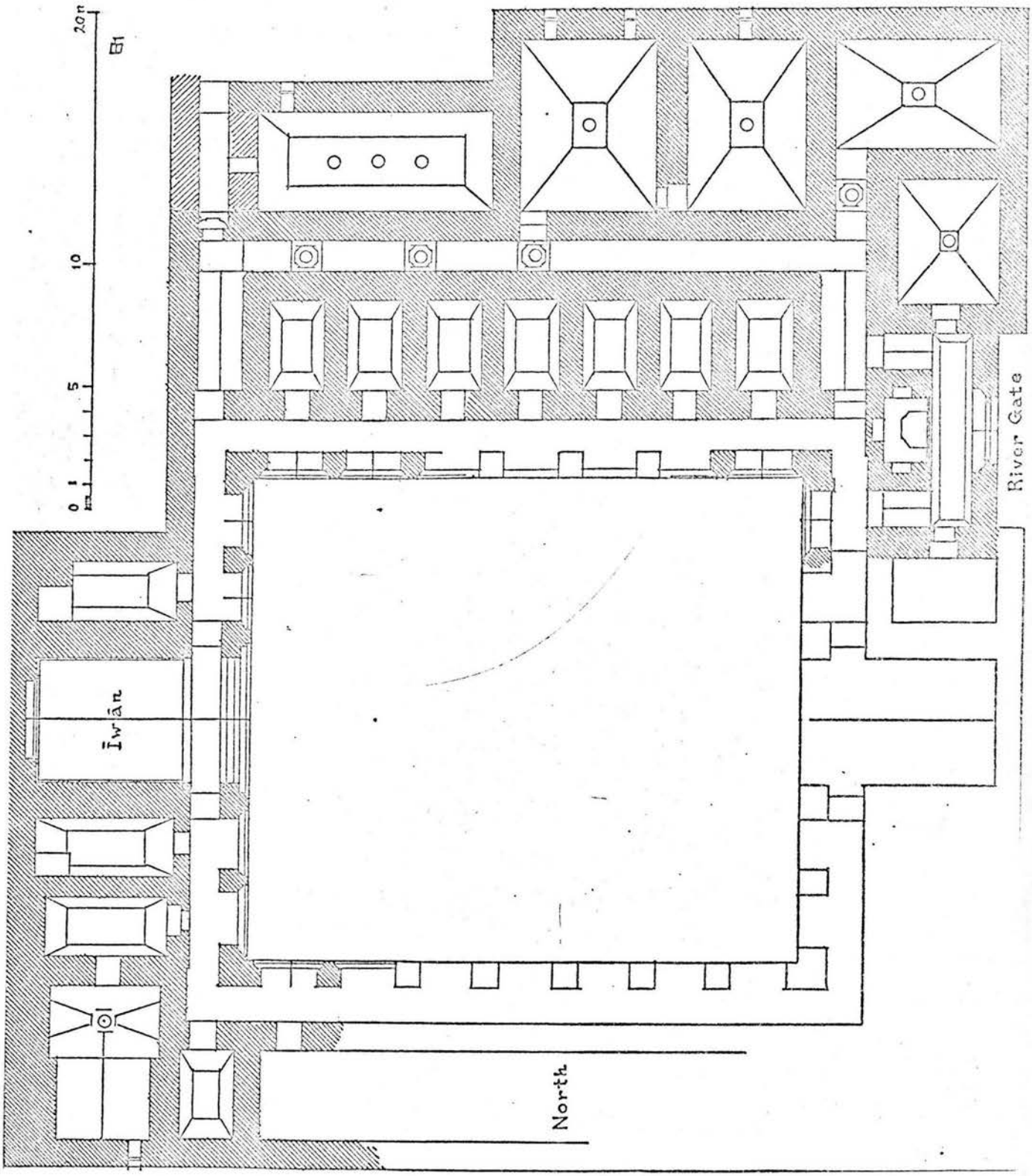
The plan of the so-called Abbasid Palace is in general like the one used in the Palace of Ardashīr I, at Fīrūzābād (218/228).[1] Apparently, this plan represents the Saljuq version of the Iranian palace court. This ancient plan was perhaps also used for a great madrasa at Baghdad, called al-Niẓāmiya,[2] built by Niẓām al-Mulk in 457/1065. This was imitated later in al-Madrasa al-Mustanṣiriya built by al-Mustanṣir in 631/1233.

The plan of the so-called Abbasid Palace drawn by Herzfeld (fig. 14), shows that the north side is similar to the south, and this was proved in the plan drawn later by the I.D.G.A. (fig. 13). But on the west side of the building, according to Herzfeld's plan, there must have been another Īwān opposite to that on the east side. The I.D.G.A., after digging on that side, proved that the foundation was not that of an Īwān but of a large hall 12.80 m. by 4.50 m. A similar type of arrangement at al-Mustanṣiriya and later in al-Mirjāniya suggests that this hall which faces the Īwān most probably served as the muṣallā for this building. This is new evidence that the building was a madrasa and not a palace. Moreover this theory can be further verified by the comparison between the plans and the style of architecture of this

1. Herzfeld, "Damascus I", p. 27; idem, Archaeological history of Iran (London, 1935), p. 95, fig. 16.
2. Schroeder, op.cit., p. 990.



13. Baghdad. Al-Madrasa al-Sharābiya (the so-called "Abbasid Palace"): plan at ground floor level.



14. Baghdad. Al-Madrasa al-Sharābiya (the so-called "Abbasid Palace"): plan at ground floor level (after Herzfeld).

building and those of both al-Madrasa al-Mustanṣiriya and al-Madrasa al-Mirjāniya. Ma'rūf in his work on the subject presents a remarkable argument in which he suggests that this building is most probably al-Madrasa al-Sharābiya built by Sharaf al-Dīn Iqbāl al-Sharābī in 628/1230.[1]

D. The newly discovered ornament

The brick ornament of this later Abbasid monument in general shows the Saljuq style of Iraq in full maturity. The brick ornament shows a great variety of geometrical units carved in deep relief with stylized arabesque patterns. A glance at this brick ornament shows that both arabesque and geometrical forms had reached their apogee (pls. 30 and 32-3). Samarra stucco models were the main source for many of the arabesque motifs. The same high standard of ornamental technique was followed in other contemporary and in later brick monuments in Iraq.

As has been noted above, the I.D.G.A. in 1971 resumed the project of clearing the external walls of the building in order to prepare them for reconstruction and restoration. On the west side the main entrance has been entirely rebuilt on its original foundation and the façade of this entrance is

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1. The argument is mainly based upon the similarity between this building, al-Mustanṣiriya and al-Mirjāniya. This extends to their plans, doors and entrances, courtyards, Īwāns, corridors, great halls, cells and rooms, muṣallās, system of vaulting and finally to their similarity in brick ornament. For the full argument see "al-Madāris al-Sharābiya", pp. 164-75. For the biography of Sharaf al-Dīn Iqbāl al-Sharābī see al-Ḥawādith, pp. 310-11 and al-Madāris al-Sharābiya, pp. 43-94.

decorated with brick ornament mainly based on copying from the surviving original work inside the building (pl. 34a). When the Ottoman chambers were cleared from the wall of the same western façade of the building, portions of the right-hand side of the main entrance turned out to be ornamented with fine Saljuq brickwork and brick ornament (pls. 34b, 35a and b). The brick bonding of the wall exhibits perpendicular and horizontal courses creating a woven pattern of hazārbāf type.[1] The courses of brick end with square brick plugs, 5 cm. by 5 cm., each ornamented with a four-petalled rosette. This type of brickwork was quite popular during the late Abbasid period in Iraq and is to be seen on the exterior façades of the turba of Zumurud Khātūn (the so-called Sitt Zubaida) and al-Madrasa al-Mustanṣiriya.[2] The hazārbāf zone of this wall at the Madrasa al-Sharābiya is bordered with a single perpendicular row of brick; outside this is an ornamented band carved with a highly stylized arabesque scroll.[3] The Iraqi mediaeval architects show a noticeable enthusiasm in applying similar types of minor borders in the brick ornament. Among the masons of Iraq at present these bands

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1. The brick ranges in length between 23 cm. and 25 cm., the width being 5 cm. in both cases. On hazārbāf see infra, pp. 453-7.
2. For more detail see infra, pp. 454-5 and n. 1.
3. This motif can also be identified as a simplified half palmette merging into a scroll. It follows local tradition, and in using these motifs on brick the artist was following an earlier model found in the stucco of Samarra (3rd/9th century). The same decorative band is found separating the layers of muqarnaṣāt which carry the vault of the southern arcade of this building and also as a part of the decorative scheme of the māḥain (see pls. 32 and 33).

are usually known as zanjīl.

The right-hand corner of this façade is occupied by an ornamented engaged column divided into multiple vertical sectors and thus forming a cluster of small-scale engaged columns.[1] It is separated from the above-mentioned hazārbāf zone by a pilaster of plain brick set in horizontal common bond. This column is partly damaged and consists of two main parts separated by a decorative band 5 cm. in width (pls. 34b and 35) which displays a scroll of stylized leaves.[2] The lower part of the engaged column is built up in courses of common horizontal bond; it ends with a row of vertically set bricks just under the decorative band.

Above this begins the second part of this column which consists of a cable moulding motif known locally as mabrūm, which means "twisted". This architectural element is of great popularity in miḥrābs and portal entrances which date from the Saljuq and other later periods in both Iraq and Persia.[3] In Anatolia it appears flanking the façade of

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1. On the engaged columns see infra, pp. 91-2.
2. Like the former band it is also used in the brick ornament of the muqarnaṣāt vault and the māḥain.
3. In Persia cable mouldings occur framing a pointed arched recess in the mausoleum of Pīr-i-Bakrān (dated 703/1303 and rebuilt in 712/1312)and on the portal of the Masjid-i-Jāmi' in Kirmān (dated 750/1349); see SPA IV, pls. 388b and 451a. According to the available evidence the cable moulding motif appears on Persian miḥrābs from the beginning of the 8th/14th century. Examples are the miḥrāb of the Masjid-i-Jāmi' of Ashtarjān near Iṣfahān (715/1315) and in Abarqūh on a miḥrāb in the Masjid-i-Jāmi' (Wilber, op.cit., pp. 141 and 181, pls. 95 and 192).

the Cāca Bey madrasa.[1] In Iraq it is to be seen framing the arch of the main entrance of what is called locally al-Manāra at Wāsiṭ.[2] Its reappearance together with engaged columns in the entrance of al-Madrasa al-Mirjāniya after more than a century shows its constant popularity among Iraqi architects.[3] Religious architecture in Iraq and Persia in the Ottoman and Safavid periods also demonstrates the common use of the cable moulding as an ornamental element on both exterior and interior façades.[4] In Iraq earlier examples of cable mouldings are to be seen on the miḥrāb of Jāmi' al-Khāṣṣakī (2nd/8th century) and the miḥrāb of Samarra (3rd/9th century).[5] Judging by these two examples, one may suggest that this element originated in Iraq and that the first experiments were on marble and stucco miḥrābs in

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1. The cable moulding here, which springs up from vases, shows the popularity of this motif in stone; see B. Ünsal, Turkish Islamic Architecture (London, 1959), pl. 82.
2. Infra, pp. 87-95 and pl. 45.
3. Infra, pp. 192-3 and pls. 98, 100-104.
4. On later monuments in both Iraq and Persia this element appears executed in coloured mosaic. Examples in Iraq are to be seen in the Madrasat Nāzzanda Khātūn, some other surviving Ottoman mosques and madrasas and in the holy shrines in both Karbalā' and Najaf. In Persia an example is the Shrine of Khwāja Abū 'l-Naṣr Pārsā in Balkh dated in the 9th/15th century (SPA IV, pls. 422 and 424); for more Persian examples see ibid., pls. 453, 464, 482, 485, 497 and 504.
5. See infra, pp. 295-7 , pl. 2a .In the U.S.S.R. an earlier example of the cable moulding column can be seen in the upper exterior façade of the mausoleum of Ismā'īl the Sāmānid at Bukhārā, sc.10th century (SPA IV, pl. 264).

the early Abbasid period. Then it seems to have been introduced in Iraq and Persia in brick façades and entrances during the Saljuq and later Abbasid periods.

The discovery of this brick ornament, which is quite compatible in technique and execution with the other original brick ornament of this building, provides further evidence for the attribution of this monument to the later Abbasid period.[1]

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1. One may hope that future excavation and other work on this building may yield more material of this type and perhaps some inscription which will decide definitely the identity of this monument and its exact date.

Section 4

Clearing and Restoration in the N.E. part of al-Madrasa al-Mustanṣiriya

A. Historical background

This famous madrasa was built by al-Mustanṣir in 631/1233 in Baghdad and named after him.[1] It is situated on the east bank of the river Tigris, a little south of the present al-Shuhadā' bridge. It was one of the best known institutions of its kind in Baghdad. Al-Mustanṣiriya contained four large law schools representative of the four major Islamic madhhabs, namely: Shāfi'ite, Ḥanafite, Mālikite and Ḥanbalite.[2] This building remained a madrasa until the 9th/15th century, but it has suffered a great deal since then. During its long history al-Mustanṣiriya has undergone terrible abuse; abandoned as a madrasa, it was once used as a khān,[3] then as a hospital and as an army barracks.[4] Later, in more recent times, it became a customs house, to be so used until, in 1936, the I.D.G.A. took the building over and began large-

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1. Al-Ḥawādith, p. 53. This fact is also inscribed in the panel over the main entrance of this madrasa; see pl. 36.
2. It might be interesting to note that the Shāfi'ite madhhab was the preferred madhhab of the time so in the distribution of the quarters it was allotted the right hand side, and was therefore in the position of greatest honour (the author of al-Ḥawādith, p. 58 records this fact, though not the interpretation).
3. This happened during the reign of the Ottoman Governor of Baghdad, Sa'īd Sulaimān Pāshā al-Kabīr, in 1193-1779; see al-Alūsī, op.cit., p. 98.
4. Ibid.; J.S. Buckingham, Travels in Mesopotamia II (London, 1827), p. 238; R. Mignan, Travels in Chaldaea (London, 1829), p. 97.

scale restoration.[1]

This madrasa is composed of two storeys (see plans on figs. 15 and 16) as is the case with the other contemporary madrasas in Iraq, i.e. al-Madrasa al-Sharābiya (the so-called Abbasid Palace) and al-Madrasa al-Mirjāniya. The main entrance of al-Madrasa al-Mustanṣiriya (pl. 36) is similar in both design and ornament to these earlier and later examples. It is ornamented with geometrical terra-cotta carved with various arabesque patterns. The four inner façades of this madrasa, which look on to the courtyard, are also lavishly adorned with similar brick ornament (pl. 38). Plate 39 illustrates eight original pieces of this ornament. The high standard and the quality of these pieces reveal the maturity and the skill of the later Abbasid craftsman. These eight geometrical units display vegetal motifs which in rather different form were known at Samarra and even under the Umayyads. Thus, although brick ornament of this kind was a Saljuq invention, the patterns themselves were rooted in earlier traditional models. The principal innovation which took place during the Saljuq and later Abbasid period is that these patterns, which were usually composed of arabesque and leaf scrolls, became more stylized than those to be seen on Samarra stucco.

The upper part of the river façade of al-Madrasa al-Mustanṣiriya (pl. 37) exhibits brickwork associated with square brick plugs, each of which is adorned with a four-

1. Ṭ. Bāqir, Baghdad, p. 7. The first stage of the restoration was completed in 1960.

pointed rosette similar to those recently discovered on the western façade of al-Madrasa al-Sharābiya (the so-called Abbasid Palace).[1] The brick plugs in the river façade of al-Mustanṣiriya project slightly from the wall and are arranged so as to build up a motif similar to the swastika pattern.[2]

Below this zone is a long band of inscription, in thulth and on a plain background, going the whole length of the façade. This inscription completely replaces the original one on this wall and states that the Ottoman restoration was carried out by Sulṭān 'Abd al-'Azīz in 1282/1865.[3] On the outside, attached to the north western side of this madrasa, are the remains of what is known as Dār al-Qur'ān. Its existence in al-Madrasa al-Mustanṣiriya is confirmed by Ibn al-Fuwaṭī who was a storekeeper in the library of this madrasa, and also by al-Arbilī.[4] The remains of Dār al-Qur'ān consist at present of a lofty Īwān decorated with brick ornament quite similar to the four inner façades of this madrasa.[5] Another religious institution

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1. Cf. pls. 34b, 35 and 37.
2. For more detail about this pattern, see infra, pp. 455-6.
3. This inscription is published by Herzfeld, Reise II, p. 162. Buckingham incorrectly claims that this inscription is executed in Kufic style; see op.cit., p. 238.
4. M.R. al-Ṭabākh, "al-Madrasa al-Mustanṣiriya" Majalat al-Majma' al-'Ilmī bi-Dimishq IV (1924), pp. 42-3.
5. On the Dār al-Qur'ān see N. Ma'rūf, Tārīkh 'Ulamā' al-Mustanṣiriya I (Baghdad, 1965), pp. 301-7, pls. on pp. 451, 453, 455, 457 and 459 (hereinafter cited as Tārīkh 'Ulamā').

which was attached to this madrasa and which no longer exists is Dār al-Ḥadīth.[1] It is well known from the contemporary authorities that this sumptuous madrasa included all the necessary apartments for students' living quarters, such as a library, a bath and a kitchen. The bath, which was mentioned by Ibn Baṭṭūṭa, no longer exists.[2] The kitchen, although it had been mentioned by western travellers, was not found until quite recently.[3] Its position was only determined after the I.D.G.A. removed the debris in 1969. This part of the madrasa will be discussed below.

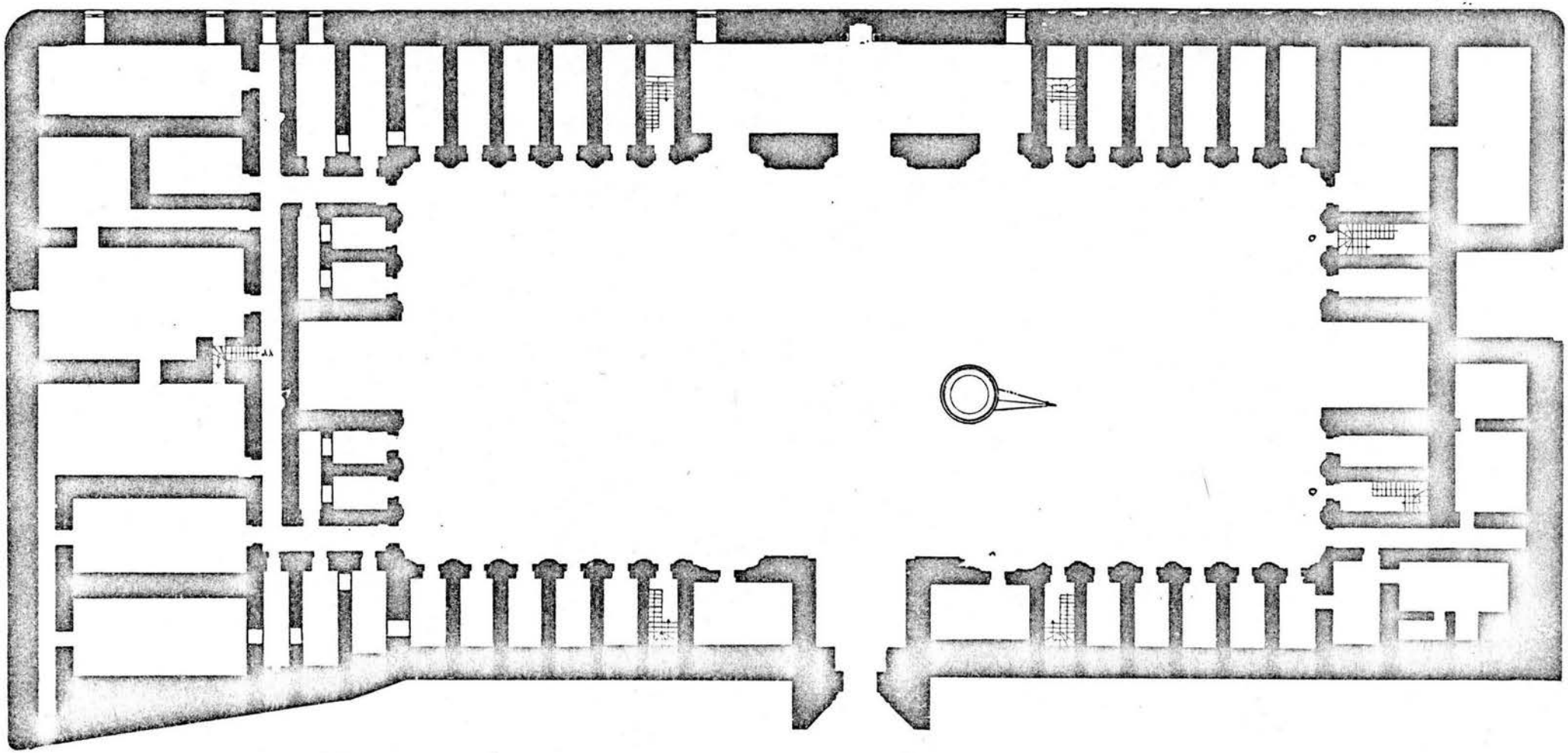
B. The kitchen of al-Madrasa al-Mustanṣiriya

1. Plan

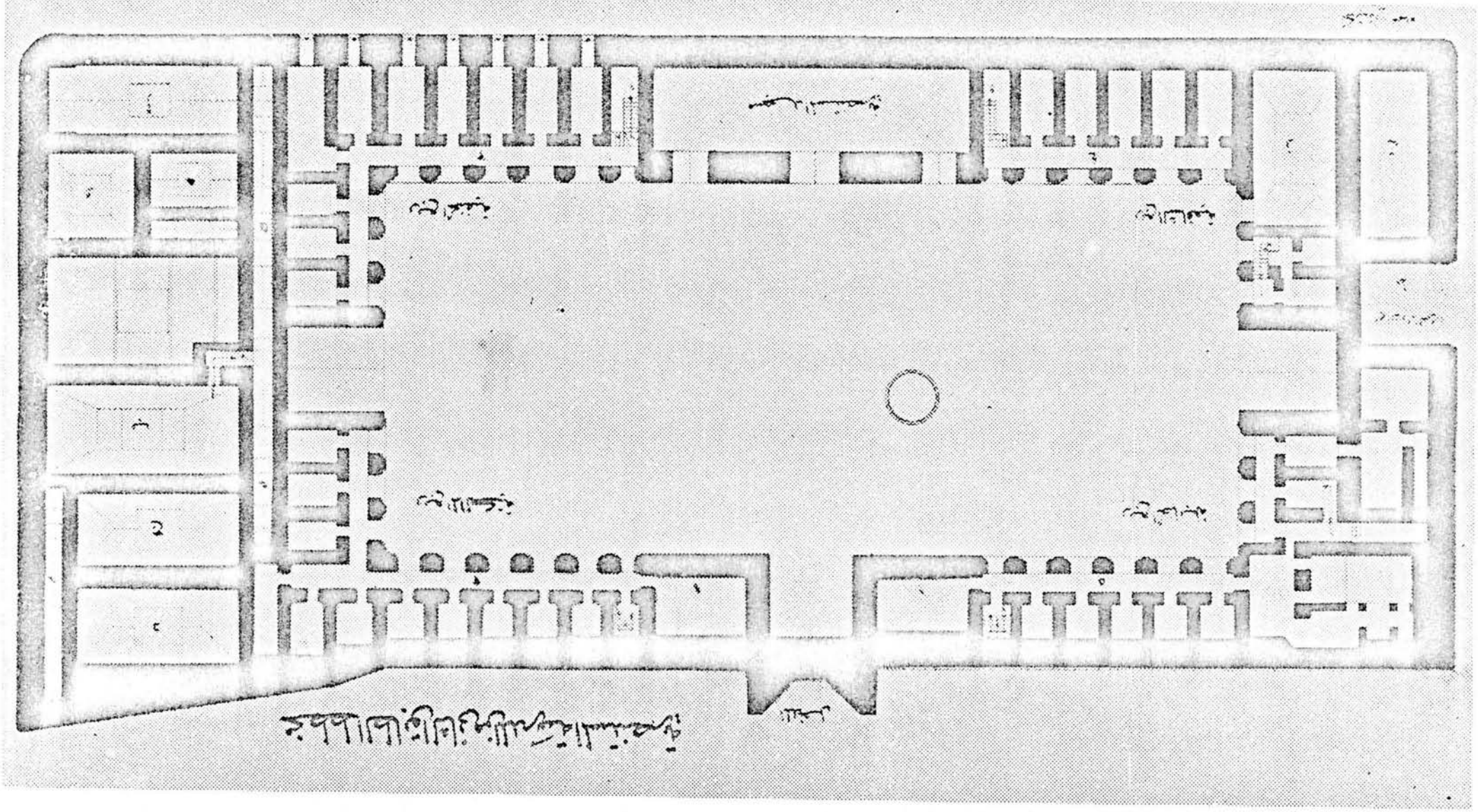
This building occupies the north-eastern corner of the madrasa. It consists of two floors. After the compartments were cleared and restored in 1969, its plan proved to be different in detail from that previously made by the I.D.G.A. Rough plans to correct the earlier version and interior photographs of this kitchen are presented here.

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1. Al-Ḥawādith, p. 58; al-Alūsī, op.cit., p. 88. According to Ma'rūf it is also known by two other names: Dār al-Sunna al-Muḥammadiya and Dār al-Sunna al-Nabawiya; see Tārīkh 'Ulamā' I, p. 319.
2. Ibn Baṭṭūṭa, Muḥammad ibn 'Abdallāh al-Ṭanjī, Tuḥfat al-Nuẓẓār fī-Gharā'ib 'l-Amṣār (Cairo, 1938), pp. 141-2. He saw this bath during his visit in 727/1326.
3. Buckingham, op.cit., loc.cit.; Mignan, op.cit., loc.cit.



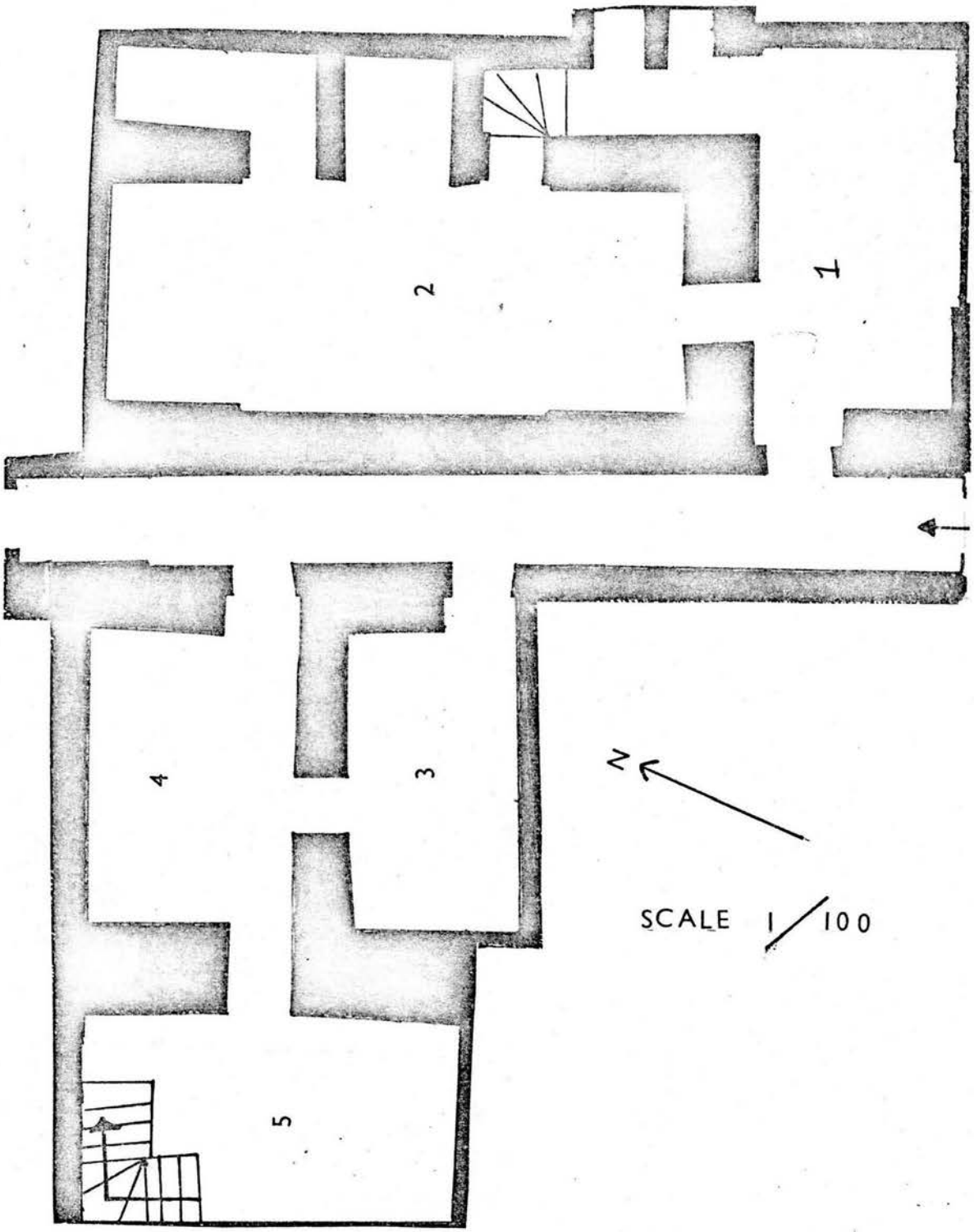
15. Baghdad. Al-Madrasa al-Mustanṣiriya: plan, ground floor.



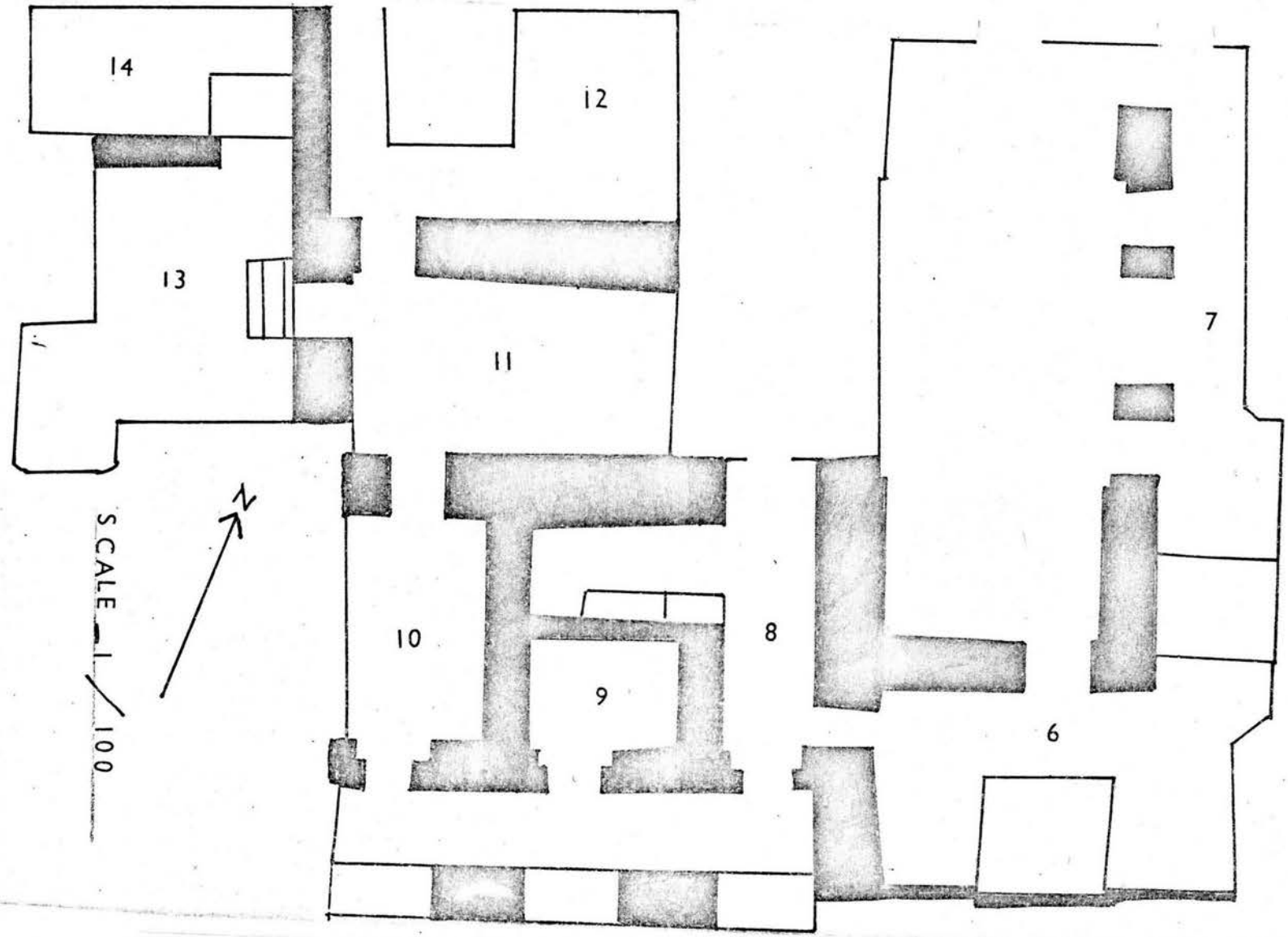
16. Baghdad. Al-Madrasa al-Mustanṣiriya: plan, first floor.

In plan, the ground floor of this kitchen (fig. 17) consists of a main, long, narrow vestibule leading to two groups of rectangular chambers which are not all of the same dimensions. Two on the right-hand side (1 and 2) and three on the left side (3-5) are linked by means of pointed-arched doorways and short narrow vestibules. It seems that enough space was intentionally prepared and planned to house a large kitchen for this madrasa. According to the contemporary authorities this kitchen and its staff were responsible for preparing the food for 248 students every day, as well as for their professors.[1] In planning such a place the architect should have had in his mind the following point: the site of the kitchen must be in a remote place reasonably far away from the lecture halls and from the masjid of the madrasa so as to avoid any possible inconvenience caused to the students by the fumes which resulted from the cooking fires. The site had to be in such a position as to permit the north and north-western winds to carry away the smell from the kitchen. No less important was the roofing system and the problem of ventilation. Moreover the architect had to be careful to supply enough suitable places for use as storage for dried food and grain and as accommodation for the staff who ran the kitchen. In examining the building and its position in relation to the other parts of this madrasa one can easily realize that the planner of this kitchen was fully aware of all these points and his plan

1. According to al-Arbilī the kitchen was supplying food for 248 faqīhs; see Khulāṣat al-Dhahab al-Masbūk (Jerusalem, 1885), p. 212.



17. Baghdad. Al-Madrasa al-Mustanṣiriya: plan of the kitchen, ground floor.



18. Baghdad. Al-Madrasa al-Mustanṣiriya: plan of the kitchen, first floor.

offered a solution for every problem in planning a kitchen as a part of a big madrasa. The site and the chambers, together with niches of various size and depth on both floors, and the large openings in the roofs of the main chambers (1-2) for the ventilation, all show the ability of this later Abbasid architect. Earlier madrasas which contain kitchens no longer exist in Iraq, so there is no chance to compare this plan with earlier models to examine the development and trace the origin of this type of structure. But al-Madrasa al-Mirjāniya, which was built in Baghdad more than a century later, may well have had a kitchen in one of its large chambers which was situated on the eastern side.[1] This suggestion is based entirely on the architectural similarity between the vaulting and ventilation system which was used in these chambers of the Mustanṣiriya madrasa - i.e. 1 and 2 - and that of al-Madrasa al-Mirjāniya No.18. Apart from this similarity, the Mirjāniya kitchen is in fact smaller and of less architectural merit than that of al-Mustanṣiriya.

2. Style of architecture

The entrance of this kitchen (pl. 41a) is through a pointed arched doorway in the N.E. corner of the courtyard. It leads to a long narrow vestibule (pl. 41b) roofed with a tunnel vault. This vestibule ends with a staircase composed of three steps leading to a pointed arched exit. The exit at present leads to a modern market. It cannot be established

1. See figs. 27, 28 and pl. 133a.

whether this exit originally led to the outside or to another attached building. To prove this theory requires an excavation on the spot.

The style and brick ornamentation of the entrance is basically similar to that of the other entrances to the cells and the quarters around the main courtyard of this madrasa. Detailed study of the entrance shows that the pointed arched doorway is wider and higher than those adjacent to it. These differences in dimensions also occur in all other entrances which do not lead to the student cells, but lead to other halls (fig. 15). Beyond the entrance, the vestibule on its east or right-hand side leads to a comparatively large rectangular chamber (fig. 17, no.1) through an arched doorway. There are no traces of any sort of brick or plaster ornament to be seen in this kitchen. However, the south-eastern wall of chamber 1 is recessed with a wide shallow blank niche of pointed profile. This niche is drawn as a doorway in the general plan, fig. 15. In this chamber the north corner is linked with a short narrow vestibule which has on its right-hand side two rectangular recesses. Each of these is roofed with a semi-circular vault faced with a pointed arch. Both of them are near the staircase which leads to the first floor of the kitchen (pl. 42a and b). These two niches are in fact suitable places for storage.[1]

1. This staircase and the niches are not in the ground floor plan which was drawn by the I.D.G.A. (cf. figs. 15 and 17).

The most significant architectural feature of this chamber is its roof, in which a large rather square opening was intentionally made to allow the fumes to escape through another opening in the roof of the first floor. The plain brick of this chamber, as well as of chamber 2, still bears traces of the blackening caused by the smoke from cooking. Chamber 2 is connected with the former chamber by means of two pointed-arched doorways. The eastern one leads to the above-mentioned staircase. The second is on the south-east side. Chamber 2 is a large oblong hall used for cooking. On its right-hand side are a niche and a small storage chamber. The niche is rectangular in shape and topped with a semi-circular vault faced with a high pointed arch. The storage chamber is of interesting construction; it has an L-shaped plan and is roofed with a tunnel vault. Its entrance is through a pointed-arched doorway. This entrance is identical with the one which leads to the staircase (pl. 43a,b).

The architect successfully created an impressive triple-arched façade on the right-hand side of chamber 2 by arranging a high and comparatively wide arch in the middle flanked by two low and narrower arches, one on each side. In doing so the architect uses a traditional architectural feature to break the monotony of the plain wall of this kitchen. Similar façades are to be seen in Bāb al-'Āma at Samarra (3rd/9th century), in the so-called Abbasid Palace and on the interior façades of al-Mustanṣiriya itself (pls. 29, 38). Later the same triple-arched façade appears in the

muṣallā of al-Madrasa al-Mirjāniya.[1]

The vault of chamber 2 is confined to the north-west and south-east sides of the chamber (pl. 43b). The rest of the area remains uncovered to permit the fumes to escape through a large opening in the roof of the first floor. The vaults here are in the form of a segmental arch. In al-Madrasa al-Mustanṣiriya it appears without exception in the vault of every student cell on both stories. Its popularity for vaults was also evident during the Jalairid period in Iraq.[2]

The first floor of this kitchen comprises a vaulted passage running along the south-eastern, north-eastern and northern sides. On its north-east side this passage has three pointed arches (pl. 42a). This triple façade repeats the motif of the floor below. On the level of the first floor the north-west and the south-east sides have only a single wide pointed arch apiece (pl. 43a). Again, this echoes the system in the floor below. The northern wall at first floor level is pierced by two pointed arched windows which look at present onto the street. These details do not appear in the old plan of this part of al-Madrasa al-Mustanṣiriya.[3]

The recent restoration of the ground floor showed further notable variations in the number and the arrangement of the chambers which were situated on the left-hand side of the main vestibule of this kitchen. The old plan (fig. 15) indicates that one entrance led to two chambers linked

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1. On the triple-arched façade see infra, pp. 376-77.
2. On the segmental arch see infra, pp. 423-4.
3. Cf. figs. 15-18.

together, but this proved to be wrong. On the left-hand side of the main vestibule there are two separate pointed-arched entrances which lead to chambers 3 and 4. They are rectangular in shape and roofed with semi-circular vaulting (see fig.17). These two chambers are linked by means of a doorway opened in the longitudinal wall. From chamber 4 one enters chamber 5 by means of a pointed-arched entrance set in the southern wall of chamber 4. Chamber 5 is rectangular in shape and vaulted with a semi-circular vault which covers about three-quarters of its length. The north-western corner of this chamber is occupied by a staircase leading to the first floor, and this is carried over a rectangular niche roofed with semi-circular vaulting and faced with a pointed arch. Although there are traces of blackening on the walls and vaults of these chambers, it is not easy to claim that cooking took place inside them too. At all events they constitute quite suitable places both for the storing of dried food and for use as sleeping chambers for the kitchen staff. The first floor, according to recent studies, also proved to be different in detail in the number and the arrangement of its chambers.

Section 5

A Monumental Entrance at Wāsiṭ, probably the remains of al-Madrasa al-Sharābiya

A. Historical background

The city of Wāsiṭ was founded by al-Ḥajjāj ibn Yūsuf al-Thaqafī, governor of Iraq during the reign of the Umayyad Caliph 'Abd al-Malik ibn Marwān (65-86/685-705).[1] During the whole period of the Umayyad Caliphate Wāsiṭ remained the virtual capital of Iraq.[2]

In the year 261/874 the first Friday mosque which is known to have existed in the eastern half of the city was built by the Turkish general Mūsā ibn Bughā and named after him.[3] From that time onwards Wāsiṭ is known in history as a city divided into two parts with a Friday mosque in each.[4] In the middle of the 7th/13th century other buildings were established in the eastern quarter of the city. Sharaf al-Dīn Iqbāl al-Sharābī founded a madrasa and largely restored a mosque.[5] This madrasa was opened on the 17th of Sha'bān 632/1234.[6] The trustee of its building and its endowment was Abū Ḥafṣ 'Umar ibn Abī Bakr ibn Iṣḥāq al-

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1. EI[1] IV, pp. 1128-32.
2. F. Safar, Wāsiṭ, the sixth season's excavations (Cairo, 1945), p. 3. The detailed history of Wāsiṭ and its recent excavation was excellently published by this authority.
3. Ibn Rusta, Abū 'Alī Aḥmad ibn 'Umar, al-A'lāq 'l-Nafīsa I, ed. De Goeje (Leyden, 1892), p. 187.
4. F. Safar, op.cit., loc.cit.
5. Al-Ḥawādith, p. 76. It might be worth while to point out that there is a mention in the contemporary authorities of other madāris founded in Wāsiṭ during the 7th/13th century; N. Ma'rūf, al-Madāris al-Sharābiya, pp. 264-9.
6. Al-Ḥawādith, pp. 76-7.

Dawraqī.[1] Later this trustee built two ribāṭs for the poor where they could reside and study the Qur'ān. One of these was built next to the madrasa of al-Sharābī.[2] According to Yāqūt there was a shrine surmounted by a high dome which was supposed to contain the tomb of Muḥammad ibn Ibrāhīm ibn al-Ḥasan ibn al-Ḥasan ibn 'Alī.[3]

However, the decline of the city started after the Mongols invaded Baghdad in 656/1258. Their work of destruction was completed in central and southern Iraq by their general Bughā Tamir.[4] The same thing occurred in 795/1392 under Tīmūr.[5] Another cause of its decline was the gradual return of the Tigris to its ancient and more easterly bed which flows past Kūt al-'Amāra.[6] It is known that by the year 1107/1695 the city had been completely abandoned.[7] Apart from this monumental brick entrance (pl. 44) and a large group of mounds, nothing remains of Wāsiṭ. The site is now usually known simply as al-Manāra or Manārat Wāsiṭ after the two minarets which flanked this entrance and the remains of which still stand in the eastern half of the

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1. Al-Ḥawādith, loc.cit.
2. Ibid., p. 254, idem, Talkhīṣ Majma' al-Adāb fī Mu'jam al-Alqāb IV, part 3, ed. M. Jawād (Damascus, 1965), pp.267-8.
3. Shihāb al-Dīn Abū 'Abdallāh al-Ḥamawī al-Rūmī, Mu'jam al-Buldān II ed. F. Wüstenfeld (Leipzig, 1866-73), p. 257.
4. Al-Ḥawādith, pp. 330-1.
5. Le Strange, Lands of the Eastern Caliphate (Cambridge, 1905), p. 39.
6. F. Safar, op.cit., p. 4, fig. 1.
7. Al-Jazā'irī, Ni'mat Allah, Zahr al-Rabī' (Najaf, n.d.), p. 129.

city.[1]

The ruin is situated 15 miles due east of al-Ḥayy, and about 30 miles south-east of Kūt.[2] According to F. Safar the so-called "Manāra" is a monumental gateway forming an entrance to an irregularly planned building (pl. 46, fig. 19). Noting that the remains of an octagonal chamber lie behind the courtyard, Safar suggested that the building was originally a turba and that the entrance portal, which still exists, was a later addition to the building.[3] However, two other Iraqi historians have different opinions concerning this problem. Y. Sarkīs, basing his theory on historical evidence, states that the entrance can probably be associated with al-Madrasa al-Sharābiya, which was built at the eastern part of the city by Sharaf al-Dīn al-Sharābī in 632/1234.[4] Ma'rūf, who supports this theory, also suggests that the building complex included a mosque and a ribāṭ as well.[5] Before drawing any conclusions, however, it is necessary to examine the plan, the architectural style and the brickwork ornamentation of this entrance.

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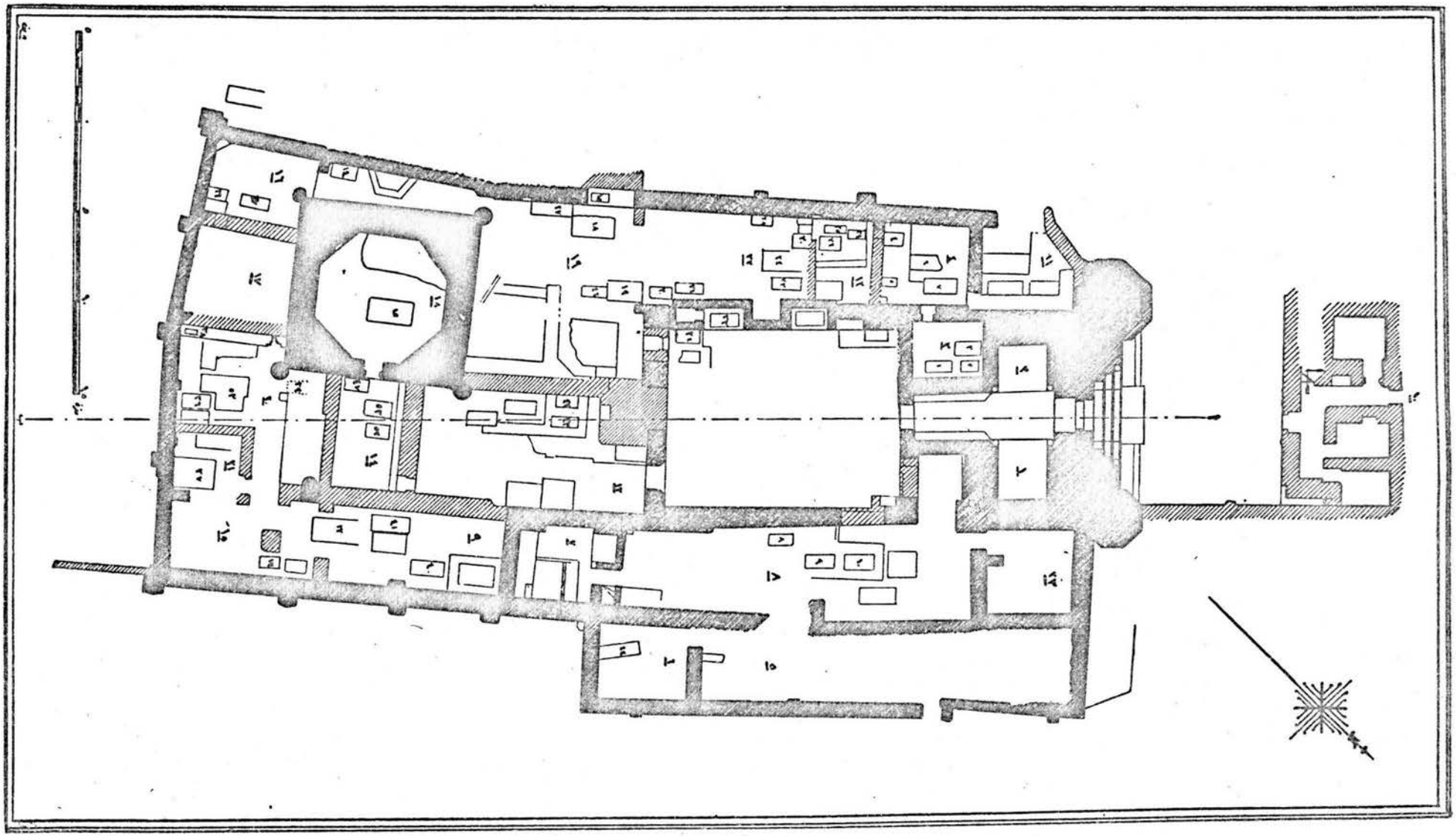
1. F. Safar, op.cit., p. 6, fig. 2. This entrance was restored by the I.D.G.A. in 1965 (see pl. 45).
2. Ibid.
3. Op.cit., pp. 9-11.
4. Op.cit., II, pp. 97-8.
5. Al-Madāris al-Sharābiya, pp. 274-5.

B. Plan

The first and the only plan is that produced by the I.D.G.A. and published by Safar in 1945.[1] As was mentioned above, Safar, in his discussion of this plan, prefers the idea that this building was a turba and rejects the possibility that it might have been a mosque. But he is not inclined to identify the plan as being a plan for a madrasa or a madrasa which might have contained a turba. At any rate, the details of the plan in general and the striking similarity between the brick ornament of this monumental entrance and the entrances of contemporary madrasas (which still exist in Baghdad), may tempt one to suggest that the building was a madrasa but of a type similar to those which contain tombs in Syria, Persia and Iraq.[2] In examining the plan of the entrance one can realize that the aim of the architect was to erect a huge portal to emphasize the importance of the main entrance which probably leads to the courtyard of a madrasa. The courtyard which was discovered in this building is rectangular in shape and lies immediately behind the entrance (fig. 19). Such an arrangement fits quite well into the scheme of a madrasa courtyard.[3] Such a courtyard is usually surrounded by cells for students and

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1. Op.cit., fig. 4.
2. For examples of such madrasas, see Herzfeld, "Damascus I" figs. 28, 40; idem, "Damascus III" figs. 1, 6, 10 and 36; idem, Archaeological History of Iran, pl. 17; Wilber, op.cit., figs. 33, 43.
3. In this respect al-Mirjāniya represents the most striking parallel.



19. Wāsiṭ. Al-Madrasa al-Sharābiya: the foundations of the structures behind the portal; plan (after Safar).

also by a prayer hall and an Īwān, but here the foundations show that several serious alterations and additions took place in later periods. The octagonal plan which was used in the turba lying behind the courtyard is in fact frequently used in both Iraq and Persia, as will be demonstrated later. Accordingly it is not impossible to suggest that the plan was intended to be for a madrasa with a turba for its founder or for some other important person. According to Ibn al-Fuwaṭī, 'Umar ibn Abī Bakr al-Dawraqī, who died on the 13th of Sha'bān 648/1250, acted as a wazīr for Sharaf al-Dīn al-Sharābī and was also a trustee for the latter's buildings at Wāsiṭ. He asked permission from his master al-Sharābī to rebuild a mosque, construct a ribāṭ beside it and build a madrasa near them both.[1] In al-Ḥawādith the author states in the chronicle of the year 648 (1250) that al-Dawraqī was a wealthy and important personage of high official and social repute. He rebuilt a mosque in the eastern part of Wāsiṭ known as the Mosque of Ibn Raqāqā; he also built a ribāṭ beside it for the poor and another ribāṭ near the madrasa of al-Sharābī in the eastern part of Wāsiṭ. Moreover, he built a turba for himself.[2] According to this contemporary authority, it might be suggested that the fragmentary entrance and the foundation behind it may represent the madrasa of al-Sharābī, and that the octagonal building may represent the turba of

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1. See Talkhīṣ IV, part 3, pp. 267-8.
2. Al-Ḥawādith, p. 254.

al-Dawraqī, simply because it was not common to erect a ribāṭ inside a madrasa during that period, though it was common to find a turba inside, or attached to, madrasas.

C. Style of architecture

This structure is built entirely of brick bonded with juṣṣ. After the restoration by the I.D.G.A. in 1965 it now stands 11 m. high. It consists of a monumental portal covered by a pointed arch, with other pointed arched recesses all included within rectangular frames. The portal is flanked on either side by a pair of minarets or towers decorated with brick ornamentation (pls. 44-48). The upper structure of the right hand tower, which was the larger of the two, and hollow in construction, was discovered during the course of the excavation, having fallen to the ground in front of the portal.[1] The erection of such monumental portals was in fact a characteristic feature of religious architecture during the Saljuq, Ilkhanid and Jalairid periods.[2] It is obvious that in erecting these portals the architect aimed to emphasize the importance of the main entrance.

This portal is now anepigraphic but an analytical description of its elements should reveal its approximate date. The doorway is set in a central recess and topped by a pointed arch quite common in similar buildings in Iraq. This arched doorway is surmounted by another pointed arch.

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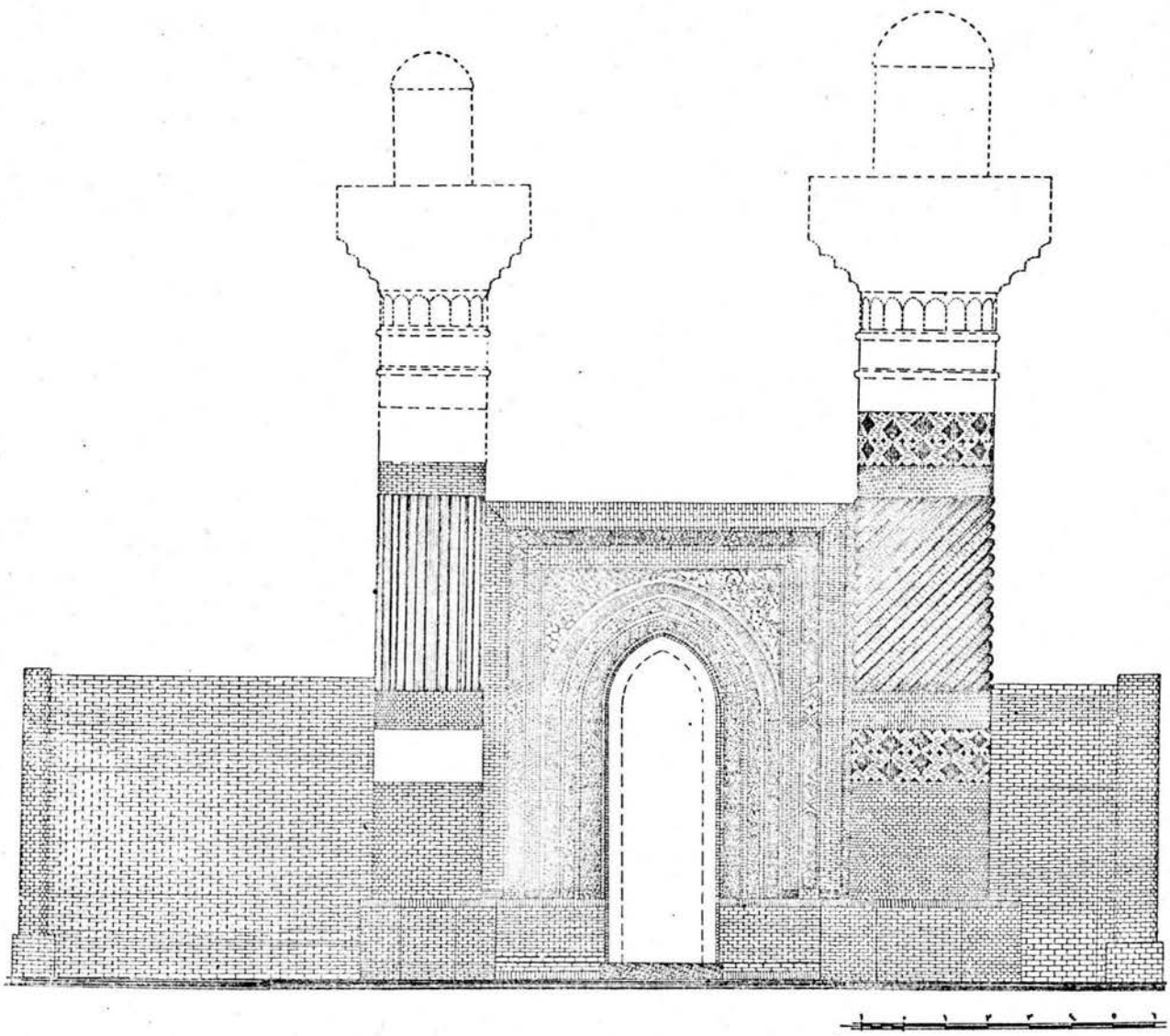
1. Safar, op.cit., p. 9.
2. Cf. pls. 34a, 36, 44 and 98.

The high and narrow tympanum of the latter is now empty. The style and the arrangement of the arches, which bear a strong similarity to those of al-Madrasa al-Mustanṣiriya and al-Madrasa al-Mirjāniya, suggest that this area once bore an inscription. Three further pointed-arched frames enclose this composition. The first two are decorated with elaborate brick ornament mainly consisting of geometrical terra-cotta pieces incised with minute arabesque. The first frame displays a woven pattern composed of an interlace band and enclosing four-pointed stars, while the main pattern of the second is a twelve-pointed star surrounded by minor geometrical units. The third and the most elaborate frame consists of a cable moulding motif (pl. 45 and fig. 20).[1]

These three pointed frames are enclosed within a rectangular frame. The spandrels of the cable moulding arch are decorated with an elaborate terra-cotta panel. The pattern is an interlacing geometrical one. The type and execution of this panel suggest a Saljuq or a later Abbasid artist. Very similar terra-cotta panels can be seen in all the existing monuments of Iraq which date from between the 6th-8th/12th-14th centuries.[2]

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1. It has already been shown that this architectural element was one of the most popular motifs in early Abbasid, Saljuq and Jalairid architecture. It was used on the entrance façades of two Baghdadī madrasas and may thus support the argument that this entrance was originally an entrance for a madrasa as well. A cable moulding of similar shape which frames the entrance façade of al-Madrasa al-Mirjāniya is the most relevant parallel in this respect.
2. Examples are Sitt Zubaida, the so-called Abbasid Palace, al-Mustanṣiriya, the minarets of Sūq al-Ghazl and Dhū 'l-Kifl, and the entrance of al-Kūfa Mosque.



20. Wāsiṭ. Al-Madrasa al-Sharābiya: elevation of portal façade (after Safar).

The outermost frame, which takes a rectangular shape, contains in the middle a series of hexagonal and elongated hexagonal recesses. This type of brick ornament is also used in the entrance façade of al-Madrasa al-Mustanṣiriya (pl. 36) and in the intrados of the Īwān arch at al-Madrasa al-Sharābiya (the so-called Abbasid Palace) (pl. 30), where these units are filled with pieces of geometrical terra-cotta carved in relief with minute arabesque. Later in the Jalairid period these polygonal recesses are used to adorn the interior façade of the entrance portal of al-Madrasa al-Mirjāniya (pl. 106). The occurrence of this motif in these contemporary and later madrasas may add further useful evidence in support of the argument as to both the date and the identity of this building.

The last among the most important architectural features of this portal is the pair of towers, presumably minarets, which flank the portal.[1] It has been noted above that the right hand one has collapsed at unknown date and was discovered buried under the debris. Moreover the outer lower part of the second minaret was found to have been largely destroyed (pl. 44). However, the I.D.G.A. has rebuilt and restored both of them almost to their original state up to the same height as the portal itself.

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1. They could also be interpreted as buttresses linked structurally with the portal, carrying the minarets and in fact constituting the lower part of them.

Fig. 20 shows the suggested original shape of the missing parts of both minarets. In this interesting reconstruction it seems that contemporary Iraqi minarets were taken as a guide. The minaret on the right hand side is now a taller as well as a wider structure and follows a different scheme of decoration from that on the left hand side. Both of them are constructed upon an octagonal base discovered during the I.D.G.A. excavation. Both of them have cylindrical shafts as well. This architectural feature in the two minaret towers is typically Saljuq and undoubtedly reflects local techniques. The combination of an octagonal base and cylindrical shaft is also found in several earlier Iraqi minarets.[1] The shaft of the minaret tower on the right hand side has three ornamental zones separated by plain brick in vertical common bond (pl. 45). The first zone just over the base is achieved by setting the brick diagonally to mark out chevron and zigzag motifs.[2] Small square brick pieces ornamented with a four-petalled floral motif are inset within each unit of the pattern.[3] Very similar brickwork associated with small brick pieces of similar ornament was discovered recently in al-Madrasa al-Sharābiya (the so-called Abbasid Palace). Although the technique can be seen on such earlier monuments in Iraq as Imām Dūr,[4] it seems to have reached its apogee during the

1. See infra, pp. 379-80.
2. For more detail and examples see infra, pp. 453-7.
3. Cf. the carved joint plugs at the so-called tomb of Chelebī Oghlu at Sulṭāniya (Wilber, op.cit., pl. 171).
4. Just below the cornice of the exterior façade (pl. 4). Similar ornament occurs on the minaret of the Jāmi' al-Nūrī (pl. 19).

later Saljuq and later Abbasid periods.[1] This technique is thus an important dating control for this monumental portal.

The second zone is ornamented with successive rows of twisted cable mouldings. It is basically similar to that discussed above in the portal proper. Its use on a monumental scale in a minaret is unique in Iraq; an example in Iran is the minaret of the Friday mosque at Shushtar.[2]

The third and the last zone has an identical scheme of decoration to that described in the first zone (pl. 45).

The minaret tower which flanks the left side of the portal has less brick decoration. Brick in horizontal common bond is used in the base and up to about half the height of the minaret tower. Then a fluted vertical zone starts; it was probably used to cover the rest of the minaret shaft until just under the muqarnaṣāt zone. The fluting, which is formed of brick in horizontal common bond, comprises engaged half round columns set side by side. Similar brickwork technique has been recently discovered on the western façade of the so-called Abbasid Palace.[3] Other Iraqi examples of such engaged columns are to be seen at the entrance of al-Madrasa al-Mirjāniya (753/1356) and a more elaborate one appears on the drum of the dome of Mirjān at the same madrasa.[4] Persia offers earlier as well as

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1. Cf. pls. 15, 19, 21, 24, 26 and 37.
2. This appears to be dated in the reign of Shaikh Uwais in the early 9th/15th century.
3. Cf. pls. 35a and 44.
4. Cf. pls. 44, 96 and 104.

contemporary instances of this technique.[1] This scheme in fact had been previously employed on a monumental scale at the Rabāṭ-i-Malik, possibly datable in the second half of the 5th/11th century.[2] Later in Persia this type of design clearly inspired the tower at Rādkān East and, in another direction, the Quṭb Minār of Delhi.[3]

From the architectural point of view it is obvious that in erecting a pair of minarets such as these the architect would first have prepared substantial plinths linked with the rest of the building. These plinths would also act as substantial buttresses to reinforce the monumental portal. J.M. Rogers has noted that the use of buttresses is "so much a feature of Seljuk architecture that it has led commentators into the erroneous conclusion that all their buildings were designed for military purposes."[4] Rogers further notes that buttresses were obviously considered not only as suitable for decoration but as decorative features in themselves, quite irrespective of

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1. The minaret at Jār Kurgān, probably built towards the end of the 5th/11th century or at the beginning of the 6th/12th century, is decorated with elaborate half-engaged columns basically similar to those at Wāsiṭ; see Schroeder, "Islamic Architecture", SPA II, p. 1027, fig. 363, pl. 347a. Another example occurs at the Kishmār tomb tower (ibid., pl. 347b).
2. SPA IV, pl. 271.
3. Schroeder, op.cit., loc.cit.
4. J.M. Rogers, "The Çifte Minare Medrese at Erzurnum and the Gök Medrese at Sivas", Anatolian Studies XV (1965), p.69.

their function.[1] At any rate in Iraq, other portals flanked by a pair of minarets no longer exist. But it seems that this feature was commonly used in the portals of madrasas elsewhere in the Islamic world during the Saljuq and later Abbasid periods. The first parallels which spring to mind are the entrances of two Anatolian madrasas, namely the Çifte Minare Medrese at Erzurum and the Gök Medrese at Sivas.[2] The latter is dated 670/1271, and the founder is named as the Wazīr Ṣāḥib 'Aṭā.[3] It is noteworthy that twin minarets were not confined to portals of madrasas but may be seen on the portals of mosques and mausolea in some parts of the U.S.S.R., Anatolia and Persia.[4]

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1. Ibid.
2. Fully discussed in the article by Rogers already cited (see especially pls. 7 and 15b). The Madrasa of Çifte Minare has traditionally been dated to 651/1253, but according to Rogers' argument it should be dated c. 1242. (Patronage in Seljuk Anatolia, unpublished D.Phil. thesis (Oxford, 1972), pp. 23-131).
3. A. Gabriel, op.cit., II, p. 161, apud Rogers, "The Çifte Minare Medrese", p. 66.
4. Examples in the U.S.S.R. are to be seen in the façade near the tomb of Mu'mina Khātūn at Nakhchivan and in the remains of a façade at Karabaglar (M. Huseynov, L. Bretanitsky and A. Salamzade, History of Azerbaydzhanī Architecture (Moscow, 1963), pp. 92 and 129). An Anatolian example is the Ṣahib 'Aṭā Mosque at Konya (Rogers, "The Çifte Minare Medrese", p. 70, pl. 10). Persian examples are the portal of the Masjid-i Jāmi' in Ashtarjān near Iṣfahān, the shaking minarets in Gārlādān, a portal with a flanking minaret at Qumm, the portal of the Masjid-i-Niẓāmiya at Abarqūh, and in Iṣfahān Do Minār Dardasht and Do Minār Dār al-Baṭṭīkh (Wilber, op.cit., pls. 91, 117, 156-8 and 163). It might

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In Persia this feature proved to be quite popular and it is found in several Safavid and later buildings.[1]

Accordingly it must be admitted that the twin minarets of Wāsiṭ cannot be regarded as strong evidence of the function of the building. On the other hand this feature, combined with the others discussed above, should constitute sufficiently plausible evidence to identify the portal of Wāsiṭ as being originally related to a madrasa dated in the first half of the 7th/13th century.

One final difference between the two towers of this portal may be noted, namely that the right-hand one is hollow inside from the top of the internal staircase upwards, while the left-hand one is solid. No plausible explanation for this contrast suggests itself. Moreover certain aspects of this façade have not been fully considered in previous publications. The major problem concerns the lack of harmony between the two towers and their relationship to the centre-piece of the façade. By common consent the Saljuq

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Contd.) be interesting to note that the twin minaret is also used in India; an example is the main entrance of Arhai-din-ka-Jhompra in Ajmīr dated from Jumādā II 595/ April 1199 onwards (Hill and Grabar, op.cit., pl. 527).

1. Examples are the shrine of Ni'mat Allah at Mahān dated c. 841/1437, the Masjid-i-Shāh in Iṣfahān dated 1025/1616, the Madrasa Madar-i-Shah dated 1126/1714 and the Tehrān gate in Qazvīn dated in the early 19th century (demolished 1935) (SPA IV, pls. 464-5, 470b, 472a, 499 and 503).

and later Abbasid period in Iraq marked a high point of religious architecture, distinguished by mature, harmonious and symmetrical planning and execution. It seems most strange that this period should have produced so unbalanced a façade as this building now has. Comparison with most other twin-minaret façades in Iran and Anatolia shows that, in general, balance and symmetry were at a premium. The many differences in detail between the two towers which spring to mind can be explained in at least two ways. One possibility is that the restoration by the I.D.G.A. was incorrect in numerous details (e.g. the greater width of the right-hand tower, its greater projection and, above all, its decoration). The other possibility, which seems to be more plausible, is that the right-hand tower had collapsed at some indeterminate date and had then been rebuilt in a different style. This rebuilt tower in turn collapsed and was restored by the I.D.G.A. as they found it in the course of excavation.

CHAPTER III

SOME STANDING MONUMENTS OF THE ILKHANID PERIOD

Section 1

The Mausoleum of Muḥammad al-Sakrān

A. Historical background

This monument is the only comparatively well preserved octagonal mausoleum which has survived from the Ilkhanid period in Iraq (pl. 49). Fortunately it is dated (667/1268) so there is no room for controversy on this score. Apparently this mausoleum escaped the notice of western orientalists who visited Iraq at the beginning of this century.[1] This is probably due to its remote site, far from major routes. This mausoleum is interesting mainly from the architectural and not the decorative point of view. It cannot be placed on a par with the more sumptuous Saljuq and Ilkhanid tombs of Iraq, Persia and Central Asia.[2] It seems first to have been mentioned by N. al- NaqshabandĪ who published the inscription above its entrance in 1962 (pl. 52).[3] Apart from this the mausoleum is virtually unknown.

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1. Such as C. Niebuhr, L. Massignon, F. Sarre and E. Herzfeld.
2. Numerous examples of such building are published by Herzfeld, Reise II, pp. 173-9, 249-63; 'Abbū, al-Qubāb al-'Abbāsiya, passim; Wilber, op.cit.; O. Grabar, "The Earliest Islamic Commemorative Structures, Notes and Documents", Ars Orientalis VI (1966), pp. 7-45.
3. "Marqad al-Shaikh Muḥammad al-Sakrān", Sumer XVIII (1962), pp. 197-9 (hereinafter cited as "Muḥammad al-Sakrān"); see also the brief historical comment published by M. Jawād (ibid., pp. 199-200).

According to the inscription above the entrance this monument is identified by three distinct names, a feature which may well be unique among mediaeval monuments in Iraq. The names included in the inscription are: turba, zāwiya and qubba. Moreover, a contemporary authority states that when the shaikh died (i.e. Imām Muḥammad al-Sakrān) he was buried in his ribāṭ.[1] It is not certain whether this is the building now known as his mausoleum. The names mentioned in the inscription denote a mausoleum (ḍarīḥ or marqad).

The name and title of the Ṣūfī shaikh for whom this mausoleum was erected is given in three slightly different forms. According to the inscription he is Muḥī al-Dīn Muḥammad ibn Sakrān. Ibn al-Fuwaṭī when reporting the death of this shaikh during the events of the year 667/1268 gives his name as Muḥammad ibn Sakrān.[2] Then in another work of his he gives what might be considered as a full version of the name and titles: Muḥī al-Dīn Abu'l-Fuqarā' Muḥammad ibn 'Abd al-'Azīz al-Sakrān ibn Abi'l-Sa'ādāt ibn al-Mu'amar al-Khāliṣī.[3] It seems that Muḥammad al-Sakrān

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1. Al-Ḥawādith, p. 364.
2. Al-Ḥawādith, loc.cit.
3. M. Jawād quoted this name from Ibn al-Fuwaṭī, Talkhīṣ Majma' al-'Adāb, an unpublished manuscript formerly in his private library (see his brief historical comment, op.cit., p. 200). It is interesting to note that some of the local inhabitants prefer to avoid the name Sakrān, which literally means "the drunk," and replace it with the name Bakrān (N. al-Naqshabandī, "Muḥammad al-Sakrān", p. 199). In Islamic mysticism the use of the name Sakrān is quite popular and has a completely different significance.

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was not given any public post during his life (579-667/ 1183-1268). He spent his lifetime as an ascetic Ṣūfī of high popular and social repute looking after poor people and passing travellers. He founded a lodging surrounded by a farm and an orchard for this purpose.[1]

This mausoleum, which is built on a rather large Islamic mound,[2] is situated in a village known as al-Jadīda[3] about 10 km. to the north-west of Khān Banī Sa'd, 30 km. to the north-east of Baghdad. It was built by Shaikh Khamīs who was, according to the inscription, a very close disciple of Muḥammad al-Sakrān and was charged with executing his will. No further information regarding this personage is available in contemporary or later authorities. Al-Naqshabandī suggests that there was a large courtyard surrounded by walls situated in front of the mausoleum.[4] No trace of walls now exists and the suggested courtyard is nowadays used as a local cemetery.

Contd.) It conveys the state of the Ṣūfī who has completely devoted his life to God (see Abū Naṣr al-Sirāj al-Ṭūsī, Al-Luma' ed. 'Abd al-Ḥalīm Maḥmūd (Cairo, 1960), pp.382-3).

1. For more detail see al-Ḥawādith, loc.cit.
2. It is about 500 m. in circumference and 1-2 m. in height, (I.D.G.A. File No. 135/41).
3. Its ancient name was al-Mubāraka (al-Ḥawādith, loc.cit.).
4. Al-Naqshabandī, "Muḥammad al-Sakrān", p. 198.

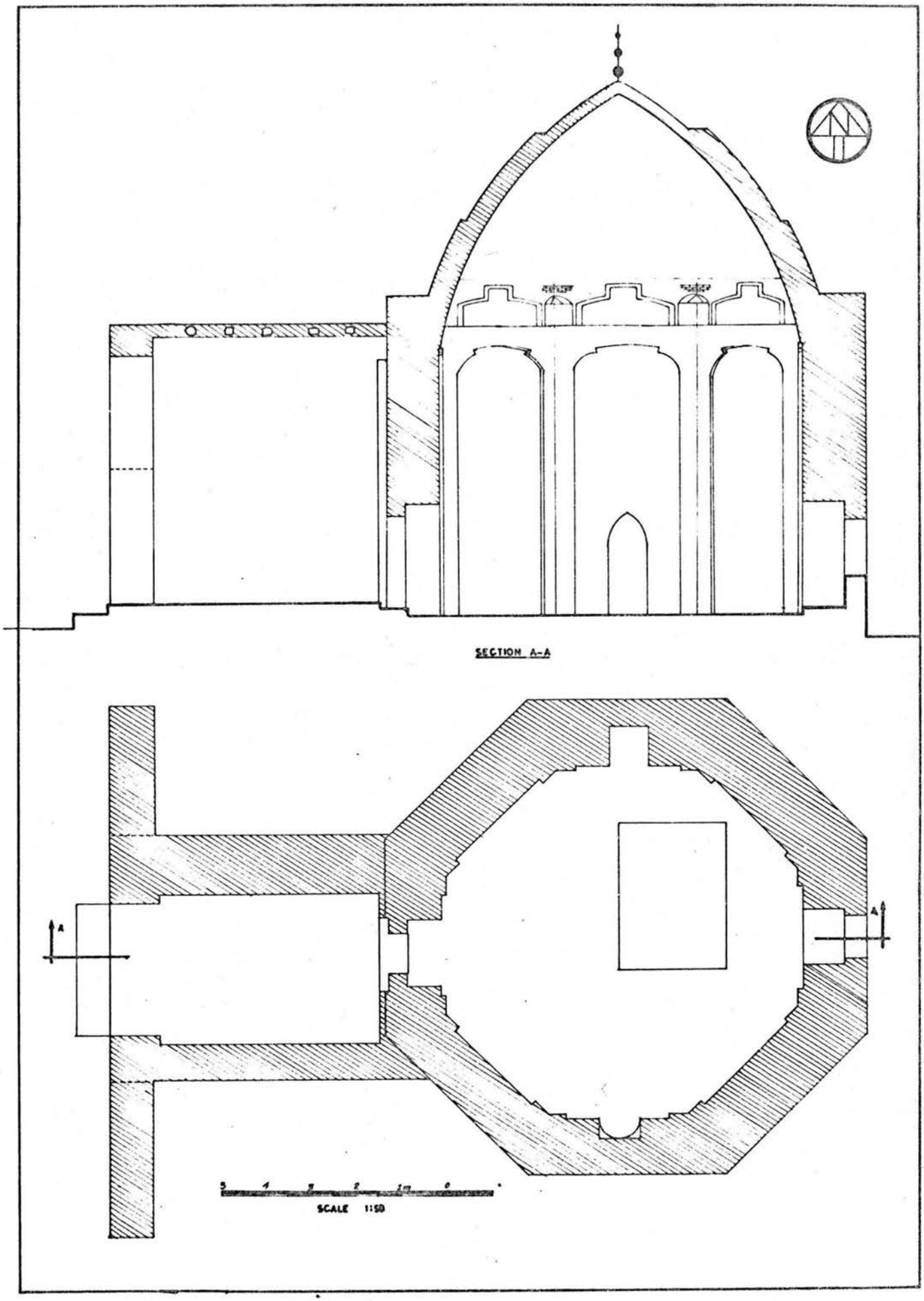
B. Plan

The mausoleum of Muḥammad al-Sakrān comprises an octagonal domed chamber entered from the west side through a vestibule ("dihlīz") covering the main entrance (fig. 21). The aim of this vestibule is most probably to create a sense of reverence and respect for the imām.[1] The same feature also occurs in some other Iraqi Saljuq and Ilkhanid mausolea. Examples are to be seen in the turbas of Zumurud Khātūn (Sitt Zubaida) (fig. 4), Imām 'Abd al-Raḥmān,[2] Imām Bāhir[3] and Ibn al-Ḥanafiya in Mosul.[4]

The octagonal plan as applied to the erection of mausolea and other domed chamber was well known and well developed in Samarra as early as the 3rd/9th century. The earliest octagonal mausoleum yet discovered in Samarra is that of al-Muntaṣir (died in 248/862) known as Qubbat al-Ṣulaibiya.[5] During the Saljuq and later Abbasid periods the

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1. For more detail see infra, p. 399.
2. 'Abbū, al-Qubāb al-'Abbāsiya, fig. 183; see also infra, pp. 301-2.
3. Ibid., fig. 185; infra, pp. 315-7.
4. It consists of a square domed chamber, 6.50 x 6.50 m., containing the tomb of al-Ḥasan ibn Muḥammad known by his laqab as Ibn al-Ḥanafiya (ibid., pp. 185-7, fig. 186). On a lintel of the eastern window appears an inscription which refers to the renewing of the dome in 731/1330 (see Herzfeld, Reise II, p. 288; N. Siyūfī, Majmū' al-Kitābāt al-Muḥarrara fī Abniyat al-Mauṣil, ed. S. al-Daiwachī (Baghdad, 1956), p. 106. Al-Daiwachī thinks that this building is a part of al-Madrasa al-Niẓāmiya which was built by Niẓām al-Mulk in Mosul (see "Madāris al-Mauṣil", pp. 101-18).
5. On this monument see Herzfeld, Erster Vorläufiger Bericht Über die Ausgrabungen von Samarra, (Berlin, 1912), p. 30; idem, Reise I, pp. 85-6; Creswell, EMA II, pp. 283-6.



21. Al-Jadīda (30 km. N.W. of Baghdad). The mausoleum of Muḥammad al-Sakrān: section and plan.

octagonal plan was also quite popular for Iraqi domes. Examples are to be seen in al-Madrasa al-Kamāliya dated 563/1167 (fig. 9),[1] Zumurud Khātūn (Sitt Zubaida) (fig. 4), Willāda in Sinjār dated 594/1194,[2] the domes of Sayyid Aḥmad al-Rifā'ī at Ḥadītha[3] and the remains of a turba behind the portal of Wāsiṭ (pl. 46, fig. 19).

The conclusion which can be drawn is that the plan of the mausoleum of Muḥammad al-Sakrān came into being as a result of a long local tradition which can be traced back at least as far as the early Abbasid period.[4]

The plan shows that this mausoleum is rather large if it was originally meant to be used as a burial place for only one person. However it does include a miḥrāb and the sarcophagus is unusually placed in the north-eastern corner, a feature which can be explained if this building was originally intended to be used as a muṣallā for daily prayer as well as for funerary purposes.

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1. Herzfeld, Reise II, pp. 233-4.
2. The site, which is situated on the east side of the Tal-'Afar road half a mile out of the city of Sinjār, is marked by two domes. The one on the south has an octagonal plan, while the other, to the north, displays a square plan. These two domes have been fully described and illustrated by Herzfeld; see Reise II, pp. 308-11, pls. 3, 4 and 84-7; see also Reitlinger, op.cit., p. 151, and 'Abbū, al-Qubāb al-'Abbāsiya, p. 110, fig. 10.
3. Herzfeld, Reise I, pp. 321-2.
4. On the plans of Iraqi turbas, see infra, pp. 396-7.

C. Style of architecture

The mausoleum is built of small bricks bonded with juss (pl. 49).[1] Horizontal common bond is used for the exterior. The entrance which faces the west is preceded by the previously noted vestibule. This was recently rebuilt to replace the earlier one - possibly the original vestibule - which, according to local tradition, collapsed at the beginning of the century. This earlier vestibule was roofed with two small domed vaults. The present roof is flat and constructed by means of wooden beams. This vestibule was in fact responsible for preserving the inscription over the entrance façade of the mausoleum proper. Today this vestibule is entered through a lofty pointed arch (pl. 50). Its present dimensions are probably the same as those of the original one.

The exterior of this mausoleum (pls. 49-51) lacks decoration. This is in fact an unusual feature for a period well-known for its brick decoration in both Iraq and Persia.[2] It is not easy to assume that the present bricks have replaced the once decorated façades of this mausoleum, for the bricks are of a shape, colour, and dimension consistent with the bricks of the Ilkhanid period. The lack of decoration might well be explained by the fact that this mausoleum is for a Ṣūfī and not for a ruler with considerable financial resources.

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1. The size 22 x 22 x 5 cm. is the most common.
2. See infra, pp. 453-64.

The façade of the entrance (pl. 52) is the only part of the exterior which displays a simple composition of brick ornamentation. The effect here is as if the entire façade were a frame for the doorway, a feature also found on several mediaeval monuments of Iraq.[1] In Persia some contemporary buildings display the same principle.[2] The emptiness of three out of four walls is also a common feature on central Asian mausolea.[3] In all these cases the aim is obvious, namely to emphasize the importance of the main entrance.

Unplugged scaffolding holes are to be seen in two rows on the north, north-west and south sides with two holes in the upper rows and three in the lower (pl. 49). Other scaffolding holes, irregularly placed, appear on the east side (pl. 51). One comparatively large, unplugged scaffolding hole is left on the north-western side of the dome. It is possible that this served as a small window for letting in the light (pl. 49).

At the middle of the east side is the arched doorway of the exit, which was converted recently into a window (pl. 51). In buildings such as this, where crowds of

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1. E.g. at al-Madrasa al-Sharābiya (the so-called Abbasid Palace) (pl. 34a), al-Madrasa al-Mustanṣiriya (pl. 36), al-Madrasa al-Sharābiya at Wāsiṭ (pl. 45), the turba of ʿUmar al-Suhrawardī (pl. 89), al-Madrasa al-Mirjāniya (pl. 98) and Khān Mirjān (pl. 134).
2. See for example Wilber, op.cit., pls. 21, 35, 91 and 115; R. Hillenbrand, "Saljūq Monuments in Iran: II. The "Pir" mausoleum at Tākistān", Iran X (1972), pl. 1.
3. Ibid., p. 46.

people come every day to pray and visit, an exit in addition to the entrance seems to be a practical necessity.[1]

The dome has a slightly pointed exterior profile and rises in three stepped layers, each one smaller than the previous one, and is crowned by a copper bar with three sphere-like motifs. This metal ornament is quite popular on minarets and domes all over the Islamic world.[2] The stepped exterior of this dome does not correspond with the interior and is plastered with a layer of juṣṣ which must have been renewed several times. The parapet is plastered with juṣṣ as well. The general appearance of its exterior resembles the Saljuq dome of Jāmi' al-Mujāhidī in Mosul (pl. 20) which was built by Mujāhid al-Dīn Qaymāz during 572-5/1176-9.

After passing the vestibule one enters the mausoleum through a pointed-arched doorway. Such arched doorways are quite popular in both earlier and later monuments in Iraq. The arch here is framed by a band ornamented with a diminutive arabesque pattern. The same band is used in framing the outside of the spandrel and to separate the lines of the inscription (pl. 52). This decorative band, as will be demonstrated later, quite frequently recurs on the architecture of the Saljuq and later periods in Iraq.

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1. This is reflected in the width of the doorways. The width of the exit on its interior is 2.20 m. and 0.95 m. on its exterior, while the entrance is 2.50 on its interior and 0.90 m. on its exterior.
2. In many cases a crescent replaced these sphere motifs. Possibly in both cases a religious significance is intended.

On the spandrel of this arch are a pair of hexagonal panels bearing an inscription standing out from a decorated background (pl. 53a,b). The rest of the area is executed with plain brick. Another lofty pointed arch of the same profile surmounts the arched doorway and acts as a frame for the main historical inscription discussed below. This type of arch also recurs on several monuments in Iraq dating from the 6th-8th/12th-14th centuries.[1] Immediately under the apex of this arch is a panel of triangular form preceding the beginning of the inscription and bearing an elaborate arabesque, composed of an abstract leaf scroll. A similar system is used in al-Madrasa al-Mustanṣiriya (pl. 36), the turba of 'Umar al-Suhrawardī (pl. 90) and al-Madrasa al-Mirjāniya (pl. 97). Sometimes the basmalla replaces the arabesque in this triangular panel as is the case in Khān Mirjān (pl. 134). The spandrel of this arch also bears a pair of decorated hexagonal panels with an inscription. Common vertical bond of headers appears on the upper framing bands of this entrance façade. On both sides of the façade a considerable area is hidden under a layer of plaster which clearly indicates an attempt at restoration. It is not impossible that part of this hidden area is ornamented with brickwork panels. Apart from this the entrance façade has remained close to its original state, thanks to the vestibule.

The interior threshold is 0.30 m. below the modern ground level of the vestibule. The ground is paved with

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1. See infra, pp. 421-2.

modern square kāshīs. On entering the mausoleum one is quite disappointed by the absence of brick decoration, though, apart from the entrance façade, this plainness was the main feature of the exterior. Below the zone of transition the walls, which take the form of a high octagonal prism, are varied in both length and thickness (see fig. 21). Excluding the interior shell of the dome proper, which has its brick of common bond exposed, as well as the upper part of the zone of transition (pls. 55-57), all the interior is plastered with juss varying in the degree of its whiteness. Undoubtedly this indicates various restorations of the plaster. Each side of the interior has a large recessed segmental arch to a depth of 5 cm. The width of these segmental arches varies according to the width of the walls. This type of decorative segmental arch appeared in the so-called Abbasid Palace and al-Mustanṣiriya among other arches of different profiles. Later on it became quite common in the Jalairid period.[1] On the walls of the mausoleum which face the four cardinal points, these segmental arches frame four distinct architectural elements: entrance, exit, miḥrāb and a concave niche. Thus a sense of symmetry is created at the ends of the two main axes inside the mausoleum. This is clearly demonstrated by the north niche which is a part of this conception and is entirely without any practical necessity (pl. 59). The most important architectural element among these four is the miḥrāb.

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1. See infra, pp. 423-4.

The mihrāb is medium in size, situated on the south side, and placed within a rectangular frame 0.85 m. in width and 2.85 m. in height (pl. 58). On the lower part the niche of this mihrāb is semi-circular in form. It is now in a comparatively poor state, and several parts of it are largely defaced. This is due to its being plastered over, most probably by an unsophisticated local mason at an indeterminate date. Happily what is left of this mihrāb is quite enough to describe its original structure. Its niche, starting 0.85 m. above ground level, consists of five layers of muqarnaṣāt of slightly pointed form corbelled gradually over each other and terminated by a semi-domical vault with five segments.[1] These muqarnaṣāt were most probably built on a wooden framework. It is well-known that in the Mongol period and later, muqarnaṣāt were customarily constructed on a wooden framework and covered with a thin plaster shell.[2] Structures in a similar style to these muqarnaṣāt are in fact rare among the surviving Iraqi mihrābs. The earliest example which springs to mind is a stone niche, probably a mihrāb, found at Sinjār (now in the Iraqi Museum) and dated in the 6th/12th century.[3] A style identical to these

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1. These muqarnaṣāt, the segmental arches previously discussed, and the zone of transition constitute the sum of architectural decoration inside this mausoleum.
2. For a detailed account of this subject, see J. Rosintal, Pendentifs, Trompes et Stalactites (Paris, 1928), passim; see also idem and Schroeder, "Squinches, Pendentives and Stalactite", SPA II, pp. 1252-57, figs. 449-51.
3. See infra, pp. 308-11.

muqarnaṣāt is also found in the marble miḥrāb of Imām Bāhir in Mosul (now in the Abbasid Palace Museum).[1] It is noteworthy that other brick miḥrābs of Ilkhanid date no longer exist in Iraq. This specimen is therefore of considerable importance.

On the north side is the pointed-arched niche with a depth of 0.90 m. (pl. 59). It is rectangular in section. It was perhaps used as an additional space inside the mausoleum during prayers or it may have served as a suitable place for reciting the Qur'ān near the sarcophagus.[2] Apart from this it seems difficult to suggest any other purposes which it might have served.

The niche on the west side, which has the form of a segmental arched vault, forms the interior part of the entrance (pl. 54). The upper left hand corner of this niche appears to have been roughly restored at some unknown date. Replicas of this niche, but 0.20 m. deeper, appear on the east side and form the beginning of the exit passage.

The zone of transition has also suffered some damage. Each side contains a comparatively large trilobed or broken-headed arch flush with the wall and alternating with a concave squinche of four segments placed in the angles of the walls (pls. 55, 56a and b). The juss plaster of the brick fabric of the trilobed arches makes the cusps more

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1. See infra, pp. 319-20.
2. It is a common feature in Islam to recite the Qur'ān near burial places. The aim is to sanctify the place. This can explain the aim behind establishing muṣallās or miḥrābs inside most Islamic mausolea.

angular than rounded.[1] The spandrels of the large arches merge in the corners of the octagon with the projection over the squinches on each side. The fact that these projections are convex means that the upper part of the zone of transition forms an uneven 20-sided figure, a disposition apparently unique at least in the architecture of Iraq. To attain the circular form on which the dome rests, several courses of plain brickwork are added. Such a system is only one of many systems used by Iraqi architects during the 6th-8th/12th-14th centuries to solve the problem of raising the dome over square or octagonal chambers.[2] A similar arrangement of the zone of transition occurs in the dome of Ḥusainiya Hasht, Yazd, dated in the 8th/14th century.[3] Other monuments of this period which still survive in Yazd are also of this type.[4]

Inside the mausoleum are two adjoining graves. The

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1. A more sophisticated form of this arch appears on the brickwork of the base of the minaret of Sūq al-Ghazl (pl. 63).
2. Cf. for examples the domes of Imām Dūr (fig. 1), Zumurud Khātūn (Sitt Zubaida) (fig. 4), al-Madrasa al-Kamāliya (fig. 9), Dhū 'l-Kifl (pls. 83, 84) and 'Umar al-Suhrawardī (pl. 91).
3. Wilber, op.cit., pl. 41; wrongly identified as the dome of Masjid-i Bābā 'Abd Allāh, Nā'īn. Although the structure consists of a square chamber and not an octagonal one the elements of the transition zone, such as the trilobed arches and the concave niches, are similar to those in the transition zone of the mausoleum of Muḥammad al-Sakrān.
4. Ibid., p. 128.

one on the north-east is that of Muḥammad ibn al-Sakrān, while the other on its left-hand side is that of Shaikh Khamīs. Both of them are built of brick and plastered with jusṣ and they are surrounded by modern sarcophagi made of iron. The lower edges of the grave of Muḥammad al-Sakrān bear a Qur'ānic naskhī inscription in relief on brick with an ornamented background which is filled at present with jusṣ. The author of al-Ḥawādith, in his report on the death of Muḥammad al-Sakrān in the year 667 A.H. [1268 A.D.] states that he was buried in his ribāṭ on which a dome was built and a wooden sarcophagus was made for his grave.[1] This wooden sarcophagus no longer exists; it was apparently replaced at an unknown date by this brick grave.

D. The inscriptions

The inscriptions are well preserved because they have been well sheltered and are completely intact. They exhibit two styles of Arabic script elaborately executed in brick. The main text, a total of eight lines, is inscribed in a fine naskh of quite clear and uncrowded quality.[2] Traces of black paint appear on this inscription;

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1. Al-Ḥawādith, loc.cit.
2. An identical style is repeated on the inscribed brick band and the panel over the entrance of the turba of Shaikh 'Umar al-Suhrawardī in Baghdad (cf. pls. 52,90). Naskh of similar quality is found on several Ilkhanid marble miḥrābs and other examples of the Mosul marble technique; see infra, pp. 496-9.

this paint was probably applied recently (pl. 52). The background of the inscription is ornamented with a pattern composed entirely of a net-like motif.[1] Kufic appears on the two pairs of hexagonal panels. Unfortunately the inscription here is partly defaced (pl. 53a,b). The background shows a very dense arabesque.

The inscription, which was first published by al-Naqshabandī,[2] will be reproduced here with a translation. The inscription runs as follows:

١ــ بسم الله الرحمن الرحيم
1.

٢ــ الذين ينفقون أموالهم بالليل والنهار سرا وعلانية
2.

٣ــ فلهم أجرهم عند ربهم ولا خوف عليهم ولا هم يحزنون
3.

٤ــ هذي التربه للشيخ الصالح قطب العارفين أوحد عصره وفريد
4.

٥ــ دهره محي الدين محمد بن سكران رحمة الله عليه ومنشيء هذه الزاويه
5.

٦ــ ووقفها على الفقراء المقيمين والواردين واليتامى والمساكين والذرية وأبناء
6.

٧ــ السبيل وأنشأ هذه القبه خادمه ووصيه الشيخ خميس توفى الشيخ رحمة الله
7.

٨ــ عليه يوم الجمعه سنة سبع وستين وستمائه وصلى الله على محمد النبي وآله
8.

Translation

1. In the name of God, the Compassionate, the Merciful.
2. 3. (Sūra II, v. 274).
4. This mausoleum (turba) is for al-Shaikh al-Ṣāliḥ, pole of all the erudite, unique in his time, unique in his
5. period, the renewer of religion (Muḥī al-Dīn) Muḥammad ibn al-Sakrān, the mercy of God be upon him and on the founder of this zāwiya

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1. For more detail and examples see infra, pp. 454-5, 492.
2. "Muḥammad al-Sakrān", p. 198.

6. who endowed it for poor residents, those who arrive, the orphans, the needy wretches, the strangers and others who pass by (Abnā' al-Sabīl).
7. This dome was founded by Shaikh Khamīs his servant and his executor. The shaikh, the mercy of God be upon him,
8. had died on Friday in the year 667 [1268 A.D.]. God's blessing be upon the Prophet Muḥammad and his family.

The upper hexagons contain the following Kufic inscription starting at the right hand corner and continuing with the left hand one.

1. ا ـ هذه سكنى شيخ الزاويه
2. ٢ ـ عاش ثمان وثمانون سنه

It may be translated as follows:

1. This is the residence of the shaikh of the zāwiya
2. who lived for 88 years.[1]

The lower hexagonal panels starting on the left hand side contain the following:

1. لله
2. البقاء

This may be translated as

1. For God
2. is the ever lasting.

The inscription on the lower edge of the grave proper consists of sūra LXXVI, v.8. This verse is quite popular on Iraqi turbas.[2] It is noteworthy that if one considers

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1. The year of birth is not given by any contemporary authority. According to this inscription, it seems that Muḥammad al-Sakrān was born in 579/1183.
2. See infra, pp. 499-500.

the biography of Muḥammad al-Sakrān, as presented by the author of al-Ḥawādith, the verses which were used for his mausoleum seem quite appropriate, indeed they were brilliantly selected.

Section 2

The Minaret of Jāmi' al-Khulafā' (the "Sūq al-Ghazl" Minaret)

A. Historical background

Apart from historical surveys by native writers,[1] very little has been written about the architecture and architectural decoration of this minaret. Most of the relevant works are travellers' accounts and general descriptions.[2] Apparently no plan of this minaret has been published. Moreover, various confused ideas about the date of this monumental minaret - still standing in eastern Baghdad - are current; e.g. that it goes back to the time of al-Nāṣir, 575-622/1179-1225, or to the time of al-Mustanṣir, 623-640/1226-1242. Evidence from contemporary authorities, however, proves that this minaret was built 22 years after the end of the Abbasid Caliphate, during the reign of Sulṭān Abāqā Khān ibn Hūlāgū. The confusion about its dating originated shortly before 1780 when Niebuhr visited the place and wrote about it. He published the text which he found on a small fragment of wall which contained the entrance to the Khulafā' mosque.[3] This text

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1. M. Jawād, "Āthār Banī 'l-'Abbās fi'l-'Irāq", pp. 1060-1; Y. Sarkīs, op.cit., II, pp. 132-51; K. al-Janābī, Mā'dhanat Sūq al-Ghazl (Baghdad, 1966), passim; 'A. al-'Azzāwī, "Min Jawāmi' Baghdad, Jāmi' al-Khulafā'", Sumer XXII (1966), pp. 21-32.
2. Niebuhr, op.cit., II, pp. 241-2; Buckingham, op. cit., II, pp. 181-3; Massignon, op.cit., II, pp. 41-4; Herzfeld, Reise II, pp. 156-9.
3. امر بعمله سيدنا ومولانا الامام المستنصر بالله امير المؤمنين علي (أعلى) الله تعالىٰ معالم الاسلام بهمته العليه · وأزهي (وأزهى) دعايم (دعائم) الايمان بايامه لبيه (بأيالته) وذلك سنة ثلاث وثلاثين وستمايه (وستمائه) (Contd.

was copied for him by a mullā. He dated the minaret on the basis of this information. Buckingham, who visited the place about one century later,[1] gave the same date but he depended entirely on Niebuhr's information. Massignon, basing himself on the evidence of the minaret's decoration, suggested a date at least one century earlier than 633/1235.[2] Herzfeld supported Massignon.[3] This reasoning is insufficient, because in Iraq generally all the motifs of the Saljūq period were used more than a century after the end of the Abbasid period. Al-Mirjāniya in Baghdad, dated 758/1356, together with other contemporary buildings, affords ample evidence of this. Moreover, most scholars were unaware of the work known as al-Ḥawādith. This contemporary authority states clearly that this minaret was built by 'Alā al-Dīn 'Aṭā Malik al-Juwainī in 678/1279.[4]

The site of this minaret[5] was originally the site of the Mosque of the Caliphate,[6] erected by the Caliph al-Muktafī

Contd.) Niebuhr, op.cit., loc.cit. The text given here reproduces the corrections suggested by Massignon, op.cit., II, p. 44. The text no longer exists.

1. Buckingham, op.cit., II, p. 183.
2. Massignon, op.cit., II, p. 44.
3. Herzfeld, Reise II, pp. 156-9, 178.
4. Al-Ḥawādith, pp. 371, 407.
5. See map fig. 2, site no. 9.
6. Otherwise known as the Mosque of the Caliph or the Mosque of the Caliphs. It is also known by two other names: Jāmi' al-Qaṣr and Masjid Dār al-Khilāfa.

between 289-295/902-908.[1] Neither al-Khāṭīb nor Ibn al-Athīr mention any minaret attached to this mosque at the time of its foundation. But Ibn al-Athīr, in his account of the events of the year 479/1086, states that "in the month of Rabī' al-Ukhrā a minaret was built in this Jāmi'."[2] It is likely that there was a minaret here prior to this date but that it had disappeared and that a new one was built instead. However this mosque was burnt together with other public buildings during the Mongol invasion.[3] Al-Ḥawādith states that the minaret of Jāmi' al-Khalīfa was built by the order of 'Alā' al-Īn 'Aṭā Malik al-Juwainī in 678/1279. Apparently the work took about eight years, because, according to the same authority, during the year 670/1271, 'Alā' al-Dīn Ṣāḥib al-Dīwān ordered the minaret of Jāmi' al-Khalīfa to be built; the trustee of the work was Shihāb al-Dīn 'Alī ibn 'Abdallāh. The work was completed by the end of Sha'bān, but the minaret fell down in Ramaḍān after the evening prayer (luckily nobody was hurt).[4] The author of al-Ḥawādith notes among the events of the year 678/1279 the completion of the building of the minaret of Jāmi' al-Khalīfa.[5] From these facts it becomes clear that the minaret which is popularly

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1. Al-Khaṭīb al-Baghdādī, Tārīkh Baghdād I (Cairo, 1931), p. 109.
2. Al-Kāmil X, p. 104.
3. Al-Ḥawādith, p. 326.
4. Al-Ḥawādith, p. 371.
5. Al-Ḥawādith, p. 407.

called Sūq al-Ghazl is an Ilkhanid building erected by 'Aṭā Malik al-Juwainī during the reign of Abāqā Khān ibn Hūlāgū in 678/1279. Apart from this monumental minaret (pl. 60) the Mosque of the Caliphs has completely vanished; probably the only trace of it was the small fragment of the wall seen by Niebuhr.[1]

The name Sūq al-Ghazl is derived from a wool and cotton market built later on the eastern side of the minaret. During the Ottoman period a small mosque was founded on the western side of the minaret by Sulaimān Pāshā;[2] it was also called Jāmi' Sūq al-Ghazl.[3] The name later on included the minaret as well.

Contemporary authorities do not give any particular details of the exact situation of this minaret in relation to the Mosque of the Caliph. On the other hand the earliest photographs of this minaret do not show it attached to any wall. Thus most probably it was either outside the wall of the mosque or very near to its wall. It was certainly entered from the roof of the mosque. The base of this minaret does not suggest that it was originally connected with any structure in its lower part.

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1. Niebuhr, op.cit., II, p. 241.
2. The Ottoman governor of Baghdad during 1193-1217/1779-1802; see al-Alūsī, op.cit., p. 37.
3. Herzfeld, Reise III, pl. 48. This mosque was demolished in 1958.

B. Plan

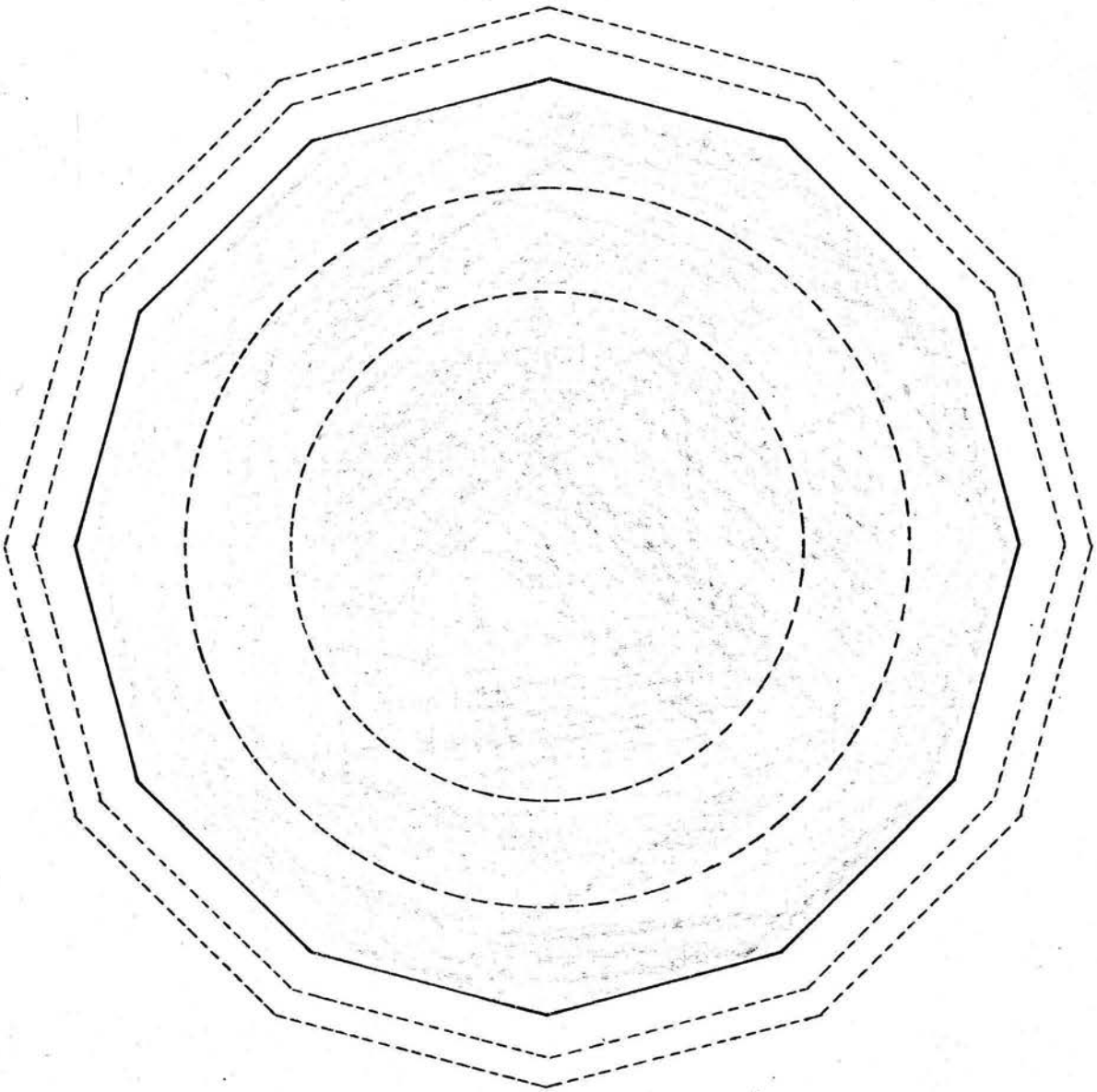
This section of the minaret consists of a cylindrical shaft built on a dodecagonal base (fig. 22).[1] Several Iraqi minarets have bases which display the evolution of this plan from the square to the dodecagonal. The earliest are the spiral minarets of the Great Mosque and the Abū Dulaf Mosque at Samarra. Both are constructed on a cubic base, i.e. of square plan, and date from the 3rd/9th century (pls. 1 and 3). The third example is from the 6th/12th century; it is the minaret of al-Nūrī Mosque which has a cylindrical shaft built on a cubic base (pl. 19). From that time onward other plans were introduced, the octagonal being the most common. Eventually, in the 7th/13th century, a new dodecagonal plan was used in Baghdad for the base of the Sūq al-Ghazl minaret.[2] In Iraq there is no other monument which displays such plan. Thus the minaret of Sūq al-Ghazl represents a unique feature in this respect.

C. Style of architecture

This minaret is built from its foundation up to ground level of brick and a mortar known locally as nūrra, then with

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1. Fig. 22 shows the plan of the foundation with shaft and gallery dotted. The necessary measurements were obtained during the last restoration by the I.D.G.A. The foundations were exposed to a depth of about one metre for this purpose and found to be of dodecagonal form. The circumference was found to be 20.64 m.; the diameter of the foundation is 6.66 m.
2. For discussion with examples see infra, pp. 379-84.





SCALE 1:50

22. Baghdad. The minaret of Sūq al-Ghazl: plan.

brick and juss from ground level to its summit.[1] The fabric of Sūq al-Ghazl is built of horizontal courses of common bond. Vertical settings appear in the upper part of the minaret (pl. 61). The height of the minaret is about 33 m.[2] Its dodecagonal base, which is 6.30 m. high, carries the cylindrical shaft, which is 16.20 m. in circumference and 26.70 m. high. The base has four layers of muqarnaṣāt which has here an architectural function in carrying the first gallery, which follows the shape of the base (pls. 62-64).[3]

In the shaft there are two pointed-arched entrances on the N.E. and S.W. (pls. 60 and 62). Both of them have the same measurements: 1.70 m. in height, 0.90 m. in width and 0.75 m. thick. They were deliberately built 0.75 m. above the floor of the gallery to prevent the rain from draining into the structure of the minaret. These two entrances lead directly to two stairs which rotate spirally in different directions around a cylindrical brick core. These stairs are so constructed that those ascending cannot meet those descending. Two earlier local minarets possess stairs arranged in the same style.[4]

The main shaft of the Sūq al-Ghazl minaret is terminated

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1. Bricks of 26 x 26 x 7.5 cm. are the most common.
2. K. al-Janābī, op.cit., p. 4.
3. The height of the wall of the gallery here is 1.25 m. and the width of the passage around the shaft is 0.96 m.
4. Examples are the minaret of Jāmi' al-Nūrī in Mosul and the minaret of Arbīl (the so-called al-Muẓaffariya), (pls. 19, 21).

by five corbelled muqarnaṣāt which carry the second gallery, this time of circular form (cf. pls. 61 and 62).[1] In this gallery the two stairs end with two pointed-arched doorways of identical shape and measurements with the two entrances in the first gallery. From the middle of this gallery the same shaft continues, but thinner and shorter, and terminating with a rounded summit. The shaft is pierced with two windows for light and ventilation inside the minaret. Buckingham stated that "the exterior surface of this minaret bears marks of violence but sufficient of it remains to show that it was highly ornamented with arabesque work."[2] This description of Buckingham's is dated before 1827 and shows the state of the minaret before any recent restoration (pl. 60). It seems that the architectural style of the minaret of Sūq al-Ghazl is unique in Iraq. All minarets built before it have differences of detail in their shapes. Although the minaret of Jāmi' al-Nūrī also has a monumental shape and a cylindrical brick shaft, it is different generally in its shape, particularly the structural shape of the base and the gallery. The only apparent similarities between them are the arrangement of the stairs and the quality of the brick ornament. Thus from this point of view Sūq al-Ghazl might be regarded as a new architectural stage in the history of the minaret and its decoration in Iraq. Forty years later Sulṭān Uljāitū

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1. The niches which form the muqarnaṣāt zone are of pointed profile. They follow here the same type of niches which are to be seen on the contemporary architecture of both Iraq and Persia.
2. Op.cit., II, p. 183.

imitated this style in the Dhū 'l-Kifl minaret.[1]

D. Ornamentation

This minaret is elaborately decorated with brickwork of fine quality and various patterns like most of the later Abbasid monuments still standing in Iraq. A common theme was arabesque executed in low relief inside the geometrical compartments. Another type has geometrical patterns formed by an elaborate bonding of the brick in a special technique known as hazārbāf.[2] According to some,[3] Sūq al-Ghazl minaret was formerly decorated with coloured tiles of which no trace is to be seen nowadays.

The prism of the base is very richly ornamented, indeed more than any other part of the minaret. Plates 63 and 64 show the base after the restoration by the I.D.G.A. Each side of this base has identical brick ornamentation. From the lowest part of the base, twelve cut brick courses of common bond reach a height of 0.90 m. They are followed by two courses of vertical bond, to a height of 0.42 m.[4] Above this is a decorative minor band 0.30 m. in width ornamented with stylized arabesque motifs in deep relief.

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1. Infra, pp. 130-8.
2. On this technique see infra, pp. 453-7.
3. Huart, Khuṭaṭ Baghdad, tr. N. Ma'rūf (Baghdad, 1961), p. 23.
4. In the Sūq al-Ghazl minaret the architect used vertical courses both as part of the fabric and as an architectural revetment. On vertical setting see also infra, pp. 366-7.

Just after this minor border there occurs an oblong panel 1.72 m. x 1.22 m., containing geometrical patterns. These consist mainly of a rather large 6-pointed star. Each point of the star penetrates a hexagonal unit. Further out, six lozenges are regularly spaced around the star and separated from it by a woven pattern (pl. 63), which is quite popular on contemporary monuments.[1] Next to this panel is another minor border followed by two vertical courses and terminated again by a minor border. Above this the muqarnaṣāt zone starts. It comprises four layers of corbelled muqarnaṣāt of a pointed shape gradually swelling outward to form a base for the gallery above them. The first layer of the muqarnaṣ is composed of a type of shouldered arch with a very elongated apex, making it an exaggerated trilobed arch. It serves as a frame for a geometrical design elaborately executed to fit within the space (pls. 63-64). As usual all these geometrical units are carved with fine arabesque. Beside each arch appears a niche of pointed form. This niche is divided into two distinct halves by the angles of the dodecagonal base (pl. 65). Each niche is filled by a stylized tree of life motif which bears foliage with curling ends which produce leaf scrolls on both sides. These foliate motifs are common in

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1. As on the turba of Zumurud Khātūn (the so-called Sitt Zubaida) (fig. 8b), al-Madrasa al-Sharābiya (the so-called Abbasid Palace) (pl. 30) and al-Madrasa al-Mustanṣiriya (pl. 38). The same pattern is found later in a brick panel above the miḥrāb of al-Madrasa al-Mirjāniya (pl. 119).

Iraqi Saljuq architectural decoration.[1] The other layers of muqarnaṣāt are decorated with arabesques and with more or less similar motifs.

The shaft of this minaret is also elaborately decorated; the predominant motif here is the swastika (pl. 62). This swastika has been identified by Massignon as the name of the Caliph 'Alī adapted to the shape of geometrical Kufic writing. It is commonly known as chahār 'Alī ("four 'Alīs").[2] The Sūq al-Ghazl's swastika consists of small brick plugs 5 x 5 cm. carved with a stylized floral motif in deep relief (pl. 66). These plugs join together to build up the swastika, which covers almost all the shaft. The shaft begins with 22 courses of brick in common bond. Thereafter two arabesque bands frame an elegant brick-work design consisting of stars laid within a woven pattern. Above this, swastika ornament begins and is terminated, as it began, with a basketwork pattern enclosed by arabesque bands.

Above this appears the severely damaged historical Kufic inscription (pl. 67), carved in bas relief on a minutely patterned background. Unfortunately this inscription is so defaced that it is impossible to read. It was not mentioned by Niebuhr who visited the minaret in 1766. But in 1907-8, Massignon was able to suggest that part of this inscription could be read as the basmalla and

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1. On this motif see infra, pp. 462-3.
2. Massignon, op.cit., II, p. 43.

Sūra XXI, v. 107.[1] The background of this inscription consists of four-petalled rosettes linked side by side, creating a network pattern. The inscription of the Sūq al-Ghazl minaret is framed by a decorative element identical to the robe motif known locally as al-'Iqāl; the parts of this robe are also decorated with a very tiny arabesque (pl. 67). Above the multiple frames of the inscription are five layers of corbelled muqarnaṣāt arranged in the same style as the first gallery and carrying the second (pls. 61 and 62). The former dodecagonal gallery is developed, this time into a circular shape, by means of the muqarnaṣāt.

From the middle of this gallery the cylindrical shaft continues, though it is narrower and shorter than the main one; it is capped by a dome. On this part of the shaft there is no decoration. The summit, however, is decorated with brick, coursed and recessed to create patterns of cross motifs.

E. The restoration

This minaret has suffered a great deal of damage, caused mainly by the Baghdad weather, which has an especially bad effect on brickwork. In addition, this monument had suffered from neglect during the last century because of the depressed condition of the country as a whole. However there is no mention in the literature of

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1. Massignon, op.cit., II, p. 42.

any major restoration of this monument between 678/1279 and 1336/1917.[1] This is even true of the Ottoman period, when Sulaimān Pāshā, in 1193-1217/1779-1802, built his mosque near this minaret. But it might be suggested that Sulaimān did carry out some minor restoration. As a result of this neglect this minaret has lost a great deal of its original ornament, and plates 60 and 61 show clearly the state of this minaret at the beginning of this century. Most of its structure was damaged. Fortunately, enough was left to enable the I.D.G.A. to establish a clear idea of its ornamental scheme which was of great assistance in the restoration process and reconstruction of patterns on its structure. In 1927 an Iraqi historian stated that in 1917 the British High Commissioner, Sir Percy Cox, wished to demolish this minaret because there was a danger of it falling on the inhabitants of the Sūq al-Ghazl quarter.[2] But al-Alūsī, an eminent Iraqi scholar, persuaded him to change his mind, and eventually this monument was saved from total destruction.[3] Shortly afterwards, in 1917, the first restoration was carried out by the Baghdad Municipality, and the base was strengthened.[4]

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1. For the restorations of the mosque proper see al-'Azzāwī, op.cit., pp. 26-8.
2. Sarkīs, op.cit., loc.cit.
3. Mahmūd Shukrī al-Alūsī, the well-known author of Masājid Baghdad.
4. The work was carried out by a French engineer called Chavannes (K. al-Janābī, op.cit., p. 2).

In 1937 another move was made to cut down the upper part of this minaret. This was the result of a decision made by two foreign engineers, Theodore Jacks and James Baxter, but the I.D.G.A. prevented this as well.[1] In 1937 a large-scale restoration of this minaret was started, and the work was completely accomplished in 1960. Nowadays, the minaret is surrounded by a modern mosque built by the Ministry of al-Awqāf in 1965 (see pl. 68). This modern mosque is specifically planned and decorated to reproduce the well-known elements of Abbasid architecture and brick ornament and to pay homage to this impressive monument.

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1. Ibid.

Section 3

The Minaret, Masjid and Turba of Dhū 'l-Kifl

A. Historical background

The Ilkhanid shrine complex which is known at present as Dhū 'l-Kifl is composed of a minaret, a masjid and a turba, topped with a muqarnaṣ dome. It is situated in a village known as al-Kifl, midway between Ḥilla and Najaf, about 130 km. to the south of Baghdad.[1] Despite the considerable architectural and decorative importance of the building very little information regarding these aspects has been published.[2] The other publications of this building are either historical or general descriptions published by western travellers, scholars and native

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1. The site of the building is about 100 m. to the right-hand side of the modern road which connects Ḥilla, Kūfa and Najaf. According to Ibn Baṭṭūṭa, op.cit., II, p. 96, the old name of the village was Bīr Mallāḥa. Massignon during his visit in 1908 stated that local tradition identified it as al-Nukhaila (op.cit., I, p. 53). However, the village is at present known only as al-Kifl.
2. In 1942 Herzfeld for the first time published the historical inscription of the minaret and dated it accordingly in 716/1316; see his "Damascus I", p. 29, figs. 70-2. Then in 1955 Wilber published a brief account of the minaret derived from Herzfeld's illustrations (op.cit., p. 154). In both these two works the minaret is the main subject. On the minaret see also A. al-Ḥadīthī, "Ma'dhanat al-Kifl", Sumer XXVIII (1972), pp. 121-7.

historians.[1] Undoubtedly, the building is of greater importance than these publications would indicate, and is still in need of a detailed study to reveal its architectural and decorative consequence in the history of Iraqi architecture during the 8th/14th century. This building was first recorded by the I.D.G.A. on 18th June 1934.[2] The plan of the masjid and the turba with its interior decoration will be presented here for the first time.

The earliest building erected on this site is a tomb over the reputed grave of the Prophet Ezekiel.[3] Among the Jews of ancient times, this was, and still is, considered a highly revered place of pilgrimage.[4] Two mediaeval Jewish travellers who visited the place wrote accounts of it;[5]

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1. See I. Goldziher, EI[1], pp. 962-3, article "Dhū 'l-Kifl", with bibliography.
2. I.D.G.A., File No. 6/42 Manarat al-Kifl.
3. Yāqūt, Mu'jam al-Buldān II, p. 594.
4. On its importance among the Jews, see Jewish Encyclopedia V (New York and London, 1902), p. 316.
5. The first was Benjamin of Tudela. He visited the tomb of Ezekiel in 561/1165 and described it æ a huge building containing 60 chambers; in the middle of it was the tomb chamber of Ezekiel topped with a great dome (see Rihlat Banyāmīn, tr. 'Izzrā Haddād (Baghdad, 1945), pp. 142-3). The second was Rabbi Pétachja who visited the place about 20 years later. He states that the interior of the tomb was gilded, that the sarcophagus of the Prophet Ezekiel was made of very fine wood inlaid with gold pieces, and that the interior of the dome was gilded and ornamented with inlaid crystals, see ibid.; see also E. Carmoly, Tour du Monde ou voyages du Rabbin Pétachja de Ratisbonne (Paris, 1831), p. 45 (apud, Goldziher "Dhū 'l-Kifl", p.963).

their descriptions do not, however, tally with the existing tomb which is most probably attributable to the Ilkhanid period. Certain problems remain, such as how this tomb came to be known as Dhū 'l-Kifl; the identity of Dhū 'l-Kifl; his relationship to Ezekiel; the date that this tomb was converted to a Muslim tomb and the reason for this; and, finally, the date of the most recent alteration of the building. The answers to these problems help to explain the religious and historical context of this building.

The Muslim reverence of Dhū 'l-Kifl apparently stems from the fact that this personage is mentioned twice in the Qur'ān in connection with a series of prophets, firstly in Sūra XXI, v. 85 as follows: "And (mention) Ishmael, and Idrīs, and Dhū 'l-Kifl. All were of the steadfast";[1] and secondly in Sūra XXVIII, v. 48, which runs as follows: "And make mention of Ishmael and Elisha and Dhū 'l-Kifl. All are of the chosen".[2] Muslim exegesis is not unanimous on the character of Dhū 'l-Kifl; it is not agreed whether he was a prophet or merely a pious servant of God.[3] According

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1. M. Pickthall, The Meaning of the Glorious Koran, 3rd ed. (New York, 1954), p. 239. His comment about Dhū 'l-Kifl is that he is a prophet famous among Arabs, and that his story resembles that of Ezekiel (ibid., n.2.).
2. Ibid., p. 327.
3. On this matter, see for example al-Rāzī, Muḥammad Fakhr al-Dīn, Mafātīḥ al-Ghaib VI (Būlāq, 1289/1872), p. 185; al-Zamakhsharī, Kashshāf II (Cairo, 1307/1889), p. 53.

to Goldziher Dhū 'l-Kifl is a second name of Ezekiel as is the case with four other prophets who have two names, such as Ya'qūb:Isrā'īl; Yūnus:Dhū 'l-Nūn; 'Isā:al-Masīḥ; Muḥammad:Aḥmad.[1] Other modern researchers also suggest that Dhū 'l-Kifl is the Arabic and Islamic form of Ezekiel.[2] This suggestion, if it is true, would explain the relationship between the two names and make clear the change from the original name of the tomb, which took place during the Ilkhanid period.

The authorities, who are all agreed that the conversion took place during the reign of Sulṭān Uljāitū (716/1316), do not state any reason for it.[3] Ḥamd Allah Mustaufī al-Qazwīnī states that Sulṭān Uljāitū took from the Jews the privilege of the guardianship of the tomb of Dhū 'l-Kifl and handed it over to the Muslims, and that he also built a masjid with a minaret in the place.[4] According to Herzfeld the turba should also be attributed to Uljāitū, mainly because its present appearance is quite different from that

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1. Op.cit., p. 962, also giving the meaning of the name and details of the legend.
2. See A.Y. 'Alī, The Holy Qur'ān II (Lahore, 1934), p. 841, n. 2743; Pickthall, op.cit., p. 239, n.2.
3. Ḥamd Allāh Mustaufī al-Qazwīnī, Ta'rīkh-i-Guzīda II (Gibb Memorial Series, XIV) tr. by E.G. Browne and R.A. Nicholson, (Leiden-London, 1913), p. 22; idem, The Geographical Part of the Nuzhat al-Qulūb II tr. G. le Strange (Leiden, 1919), p. 39.
4. Ibid.; the same information is mentioned in Nuzhat al-Qulūb, op.cit., loc.cit.

described by the above-noted mediaeval Jewish travellers.[1]

After the addition of the masjid and the minaret in 716/1316 the place became purely Islamic and remained thus until the beginning of this century. According to Massignon, the building, which includes the turba and the masjid, was re-converted to a Jewish sacred place through the influence of the Jewish multi-millionaire Menāḥīm ibn Danyāl, who was also responsible for the restoration of the building.[2] Apart from the minaret no element of Islamic religious architecture can be traced at present on the site.

B. The Minaret

The historical inscription of this minaret, which is published by Herzfeld,[3] makes it clear that the minaret of Dhū 'l-Kifl was ordered by the Mongol ruler Uljāitū Khudābanda who died in 716/1316, and completed by his son and successor Abū Sa'īd immediately afterwards.[4]

The minaret of Dhū 'l-Kifl is undoubtedly the most impressive monument on the site (pls. 69-73), and it is surprising that such an important building, as well as its adjoining structures, is so little known. Although the minaret has suffered a great deal of damage, it still retains most of its original structure and brick ornament. It is situated about 33 m. away from the north-eastern corner of

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1. Herzfeld, "Damascus I", loc.cit.
2. Op.cit., loc.cit.
3. "Damascus I", p. 29.
4. Ibid.

the masjid, set into a semi-circular projecting bay.[1] This bay is in fact a part of an ancient high wall with semi-rounded bastions. The wall itself is the outer enclosure of two khāns belonging at present to Menāḥīm ibn Dānyāl.[2]

The minaret of Dhū 'l-Kifl, which is about 24 m. in height, is not as high as the contemporary minaret of Sūq al-Ghazl, which is about 33 m. high.[3] It is composed of a cubical base, a cylindrical shaft terminating in a circular gallery and finally a sham'a with a small, ribbed dome. The base of this minaret represents a return to the early Saljuq square shape.[4] It measures 5.40 m. raised 4 m. above the modern ground level. It is built of brick and juss in common bond,[5] and has no decoration. Judging from the rich brick ornament at the base of the Sūq al-Ghazl minaret, this feature in the minaret of Dhū 'l-Kifl is rather unusual. An earlier photograph of the minaret

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1. The projection of the wall is 5.20 m., the minaret being set approximately in the middle of the bay about 1 - 1.45 m. away from the wall of the bay proper.
2. They are Khān Quraish and Khān al-Sīf. Both these khāns were used until quite recently as residential places for the Jews during the pilgrimage season. For more details of these khāns, see I.D.G.A., File No. 6/42.
3. In fact this is not the only aspect in which they differ. The minaret of Dhū 'l-Kifl displays other architectural differences such as the shape of the base, the number and shape of the galleries, the system of the staircase and the number of entrances.
4. For details see infra, pp. 379-84.
5. The bricks range from 20 to 22 cm. square. The thickness is between 4.5 and 5 cm. Common bond is also used for the structural core of the minaret.

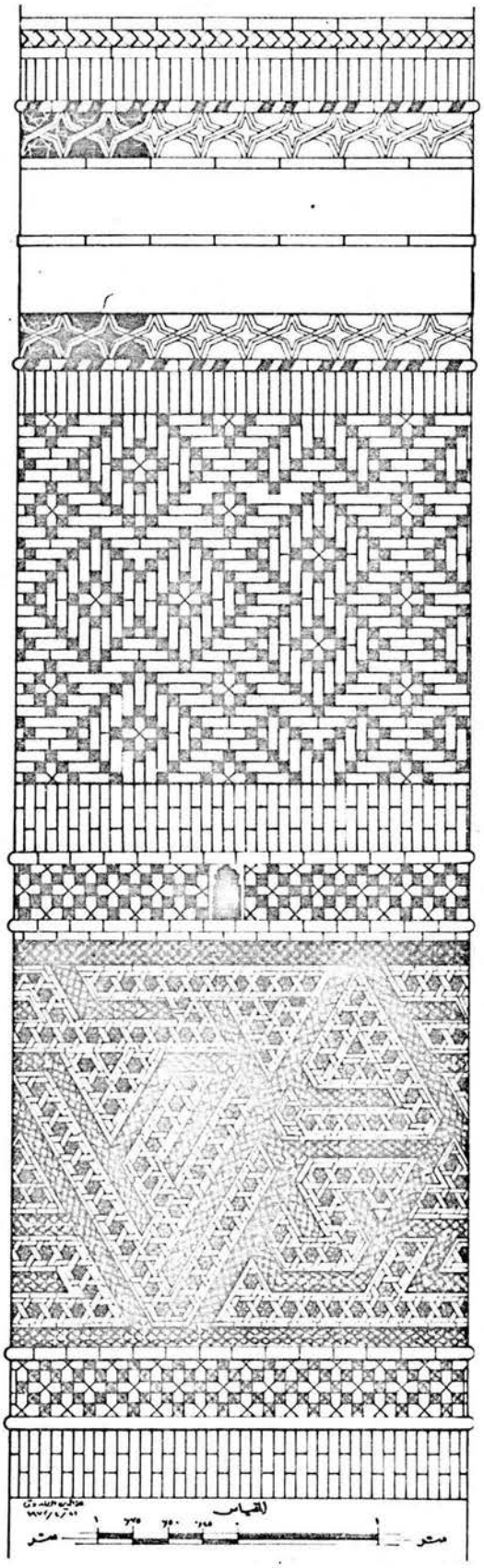
(pl. 69) shows that a staircase was attached to the north-west side of the base. It was built over a pointed-arched recess and led to the roof of a room with an arched entrance linked with the base. This room and the staircase no longer exist (pl. 71).[1] This construction at the base was probably the only way that led to the entrance of the minaret.

The minaret of Dhū 'l-Kifl exhibits perhaps the most elaborate ornamentation of mediaeval Iraqi minarets. The lavishness and the variety of its brick ornamentation can only be compared with the minaret of al-Nūrī Mosque (566-8/1170-2) and the minaret of Sūq al-Ghazl (678/1279). As far as the brick ornamentation of Iraqi minarets is concerned, one may suggest that the minaret of Dhū 'l-Kifl is the last and the unsurpassed example of this elaborate traditional technique.

The cylindrical shaft of the minaret of Dhū 'l-Kifl is 10.27 m. in circumference and 20 m. in height. It has several ornamented zones. The lowest part of the shaft, which contains the entrance, is composed of courses of cut brick in common bond.[2] This zone is bordered on its lower and upper parts by a row of bricks set vertically (pls. 71, fig. 23). This zone is followed by a decorative band

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1. On the basis of the assumption that this room was original, it may be suggested that it was used by the mua'dhdhin of the mosque.
2. The entrance is 1.28 m. in height and 0.50 m. in width. It is of rectangular shape at present. This unusual shape suggests that it was built recently to replace the usual pointed-arched one.



23. Al-Kifl. The minaret of Dhū 'l-Kifl: detail of brick ornament.

composed of pieces of rectangular plain brick combined with square brick plugs carved in low relief with a four-pointed rosette. The pattern of this band is purely geometrical. The plain brick pieces are set so as to build up cross shapes with the square plugs set on a slightly lower level in between them (pl. 72). The cross pattern is one of the most popular motifs on the brick minarets of both Iraq and Persia and in many cases appears together with hazārbāf.[1] The next section is 2.87 m. in width. It has an elaborate Kufic inscription built up of small pieces of terra-cotta (pl. 72).[2] The main attraction is not only the small pieces which build up the words, but also the style in which the words are arranged. They are set in a pattern of alternate upright and inverted triangles. The letters of the inscription are in a type of angular Kufic.[3] The style of the writing and the way each individual word is built up is undoubtedly the unique and most

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1. Cf. pls. 19, 22, 24, 26 and 62. Persian examples are illustrated in SPA IV, pls. 358b, 359a,b and 360 a,b.
2. The plain small pieces are used as an outline of each word and also placed diagonally and enclose hexagonal polygons decorated with minute arabesque patterns. The background, which is at a lower level, is ornamented with quite a dense pattern composed of minute star-like motifs linked together and creating a network-like pattern.
3. On this type of Kufic script see infra, pp. 493-5.

impressive artistic feature of this minaret. Herzfeld does not mention this inscription, while Wilber states that it spells out pious words.[1] These words are rather difficult to read, mainly because only one third of the inscription remains intact, and because of the decorative style in which it was executed. Thus the suggested reading is not very certain, though it is at least plausible. It may be read as " على حبي محمد وعلي ", "For the love of Muḥammad and ʿAlī."[2]

The next section is a narrow band identical to the one below the Kufic inscription. This is followed by another narrow band of plain brick in vertical common bond. The wide zone of hazārbāf starts immediately after these two bands. It is composed of standard bricks, whose joints are inset with end plugs of moulded terra-cotta decorated with a four-pointed star (fig. 23). This zone terminates with a row of bricks set vertically.

The next zone consists of a two-line historical inscription[3] framed by two elaborate brick bands (pl. 73). These two bands are ornamented with a characteristic combination of geometrical units and arabesque. These two bands

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1. Op.cit., loc.cit.
2. The names Muḥammad and ʿAlī are quite recognizable in fig. 23, the reconstruction of the inscription drawn by the I.D.G.A. It could also be argued that the missing parts of this inscription were a repetition of the above-stated formula.
3. It is published by Herzfeld; see "Damascus I", p. 29.

are also bordered on both sides with an ornamented torus motif known locally as 'iqāl, similar to that previously noted on the minaret of Sūq al-Ghazl.[1] The inscription was already badly damaged when Herzfeld visited it at the beginning of this century (pl. 73). It is carved in relief on a series of terra-cotta slabs, each slab containing several letters executed on a dense arabesque background. The style is a type of crowded naskh with many vowelling signs. The inscription runs as follows

1. ا ـ ... لا ... السلطان الأعظم غياث الدنيا والدين (خداب) نده
محمد طاب ثراه[2] وتم (ت) في (د ول) ة ول (د ه) السلطان ....
2. ٢ ـ (ا) لله تعالى وطلبا لجزيل ثوابه[3] الأمير المعظم العادل ملك
الأمراء منشئ العدل ومقرره وحامي .[4]

Translation[5]

"1....the august Sulṭān Ghiyāth al-Dunyā wa 'l-Dīn [Khudāb]anda Muḥammad, may his grave be pleasant,[6]

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1. There it is also used as the outer-most frame for the historical inscription (cf. pls. 67 and 73).
2. Herzfeld reads ثوابه . According to the contemporary tombs with inscriptions found in an underground graveyard (sirdāb) under the courtyard of the Mausoleum of 'Alī in Najaf, this word should read as suggested above. For the inscriptions of these tombs see infra, p. 169.
3. Herzfeld reads ثوابه .
4. This word does not appear in full in Herzfeld's reading.
5. The above is Herzfeld's translation reproduced here with some amendments.
6. The root طاب connotes such concepts as pleasant, good and so on. Another derivative of the same root means "to perfume oneself" (see E.W. Lane, An Arabic-English Lexicon

(Contd.

and it was finished under the reign of his son, the Sulṭān...

2. Allāh, be He exalted, and demanding His most generous reward, the exalted Amīr, the just, King of the Umarā', the promoter and establisher of justice, the protector....."

Immediately above the zone of the inscription is a row of plain bricks in vertical setting followed by a decorative band composed of lozenges linked together like a chain and bordered by other geometrical pieces.[1]

Above this starts the zone of the muqarnaṣāt. It is composed of four corbelled layers[2] swelling out gradually

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Contd.) I - part 5 (London, 1874), pp. 1900-01). It is of course a commonplace in Islamic epigraphy to describe a grave as "perfumed" and it is tempting, though perhaps not wholly defensible, to suggest that the phrase under consideration should be translated "may his grave be perfumed".

1. Like the two similar bands which frame the historical inscription, this band is without parallel on the contemporary buildings of Iraq or indeed on those of an earlier date.
2. The first layer is composed of a series of alternating flat niches and niches with salient apices, both being of pointed-arched shape. These niches are ornamented with arabesque generally similar to that on earlier and later Abbasid and Ilkhanid examples (cf. pls. 11, 33 and 65). The second layer is composed of pointed-arched niches with salient faces. The third layer is basically of similar composition to that of the first layer. Four of these flat niches serve as windows as well. The fourth layer is a series of concave pointed-arched niches. The last three layers as well as the gallery were largely restored in 1939. The closest structural parallels to these muqarnaṣāt in Iraq are those of the minaret of al-

(Contd.

to form the projection of the gallery, which is circular. Plates 69, 70 and 73 show the layers of the muqarnaṣāt being badly damaged, and the exposed part also shows that wooden beams were incorporated in their construction. The muqarnaṣāt zone is lavishly ornamented with fine brick ornament. On the sides which face the four cardinal points of the compass the flat niches are left open to serve as windows (pl. 71).

The sham'a stands as an undecorated short and narrow column laid in common bond and topped with a fluted dome.[1] Lighting and ventilation inside the minaret are secured by means of four small rectangular openings in the shaft and eight pointed-arched openings in the muqarnaṣat zone, as well as by means of unplugged scaffolding holes in the sham'a.

The entrance at the lowest part of the shaft leads to a spiral staircase composed of 60 steps rotating around a cylindrical core.[2] The staircase leads to the gallery through a rectangular doorway.

Contd.) Khaffāfīn (originally 599/1202) and the minaret of Sūq al-Ghazl (678/1279) (see pls. 24 and 62). In Persia the most relevant examples are the minaret of Baṣtām (dated 514/1120) and the minaret of Saribān, Iṣfahān, datable late 6th/12th century (see SPA, pls. 360b, 362 and 366).

1. According to the available evidence the fluted dome of the minaret of Dhū 'l-Kifl seems to be the earliest existing example in Iraq. Later this feature appeared on the minaret of the Great Mosque of al-Kūfa (infra, pp. 248-51, pl. 143); then it appears on the minaret of Jāmi' al-'Aqūlī (pl. 109).
2. This staircase is typical and traditional. It is also found in many minarets of Persia in that period (Wilber, op.cit., p. 56).

The style of architecture and the rich ornament - which both follow earlier Iraqi models - suggest that purely local traditions were followed by the architect in building and decorating the minaret of Dhū 'l-Kifl.[1]

C. The Masjid

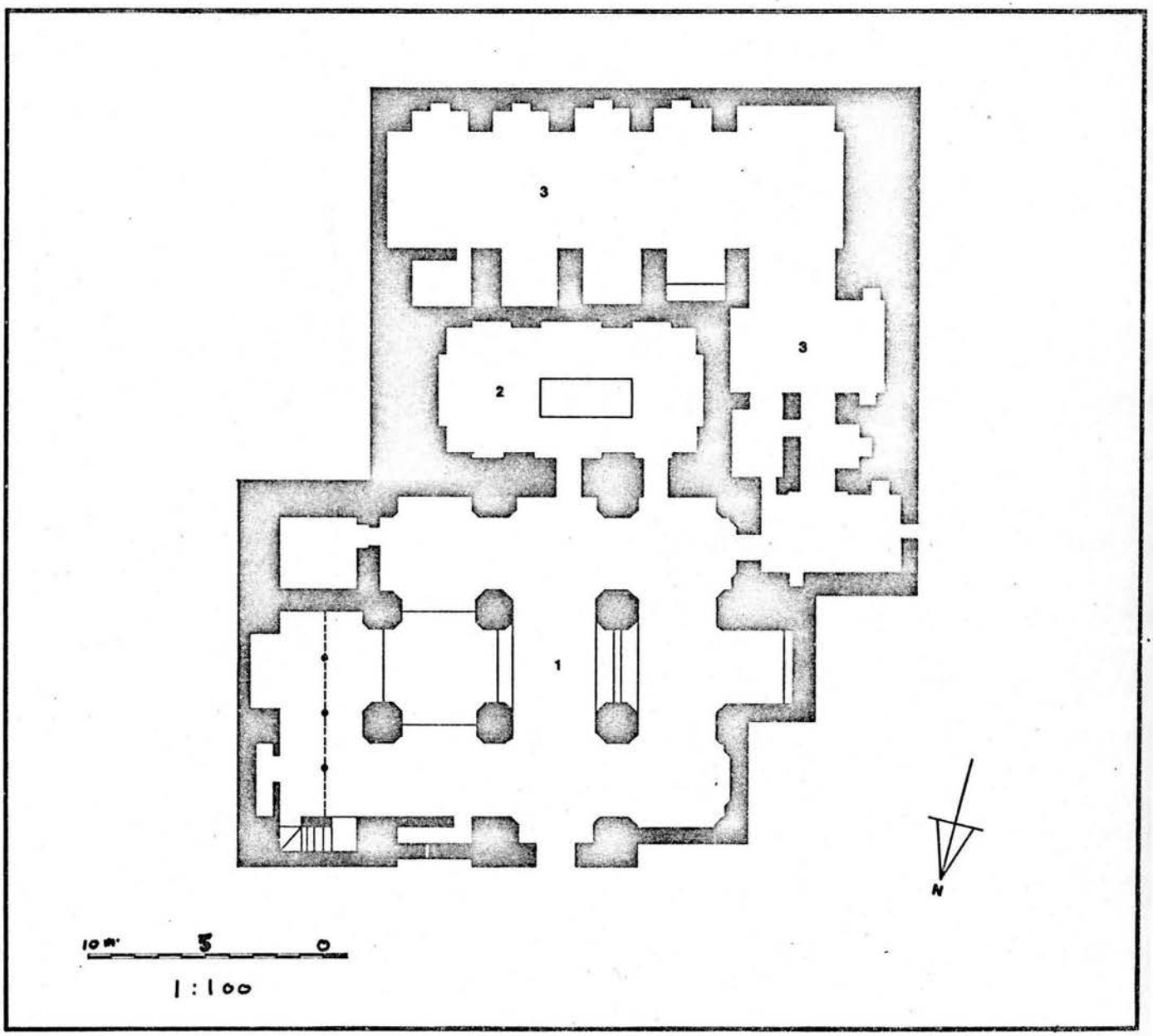
The present masjid was subjected to a great deal of vandalism and alteration during the later Ottoman period. This took place when the whole building was converted for use as a Jewish sacred place. At present no miḥrāb is to be seen in the qibla wall, and the exterior and interior façades of the walls are plastered with juṣṣ (pls. 74, 77). The interior façades are decorated with polychrome painted motifs composed of naturalistic leaf and flower scrolls of quite recent date (pl. 77). This is combined with Hebrew texts either applied directly on the upper parts of the walls or set in frames and hung on the walls (pl. 79a). Possibly this recent Hebrew decoration replaced that of the Ilkhanid period which presumably embellished this masjid. The altered and restored state of this monument, and the lack of earlier descriptions or photographs, means that the only way to isolate the original elements of this masjid is by rigorous examination of the present structure. It

1. Wilber, in his brief account of this minaret, also refers to this fact when he states that the ornament is much more closely related to the contemporary technique in Baghdad than to the decorative features of Persian monuments (ibid., p. 154).

seems that there was a large open courtyard in front of the musallā, whereas the present courtyard (pl. 74) seems diminished by the surrounding buildings, which according to their style date from the later Ottoman period. The musallā is a rectangular hall (fig. 24, no.1) roofed by nine low domical vaults and entered by means of a single pointed-arched entrance (pl. 75). The arch of the entrance is at present hidden behind a recent rectangular entrance which contains a rectangular wooden door composed of two panels.[1] Since arched entrances with such a profile were popular in the contemporary buildings in Iraq one may suggest that the hidden pointed-arched entrance of this masjid is the original Ilkhanid one. The exterior façade of the musallā has two rectangular recesses on the left hand side of the entrance. The one which is nearer to the entrance frames a rather deep pointed arch. The next one possibly used to have the same pointed recess. In any case these two recesses enclose two rectangular windows with iron bars. These recesses and windows may be part of the original façade and possibly correspond to a vanished but similar composition on the right-hand side of the entrance (pl. 74). This suggestion gains weight from the fact that recesses with pointed profiles and rectangular windows, and also simply rectangular windows, were well known in Iraq during

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1. The rectangular frame of the entrance with its plain swastika ornament is typically Ottoman.



24. Al-Kifl. The shrine complex of Dhū 'l-Kifl: plan.

the 6th-8th/12th-14th centuries.[1]

The interior of the musallā, as noted above, lacks the original decoration. The brickwork on some lower parts of this musallā is exposed (pls. 77, 78). The size of the bricks is the same as that of the above-mentioned minaret. The bricks are laid in common bond. The main interest of the musallā lies in the method of its roofing which shows unmistakable originality. The system of roofing involves setting three rows of vaults vertically against the qibla wall. Each row has three domical vaults constructed on large arches of pointed profile and supported by six octagonal piers, together with half piers which merge with the supporting walls of the musallā on the other side (pls. 77, 78).[2] The square areas which result from

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1. The earliest rectangular stucco window known in Iraq occurs in the musallā of al-Nūrī Mosque in Mosul dated 566-8/1170-2 (see infra, pp.338-41 and pl.184). Pointed-arched recesses with rectangular windows are to be seen on the exterior façades of both al-Madrasa al-Mirjāniya and Khān Mirjān 758-60/1356-8 (see pls. 125, 134). In the lower part of the dome of the mausoleum of Uljāitū at Sulṭāniya in Persia there are four rectangular openings, which acted as windows, in addition to other types of windows; see A. Godard, "The Mausoleum of Öljeitü at Sulṭāniya", tr. P. Ackerman, in SPA, p. 1114.
2. The top of alternate sides of the octagonal base of these piers ends in a concave arch with a projecting apex, thus giving the upper part of the pier a square ground plan (pl. 78b). Octagonal piers are rare in Iraq. A contemporary parallel to these piers is found in the octagonal columns of glazed brick in the interior angles of the mausoleum of Uljāitū in Sulṭāniya (see Godard, op.cit., loc.cit.). The Sulṭāniya columns are, however, engaged, not free-standing like those at Dhū 'l-Kifl.

the distribution of the piers, the half piers and their arches are gradually converted to a 16-pointed star figure and thus a 32-sided figure by means of a zone of transition comprising three layers of triangular and diamond-shaped muqarnaṣāt (pls. 76, 78a). Each vault then continues smoothly, terminating with a small circular hole in the middle.[1] The main middle aisle which usually marks the miḥrāb axis and is known as bilāṭat al-miḥrāb is at present converted for use as a main passage which leads to the entrance of the turba of Dhū 'l-Kifl (pl. 76). The miḥrāb no longer exists.

The conclusion which may be drawn from the above discussion is that despite considerable alteration and damage, the masjid of Dhū 'l-Kifl still retains some features of its original structure, which possibly dates from 716/1316. These features are: the system of vaulting,[2] the arches

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1. This was probably used for hanging qandīls for illuminating the inside of the muṣallā. At present these holes are covered from the exterior of the roof by glass pyramidal covers which let in light during the day.
2. It could be argued, on the basis of comparisons with Timurid architecture in Iran, where such vaulting follows a distinct and well-documented development, that these vaults date from the 9th/15th century or even later. But comparison with the inner vault of the turba of Shaikh 'Umar al-Suhrawardī (infra, pp. 150-62) and with those at the entrance of al-Mirjāniya and in Khān Mirjān suggest that this type of vaulting was known in Iraq in the 8th/14th century. The comparative dearth of examples in Iraq, however, leaves the question of the date and origin of such vaulting finally unresolved.

and the composition of the exterior façade of the musallā.

D. Projected structure

Several projecting structures in both the masjid and the turba of Dhū 'l-Kifl are to be seen, particularly on the north-eastern, south and south-western sides (see plan, fig. 24, no.3). As these buildings have been repeatedly restored it is difficult to decide whether they are original or a recent addition. Among all these buildings the one which is situated immediately behind the southern wall of the turba seems to be original (pl. 79b). It is a long rectangular hall which contains a row of four cells on each side, each structurally similar to small Iwāns. These cells are vaulted with barrel vaults, each terminating in a pointed arch. The only interest of this hall lies in its vaulting system. The courtyard of this hall is covered with an elaborate vault carried over five large transverse arches of pointed profile. These transverse arches are supported by the walls which separate the cells from each other. These walls in fact support the inner vaults of the cells as well and act as piers for the transverse arches. The idea of this type of vaulting in Iraq is well developed and fully advanced in the vault of Khān Mirjān, 760/1358.[1] It may be suggested that this vaulted hall was either used as lodging for distinguished guests and visitors or as a place for religious teaching.

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1. See infra, pp. 238-43, pl. 140.

E. The Turba

The turba is built of brick and juss and is in a comparatively good state of repair. The plan (fig. 24, No.2) shows that the turba and the masjid shared the southern wall and were, in fact, structurally linked. The turba is rectangular in plan. For the purpose of erecting the dome this rectangular area was divided into three square parts. The part which contains the sarcophagus is topped with a muqarnas dome (pl. 80). The second and third parts are roofed with domical vaults of the same type and construction as those previously discussed in the masjid (pl. 81b).

The way into the turba at present is by means of two entrances. The one in the middle (pl. 76) was probably opened recently and replaced the miḥrāb which in all probability used to occupy this space.[1] The second entrance, which has also been restored recently, seems to be the original one.

The muqarnas dome of Dhū 'l-Kifl is in fact the first example of a muqarnas dome in Iraq with two entirely different and separate shells. The exterior thus no longer reflects the interior (cf. pls. 82 and 84). Apparently this evolution in the construction of the muqarnas dome took place in Iraq during the Ilkhanid period.[2] The square

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1. This suggestion is based on the fact that the middle vertical axis (bilāṭat al-miḥrāb) usually leads to the miḥrāb for which the most common place is the middle of the qibla wall in almost every mosque; See A. Fikrī, Masājid al-Qāhira wa Madārisuhā, al-Madkhal (Cairo, 1962), p. 298 (hereinafter, al-Madkhal).

2. See infra, p p. 441-4.

chamber of the turba proper under the inner hemispherical dome is converted to a 64-sided figure and then to a circular shape by means of an elaborate zone of transition made up of five layers (pls. 82-84). The first layer is composed of four large plain squinches, each one set in one of the four corners of the square.[1] The tops of these squinches reach the second layer. Each one of them takes the shape of a semi-dome faced with an arch of pointed profile. Between each two of these squinches is another row of three units of muqarnaṣāt of a quite peculiar shape. They have an angular sharp profile, the one which is in the middle being wider than the others and having a flat face (pl. 83a). This is flanked on both sides by slightly concave muqarnaṣāt. The architectural function of the first layer is principally to convert the square to an octagonal shape, while the function of the second layer is to convert the resultant octagon to a 16-sided figure. This is achieved by setting a rather small muqarnaṣ of concave pointed shape in each corner of the octagon. Each pair of them occupies the spandrels of the four large squinches. By virtue of these and the continuation of the flat muqarnaṣāt of the first layer, the 16-sided figure is obtained and the base for the 32-sided figure of the third layer is already established. The third layer is a set of

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1. Prototypes of such squinches are to be seen at Fīrūzābād, in the Palace of Ardashīr (early 3rd century) and in the main dome chamber of the Sasanian palace at Sarvistān (SPA pls. 146a and 148c).

muqarnaṣāt, some with a flat surface while others have a salient apex (pl. 82a). The ends of these pointed muqarnaṣāt make up a star with thirty-two points. The fourth layer is a row of short concave muqarnaṣāt forming another 32-pointed star. The fifth layer is a row of rather small muqarnaṣāt with pointed profiles and salient apices. The function of this layer is to convert the 32-pointed star to a 64-sided figure. By filling the spandrels of this 64-sided figure the circular base of the dome is finally achieved. On this the smooth inner hemispherical dome of Dhū 'l-Kifl is erected. This type of transition zone is unique in its detail and without a parallel in all the existing domes of Iraq.

On the four sides of the domes which face the four main cardinal points the upper parts of the zone of transition are pierced with four square windows. They are the only source of light and ventilation inside the dome. The inner shell of the dome is ornamented with polychrome painted plaster. The pattern is an elaborate stylized scroll (pl. 82b). Since such mural polychrome painting is already found in Iraq and Persia during the Ilkhanid period there is no reason to doubt that this is an original part of the decoration of this dome.[1] The zone of transition is

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1. Mural paintings were well known in Iraq during the Umayyad and early Abbasid periods and examples were discovered by the I.D.G.A. in the Dār al-Imāra at Kūfa and at Samarra. In the Ilkhanid period polychrome plaster is to be seen in the inner dome of Shaikh 'Umar al-Suhrawardī in Baghdad. In Persia examples of polychrome plaster are ubiquitous; examples occur inside the mausoleum of Uljāitū at Sulṭāniya and in the tomb of Sayyid Rukn al-Dīn in Yazd dated 725/1325 (see Wilber, op.cit., pls. 76-7, 80-3 and 143).

plastered with _juss_, but the inner concave faces of the four large squinches retain some polychrome plaster which is in the form of a disc filled with minute arabesque. The quality of this ornament, and the range of colour used, which is similar to that used on the inner face of the dome, suggests that this ornament is also original.[1] The interior façades of the four walls beneath the dome are also plastered with _juss_. The middle and the upper parts of these walls, as well as the first layer of the _muqarnaṣāt_, are decorated with polychrome painted patterns. Judging by their quality and colours they date from the later Ottoman period. On the southern wall of the _turba_ which faces the entrance there is a pointed-arched niche of flat surface (pl. 81a). One cannot with any certainty suggest that this niche was originally meant to be a _miḥrāb_. The pointed arch on the western wall (pl. 83a) is framed by a slightly projecting segmented arch situated immediately below the zone of transition.

The exterior dome of the _turba_ of Dhū 'l-Kifl, as already noted, is completely different in style and construction from that of the interior. It is of a pyramidal form composed of eleven layers of _muqarnaṣāt_ of pointed arched profile constructed over an octagonal prism and topped by a small hemispherical dome of slightly pointed profile (pl. 80). The octagonal base is obtained

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1. A similar polychrome painted disc is to be seen in Shaikh 'Umar al-Suhrawardī (pl. 92).

by virtue of the four large inner squinches. Five layers, each composed of a 16-sided figure and diminishing progressively in their diameters, are constructed over this octagonal base and below a flaring balcony. Each of these five layers has a recessed blind arcade of sixteen pointed-arched niches. The sixth layer is crowned by a balcony or platform in the shape of an eight-pointed star decorated at the base with sixteen arched niches of alternating flat and salient apices. Above this platform are raised another five layers of octagonal form. Each one is smaller than the one before it and the first four are recessed with eight pointed niches with flat faces. The fifth layer is a rather long and narrow octagonal prism topped with a small dome of slightly pointed profile. The whole exterior of this muqarnas dome is plastered with juss. The muqarnaṣāt, which give a honeycomb effect, are the only decoration on the exterior of this dome. As this dome is merely an outer cover for the inner hemispherical shell, no windows are needed.

The earliest example of a muqarnas dome is that of Imām Dūr (pls. 4 and 5). This dome is erected over a high cubical chamber by means of an octagonal base followed by another four octagons taking the shape of an 8-pointed star.[1] The second example is the muqarnas dome of Zumurud Khātūn (Sitt Zubaida) (pl. 8 and fig. 4). It is erected over an 8-sided chamber. Above the zone of transition, which consists of eight compound brackets, rise ten zones of

1. Herzfeld, Reise I, p. 232.

muqarnaṣāt, like a rich lotus design (pl. 9). Above the seventh the units would have become too small had their number remained at sixteen, and so at the seventh course they change over to eight units.[1]

The third Iraqi muqarnas dome which also has a single shell is that of the turba of al-Ḥasan al-Baṣrī (pl. 14), dated in the first half of the 7th/13th century. The tomb chamber is square in plan, and by means of a zone of transition the square chamber was as usual converted to an octagonal form. Eleven layers of muqarnaṣāt follow, forming the pyramidal shape of the dome which ends with a small dome. All the eleven interior layers have sixteen muqarnaṣāt each. The number of the layers on the exterior of this dome is not echoed in its interior. The exterior comprises seven layers of muqarnaṣāt constructed over an octagonal base and topped with a small rounded dome.[2] The fourth dome of this kind is the dome of Dāqūq, which is datable to the same period as that of the dome of al-Ḥasan al-Baṣrī.[3] This dome is erected over a square tomb chamber. The closest parallel to this dome is the dome of al-Ḥasan al-Baṣrī.[4] In these two latter domes the differences between the interior and exterior of the muqarnas domes

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1. Idem, "Damascus I", pp. 25-6.
2. Herzfeld, "Damascus I", p. 29; ʿAbbū, al-Qubāb al-ʿAbbāsiya, pp. 174-7.
3. Ibid., pp. 119-22.
4. Ibid., p. 177. For more detail of muqarnas domes see infra, pp. 441-4.

became noticeable and finally there evolved two shells of completely different style. This new architectural device was developed in Iraq during the Ilkhanid period and first used in the dome of Dhū 'l-Kifl in 716/1316 and then in the dome of Shaikh 'Umar al-Suhrawardī in 735/1334.

The above discussion suggests that the turba of Dhū 'l-Kifl, with its muqarnas double dome, was ordered to be rebuilt at the same time as the masjid and the minaret were built, i.e. shortly after 716/1316.

Section 4

The Turba of al-Shaikh 'Umar al-Suhrawardī

A. Historical background

The turba of al-Shaikh 'Umar al-Suhrawardī (pls. 85, 86), notable as the second Ilkhanid example of a muqarnas dome, is situated in eastern Baghdad. It stands in a quarter known at present as Shaikh 'Umar, very near to Bāb al-Ẓafariya or al-Bāb al-Wasṭānī.[1] The place was originally (before the turba was built) an extensive Abbasid cemetery known as al-Wardiya.[2] Shaikh 'Umar al-Suhrawardī was a very distinguished Shāfi'ite jurisconsult (faqīh) and imām of his time.[3] He was born in 539/1144 and during his lifetime became the confidant of al-Nāṣir, and died on 1 Muḥarram 632/1234.[4] The date of this turba is still disputed.

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1. See I.D.G.A. file no. 28/40.
2. In reporting the death of al-Shaikh 'Umar al-Suhrawardī in 632/1234, Ibn al-Fuwaṭī states that the shaikh was buried in al-Wardiya in a turba prepared for him near the wall of al-Ẓafariya quarter (see al-Ḥawādith, p. 74). According to Jawād this site faces Bāb al-Ẓafariya which is also known as al-Bāb al-Wasṭānī (see Jawād and Sūsa, op.cit., p. 122).
3. Yāqūt, Mu'jam al-Buldān III, p. 203. His nisba (al-Suhrawardī) is derived from Suhraward, an Arabic version of the Persian city Suhrabgird which is situated near Zanjān in Adharbaijān (see Herzfeld, "Damascus I", p. 26).
4. Al-Ḥawādith, loc.cit.; E.G. Browne, A Literary History of Persia I (Cambridge, 1929), p. 423.

The date depends on the answers to the following questions:

(1) Is this turba the same turba which was built for al-Shaikh 'Umar al-Suhrawardī shortly before his death in 632/1234 as stated by Ibn al-Fuwaṭī?[1]

(2) Is it the same turba mentioned by Ibn al-Fuwaṭī, but merely restored during the Ilkhanid period, in 735/1334?

(3) Or was it entirely rebuilt in the Ilkhanid period, in 735/1334?

The new epigraphic evidence presented here, and other architectural and decorative dating controls, may effectively settle this problem. Herzfeld, who twice briefly refers to this building, suggests that it dates from 632/1234.[2] Jawād, who supports Herzfeld's suggestion, also claims that it is the same building but that it underwent a restoration during the Ilkhanid period in 735/1334.[3] Herzfeld's argument is mainly based on the similarity between the exterior shape of the Saljuq muqarnaṣ dome of Sitt Zubaida (pl. 8) and that of al-Shaikh 'Umar al-Suhrawardī (pl. 8b). It is also based on an inscription which, however, includes neither a name nor a date. This inscription - on the northern exterior façade of the turba - was the only inscription exposed at that time which Herzfeld was able to see and publish (pls. 89, 90).[4] This inscription is mainly

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1. Al-Ḥawādith, loc.cit.
2. Reise II, p. 179; "Damascus I", pp. 26-7.
3. Jawād and Sūsa, op.cit., p. 236.
4. "Damascus I", p. 26. The text will be presented here with a few emendations.

a Qur'ānic text (Sūra XXX, v. 50), set in a band 0.60 m. in height and 7.45 m. in length placed on the upper part of the northern façade. It is executed in naskhī style of uncrowded character carved in relief against a background composed of a net-like pattern. The inscription runs as follows:

((بسم الله الرحمن الرحيم فانظر الى اثار رحمة الله كيف يحي الأرض بعد موتها ان ذلك لمحي الموتى وهو على كل شيء قدير · امر بتجديده[1] بعد دثوره[2] و···))

Translation

("In the name of God, the Compassionate, the Merciful. Look, therefore, at the prints of Allah's mercy (in creation): how He quickeneth the earth after her death. Lo! He verily is the Quickener of the Dead, and He is Able to do all things."[3] He has ordered it to be rebuilt after its fall into ruins and.....).[4]

According to Herzfeld, this inscription is supposed to date from the exact period of the death of al-Shaikh ʿUmar al-Suhrawardī in 632/1234. His reason is simply that the style of this inscription and the pattern of its background,

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1. Herzfeld's reading is تجديد (ibid.).
2. Herzfeld's reading is دثورها (ibid.). Moreover, Herzfeld wrongly cited the above Qur'ānic text as being Sūra LVII, v. 16; accordingly he gave a different translation (ibid.).
3. The above translation of the verse is according to Pickthall, op.cit., p. 293.
4. Herzfeld translated the last part of the text as follows: "has been ordered to rebuild after its decay at the...".

which he regards as an important dating control, are similar to those in al-Madrasa al-Mustanṣiriya (631/1233) and the turba of Yaḥyā ibn al-Qāsim (637/1239). However, at the same time Herzfeld adds, "it is strange to read the word tadjdīd, which means the replacing of an old building by a new one".[1] This comment suggests that Herzfeld probably had doubts about the date he had just mentioned.

As regards the style of the inscription and its background pattern, they are quite common, being found on several other earlier and later monuments in Iraq dating from within the 6th-8th/12th-14th centuries.[2] The most important of all the evidence, which should settle the dispute concerning the date, is a text recently discovered above the north-western entrance of the turba (pls. 89, 90).[3] Herzfeld, of course, was not aware of this text, for it was under a thick layer of plaster removed by the I.D.G.A. during the 1950s.[4]

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1. "Damascus I", p. 27.
2. Examples are to be seen in the inscriptions of the Ḥarbā bridge at Samarra dated 629/1228 (pls. 12-13), the mausoleum of Muḥammad al-Sakrān dated 667/1268 (pl. 52), the minaret of Sūq al-Ghazl dated 678/1279 (pl. 67), the minaret of Dhū 'l-Kifl dated 716/1316 (pl. 73) and al-Madrasa al-Mirjāniya dated 758/1356 (pls. 128-131).
3. It is sheltered by an adjacent chamber. The other entrance on the south-east, which leads to the Ottoman mosque, is not original (see fig. 25).
4. This plastering probably happened during one of the two Ottoman restorations. It was carried out by either Ismā'īl Pāshā in 1273/1856 or by Nāmuq Pāshā al-Ṣaghīr in 1320/1902. These two restorations are mentioned by Jawād and Sūsa, op.cit., p. 235.

Moreover, like the dome, the entrance which bears this inscription is a typical example of Ilkhanid architecture. This, too, became clear after the plaster had been removed from the terra-cotta panel over the doorway of the entrance.

B. The inscription above the entrance

This important and unpublished inscription is carved in relief against an ornamented background (pl. 90). The brick panel which includes this inscription is separated from the doorway by another brick terra-cotta panel. The inscription begins with the basmalla and Sūra X, v. 62.[1] There follows the full version of the name of al-Shaikh 'Umar al-Suhrawardī and his laqab (Shihāb al-Dīn, "the star of religion");[2] the name of the donor who was responsible for the rebuilding of the turba (Muḥammad ibn al-Rashīd);[3] and finally, the year of completion of the work (735/1334).

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1. See infra, pp. 499-500.
2. The inscription also provides two other highly honorific titles of al-Shaikh 'Umar al-Suhrawardī, namely: al-Qudwa al-Rabānī and Quṭb al-Auliyā' wa 'l-'Ārifīn. This second title is identical to that of the Shāfi'ite Shaikh Muḥammad al-Sakrān; see supra, p. 110.
3. Jawād, without stating his source of information, mentions the name as Ghīyāth al-Dīn Muḥammad ibn Rashīd (Jawād and Sūsa, op.cit., p. 236). The name of the donor (Muḥammad ibn al-Rashīd), given as such in the inscription, and not preceded by any lāqab or title, suggests that the donor was not employed in any public post. Accordingly, it might also be suggested that he was a wealthy Shāfi'ite merchant with a strong social influence. Shaikh 'Umar al-Suhrawardī, after all, was a Shāfi'ite. It is not certain whether Muḥammad ibn 'Abd al-Raḥmān ibn al-Shaikh Abī 'Umar Shams

(Contd.

The panel takes the shape of a pointed arch 2.15 m. in height and 1.60 m. in width. It consists of six lines, each 30 cm. high. The inscription runs as follows:

١ــ"بسم الله الرحمن الرحيم الا ان اولياء الله لاخوف 1.

٢ــعليهم ولا هم يحزنون "جدد هذه العمارة المباركه (الشريفه) 2.

٣ــ (ل)ضريح الشيخ القدوه الرباني قطب الاولياء والعارفين 3.

٤ــ شهاب الدين عمر محمد السهروردى روس الله مرقده محمد بن الرشيد 4.

٥ــ اصلح الله شانه وذلك في شهور سنة خمس وثلاثين وسبعمائه (ئه) 5.

٦ــ والحمد لله وحده وصلواته على نبيه محمد وآله . 6.

Translation

1-2 - In the name of God, the Compassionate, the Merciful (Sura X, v, 62). There renewed this honourable blessed building, (lit. ʿimāra)[1] 3 - for the sarcophagus[2] of the Shaikh, the holy model, the

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Contd.) al-Dīn ibn al-Rashīd (708-64/1308-62), whose biography is given by Ibn Ḥajar al-ʿAsqalānī, is the same Muḥammad ibn al-Rashīd whose name is inscribed in the historical text (see al-Durar al-Kāmina fī Aʿyān al-Māʾa al-Thāmina IV (Ḥaidarabād, 1350/1931), p. 6).

1. It means "building", "structure", or "architecture". It indicates a specific building, in this case a turba. It seems that such a general term was also used during the later Abbasid period. The term mahal, which literally means "place", was used instead of madrasa in an inscription at al-Madrasa al-Mustanṣiriya (see Ḥ. Amīn, al-Madrasa al-Mustanṣiriya (Baghdad, 1960), p. 148). The term makān could also be used for a madrasa, e.g. in the text over the entrance of al-Mirjāniya (infra, p. 213).
2. The word used here (ḍarīḥ) could also mean "mausoleum" but "sarcophagus" makes better sense in this context.

pole of the saints and of the erudite 4 - Shihāb al-Dīn ʿUmar Muḥammad al-Suhrawardī, may God make his resting place like a garden, has been renewed by Muḥammad ibn al-Rashīd 5 - may God make good what concerns him and that was in the months of the year 735 [1334 A.D.] 6 - and praise be to God alone and may His blessing be upon His Messenger Muḥammad and his family.

The style of this inscription and the technique of carving and setting the panel are typically Ilkhanid (pls. 89, 90). The script is a slightly crowded naskhī type. As usual in the inscriptions of the period, vowelling and other purely decorative signs are used to fill the interstices of the letters. This script is almost identical with that used in the mausoleum of Muḥammad al-Sakrān (pl. 52).

Immediately above the first line of this inscription is a triangular brick terra-cotta panel shaped to fit the pointed outer frame of the inscription. This panel is ornamented with an arabesque composition against a decorated background composed of a net-like pattern identical with the background of the inscription itself. Again, the same triangular-shaped panels with almost identical arabesques are to be seen preceding the historical inscriptions of al-Madrasa al-Mustanṣiriya, the mausoleum of Muḥammad al-Sukrān, and al-Madrasa the Mirjāniya.[1]

Another element of this inscribed panel is the

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1. Cf. pls. 36, 52 and 97.

decorative band which frames the inscription and also separates the lines. An identical band is to be seen separating the terra-cotta divisions of the minaret of Sūq al-Ghazl (pl. 63).

The entrance of the turba is another genuinely Ilkhanid piece of architecture. It consists of a lofty rectangular façade, 6.5 m. in height, recessed with a lofty pointed arch which itself again encloses a rectangular recess 1.60 m. in width and 5.65 m. in height (pl. 89). Brick entrances of similar composition are common in both the religious and the secular buildings of Iraq which date from the 6th-8th/12th-14th centuries.[1] The arched doorway is surmounted by an elaborate geometrical terra-cotta panel. It is of rectangular shape, measures 160 m. x 130 m., and its lower part forms the pointed arch of the doorway itself.[2] This panel has two decorative frames.[3]

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1. Examples are: the Abbasid Palace, the Mustanṣiriya, the mausoleum of Muḥammad al-Sakrān, the Mirjāniya, Khān Mirjān and the entrance of the Great Mosque of al-Kūfa which is attributed to the 8th/14th century (cf. pls. 34, 36, 52, 97, 134 and 144.).
2. Brick terra-cotta panels of the same shape are to be seen in the Abbasid Palace, the Mustanṣiriya, the Mirjāniya and Khān Mirjān; also in many other brick monuments which have this type of arch.
3. The outer one is a narrow band 3 cm. in width, carved in deep relief, with the same arabesque motif which appears on the decorative frame of the inscription. The outermost band of this panel is 6 cm. in width and carved with quite dense stylized arabesque.

The panel itself contains a geometrical design which arises from a five-pointed star which surmounts the apex of the arch of the doorway. The radiating lines of this star are interlaced to create various geometrical units such as polygons, triangles, diamonds and lozenge shapes. The arabesque of this terra-cotta panel represents a stage of development between later Abbasid and Jalairid brick terra-cotta technique.[1] Other designs in terra-cotta appear on the upper left part of the entrance adorning the spandrel of the outer pointed frame (pl. 89).

According to the epigraphical and architectural evidence discussed above, the date of the building, as well as the name of the founder, can by now be stated with some confidence. The building was rebuilt by Muḥammad ibn al-Rashīd in 735/1334 to replace one which was destroyed at an unknown date.[2]

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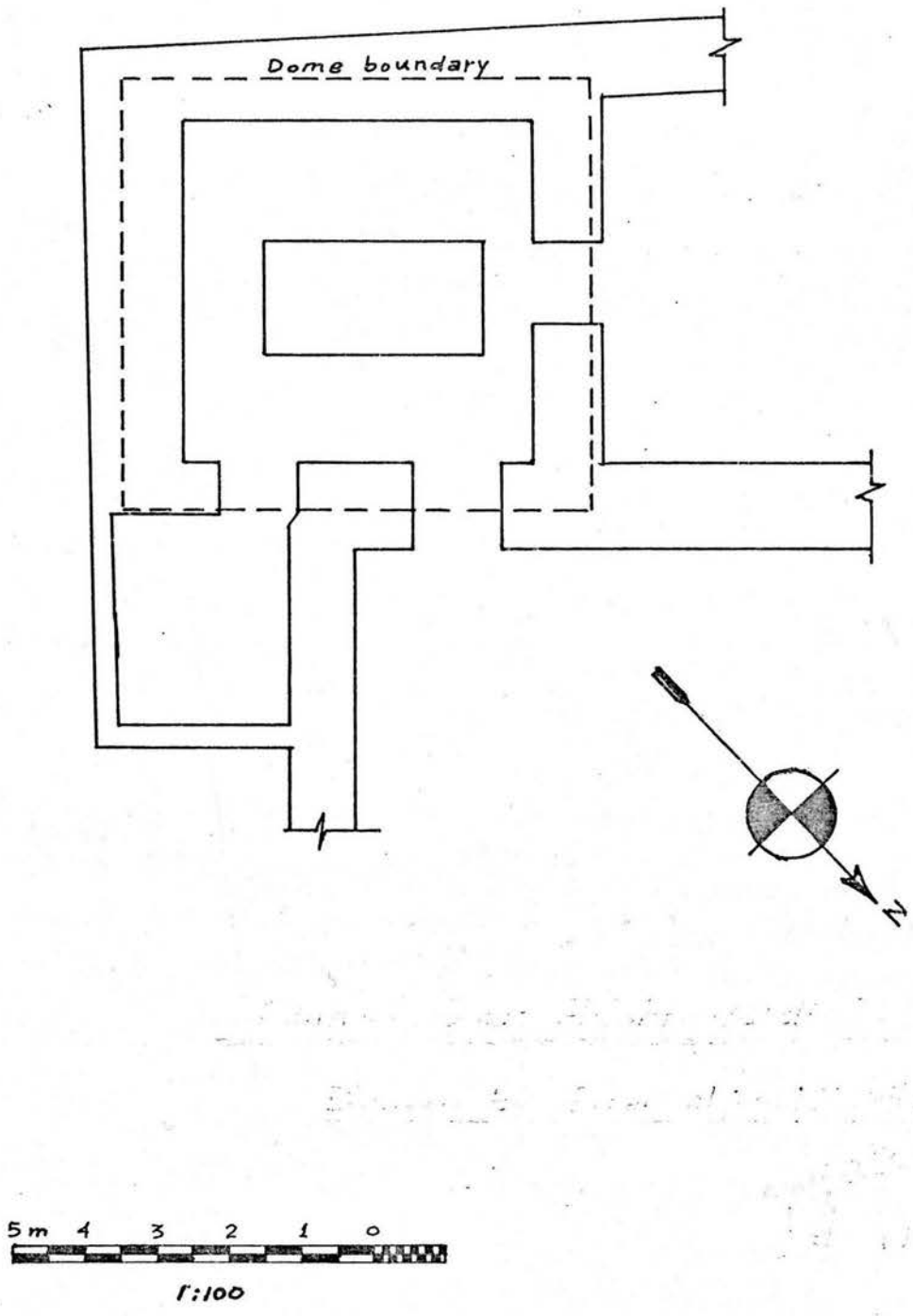
1. Brick panels with geometrical interlaced designs are quite common in the Abbasid Palace, Sitt Zubaida, the Mustanṣiriya, Sūq al-Ghazl and Yaḥyā ibn al-Qāsim. In all these examples the geometrical units enclose arabesques of still recognisable detail. This feature no longer exists during the later Ilkhanid and Jalairid periods. The arabesque became minutely carved and represented a purely abstract design. Examples of geometric terra-cotta panels with abstract arabesque designs are to be seen in al-Madrasa al-Mirjāniya and the entrance of the Great Mosque of al-Kūfa; cf. pls. 120-4 and 144.
2. Between the death of al-Shaikh ʿUmar and the rebuilding of his new turba is a space of 97 years. A long period seems enough in itself to damage or even destroy any building which is not strongly built, especially in weather such as Baghdad has.

Although both of the inscriptions discussed above imply this quite clearly, this conclusion can be further verified by analyzing the architectural features of the muqarnaṣ dome of the building.

C. The muqarnaṣ dome

This is in fact the second example in Iraq of a muqarnaṣ dome which covers a hemispherical shell. Earlier muqarnaṣ domes, such as that of Sitt Zubaida, have a single shell only. According to the existing evidence, this innovation by which the exterior muqarnaṣ dome became a purely decorative element took place in Iraq only during the Ilkhanid period.[1] Moreover, the detail of the muqarnaṣ dome of Shaikh 'Umar and the zone of transition of the inner shell differentiate it from the contemporary muqarnaṣ dome of Dhū 'l-Kifl. As usual brick is the only building material.[2] The turba comprises three chambers attached at present to an Ottoman mosque dating from 917/1511 situated to the north of the turba. The tomb chamber is almost square in plan and has two entrances. The main entrance is on the north-west side (see, fig. 25). From the exterior the turba is a high cubic structure about 11.50 m. in height. The northern façade of the turba still retains, under the inscribed band, two original recessed rectangular

1. For details and examples see infra, pp. 441-4.
2. The bricks are varied in size, the most common being 22 x 5.5 cm.



25. Baghdad. Mausoleum of Shaikh 'Umar al-Suhrawardī: plan.

niches. The larger one displays swastika ornament achieved by the geometrical setting of plain bricks. The swastika design of this panel is marked out with narrow white and blue bands of glazed tile (pl. 88). The next panel contains a pointed arch bordered with a row of headers. As the other sides of the turba lack decoration at present it might be suggested that the same composition was originally applied to them too. This suggestion is perhaps all the more plausible if one considers the unfinished inscribed band which ran along the northern façade, and whose continuation must once have ornamented the other exterior façades.

The interior wall of the turba, which rises to a height of 6.5 m., lacks decoration and is plastered with juss. Polychrome painting and an elaborate decorative zone of transition are the only relief from the otherwise plain interior of the dome. The zone of transition is composed of three layers which ultimately convert the square shape of the tomb chamber to a sixteen-pointed star (pl. 91). The first layer contains four recesses with segmental arch profiles occupying the middle of the upper part of the walls. Each segmental arch is flanked on each side by two muqarnas of pointed concave shape and salient faces. The second layer consists of four deep recesses of pointed-arch profile, their façades resting on the niches of the salient faces of the first layer. These four deep niches are also flanked by three shallow muqarnaṣāt of pointed shape. In this layer there are four windows opened to face the four cardinal points. Each window is in the form of a pointed

arch and measures 1 m. x 1.60 m. The apices of the arches in this layer form the base on which the 16-pointed star is set. The third layer is a series of shallow lozenge-type muqarnasāt resting immediately on the points of the muqarnasāt of the second layer. On this layer, too, is built the 16-pointed star from which the actual curvature of the hemispherical dome springs.

The interior face of the dome still retains a polychrome ornament in the form of a painted disc (pl. 92). This disc consists of five circular frames each ornamented with a separate pattern. The middle of the disc is occupied by a large 16-pointed rosette from the centre of which hangs a chain which used to carry a lamp. It may be suggested that this disc is original and probably the only surviving example of several polychrome paintings in the interior of this turba. Examples of such polychrome painting have been discussed above in relation to the Dhū 'l-Kifl dome.[1]

The muqarnas dome of Shaikh 'Umar is erected over a 7.45 m. square base, by means of an octagonal base 1.70 m. in height (pl. 86). Each side of the octagon measures 2.25 m. This octagonal base is recessed eight times with large pointed arches. This part of the octagonal base corresponds with the second layer of the zone of transition. The upper part of the octagonal base is transformed to a 16-sided figure by means of eight more small flat arches occupying the spandrels of the eight large arches. This 16-sided figure corresponds with the last layer of the zone of

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1. Supra, p. 145.

transition. The actual muqarnaṣ dome then starts as a lofty pyramid composed of eleven layers. Each layer takes the shape of a star. The points of each star enclose a tiny quarter-cylindrical element topped with a quarter-dome. The stars of the first seven layers each have sixteen points. These layers of stars are of ever-decreasing diameter. The stars become 8-pointed in the eighth and the ninth layers, and in the tenth and eleventh layers have six points. The seventh layer is surmounted by an 8-pointed star. The points of this star are projected outwardly in a way similar to that in Sitt Zubaida and Dhū 'l-Kifl. The architectural function of this 8-pointed star is to prepare a platform for the eighth layer; this is apart from its decorative effect.

The muqarnaṣ dome of Shaikh ʿUmar, like the muqarnaṣ dome of Dhū 'l-Kifl, is a new Ilkhanid architectural device developed from earlier local prototypes. It was the last example of this unique series of domes in Iraq.

During the Ottoman period a masjid was founded next to the turba, and the turba was restored by Nūr Allāh ibn Khwāja Ḥasan in 917/1511. This name and date is inscribed on a glazed tile measuring 38 x 55 cm. and placed inside the mosque.[1] Other Ottoman restorations were carried out by Ismāʿīl Pāshā, the wālī of Shahrazūr, in 1273/1856 and by Nāmuq Pāshā in 1320/1902. The latter was also responsible for building a minaret with colourful glazed tiles in the masjid (pl. 93).[2] All these restorations did not alter the original structure of the turba and its muqarnaṣ dome.

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1. The inscription was first published by Herzfeld, "Damascus I", p. 27.
2. Jawād and Sūsa, op.cit., p. 236.

CHAPTER IV

THE JALAIRID ARCHITECTURE OF BAGHDAD

Section 1

Al-Madrasa al-Mirjāniya

A. Introduction

This monument is situated in the middle of the eastern part of Baghdad, very near to al-Madrasa al-Mustanṣiriya (pls. 94-96). Unfortunately most of the building was destroyed in 1945-8 by the Municipality of Baghdad (pl. 133). This happened despite desperate attempts by the I.D.G.A. to prevent it.[1] The reason for the destruction was that the Municipality wished to make al-Rashīd street continue straight past the madrasa. The full gravity of the loss appeared during the course of destruction, when it was seen that the building's brick ornamentation was some of the most rich and elaborate in Iraq. This is stated by Creswell in his official report which he presented to the Iraq authorities after he had been invited in 1945 to estimate the value of the building.[2] Apart from the entrance façade and some cells attached to it on both sides nothing now remains of the original building. The famous waqfiya of the founder has been put in the muṣallā of the new mosque which was built on the same site. Some of the brick ornament of this madrasa is now exhibited at the Iraqi Museum.

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1. The relevant official papers are kept in the I.D.G.A. in File No. 11/40: Jāmi' Mirjān.
2. For his full report see infra, pp. 227-29.

In this chapter all the available material has been collected in an attempt to present a full account of this building, and thus to make possible the eventual rebuilding of this madrasa.

This building is first mentioned by Niebuhr who published one of the texts (which no longer exists) quoted to him by a mullā.[1] Later on, other western travellers visited the place and reported its name as Jāmi'.[2] The work of Massignon concentrated mainly on publishing the text of the waqfiya.[3] Herzfeld, who treated the building briefly and published his correction of Massignon's reading, also published a rough ground plan and several drawings of the building.[4] Native publications also deal with the reading of the inscription and cover certain historical aspects of the building.[5]

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1. Op.cit., p. 242.
2. Buckingham, op.cit., p. 183; he gives the name as "Jāmi' Merjameeah". See also R. Mignan, Travels in Chaldaea (London, 1829), p. 98.
3. Op.cit., pp. 1-31, pls. 4-11.
4. Reise II, pp. 181-7, figs. 211-16.
5. Al-Alūsī, op.cit., pp. 71-3; A.M. al-Karmalī, al-Fawaz bi-al-Murād fī Tārīkh Baghdād (Baghdad, 1911), 26-33; N. al-Naqshabandī, "al-Madrasa al-Mirjāniya", Sumer II (1946) pp. 33-54; A. al-'Azzāwī, "Khaṭṭāṭū Jāmi' Mirjān" Sumer III (1947), pp. 312-17; M. Jawād and A. Sūsa, op.cit., pp. 219-20.

B. Historical background

From the inscriptions of this madrasa facts concerning the name of the founder, the date, and the purpose of the building are available. It was built by the governor Mirjān in 758/1357 and named after him as al-Madrasa al-Mirjāniya. The madrasa was built for teaching students of the Shāfi'ite and the Ḥanafite rites. It is the only surviving madrasa of importance to be built after the Mongol invasion of Baghdad in 656/1258, though there were several others before it.[1] The inscription over the entrance façade mentions that the building of this madrasa was financed by the mother of Shaikh Ḥasan, the founder of the Jalairid dynasty.[2] Because some of the words in the eighth line of the text above the main entrance have been defaced, one cannot state with certainty when work was actually begun. The inscription gives only the first part of the date: "Uumādā...."; however it is known that the work was completed during the first year of Sulṭān Uwais's reign, in 758/1357, by Mirjān, the governor of Baghdad.

The name of Mirjān in the inscription of this madrasa is associated with the laudatory titles, typical of the Ilkhanid period, and more or less similar to the titles which accompany the name of the Ilkhanid wazīr Rashīd al-Dīn.[3] His name, apart from his laqabs and title, is Mirjān ibn 'Abd Allāh ibn 'Abd al-Raḥmān, but the best known version of his

1. Supra, pp. 36-8, 41.
2. See infra, p. 212.
3. The titles of Rashīd al-Dīn were given by Herzfeld; see Reise II, pp. 189-90, n. 3.

name is Amīn al-Dīn Mirjān ibn ʿAbd Allāh ibn ʿAbd al-Raḥmān al-Sulṭānī al-Uljāitī. According to a contemporary authority his laqab - al-Sulṭānī al-Uljāitī - was derived from the name of the Sulṭān Muḥammad Khudā Banda Uljāitū.[1] Originally Mirjān was one of Uljāitū's manumitted slaves; he was a Rūmī, presumably Greek, by race.[2] He served in the Sulṭān's court as ṭawāshī.[3] Mirjān succeeded in improving greatly his social rank and eventually was appointed as governor of Baghdad by Shaikh Ḥasan around the year 754/1354.[4] This was his first appointment to this post. At

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1. Tārīkh al-Ghaiyāthī, ff.162,182.
2. Ibid, p.162.
3. Ṭawāshī is a Mongol title which means the chief of the servants of the court or chamberlain of the ḥarīm; see A. Al-ʿAzzāwī, Tārīkh al-ʿIrāq baina al-Iḥtilalaim II (Baghdad, 1935), p. 109.
4. The authorities do not give a precise date for his appointment in Baghdad, but one may assume that he did not begin the madrasa before he had been appointed, since the scale and magnificence of the building imply that its patron was in a position of high authority. Moreover, such a building would most likely have taken several years to build. Thus the date of Mirjān's appointment was probably about three or four years earlier than the completion of the madrasa, say c. 754/1353. Tārīkh al-Ghaiyāthī is the only authority who states the date as being in the year 760/1360, see f. 161. But this is unlikely because Mirjān completed the building of his madrasa in 758/1357.

that time Jalairid supremacy was still facing local military resistance and political plots were hatched by rebellious amīrs in many parts of Persia, Diyārbakr, Mārdīn and Baghdad.[1] Mirjān, who himself came under strong pressure from princes hostile to Uwais such as Kaykhusrau, Shaikh 'Alī, Muḥammad Belitān and 'Alī Khwāja, seized the opportunity of Uwais' absence from Baghdad and announced a revolution and his own independence in 765/1363.[2] In the spring of 763/1361 Uwais was in Ujān and in the autumn of the same year he went to Tabrīz. In the winter of 766/1364, when he was on the point of marching to Qarābāgh against Kāwus Shirwānī, he was informed of the rebellion of Mirjān. He went back and took Baghdad, though Mirjān had inundated its surroundings.[3] Uwais stayed in Baghdad for about eleven months. He ordered the rebellious princes to be hanged and entrusted Baghdad to

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1. Tārīkh-i Shaikh Uwais, p. 12.
2. Ibn Ḥajar al-'Asqalānī states that Mirjān wrote to al-Ashraf, Sulṭān of Egypt, asking him to support his revolution (see al-Durar al-Kāmina IV, p. 345). The authorities are not all agreed about the actual date of Mirjān's revolution; al-Maqrīzī gives the date as 767/1365, and states that Mirjān was punished by the loss of both his eyes after the failure of his revolution. This statement seems untrue simply because Mirjān was reappointed as a governor later on; see al-Sulūk bi Ma'rifat Duwal al-Mulūk II, ed. M.M. Ziyāda (Cairo, 1958), p. 219.
3. Mīrkhwānd (Muḥammad ibn Khāwandshāh), Rauḍat al-Ṣafā V, (Bombay, 1850), p. 171 (hereinafter this work shall be quoted as Mīrkhwānd).

Sulaimān Khāzin.[1] After the death of Sulaiman Khāzin in 769/1367, Mirjān was reappointed by Uwais as governor of Baghdad. This time he stayed in power until his death in 774/1372.[2] He was buried under a domed turba in his madrasa.[3] The reappointment of Mirjān might suggest that he was only reluctantly brought into this revolution against Uwais by the princes mentioned above. Mirjān is described by a contemporary authority as a just governor, and during his period Baghdad was very well ruled, and enjoyed prosperity.[4] This account is supported by his reappointment to his post despite his unsuccessful revolution. It can also be suggested from the inscription of the madrasa that he was a pious ruler, or at least one who took seriously his duty of building for the public good.

The fact that al-Madrasa al-Mirjāniya was established for the two main Sunnite madhhabs, namely the Shāfi'ite and the Ḥanafite, presents certain difficulties, for the Jalairids had been sufficiently iranicised by that time to become Shi'ites. According to Van Loon this was evident from their choice of Shi'ite names, and also by the choice of Najaf as a last resting place for Shaikh Ḥasan, who died in 757/1356,

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1. Tārīkh al-Ghaiyāthī, f. 161, gives the name as Shāh Khāzin.
2. Ibid.
3. Ibid. The death of Mirjān happened sixteen years after the completion of the building. It is not clear whether the turba was originally intended to be for him or for the mother of Shaikh Ḥasan who most probably ordered this madrasa to be built with her financial support.
4. Ibid.

and for several of his descendants after him.[1] Several explanations do, however, present themselves. The majority of the population in Baghdad were followers of these two Sunnite madhhabs at this time, as they had been during the Ilkhanid period and earlier. Mirjān, in dedicating his madrasa to these two madhhabs, was thus following an already established religious tradition. Indeed, Mirjān, as well as

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1. Tārīkh-i Shaikh Uwais, p.11. Quite recent discoveries have cast some light on the burials of some Jalairid sulṭāns at the shrine of Najaf. J.B. Āl-Maḥbūba, a native historian of Najaf, gives information about this subject on pp. 242-3 of his Māḍī al-Najaf wa Ḥāḍiruhā (Najaf, 1964). He states: "those who were buried in Najaf were Shaikh Ḥasan and Qāsim, brother of Sulṭān Uwais, who died in 779/1378. And recently when they were repaving the holy courtyard in Najaf they discovered a cellar, which contained tombs built of stones and adorned with mosaic. Most of them bore inscriptions, four of which are as follows:

الله لا اله الا هو هذا قبر شاه (الشاه) الاعظم معزالدين عبد الواسع انار الله برهانه توفى في خامس عشر جمادى الاولى سنه ٧٩٠

"God, there is no other God, but He. This is the grave of the august Shāh Mu'izz al-Dīn 'Abd al-Wāsi', God illuminated his wisdom [lit. his argument], who died on the 15th of Jumādā al-Aulā 790 [1388 A.D.]

هذا قبر شاه زاده سلطان بايزيد طاب ثراه توفى في شهر جمادى الاولى سنه ٨٣٣ هلاليه

"The pious Shāh Zādeh Sulṭān Bāyazīd, may his grave be pleasant, died in the month of Jumādā al-Aulā 833 A.H. [1429 A.D.]

هذا ضريح الطفل السعيد سلالة السلاطين .. شاه زاده .. طاب ثراه

"This is the tomb of the child, the happy [because he is with God] descended from the Sultanid dynasty..Shāh Zādeh, may his grave be pleasant"

هذا قبر السعيده مرحومه (ما) بنده سلطان

"This is the grave of [Ma]banda Sulṭān, happy to be with God, having received his mercy"."

his master Uwais, was probably a follower of one of these two Sunnite madhhabs, more likely the Shāfi'ite one.[1] The inscription of this madrasa goes far to substantiate such a view. Moreover, Uwais, who died in 776/1374, was not buried in Najaf but at Shādiyābād-i Mashāyikh near Tabrīz,[2] a site of no apparent religious significance.

At any rate, al-Mirjāniya continued in performing its educational task for the Baghdadi community, together with the two major madrasas, al-Niẓāmiya and al-Mustanṣiriya, for more than 440 years. Ample details about professors and students of both the Niẓāmiya and the Mustanṣiriya are available.[3] But very little information about this is available for al-Mirjāniya. One may tentatively suggest that several contemporary professors from al-Mustanṣiriya gave lessons in al-Mirjāniya. However, Ibn Ḥajar seems to be the only authority who mentions the name of a professor who taught in al-Mirjāniya - Badr al-Dīn Muḥammad al-Arbilī - who died in 775/1373.[4] It has been discovered quite recently that during the year 1048/1638 Aḥmad ibn 'Umar was a teacher at al-Mirjāniya. This is stated in the

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1. Massignon, quoting Khalshin Khalfā, states that Mirjān was a Shāfi'ite Kurd (op.cit., II, p. 2).
2. Tārīkh-i Shaikh Uwais, p. 13. An aquarelle which shows the tomb of Uwais as it was in the middle of the last century is now available in a Russian album of old inscriptions (see Epigrafika Vostoka II (Moskva-Leningrad, 1948), p.34).
3. See Makdisī, op.cit., pp. 1-56; N. Ma'rūf, Tārīkh 'Ulamā' al-Mustanṣiriya I and II, passim.
4. Al-Durar al-Kāmina II, p. 238.

endowment of Jāmi' al-Qal'a in eastern Baghdad of which he was a witness.[1] Later, in 1200/1785, 'Abdallāh al-Rāwī taught fiqh there.[2] From that date onward and after the major restoration by Sulaimān Pāshā which will be discussed shortly, al-Mirjāniya became known as Jāmi' Mirjān. But the teaching went on unaffected until quite recently. It is known that several members of the Alūsī family taught various religious subjects there.[3]

Mirjān gave an immense endowment to keep his madrasa performing its duties. The endowment of Mirjān was so generous that it ranks among the largest ones in the Islamic world.[4] His endowment was made up of 13 oil presses, 103 shops, a paper factory, 7½ caravansarais, 11 pieces of territory, 2 villages and 7 orchards.[5]

The first restoration which was recorded in this madrasa was made by Sulaimān Pāshā in the year 1200/1785.[6] This is stated in a poem inscribed on a glazed tile panel, rectangular in shape and placed above the main entrance of the muṣallā (pl. 132). Although this poem is arranged in this panel in four horizontal lines, it is in fact composed of seven lines as follows:[7]

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1. Prof. Ma'rūf kindly drew my attention to this endowment which he published in Tārīkh 'Ulamā' al-Mustanṣiriya II, p. 319.
2. A. 'Azzāwī, Tārīkh al-'Irāq II, p. 85.
3. Ibid.
4. For details see the inscription, infra, pp. 217-27.
5. Massignon, op.cit., II, p. 30.
6. Sulaimān Pāshā was governor of Baghdad between the years 1194-1217/1789-1802 (see al-Alūsī, op.cit., p. 71; Jawād and Sūsa, op.cit., p. 293).
7. First published by al-Alūsī, op.cit., pp. 71-2.

1. تبارك من انشأ الانام واوجدا وقيض منهم من يقام به الهدى
2. ففي كل قرن يبدو منه مجدد حديث أتى عن سيد الرسل مسندا
3. فكان بهذا القرن حقا مجددا وزير محى رجس الضلالة والردى
4. فأحيا ربوع العلم بعد دروسها وكم جامع أحيا وجدد مسجدا
5. وقد بان في هذا المكان تخلخل تداركه فورا فأضحى مشيدا
6. هنيئا له حاز الثواب لأنه نوى عملا لله صرفا مجردا
7. وفيه روى الراوي الحديث مؤرخا سليمان أضحى عادلا بل مجددا

1. "Blessed be He who created and founded mankind and chose from among them those who established the right path. 2. A documented hadīth came from the master of the prophets that a renewer [of buildings] appears in each century. 3. In this century (i.e. 12th/18th) the renewer was indeed the wazīr who wiped out the evil of wickedness and wrongdoing. 4. He renewed the quarters of knowledge after they were ruined, and behold how many mosques and masjids he renewed and rebuilt. 5. After cracks had appeared in this place (i.e. al-Madrasa al-Mirjāniya) he treated it promptly and it became firmly established. 6. May he be happy. He obtained the reward [from Allah] because he resolved that the work should be entirely and absolutely for Allah. 7. In him [and in his work] the teller told the story, dating it, that Sulaimān became just but [also] a renewer [1200 A.H.]".

If the Ottoman restoration was indeed the first one, it would seem that the madrasa did not need any restoration for more than four and a half centuries, too long a period of time for any building to remain intact in a climate such as that of Baghdad.[1] Alūsī, however, suggests that al-Mirjāniya

1. This climate is hot in summer and cold in winter and so causes cracks in such big brick buildings. Moreover the dampness which rises from the earth and the percentage of salt in the building material all have a bad effect on buildings of such antiquity.

was so strong that it did not need any restoration except that which was executed by Sulaimān Pāshā in 1200/1785.[1] But one cannot be sure in view of the silence of the authorities. Details of the restoration by Sulaimān Pāshā are not stated fully, but according to Alūsī he enlarged the muṣallā by adding two halls on each side of it.[2] These were reached by large openings with segmental arches broken through the walls at both sides of the muṣallā (pl. 112). Presumably he was also responsible for the plastering or replastering of all the ornamented façades of the muṣallā, and presumably other parts of the madrasa.[3] Most probably Sulaimān Pāshā

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1. Op.cit., p. 71.
2. The hall of the right hand side is 7 on the plan and those on the left hand side are 10 and 11; see fig. 27.
3. Al-Naqshabandī states (without citing his source of information) that according to local tradition the plastering of the muṣallā was ordered by Madḥat Pāshā during the visit of Nāṣir Shāh al-Qājārī to Baghdad in 1288/1871; see "al-Madrasa al-Mirjāniya", p. 40. If this were true one might suggest that not only the muṣallā but also all the other ornamental façades were replastered 88 years after the restoration of Sulaimān Pāshā. As Professor Safar has pointed out to me, the tendency during the Ottoman period was to paint leaf scrolls of various colours on a layer of juṣṣ to replace brick and mosaic ornament. Examples of such painting are found on the interior walls of Imām al-Dūr, on the walls of the Ottoman dome near 'Āna known locally as Mashhad Abī Rīsha and on the walls of the turba of Dhū 'l-Kifl.

was also responsible for other additions and alterations to this madrasa. These include a mosaic mihrāb (pl. 114) which was later found to be hiding the original brick one (pl. 119), a minbar built of brick and revetted with square glazed tiles of light green and white,[1] a revetment of the same tiles running all around the lower part of the walls inside the musallā to a height of about one meter,[2] a square platform probably used for ablution (pl. 126b), and lastly a zulla with a wooden column in front of the musallā and wooden doors. These additions suggest that the main objective of Sulaimān Pāshā was to convert this madrasa to a congregational mosque, which became known later as Jāmi' Mirjān.

The second restoration was ordered by the Minister of the Endowment, Pāshā 'Ayān, in 1928.[3] He renewed the plaster of the building, repaved the courtyard, restored the brick ornament of the main entrance,[4] replaced the old wooden zulla in front of the musallā by a modern one and installed a new wooden minbar to replace the Ottoman brick one (pls. 110 and 114).

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1. It is illustrated in Massignon, op.cit., II, pl. 11. This minbar no longer exists and was replaced by a wooden one ordered by the Minister of the Endowment, Pāshā 'Ayān, in 1928 (pl. 114).
2. This type of glazed tile was so commonly used during the Ottoman period that one can expect to find it in almost all their religious buildings.
3. Massignon states that about 1872 this madrasa was restored by al-Shaikh Nu'mān al-Alūsī after he had acquired the necessary funds from the Turkish Government. No details are given by Massignon about this restoration. Shaikh Nu'mān acted as a teacher and a guardian for this madrasa; see Massignon, op.cit., II, p. 3.
4. Cf. pls. 94 and 95a.

In 1971-72 the I.D.G.A. strengthened the foundation of the main entrance and restored its brickwork. More brick ornamentation was found under the plaster in the course of restoration on the interior façade of the entrance.[1]

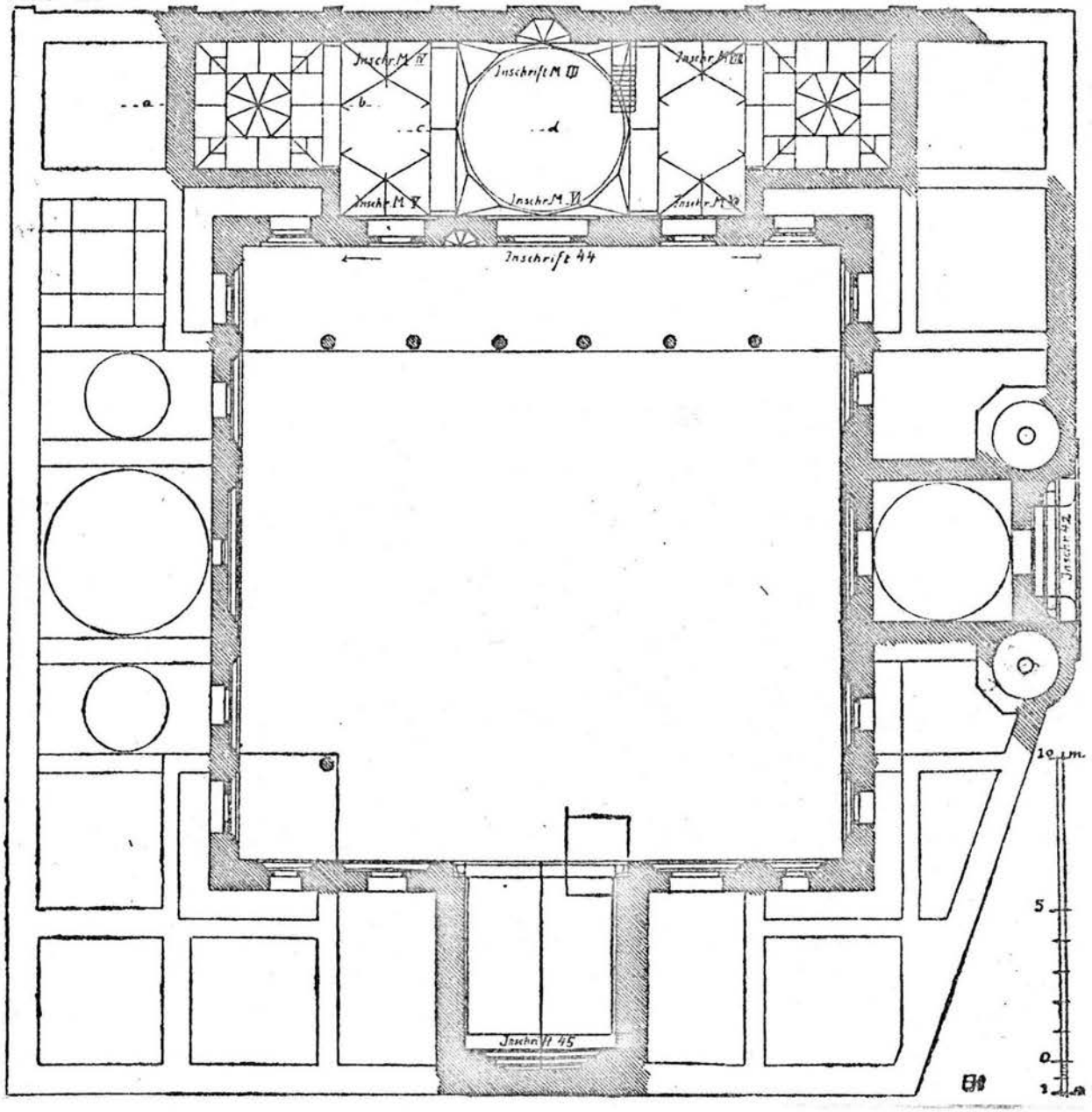
C. Material of study

To reconstruct and study a monument of which nothing but the entrance and some cells attached to it remains is a difficult task. The inscription as well as most of the brick ornament were luckily saved, so they can be closely examined. The other material available consists of Herzfeld's work[2] and of the I.D.G.A. plans and photographs.

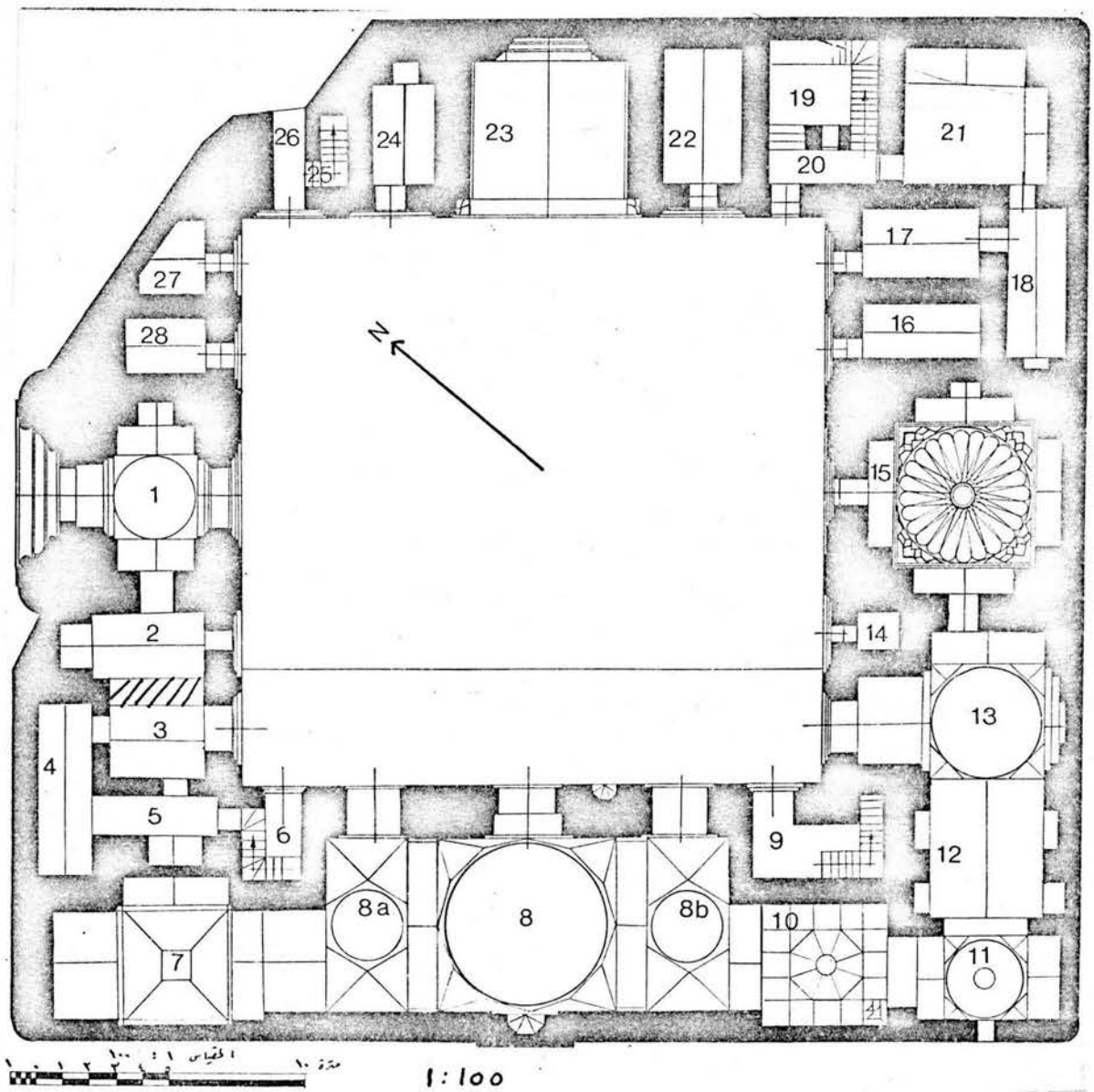
From the architectural point of view Herzfeld's work on al-Mirjāniya is clearly the earliest useful investigation of this subject and his plan is the oldest one available (fig. 26). But much of his work is concentrated on the correction of Massignon's reading of the texts. Herzfeld's plan is only partly shaded, which suggests either that he did not have access to the whole of the building, or that he lacked the time to study it in depth. But his plan does give the general outline of the building, as well as the distribution of its main compartments. It nevertheless has major shortcomings, and calls for the following comments:

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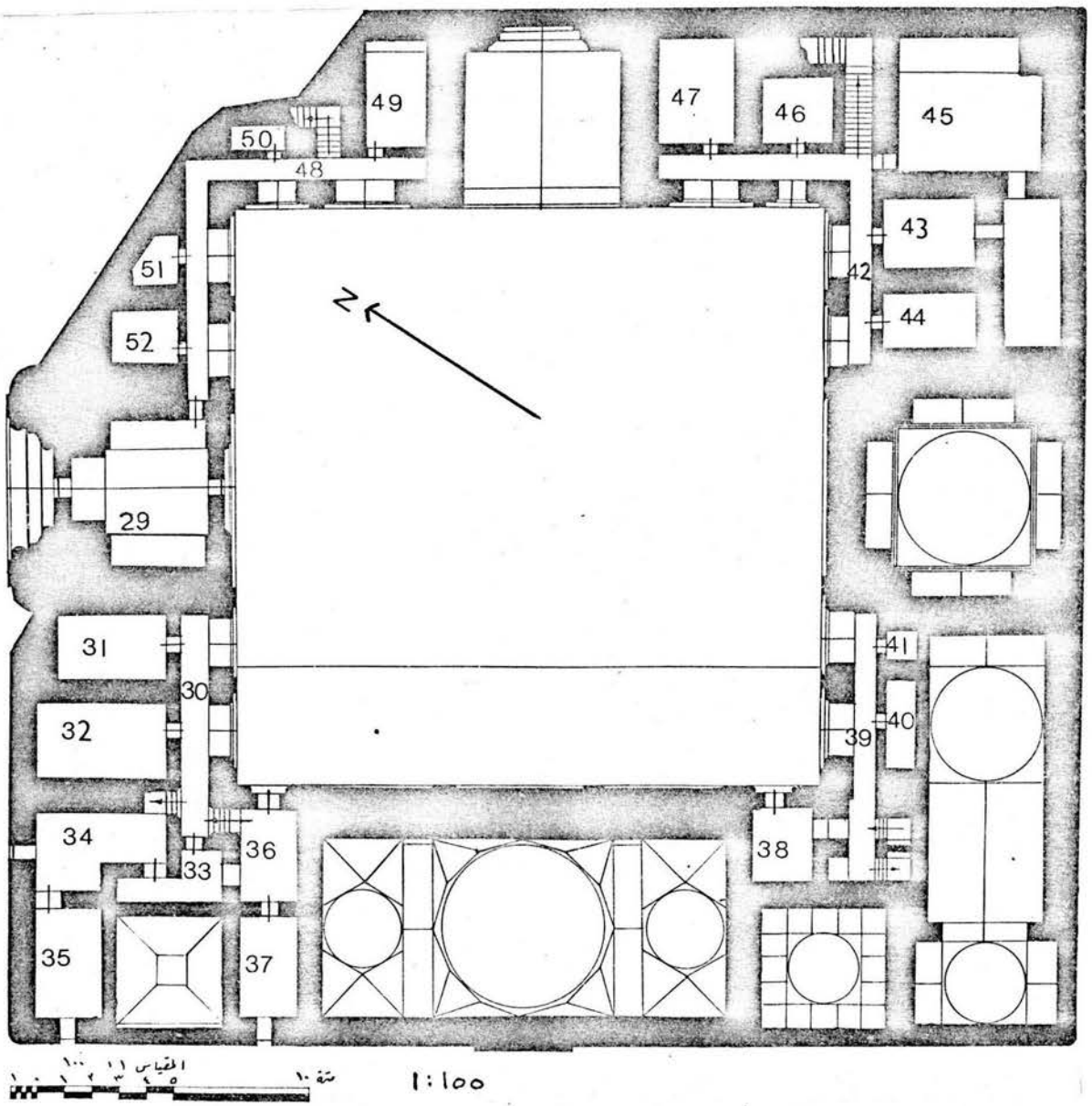
1. Cf. pls. 98, 105-108.
2. Reise II, pp. 181-7, figs. 211-15.



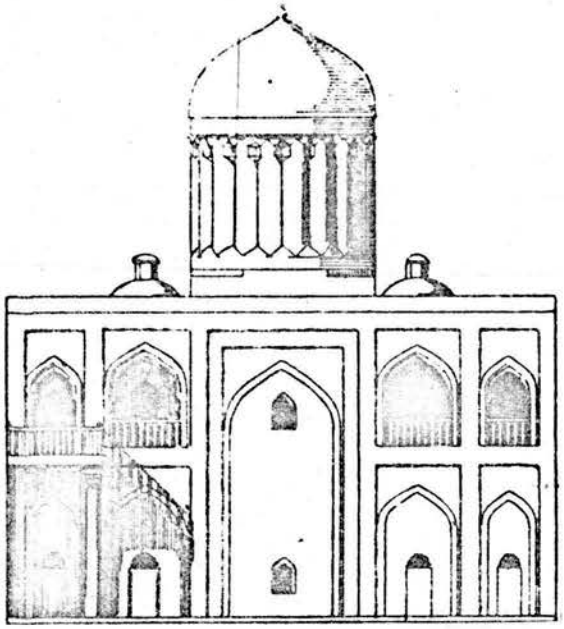
26. Baghdad. Al-Madrasa al-Mirjāniya: plan (after Herzfeld).



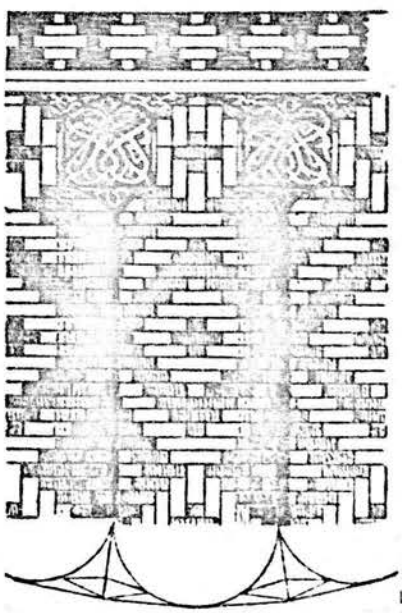
27. Baghdad. Al-Madrasa al-Mirjāniya: plan, ground floor.



28. Baghdad. Al-Madrasa al-Mirjāniya: plan, first floor.



29a. Baghdad. Al-Madrasa al-Mirjāniya, mausoleum of Mirjān: elevation (after Herzfeld).



29b. Baghdad. Al-Madrasa al-Mirjāniya, mausoleum of Mirjān: detail of hazārbāf on exterior of the dome (after Herzfeld).

1. It is not quite clear which floor of al-Madrasa al-Mirjāniya he meant by his plan, because Herzfeld drew in four corridors which, as will be shown later, existed only on the first floor. On the ground floor of this madrasa there are no such corridors, but only halls and cells which opened directly on to the courtyard (see fig. 27).

2. In al-Madrasa al-Mirjāniya there were four staircases, one at each corner. Herzfeld drew only one staircase on the right hand side of the middle dome inside the muṣallā. Most probably he meant to indicate the staircase of the brick minbar built by Sulaimān Pāshā.

3. No detail is given by Herzfeld of the northern part of the building which shows the bevel and the zigzag in the plan, most probably caused by the already existing street; moreover he did not draw the subsidiary entrance which was on that side (see fig. 27, no. 26).

4. Herzfeld's plan shows two small assumed domed chambers on each side of the turba of Mirjān (figs. 26 and 29). According to the plan (fig. 27), there was one large chamber roofed with a domical vault with a lantern, known locally as simāya, in the middle for light and ventilation.

5. There is not a trace in Herzfeld's plan of the zone of transition of the dome of Mirjān, although he gives the vaulting of the muṣallā.

6. There are differences in both the numbers and the shapes of the halls and cells in Herzfeld's plan when compared with those of the I.D.G.A. plans.

7. Herzfeld's plan represents the entrance, which is still intact, with different detail from that which it actually has.

For the reasons cited above, the plan cannot be considered as an entirely reliable guide to this building. Fortunately, before and during the demolition of the madrasa the I.D.G.A. carried out a considerable amount of work on it. New detailed plans were drawn and adequate photographs were taken for almost all parts of the building and its brick ornament.[1]

The original full-scale copy of the ground plan of al-Madrasa al-Mirjāniya at a scale of 1:100 is available. That which represents the first floor is now lost, but its photograph is available (see fig. 28). After the comparison on the site with the remains of the madrasa, its scale of reduction has been approximately fixed as 1:257. The following table (p. 178) which is based on field notes is to investigate the relative accuracy of the I.D.G.A. plan as regards the rest of this building, by a study of the portal complex (which is all that remains of the original structure.[2]

From this table the following results emerge:

1. Figs. 27 and 28 represent the two storeys of this madrasa as well as the number and the distribution of its compartments.
2. The thickness of the walls as well as the measurements of the cells and their doorways are not all quite accurate in the I.D.G.A. plans. At the same time both plans offer

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1. These form largely reliable documents for any future attempt to rebuild this madrasa.
2. I am grateful to Prof. F. Safar of the I.D.G.A. for his valuable help and suggestions on this matter.

Measurement on the site, ground floor.	Measurement in plan. Fig. 27.	Details
185 cm.	210 cm.	The width of the inner portal of the main entrance.
620 cm.	620 cm.	The distance between the inside and outside doorway of the main entrance.
269 cm.	280 cm.	The width of the rectangular chamber on the left side of the main entrance.
500 cm.	510 cm.	The length of the rectangular chamber on the left side of the main entrance.

Measurement on the site, first floor	Measurement in the plan. Fig. 28	Details
110 cm.	77 cm.	The width of the passage which leads to the room 29.
108 cm.	77 cm.	The wall thickness of the upper arcade.
165 cm.	192 cm.	The width of the northern arch of the upper arcade.
180 cm.	180 cm.	The width of the southern arch of the upper arcade.
240 cm.	167 cm.	The length of room 51 along the passage.
178 cm.	154 cm.	The maximum width of room 51.
78 cm.	46 cm.	The doorway width of room 51.
80 cm.	40 cm.	The doorway width of room 52.
452 cm.	488 cm.	The length of room 29.
273 cm.	231 cm.	The length of room 29, western recess.
269 cm.	205 cm.	The length of room 29, southern recess.
269 cm.	308 cm.	The length of room 29, eastern recess.
75 cm.	51 cm.	The width of room 29, window from outside.
75 cm.	46 cm.	The width of room 29, window from inside.

a fairly good idea about the outlines, shapes and numbers of the compartments which are now, of course, unobtainable.

For the above reasons the study of the plan and the construction of this madrasa will be based mainly on the I.D.G.A. material.

D. The Plan

It seems that Mirjān chose to erect his madrasa in one of the most densely populated quarters of eastern Baghdad, to the south of the busiest commercial centre, which was known as Sūq al-Thalāthā' or "Tuesday market."[1] It is not known for sure whether the site of the building was previously occupied by another building which had been demolished to make room for the new madrasa, but it seems that the area was fully exploited for domestic purposes. Apart from the palaces of the Caliphate, al-Madrasa al-Niẓāmiya and al-Madrasa al-Mustanṣiriya are both situated not far to the north-west of al-Madrasa al-Mirjāniya. To the east of al-Mirjāniya is the Jāmi' of Sūq al-Ghazl (pl. 95a). The comparative lack of space obliged the planner of al-Madrasa al-Mirjāniya to modify the north-western corner of his plan to accommodate an already existing road which probably led from Sūq al-Thalāthā' to Sūq al-Rayḥāniyn, and to the Jāmi'

1. Ibn Jubair states that during his visit the eastern part of Baghdad was composed of seventeen quarters and was surrounded by great semi-circular walls with four monumental gates (op.cit., pp. 225-9). He also reports that this part of Baghdad had many markets and was over-populated (ibid., p. 228).

of Sūq al-Ghazl.[1] According to al-Naqshabandī the site of al-Madrasa al-Mirjāniya was surrounded by houses and markets and in front of its entrance there was a market gate topped with a great dome and this, according to him, caused the cut in the north-western part of the plan.[2] But it seems more reasonable to believe that the cut was caused by the uneven zigzagging road which used to pass by the madrasa.[3]

The plan of al-Mirjāniya is almost rectangular in shape, measuring 39.20 x 36.80 m. The piece of land which

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1. Details of these markets and their situation are given by Jawād and Sūsa, op.cit., p. 175.
2. He states without giving the source of his information: "قيل انها كانت باب سوق كان عليه قبه عظيمه"
   "It had been said that it was a gateway of a market topped with a great dome" (see "al-Madrasa al-Mirjāniya", p. 38).
3. Cutting part of, or modifying the plan of, an important building such as a madrasa because of a pre-existing street is a common feature in Islamic architecture. In Persia, at Naṭanz, Wilber had noted that the lack of plan harmony throughout the structures was the result of the presence of previously existing streets or buildings (op.cit., p. 133, fig. 23). Examples of Egyptian madrasas with modified plans are al-Madrasa al-Kāmiliya, al-Madāris al-Ṣāliḥiya, Masjid and Madrasat al-Sulṭān Ḥasan in Cairo (Fikrī, op.cit., II, figs. 9, 13 and 50). Herzfeld in his comment on the irregularity of the plan of al-Madrasa al-Nūriya in Damascus states that this feature was the rule of that time with building in crowded cities. Nevertheless, many other Islamic monuments still standing had their plans, whether square, rectangular or polygonal, executed in full.

was actually occupied by the building itself amounted to 1363.17 square meters.[1]

The plan of al-Madrasa al-Mirjāniya contains all the well-known basic elements of the madrasa as well as the tomb of its founder; thus from this point of view, al-Mirjāniya represents the only existing example of this type in Baghdad. The entrance of the madrasa (no.1 in fig. 27) occupies the western side of the plan and leads through a vaulted passage to an almost square courtyard (21 x 20.10 m.) occupying about a quarter of the entire area of the madrasa. The Īwān (no. 23) is placed on the north-eastern side.

Facing the Īwān, and thus on the south-west side, is the muṣallā (nos. 8, 8a and 8b). This is a rectangular hall with three entrances, the middle one being wider than those on either side. The miḥrāb is set as usual in the middle of the qibla wall. In section the miḥrāb is a five-sided niche. It is possible that this form dates from Sulaimān Pāshā's restoration and does not represent the section of the original miḥrāb. Another miḥrāb which also

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1. The area of the cut, which is triangular in shape, amounted to 79.39 square meters. The side of the madrasa which has this cut appears as oblique with four unequal zigzag stages which suggest the actual shape of the street. In Herzfeld's plan the four zigzag stages do not appear. The existence of the subsidiary entrance 26 at the north side of the madrasa does emphasise the existence of the suggested street which causes the cut in the plan. This cut, as will be shown, had its effect on the final architectural shape of cell 27 on the ground floor and cell 51 on the first floor of this madrasa (see figs. 27 and 28).

has the same five-sided niche is set at the left-hand side of the middle entrance of the muṣallā (fig. 27). The plan of the muṣallā is similar to those of the so-called Abbasid Palace and al-Madrasa al-Mustanṣiriya (figs. 13, 15).

The turba (No.15) of Mirjān occupies the middle of the south-east side and is on the axis of the main entrance. It is basically square in shape with a rather deep recess on each side. The turba has one main entrance open on to the courtyard, but it is also connected with hall 13 by means of a doorway. The deep recesses in the turba of Mirjān face each other in a way similar to four Īwāns, thus creating the impression of a cruciform plan. The plan of the turba of Mirjān recalls the Ayyūbid Syrian turbas which were attached to madrasas and other public buildings. They all have square plans and most of them are recessed.[1] From an examination of the plan of the turba of Mirjān it is clear that it was neither imposed on the plan of the madrasa as a whole, nor a later addition, as al-Naqshabandī suggests.[2] Indeed the

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1. Examples can be seen in the turbas of al-Madrasa al-Nūriya, al-Madrasa al-'Ādiliya, al-Madrasa al-Rukniya, al-Madrasa al-Murshidiya or Khadīja Khātūn and Maqām Nabī Allāh Yūsha' at Ma'arrat al-Nu'mān (see Herzfeld, "Damascus I" fig. 28; "Damascus II", figs. 1, 6, 36 and 62-63).
2. "Al-Madrasa al-Mirjāniya", p. 42. There is no doubt that al-Mirjāniya originally had a turba for its founder. But the question can be put whether this turba was originally intended to be for Mirjān (who died sixteen years after the completion of the building of the madrasa) or for the mother of Shaikh Ḥasan.

plan of this turba is well integrated with the rest of the plan of this madrasa. It seems that the planner of this madrasa produced such thick walls for the turba simply to ensure stability. Al-Naqshabandī's suggestion is based on the absence of brick ornament and of an inscription. In Iraq, it was almost a common feature to have turbas in madrasas for their founders.[1] Thus Mirjān in fact followed a rule already established for more than two centuries before he died, not only in Iraq but in other parts of the Islamic world.[2]

The plan of the so-called Abbasid Palace in fact represents the closest parallel to the plan of al-Madrasa al-Mirjāniya; it has a similar courtyard and its Īwān is opposite the muṣallā.[3] Earlier Syrian madrasas are generally similar in plan to al-Mirjāniya.[4] Among the most similar

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1. See supra, pp. 25-41.
2. In Syria during the Ayyūbid period the building of madrasas which included a turba for their founder was a quite common feature; see Herzfeld, "Damascus I", pp. 40-6; idem, "Damascus III" passim. In Egypt al-Madāris al-Ṣāliḥiya which was built by Najm al-Dīn Ayyūb in Cairo in 641/1243 also contains a turba for al-Malik al-Ṣāliḥ at its northern part; see Fikri, op.cit., II, pp. 60-61.
3. Cf. figs. 13 and 27.
4. Examples are al-Madrasa al-Ẓāhiriya built in Aleppo in 616/1219 by al-Ẓāhir Ghāżī ibn al-Malik Ṣalāḥ al-Dīn ibn Ayyūb, (see al-Nu'aimī, 'Abd al-Qādir ibn Muḥammad, al-Dāris fī Tārīkh al-Madāris I, ed. J. al-Ḥasanī (Damascus, 1948), p. 340; Creswell MAE II, pp. 112-3, fig. 60), al-Madrasa al-Firdūsiya built by Ḍaifa Khātūn, daughter of al-Malik al-'Ādil, in 633/1235 in Aleppo (Creswell, MAE II, p. 116, fig. 64) and al-Madrasa al-Sharafiya built between 640-50/1242-52 by al-Shaikh Abū Ṭālib, known as Ibn al-'Ajmī, in Aleppo (see al-Nu'aimī, op.cit., p. 316; Creswell, MAE II, p. 116, fig. 65).

madrasas which have their Īwān set opposite the muṣallā are al-Madrasa al-Nūriya al-Kubrā, al-Madrasa al-'Ādiliya and al-Madrasa al-Kāmiliya.[1] An example is provided by al-Madrasa al-Qāsimiya at Mārdīn.[2] It seems that there was no definite rule for this arrangement. Once the muṣallā is correctly oriented, the setting of the rest is not so important from the religious point of view. Some madrasas have their entrances facing their muṣallā; others have the Īwān facing the muṣallā. Apart from the muṣallā, the rest of the arrangement is probably affected by the available space. The plan of al-Mirjāniya came into being after long experience in this field in Iraq, Persia and Syria; thus it includes all the already known conventional features of such buildings.[3] Its origin as a house with an open courtyard

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1. For these see respectively, Herzfeld, "Damascus I" fig. 1; idem, "Damascus III", fig. 1; Creswell, MAE II, p. 119, fig. 66. The Kāmilya madrasa has a square plan and its Īwān is set against its muṣallā. The plan in general has a striking resemblance to that of al-Mirjāniya, indeed this madrasa represents the most relevant Syrian parallel.
2. According to Herzfeld the founder, Qāsim, was not one of the princes of Mārdīn, hence the date remains uncertain ("Damascus I", p. 43; fig. 29).
3. Apart from both the so-called Abbasid Palace (al-Madrasa al-Sharābiya ?) and al-Madrasa al-Mustanṣiriya the plan of the building known locally as "'Imārat or Mashhad al-Arba'īn" at Tikrīt which, according to A. Ḥamīd, is a madrasa including two turbas built towards the end of 5th/11th century, is similar to the plan of al-Mirjāniya in some respects. The plan is a 47 m. square with an almost square courtyard and includes a muṣallā rectangular in shape (7.5 x 5.5 m.), an Īwān set opposite the main entrance and halls of various sizes, all opening onto the courtyard ("'Imārat al-Arba'īn fī Tikrīt", Sumer XXI (1965), pp. 123-55, fig. 1).

can be traced back to the pre-Islamic epoch in both Iraq and Persia and its immediate source of inspiration was the local contemporary madrasas in Iraq.[1]

E. The style of architecture

Al-Madrasa al-Mirjāniya was built of brick and juṣṣ.[2] The parts of this madrasa which are still intact are, as noted above, the entrance and cells 27 and 28 (fig.27). On the first floor room 29, cells 51-52 and part of corridor 48 were also saved from destruction (fig. 28). The remaining parts were later linked with the jāmi' which was built immediately after the demolition of the other parts of the madrasa. The remaining parts shed much light on the vaulting system of the cells and their brickwork. In the following description all the available photographs are used as substitues for the missing parts of the madrasa.

Apart from the monumental entrance, which is elaborately decorated, the rest of the exterior façades are executed with plain brick in common bond. The walls were originally about 10.80 m. in height. At present the difference between the original ground level and the street level is about 2.50 m. The height of the walls of al-Mirjāniya is more or less similar to those of the 'Abbasid Palace and al-Mustanṣiriya.[3]

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1. See infra, pp. 400-9.
2. The size of brick varies slightly, but 22 x 7.5 cm. is the commonest size. The entrance brickwork shows other sizes such as 22 x 7 cm. and 24 x 7.5 cm.
3. The height of the walls of the 'Abbasid Palace and al-Mustanṣiriya is about 10.50 m.

Due to the lack of earlier photographs and of other information it is not easy to ascertain whether the exterior façade of al-Mirjāniya once bore ornaments or inscriptions, but applying brick ornament and inscriptions on the exterior façade was a common feature in Baghdad during the later Abbasid period, as for example on the river façade of al-Mustanṣiriya (pl. 37). Plates 94 and 95 show that recent buildings, mostly shops and houses, were attached on the right hand side of the main entrance and on the south-eastern side (the side which contains the turba of Mirjān). It seems that the north and the north-eastern sides were free-standing. Although no illustrations of these sides are available, the existence of entrance 26 (fig. 27) suggests that a road isolated this part of the madrasa. Plate 96 illustrates the qibla wall from outside. The most interesting part of it is a hollowed miniature semi-minaret placed at the middle of the wall up to about 2 m. from the street level. No information regarding its date is available, but it may well be attributed to the time of the restoration of Sulaimān Pāshā in 1200/1785 for the following reasons. Its place suggests that it was set behind the minbar and not behind the miḥrāb, which has its own niche, and which stands well below this level.[1] It has been shown that the minbar was introduced by Sulaimān when he converted the madrasa to a jāmi'. As the brick minbar of Sulaimān has its own platform topped with a conical canopy

1. The only possible explanation for its erection behind the minbar is probably to form a niche, thus giving more room for the imām when he stands to deliver his khuṭba.

which offers enough space for the imām, one cannot see any practical necessity for erecting this minaret motif behind it. Accordingly it might be suggested that its use here was purely decorative. Brick was used presumably to harmonise with the wall and because stone would be too heavy. It starts at the base with three layers of corbelled muqarnaṣāt which build up the projection for the semi-rounded base. Thereafter the base becomes conical and continues as a semi-cylindrical shaft topped by a fluted summit. The architect did not even forget to apply the metal spherical ornament which usually crowns Iraqi minarets. In Iraq no parallel is to be found for this minaret motif on either earlier or later standing monuments. Distant parallels for this architectural sculpture are to be found in Anatolia. Dr. J.M. Rogers has noted on the façade of the Cifte Medrese at Sivas (670/1271-2), two small aedicules suggesting a section through a domed building, while Professor Der Nersessian has noted the tholoi which decorate the base of a capital from the Hospital at Divriği (626/1223).[1]

The main entrance of al-Mirjāniya represents a monumental portal which occupies the full height of the building.[2] As is the case in the monuments of Iraq of the

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1. J.M. Rogers, Patronage in Seljuk Anatolia, p. 153 and pp. 195-6, nn. 40-44 (where the relationship to the models of churches used in the exterior façades of Armenian churches is explored) and pls. 32-33. For the Armenian examples, see P. Cuneo, "Les modèles en pierre de l'architecture arménienne", Revue des Etudes Arméniennes N.S. VI (1969) 201-31.
2. The height of the entrance from the top to the original ground level is 12 m.

Saljuq, later Abbasid and Ilkhanid periods previously discussed, here, too, it seems the intention was to emphasize the importance of the main entrance (pl. 98). As far as this idea is concerned the Jalairid architect in fact did not produce anything new; he simply followed earlier local examples which exist not only in madrasas but also in some turbas of the Ilkhanid period.[1] Although the main entrance represents one architectural unit, each of its interior and exterior façades is treated separately and differs in detail from the other. During the course of the restoration in 1970 by the I.D.G.A. the foundations of the entrance were exposed for reinforcement and hence it was possible to observe the method used in their construction. The foundation of the entrance comprises a platform 2 m. in height. This platform is formed by three gradually reduced layers. The wall of the entrance proper starts on the uppermost layer. The same method was followed in building the portals of both the 'Abbasid Palace, al-Mustanṣiriya and al-Sharābiya at Wāsiṭ. It is also evident in the walls of Khān Mirjān.

Structurally the entrance of al-Mirjāniya is formed by a vaulted passageway at the middle of which there is a square vaulted chamber with an extension on either side faced with

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1. E.g. the turba of Muḥammad al-Sakrān (pl. 52), the turba of 'Umar al-Suhrawardī (pl. 89) and the tomb of Chelebi Oghlu at Sulṭāniya (A. Godard, "Le Tombeau de Mawlânâ Ḥasan Kâshî à Sulṭânîyè", Arts Asiatiques I (1954), fig. 14).

pointed arches. Above this vaulted chamber is room 29 which has two windows, one looking on to the courtyard and the other on to the street. This commanding position, as well as its size, suggest that it was for the use of an important person, probably the nāẓir al-madrasa.[1] The entrance is flanked on its exterior by two substantial buttresses of semi-cylindrical shape. The one on the left hand side continues as a minaret (pl. 98), but neither its date nor its origin is certain. The other, on the right hand side, was clearly crowned by a minaret once (pl. 99). These buttresses can only be justified architecturally if they ended in minarets. The use of buttresses to carry minarets becomes important during the Saljuq and subsequent periods.[2] The buttresses, whether rectangular or semi-rounded, are usually raised to the same height as the entrance itself. They are distinct from it only in that their decoration is treated in a different way, even though they constitute an integral part of the entrance. In Iraq, apart from the entrance of al-Madrasa al-Sharābiya at Wāsiṭ (pl. 45 and fig. 20), the other similar contemporary entrances do not include minarets.[3] The use of two minarets to flank the

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1. The restriction of brick ornament to a single doorway in both al-Mustanṣiriya and al-Sharābiya of Baghdad led Ma'rūf to suggest that the associated chambers were used by the nāẓir (al-Madāris al-Sharābiya, p. 210, pls. 12,13).
2. For examples see supra, p. 92-4.
3. Such as the entrances of the so-called Abbasid Palace and al-Madrasa al-Mustanṣiriya.

entrance was possibly the reason for introducing these buttresses at the entrances. Some Persian portals of madrasas, shrines and mosques datable to the early 8th/14th century show how popular these pairs of minarets were.[1] It seems that this tradition continued in Persian architecture of the Timurid and subsequent periods.[2] Pairs of minarets also appear flanking Īwāns of some Persian religious buildings.[3] The constant use of this architectural feature in Persia suggests that it originated there; it was probably spread by the Saljuqs.

The entrance of al-Mirjāniya, with its buttresses which were unmistakably used to carry minarets, thus displays a well known feature which has its roots not only locally, i.e. al-Sharābiya of Wāsiṭ, but also in the neighbouring territories of Persia and Anatolia.

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1. E.g. they may be seen in a portal, probably the remains of a madrasa, at Qumm, datable circa 726/1325 (Wilber, op.cit., p. 167, pl. 156), at Abarqūh in the portal known locally as the Masjid-i Niẓāmiya datable circa 726/1325 (A. Godard, "Abarḳūh", Athār-è Īrān, I, 1 (1936), p. 72, fig. 52; Wilber, op.cit., pp. 167-9, fig. 158), in Iṣfahān Do Minār Dārdasht also datable to 726/1325, Do Minār Dār al-Baṭṭīkh datable circa 726-50/1325-49 (Wilber, op.cit., pp. 167-70, figs. 158, 163) and in Kirmān the portal of the Masjid-i Jāmi' dated 750/1349 (SPA pl. 451a).
2. See supra, p. 93, n.4.
3. E.g. the Īwān of the south side of the Masjid-i Gawhar Shād at Mashhad dated 821/1418 (SPA pl. 430), in Māhān at the shrine of Ni'mat Allah dated 841/1437 (ibid., p.1499) and in Iṣfahān at the madrasa Madar-i Shāh dated 1126/1714 (ibid., pl. 470; for more recent monuments see pls. 439b, 448, 463, 464-5).

The exterior façade of the main entrance consists of a rectangular frame which includes a lofty arch of pointed profile. The framing bands which enclose the arch also form the concave and convex mouldings of the entrance (pl. 97). The bands frame the historical text above the doorway of the entrance. The buttresses are merged on both sides with the walls and the outermost rectangular frame of the entrance.

The doorway of the entrance (pl. 97) is formed by a pointed arch of a popular and characteristic shape known as al-daura, 2.65 m. in height. The arch of the doorway and the decorative bands are all framed and separated from each other by rows of headers. The first panel of brick ornament which framed and topped the doorway, leaving in the middle a space for another panel with a different pattern, is composed of a geometrical pattern mainly formed by the radiation and the intersection of 12-pointed stars placed at equal intervals and inset. This method of creating a pattern could easily form other geometrical units. Among those here are 5-pointed stars, octagons, 5-sided figures and diamond-shaped units. The panel in the middle which surmounts the pointed arch of the doorway is decorated with similar patterns, but these are based on 7-pointed stars. The lower part of this middle panel echoes the shape of the pointed arch of the doorway.

The next panel above the doorway includes the historical inscription.[1] This starts with a triangular panel filling the apex of the arch, ornamented with leaf scrolls similar in

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1. See infra, pp. 211-3.

detail and execution to later 'Abbasid and Ilkhanid examples.[1] Lines 5 to 11 are interrupted in the middle by the rectangular window of room 29. This window, which is topped with a semi-circular arch, corresponds to another one on the interior façade of the entrance (pl. 105). Al-Mirjāniya and Khān Mirjān are the only examples in Iraq in which the historical texts are interrupted by windows (pl. 134).

The doorway is framed by the next group of ornamental bands which build up the concave and convex moulding of the entrance and which take the same pointed arched shape. These bands are set on both sides upon a rectangular platform about 30 cm. in height (pl. 100). Starting from the inside the first band comprises a semi-cylindrical engaged column. Its ornament as well as the ornament of the other bands beside it starts after eight courses of plain brick followed by a narrow decorative band. The scheme of the ornament is a continuous pattern of intersecting bands including alternating six-pointed stars and hexagons. An attractive effect is created by recessing the bands and projecting the geometrical units of this pattern. The arabesques, especially those carved inside the octagons and the 4-sided figures, recall an earlier local form.

The next section is a concave band ornamented with a geometrical pattern. The arabesque, which is mainly a curling scroll, is again very detailed. The variation in level is intended to create contrasts of light and shade.

The last and the most impressive section contains the

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1. Cf. pls. 36, 52 and 90.

cable moulding motif (pls. 98, 100-103). Although this element is found on earlier monuments such as the so-called 'Abbasid Palace and on the entrance at Wāsiṭ (pls. 35, 45), here it represents an advanced stage in both its execution and ornament. The cable element of al-Mirjāniya arises out of a base composed of five stylized vase elements ornamented with an elegant scroll enclosing trilobed and other curling motifs (pls. 102-103). The ornament is applied on three out of the five sections which build up the cable. The ornament is chārlang or adjoining linked stars with four points. The space between each pair of these chārlang is filled by a pair of half-octagons. The half-octagonal units contain more dense arabesque than the chārlang units. Cable mouldings were of course a popular element in the architecture and in miḥrābs of earlier, contemporary and later periods in both Iraq and Persia.[1]

The buttresses are treated with an identical scheme of decoration. Their lower parts contain six engaged semi-circular columns executed in plain brick and bordered on the upper and lower parts by a minor decorative band (pl. 104).[2] The rest of the ornament of the buttresses is composed of diagonal spiral bands separated from each other by a slightly recessed, narrow plain band. The ornament here is again based on the radiation and intersection of 8-pointed stars (pl. 99).

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1. See supra, pp. 69-71, 88.
2. See supra, pp. 91-2.

The interior façade of the entrance is rectangular in shape and composed of four concentric rectangular bands (pl. 105). These bands frame the pointed arched recess which encloses the doorway. Plate 106 shows that parts of the decorative bands as well as the tympanum of the arch were under a layer of _juss_, which was removed by the I.D.G.A. in 1971.

Plate 107 shows that some pieces of an inscribed brick were arbitrarily set in the upper left hand corner at an unknown date. These pieces probably came from the inscribed band of this façade. The I.D.G.A. removed these pieces and restored the ornamentation of this band to its original shape as illustrated in pl. 108. The work on this façade was resumed by the I.D.G.A. in 1971 when this ornamented band was completed and linked with the other parts on the right hand side.

The inscription, which is composed of Qur'ānic verses executed in _naskh_ on an ornamented background, will be dealt with later. This inscribed band is gradually recessed towards the inside and frames the central panel which includes the lofty pointed arched recess of this façade.

When the plaster from the panel above the doorway and around the window was removed, these spaces, as expected, were found to be elaborately ornamented (pl. 108). The panel which surmounts the doorway has an impressive geometrical pattern. Variations in the level of the unit and the minute type of arabesque are both characteristic features of this panel. Next to this is the panel of pointed shape which

enclosed the window and which is similar to that on the exterior façade of the entrance. Although this panel is interrupted by the window, it was prepared as if it were going to receive four lines of inscription. After the plaster was removed no trace of an inscription was visible; perhaps the panel was originally uninscribed.

The minaret is situated on the left hand side of the main entrance. It is structurally linked with the buttress of this side (which is 10.80 m. in height), appearing as a continuation of the buttress itself (pl. 95). The size of its bricks varies but most of them correspond to the bricks in the entrance and to those of Khān Mirjān.[1] The height of the minaret from its springing point above the buttress up to its summit is 16.60 m. This makes its full height 26.40 m. A lack of the usual brick ornament is a prominent feature of this minaret. The shaft, which is 9.5 m. in height and 8.20 m. in circumference, is executed in plain cut brick in common bond, and ends with a row of bricks set vertically. The projection of the gallery is achieved by a quite peculiar type of muqarnaṣ zone which bears no relation to the conventional type, but is simply eight courses of corbelled brick which give a serrated effect (pl. 96). A similar muqarnaṣ zone was used in the minaret of al-Kūfa mosque (datable to the 8th/14th century) which no longer exists.[2]

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1. Inside the shaft the sizes are 19 x 5.5 cm. and 18.5 x 5, while those of the exterior are 25 x 6 cm., 19 x 5.5 cm., 15 x 4 cm., 13.5 x 6 cm., 19 x 6 cm. and 21 x 6 cm. The sizes at the sham'a are 18.5 x 4.5 cm. and 18.5 x 5 cm. The bricks of the gallery are larger: 25.5 x 7.5 cm.
2. For more detail see infra, pp. 248-51, and pl. 143.

Another quite relevant parallel is to be seen in the minaret of al-'Āqūlī mosque in Baghdad (pl. 109) probably dating from the 8th/14th century.[1]

The circular gallery is 10.50 m. in circumference. Its sole ornament is two glazed tile bands decorating its upper and lower parts. The ornamentation is composed of an alternating black and light blue chevron motif. The wall of the gallery is 1.10 m. high.

In the middle of this gallery stands the sham'a which is 6 m. in height, and 6.40 m. in circumference. It is again executed in plain brick in common bond. As usual it is shorter and thinner than the main shaft; this is in fact an established tradition in almost all Iraqi minarets. The sham'a is terminated by a rounded summit with a pointed profile.

The entrance to the minaret is from the roof through a rectangular doorway, 1.40 m. in height and 67 cm. in width, topped by a type of skew arch similar to the one which appears

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1. The mosque of al 'Āqūlī which still exists in the eastern part of Baghdad was originally a house of al-Shaikh Jamāl al-Dīn 'Abdallāh ibn Muḥammad ibn 'Alī al-'Āqūlī, a famous professor of the Shāfi'ite madhhab at al-Madrasa al-Mustanṣiriya. He died in 728/1327 and was buried in his house, which was converted according to his will to a jāmi'. During the Ottoman period the jāmi' underwent two major restorations, first by Muḥammad Pāshā in 1095/1683, the second by 'Umar Pāshā in 1163/1749; see al-Alūsī, op.cit., p. 46, and infra, pp. 359-62 and pls. 197-200.

on the minaret of Jāmi' Qumriya (pl. 26). The entrance leads to a staircase consisting of 31 steps, each measuring 60 x 28 cm. The staircase spirals around a brick core. Twenty-seven of these steps lead to the gallery of the minaret; they end at a rectangular doorway 1.60 m. in height and 71 cm. in width. The rest of the staircase, which has four steps, continues inside the sham'a. Apart from reinforcing the structural fabric of the sham'a, no other function suggests itself.

The sources of light and ventilation inside the minaret are two rectangular windows in the main shaft facing the north-west and the north-east. Another six are set in the upper part of the sham'a. They are almost square, and face in all directions.

The minaret at present is anepigraphic, and in addition to this the lack of written sources and artistic evidence render its date uncertain. The plain shaft makes it difficult to attribute it to the Jalairid period, which represents the apogee of brick decoration in Iraq. Judging by the architectural features of the entrance portal, Herzfeld concludes that it must have had a pair of minarets flanking it, even though he suggests a later date (unspecified) for the existing minaret.[1] One architectural feature which suggests a Jalairid attribution, however, is the distinctive type of muqarnaṣāt which is similar to that of the fairly firmly dated minaret of al-Kūfa mosque. Factors which

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1. Reise II, p. 184.

contribute to this dating are the access from the roof and the lack of the overall kāshī decoration which is so popular on Ottoman minarets (pl. 93). It is also possible that the minaret, though it existed in pre-Ottoman times, was in poor condition and that it underwent a major restoration, probably at the hands of Sulaimān when he converted this madrasa to a mosque. This putative restoration did not concentrate on the architectural revetment, but simply on putting the minaret in good order. Even if the minaret is Ottoman, this does not necessarily mean that al-Mirjāniya did not have one or a pair of minarets originally. This feature was quite common in building madrasas, mosques and turbas in many Islamic countries.[1] In Iraq the entrance of al-Madrasa al-Sharābiya at Wāsiṭ, which is architecturally similar to the entrance of al-Mirjāniya, still retains parts of its pair of minarets (fig. 20). Thus the plan and the architectural features of the entrance suggest that al-Madrasa al-Mirjāniya had at least one minaret originally. Perhaps Mirjān wanted to build two minarets instead of one, but he might have changed his mind for some unknown reason. Another possibility is that there was a pair of minarets; these might have fallen down at an unknown date and Sulaimān was only interested in rebuilding the one on the left hand side when he converted this madrasa to a mosque.

The muṣallā is divided into three chambers by means of two large pointed transverse arches supported by the

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1. Supra, p. 93, n. 4.

longitudinal wall on both sides (pl. 112). These chambers are topped with a row of three domes, the one in the middle, which covers the bay of the mihrāb, being higher and wider in diameter than the lateral ones (pl. 111). Of architectural interest is the zone of transition of these domes, which is distinctively different from the varied muqarnaṣ zones of transition in Iraqi domes. In the middle dome the zone of transition is based on the pendentive system. On each corner a pendentive composed of three triangular sectors transforms the square shape of the chamber to a dodecagonal shape (pl. 113). On this rests the shell of the dome. The pendentives of the two domes on either side are composed of one concave sector at each corner (pl. 114). This has an important architectural effect in reducing the rectangular shape of the side chambers to a square shape, and then transforming them to the octagons on which these two domes are constructed.

The pendentives of the muṣallā of al-Mirjāniya are lavishly decorated with brick ornament of high quality (pls. 115-118). This ornamentation produces a honeycomb effect. No parallels for pendentives with such extravagant brick ornamentation present themselves. It easily surpasses earlier work of this kind in Iraq.

Another masterpiece of this muṣallā is the mihrāb and its façade (pl. 119). Originally it was a pointed arched niche enclosed by a rectangular frame. It is surmounted by a triangular panel containing the first part of the Mirjān endowment inscription, and flanked on both sides by an elaborate panel (pl. 120). A distinctive feature of these

panels inside the muṣallā is that they are bordered with a great variety of minor borders which all contain stylized leaf scrolls, each subtly different (pls. 120, 121b, 122a).

The rectangular panels on both sides of the miḥrāb (pls. 119 and 120) are identical and contain a multilobed decorative arch enclosing a geometrical ornament. The spandrels of the arch are ornamented with elegant arabesque which extends on both sides, and fills the space around the arch. The detail of this arabesque is similar to that which surmounts the historical text of the exterior façade (pl. 97).[1]

Other touches of the brick ornament of the muṣallā are found on the interior façade of the middle entrance of the muṣallā, which is similar to that of the miḥrāb (pls. 115 and 116); on the intrados of the transverse arches (pl. 116, 117 and 121b); and on the northern wall of chamber 8a (pls. 115, 116 and 121a).

The exterior façade of the muṣallā until quite recently still retained its original elements.[2] These elements, as shown in plate 110, are the triple-arched entrances, an inscribed band containing a Qur'ānic text on the upper part of the façade, and the three domes of the muṣallā. The

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1. A similar type of arch later became quite popular, but usually had tiled ornamentation. An example is to be seen in a tiled niche at the Green Mausoleum in Bursa, see Ünsal, op.cit., pl. 93.
2. The earliest photograph available for the façade is the one published by Massignon in 1912 (op.cit., II, pl. 4).

domes are of slightly pointed profile and lack decoration. Plain square brick was used for their revetment (pl. 111). The middle dome is pierced with eight rectangular windows set in pairs and oriented towards the four cardinal points (pl. 113).

The lower part of the façade of the muṣallā proper is flanked by two pointed-arched doorways which lead to staircases 6 and 9. Each of these doorways is surmounted by an unusually impressive lobed panel with four projections, containing Qur'ānic verses. No detail of other ornamentation above these doorways was visible until the plaster was removed by the I.D.G.A. Plates 122b and 123 illustrate the amount of the hidden ornament around the lobed panel and around the arch of each doorway. Apart from the different Qur'ānic verses inside the lobed frames, the rest of the ornament on both these doorways is identical.

The upper part of the façade of the muṣallā is flanked by two identical windows, with decoration of high quality. They correspond to rooms 36 and 38 on the first floor of the madrasa. Plate 124 illustrates the window of room 38, which is on the left hand side of the muṣallā. The pointed recess of this window encloses five bands which take the same pointed shape. The outermost is an engaged half-rounded column executed in plain brick. The next two are of rows of plain headers. Thereafter a decorative band follows. It is wider than usual and contains an elaborate geometrical pattern. Of special interest are the geometrical units which contain the knot motif; they are all similar, apart from the one in the middle which has a modified shape similar to a spearhead,

in order to fill the space at the apex of the arch. The next frame is also of plain brick headers forming an immediate frame to geometrical brick ornament. The composition as well as the arabesque is again similar to the panel of staircase 6 (pl. 123). It might be interesting to note that the application of such lavish and elaborate brick ornament for windows of ordinary cells probably resulted from their honourable position on either side of the muṣallā. An earlier, similar example is a window inside the muṣallā of al-Nūrī mosque in Mosul. This is likewise in an honourable place, and is lavishly ornamented with decorative stucco frames.[1]

The muṣallā of al-Mirjāniya, which is similar to Syrian examples, was in fact the only surviving example in Iraq of this type.[2] Its great importance was first referred to by Creswell in 1945, when he described it as an outstanding monument of Muslim architecture.

The turba of Mirjān is structurally linked to the remaining parts of the madrasa (pl. 125).[3] The main entrance

1. See infra, pp. 338-41 and pl. 184.
2. According to Creswell, Syrian muṣallās have a dome in the centre with tunnel-vaulted extensions to right and left; occasionally there are three domes in a row. In Baghdad the plans of the muṣallā in both the so-called Abbasid Palace and al-Madrasa al-Mustanṣiriya are similar to the plan of the muṣallā in al-Madrasa al-Mirjāniya. But because of the changes in the original structure in both cases, it is not certain whether their vaulting systems were originally similar to that in the muṣallā of al-Mirjāniya, or whether they were also ornamented with similarly lavish decoration.
3. According to Massignon, this turba was opened for the first time in the presence of Shaikh Nu'mān al-Alūsī, the trustee of the waqf, in 1880; see op.cit., II, p. 3.

of the turba is through an arched doorway opening onto the courtyard. The doorway is set in a rectangular recess and surmounted with another lofty pointed arched recess. At the middle of the upper part of this recess is a rectangular window with a grille of geometric pattern, probably executed in stucco or wood.[1] The exterior façade of the turba as it appears in plate 125 is entirely plastered with juṣṣ. It is possible that it originally bore the usual brick ornament. The turba is covered with a dome of a type unique in Iraq (pl. 96). It is constructed on a high circular drum which displays on its exterior engaged columns treated with fine hazārbāf brickwork. These engaged columns of the drum rest on an octagonal base and are bridged at the top by little squinch-like arches enclosing arabesque decoration (fig. 29). Although local monuments show the use of this engaged column motif it was used on a larger scale in Persia.[2] The most relevant Persian example in this respect is the tower at Rādkān East (perhaps dated 680/1281) which displays almost identical brickwork.[3] The drum of the dome of Mirjān is terminated by a band bearing a geometrical pattern executed

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1. In Herzfeld's drawing of the façade of the turba, the main entrance is replaced by a window with pointed arch. The window on the upper part, which is noted above, is inaccurately drawn by Herzfeld, with no ornament and with a pointed arch; see fig. 29.
2. Local examples may be seen on the monumental portal of Wāsiṭ, and on the western façade of the Abbasid Palace (pls. 35a and 45).
3. SPA IV, pl. 347a; see also supra, pp. 91-2.

in glazed tile of two colours, probably white and blue. The shell of the dome is of pointed arched profile.

The interior of the turba comprises four pointed-arched recesses occupying the full height of the four walls. The interior lacks decoration, and is entirely plastered with jusṣ. Plate 126a illustrates the interior of the dome shortly before its demolition in 1948. This photograph shows that the dome of Mirjān is composed of two shells which do not precisely match each other. The inner shell is fluted and consists of 24 concave sectors. This shell is constructed over three layers of muqarnaṣāt of different shape which transform the square shape of the tomb chamber to a circle on which the fluted shell rests. At the centre of the shell a star of 24 points is formed by the ends of the fluted sectors. The source of light inside the turba is provided by two windows in the zone of transition, in addition to the one previously noted over the entrance of the turba. In Iraq an earlier dome with a fluted shell first appeared in al-Ukhaiḍir (2nd/8th century) over the entrance passage which leads to the great hall, and part of such a shell appears at the corner of the masjid of al-Ukhaiḍir[1] also. Another example, which still exists, is the inner shell which covers the northern sanctuary of the church of Mār Behnām, 35 km. to the south-east of Mosul (559/1163).[2] Ayyūbid domes of Syria

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1. Creswell, EMA II, pls. 10b and 18-19.
2. Al-Mauṣil, pp. 173-4, fig. 4; ʿAbbū, op.cit., pp. 72-80.

show the great popularity of this fluted shell.[1] Such a fluted inner shell was popular in Iraq in subsequent centuries, and its appearance in the turba of Mirjān may represent a recreation of an Abbasid form by a Jalairid architect.

The Īwān is situated at the north-eastern side, opposite to the muṣallā. It occupies the full height of the building, which amounts to 10.80 m. Structurally it is similar to the Īwāns of al-Madrasa al-Sharābiya and al-Madrasa al-Mustanṣiriya. It has a barrel vault faced with a pointed arch. The earliest available photograph of the Īwān is that published by Herzfeld in 1910 (pl. 126b). This does not show any brick ornament, although there were traces of inscribed brick on the rear pointed-arched recess of the Īwān. This inscription later fell (pl. 187) and was discovered inside the well on the left hand side of the Īwān. It is now exhibited at the Abbasid Palace Museum. From examining the illustrations of the Īwān one can see that the wall on which the vault of the Īwān rests is slightly recessed, leaving a suitable place for applying brick ornamentation. Judging by the ornamentation on the Īwāns of contemporary madrasas in

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1. Examples are: in Ḥamā, Jāmi' al-Nūrī and Jāmi' al-Ḥasanain ("Damascus II", figs. 64, 67b) and in Damascus, Turbat Banī 'l-Muqaddam ("Damascus I", fig. 11), al-Madrasa al-Ṣāliḥiya, al-Rukniya and Turbat al-Najmiya ("Damascus III", figs. 36-9 and 61). On these domes see also A.N. 'Abbū, The Ayyūbid domed buildings of Syria, Ph.D. thesis presented to the University of Edinburgh in 1973 (unpublished), passim.

Baghdad it seems reasonable to suggest that brick ornament once adorned the inner surface of the vault as well as its façade.

Apart from the above-mentioned four main parts of the madrasa, the arcades which surround the courtyard are basically similar, and a sense of symmetry dominates. The arcades are rectangular frames enclosing pointed arched recesses which surmount the pointed arched doorways around the courtyard. The arcades of the first floor are supported by substantial piers similar to those of al-Madrasa al-Mustanṣiriya.

Al-Madrasa al-Mirjāniya has, on both floors, 30 cells of different shape and size. On the ground floor they are 2-5, 14, 16-17, 21-22, 24 and 27-28 (fig. 27).[1] On the first floor they are 31-32, 34-40, 43-47 and 49-52 (fig. 28).[2] If one assumes that the average size of these cells is enough for sleeping accommodation for at least four students, then it is possible to suggest that al-Mirjāniya was originally established for 120 faqīhs, presumably half of them Shāfi'ite and the other half Ḥanafite.

Although both the muṣallā and the īwān sometimes constitute suitable places for holding classes of religious instruction, al-Mirjāniya has 5 large halls for this purpose. They are 7, 10-13. These halls, as in al-Madrasa al-Sharābiya

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1. The vault which is used in cell 28 is of segmental arched profile. The same vaulting system is used in al-Mustanṣiriya. The rest of the cells thus probably follow the same system. The cells on the ground floor have no windows, so that the main source of lighting is through their entrances.
2. Among the cells which have windows on the first floor are 34-38.

and al-Madrasa al-Mustanṣiriya, occupy the full height of the building. The halls of al-Madrasa al-Mirjāniya are covered with domical vaults with a lantern at the centre of each to let in the light. Plate 96 shows the domical vaults of halls 7, 11 and 13. Plate 133b shows the interior of halls 11-13 which are linked together. The entrance to these halls is from the courtyard through a pointed-arched doorway which leads to segmentally-arched passageway. Hall 13 has a large pointed recess on its north-eastern wall and plate 133b shows that it is roofed by domical vaults rested on kite-shaped squinches. The roof over hall 12 is a tunnel vault, while that of hall 11 is similar to that of hall 13. It may be suggested that one of these halls, or at least part of one of them, was used originally as a library.

It has been suggested that room 29 on the first floor constituted a suitable place for the head of this madrasa. This suggestion is not documented by any source, but it is based on a certain amount of evidence. Its site overlooks the building from both sides through two windows; and since it is part of the entrance it has its façade ornamented. M. Ma'rūf, on the basis of the ornamented panels over the doorway of two rooms in al-Madrasa al-Sharābiya and al-Madrasa al-Mustanṣiriya, suggests that these rooms were used by the heads of these two madrasas. Room 29 has four confronted pointed-arched recesses and is covered with a domical vault on pendentives.

Compartment 18 was conceivably used as the kitchen.

This suggestion is based on the type of its vaulting (only inadequately shown on pl. 133a) which is similar to that used in the kitchen of al-Madrasa al-Mustanṣiriya.[1] This vault was open to the sky at the centre, presumably to allow for the necessary ventilation inside the chamber. Moreover, the situation of this room in the west side of the madrasa means that the south-west wind would blow cooking fumes away from the madrasa. The identification of this room with the kitchen can, however, only be tentative in default of further evidence.

From the foregoing discussion, it seems that al-Mirjāniya was largely influenced by al-Madrasa al-Sharābiya and al-Madrasa al-Mustanṣiriya in respect of plan, style of architecture and brick ornament. Nevertheless the building has its own unique architectural features, namely the composition of the entrance, the type of muṣallā and the turba for the founder with its unique dome. These are supplemented by the lavishness of the ornamentation, the great variety of the geometrical units, their arabesque, and the minor borders, and the ample inscriptions.

A glance at the brick ornamentation of al-Madrasa al-Mirjāniya would indicate that both arabesque and geometrical techniques had by this time reached their zenith, although the same techniques of ornamentation were previously used in both al-Madrasa al-Sharābiya and al-Madrasa al-Mustanṣiriya. Certainly the architect of al-Mirjāniya seems to have imitated, with certain modifications, the style of the geometrical

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1. Cf. pls. 133a and 43b.

ornament and the arabesque of both these madrasas. The building was also influenced by the Saljuq and Ilkhanid monuments of Persia, and Syrian elements are likewise recognizable here, especially in the plan of the turba and the vaulting system of the musallā.

F. The inscriptions

Al-Mirjāniya has the greatest amount of inscriptions ever found on a building in Iraq. The remarkable length which characterises the amount of the inscription results mainly from its many Qur'ānic verses and also its immense waqfiya. The inscriptions of this madrasa give data of great historical value, such as the name of the founder, the date of the building, its purpose, and also the name of the calligrapher. The Qur'ānic verses are carefully selected for their relevance.[1] The whole inscription is in crowded naskh of high quality. The inscriptions are all executed in brick on a floral background composed of diminutive 4-petalled rosettes linked together to give a net-like impression. The calligrapher is named as Aḥmad Shāh al-Naqqāsh al-Tabrīzī. After stating his name and laqabs at the end of the inscription he adds another laqab: Zarīn Qalam, a Persian expression meaning "the golden pencil". This demonstrates his pride in his work. His first laqab (al-Naqqāsh, "the depicter" or "the decorater"), suggests that he was also probably responsible for the execution of the brick ornament in this madrasa. His

1. See infra, pp. 499-510.

last laqab, al-Tabrīzī, shows that he was a native of Tabrīz, and either came directly from this city to Baghdad specially to do this work, or had previously settled in Baghdad. His style of handwriting, which shows the full maturity of the naskh script, is, according to A. al-'Azzāwī, an imitation of the famous master Yāqūt al-Musta'ṣimī.[1] Aḥmad Shāh was also responsible for the text over the entrance of Khān Mirjān which was built two years after the completion of al-Madrasa al-Mirjāniya.

The inscriptions of al-Mirjāniya have been read partially or fully by several native and western scholars.[2] The first fairly complete account of these inscriptions was published by Massignon in 1912.[3] Herzfeld, in his work on al-Mirjāniya, gave corrections for Massignon's reading.[4] In 1929 M. Jawād read all the inscriptions and republished them.[5] The last publication was by N. al-Naqshabandī shortly before the demolition of the madrasa in 1946.[6] Apart from the historical text on the exterior façade of the main entrance, which is the most difficult to decipher owing to its damaged state, there

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1. "Khaṭṭāṭū Jāmi' Mirjān", Sumer VIII (1952), pp. 312-17.
2. Niebuhr, op.cit., II, p. 242; al-Karmalī, op.cit., loc.cit.; Van Berchem, in Reise I, pp. 45-50; al-Alūsī, op.cit., pp. 71-2.
3. Op.cit., II, pp. 5-26.
4. Reise II, pp. 182-3.
5. See Lughat al-'Arab VII (1929), pp. 690-4.
6. "Al-Madrasa al-Mirjāniya", Sumer II (1946), pp. 46-52.

are no major differences regarding the rest of the inscriptions among the readings of these scholars.

The waqfiya of this madrasa as well as the inscription of Khān Mirjān is a source of interesting topographical study. Such a study was first published by Massignon[1] and then expanded by Herzfeld.[2] The inscriptions of al-Madrasa al-Mirjāniya, which will be presented here for the first time with an English translation, and with emendations and amendments wherever necessary, are of considerable social and religious importance. Moreover they shed light on the founder and on his times.

1. The text above the main entrance, Pl. 97.

This text consists of eleven lines. The first five are inscribed on a floral background, which has largely disappeared, unlike that of the remaining lines. Al-Alūsī read the first five lines, but he was not able to decipher the rest because, according to him, they were badly damaged. He then suggested some suitable words.[3] Van Berchem also read the first five lines, and published them in 1911.[4] Massignon copied the reading of al-Alūsī with slight corrections, but noted that the inscription was very dilapidated.[5] Herzfeld

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1. Op.cit., II, pp. 28-30.
2. Reise II, pp. 190-2.
3. Op.cit., pp. 69-70.
4. Op.cit., II, p. 22.
5. See Reise I, pp. 45-6. His reading slightly differs from that of al-Alūsī.

approved the reading of van Berchem, and published corrections to al-Alūsī and Massignon's readings.[1] The reading of M. Jawād, which was approved by N. al-Naqshabandī, a numismatic specialist, seems the most complete and correct; it differs very considerably from that of Massignon. The following is the reading according to M. Jawād which is republished by al-Naqshabandī.[2]

١ ــ بسم الله الرحمن الرحيم، انّما يخشى الله من عباده العلماء 1.

٢ ــ انشأ هذه المدرسة المباركة من فواضل صدقات ... السعيده انار الله 2.

٣ ــ برهانها في دولة ولدها النوبان الأعظم ... السعيد الشيخ حسن انار الله برهانه 3.

٤ ــ وكملت في ايالة ولده النوبان الأعظم ناشر العدل في العالم سلطان السلاطين 4.
غياث الدنيا والدين ومغيث

٥ ــ الأسلام والمسلمين شيخ اويس نوبان ... الله دولته بمولاهم الطاهب الأعظم 5.
ملجأ وملاذ الأمم

٦ ــ مربي الملوك وعضد السلاطين وكهف الضعفاء المخصوص بعناية الرحمن امين 6.
الدين مرجان

٧ ــ اسبغ الله عليه نعمه الجز (يله) هو الكريم المنان ابتدأ عمارة 7.

٨ ــ هذا المكان في تاسع جمادى ... وصلى الله على سيدنا ومولانا 8.

٩ ــ نبي الرحمة وشفيع الأمه ومجلي الغمه محمد وعلى اله وصحبه الطيبين الطاهرين 9.

١٠ ــ والتابعين لهم باحسان الى يوم الدين كتبه العبد الضعيف المحتاج الى رحمة 10.

١١ ــ الله تعالى أحمد شاه النقاش المعروف بزرين قلم التبريزي غفر الله ذنوبه 11.
وستر عيوبه

1. In the name of God, the Merciful, the Compassionate (Sūra XXXV, v. 28). 2. This blessed madrasa was constructed from the excess of the alms of ... the happy, may God illuminate

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1. Reise II, p. 182.
2. "Al-Madrasa al-Mirjāniya", p. 45.

her proof [sc. of piety] 3. during the reign of her son, the greatest Nūyān, the happy Shaikh Ḥasan, may God illuminate his proof. 4. It was completed during the reign of his son, the greatest Nūyān, the spreader of justice throughout the world, the Sulṭān of Sulṭāns, the aid of the world and the faith, the aider of 5. Islām and the Muslims, Shaikh Uwais Nūyān ... [may] God [? eternize] his reign, by their client, the greatest companion, the refuge and the recourse of the nations. 6. The nurturer of kings, the supporter of Sulṭāns, the care of the weak, the singled out by the care of God, Amīn al-Dīn Mirjān. 7. May God endow him abundantly with His ample prosperity. He is the Glorious One, the Generous One. The construction 8. of this place (makān) began on the ninth of Jumādā ... may God bless our master (sayyidnā) and our lord 9. the Prophet of mercy, the intercessor for his nation, and the remover of grief Muḥammad, and his family and his good and pure companions 10. and those who follow them properly, to the Day of Judgement. Written by the poor slave who is in need of the mercy of 11. God, may He be exalted, Aḥmad Shāh al-Naqqāsh known as Zarīn Qalam al-Tabrīzī, may God forgive his sins and overlook his vices.

2. The text on the interior facade of entrance, Pl. 106.

It contains Qur'ānic verses and starts on the lower part of the right hand side as follows:

> "In the name of God, the Merciful, the Compassionate, (Sūra XXIV, vs. 61-4).[1] God spoke the truth, and so did his Prophet the generous, and prayers be upon our Master Muḥammad the Prophet of mercy".

1. See infra, pp. 505-6.

3. The text on the upper part of exterior façade of the muṣallā, Pl. 111.

"بسم الله الرحمن الرحيم • في بيوت اذن الله أن ترفع ويذكر فيها اسمه يسبح له فيها بالغدو والآصال • رجال لاتلهيهم تجارة ولا بيع عن ذكر الله • " انشاهُ المفتقر الى مغفرة الملك المنان مرجان بن عبد الله بن عبد الرحمن السلطاني الأولجايتي تقبل الله منه في الدارين طاعاته وصلى الله على سيدنا محمد وآله الطيبين الطاهرين وصحبه وسلم •

"In the name of God, the Merciful, the Compassionate, (Sūra XXIV, vs. 36-7).[1] This was constructed by him who needs His forgiveness, the generous King Mirjān ibn ʿAbdallāh ibn ʿAbd al-Raḥmān al-Sulṭānī al-Uljāitī, may God accept his obedience in this world and the next, and may the blessing and peace of God be upon our Master Muḥammad and his good and pure family and companions".

4. The text above the doorway of the staircase 6. Pl. 123.

This text contains a Qur'ānic verse ending with a popular religious formula as follows:

"In the name of God, the Merciful, the Compassionate, (Sūra IX, v. 72).[2] God spoke the truth, and so did his Prophet the generous".

5. The text above the doorway of the staircase 9. Pl. 122b.

It contains:

Sūra VIII, vs. 2-3 .

6. A text probably related to the Īwān

No text has survived intact on the Īwān, although according to plate 126b there was one. The text given below

1. See infra, p. 503.
2. See infra, p. 506.

was, according to N. Naqshabandī, discovered in 1946 inside the well which existed in front of the Īwān. This text, which is to be seen exhibited in the Abbasid Palace museum, was in fact published by al-Alūsī and republished by Massignon in 1912.[1] So it is possible that it belongs to the Īwān. This text, which comprises four lines, was republished again by N. Naqshabanī in 1946.[2] It runs as follows:

١ ـ بسم الله الرحمن الرحيم الحمد لله حق حمده والصلاة والسلام على ذى الهدى
محمد وآله وصحبه من بعده ، يقول الواقف مرجان بن عبد الله بن عبد الرحمن
السلطاني الأولجايتي من غير شروط أوقافي أو تصرف فيها خلاف ما شرطت لمن في
الدنيا والآخره والحق بالأخسرين أعمالا ٢ ـ الذين ظل سعيهم في الحياة الدنيا
وهم يحسبون انهم يحسنون صنعا · أولئك الذين كفروا بآيات ربهم ولقائه فحبطت
أعمالهم فلا نقيم لهم يوم القيامه وزنا · وشرطت أن لا يؤجر ما هو وقفا من متعززز
وجندى ٣ ـ ومن يخالف شرائطه وأن لا يؤجر اكثر من سنة واحده ولا يعقد عقد أجارة
قبل انقضاء العقد الاول ولا يوفر من الموقوفات شيء بوجه الموسومات بحسن المرتزقه
بها مما ذكر فهو ظالم عند الله ٤ ـ وصلى الله على سيدنا محمد النبي الأمي وعلى
آله الطيبين الطاهرين وصحبه وسلم وذلك في شهور سنة ثمان وخمسين وسبعمايه ،
كتبه أضعف عباد الله تعالى أحمد شاه التبريزى أحسن الله اليه في الدنيا
والآخره ·

1. In the name of God, the Merciful, the Compassionate, thanks be to God, as they should be given. Prayer and peace be upon Muḥammad, Prophet of the right path, and upon his family and his companions who follow him. The giver of waqf,

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1. Op.cit., II, p. 6.
2. "Al-Madrasa al-Mirjāniya", p. 47.

Mirjān, says: whoever changes the conditions of my endowment or whoever disposes of it in a way other than I have laid down, he [will] be cursed in this world and the next. Sūra, XVIII, v. 104. 2. Sūra, XVIII, vs. 105-6. I have stipulated that it should not be let to those who are powerful or to soldiers 3. or to those whose evil-doing is feared, and that it be not let for more than one year, and that no further contracts be entered into before the completion of the first contract, and that nothing be set aside from the endowment by order of some mercenaries as has been mentioned, for they are cruel [in the sight] of God. 4. May the blessing and peace of God be upon our Master the illiterate[1] Prophet, Muḥammad, and his good and pure family and his companions, and this was written in the months of the year 758 by the weakest worshipper of the Exalted God, Aḥmad Shāh al-Naqqāsh al-Tabrīzī, may God give him prosperity in this world and the next.

7. The text on the middle dome of the muṣallā. Pls. 113, 116-117.

It contains Sūra, III, vs. 190-4.[2]

8. Text in a rectangular panel over the miḥrāb. Pls. 114, 128.

It contains part of Sūra, IV, v. 103.[3]

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1. This means the bearer of the revelation by inspiration, to whom the previous Holy Scriptures were unknown; see Nöldeke, Gesch. des Qor'ans (1860), p. 10, apud Reise II, p. 189.
2. See infra, pp. 507-8.
3. See infra, p. 504.

The rich waqfiya of this madrasa is inscribed inside six panels.[1] It starts in a pointed-arched frame over the mihrāb and continues in rectangular panels on both sides. The continuations are set in similar panels on the opposite side.

9. The text over the mihrāb, Pl. 128.

1. ١ ــ بسم الله الرحمن الرحيم
2. ٢ ــ الحمد لله الذى وفق المطيعين لعمارة ابْنيه بيوت العبادات والْهم المخلصين باشادة[2] اعْمده دور الطاعات ورفع ذكر
3. ٣ ــ الولا ة بتاْسيس قواعد معالم المكرمات ودل ارْباب السعادات على سلوك سبل الخيرات ومنح المحسنين بتشريف انْ الحسنات يذ هبن السيئات وحباهم بماله انْ المتصد قين والمتصد قات
4. ٤ ــ والصلوه (والصلاة) على نبي الرحمه محمد المصطفى خير الا نام واصْحابه مصابيح الدجى وبدور الظلام، امّا بعد فيقول المفتقر الى عفو الملك المنان مرجان بن عبد الله بن عبد الرحمن يدل الله سيئاته حسنات انّي هاجرت
5. ٥ ــ في الارض مدة وجا[3] هدت سنين في الطول والعرض ذات شمال ويمين متوطا في مخاوف البر والبحر متوردا في مشارف البرد والحر حين ادّاني الجد الصاعد وادْناني التوفيق المساعد فعلمت انْ الدنيا دار الفرار وانْ الاخره دار القرار وايْقنت انْ اوْلى

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1. The waqfiya has been placed inside the muṣallā of the new Jāmi' which is similar in construction to the original one.
2. Massignon read باساره. Herzfeld suggests the above correct reading, although the three dots over the sīn are not used (cf. Massignon, op.cit., II, p.9 and Reise II, p. 183).
3. Massignon's reading is: مدة في الارض ; Naqshabandī gives the above correct reading.

٦ــ ماانفقت فيه الاموال واحرى ما توجهت اليه هم الرجال ما كان وسيله الى ابواب رحمته محط الرحال وذخيره ليوم المحاسبه والسؤال قال النبي عليه الصلاة والسلام اذا مات الانسان انقطع عمله الا من ثلاث صدقه جاريه وعلم ينتفع به وولد صالح يدعوله · والصدقة الجارية 6.

٧ــ هي الوقف نشمرت عن نية صادقه طفقيه وسريرة للخير وافية وشرعت في عمارة هذه المدرسة المشهره بالمرجانيه وتوابعها المتعلات بها بحضها بالمحل في زمان المخدوم الأعظم السداح الس جوار الله وجناته المستريح على اعلى غرفات جنانه شيخ حسن نهان انار الله برهانه وتمت في ايام دولة 7.

1. In the name of God, the Merciful, the Compassionate. 2.Thanks be to God who gives success to the obedient [ones] in the construction of the houses of worship, and inspires the sincere [ones] to construct the columns of the houses of obedience [religious buildings]. And He has enhanced the renown 3. of governors in making them establish the buildings due to their generous deeds and He guided those possessing majesty along the paths of goodness and He grants to good persons nobility: "good deeds annul ill deeds" (Sūra, XI, v.114), and He engulfs with His treasure those men and women who give alms. 4. May His blessing be on the Apostle of mercy, Muḥammad al-Muṣṭafā, best of all men, and his companions, the lamps of the darkness, and the full moons of the night. As follows: the one who is in need of forgiveness, the generous King Mirjān ibn ʿAbdallāh ibn ʿAbd al-Raḥmān, may God replace his evil deeds with good ones, said: I travelled 5. throughout the earth for a time and I struggled for some years in its length and width, to the left and to the right, embroiled in fearsome places by land and by sea, arriving successively

in mortal places of cold and heat, until ever-growing enthusiasm brought me [to do this] and further success advanced me. Consequently I learned that this world is the temporary house, and the next is the permanent house, and I realized that the best way 6. of spending wealth and the best thing to which the ambition of men should be directed is that which is a means toward the doors of His mercy, destiny of any departure, and repository for the Day of Accounting and the Questioning. The Prophet (praise and peace be upon him) said: When man dies (all) his works are finished except for three things: continuing almsgiving, and knowledge by which others may benefit, and a good son who will pray for him. And the "continuing almsgiving" 7. is the waqf, so I prepared to work with truthful and pure resolution and with an abundant mind for good. And I began to build this madrasa known as al-Mirjāniya and its attendant buildings which are attached to one another, during the time of the greatest Employer, the one who rises to the neighbourhood of God and His Paradises, the one who rests in the highest rooms of His Paradises, Shaikh Ḥasan Nūyān, may God illuminate his proof. It was completed during the days of the reign.

10. The text on the left side of the mihrāb. Pl. 129a.

1. ا ــ نور حدقته ونور حديقته المخدوم الأعظم الأعدل رافع رايات السلطنه على الأفلاك ناصب غايات المملكه الى

2. ٢ ــ الشمال[1] ساحب ذيل الرحمة على الاعراب والأتراك محيي مراسم الملله المصطفويه مزين شعار الدوله الجنكزخانيه شيخ شاه أويس

1. Massignon reads بالسماك (op.cit., II, p. 11).

٣ــ خلد الله ملكه ووقف على الفقهاء وطلاب العلم والتفسير والحديث والفقه على
3. مذهبين الامام الاعظم محمد بن ادريس الشافعي المطلبي
٤ــ والامام الاقدم ابي حنيفه نعمان بن ثابت الكوفي رضي الله[1] عنهما ووقف على
4. مصالحها كما شرح في الوقفيه الموقعه بتوقيعات قضاة
٥ــ الاسلام والموشحه بشهادات الامراء والوزراء العظام بالريحانين اربع واربعين
5. دكانا واثنى عشر عصاره[2] في السوق الجديد المجاور

1. of the light of his pupil and light of his garden, the greatest and the most just Employer, the Raiser of the banners of the Sultanate to the orbits [sky], Placer of the aims of the Kingdom to 2. the north, Puller of the hems of mercy over the Arabs and the Turks, Renewer of the ceremonies of the Islamic nation, Decorator of the emblem of the state of Chingiz Khān, Shaikh Shāh Uwais 3. may God eternalise his sovereignty, and it was endowed for the jurists and the students of knowledge and exegesis and tradition and fiqh following the two madhhabs of the greater Imām Muḥammad ibn Idrīs al-Shāfi'ī al-Muṭṭalībī 4. and the senior Imām Abī Ḥanīfa Nu'mān ibn Thābit al-Kūfī, may God be pleased with them, there is endowed for its upkeep as has been explained in the endowment signed by the Judges 5. of Islam and beautified by the witnessing of the greatest princes and ministers: In al-Rayḥāniyn forty-four shops and twelve oil-presses in the New Market which is adjacent to

11. The text opposite to the text 10. Pl. 129b.

١ــ للمدرسة والصاغة وتسعة وعشرين دكانا اخرى وثلاث خانات ونصف خان احداهن
1. انشاء الواقف وواضع بالمدريه وبالامشاطين

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1. Massignon adds the word تعالى which does not exist; see ibid.
2. Massignon gives the correct reading of this word which appears in the text as عصاده (see ibid.).

٢ــ ثلاثة دكاكين وبالمشرعه اربع عشر دكانا وخان جديد[1] انشاه الواقف تقبل الله منه
2. صالح الأعمال وبالحلبه ثلاثة عشر دكانا وعصاره وخانا فيه
٣ــ اثنتان وخمسون حجره وبالجانب الغربي بمحلة[2] القصر دارا ومدارا وخانا يعرف
3. بالجواري وبالخليلات[3] خان الزاويه ومدارا هي الآن من حقوق
٤ــ الخان المذكور وبالحريم دكان الكاغد وبنهر عيسى[1] ناحيه عقرقوف ونصف القايميه
4. وتل دحيم وساتين بالمخرميه وساتين بقريه الترك والجوسه
وقراح الجاموس
٥ــ وبالصراة مزرعه وبالقاطون[4] ناحيه رادمان وبجلولاء من خاناباد[5] النصف ومن
5. بساتين بمعقوبا وبهوهرز[6] وبخانقين دور ونصف رزين جوب[7]

1. the school and [the market of] the goldsmiths and twenty-nine other shops and three and a half khāns one of which was built by the endower, and sites in al-Badriya and in al-Amshāṭiyn
2. three shops and in al-Mashra'a fourteen shops and a new khān built by the endower, may God accept good deeds from him, and in al-Ḥulba thirteen shops, an oil-press, a khān 3. in which are 52 ground-floor compartments and in the western part

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1. This refers to Khān Mirjān which was built by the endower two years later.
2. Massignon reads من محله (op.cit., II, p.13). The above correct reading was first suggested by Herzfeld (Reise II, p.183).
3. Massignon reads وفي الخليلات (op.cit., loc.cit.).
4. Massignon reads القاطول (ibid.). The above correct reading is suggested by Herzfeld, loc.cit.
5. This word written as حاناباث. Massignon follows al-Alūsī's reading of خاناباد.
6. Massignon adds the word النصف which does not exist (op.cit., loc.cit.).
7. Massignon reads روبر جوبي, but also suggests
The above correct reading is given by Herzfeld, loc.cit.

in the quarter of the Palace a house, a mill and a khān known as al-Jawārī and in al-Khulailāt Khān al-Zāwiya, and a mill which is now a part of the right of 4. the aforementioned khān and in al-Ḥarīm a paper shop and in the canal of ʿĪsā the area of ʿAqarqūf, and half of al-Qāʾimiya, and Tell Diḥīm and orchards in al-Mukharramiya, and orchards in the village of al-Turk, al-Jūba and in the Qarāḥ of al-Jāmūs 5. and in al-Ṣarāt a farm and in al-Qāṭūn the area of Rādamān and in Jalawlāʾ half of Khānābād, and orchards in Baʿqūbā and Būhrīz, Khānaqīn, Dūrī and half of Razīn Juwī (golden river)

12. The text opposite the mihrāb. Pl. 130.

1. ١ ــ وأرحية الماء ونعمتاباد [1] ود ولتاباد

2. ٢ ــ وبساتين بالبندجين وبستان جديد ببوهريز انشاء الواقف ونهر خرماباد وسائر أراضيها ومزارعها

3. ٣ ــ المدعو هزار نشته وذلك بين جبل حمرين وخانقين وقفا صحيحا شرعيا مؤبدا مخلدا محرما بجميع ما حرم الله به [2] مكه والبيت الحرام والركن والمقام لايزال ذلك

4. ٤ ــ كذلك الى أن يرث الله الأرض ومن عليها وهو خير الوارثين لايندرس بكدور الأعصار ولا ينطمس بمرور الأدوار لايؤجر من متغلب ومتعزز وجندي ومن يخاف غائلته بل يؤجر من رجل مسلم معامل بمكان الوالي

1. Massignon reads ونغمتايا (op.cit., p.14), but Herzfeld suggests the above readings (Reise II, p. 183).
2. This word does not appear in Massignon's reading although it is clearly inscribed in the text. It is, however, included in NaqshabandĪ's reading.

٥ــعلى هذا الوقف من مرافعتة بين يدي الحكام وقضاة الأسلام قادرا من
5. ادّاء ما يتوجه[1] عليه من ضمان الوقف ومن فعل ذلك فتلك الأجارة
باطله وتصرفه حرام سحت ووصيتي الى حكام كل زمان وعصر وآوان
والى قاضي القضاة ببغداد انْ يساعد الوالي

٦ــعلى هذا الوقف وعلى أستخلاص الحقوق الواجبه لوقف هذه المدرسة
6. وانْ ينظروا اليهم بنظر الرحمه والرافه فانّ الحاكم العادل في رعيته
كالوالد الشفيق على ولده ، الا[2] وكل من سنّ سنة حسنة كان له
أجرها وأجر من يعمل بها الى يوم القيامه ومن سن سنة سيئه فعليه وزرها

٧ــ ووزر من يعمل بها الى يوم القيامه ولْن لا يتعرضوا بمتولي[3] هذا الوقف
7. ومستوفيه ومشرفه من أسترفاع حساب أو نصب وترتيب ولا يداخلوهم[4]
في ذلك بشبه من الشبه ولا يعقد بهذه المدرسة ديوانا لفصل
القضايا الشرعيه واليارغوجيه[5] فانّ هذا الموضع موطن العلماء ومنزل
الصلحاء فطوبى ثم طوبى لمن

1. and water mills and Ni'matābād and Dawlatābād 2. and orchards in al-Bandanījīn and a new orchard in Buhrīz constructed by the endower, and a canal in Khurramābād and all its surrounding lands and farms 3. which are called Hazār Nishta and this is between Ḥamrīn mountain and Khānaqīn, as a true, legal, eternal, perpetual and sacred waqf by all (means by which) God makes sacred Mecca and the Bait al-Ḥarām

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1. Massignon reads ومايتوجهوا , (op.cit., p. 15).
2. Massignon adds وانْ , which does not exist in the text (see pl. 130).
3. Massignon reads لمتولي
4. Massignon reads يداخلهم . The above is clearly apparent in the text.
5. Herzfeld suggests اليارجوشيه or البارجوجيه . Naqshabandī reads it as البارعونيه . The above correct reading is given by Massignon. Yārghūchī is a technical term for a Mongol judge.

and the pillar (of the Ka'ba) and the Maqām (of Abrāhām) this will continue 4. as it is until God inherits the earth and whatever is upon it for He is the best of the inheritances. It will not be effaced by the passing of evil events nor obliterated by the changing of dynasties. It will not be rented by powerful, mighty soldiers, and those whose evil-doing is feared, but rather it is to be rented by a Muslim whose position over this waqf is guaranteed by the wālī. 5. The wālī may cause him to be judged by the judges and qādīs of Islām. The Muslim must be able to repay what has come to him from the rent of the waqf. As for the wālī who does what has been mentioned, his contract is false and his behaviour is totally prohibited. My will is addressed to the judges of every time, to the Judge of the Judges in Baghdad that he must help the wālī 6. in respect to this waqf and in the collecting of the rights which are due from the waqf to this madrasa and they should look upon them with mercy and compassion, for indeed the just governor is to his subjects as a merciful father to his son. Whoever institutes a good rule will receive its bounty and the bounty of whoever follows it until the Day of Judgement, and whoever institutes an evil rule will receive its recompense 7. and the recompense of whoever follows it until the Day of Judgement, and then should not impede the trustee of this waqf and its financial collection and its supervisor from presenting the account, or from furnishing and maintenance, nor interfere with them in these matters by raising any suspicions nor convene a diwān in this madrasa for settling religious cases according to Islamic and Mongol law; for this site (i.e. the madrasa) is the homeland for men of knowledge and a house for

good men. Blessedness and blessedness to whoever

13. The text on the right side of the mihrāb. Pl. 131a.

1. ١ــ استجلب ترحما لنفسه وويل ثم ويل لمن صاحبته اللعنه في رمسه فمثل ما تعاملون في حياتكم تعاملون في مخلفتكم بعد مماتكم

2. ٢ــ فانّ المكافاة من الطبيعه واجبه كما تدين تدان وكما تزرع تحصد فانّ الدنيا غداره غراره وانْ طالت مدتها فما طالت وانْ نال صاحبها مانال [1]

3. ٣ــ ومن غير شروط هذه الاوقاف او تصرف فيها بخلاف ما شرطت في الوقفيه فهو ظالم عند الله "الا لعنه الله على الظالمين "وعليه "لعنه الله

4. ٤ــ والملائكه والناس اجمعين "" وماوٰاه جهنم وبئس المصير "" والحق بالأخسرين اعمالا ، الذين ظل سعيهم في الحياة الدنيا وهم يحسبون انّهم يحسنون صنعا

5. ٥ــ وماذلك على الله بعزيز "وشرط الواقف تقبل الله منه الحسنات ولا واخذه بما كسبت ايديه من السيئات انْ لايسلم من ارّاضي الموتوفات

1. brings mercy upon himself, woe and woe to whoever is accompanied by curses in his grave, as you treat (people) in your life so will you be dealt with in your judgement after your death. 2. Because recompense is natural, you are judged as you judge, as you sow, so must you reap, because the world is perfidious and a tempter, for although its duration seems long, it is not long, and although the man of the world acquire (much) he acquires nothing. 3. Whoever changes the conditions of this endowment or disposes of it in a manner contrary to what has been laid down in the waqfiya will be a wrongdoer in the eyes of God, and upon him be the

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1. Massignon reads وانْ نالت لصاحبها فما نالت (op.cit., II, p. 17). The above correct reading of these words appears in Naqshabandī's reading ("al-Madrasa al-Mirjāniya", loc.cit.).

curse of Allāh 4-5 and the angels and of men combined (Sūra, VII, v. 42 and Sūra, II, v. 161), Sūra, III, v. 162 and Sūra, XVIII, vs. 104-6. The endower has laid down, may God accept from him good deeds and may He not judge him by what his hand grasps of evil actions, that absolutely nothing is rented from the lands of the endowments,

14. The text opposite to the text 13. Pl. 131b.

١ــ من النواحي والبساتين والبسوط بالقرار الشمسي شيئا اصلا ولا من المسقفات
1. من[1] الدكاكين والخانات والطواحين بالعرصه[2] ابدا ومن فعل فحكمه باطل[3]

٢ــ وشرطه مفسوخ وتصرف من تصرف فيها بهذه الشبه حرام سحت وفاعله
2. ماثوم ملوم الخالق والخلق "فمن بدله بعد ما سمعه فانما اثمه على الذين

٣ــ يبدلونه ان الله سميع عليم "[4] وكتب في شهور سنة ثمان وخمسين وسبعمايه
3. والحمد لله وحده والصلواة والسلام على نبي الرحمه

٤ــ وشفيع الامه وكاشف الغمه النبي الامي العربي الهاشمي القرشي المكي المدني
4. سيد المرسلين ورسول رب

٥ــ العالمين وخاتم النبيين محمد النبي وعلى آله وصحبه الطيبين الطاهرين
5. الكرام المنتخبين البرره وسلم تسليما كثيرا[5]

1. consisting of the districts and the orchards and the lands at al-Qarār al-Shamsī.?. And the same is true of the covered buildings of

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1. Lit. عن . Massignon gives the above correct form (op.cit., II, p. 18).
2. Massignon reads بالعرضه (ibid.).
3. Lit. محكمه باطله . According to Massignon the above reading was first suggested by al-Alūsī. Massignon published the reading: فحكمه شبهه باطله (op.cit., pp. 18-9).
4. Sūra, II, v. 181.
5. Although the text clearly has the above reading, Massignon suggests that this line should read as follows:
وخاتم النبيين محمد النبي وعلى آله الطاهرين الكرام وصحبه المنتخبين (من البرره)
وسلم تسليما كثيرا .

shops, khāns and mills will never be given on the basis of a long lease. Whoever does this his action is illegal 2. and his contract is void. The disposing of this [waqf] in such a suspicious [manner] is prohibited and illegal, whoever does this is a sinner and [deserving] blame from The Creator and the created [people] "And changeth (the will) after he hath heard it the sin thereof is only upon those 3. who change it. Lo! Allah is Hearer, Knower" (Sūra II, v. 181).[1] It was written in the months of the year 758. Thanks be to God alone and prayer and peace be upon the Prophet of mercy 4. the intercessor for His nation and the remover of grief, the illiterate, the 'Arabī, the Hāshimī, the Quraishī, the Meccan, the Medinan, the Master of the Messengers, Messenger of the Lord 5. of the worlds, the seal of the Prophets, Muḥammad the Prophet, and his family and his good, pure, glorious, selected and good companions and many greetings [to them all].

G. Appendix No. 1

In an attempt to save this monument from destruction the I.D.G.A., as has been mentioned above, invited Creswell to give an evaluation of the building to prevent its demolition by the government of that time. Eventually Creswell examined the building and gave his report on 22nd of September 1945. It might be of interest to give here his unpublished report to conclude the above study of al-Madrasa

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1. Pickthall, op.cit., p. 49.

al-Mirjāniya.[1]

"The recent discovery, in the hall of prayer of the Mirjāniya Madrasa, of splendid panels of Abbasid carved brickwork of the finest quality has at once raised this building, not regarded hitherto as of great importance, to the very front rank as a monument of Muslim architecture.

This carved brick technique is completely unknown in Egypt, Syria and Palestine and the amount preserved in Iraq is very limited. Apart from the Abbasid Palace[2] in the Citadel, the Mirjāniya Madrasa has no rival.

The muṣallā of the Mirjāniya is also of great importance structurally for the following reason. In Egypt madrasas did not have a muṣallā of special type, they merely used the ʾIwān qibla as a muṣallā when prayer-time came; at other times classes of instruction were held there, as in the other liwāns, which were vaulted halls opening on to the ṣahn for their full width, as in the Kāmiliya Madrasa, and the Madrasa of Sulṭāns Ṣāliḥ, Muḥammad al-Nāṣir and Barqūq, etc.

But in Syria madrasas were constructed differently. We are able to speak with certitude on this point, for eight or nine madrasas built before 700 A.H. (A.D.1300) have been preserved. They were built sometimes for one rite, sometimes for two. In the one-rite madrasa there was a tunnel-vaulted

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1. This report is kept in I.D.G.A. in Baghdad file No.11/40.
2. Prof. Creswell later changed his mind about the name and accepted the identification of this building as al-Sharābiya madrasa, as I have been told by Prof. N. Maʿrūf.

liwān for teaching in, in a two-rite madrasa two liwāns. On the qibla side was the musallā. This always consisted of a hall with a triple-arched façade on the sahn, the central arch being wider and higher than the lateral ones. Behind this the musallā was developed laterally; it usually had a dome in the centre with tunnel-vaulted extensions to right and left; occasionally there were three domes in a row.

The musallā of the Mirjāniya is the only surviving example in Iraq of this type. It is therefore an outstanding monument of Muslim architecture, not only because of its splendid ornament, more of which is coming to light every day, but also on account of the fact that it is the only example surviving in Iraq of this early type of triple-arched laterally developed and domed hall of prayer.

Section 2

Khān Mirjān 760/1359

A. Historical background

Khān Mirjān is situated across the street from, and very near to, the south-western side of al-Madrasa al-Mirjāniya. Although the waqfiya of the madrasa includes seven khāns, this is the only one which has survived and is still in good repair. According to its historical inscription above the entrance it was completed, together with a group of shops attached to it, in 760/1359 to be a waqf for both al-Madrasa al-Mirjāniya and the hospital called Dār al-Shafā', also built by Mirjān near this khān on the riverside at Bāb al-Ghurba.[1] Khān Mirjān is mentioned by various western travellers,[2] the first study to include a ground plan and some drawings being that of Herzfeld.[3]

In the last century or so the building came to be known locally as Khān al-Urṭuma, a Turkish name, which means the vaulted khān.[4] But its original name, as given in the

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1. This hospital no longer exists.
2. Buckingham, op.cit., II, pp. 189-90; F. Jones, Memoirs (Bombay, 1859), p. 315; Massignon, op.cit., II, p. 24.
3. See Reise II, pp. 188-90, 193-6, figs. 217-20.
4. Herzfeld states that in 1903 he was told that the building was named after a merchant called Varṭman and also suggests that in the Arabic of Baghdad Vartman can easily be distorted to become Ortman or even Ortmah (Reise II, p. 187, n.1). Buckingham mentions this building with this name (op.cit., loc.cit). Jones uses the same name and mentions it as the enclosed khān with a vaulted roof. Al-Alūsī's explanation خان الأوطمه اى المقطع بالسقف الحجري (Khān al-Urṭuma, which means khān with a stone vault), is supported and repeated by A.M. al-Karmalī, op.cit., p. 32 and by Massignon, op.cit., II, p. 25. This explanation, which is also supported by Herzfeld, Reise II, p. 187, seems the most acceptable one.

inscription, is النّبم and this, according to Yāqūt, means, in the Khurāsān dialect, the khān which is inhabited by the merchants.[1] Herzfeld, who read this name as نَبم identified the building as post-house for travellers similar to a Persian chapārkhāna. Accordingly he discussed intensively the origin, the name and the history of such buildings of which Marco Polo describes one in China under Qubilaykhān.[2] But a glance at the plan of Khān Mirjān would show that this building lacks the necessary space for the stabling of horses. Moreover it was not originally intended to be used as a governmental building but as a commercially profitable one, which should help to make a good income for a madrasa and a hospital. It is not plausible to expect such an income to derive from a building of the type Herzfeld describes. One can, however, well imagine that such an income could be made from the use of the courtyard of this building as a market for merchants and cloth dealers, who would have to pay duty to the holders of the khān for the privilege of doing business there. The 45 cells on both floors of the building constituted suitable sleeping chambers for them and for other travellers as do modern hotels. Further evidence that the nature of this building may have been

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1. Op.cit., I, p. 909; see also Jawād and Sūsa, op.cit., p. 221.
2. Henry Yule, The Book of Sir Marco Polo, I (1903), p. 433, apud Reise II, p. 189.

inscription, is التّهم and this, according to Yāqūt, means, in the Khurāsān dialect, the khān which is inhabited by the merchants.[1] Herzfeld, who read this name as تهم identified the building as post-house for travellers similar to a Persian chapārkhāna. Accordingly he discussed intensively the origin, the name and the history of such buildings of which Marco Polo describes one in China under Qubilaykhān.[2] But a glance at the plan of Khān Mirjān would show that this building lacks the necessary space for the stabling of horses. Moreover it was not originally intended to be used as a governmental building but as a commercially profitable one, which should help to make a good income for a madrasa and a hospital. It is not plausible to expect such an income to derive from a building of the type Herzfeld describes. One can, however, well imagine that such an income could be made from the use of the courtyard of this building as a market for merchants and cloth dealers, who would have to pay duty to the holders of the khān for the privilege of doing business there. The 45 cells on both floors of the building constituted suitable sleeping chambers for them and for other travellers as do modern hotels. Further evidence that the nature of this building may have been

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that suggested here is the discovery in this khān of an edict inscribed on a marble slab (22 x 80 cm) from the time of Shāh Ismā'īl I, dated 921/1516. This edict, which was first published by Herzfeld, deals solely with aspects of finance and taxation, and suggests that the khān was indeed a major market, and not a post-house.[1] Thus the waqfiya of the madrasa, the inscription of both the madrasa and the khān, the architectural style of the khān and the literary evidence, all combine to cast doubt on Herzfeld's suggestion that the building was a post-house or a chapārkhāna. According to Herzfeld such buildings must always have rooms for the post horses because this was their real purpose.

The waqfiya of the madrasa mentions a new khān with 14 shops in al-Mashra'a, which is a lane leading from this madrasa to the river.[2] As Khān Mirjān is actually situated in such a lane it is quite likely that this khān with its shops is the one mentioned in the waqfiya. Even though the completion of the building of Khān Mirjān occurred two years after the building of al-Mirjāniya, the building of this khān with its shops was probably in progress while the building of the madrasa was approaching its final stages. They would thus be part of the same building campaign, which would go far to explain their close resemblance in style and decoration.

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1. See Reise II, p. 192, pl. 133. The edict was issued by Sulṭān Qangharūz, the governor of Baghdad at that time.
2. This lane at present contains Sūq al-BazzāzĪn and leads to Shirī'at al-Maṣbagha.

B. The inscription

The only inscription of this khān is set above the doorway of the main entrance (pl. 134). It contains nine lines of naskh against a plain background, and it too was executed by the calligrapher Aḥmad Shāh. After the fourth line the inscription is interrupted by a rectangular window similar to that on the entrance of al-Madrasa al-Mirjāniya. Al-Alūsī, who was the first to read and copy this text, was not sure about its four opening lines, but he suggested a tentative reading.[1] Alūsī's reading was at first only available in manuscript and thus its first publication was that of Massignon in 1912.[2] During the opening of Khalīl Pāshā street in 1916-17 these four lines were uncovered for the first time.[3] Herzfeld was the first to read them in 1917 and proved that al-Alūsī's suggestion was incorrect.[4] In 1929 Jawād read and published the text,[5] and in 1946 al-Naqshabandī read and republished it.[6] Jawād's and al-Naqshabandī's reading differs in some important aspects from that of Herzfeld, particularly in the reading of the name of the building. The following is the reading according to Herzfeld which was amended by both Jawād's and al-Naqshabandī's reading.

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1. Op.cit., pp. 78-9.
2. Op.cit., II, pp. 24-5.
3. Herzfeld, Reise II, p. 188.
4. Ibid.
5. See Lughat al-'Arab VII (1929), pp. 615-17.
6. "Al-Madrasa al-Mirjāniya", p. 53.

١ــ بسم الله الرحمن الرحيم الأعظم.1

٢ــ امر بانشاء هذا التيم[1] المبارك والدكاكين المولى المخدوم الأمير[2] الصاحب / .2

٣ــ الأعدل ملك ملوك الأمراء في العالم صاحب العدل الموفور عضد السلطنه .3
والامارة حاوي مراتب الامارة والوزارة[3]

٤ــ افتخار شهدا الاوان[4] المخصوص بعنايه الرحمن امين الدين مرجان اقا .4
الأولجايتي وقفها على المدرسة المرجانيه ودار الشفاء بباب الغربه وكذلك
ناحية عقرقوف

٥ــ والنصف من القائميه وتل دحيم ومزرعه بالصراة وبساتين / بقريه الترك .5
والرادمان وخرماباد

٦ــ ورباط جلولاء المعروف بقزل رباط ورزين جوي ونصف دوري / وبساتين .6
بمعقوبا وبهوهريز وبالبندنيجين وخان ودكاكين

٧ــ بالحلبه واربعه خانات ودكاكين بالجوهريين[5] / وخان بالجانب الغربي .7
ودكان كاغد بالحريم كما هو

٨ــ محدود مشروح في الوقفيه وقفا صحيحا شرعيا تقبل الله تعالى منه الطاعات .8
في الدارين وبلغه نهايه المراد[6] وكان الفراغ منه سنة ستين وسبعمائه
والحمد لله وحده

٩ــ وصلى الله على سيدنا محمد النبي الأمي العربي الصادق وعلى آله .9
الطيبين الطاهرين وصحبه وسلم كتبه الفقير الى رحمة ربه احمد شاه
النقاش المعروف بزرين قلم غفر الله ذنوبه .

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1. Herzfeld reads هذا اليم . The correct reading seems to be that of Jawād and al-Naqshabandī.
2. This word is slightly defaced; Jawād and al-Naqshabandī suggest الآمر .
3. The above is according to Jawād and al-Naqshabandī readings. Herzfeld read the part which starts after the word العالم as وصدر السلطنه كفاة خلق امرتين في الامارة والوزارة (...) ص ١٠ ج ال
4. Herzfeld suggests افتخار شهداء الغزوات . The above is according to Jawād and al-Naqshabandī.
5. Herzfeld reads الجوهرتين .
6. The three words after الدارين are slightly defaced. Herzfeld was not certain about how they should read. The above reading was first suggested by al-Naqshabandī.

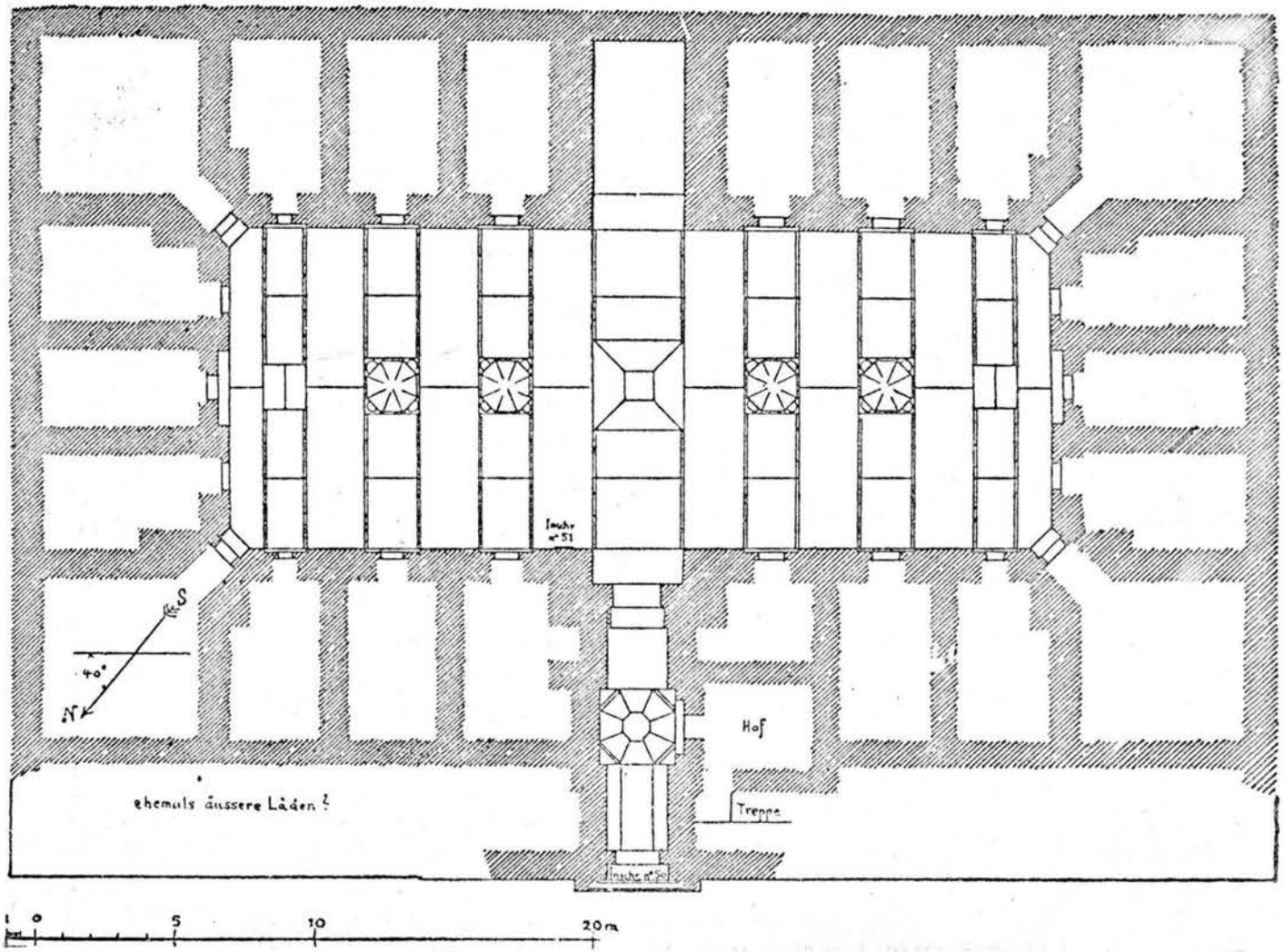
1. In the name of God, the Merciful, the Compassionate.
2. The construction of this blessed taim [khān] and the shops was ordered by the client, the employer, the prince, the greatest 3. and the most just companion, king of kings of the commanders in the world, the one with abundant justice, Supporter of the Sulṭānate and the Imāra, Container of the ranks of the Imāra and the Wizāra 4. pride of the [shahdā?] of the time, the one particularly cared for by God, Amīn al-Dīn Mirjān Āqā al-Uljāitī, and he endowed it for the Madrasa al-Mirjāniya and the Dār al-Shafā' at Bāb al-Ghurba, also the district of 'Aqarqūf, 5. half of the Qāi'miya, Tell Diḥīm, a farm at Ṣarāt, orchards in the villages of al-Turk, al-Rādmān and Khurramābād 6. and the ribāṭ of Jalawlā' known as Qizil Ribāṭ, Razīn Juwī (golden river), half Dūrī, orchards in Ba'qūbā, Būhrīz and Bandanījīn, a khān and shops 7. at Ḥulba, four khāns and shops at al-Jawhariyin, a khān at the western side and a paper shop at al-Ḥarīm, as it is 8. defined and explained in the waqfiya as a true legal waqf. May the Exalted God accept from him his obedience in this world and the next and let him reach the climax of desire [paradise]. The completion was in 760.Thanks be to God alone. 9. May God's blessing and peace be upon our Master, Muḥammad, the Prophet, the illiterate, the 'Arabī, the honest, and upon his good and pure family and companions. Written by the one who is in need of his God's mercy, Aḥmad Shāh al-Naqqāsh known as Zarīn Qalam. May God forgive his sins.

C. The plan[1]

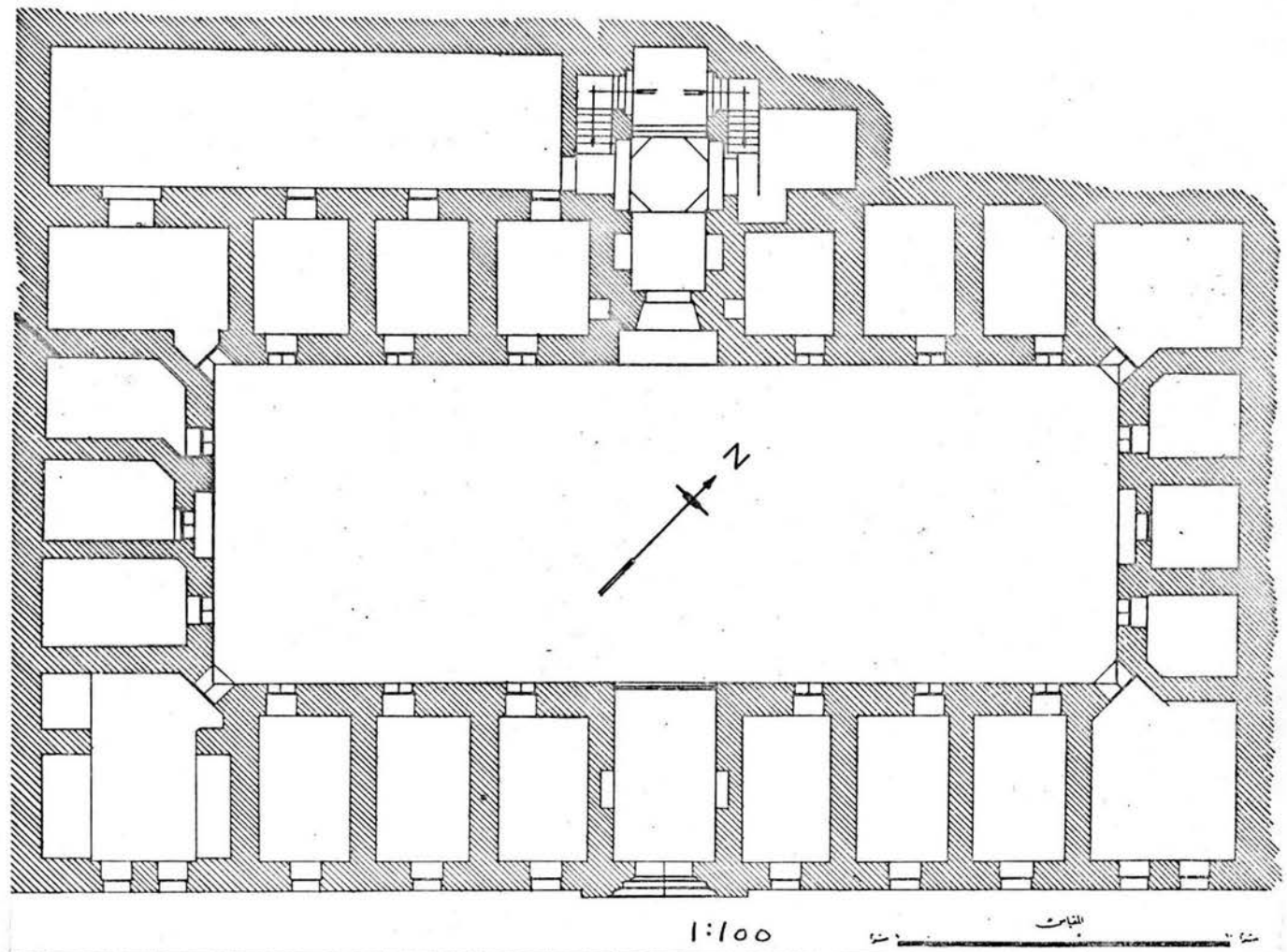
According to the waqfiya this khān adjoined shops, and according to the indications yielded by both the plan and the site, one may suggest that these shops, which were presumably fourteen in number, were on both sides of the entrance, seven of them on each side.[2] If this was originally so then the outline of the building would have been a perfect rectangle. Apart from the entrance and the south-eastern façades, which are free-standing, the rest of the building is connected with other recent structures. The plan of the building as it is today comprises a long vaulted courtyard (29.72 x 10.70 m.) surrounded by a group of cells on both floors (figs. 31 and 32). The entrance is situated

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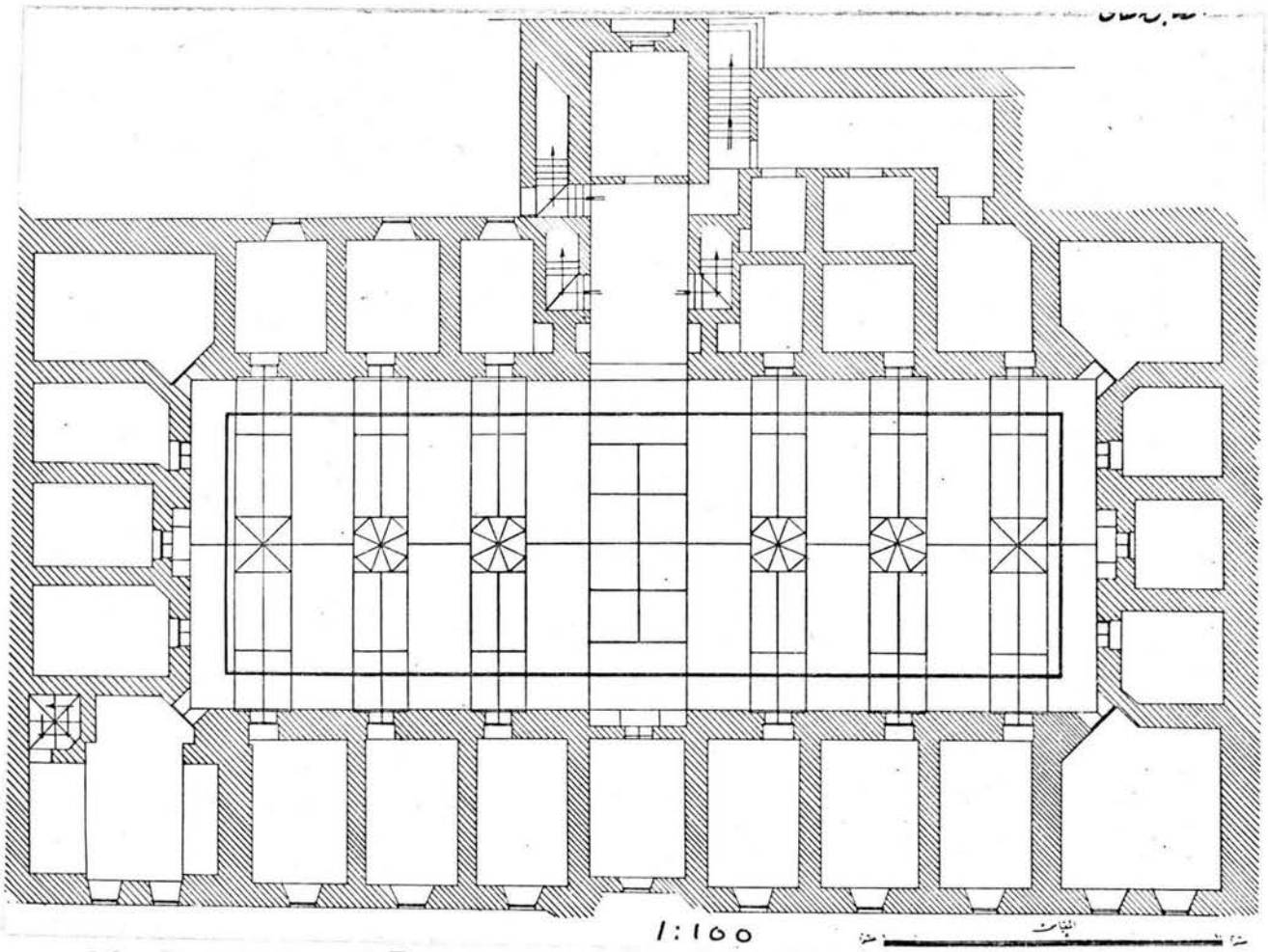
1. The first plan of this building was drawn by Herzfeld (see fig. 30). Herzfeld, in planning Khān Mirjān, followed the same principles which he had previously used in planning al-Madrasa al-Mirjāniya. For Khān Mirjān, which is a building consisting of two floors, Herzfeld drew one plan in which he combined the two floors without considering their variation in detail. Accordingly his plan cannot be considered as a true interpretation of both floors; but it does represent the general layout of the building. The set of plans and sections which are reproduced here were drawn by members of the I.D.G.A. according to their own measurement (figs. 31-34). These plans, with short descriptions, were first published by the I.D.G.A. (see Dalīl Mathaf al-Āthār al-'Arabiya fī Khān Mirjan (Baghdad, 1957)).
2. Shops selling cloth still exist on both sides of the main entrance.



30. Baghdad. Khān Mirjān: plan of ground floor (after Herzfeld).



31. Baghdad. Khān Mirjān: plan of ground floor.



32. Baghdad. Khān Mirjān: plan of first floor.

in the middle of the north-western side and on the same axis, on the opposite side, is an open vaulted chamber similar to the Īwān. The four corners of the plan are occupied by four comparatively large rooms varying in their dimensions, but all of them open onto the courtyard. The second floor contains 26 cells, 23 of them corresponding to the ground floor, and opening onto a gallery which encircles the courtyard. The plans of both floors display a dominant symmetry.

The building has some features which are more likely to be found in madrasas and mosques than in caravanserais. Although the present name of this building and the interpretation of its old one is khān, it is necessary to bear in mind that both in shape and size this building differs from the common type of caravanserai with an open courtyard (fig. 36).[1] The plan of Khān Mirjān does not solve the problem of housing animals, or of facilitating their loading. True caravanserais - at least judging by Iraqi and Persian examples - usually consist of a series of concentric units. That just within the peripheral wall is for the animals, cut off from the rest of the interior by a wall that is pierced only by a few well-controlled openings which would have made it difficult for marauders to steal. As for the sections for human habitation, these are always above the level of the court, from about 2 to 5 feet, to prevent the pack animals from gaining access, and probably also to

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1. Cf. Reise II, figs. 223-4; SPA II, figs. 446-8; see also infra, pp. 411-15.

facilitate their loading.[1]

Khan Mirjān, which in fact does not offer any of the foregoing features, cannot be considered a true caravanserai or a post-house. Rather does the plan indicate that, as was suggested before, it was intended to be for a building to serve as a hotel and as a purely commercial centre.

D. Style of architecture

As usual brick and juss are the only building materials.[2] Originally the khān was entered by its main entrance at the middle of the north-western side (pl. 134). The portal in Sūq al-Bazzāzīn, which is now 3 m. lower than the present ground level of the market, is similar to that of the madrasa. It has less elaborate architectural ornamentation, is shallow and not so high. The spandrel of the arched doorway is filled with minute arabesque scrolls and bordered with a decorative band containing different types of interlaced scrolls. Above this is the historical inscription of the khān, together with a doorway enclosed by a pointed-arched recess. Another type of elaborate minor border, which seems to have been used here for the first time, appears at the upper part of the portal.[3] Apart from this the other types of minor border which are used here are similar to those

1. See infra, pp. 411-15.
2. The common size is 22 x 5.6 cm.
3. It is composed of a wavy scroll developing a trilobed motif on both sides.

of the madrasa. Through the door one enters into a vaulted passage with an extension in the middle, where there is a flat shallow vault. From there one reaches a small yard on the right where the original staircase for the first floor is situated. The stair leads to an Īwān preceded by a room situated above the entrance corridor, and from there to the gallery previously noted. The rooms on both sides of the entrance are not so deep as the entrance corridor. According to Herzfeld there must have been a complete row of rooms or shops for these are mentioned in the inscription.[1] The four corners of the courtyard are rounded to make room for the doorways to the corner rooms (pl. 138). The building displays mature and elaborate craftsmanship. Apart from this the main architectural interest of the building lies in two important aspects, namely its muqarnaṣ gallery, and its well developed vaulting system.

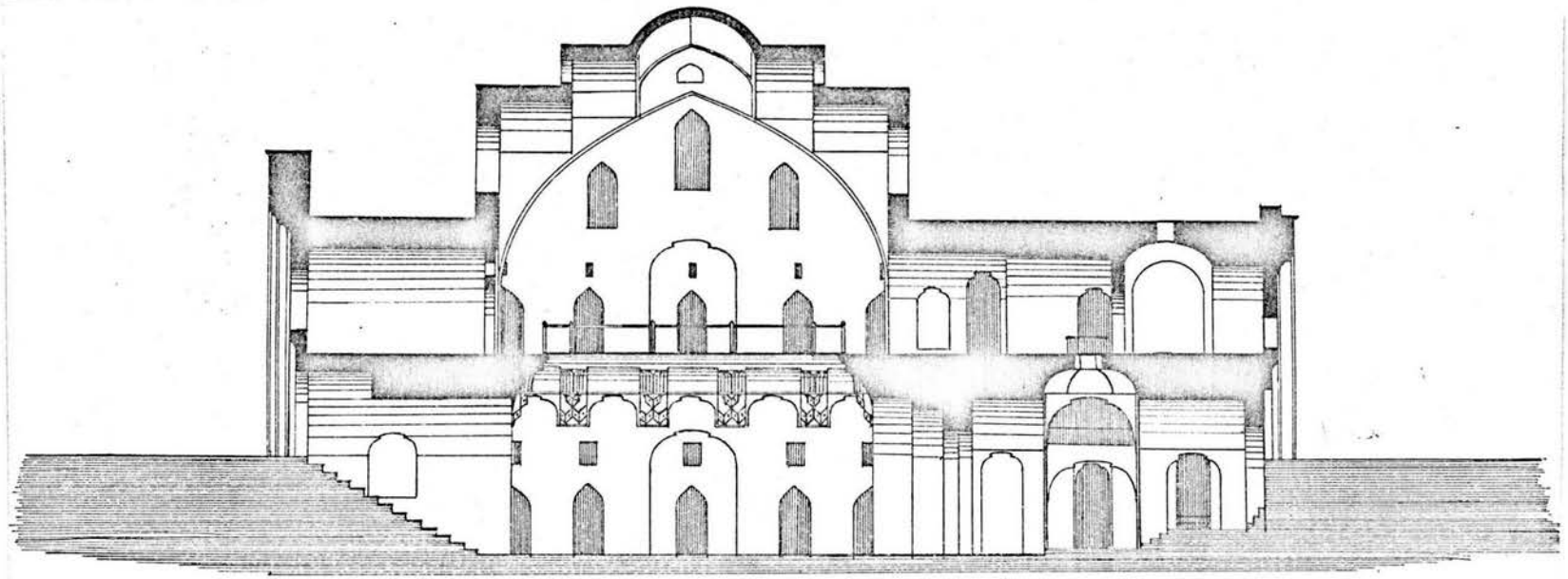
The gallery, which starts at a height of 6m., is carried over corbelled muqarnaṣāt of a type unique in its composition (pls. 138-140). The gallery does not simply separate the two floors, but gives the opportunity of including them under a single roof, and thus permits the height of the vault to be increased to an extent compatible with the length and width of the courtyard. This architectural device enhances the impressiveness and beauty of the building. Each muqarnaṣāt unit is composed of three pointed-arched niches with salient and concave faces (fig. 35). These units are set approximately one meter apart. They constitute a decorative band 2m.

1. Reise II, p. 194.

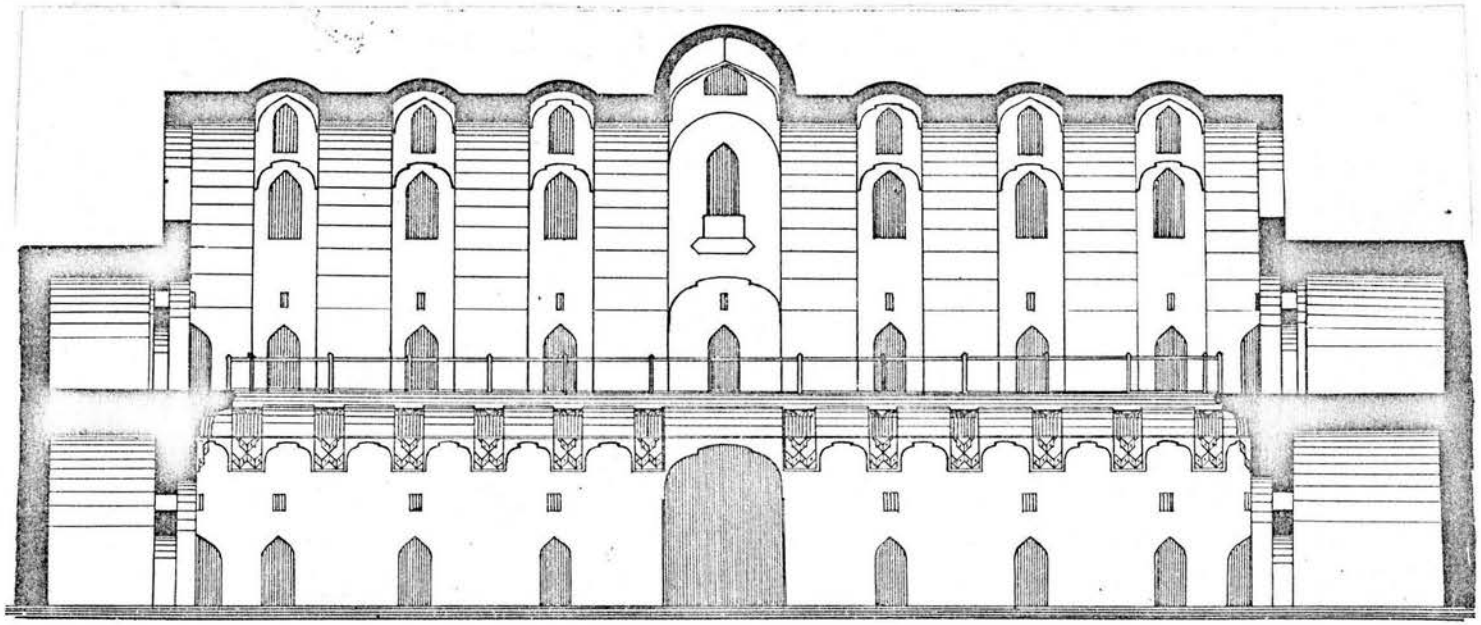
in width. The zones among the muqarnaṣāt are filled with concave common bond fillings supported by segmental arches. The projections of these fillings, and that of the muqarnaṣāt , build up the base of the gallery.

The vaulting system demonstrates the architect's success, not only in combining two floors under one roof, but also in solving the problem of lighting such a large, long vaulted hall. The roof of Khān Mirjān, which is about 14 m. in height, is composed of a series of arches and vaults, varying in shape and dimensions. The vault mainly consists of eight great transverse arches of pointed profile of a type known locally as al-daura (fig. 33). The span of each amounts to eleven meters and is more than two meters in width. These transverse arches are placed at equal intervals (1.90 m.) except for the middle one which is wider - 3.22 m. The intervals between these great arches are filled by vertical walls, then by vaults of segmental profile (fig. 34), in two stages. The lower part of these vertical walls is pierced with the pointed arched doorways of the cells, each of which is topped by a rectangular window.

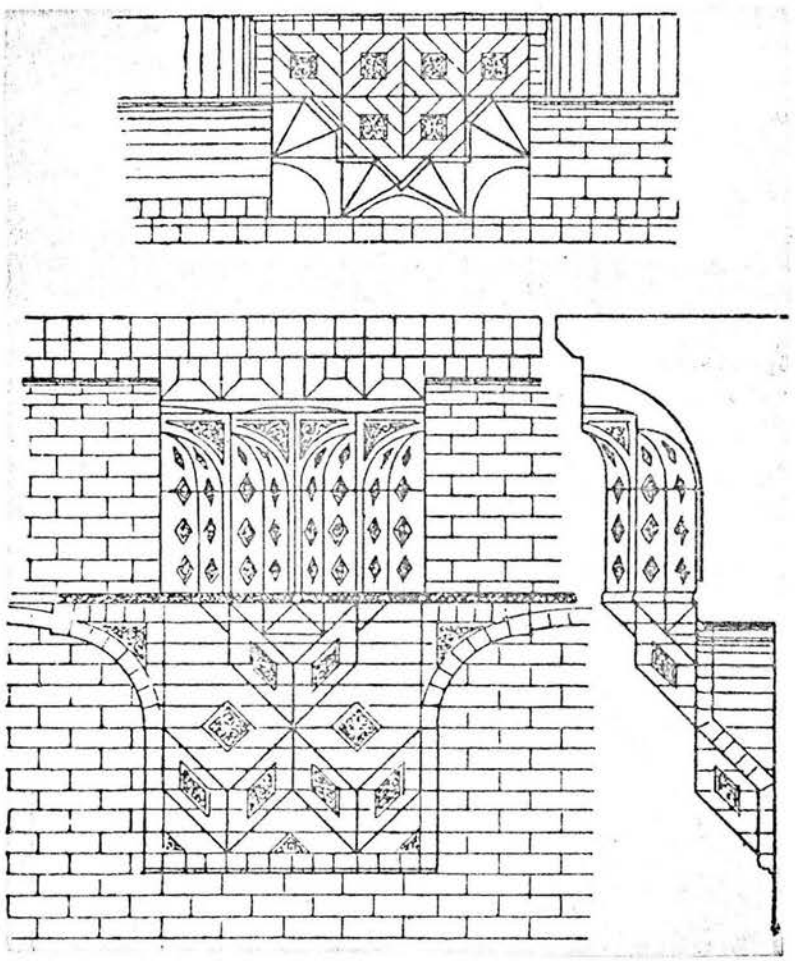
The upper part of these walls is pierced with pointed-arched windows opening on the outside in the roof. The first stage of the vault which fills the interval between the great arches is partly supported by this vertical wall, and partly by the great arches. The second stage, which is architecturally similar to the first stage, begins with vertical walls pierced with pointed-arched windows opening on the roof and has a similar type of vault (pl. 137). The filling system is identical on both sides and the meeting



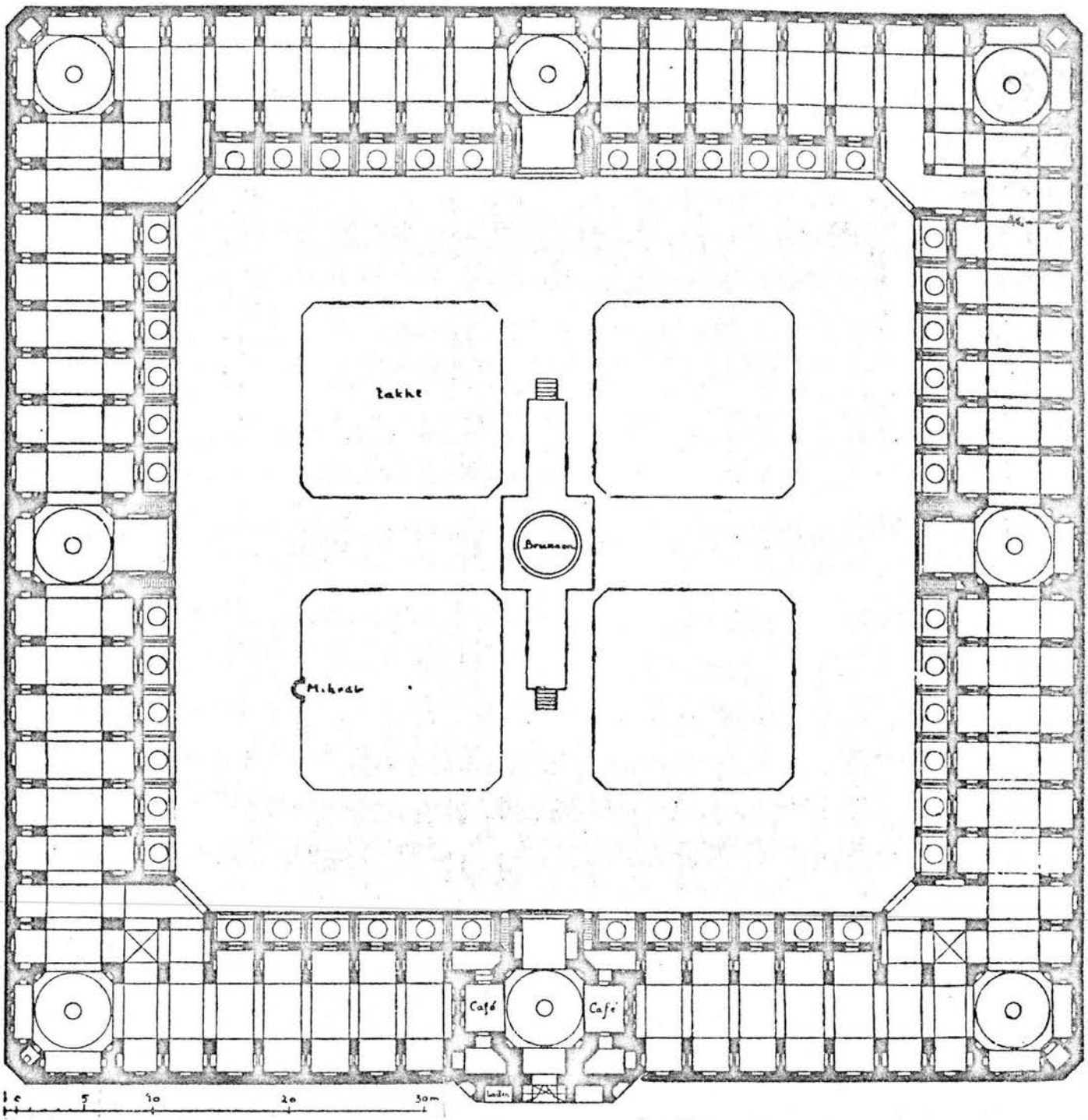
33. Baghdad. Khān Mirjān: cross section.



34. Baghdad. Khān Mirjān: longitudinal section.



35. Baghdad. Khān Mirjān: detail of the muqarnasāt of the gallery (after Herzfeld).



36. Baghdad. Khān al-Mashāhida: plan (after Herzfeld).

point which forms a square area at the top in each of them is covered by a small domical vault, the one which covers the wider middle intervals being higher and larger. In addition to all these windows, the upper part of the two walls at the end of the longitudinal axis is also pierced by three comparatively large pointed-arched windows (fig. 33 and pl. 140).

This elaborate and monumental type of vault constitutes not only a major factor contributing to the impressiveness of this building, but is also, as briefly noted above, a brilliant solution to its lighting problem. The lighting of such a long rectangular vaulted hall could be a serious problem for the architect, because the greater the length of the hall the more the need for windows makes itself felt. These windows must obviously open in the lateral and longitudinal walls. But the usual cells and rooms on these sides do not permit such windows to open directly on the outside. The only solution is thus to set the windows above the walls, in the vault itself. This method, of course, has its own defects, particularly when a great number of windows is needed. It will, above all, weaken the fabric of the vault. The vaulting system of Khān Mirjān overcomes these problems, and at the same time adds to the beauty of the building through a division of the vault into parallel segments, i.e. the great arches, each of which independently supports itself. These parallel segments are connected by much smaller vaults, whose lower part comprises vertical walls which create a suitable space for the great number of windows

needed. Thus the strength of the vault itself is unaffected.

This development of the vault is unique in Iraq. But its origin as a type of vaulting system in brick building can be traced back to Sasanian architecture. The vaulting system of the ruins known today as the Iwān-i-Karkha show a a notable similarity. This building consisted of a single room which was symmetrically sub-divided into a central square about 9 m. to a side, outlined by four great arches, and two wings of this same width, each about 20 m. long. The central square was roofed with a dome on squinches, remains of which were still to be seen in the 19th century. The wings were spanned by five wide arches thrown from wall to wall, and the spaces between these were covered with transverse barrel vaults.[1] In Islamic Persia this type of vaulting continued to be used in much later periods. The vaulting system of the two oratories flanking the principal Īwān in the Masjid-i-Jāmi' of Yazd, probably erected after 762/1360, provides a good example.[2] The roofing system here is a series of transverse arches joined by vaults running in the direction of the cross arches. According to Wilber, this type of vault, which is rooted in the Sasanian

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1. O. Reuther, "Sasanian Architecture", SPA I, p. 506, fig. 135.
2. SPA pl. 446. See also Wilber, op.cit., p. 160, pls. 136-7. This building complex has been studied by M. Siroux: "Le Masdjid-e Djum'a de Yezd", Bulletin de l'Institut français d'Archéologie orientale XLIV (1947), pp. 119-176, figs. 1-13, pls. 1-9, apud Wilber, op.cit., p. 160.

period, was also used in the Ilkhanid times in the Īwān at Garladān and the Īwāns in the madrasa of the Masjid-i-Jāmi' at Iṣfahān.[1]

Fine as these Iranian vaults are, it is difficult to agree with Pope's statement that in the Yazd oratories vaulting is "brought to a perfection not surpassed in Oriental architecture even by the vaults of the Khān Ortma in Baghdad".[2] Rather does it seem that the architect of the khān successfully solved problems which were not attempted by the architects at Yazd. To begin with, Khān Mirjān is much larger than either of the Yazd oratories; and unlike them, it has a gallery above the first floor, supported on richly decorated stalactite corbels (fig. 35, pl. 139), a more generous system of lighting by tiers of superposed windows, and a series of rooms opening off the gallery. Comparison with the end walls at Yazd shows that the khān has far more abundant lighting by means of arched windows. The arches of the vault itself are, as the greater height and width of this hall dictate, a good deal more substantial than those at Yazd.

E. Restoration

No restoration has been recorded in this khān, but presumably some restoration work has taken place at unknown dates. The earliest I.D.G.A. photographs, which date from

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1. Wilber, op.cit., loc.cit.
2. SPA II, p. 1069.

1935, show the building neglected and damaged (pls. 135-6). During later periods the building was used only for storing piles of goods. This caused more damage and rendered the building dangerous to pedestrians.[1] This in turn caused the Municipality of Baghdad to ask for the demolition of the dangerous parts of the building. The building's guardianship was, until 1935, in the hands of al-Awqāf Ministry. Then in 1935 the I.D.G.A. took over the building and immediately started a major plan of restoration. The I.D.G.A.'s aim in undertaking this restoration was to preserve the old elements, and not alter the original features of the building. This restoration was completed in 1936, and in the beginning of 1937 the building began to be used as a museum for Arabic antiquities (pls. 137 and 140).

The details of the I.D.G.A. restoration and minor alterations to the building are as follows:

1. From the courtyard and the cells which surround it on the ground floor a layer of debris about 2 m. thick was removed and the original floor was uncovered and paved with cement.
2. The foundations down to about a meter in depth and up to 3 m. above ground were restored.
3. In the course of time the surrounding street level had become higher than the ground level of the building. This caused the opening of a new entrance in the south side of the khān, probably during the later Ottoman period. The differences in the level increased after the removal of the

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1. For details of the damage, see I.D.G.A., Dalīl Mathaf al-Āthār al-'Arabiya, p. 7.

debris, and this makes it difficult to use the main entrance in any way, so the I.D.G.A. decided to widen and to re-organize the already existing second entrance on the south side (cf. pls. 136 and 137).

4. Originally Khān Mirjān had two staircases. One of them was on the right-hand side as one entered through the main entrance, and the second was in the corner room on the south side. The first led to the first floor of the building, and the second led to the same room on the first floor and then led to the roof of the building. These two staircases were severely damaged, and had been in disuse for some time. This meant that the guardian of the khān had to build two new staircases, presumably in the later Ottoman period. One of them, of wood, was placed in the courtyard and led to a wooden balcony supported by wooden columns, and connected with the gallery. The second was built of brick and was set in the rectangular hall which was situated behind the cells, on the right-hand side of the main entrance. The I.D.G.A. removed these stairs and restored the original stair, and it is used now as the way up. The I.D.G.A. also built another staircase on the other side as the way down. The second original stair in the corner room is hidden behind an exhibition case.

5. Necessary minor restorations were carried out on the great arches and their vaults without any alteration.

6. The I.D.G.A. replaced the old wooden balustrade with a new one bearing geometrical ornament based on a pattern found on the window which flanks the exterior façade of the muṣallā in al-Madrasa al-Mirjāniya.

7. According to the I.D.G.A. the rectangular hall on the right-hand side of the entrance was outside the original plan of the khān, and was roofed with a badly damaged wooden roof. It also included some recent walls and cells. This place was converted to a hall for exhibiting antiquities. The I.D.G.A. also made small openings in the roof of the cells on the first floor and covered them with glass windows with wooden frames to provide light and ventilation inside these cells which at present contain antiquities.

Finally, apart from these minor and necessary alterations, the restoration was carried out in accordance with the original elements of the building.[1] At the present time the main danger which threatens the existence of this building is the underground water which drains from the river and the surrounding higher buildings, and collects inside this khān. At present the I.D.G.A. is treating this matter with scientific methods.

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1. I.D.G.A., Dalīl Matḥaf al-Āthār al-'Arabiya, p. 14.

CHAPTER V

ARCHITECTURE ATTRIBUTED TO THE JALAIRID PERIOD 8th/14th CENTURY

Section 1

The Minaret and the Entrance of al-Kūfa Mosque

A. Historical background

The first mosque at Kūfa was marked out by the Commander-in-Chief, Sa'd ibn Abī Waqqāṣ, in 17/638.[1] It was almost square in plan and not enclosed by walls but by a ditch only. Its sole architectural feature was a covered colonnade 200 cubits long which ran the whole length of the south side.[2] Apparently it remained this way until 41/661. Then, according to al-Balādhurī, al-Mughīra ibn Shu'ba enlarged this mosque before it was rebuilt by Ziyād ibn Abīhi in 50/670.[3] Later, during the Umayyad period, the mosque underwent some restoration.[4] Ibn Jubair, who visited the mosque in 580/1187, wrote an interesting account of it. He was particularly amazed by the height of its marble columns.[5] These columns, according to Ibn Jubair, supported

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1. Its boundaries were fixed by a man who shot an arrow towards the qibla, i.e. the south, then another towards the north, another to the west, and a fourth to the east (al-Balādhurī, Futūḥ al-Buldān ed. R.M. Raḍwān (Cairo, 1932), pp. 275-6).
2. Creswell, EMA I, p. 16, fig. 6.
3. Al-Balādhurī, op.cit., loc.cit.
4. K. al-Janābī, Takhṭīṭ Madīnat al-Kūfa (Baghdad, 1967), p.121.
5. Ibn Jubair, op.cit., p. 211.

the flat roof of the mosque without the usual arches.[1] The present state of the mosque (pl. 141) confirms that almost nothing of what Ibn Jubair saw in this mosque remains.[2] The present mosque, which is mostly of quite recent construction, still retains several ancient architectural features, and an additional monument which, according to their architectural and decorative elements, could be attributed to an earlier date (i.e. the 8th/14th century).

B. The Minaret

The entrance, which is situated on the north-eastern side, is flanked by a minaret which rises from above the wall on the right-hand side (pl. 143). Unfortunately, for some unknown reason this minaret was demolished on the 13th of February 1956 and replaced by a new one (pl. 146a). Luckily, in the 1950s the I.D.G.A. was able to photograph the entrance with the minaret. The following description derives from plate 143 and a discussion concerning this undated monument will be based upon other minarets which bear more or less similar architectural features.

The lofty solid tower or semi-circular buttress on the right-hand side of the entrance seems to be architecturally a suitable base for this substantial monument. It is probable that the buttress was built before, and independently

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1. Creswell thinks that these columns were taken from some building of the Lakhmids, the princes of Ḥīra; see op.cit., loc.cit.
2. The I.D.G.A. has recently discovered two marble capitals of Corinthian type on this site. Their style suggests that they might be the remains of the actual columns seen by Ibn Jubair; see pl. 142.

of, the minaret. The minaret had a height of 12 m. as has been mentioned incidentally by al-Janābī.[1] The main shaft was comparatively thicker than usual if one takes into account the actual height of the minaret. The minaret of Jāmi' Qumriya in Baghdad, dated 626/1228, has a similar shaft. Other minarets which are still standing in Iraq and date from the 6th-8th/12th-14th centuries generally have taller and slimmer shafts and thus more graceful proportions.[2]

The minaret was mainly built with fine cut brick set in common bond. The monotony of the brick was broken by an elaborate ornamented brickwork section at the upper end of the shaft, composed of geometrical patterns with hazārbāf impressions created here by the setting of the brick itself. This design appears very frequently on Saljuq and Ilkhanid minarets and other monuments of Iraq.

Above this section began the corbelled zone bearing the gallery. It started with a row of slightly recessed niches surmounted by two layers of corbelled muqarnaṣāt creating a serrated effect. These muqarnaṣāt are solid and linked to the structural core. This type of muqarnaṣāt is in fact a completely new architectural device introduced by the Iraqi architects to replace the usual pointed-arched niched muqarnaṣāt which were used to form the projecting bases for the galleries on Saljuq and Ilkhanid minarets in Iraq.

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1. In his work about the planning of Kūfa during the Umayyad period he gives some information about the present state of al-Kūfa Mosque; see op.cit., p. 117.
2. E.g. al-Nūrī, Arbīl, Sinjār, al-Khaffāfīn, Sūq al-Ghazl, Dhū 'l-Kifl, and Mirjāniya.

A parallel to the muqarnaṣ of the minaret of the Kūfa mosque which springs to mind is that of the minaret of al-ʿĀqūlī in Baghdad probably dating from the 8th/14th century (pl. 109).[1] Another of similar date to this muqarnaṣ is that of the Mirjāniya minaret, probably dated 758/1356 (pl. 96). As the minaret of al-Kūfa mosque was anepigraphic, this architectural element may be considered as an important dating control in addition to the other subordinate elements which permit this monument to be dated with a certain degree of confidence to the second half of the 8th/14th century.

The gallery, which had a circular form, sprang immediately from the base prepared by the muqarnaṣāt, and bore brickwork basically similar in design to that previously noted on the main shaft.

The last part of the minaret - al-shamʿa - rose from the middle of the gallery. The upper part of this shamʿa bore the same brickwork pattern as the main shaft. This ornamental section was followed by six courses of brick in common bond. The shamʿa, which was obviously thinner and shorter in size than the shaft, was topped by a bulbous fluted dome.

The left semi-circular buttress which flanks the entrance constitutes a quite suitable place for another minaret. It cannot be architecturally justified otherwise. Mosques with

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1. For more information about the ʿĀqūlī mosque see supra, p. 196 n.1.

entrances flanked by a pair of minarets to emphasise the main façade were well known in the eastern Islamic world, particularly in Persia and Anatolia, during these periods. Examples are to be seen in the Masjid-i-Jāmi' of Ashtarjān near Iṣfahān (715/1315-16) and in Abarqūh at the portal of the Masjid-i-Niẓāmiya (c. 726/1325).[1] This feature was apparently more popular in the madrasas rather than the mosques of Iraq, Persia and Asia Minor during the 6th-8th/12th-14th centuries.[2]

C. The entrance

The entrance of al-Kūfa mosque, which is illustrated in plates 143-5, is now anepigraphic. However, conversation during the summer of 1966 with several aged inhabitants of Kūfa about the date of the entrance revealed that there was formerly an inscribed panel placed immediately above the doorway in the field of the arch. This stated that the building of the entrance with its minaret was the work of the Jalairid Sulṭān Ḥusain ibn Uwais (776-84/1374-82). No remains of the inscription which they claim to have existed are to be seen at the present time. The space in question is now, as shown in plate 144, completely plastered with juṣṣ. As is the case with the minaret, the only clue as to its

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1. Wilber, op.cit., pp. 141, 167, pls. 91, 157. On this building see also SPA II, pp. 1079-80.
2. Safar, op.cit., fig. 3; Wilber, op.cit., p. 167, pl. 156; Rogers, "The Çifte Minare Medrese", p. 69. For more discussion and examples see supra, pp. 93-4.

date is furnished by its architecture and its architectural decoration. This entrance was slightly altered, and additional glazed-tile ornament added, when the building of the new minaret took place in 1956-57 (pl. 146). Of special interest and importance is the brickwork of the entrance, of which an adequate amount is still to be seen, even after its restoration (pls. 144-6). The description of this entrance and its brickwork will be based on the earlier photographs.

It is composed of a lofty brick rectangle which reaches the same height as the adjacent wall. The doorway proper is also rectangular in shape and has a wooden door of quite recent date. The doorway is surmounted by a pointed arch recessed twice and framing the vanished inscribed panel previously noted. This part of the door is framed down to the middle on both sides of the doorway with a flat pointed arch, of a type found in the Mustanṣiriya and Mirjāniya madrasas and at Khān Mirjān. It exhibits elaborate brick bonding in which especially prepared bricks are used. The appearance of the brick suggests that it was cut before firing.[1]

The rest of the entrance façade is mainly ornamented with very elaborate terra-cotta of two distinct patterns in which an arabesque of fine diminutive detail adorns the inside of each geometrical unit. The first pattern is used to decorate a band which frames the former arch and continues

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1. A similar type of brick occurs in the entrance of Khān Mirjān.

to border both sides of the entrance (pl.145). The basic unit of this elaborate geometrical pattern is composed of a twelve-pointed star set deeper than its surroundings and carved in low relief with a tiny abstract scroll. Such arabesques in geometrical brick units are first found in Iraq during the Saljuq period, were developed under the Ilkhanids and reached their highest level in the Jalairid period. Elaborate and impressive examples of such brick ornament have been discussed in relation to al-Mirjāniya (758/1356). It seems that the popularity and the common use of the twelve-pointed star, which is known locally as shamsa, "the sun", occurred on the brick ornament of Iraq during the Jalairid period. It has already been noted that other types of stars with less points were quite popular on Saljuq, later Abbasid and Ilkhanid monuments. This decorative device may be considered here as an important element in attributing this brick ornament to the Jalairid period.

The stars of this entrance are surrounded by twelve lozenge-like units. The interior of each of them is ornamented with three stylized leaves. The whole pattern is linked by means of a group of rather small five-pointed stars linked together and forming the spaces for the five-sided polygonal units. Both of these two units are again carved with arabesque decoration. The unevenness in the depth of these units, which is a characteristic feature of the period, creates here a honeycomb effect. The pattern is repeated all over this decorative band (pls. 144-5). Identical brick ornament featuring the twelve-pointed star is to be seen among the brickwork ornamentation in the musallā of al-Mirjānīya (pl. 118).

The second terra-cotta panel surmounts the entrance and is separated from the former band by means of a row of headers placed one beside or upon the other. It has also a comparatively narrow inner border known locally as al-zanjīl. This is composed of a chain-like geometrical motif.

The pattern of this panel basically consists of geometrical compositions which again vary in their depth. At first glance this pattern (pl. 145) gives the impression of interlaced circles. However each principle unit is composed of a six-pointed star, each point of which is attached to six-sided polygons on the same level as the star. The corners of these polygons meet the points of the adjacent stars, thus creating the spaces for other types of geometrical units which are placed on a slightly lower level. The stars and the polygons are carved in relief with a more detailed type of arabesque than that of the outer band. It is composed of highly stylized leaf-scrolls.

The other units are carved with a very dense and diminutive type of arabesque which also appears on the outer band. A similar design to this panel was introduced, but on wood carving, about forty years before the Jalairid era had begun. It is found on a wooden door from the Imām Bāhir mosque at Mosul dated 699/1299 (now at the Abbasid Palace Museum).[1] An identical parallel to this pattern on brick ornament is at al-Mirjāniya. It is to be seen on a decorative band which frames the interior façade of the entrance of this madrasa (pls. 106-7).

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1. See pl. 196.

The rest of the façade is in plain bricks of various sizes which probably indicates quite recent restoration. The outermost pillars of the entrance rest on two plinths which are probably modern. These two pillars and the lower part of the doorway on both sides are plastered with _juss_. The upper part of the façade encloses a rectangular opening in the middle. It appears here without any function simply because this entrance leads to the immense open courtyard of the mosque (pl. 141).

The conclusion to be drawn with regard to dating is that, on the evidence of the architecture and the architectural decoration of this entrance, a date in the second half of the 8th/14th century can be defended for this part of the mosque. Indeed one might well be tempted to believe the local tradition that the entrance with its minaret is the work of Sulṭān Ḥusain ibn Uwais (776-84/1374-82). Political events do not seem to gainsay this attribution. The reign of this _sulṭān_ was comparatively peaceful. By the time he came to power his father Sulṭān Uwais had destroyed almost all his opponents in both Persia and Iraq. Thus, it is possible that this _sulṭān_ could have undertaken some architectural activities at this major Shi'ite city during the most flourishing years of the Jalairid period.[1]

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1. See van Loon, _op.cit._, pp. 5-18, pp. 81-3.

Section 2

Al-Sifīna in the Court of the Kūfa Mosque

A. Historical background

In spite of the architectural importance of this monument it apparently escaped the notice of all the western orientalists who visited Iraq during the last century, for there is no mention of it in their published work. This can only be explained by the fact that this monument, though in the middle of the courtyard of a crowded mosque, is part of a site inaccessible to non-Muslims. Moreover, there is no mention of it in the contemporary authorities. It seems first to have been recorded in 1938 by the I.D.G.A.[1] Later, in 1967, a native historian mentioned it and assigned it to the 6th-7th/12th-13th centuries.[2]

This monument, which has neither clear identity nor any trace of inscription, is known locally as al-Sifīna "the ship". Local tradition identifies the site as linked with the ship of the Prophet Nūḥ (Noah), which he made by the order of God shortly before the great deluge (Sūra XI, vs. 37-44).[3]

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1. See the I.D.G.A., publication, Masjid al-Kūfa (Baghdad, 1940), p. 5.
2. K. al-Janābī, op.cit., p. 118. The evidence presented below suggests that this monument may well belong to the 8th/14th century.
3. According to tradition the site of this monument was the place from which Noah's Ark departed and where the great deluge began. Ibn al-Faqīh (died 365/975) gives similar information without mentioning specifically that the site of al-Kūfa mosque was where this dramatic event actually took place (Kitāb al-Buldān, ed. M.J. de Goeje (Leiden, 1885), p. 173). But excavation suggests that Shurūppāk on the Euphrates was

(Contd.

The Kūfa area does not provide comparative material for the plan of this structure, but fortunately several parallels can be found in Baghdad dating from 6th-7th/12th-13th centuries, and parallels for the decoration exist in both al-Kūfa and Baghdad. It can be tentatively suggested that al-Kūfa and the cities around it, such as Karbalā' and Najaf, constitute a major centre of Jalairid architecture during the 8th/14th century.[1]

Although there is no mention in contemporary authorities of any Sulṭān who erected buildings in al-Kūfa, the evidence of the entrance of al-Kūfa mosque and of the attached minaret, as well as of the discussion below, suggests that the same Jalairid Sulṭān during the 8th/14th century was probably also responsible for the erection of this mysterious monument.

Contd.) the place where the deluge began (see T. Bāqir, "Nuṣūṣ min al-Adab al-'Irāqī al-Qadīm", Sumer VII (1951), p. 49). This identification was first made in 1865 by George Smith, then Assistant Keeper of Oriental Antiquities in the British Museum. His information derived from a tablet from Nineveh found in 1850 by Sir Henry Layard and his assistant Rassām (see Lloyd, op.cit., pp. 17-18; see also British Museum, The Babylonian story of the Deluge (London, 1929), passim).

1. In addition to the entrance of al-Kūfa mosque, Sulṭān Uwais had ordered a mosque with a minaret to be built in Karbalā'. The minaret was called Angūsht " انگشت ". The total number of the letters of this word amounted to 771 which was the year in which this minaret was built. Unfortunately it was demolished in 1921 for the sake of opening a new street in the city. I owe this information to Mr. 'Abdallāh al-Ṣarrāf.

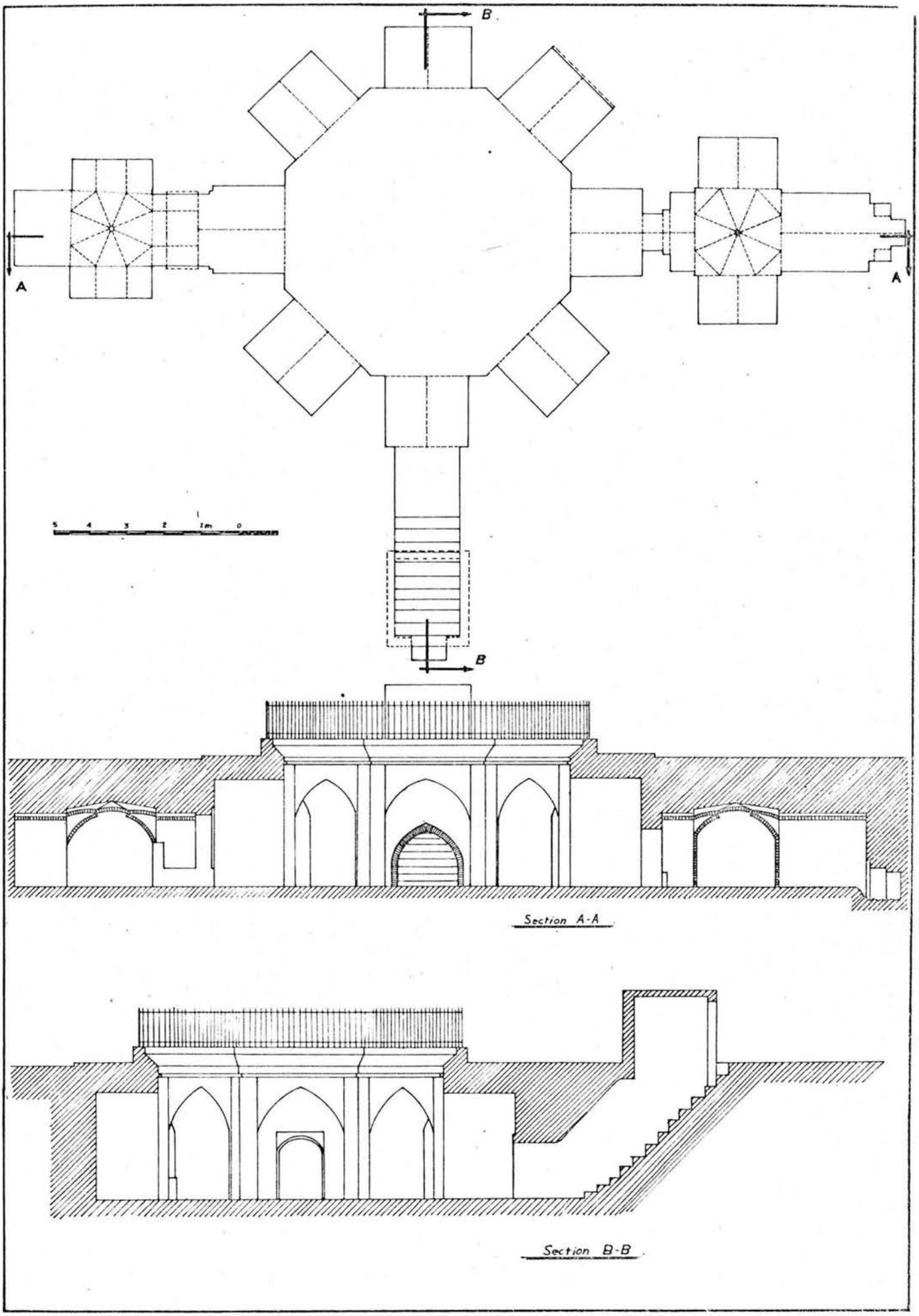
B. The plan

A first glance at the plan (fig. 37) gives the impression that it was intentionally made to resemble the shape of a ship: broad in the middle, extended and narrower to the north and to the south. Most probably the shape of this building inspired its name. It comprises an open underground octagonal courtyard surrounded by eight Īwāns opening onto it.[1] The north and the south Īwāns are open. Each of them is attached to a vestibule of varying depth and width. The one to the north leads to a domed chamber which has a roughly cruciform plan. The two Īwāns which are situated on its vertical and main axis are deeper than the other two on the horizontal axis. The other vestibule to the south also leads to a chamber, which is vaulted. This is basically of a similar architectural composition, but its main axis is longer than the former and the two Īwāns to the east and west are comparatively deeper. In the middle of the south wall of the south Īwān is a miḥrāb composed of rectangular recesses with a rectangular plan.

The details of this plan, namely the octagonal courtyard with two cruciform-type annexes, the south one of which is suitable as a small masjid, seem rather strange at first glance. However, an understanding of the actual function of this monument may explain the plan. The mosques, madrasas

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1. The only similar plan which springs to mind - i.e. an octagon with eight Īwāns, one per side - was used for the interior of vaulted Bāb al-Wasṭānī in Baghdad, see fig. 3; see also Reise II, pp. 151-6. For a discussion of related mausolea types, cf. supra, pp. 99-100.



37. Kūfa. Al-Sifīna: plan and sections.

and mausolea of mediaeval Iraq do not present any parallel plan. The problem which faces one here is thus to identify the function of a building with such a relatively sophisticated plan. The octagonal plan *per se* calls for no particular comment, since this type of plan was popular in many tombs at least in Iraq and Persia.[1]

Turning back to the problem of the identity of this monument, the obvious suggestion is that the building has a religious function. It is sited in the courtyard of a mosque and has a *miḥrāb* facing correctly towards Mecca. But what kind of religious building can this be? Is it a mosque, *madrasa*, mausoleum, or *zāwiya*? Apparently it cannot be a mosque or even a *masjid*, simply because it is found inside a large congregational mosque; there is no practical necessity in building another. Moreover, the *miḥrāb* of this monument cannot be considered in any way to prove that the building was intended for a mosque, for it is well known that most of the Saljuq and Ilkhanid *madrasas* and mausolea which still exist include *miḥrābs*, often sited within a prayer hall. Lastly, there is not a single parallel among all the existing mosques which displays this type of plan. All these explanations militate against this theory.

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1. In Iraq architects of the early Abbasid period applied such a plan to secular architecture as well (see *infra*, pp. 396-7). In Persia, the octagonal plan was used not only in mausolea but also (in Safawid times) in secular architecture, namely *khāns*. Khān-i-Khurra, near Dihbīd, on the Iṣfahān-Shirāz road, is an example (Herzfeld, "Damascus II", fig. 3). It has no inscription, but according to Herzfeld it belongs to the late Safawid period (see *ibid.*, p. 25).

The second assumption, that it might be a madrasa, is again difficult to defend, since this type of Islamic institution had developed a distinct plan since early in the Saljuq period. Although some alterations were made in the number of Īwāns, the madrasa plan remained either square or rectangular without any exception. Variations in the number of cells and chambers are determined by the particular requirements of the building, and according to the total number of the students for whom the madrasa was originally built. Most madrasas have an oblong prayer hall at the south side, with the other units of the building arranged around a central courtyard.

The third assumption can also easily be rejected. Although an octagonal plan was used for many Islamic mausolea of the Saljuq and Ilkhanid period or even earlier, they were without exception covered with a domed roof of one kind or another. In the case of al-Sifīna the octagonal plan is used for an uncovered courtyard only. Moreover, the contemporary authorities do not mention any burials in the middle of the courtyard of al-Kūfa mosque.[1] This fact is corroborated by the absence of any traces of a grave, sarcophagus or cenotaph,

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1. Attached to the exterior of the north-eastern wall of al-Kūfa mosque are two domed mausolea of square plan separated by a courtyard. The one to the south is for Muslim ibn ʿAqīl and the one to the north of it is for Hānī ibn ʿAirwa. Both of them were executed by ʿUbaid Allāh ibn Ziyād in 53/672, shortly before the arrival of Ḥusain at al-Kūfa. Both mausolea display the late Safawid type of tiled architecture (see K. al-Janābī, op.cit., pls. 6-7).

inside this monument. Finally, mausolea, especially those of the post-Saljuq period, usually bear some inscription associated with carefully selected Qur'ānic verses. Here this feature is entirely missing. Among all the suggestions the last, which would identify the monument as a zāwiya, seems most plausible in this context. The purpose of the plan and the style of the architecture would be quite suited to this type of building. Thus, it is more likely that this monument was originally planned and built as a place where a group of ascetic ṣūfīs might discuss religious matters in peace. Also it is a suitable place for their rest and their prayer. As the building contains covered and uncovered areas, it could conveniently be used in all weathers. Besides, one cannot see any other possible use for a building with such a plan.

As there is no written evidence, this plan with its unique composition may well remain unexplained in default of further evidence.

C. The style of architecture

This monument is built of brick[1] and juss. Plate 141 shows that it is situated near the middle of al-Kūfa mosque and surrounded by a low octagonal brick wall.[2] The ground

1. The walls and the piers are constructed of bricks measuring 22 x 7 cm. and 24 x 7.5 cm., the most common size being 22 x 7.5 cm. Bricks measuring 23.5 x 11 x 7 cm. are used mainly in erecting the arches. Bricks of similar size are used in al-Mirjāniya in Baghdad (758/1356).
2. At present a modern fence has been added on the top of the former brick wall (see Section A.A. in fig. 37).

level of al-Sifīna is in fact 3.50 m. below the modern ground level of the courtyard of al-Kūfa mosque. It seems quite likely that the present ground level of al-Sifīna represents more or less the original ground level of al-Kūfa mosque.[1] As there is a period of more than seven centuries separating them, the site for building al-Sifīna must have been prepared by digging up the soil to a depth of more than 3.5 m. Why was that? It is difficult to answer. In this context, one might suggest that this building was originally meant to be founded in a remote place inside the mosque and to a certain extent to be cut off from the outside world. One reaches the interior of this building by means of a staircase composed of a flight of thirteen steps. The present exterior of the entrance, together with this staircase, appear to have been restored recently. The entrance on its exterior consists of a pointed arched doorway. The arch here is constructed of two rows of brick set vertically. The upper part of this arch is to be seen springing above the ground level and surrounded by a row of bricks set vertically on the ground in front of the arched doorway.[2] This is gradually raised as

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1. To decide this fact, excavation inside the building is needed. The objective of such an excavation would be to find the virgin sandy soil of al-Kūfa mosque.
2. This feature prevents the rainwater from draining inside the staircase. The uncovered courtyard of this building must have had a hole in the middle for the drainage of rainwater. In 1966 I was in charge of the excavation at Dār al-Imāra in al-Kūfa. In room 136 behind the qibla wall a lead pipe 13 cm. in diameter was discovered underneath the pavement coming through the mosque. It is very likely that this pipe was responsible for carrying the water from the courtyard of al-Sifīna to the water accumulation centre inside the Dār al-Imāra.

it flanks the barrel vault which covers the staircase (pl. 147). The staircase leads to another undecorated pointed arched doorway opening in to the west Īwān which looks onto the unpaved octagonal courtyard (pl. 148). It is possible that it was once paved with the usual square bricks, but no trace of this is to be seen nowadays.

The uncovered part of the interior of al-Sifīna consists of eight identical Īwāns facing each other. Each Īwān is roughly square in plan and covered with a barrel vault. Five of these end on the outside with an arch of pointed profile struck from four centres.[1] The eight partition walls which are placed on the angles of the octagon act as substantial piers for the vaults of these Īwāns. Five out of eight of them are blank. The type and the quality of these Īwāns are well known in Iraqi buildings of these periods. The arches of these Īwāns represent a variant form of a pointed arch known among western scholars as 'ajamānī after 'Ajam, the mediaeval name for western Iran. This type of arch was well known during the early Saljuq period and became very much favoured during other later periods in both Iraq and Persia.[2]

The interior of this courtyard exhibits a distinct poverty in brick ornamentation, and is thus atypical of later mediaeval Iraq. The only attempts at ornamentation which have survived here are fragmentary pieces of hazārbāf on the

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1. The south and the north Īwāns end with shouldered arches; see fig. 37, section A.A.
2. On this type of arch see Wilber, op.cit., pp. 68-9; see also infra, pp. 418-22.

spandrels of the arches. Apart from this the whole structure is executed in plain brick in common bond. Possibly there might have been other brick ornamentation which was destroyed during later periods.

It has already been noted that the western Īwān contains the doorway of the entrance. The two other Īwāns which are situated to the north and to the south also contain entrances, which lead to the extensions in these directions. The rest of the Īwāns as noted before are blank and in fact constitute suitable places for holding discussions. On entering the south Īwān one faces an arched doorway of inferior quality. The present appearance of this doorway indicates a great deal of alteration and restoration. The arch which is used here is a type of depressed arch which most probably replaces the original pointed one (pl. 149a). The spandrel of this arch, which is framed by a row of headers, is plastered with juss and ornamented with a painted design composed of naturalistic leaf scrolls quite common during the later Ottoman period in Iraq. Both corners of the spandrel bear a circle, each one enclosing a developed type of naskhī inscription executed in black paint. The style of the script points to Ottoman influence too.[1] This doorway leads to a cruciform domed chamber. This part of the building is apparently the private masjid of al-Sifīna, and is large enough to hold about a dozen people. It is composed of four vaulted Īwāns. The south one which encloses the mihrāb has a vault with a shouldered segmental

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1. The inscription is not clear as it is partly defaced. It is likely that it consists of Qur'ānic material.

profile; the northern Īwān is a mirror image of this. The other two Īwāns are covered with barrel vaults but faced with shouldered segmental arches. Arches and vaults with a shouldered segmental profile appear in Iraq at the Mustanṣirīya (631-3/1233-5), and on Ilkhanid monuments, yet they only became really popular during the Jalairid period.[1] This architectural element may thus be regarded as a fairly safe dating control. The central part of this masjid is covered by a domical vault resting on an octagonal base, and composed of eight segments. It is known locally as ṣīniya. The square bay in front of the miḥrāb is transformed into an octagon by means of a transition zone composed of four pyramidal pendentives placed on the four corners of the four Īwāns or deep niches (fig. 37, pl. 149b). Above this rise the eight spherical triangles which form the domical vault (pl. 150). The same domical vault with a similar construction is to be seen in al-Mirjāniya entrance (758/1356).

In contrast to the courtyard, this part of al-Sifīna has preserved some rich brick ornamentation. This appears on the inside of the domical vault, on the upper part of the miḥrāb (pl. 152) and on the upper part of the south and south-western Īwāns (pl. 151). The domical vault is built of very fine brickwork composed of horizontal courses in common bond punctuated by elaborate brick joint plugs of square shape (5 x 5 cm.). Each is ornamented with a geometrical pattern executed in low relief and suggesting a four-pointed star motif, identical with that on the minaret of Dhū 'l-Kifl

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1. See infra, p. 424.

(716/1316). These plugs are arranged in two ways. They either appear as a group of three set diagonally or they alternate with the stretchers, also following a diagonal axis. These ornamental plugs have an impressive effect here as they recall the stars of heaven (pl. 150). The top of the vault from inside is composed of six octagonal courses which become gradually smaller in size and enclose a tiny octagonal and empty area which originally should have contained a hook for hanging a qandīl to provide light. As this part is underground it is obvious that no window could possibly have been used. The only source from which daylight enters is through the arched entrance. This part of the domical vault has retained traces of diminutive arabesque decoration composed of abstract leaf scrolls. Brick ornamentation of this quality is to be seen on al-Mirjānīya and Khān Mirjān, both of the 8th/14th century. However, it must be admitted that the brickwork ornamentation which survives here is far from the sophistication of these two Jalairid monuments. Nevertheless, the accumulation of these specific decorative elements may be considered as a useful dating control. Brick plugs occur in Iraqi architecture from the Saljuq period onwards. Fine examples of such brick plugs bearing identical motifs are to be seen in the Abbasid Palace and in al-Mustanṣirīya on the façade facing the Tigris. Other specimens with different motifs are used on the shafts of Sūq al-Ghazl and Dhū 'l-Kifl dating from the Ilkhanid period. In Persia the tomb of Chelebī Oghlu in Sulṭāniya (c. 730/1330) exhibits

similar brick plugs.[1] The way in which the joint plugs of al-Sifīna are arranged cannot be compared with these examples, for they are set very simply.

The most important architectural feature of this part of al-Sifīna is the mihrāb (pl. 152). It is in an excellent state of preservation and in a style which has no obvious parallel among other existing mihrābs of Iraq from the early Abbasid to the Jalairid periods. Generally this mihrāb is quite simple and its simplicity can be regarded here as its main attraction. It is of rectangular shape and recessed twice into the qibla wall.[2] It is constructed of cut brick with a thin layer of mortar. Its upper façade is composed of a pointed arch which occupies the top half of the first recess, forming an unsupported hanging ledge and acting as a crown to the main mihrāb niche within. The mihrāb itself comprises a flat niche with a pointed arch. The ornamentation is confined to the spandrel of the outer arch. A row of headers forms its border. The decorative scheme shows once more that established ornamental themes during the Saljuq period in Iraq were used for a long period thereafter. The ornamentation starts with a decorative band which runs around the spandrel without any interruption, rather like the band on the entrance of al-Kūfa mosque discussed previously. The ornamentation on this band

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1. During the Saljuq period and earlier in Persia joint plugs were cut in plaster in imitation of brick; see Hillenbrand, op.cit., p. 53, notes 59-61, fig. 3; D. Hill and O. Grabar, Islamic Architecture and its Decoration (London, 1964), pl. 249; Wilber, op.cit., pl. 101.
2. On the upper part there are three recesses (see fig. 37, section B.B.); see also infra, p. 393.

is composed of a continuous stylized leaf scroll executed in low relief. Bands with such motifs are found on several earlier standing monuments in Iraq, a fact which shows that this motif originated before the Jalairid period. The earliest monument which displays this band in brick ornamentation is the "Abbasid Palace" at Baghdad (6th/12th), where it appears as a frame for the ornamehtation of the mābain and for the muqarnas vault at the eastern part of the courtyard (pl. 33). Then during the Ilkhanid period it appears several times on the Sūq al-Ghazl minaret (678/1279), surrounding the shaft and framing the decorative niches at the base of the minaret. During the Jalairid period the motif is often used for borders; al-Mirjāniya (758/1356) and Khān Mirjān (760/1358) provide many examples. However, this band has two tiny plain borders which separate it from the rest of the ornament.

The two spandrels are ornamented with identical panels of arabesque in low relief, but deeper than the former. Again the origins of this arabesque lie in Iraqi Saljuq ornament. It comprises a leaf scroll elaborately designed to fit the available space. The leaves of this scroll are very stylized. The stems are curled and interlaced with each other. As the main axis of this arabesque is developed perpendicularly to the corner of the spandrel and spreads to both sides, it is quite possible that it denotes a stylized tree of life. Arabesques of the same type were used by Iraqi artists on wood, metal, brick and marble during the Saljuq and Ilkhanid periods and imitated all over the Islamic world. The miḥrāb, like the rest of al-Sifīna, has no inscription.

The ground of this masjid is unpaved (pl. 152); a very hard type of juss replaces the usual brick paving. The brick ornament which has survived on the upper parts of the inner vault (pl. 151) probably once covered the whole masjid. Fortunately the fragmentary remains of this original decorative brick revetment are quite sufficient to establish the original scheme. Moreover, it represents an additional dating control for the building. It comprises a decorative band and a row of geometrical terra-cotta composed of seven pieces.

The band is ornamented with a chain-like motif consisting of spindle shapes alternating with squares set on their corners. This motif is first found in Iraq during the time of al-Mustanṣir (623-40/1226-42) and continued to be popular for over a century. At first it was always used to frame historical texts, as on the Ḥarbā bridge built by al-Mustanṣir in 629/1228 near Samarra (pl. 13). A few years later it appears on the Mustanṣiriya river façade (pl. 37) and on the façade of the tomb of Yaḥyā ibn al-Qāsim, 637/1239.[1] In the Ilkhanid period this motif appears as a frame for the inscription of the Sūq al-Ghazl minaret (678/1279). At al-Sifīna it appears for the first time only as a frame for ornament, though it is preceded as usual by a row of headers. This was apparently the last time in which such brick decorative bands appeared in Iraq. It will be demonstrated that in Iraq by the second half of the 8th/14th century this

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1. Al-Daiwachī, "Mashhad al-Imām Yaḥyā ibn al-Qāsim", pl. 13.

kind of brick technique had reached its apogee. Eventually, by the end of the same century, it started to decline rapidly and was replaced by faïence decoration.[1] A similar situation was to occur in Persia during the same century.[2]

The second element of the decoration is composed of five portions of octagonal stars enclosing three five-sided polygons separated from the former band by means of another undecorated narrow band. All these pieces of terra-cotta are carved in relief with a highly stylized arabesque composed of an abstract leaf scroll. A parallel to these geometrical terra-cottas is to be seen among the brick ornaments of the Abbasid Palace, Sitt Zubaida and al-Mustanṣiriya, all of which are dated in the later Abbasid period. Nevertheless, the degree of stylization of the brick ornament of al-Sifīna on the miḥrāb, and also here, demonstrate a further development in this established type of arabesque design. As was the case in Persia and elsewhere, the Islamic artists and craftsmen were content to a certain extent to reuse for long periods already familiar decorative elements, altering them only slightly.[3] Thus in dating monuments it seems inadvisable to depend entirely on the brick ornamentation as a whole without considering it in quite minute detail. The scheme of the

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1. See infra, pp. 453-64.
2. Wilber, op.cit., p. 50.
3. Hillenbrand, op.cit., p. 52.

decoration for the rest of the panel probably featured a repetition of the same geometrical unit. Plate 151 shows the wall after most of the terra-cotta pieces had fallen down. The wall here is of rough brick of various sizes with heavy thick mortar.[1] Such a surface cannot of course be left without revetment, and decorated terra-cotta was chosen here. Once again, identical brick ornament can be seen in al-Mirjāniya,[2] a fact which suggests that an artist from Baghdad was introduced to decorate this monument, an artist who was well acquainted with the established Baghdadi repertory of the 7th-8th/13th-14th centuries.

The north Īwān leads to the interior of a domed chamber by means of a wide vaulted entrance. The chamber, which consists of four Īwāns, is comparatively small but basically identical in its architectural composition to the corresponding domed chamber on the south side which has been identified as a small private masjid. The domical vault of this part is based on the same architectural principle used in the masjid vault, but decorated joint plugs do not appear to be associated with the brickwork of this vault. Apparently the joint plugs in the domical vault of the southern chamber were intentionally used to add richness and effect in the muṣallā.[3] Some of the

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1. For the sizes, see supra, p.261 . According to Wilber, op. cit., p. 56 "as structural surfaces were increasingly hidden beneath decorative overlays interest in elaboration of the fabric of the structures fell off."
2. The middle five-sided polygon is ornamented with a sunken motif strikingly similar to that above the upper window of the muṣallā of al-Mirjāniya (cf. pl. 124).
3. A comparable differentiation in the ornament of two basically similar rooms, of which one is the mosque, occurs in the Timurid madrasa at Khargird, Iran.

brickwork of this part is covered by a thin coat of white plaster. One may suggest that lower down the northern chamber was originally given brick ornamentation similar to that of the southern one. The shape of this chamber is such that it offers quite a suitable place for ṣūfīs' meetings or ceremonies.

The above discussion suggests that this monument was originally intended to be a zāwiya for ṣūfī shaikhs,[1] and that it was built during the second half of the 8th/14th century by one of the later Jalairid Sulṭāns. The combination of architectural and decorative elements seem to justify this date. A slightly later attribution, but still in the late 8th/14th century or early 9th/15th century, could also be supported.

The foregoing account has concentrated on a description and architectural and ornamental analysis of al-Sifīna, as well as dealing with the problem of its date. But certain major problems remain unconsidered, and it seems necessary at least to draw attention to them. It is puzzling, for example, that this structure is placed within a mosque, and especially in the courtyard. One may ask why it should be built underground,[2] and yet also be open to the sky. The presence of

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1. Unfortunately no zāwiya or khānqāh has survived in Iraq to serve as a parallel. However, such religious buildings most probably had a suitable place with a miḥrāb to serve as a masjid, as well as other chambers and Īwāns for holding religious ceremonies. For the term zāwiya see EI[1] vol. IV, pp. 1220-1.
2. An underground room (sirdāb) is found in the courtyard of Masjid al-Sahla in Kūfa itself, about one mile west of the Great Mosque. It is called Ghaibat al-Mahdī (Disparition of al-Mahdī) (see K. al-Janābī, op.cit., pp. 89-93, fig. 2)

(Contd.

two almost identical rooms needs to be explained. Perhaps some answers to these problems may be in the fact that al-Sifīna is situated in the Great Mosque of Kūfa, a site of unique religious importance to Shi'ites. Unfortunately, limitations of time and space forbid a more detailed treatment of these problems, but a solution to them is essential to a proper understanding of the function of this curious structure.

Contd.) and a similar site is found in the mausoleum of the Imāms at Samarra (see I.D.G.A., Door of Disparition at Samarra (Baghdad, 1938). However, neither of these two sirdābs can be compared architecturally with the sophistication of al-Sifīna. An earlier parallel, again rather distant, is furnished by the monastery of Mār Behnām (A. Grabar, Martyrium I (Paris, 1946), fig. 14). Certain Iranian mosques have underground halls beneath the courtyard; an example is the Masjid-i Jāmi' at Nā'īn.

Section 3

The Bridge of Kirī Si'da

A. Historical background

This is another undated monument which is still standing in al-Kūfa. Like the nearby al-Sifīna, virtually no mention of it is given in written sources. Moreover, since the bridge is anepigraphic, it does not provide grounds for a historical discussion. The main interest of this monument is therefore purely architectural.

This bridge was first recorded on 28th February 1946 by the I.D.G.A. Some topographical information about the site which was noted by M.A. al-Baṣām and 'Izz al-Dīn al-Ṣandūq, both members of the I.D.G.A. staff, appears in Arabic in the official file No. 3/43 in the I.D.G.A. Later in 1967 K. al-Janābī published a photograph of this bridge and quoted some information regarding the bed of the river found in the travels of J.B. Tavernier in Iraq during the seventeenth century.[1] Apart from these sources no further information about this monument has been discovered.

It is known locally as Qanṭarrat Kirī Si'da or Chirī Si'da.[2] Apparently this name is derived from the dike over which this bridge is built. The bed of the dike is altogether

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1. Op.cit., p. 41, n.68, pl.1. This note is quoted from Tavernier, Tārīkh al-'Irāq fi'l-Qarn al-Sābi' 'Ashar, transl. B.Faransīs and G. 'Awād (Baghdad, 1944), p. 134.
2. It is also known as Khandaq Sāpūr, see K. al-Janābī, op.cit., loc.cit. The name of the Sasanian King Shapūr most probably denotes that this dike was dug up during the Sasanian period. The other name of this bridge is Qanṭarat al-Baiḍa, but this is not so popular at present.

dry. This dike or canal is probably called after the mountain of Si'da situated to the west of al-Ḥabāniya lake. Full information about the course of the canal is given by al-Janābī.[1] The canal starts 17 km. to the south of Hīt on the west bank of the Euphrates; it passes the ruins of al-Khawarnaq palace,[2] and finally ends in al-Ḥammār lake. During the Ṣafawid period Shāh 'Abbās attempted to dig a canal (jadwal) to carry water from Kirī Si'da to the mosque of al-Kūfa.[3] The advantages of digging the Kirī Si'da canal are apparent. Besides its vital importance as part of the irrigation system for Iraqi agriculture it was an effective factor in eliminating the dangerous flooding of the Euphrates.[4]

The site of Kirī Si'da is marked within square No.35 of the English map (2 D. - S.W. scale 1 inch = 2 miles).

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1. Ibid.
2. According to Ibn Khaldūn, Tārīkh Ibn Khaldūn II part I, (Beirut, 1966), p. 549 (following earlier sources) the Lakhmids built two famous palaces, al-Khawarnaq and al-Sadīr, at their capital al-Ḥīra. The ruin of al-Khawarnaq is thought to be situated 16 km. to the south-east of al-Kūfa. In 1945 the I.D.G.A. attempted some exploration on the site but the work was called off because they found that the bricks had already been dug out and carried away by the local people to the nearby city Abū-Ṣṣkhair (local pronounciation).
3. Al-Janābī, op.cit., loc.cit.
4. On the state of this river when it nears al-Kūfa, see J.M. al-Khalaf, Jughrāfiyat al-'Irāq al-Ṭabī'Īya (Cairo, 1959), p. 174; A. Sūsa, Wādī al-Furāt wa Mashrū' Saddat al-Hindiya II (Baghdad, 1945).

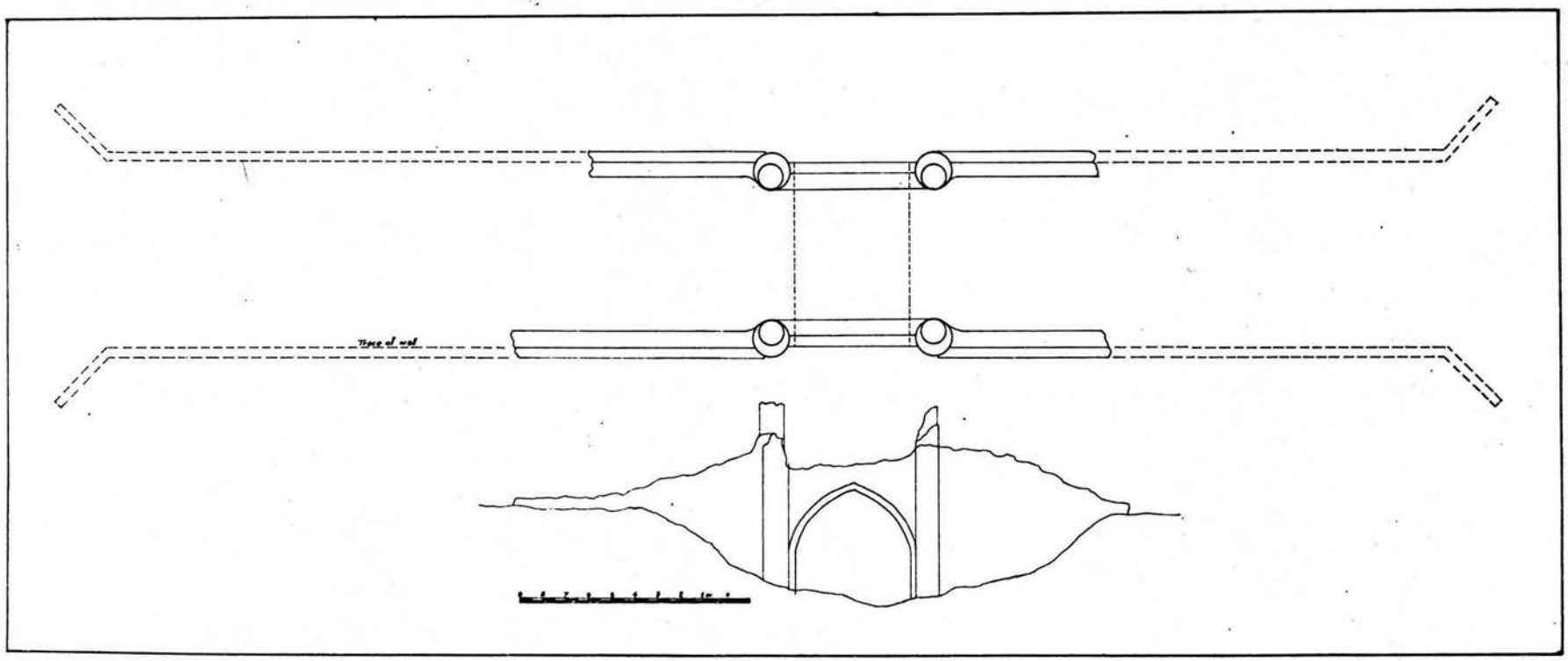
It consists of sandy mounds of varying height [1] surrounding the bridge, which is situated about 6 km. to the north-east of Najaf and about 5 km. to the north-west of al-Kūfa.[2] At the time when the water used to fill this dike it was probably the only bridge which carried the roadway between the western desert and the city of al-Kūfa. Thus, one can see a vital and a practical necessity in building it.

B. Style of architecture

The bridge is built of small square bricks, the most common size being 20 x 20 x 5 cm.[3] On the whole it is a solid and substantial structure. It is composed of one large pointed span which ends on either side with an arch of the same profile struck from four centres (fig. 38 and pl. 153). The roadway is carried on this arch, which is finely shaped and also serves to lighten the structure and considerably reduce the material required.[4] The arch is supported at the corners by four huge, almost rounded piers linked with the ramp on both sides. The intrados of the arch as well as

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1. Their height varies between 4 and 5 m. and they are oval in shape. They extend from the south-east to the north-west. Their surfaces are full of fragments of pottery which can be easily attributed to the various Islamic periods. See I.D.G.A., File No. 3/43.
2. Ibid.
3. Other sizes are: 24 x 5 cm. and 23 x 5.5 cm.
4. Bridges of single spans are also popular in Persia. Examples are the bridge of Mayamd, the bridge built by Shāh 'Abbās I at Āmul and the bridge of the river Harajvin in Fārs; see SPA, pl. 496a, d and c.



38. Kūfa. The bridge of Kirī Si'da: plan and elevation.

its façade is still in a good state of repair. Apart from this the ramp on both sides has suffered a great deal of damage. Most of the brickwork revetments have fallen down and the dangerous deep cracks which appear on these parts show that conservation measures are urgently needed (pls. 154-5). The plan of the bridge (fig. 38) shows that the ramp which slopes down on both sides was linked with a paved roadway. Traces of this are still to be seen.

Above the four corners of the arch the remains of four cylindrical solid shafts are to be seen. Like the other parts of the bridge, these shafts are built of brick in common bond. Traces of vertical setting are used only at the springing points of these towers. The available evidence suggests that such towers were not generally used in bridge construction in Iraq, Persia or Anatolia. Apart from giving support and balance to the span they seem to serve no architectural function.[1] At first sight they look like minarets. Both the south and north façades of the bridge, consisting as they do of a lofty wide

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1. In the mausoleum of Uljāitū at Sulṭāniya dated 705-13/ 1307-13 more or less the same architectural concept operates. At the base of the dome eight minarets spring from the corner angles. Beside their function in strengthening the structure, they weight the walls where the thrust is most dangerous. This function is similar to pinnacles in mediaeval European building; see M. Dieulafoy, Revue générale de l'architecture (1883), cols. 241-2, apud A. Godard, "The Mausoleum of Oljeitū at Sulṭāniya", tr. P. Ackerman, SPA II, p. 1115.

arch flanked by a pair of these towers, resemble the portal entrances flanked by a pair of minarets found in numerous mosques and madrasas of the Saljuq and especially Ilkhanid periods in Iraq, Persia and Turkey.[1] Remains of two rows of square scaffolding holes appear on both sides. This feature is quite common on the monuments of these periods. As the lower part of the Kirī Si'da bridge is covered at present with a heavy layer of sand which has accumulated mainly as a result of the sand storms from the south-western desert, it is now difficult to determine the actual height of the arch or the composition of the bridge at its base without removing this sand.

The Kirī Si'da bridge was originally ornamented with quite simple brick decoration which is confined to the spandrels of its arch on both sides (pl. 153, 155a). The present state of the ornament is such that one can easily establish its original scheme. It is composed mainly of plain brick set geometrically to form concentric octagons. This pattern of setting has been noted in the domical vaults of al-Sifīna. It seems that this type of brick ornament does not appear on monuments which belong to both the Saljuq and Ilkhanid periods, but begins to be featured from the second half of the eighth century onwards. The brick ornament elsewhere on the spandrel is given other types of geometrical setting.

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1. Safar, op.cit., fig. 3; Wilber, op.cit., pls. 156, 158, 163; Rogers, "The Çifte Minare Medrese", p. 69, pls. 7, 15.

As has been noted above, the dating of this monument poses a problem. Quite apart from the lack of inscriptions and the parsimony of the decoration, neither the area of al-Kūfa nor that of Baghdad offer any dated or undated parallel. One must therefore seek parallels in a similar type of architecture elsewhere in Iraq. Examples are few, but some of the architectural elements of the Kirī Si'da bridge are repeated elsewhere. Two types of bridges are to be found in Iraq, the building material used depending on the location. Those built with blocks of stone are found only in the northern part of Iraq. The second type are of brick alone. Of these one example only survives, near Samarra; it will be discussed below.

The stone bridges which have survived, namely Kisik Kuprū, Eskī-Mosul and the so-called al-Jisir al-'Abbāsī, probably date from the Saljuq period (pl. 17a). In 1938 Reitlinger was able to examine the first two bridges and he published them in the same year.[1] The third bridge is situated in Zākhū on the upper Zāb near the Iraqi-Turkish border.[2] Like the other two examples, the lower part of the bridge is constructed of massive oblong limestone blocks, the

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1. G. Reitlinger, "Mediaeval Antiquities West of Mosul", Iraq V (1938), pp. 144, 146-7, figs. 2, 5-7. These structures show that bridges with one or two arches were common in the Saljuq period in Iraq. In Kirī Si'da the situation is more or less similar to the bridge of Eskī Mosul. Thus in both cases one wide and lofty arch was sufficient.
2. I.D.G.A., File No. 13/35.

upper part being of smaller blocks of limestone and rough stones set in mortar. Its span consists of a wide and lofty pointed arch flanked by two other arches of the same profile but smaller in size. These arches carry the roadway which slopes gradually on both sides. Similar mediaeval stone bridges are still to be seen in Asia Minor, for example the great bridge over the Batman Su near Silvan dated 541-2/1146-7, and the Saljuq bridge near Bayburt on the Trebizond-Erzerum road.[1] Others are still standing in Persia.[2] All these examples exhibit spans in one way or another similar to that of the so-called al-Jisir al-'Abbāsī and Kirī Si'da bridges, but they are larger than the Kirī Si'da bridge and composed of more than one arch.

The most relevant parallel to Kirī Si'da is the bridge or Qanṭarat Ḥarbā, built near Samarra by al-Mustanṣir (pl. 12). The date of its construction, according to M. Jawād, is 629/1228.[3] It is built of brick in common bond and has a roadway carried on four wide pointed arches alternating with three pointed arches in flat-topped niches. At present the wide arch on the extreme left is blocked. This bridge is in a good state of repair and still retains its original ornamentation which consists of a long naskhī inscription in a style identical with that on the outer wall of

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1. D. Hill and O. Grabar, op.cit., pls. 387, 390.
2. Such as the Shushtar and Dizfūl bridges (SPA IV, pls. 261a, b).
3. Jawād and Sūsa, op.cit., p. 183.

al-Mustanṣiriya.[1] The arches and vault of the Ḥarbā bridge are very similar to the arch and vault of Kirī Si'da. But the ornamentation on the Ḥarbā bridge is very advanced and rich, as befits the period. On the other hand, Kirī Si'da is an example of a retrograde movement in brick ornamentation which begins to be noticeable in Iraq by the end of the 8th/14th century. The Ḥarbā bridge constitutes proof that Saljuq brick bridges were constructed and ornamented according to established rules which were applied to almost every brick structure of that time. This is why Kirī Si'da, with its decadent scheme of decoration cannot be given a Saljuq date, or even an Ilkhanid one. The key to the date of Kirī Si'da bridge is best sought in its ornament, for this provides a rough dating control which suggests a date not earlier than the end of the 8th/14th or beginning of the 9th/15th centuries. It is possible that this type of brick decoration continued into much later periods, so a date some time in the Safavid period cannot be ruled out.[2]

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1. The inscription is in relief on a lacelike background. It is published by Jawād and Sūsa, op.cit., fig. 22. Ḥusain Amīn gives the measurements of this bridge as follows: width 11.80m., length of the inscription 10.0 m. on both sides; see "al-Madrasa al-Mustanṣiriya", p. 5 and I.D.G.A., file No. 44/40.
2. In Iran such brick ornament can be found not only in the Safavid period, but also in the 12th/18th century.

Section 4

Jāmi' al-Kawwāz

A. Historical background

This mosque, which includes a turba as well, is situated in al-Mishrāq quarter in al-Baṣra. It occupies nowadays an irregular piece of land which amounts to 2120 square metres.[1] This irregularity was caused by the opening of new streets around the mosque.[2] The building dates from later than the Ilkhanid period, but its precise date is still problematical. The argument may briefly be summarised.

According to the inscription executed in relief on a stone panel set above the main entrance (pl. 156b), the mosque dates from the late Jalairid period, namely 785/1383. The inscription is a poem (most probably commemorating the erection of the minaret) composed of four lines as follows:

1. ١ــ أخلصوا النية فيها فجروا عن مسجدا لله نعما وجنان
2. ٢ــ أحسن الهمة في بنيانها أنس المحمود في كل مكـــان
3. ٣ــ فغدت مثل عروس حليت واخذا في الحسن والأمر عنان
4. ٤ــ قيل أرخ قلت في تاريخها أعقب الله سناها بالأذان

1. They were sincere in their intention, [and] they discharged it in a mosque for Allāh, delightful and paradisical. 2. The zeal [of] Anas, the one who is praised in every place, did well in building it [i.e. the minaret]. 3. It became like an adorned bride, full of beauty and towering skywards.

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1. I.D.G.A. File. Jāmi' al-Kawwāz No. 16/48.
2. The irregularity of the outline of the ground plan can be explained by the position of the street, already in existence at the time that the mosque was built, as was the case with al-Madrasa al-Mirjāniya; see fig. 27.

4. They said, "Date it". I said, "In its date, may Allāh cause its splendour to be followed by the adhān (the call to prayer).

As usual the last word of the fourth line which is here الأذان ("the call to prayer") contains the date. This word contains seven letters each of which can correspond to a certain numerical value: ا = 1, ذ = 700, ا = 1, ن = 50, ا = 1, ل = 30, ا = 1, ى = 2, making a total of 785.[1] On the other hand, according to a historical authority the earliest possible date for this mosque is 920/1514.[2] This information, however, is unconfirmed by the later authorities; moreover there is no inscription in the building which alludes to such a date. If the date given in the above poem is correct, the later date may well represent the date of the rebuilding of the mosque. Evidence cited below suggests that the minaret could be dated earlier than either the muṣallā or the turba.

According to the file of the I.D.G.A., this mosque was

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1. The system of the numerical value of the letters which is followed above is according to the table published by M.A.A. Marzūq, al-Fann al-Islāmī (Baghdad, 1965). This table is similar to that published by G.R. Kaye, "Astronomical Instruments in the Delhī Museum", Memoirs of the Archaeological Survey of India XI-XIV No.12 (Calcutta, 1921), pp. 1-24 and pl. VI (dealing with Abjad notation - naskhī).
2. This date is given in an MS by an unknown author called Tamā'im al-Durar, f.117 (now in a private library in Baṣra which belongs to the family of 'Abd al-Qādir Pāshā A'yān al-'Abbāsī, descendant of the 'Abbāsī Caliphs; this library is known locally as al-Maktaba al-'Abbāsiya).

first built by Shaikh Sārī ibn al-Shaikh Ḥasan al-Dā'in al-'Abd al-Salām al-'Abbāsī in 920/1514. Then in 930/1523 it was rebuilt in brick by al-Shaikh 'Abd-al-Qādir al-Kabīr al-'Abbāsī,[1] and named Jāmi' al-Kawwāz after the celebrated 'Abd al-Ṣūfī al-Walī al-Shaikh Muḥammad Amīn al-Kawwāz, the head of al-Shādhilīya sect in Iraq, who was buried in this mosque in 953/1546.[2] A dome sheltering his sarcophagus was erected during the Ottoman period in 1011/1602. In 1140/1727 a minaret was built by Shaikh Anas Pāshā A'yān al-'Abbāsī. However the architectural and decorative styles of this minaret suggest that it dates from two or three centuries earlier than the above date. Thus one may suggest that the date 1140/1727 represents a major restoration carried out by al-Shaikh Anas.

B. <u>The construction and the ornament</u>[3]

The building as a whole is of interest from both the

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1. The information cited in the I.D.G.A., <u>File 16/48</u>, regarding this mosque was given by the late 'Abd al-Qādir Pāshā 'Ayān al-'Abbāsī, the trustee of the <u>waqf</u> of this mosque. He died in 1970.
2. The founder of <u>al-Shādhilīya</u> sect was Abū 'l-Ḥasan 'Alī ibn 'Abd Allāh ibn 'Abd al-Jabbār al-Sharīf al-Zarwilī, a celebrated mystic whose <u>ṭarīqa</u> (brotherhood), known as the Shādhiliya, has itself given rise to some fifteen other brotherhoods, such as the Wafā'iya, the 'Arūsiya, the Jazūliya, the Ḥafnawiya and so on. According to some the founder was born at Chemara near Ceuta about 593/1196; others say he was born at Shādhila, a place near the Jabal Ẓafrān in Tunisia, from which he took his <u>nisba</u> (see <u>EI[1]</u> IV, pp. 246-9).
3. During a visit in August 1969 the mosque was locked, hence I was not able to examine the interior of either the <u>muṣallā</u> or the <u>turba</u> to take any measurements.

architectural and decorative points of view and marks a significant stage in the history of the development of Iraqi architecture. Of special interest is the dome, which represents an early example of the change in architectural revetment which took place in Iraq during the 8th-9th/14th-15th centuries, when glazed tile in various bright colours replaced entirely the earlier brick ornament which had been favoured by Iraqi architects for more than three centuries.

As usual, brick was the only building material used. The mosque is entered by means of a pointed-arched doorway (pl. 156b) of which both construction and ornament are typical of Ottoman architecture in Iraq. The spandrels of the arch, which are plastered at present with a layer of juss, are embellished with geometrical pieces of glazed tiles of different colours arranged to form four-pointed stars linked together. The quality and the design of the decoration are again undoubtedly Ottoman. Immediately above the arch is a rectangular panel measuring 2.20 x 0.40 m. and consisting of inscribed glazed tiles in dark blue on a yellowish background. The text contains Sūra XXXIII, v. 56. It reads

(انّ الله وملا[1] ئكته يصلون على النبي يا أيها الذين آمنوا صلوا عليه وسلموا تسليما ·

"Lo! Allah and His angels shower blessings on the Prophet. O ye who believe! Ask blessings on him and salute him with a worthy salutation".[2]

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1. The words between the brackets do not appear on the panel because they are hidden underneath the plaster.
2. Pickthall, op.cit., p. 306.

The style of this inscription is a crowded type of naskh. Another noticeable feature of this script is the abundant use of vowelling and other orthographic and decorative signs infilling the interstices of the letters.[1]

Above this panel, in the middle of the area above the entrance, is another rectangular piece of stone (1.60 x 0.60 m.) inscribed in relief with a four-line poem written in a naskhī style.[2] The script is strikingly similar to that of al-Mirjāniya (758/1356) and Khān Mirjān (760/1358).[3] The content of the poem suggests that the poet may have meant the minaret and not the mosque,[4] and thus it may be that this panel was originally placed somewhere on the minaret and was transferred from there to its position above the entrance. This probably happened after the rebuilding of the mosque by al-Shaikh ʿAbd al-Salām al-Thānī al-ʿAbbāsī in 1011/1602.

This panel is flanked by two glazed tile panels, also rectangular in shape. The one on the right hand side is inscribed بالله and that on the left بمحمد. In these two panels the calligrapher used comparatively large letters of naskhī type to fill the available space. Here again the style of both script and ornament is Ottoman.

The outer walls of the mosque are built with bricks of

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1. Thus, small letters are placed within or near larger identical letters (e.g. sād, kāf and mīm).
2. The text is given above, see supra, p. 282.
3. Cf. pls. 97 and 134.
4. The last word of the poem is بالأذان ; this immediately suggests an association between the poem and the minaret.

various sizes and colours, a feature suggesting repeated restorations (pl. 156a).[1]

The muṣallā consists of a large rectangular hall covered with a flat roof. In front of it is a flat ẓulla supported by a row of wooden columns with muqarnaṣ capitals (pl. 158b). Columns of this type represent a local tradition.[2] The entrance into the muṣallā is by means of a rectangular doorway of quite recent date. The exterior façade of the muṣallā is plastered with juṣṣ. On the right hand side of the door of this muṣallā is a pointed concave miḥrāb, also plastered with juṣṣ. This type of miḥrāb outside the muṣallā is quite common in mosques and madrasas in Iraq.[3] The architectural features of this muṣallā suggest a dating to the Ottoman period.

The minaret is in an excellent state of repair and is a good example of the combination of elaborate brickwork and glazed tile (pl. 157b). With its height of 80 feet, it is the most impressive monument in this mosque.[4] The usual common bond is entirely replaced by elaborate geometrical brickwork

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1. The most recent restoration was carried out in 1963.
2. Columns of this type are still to be seen in houses following the old Baghdādī Ottoman style all over Iraq; see Krunic, op.cit., pp. 33-47, figs. 6 and 9; Herzfeld, "Damascus III", p. 18.
3. The earliest example is in al-Nūrī Mosque (566-8/1170-2), and it is later found in al-Mirjāniya (758/1356). During the Ottoman period it was found in almost all mosques. In fact this type of open-air muṣallā is an important means of overcoming the fierce heat of the Iraqi summer.
4. The diameter of the shaft is 40 feet (I.D.G.A., File No.16/48).

executed in the hazārbāf technique. The same technique of brick bonding was frequently used on Saljuq, Ilkhanid and Jalairid minarets of Iraq.[1] Almost all the glazed tile pieces are either square or lozenge shaped. The tile pieces are of blue (with various shades), white and black. The lower part of the shaft is surrounded with a band composed of small lozenge-shaped pieces of black and white tile. This is preceded by another tile band composed of stylized geometrical scrollwork. Above these two bands on the middle zone of the shaft are two rows of light blue glazed tiles set vertically forming a zigzag pattern. These zigzag bands include a repetition of two words الله اكبر executed in square Kufic. This is framed by two torus motifs of a type quite common on Ilkhanid minarets of Iraq.[2] Tile pieces of blue, white and black forming a crossed zigzag pattern appear on the upper part of the shaft under the muqarnaṣāt zone. Other tiled pieces on the shaft also form purely geometrical patterns quite common on minarets of these periods.

The gallery of al-Kawwāz minaret is of a style unique among Iraqi minarets. It is of octagonal form constructed over three corbelled muqarnaṣāt. Although the basic architectural elements of the gallery, such as the octagonal shape[3] and the muqarnaṣ, are well known features in Iraq, their

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1. For more detail see infra, pp. 453-7.
2. It is to be seen of the minaret of Sūq al-Ghazl and Dhū 'l-Kifl.
3. The existing minarets in Iraq show that the octagonal form was used for the base during the Saljuq period.

combination in this gallery is without parallel. The galleries of the Iraqi minarets show that circular forms are the most common.[1]

The muqarnaṣāt of Jāmi' al-Kawwāz suggest that the minaret antedates the Ottoman period. They are of a type basically similar to those on the gallery of Khān Mirjān (fig. 35). The small units of the muqarnaṣāt are grouped together to form larger ones. They are separated in the first layer by means of arched recesses taking the form of a trilobed arch. The architectural function of the muqarnaṣāt of Jāmi' al-Kawwāz is to transform the cylindrical shaft of the minaret to an octagonal projecting base on which the gallery rests. The decorative effect of these muqarnaṣāt is obvious. A wooden fence was used in the gallery instead of the usual brick one.[2]

The last part of this minaret, i.e. al-sham'a, stands as a short column topped by a round dome of a slightly pointed profile. The brickwork and the glazed tile ornament of al-sham'a are basically similar to that on the shaft. It seems

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1. One exception is the lower gallery of the minaret of Sūq al-Ghazl which has a dodecagonal shape; see fig. 22.
2. The minaret of al-Nūrī mosque in Mosul (pl. 19) has on its upper gallery a similar type of fence, probably of a later date. Apart from these two minarets no other minarets in Iraq have such wooden fences. The use of a wooden fence instead of a brick wall in the gallery of a minaret has two main advantages: it allows for more room inside the gallery, and it considerably decreases the pressure on the muqarnaṣāt zone.

possible that the architect of the minaret of al-Kawwāz mosque was largely influenced by the earlier Saljuq and Ilkhanid minarets of Iraq. The architect followed a purely local tradition, which remained an established convention in the building of minarets for more than two centuries after the end of Saljuq power in Iraq.

The architectural and decorative elements of al-Kawwāz minaret therefore suggest a date earlier than 1140/1727. The date 785/1383, which is stated in the previously discussed poem, seems to be more appropriate. Indeed, it is tempting to believe that the panel which contains the poem did originally relate to the minaret.

The turba is situated on the south-eastern corner of the courtyard, a few feet to the north of the minaret. The glazed tile decoration of the dome is of interest because it gives perhaps the earliest existing Ottoman example of geometrical tile work of no more than three basic colours, namely two variations of blue, black and white. The turba of al-Kawwāz mosque has suffered a great deal of damage and a large part of its tiling has fallen away.[1] What is left indicates that it consisted of a circular chamber topped with a comparatively large smooth dome of pointed profile. This chamber is approached via another rectangular chamber now badly damaged. The latter most probably acted as a vestibule.

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1. The I.D.G.A. in 1971 started a large-scale restoration to save the dome from several dangerous cracks and also to complete its tile decoration.

The mosaic work of this dome displays a high technical standard. The pattern is based entirely on a purely geometrical design executed with small pieces of glazed tile carefully cut and laid upon a thick bed of mortar. Very thin mortar joints are used (pl. 157a). The scheme of decoration in the dome is composed of six-pointed stars built up with very tiny pieces of triangular shape. These stars are linked together, thus creating the spaces for hexagonal polygons. The pattern is repeated and covers all the exterior of the dome proper. The mosaic of the dome represents a local development. The date 1011/1602, which applies to part of the mosque, quite fits this turba too.

One may conclude this description by noting that Jāmi' al-Kawwāz as a whole represents an important transition stage between the architecture of the Saljuq period and that of the early Ottoman and Safawid periods in Iraq.

CHAPTER VI

RELATED ARCHITECTURAL MATERIAL OF SALJUQ, LATER ABBASID AND ILKHANID DATE IN THE IRAQ MUSEUMS

Introduction

The Iraqi Museum's collection of marble, stucco and wooden objects are of great importance in the study of the architectural decoration of the mediaeval periods. Most of these objects are the products of northern Iraq. Despite their importance most of them still await detailed and analytical study.

The articles which have been published about some of them so far have been by al-Naqshabandī and Faransīs, whose main concern as numismatic specialists was the reading of the inscriptions.[1] Herzfeld was the first to study several examples of Atābikid miḥrābs in Mosul.[2] In 1952 R.Ettinghausen in discussing the "beveled style" in the post-Samarra period referred to the importance of three examples, namely the miḥrāb of Imām ʿAbd al-Raḥmān, the miḥrāb of al-Juwaichātī mosque and the minbar of the Great Mosque of al-ʿAmādiya.[3]

Most of these objects were transferred to Baghdad .

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1. They have written several joint articles, such as "al-Khashshab", pp. 55-64; "al-Maḥārīb al-Qadīma fī Maṭḥaf al-Qaṣr al-ʿAbbāsī", Sumer VII (1951), pp. 211-21 (hereinafter referred to as "al-Maḥārīb").
2. Reise II, pp. 218-24, 275-81.
3. See Archaeologica Orientalia in Memoriam Ernst Herzfeld ed. G.C. Miles (Locust Valley, 1952), pp. 74-5, pls. 9-10. This book is hereinafter cited as Archaeologica Orientalia.

during the 1940's and were first exhibited in the Museums of the Abbasid Palace and Khān Mirjān. Several of these objects were later transferred to the new building of the Iraqi Museum during 1965.

As regards mihrābs the I.D.G.A. possesses at present eleven dating from the 2nd-7th/8th-13th centuries.[1] They are made of various materials such as stucco, brick and marble.

The earliest mihrāb in the collection is the mihrāb of Jāmi' al-Khāṣṣakī which is made from one block of marble. This mihrāb has been adequately studied and illustrated by several western scholars who are all agreed that it was re-used in this jāmi' having been used in the mosque of al-Manṣūr (2nd/8th century).[2]

The mihrāb of Samarra dating from the 3rd/9th century will be included here, although it is not from within the prescribed period of my study. It is the only existing stucco mihrāb which is fairly unknown, and its ornament and Kufic inscription suggest prototypes for Mosul marble mihrābs.

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1. They are mihrābs of Jāmi' al-Khāṣṣakī, Samarra, al-Nūrī, Imām 'Abd al-Raḥmān, al-Juwaichātī, Sinjār, Abū Rīsha, Alūs, Khān al-Khirnīnā, Panja 'Alī and Imām Bāhir.
2. Herzfeld, Reise II, pp. 139-45, fig. 187; idem, "Die Genesis der islamischen Kunst und das Mshattā-Problem", Der Islam I (1910), pp. 33-6, pls. 1-2; G. Bell, Amurath to Amurath (London, 1911), p. 192; Creswell, EMA II, pp. 35-6.

As most of these various materials are undated they can be arranged in only approximate chronological order. Examples of them will be studied in four groups according to their functions and the material of which they are made.[1]

1. All the numbers which appear in this chapter are taken from the Iraqi Museum Record.

Section 1

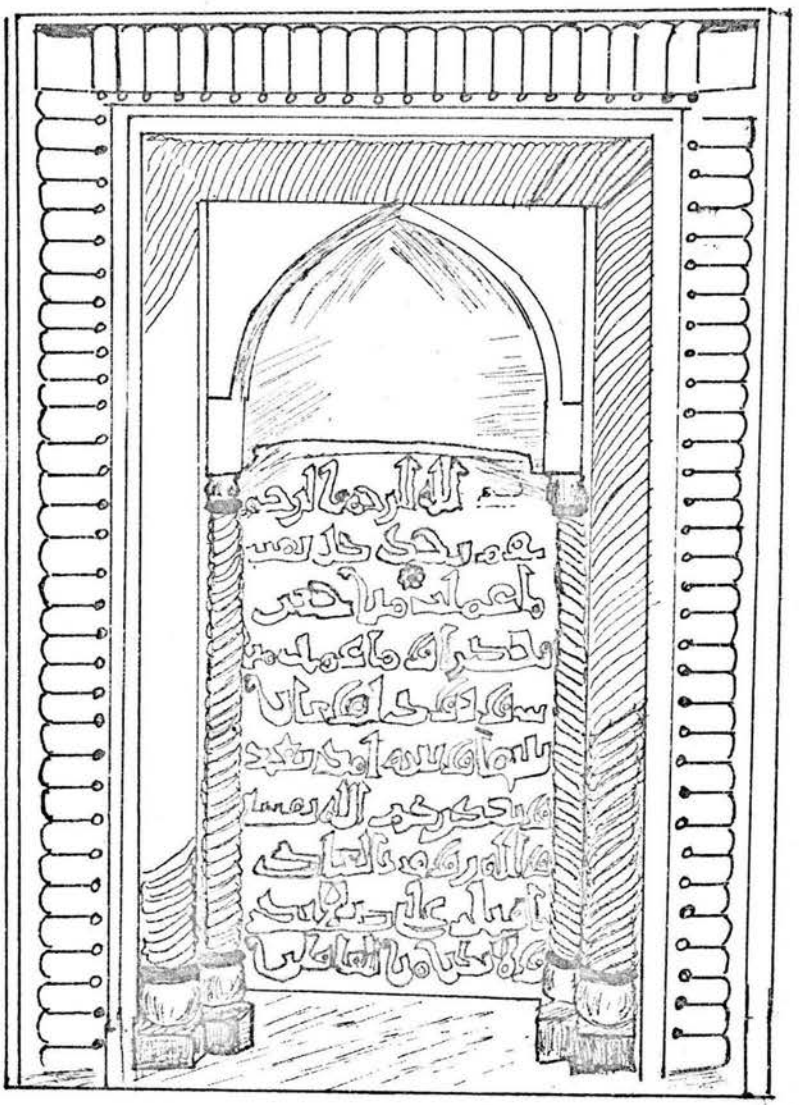
The Miḥrābs

A. The Miḥrāb from Samarra, A. 9210.

This gypsum miḥrāb was discovered by the I.D.G.A. at a site called Madaqq al-Ṭabul at Samarra during the excavation of 1936 in dār 2, room 5.[1] It is rectangular in shape, 1.77 x 1.31 m. This miḥrāb is the only comparatively well preserved example which has survived from the early Abbasid period (pl. 2a, fig. 39). The scheme of its decoration is quite simple, consisting of frames and engaged columns. These columns rest on a vase motif per side and are decorated with a cable moulding. Outside these columns runs a continuous rounded frame, also resting on a vase motif, and also decorated with a cable moulding.[2] The inner columns bear the pointed arch of the niche; they have vase-shaped capitals. The outermost frame is decorated with a row of incised narrow adjoining rectangles with rounded tops. Each is flanked at the base by a sunken bead motif.[3]

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1. Excavation at Samarra I, p. 14, plan 2; see also p. 39, pl. 57; infra, p. 397, n.1.
2. As regards the cable moulding columns on miḥrābs, the miḥrāb of Jāmi' al-Khāṣṣakī represents an earlier local example. Cable moulding columns also occur on the miḥrāb of Jāmi' al-Nūrī as will be shown shortly. This motif is also popular in Persian miḥrābs such as the miḥrāb of the Masjid-i-Jāmi' of Ashtarjān near Iṣfahān (715/1315) and in Abarqūh on a miḥrāb in the Masjid-i-Jāmi' (Wilber, op.cit., pp.141, 181, pls. 95, 192). On cable moulding see supra, pp. 69-70.
3. An identical motif appears on marble friezes found in the Jausaq al-Khāqānī at Samarra (EMA II, fig. 190).



39. Samarra. The stucco mihrāb of Samarra showing Kūfic inscription.

The most important artistic feature of this mihrāb is its Kufic inscription. Its style has certain affinities with early 6th/12th century inscriptions on marble, stucco and wooden objects (fig. 40). The inscription is moulded in relief and contains several defaced letters. It consists of ten lines of which the first eight are Sūra III, v. 30, the other two being a ḥadīth. The reading of the text is as follows:[1]

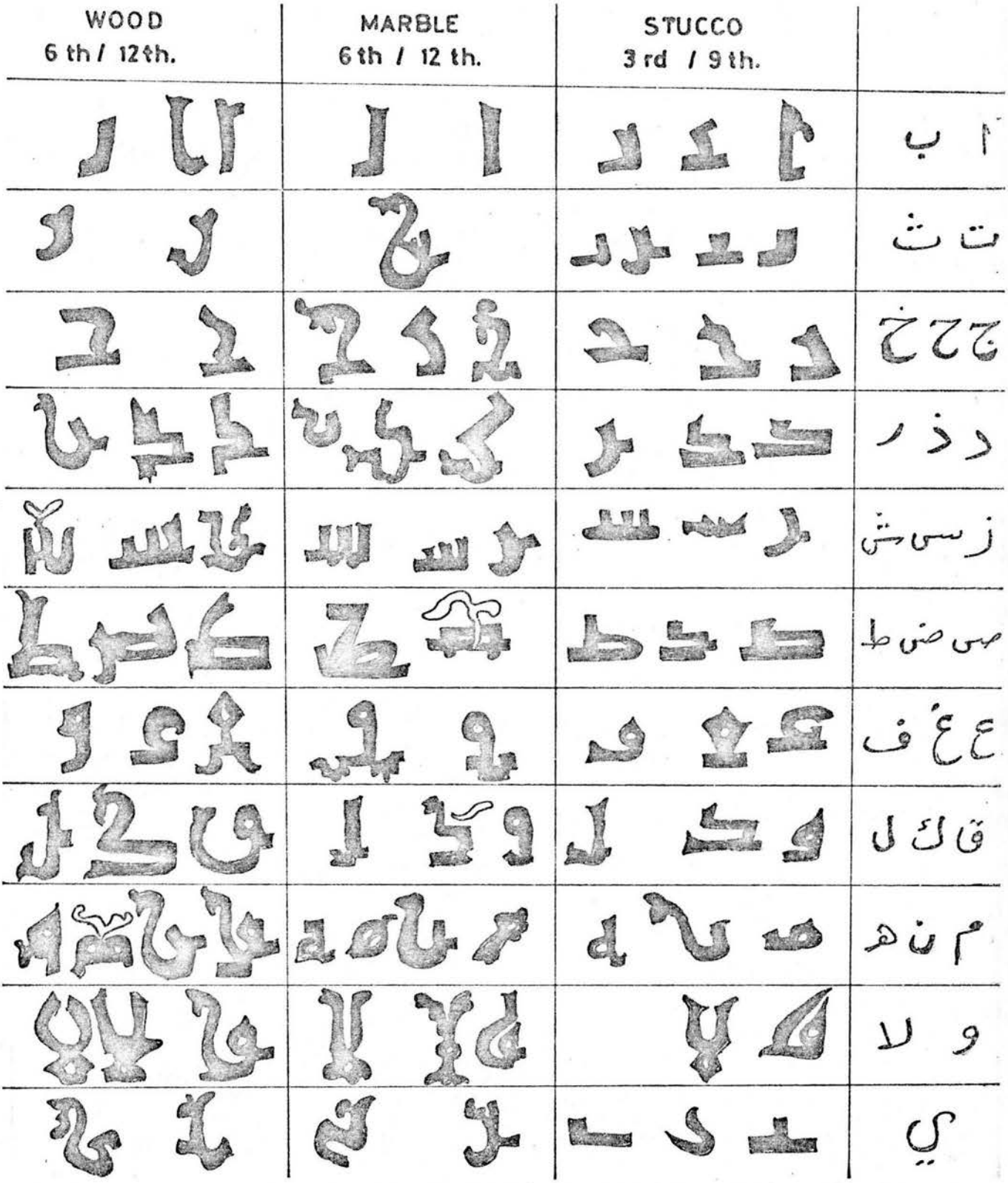
1. ١ــ بسم الله الرحمن الرحيم
2. ٢ــ يوم تجد كل نفس
3. ٣ــ ما عملت من خير
4. ٤ــ محضرا وما عملت من
5. ٥ــ سوء تود لو أن
6. ٦ــ بينها وبينه أمدا بعيد
7. ٧ــ ويحذركم الله نفسه
8. ٨ــ والله رؤوف بالعباد
9. ٩ــ اقبل على صلاتك
10. ١٠ــ ولا تكن من الغافلين

1-8. In the name of God, the Merciful, the Compassionate (Sūra III, v. 30). 9. Proceed to your prayer, 10. and do not be one of those who are unmindful of them.[2]

This mihrāb does not carry a date, but it is well known that Samarra was founded and then largely deserted during the

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1. This inscription was first read by N. al-Naqshabandī, see "al-Maḥārīb", p. 211.
2. See A.J. Wensinck, al-Mu'jam al-Mufahras li Alfāẓ al-Ḥadīth al-Nabawī IV (Lieden, 1965), p. 541, V, p. 251.



40. Kūfic alphabets of some Iraqi stucco, marble and wooden objects dating from the 3rd/9th to the 6th/12th century.

3rd/9th century. It would be fair to assume that the miḥrāb dates from this period, particularly as it was discovered in a large private house and not in a public mosque. It therefore gives an idea of what private miḥrābs looked like in the early Abbasid period in Iraq.

B. The Miḥrāb of Khān al-Khirnīnā.[1] A.2341.

Khan al-Khirnīnā is situated midway between Tikrīt and Baijī. The site is now badly damaged, though parts of its substantial walls are still to be seen. The ruin is known locally as Imām Mafra'. It has been stated that al-Mustanṣir, who reigned between 623-640/1226-1242, built the khān from which this miḥrāb was transferred.[2] According to the I.D.G.A. publication[3] this miḥrāb was in a turba of the same name and period inside this khān. Several western scholars who had seen this site identified it as the Khān al-Khirnīnā of al-Mustanṣir.[4] Accordingly this miḥrāb could be assigned to the 7th/13th century. This miḥrāb is of importance because it gives a general idea of the Iraqi brick miḥrābs of the later Abbasid period. Plate 159 shows this miḥrāb still in situ. It is of rectangular shape, 1.70 x 1.00 m., with a façade formed mainly of two engaged columns of plain shafts built from pieces of moulded brick in

1. It is exhibited in Room 19 at the Abbasid Palace Museum.
2. Ibn al-Ṭiqṭāqā, op.cit., p. 445.
3. Some Notes on the Antiquities in the Abbasid Palace (Baghdad, 1956), p. 8.
4. Jones, op.cit., p. 26; Bell, op.cit., p. 219.

horizontal, common bond. These columns originally had two capitals which are now very badly damaged. These engaged columns are surmounted by a pointed arch 0.75 m. in width. The spandrels of this arch are ornamented with very fine arabesque which is similar both in design and technique to the scrolling arabesques in the Abbasid Palace and other contemporary buildings. The arch and the spandrels are framed here by decorative bands of a very popular arabesque motif. Another arch, 0.46 m. in width and 0.70 m. in height, marked out the main niche of this miḥrāb. Inside this appears a panel carrying brickwork forming geometrical interlaces.[1]

C. The Miḥrāb of Jāmi' al-Nūrī[2]. A.9888

This miḥrāb is actually one of four miḥrābs which were discovered in the muṣallā of this mosque during the demolition of the sanctuary and its dome in 1942.[3] This particular miḥrāb was found outside the muṣallā in the place where the prayers are held during the summertime. It is the biggest and most richly ornamented of all, and the quality of its ornament

1. This sort of decoration was well known in Baghdad before and after al-Mustanṣir's reign, on Sitt Zubaida, al-Mustanṣiriya and the Sūq al-Ghazl minaret.
2. Al-Nūrī mosque is situated in the middle of the modern part of Mosul. This mosque was completed in 568/1172 by Nūr al-Dīn Maḥmūd ibn 'Imād al-Dīn Zangī; Herzfeld, Reise II, pp. 216-3; III, pl. 92; S. al-Daiwachī, "al-Jāmi' al-Nūrī fi'l-Mauṣil", Sumer V (1949), pp. 276-90.
3. Al-Daiwachī, op.cit., pp. 286-7.

would suggest that it was the original mihrāb of this mosque (pl. 160).

It is built of blocks of bluish marble and has the following dimensions: height, 3.35 m., width, 2.44m., depth of its niche, 0.98 m., and width of its niche, 0.75 m. It has two niches, one within the other; both are elaborately decorated in relief of various depths. The large niche is framed by a pointed arch of a style unique in Iraq: its inner profile is serrated. This arch rests on two columns with identical vase-shaped capitals and bases.[1] The spandrels of this zigzag arch, together with its niche, are filled in with an elaborate arabesque which recurs frequently on Iraqi and Syrian contemporary woodwork.[2]

Round the façade of this mihrāb appear eight small panels of lobed arches filled with more delicate and minute arabesque. A fragment of a panel of the same shape appears above the mihrāb arch and also to the right, which suggests

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1. At Samarra the vase was quite often used as a base for stucco columns, as the I.D.G.A. excavations confirmed, for example in dār 4, room 52 (Excavation at Samarra I, pl. 73 (which illustrates other examples)). The Sinjār niche (pl. 164) has the same feature. Columns bearing the same vase appear again on the mihrāb of Panja ʿAlī (pl. 166). Similar capitals occur on the stucco mihrāb of al-Afḍal in Egypt (487/1094), see D.T. Rice, op.cit., p. 89, fig. 88.
2. Herzfeld, "Damascus II", figs. 74-5; A. Fahmī, "Bāb Hānī ibn ʿIrwa", Sumer XXVI (1970), pp. 263-76, pls. 9, 14.

that there was a continuation of these panels around the façade.[1] The small niche inside this miḥrāb is entirely based on the same style of arch, columns and arabesque. The arabesque here suggests either a highly stylized vase motif or a tree of life associated with other stylized plants (pl. 160b).

This miḥrāb bears two bands of naskhī inscriptions, 0.13 m. in width. This contains Sūra III, vs. 17-18[2] and is terminated by the phrase commonly recited after a reading of the Qur'ān. The terminal phrase may be translated as follows:

> "God spoke the truth, and so did His Prophet the generous".

Between these two inscribed bands are two courses of dressed stone decorated in bas-relief with an elaborate arabesque associated with eight-petalled rosettes.[3] It resembles the anthemis coula (al-Uqḥuwān), which is a very common flower in northern Iraq.

This miḥrāb carries neither a date nor names. However, as noted above, its size and the quality of its ornaments make it undoubtedly the greatest and the finest miḥrāb yet discovered in al-Nūrī mosque. Therefore, one may suggest that this miḥrāb is the original one made and erected in 566-68/1170-72 by the order of the founder Nūr al-Dīn Maḥmūd.

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1. On this element see infra, p. 476.
2. See infra, p. 503.
3. On this motif see infra, p. 474.

D. The Miḥrāb of the Turba of Imām 'Abd al-Raḥmān. A.10627

The turba of Imām 'Abd al-Raḥmān was originally al-Madrasa al-'Izziya.[1] It is situated in a quarter called 'Abid Khūb in Mosul, quite near to the remains of Qara Sarāy. This is confirmed by Ibn al-Athīr, who gives further information about the site, stating that 'Izz al-Dīn Mas'ūd had founded a madrasa near Dār al-Mamlaka for the Ḥanafite and the Shāfi'ite madhhabs and had been buried in his school in a turba prepared for him before his death.[2] The building consists of two chambers. The one which contains the grave of Imām 'Abd al-Raḥmān is almost square, measuring 4.90 x 4.70 m.; it is covered with a conical dome.[3] On the exterior façade above the door of this chamber is an inscription in naskh containing a blessing and the name of the founder, the king 'Izz al-Dīn Mas'ūd ibn Maudūd.[4] The second chamber measures 4.90 x 4.25 m. and is covered with a flat dome of recent date.[5] This monument has been subjected to several restorations which

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1. Al-Daiwachī thinks it was converted into a turba by Badr al-Dīn Lū'lū' (al-Mauṣil, p. 142). Summary information is given about this building by Herzfeld, Reise II, pp. 282-3; see also 'Abbū, al-Qubāb al-'Abbāsiya, pp. 181-3, fig. 183.
2. Al-Kāmil XII, p. 66; al-Bāhir, p. 354.
3. 'Abbū, al-Qubāb al-'Abbāsiya, p. 182, fig. 183.
4. This inscription is published by Herzfeld, Reise II, p. 282; al-Daiwachī, al-Mauṣil, p. 141, n. 3; 'Abbū, al-Qubāb al-'Abbāsiya, p. 181, n.5.
5. It is nowadays used as a muṣallā; see 'Abbū, al-Qubāb al-'Abbāsiya, p. 182.

have affected many of its original features. The miḥrāb (pl. 161) is the only survival of its lavish ornamentation.

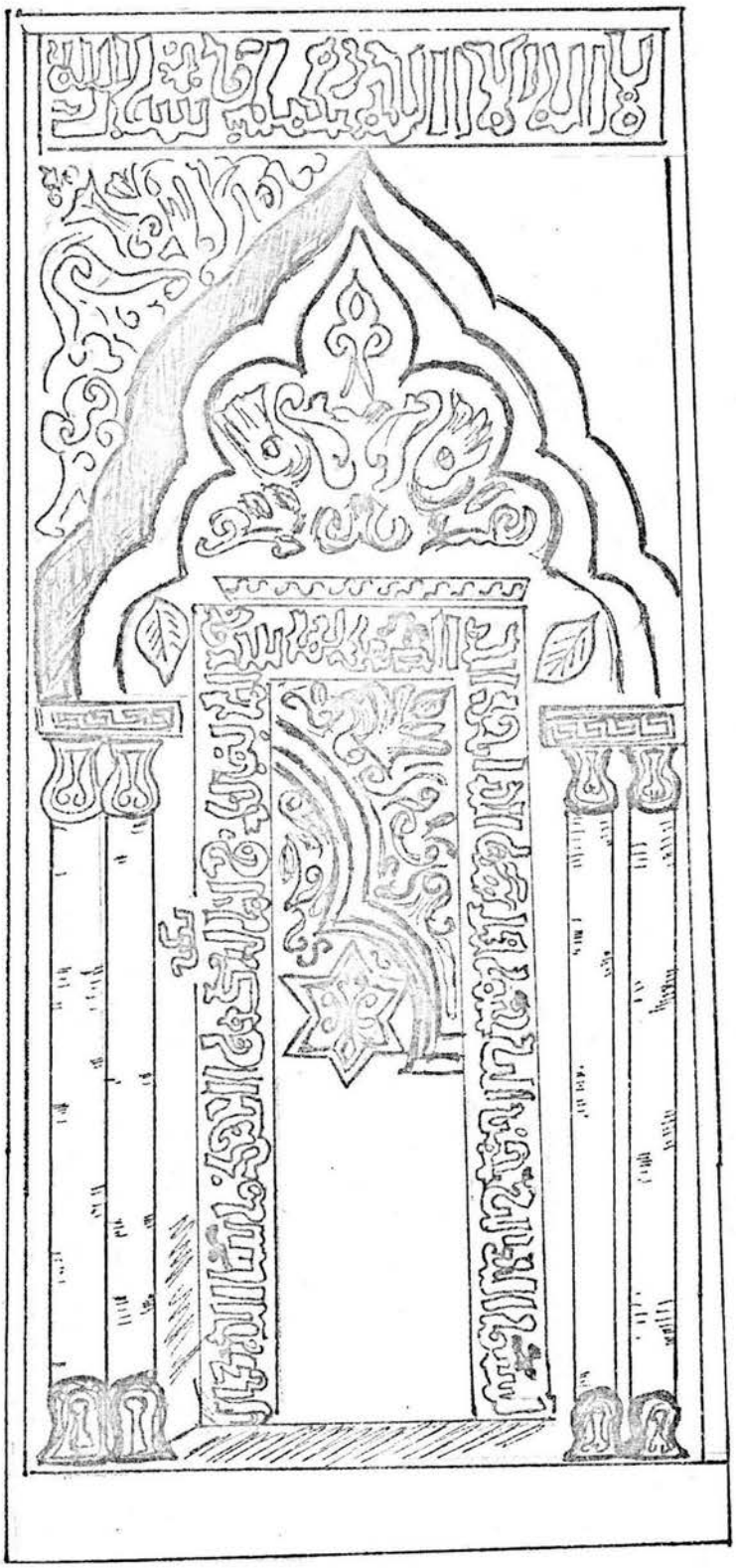
The miḥrāb of Imām ʿAbd al-Raḥmān is quite distinct from the usual concave niched miḥrāb, as it is carved from one flat block of bluish marble. It measures 2.40 x 0.89 m. The scheme of ornamentation, which is in relief, consists mainly of a lobed arch resting on a pair of twin engaged columns. These columns are surmounted by an architrave. The arch of this miḥrāb, which is doubled, exhibits seven lobes joined together to form a rather stilted apex (fig. 41). It serves here as a suitable frame for an elaborate arabesque. The pattern probably represents a simplified tree of life which consists here of a series of superimposed stylized half-palmettes with volute ends and spiral tendrils flanked by two winged half-palmettes and surmounted by a three-petalled motif. The base of the pattern shows the merging of the half-palmette into the stem, which is developed here into a wavy scroll.[1]

The spandrels of the arch of the miḥrāb describe more or less the same pattern which is composed here by more stylized half-palmettes in a wavy scroll design. They fill the space round a highly stylized split palmette with spiral tendrils crowned again by the trefoil motif.[2]

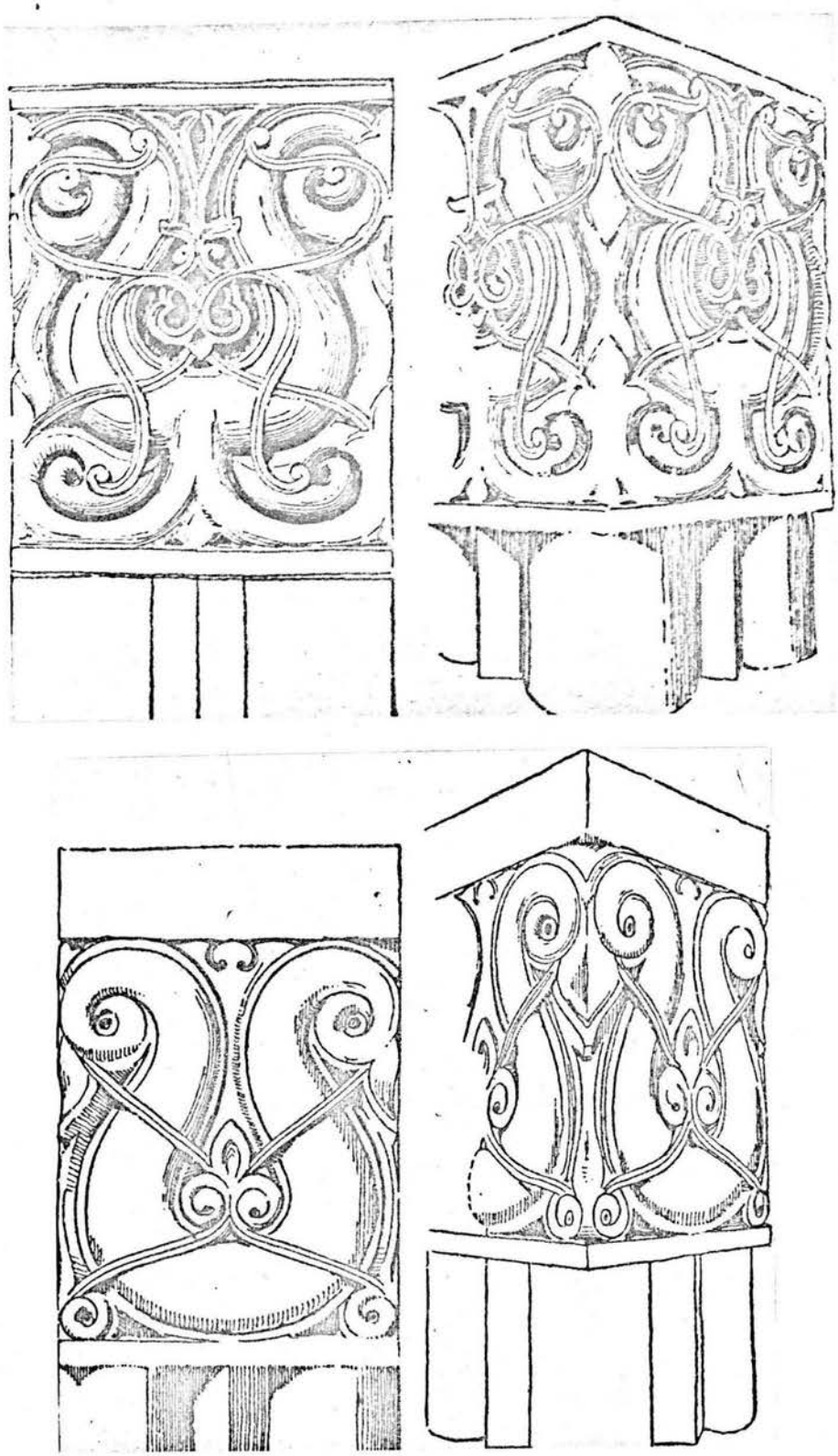
Immediately under the arabesque of the arch is a

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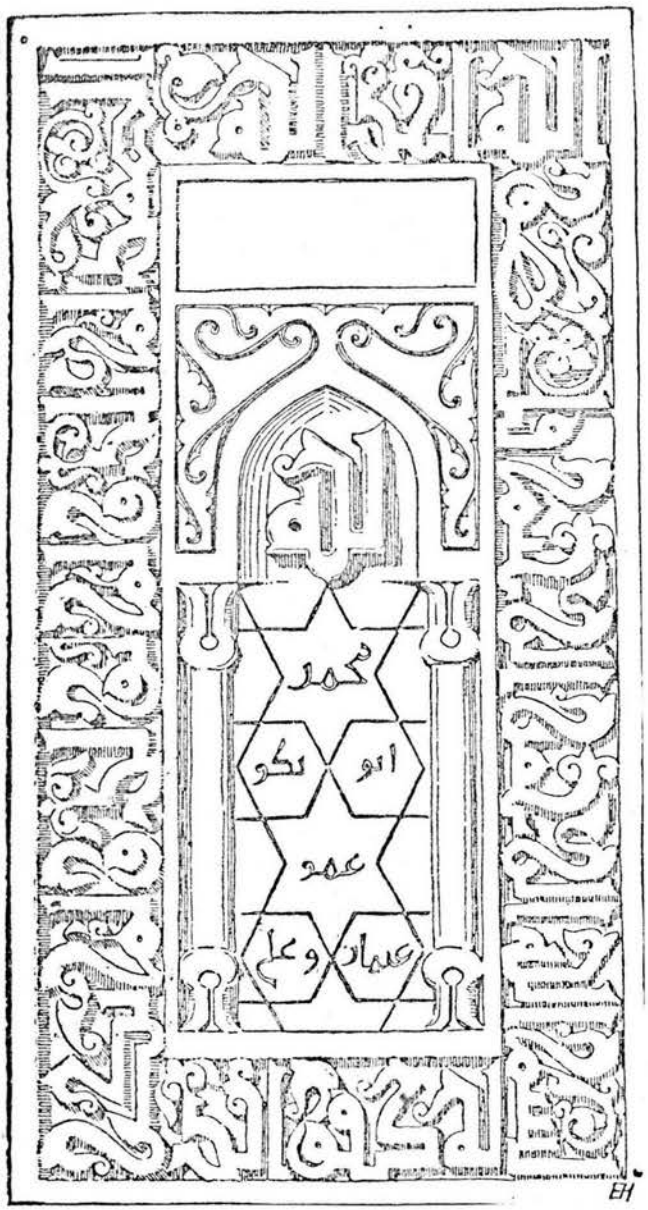
1. This pattern is similar to one on a stucco panel from Ctesiphon; see M. Dimand, "Studies in Islamic Ornament", Ars Islamica IV (1937), fig. 35.
2. This motif is very popular on Samarra stuccoes (pl. 162). It also appears on some marble capitals of Jāmiʿ al-Nūrī (fig. 42).



41. Mosul. The mihrāb of the mausoleum of Imām ʿAbd al-Raḥmān: detail of ornament and Kūfic inscription.



42. Mosul. Jāmi‘ al-Nūrī: marble capitals (after Herzfeld).



43. Mosul. The miḥrāb of the mausoleum of Shaikh Fatḥī: detail of ornament and Kūfic inscription (after Herzfeld).

decorative band bearing a classical pattern similar to the wave ornament often used in friezes and known as the Vitruvian scroll.[1] On both sides of this band appears a naturalistic single leaf. These leaves resemble those of an orange tree. The lobed arches rest on abaci ornamented with repeated geometrical pattern resembling joined "S"s slanting backwards.[2]

The columns of this miḥrāb are of plain semi-cylindrical shafts, their bases and capitals being identical, and suggesting a lotus flower or a bell shape incised with floral motif.[3] The lotus flowers in the bases are set upside down. Decorative columns with capitals of the same type are to be seen on the miḥrāb of the turba of Shaikh Fatḥī (fig. 43),[4] and on the miḥrāb

1. It is also known as "running dog" (see The Penguin Dictionary of Architecture (Harmondsworth, 1966), p. 192).
2. This motif was common on the Sasanian stucco of Ctesiphon (Dimand, op.cit., fig. 30) and also occurs at Samarra; see Excavation at Samarra I, pl. 109 (sounding No.1).
3. Examples of columns with bell shape bases were discovered at Samarra (ibid., pls. 62, 64, 73 and 116; see also Creswell, EMA II, pl. 74 c). A stucco piece (rectangular in shape: 1.60 x 1.42 m.) transferred from 'Āna (possibly from Mashhad 'Alī dated 589/1193), now exhibited in the Iraqi Museum under No. A 1376, demonstrates a pointed arch resting on two columns with bell-shaped capitals; see Herzfeld, "Mashhad 'Alī", p. 361, fig. 2 and pl. 1.
4. This turba is attributed to al-Fatḥ ibn Muḥammad ibn Washshāh al-Mauṣilī al-Azdī, died in 170/786; see Y. al-'Umarī, Munyat al-Udabā' fī Tārīkh al-Mauṣil al-Ḥadbā' ed. S. al-Daiwachī (Mosul, 1955), p. 117; Herzfeld, Reise II, pp. 279-82, fig. 270-4; al-Daiwachī, Mauṣil, p. 161.

of Jāmi' al-Juwaichātī which is discussed below (pl. 163).[1]

In the central part between these pairs of columns is a rectangular panel framed by a band of Kufic inscription. It is filled with a half-lobed arch which, if drawn in full, would be a three-lobed arch. The spandrel here is filled with an arabesque of the same quality as in the upper part of this mihrāb. The remaining part of this area is ornamented with a geometrical pattern consisting of a large hexagonal star and other linked units. All these units are ornamented with a trifoliate motif which again is common in Samarra stucco.

The inscription of this mihrāb is confined to the upper part and around the central panel. The script is Kufic of a characteristic Saljuq style on a plain background. A few foliated motifs are incorporated occasionally to fill the interstices of the letters.[2] As is the case with most of the

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1. This type of capital appears also on the mihrāb of al-Shāmiya in Damascus (Herzfeld, "Damascus II", fig. 78). Later it proves to be very popular on Persian mihrābs; examples are at Baṣtām in the shrine of Bāyazīd (700/1300), and in the Masjid-i-Jāmi' (699/1299), at Ardabīl in the Masjid-i-Jāmi' (8th/14th century), at Ashtarjān in the mihrāb of the Imāmzāda Rabi'a Khatūn, now in the Tehrān Museum (708/1308), at Iṣfahān in the mihrāb of the Masjid-i-Jāmi' (710/1310), and at Hamadān in the mihrāb of the Gunbad-i-Alaviyyān (Wilber, op.cit., pls. 36,38,58,68,88 and 116 respectively).
2. An inscription similar in style and content appears on the mihrāb of Shaikh Fatḥī which is contemporary in date (fig. 43). Other contemporary Kufic inscriptions which are basically executed in the same style are to be seen in local woodwork such as the minbar of Jāmi' al-'Amādiya (pl. 190) and the door of Hānī ibn 'Urwa dated 543/1148. It was transferred at an unknown date to Cairo and acquired by the Museum

(Contd.

other parts of this mihrāb the dominant artistic convention here is horror vacui. The inscription in the upper band consists of the following shortened shahāda as follows:

لا آله الا الله محمد رسول الله "There is no god but God; Muḥammad is the Messenger of God". The bands which frame the central panel contain the basmalla, Sūra CXII and an uncompleted religious phrase. It is difficult to say whether this is a part of a verse or a hadīth. The inscription reads:

بسم الله الرحمن الرحيم، قل هو الله أحد، الله الصمد، لم يلد
ولم يولد ولم يكن[1] له كفوا أحد · ما شاء الله كان[2]

"In the name of God, the Compassionate, the Merciful, (Sūra CXII). Whatever God wished, was."

The arabesque of this mihrāb together with the other

Contd.) of Jābir Andersūn (see A. Fahmī, "Bāb Ḍarīḥ Hānī ibn 'Urwa", Sumer XXVI (1970), pp. 263-77, pls. 2-7). The origin of the Kufic style of these examples can be traced to some extent to the mihrāb of Samarra (fig. 39). The main evolution which occurs during the three succeeding centuries is that the letters became more rounded and elongated and the heads of the upright letters were sometimes decorated with floral motifs (see fig. 40).

1. This word is carved not on the same level as the rest of the inscription but slightly above, a fact that suggests that it was forgotten by the artist and added later by him in the simplest way.
2. These words do not fit in with the rest of the text, and it is difficult to suggest why the artist included them. If the artist needed some words to fill the space, he could have chosen العظمة لله وحده , or الملك لله, or صدق الله العظيم. All these phrases make sense and the two latter ones are commonly found.

decorative elements and Kufic inscription confirms the attribution of this miḥrāb to 'Izz al-Dīn Mas'ūd ibn Maudūd. Most probably it was placed in the musallā of his madrasa, i.e. al-'Izziya, before it was reused as a miḥrāb for the turba of Imām 'Abd al-Raḥmān.

E. The Miḥrāb of Jāmi' al-Juwaichātī. A.1201.

The mosque of al-Juwaichātī was built in Bāb al-Jadīd in Mosul by 'Abdallāh Abū Bakr al-Juwaichātī whose family still retain their duty of looking after the mosque. The date of this mosque is not yet fixed. One Iraqi researcher gives 900/1494 as a probable date for it.[1] Another gives 1059/1649.[2] Judging by the quality of this miḥrāb (pl. 163) both dates appear to bear no relation to it. It is more likely that this miḥrāb was transferred there from another ruined Atābikid monument. This miḥrāb is the second example of a flat miḥrāb in the Iraqi Museum. Like its fellow, it is of blue marble; it is rectangular in shape, 1.80 x 0.88 m. The miḥrāb of Jāmi' al-Juwaichātī is quite surprisingly similar to the miḥrāb of Imām 'Abd al-Raḥmān, in the type of marble, the quality of its ornamentation and the style of its Kufic inscription.

The miḥrāb of Jāmi' al-Juwaichātī consists of doubled lobed arches, one framing the other. They contain six lobes

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1. D. al-Chalabī, Makhṭūṭāt al-Mauṣil (Baghdad, 1927), p. 78.
2. A. al-Ṣūfī, al-Āthār wa 'l-Mabānī al-'Arabiya wa 'l-Islāmiya fi'l-Mauṣil (Mosul, 1940), p. 60.

each and they have the same stilted apex. These arches rest on undecorated abaci carried on two pairs of engaged columns, again identical with the miḥrāb of Imām 'Abd al-Raḥmān. The spandrel of the arch, and its tympanum, is ornamented with an ambiguous motif. It may represent a palmette flanked by two winged leaves. Alternatively it may depict a stylized vase flanked by stylized palmettes and winged leaves. In any case this arabesque is skilfully designed to fit the available space.

The middle panel between the columns is unusual in that it contains a smaller, rectangular panel treated with a complete decorative composition as if it were itself a complete façade of a miḥrāb. This panel also contains a trifoliate arch resting on two columns with bell-shaped capitals and bases, the spandrels being ornamented with stylized foliage. The space under this arch is ornamented with two eight-pointed stars;[1] adjacent to them are half-octagons ornamented with arabesques of the same type as occur elsewhere on the miḥrāb. This small panel is carved in a different plane from the rest of the panel which surrounds it, and is angled to give the impression of a partly opened door (pl. 163).[2]

1. The stars may here also denote a religious meaning and presumably have a close relation in meaning with the lamp (qandīl); see infra, pp. 390-2. The miḥrābs of Imām 'Abd al-Raḥmān and Shaikh Fatḥī have stars incorporated in their ornament; these may have the same religious significance (figs. 41 and 43).
2. Probably this was done intentionally to indicate the right direction towards Mecca. Possibly the artist of this miḥrāb was instructed to do this after it was discovered that there was a difference of a certain degree in the angle of the qibla inside the musallā.

The upper part of the main panel in this mihrāb is decorated with interlacing zigzag lines which create a repeated geometrical pattern. All the units of this pattern are ornamented with a trifoliate motif. This motif frames the panel on the other three sides. This motif is similar to the one on the minbar of Jāmi' al-'Amādiya 548/1153 (pl.190).

The only Kufic inscription of this mihrāb is on the uppermost band and is 0.20 m. in width. The Kufic is in the same style as the previous mihrāb (fig. 41), and the content is also the same.

Judging by the similarity of most of the details of this mihrāb with the previous one and the similarity of many of its ornamental motifs with motifs on dated objects such as the minbar of al-'Amādiya and the capitals of the columns in Jāmi' al-Nūrī (fig. 42), it seems likely that it belongs to the first half of the 6th/12th century. One might be tempted to believe that this mihrāb should be attributed to the same artist who made the mihrāb of Imām 'Abd al-Raḥmān.

F. The Niche of Sinjār. A. 3105.

This niche was found in 1938 on an Islamic site called Gū-Kummet at Sinjār. Reitlinger was there at that time and was able to take some photographs and the necessary measurements.[1] On the basis of its decoration he attributed it to the first half of the 6th/12th century. Here some supplementary notes will be added to his account.

1. Later in the same year he published his study of it; see "Mediaeval Antiquities west of Mosul", Iraq V (1938), pp. 151-3, figs. 14-17.

The niche is topped by a shell-shaped semi-dome and this rests on four layers of pointed arched muqarnasāt (pl. 164). The fifth layer comprises a section of half a sixteen-pointed figure resembling a reversed scallop.[1] This architectural element was quite popular in Islamic times, particularly for crowning miḥrābs.[2] The niche is faced with a pointed arch struck from four centres, a type quite common in the architecture of Iraq in this period. The style of the trilobed panel which frames this niche is quite common on several marble objects of Mosul such as the miḥrāb of Jāmi' al-Nūrī (pl. 160), the doorway of Mār Behnām (pl. 165), the doorway of Imām Bāhir (pl. 170) and the sarcophagus of Imām 'Alī al-Hādī (pl. 174). The human figures which are carved inside these trilobed panels most probably represent here the sulṭān himself in different poses from ordinary life. This is based on the fact that the figure which holds a cup in his right hand, while his left rests on his hip, represents, according to Bahrāmī, the most eloquent expression of majesty in the field of Near Eastern art.[3] Moreover it is significant that the two figures nearest the crown of the arch - which therefore have the position of honour - each hold a bow and arrow. This

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1. A reversed scallop is a feature of Hellenistic origin (Herzfeld, "Damascus I", p. 24). It is found in many pre-Islamic buildings in Syria which date from the last quarter of the second century A.D.; see H.C. Butler, Architecture and other Arts (New York, 1903), pp. 345-65.
2. Cf. the miḥrābs of the turba of Muḥammad al-Sakrān (pl. 58), Panja 'Alī (pl. 166) and Imām Bāhir (pl. 172).
3. See "A gold medal in the Freer gallery of art", Archaeologica Orientalia, pp. 6-7.

symbol of royal power, derived from Turkish iconography, replaced the earlier Islamic theme of the king holding a sword. Without exception all the figures of this niche were crowned with a motif suggesting two winged stylized leaves flanking a small floral motif. Obviously this does not denote the ring or the banner of the king. But it still recalls the winged crowns of the Sasanian kings. Most probably it is applied here to preserve the symmetry in filling the upper lobe of these trilobed panels. The types of arabesque in this niche were in use in Mosul from the beginning of the 6th/12th century, although they are found still earlier in the bevelled style at Samarra.

Creswell is reluctant to assume that this niche represents a mihrāb and prefers the idea of a throne niche.[1] Reitlinger, who also believes that it is not a mihrāb (basing his opinion on the non-existence of such human figures on mihrābs) states that the area of the site seems too small to include both a palace and a mosque.[2] However, recent excavation conducted by the I.D.G.A. suggests that the site was a madrasa containing a turba for its founder, Sulṭān 'Imād al-Dīn Zengī (521-41/1127-46).[3] Since the traces of a madrasa

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1. See Reitlinger, op.cit., p. 152.
2. According to Reitlinger, Creswell states in a letter that the palace had often direct access to the maqṣūra of the mosque so that the governor or sulṭān could go to prayers without meeting the common people (see ibid.).
3. The full report of this excavation will be published in Sumer.

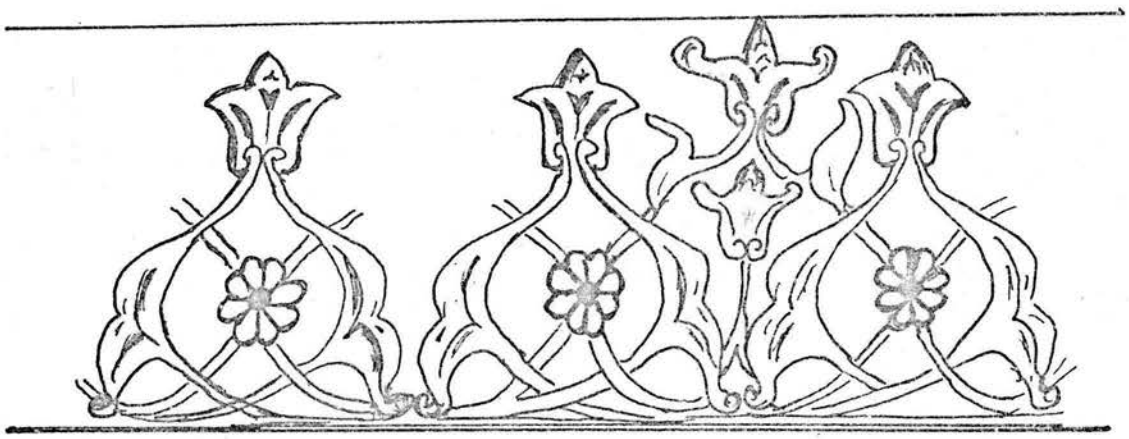
and a turba were found on the site it is probable that this niche may represent an Atābikid miḥrāb, rather than any other type of construction. But such a miḥrāb would be wholly unparalleled in Islamic religious art. The identification of this niche as a miḥrāb must therefore be tentative. It is possible that this niche, if a miḥrāb, represents an extreme example of the Zangid fondness for figural decoration, and that its uniqueness could be explained by an uproar among the religious community which put an end to further experiments of this kind.

G. The Miḥrāb of Panja ʿAlī. A.1134.

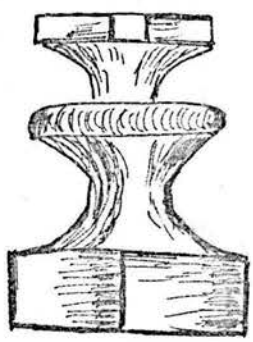
This miḥrāb was transferred from its original place in the turba of Panja ʿAlī,[1] which means the hand of ʿAlī, situated outside the walls of Mosul very near to Bāb Sinjār.[2] It is built from a blue marble block and was made in 686/1287 by order of Ismāʿīl ibn ʿAlī and under the supervision of ʿIzz al-Dīn Abu'l-Ḥasan, as is shown by its naskhī inscription.[3] It consists of a rather large rectangular façade 3.85 x 3.64 m. which is marked out with bands of naskhī inscription and contains elaborate arabesques (pl. 166). A carved arabesque band 0.30 m. in width crowns the façade (fig. 44a). Basically

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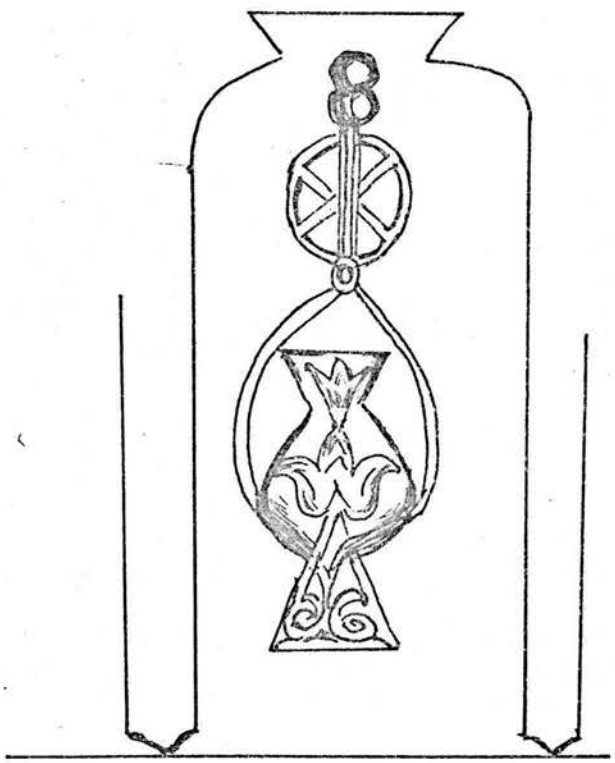
1. This monument was first published by Herzfeld, Reise II, pp. 270-8, figs. 266-9.
2. It is known also as Mashhad al-Ṭuruḥ (see al-Harawī, al-Ishārāt ilā Maʿrifat al-Ziyārāt, ed. J. Sourdel-Thomine (Damascus, 1954), pp. 213-6).
3. The inscription of this monument was first published by M. van Berchem in Reise I, pp. 24-26, then by al-Naqshabandī, "al-Maḥārīb", p. 218.



A



C



B

44. Mosul. The mihrāb of the mausoleum of Panja ʿAlī: details of ornamental motifs.

it is a central rosette of eight petals[1] flanked by two stylised leaves and surmounted by an elaborate three-petalled flower. This pattern of arabesque is repeated all over the band embracing other units of arabesque of similar type. An identical band is to be seen on the lower panel of the Sinjār niche and in the turba of Imām Yaḥyā ibn al-Qāsim (pls. 164, 169a).

The central part of this miḥrāb consists of a rectangle 2.20 x 1.60 m., containing the main niche which is 0.80 m. in width and 8.75 m. in height. This is flanked by two identical rectangles, 1.60 x 75 m., which also contain niches. The main niche is covered with a muqarnas vault of five layers and framed with a pointed arch enclosed in turn by another arch containing a naskhī inscription (pl. 167a). In the central niche of this miḥrāb there appear three separate but identical panels taking the form of a shouldered segmental arch. They are carved in relief with a very elaborate suspended qandīl (fig. 44b).[2] The spandrel of the main niche is filled with arabesque of the same type as that on the upper band (pl. 167b).

The side niches are covered with three layers of muqarnaṣāt of pointed-arched shapes. In addition to their decorative function they were probably used as a suitable place for putting the oil lamps for illumination inside the turba. As for the holes inside these niches, their function

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1. On this motif see infra, p. 474.
2. Each qandīl is ornamented with a three-petalled flower of the same style as in the upper band. Here the flower is associated with scrolls taking the shape of the qandīl.

is quite obscure and they were probably made recently.[1]

The inscription of this miḥrāb is of naskhī style inscribed in relief and forming frames on the façade.[2] The right side of the uppermost band contains a Qur'ānic text, Sūra V, vs. 58-9. The outermost band contains blessings upon the twelve Holy Imāms.[3] The text reads:

اللهم صل على محمد المصطفىٰ وعلي الرضىٰ والحسن المجتبىٰ والحسين الشهيد بكربلاء وعلي بن الحسين زين العابدين ومحمد بن علي الباقر وجعفر بن محمد الصادق وموسىٰ بن جعفر الكاظم وعلي بن موسىٰ الرضا ومحمد بن علي الجواد وعلي بن محمد الهادي والحسن بن علي العسكري ومحمد بن الحسن الحجه القائم بامر الله صاحب الزمان عليهم افضل الصلوات والسلام ٠

"May the blessing of God be upon: Muḥammad al-Muṣṭafā, 'Alī al-Riḍā, al-Ḥasan al-Mujtabā, al-Ḥusain al-Shahīd in Karbalā', 'Alī ibn al-Ḥusain Zain al-'Ābidīn, Muḥammad ibn 'Alī al-Bāqir, Ja'far ibn Muḥammad al-Ṣādiq, Mūsā ibn Ja'far al-Kāẓim, 'Alī ibn Mūsā al-Riḍā, Muḥammad ibn 'Alī al-Jawād, 'Alī ibn Muḥammad al-Hādī, al-Ḥasan ibn 'Alī al-'Askarī and Muḥammad ibn al-Ḥasan al-Ḥujja al-Qā'im bi-Amr Allāh Ṣāḥib al-Zamān, best prayer and salutation be upon them all". The third band, surrounding the central niche, contains Sūra II, v. 255, known as the

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1. They are 0.37 m. in width, 0.62 m. in length. Local tradition says that these holes on both sides bear the mark of 'Alī.
2. The average width of 0.30 m., the upper band and the one which frames the central niche being 0.35 m. The arrangement of the naskhī bands around the main niche as well as the type of the muqarnaṣāt of the miḥrāb in the turba of Panja 'Alī recall work on the miḥrāb of the Great Mosque of Mayyāfāriqīn in Asia Minor (see A. Gabriel, Voyages Archéologiques dans la Turquie Orientale I (Paris, 1940), pp. 231-40, II, pl. 79).
3. See infra, p.510.

verse of the throne.[1]

Above the right niche there is a panel bearing an inscription in low relief, the style of which suggests that it is a recent addition. It reads as follows هذا اثر كف مولانا امير المؤمنين "This is the mark of the hand of our master the Commander of the faithful." On the left-hand niche is inscribed the continuation علي عليه السلام واثر حافر فرسه "'Alī, peace be upon him, and the trace of the hoof of his horse".

The last band of inscription runs along the lower part of this mihrāb (pl. 168) and runs inside the central niche as well. This band contains the historical text of this mihrāb. It starts from the right and reads:

امر بعمله العبد الفقير الى رحمة ربه وشفاعة جده اسماعيل بن علي بن محمد بن زيد بن عبد الله الحسين بتولي وال ؟ السيد عز الدين ابو الحسن علي في ولايته المولى النقيب الطاهر نصير الدين محمد بن محمد بن المرتضى بن عبد المطلب بن المرتضى بن محمد بن زيد بن عبد الله الحسين عفا الله عنهم في سنة ستماية وست وثمانين .

"There ordered it to be made the poor slave who is in need of God's Mercy and the intercession of his grandfather, Ismā'īl ibn 'Alī ibn Muḥammad ibn Zaid ibn 'Abdallāh al-Ḥusain under the supervision of the pure master [naqīb] Naṣīr al-Dīn Muḥammad ibn Muḥammad ibn al-Murtaḍā ibn 'Abd al-Muṭallib ibn al-Murtaḍā ibn Muḥammad ibn Zaid ibn 'Abdallāh al-Ḥusain, may God forgive them all. In the year 686" [1287].

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1. See infra, p. 509.

Section 2

Two Marble Pieces from the Turba of Imām Bāhir

Introduction

The turba as it may be seen today is enclosed within a mosque built recently in a quarter of Bāb al-Masjid in Mosul.[1] It is known locally as Mashhad al-Imām Bāhir ibn al-Ḥusain ibn ʿAlī.[2] The tomb chamber is square, 7.5 x 7.5 m., the thickness of its wall being 1.40 m. It is roofed with a dome.[3] This chamber is preceded by a vestibule, 5.40 x 2.10 m., containing the main entrance. On both sides of the vestibule there are two small chambers roofed by comparatively small domes. This mausoleum is built of stone. The height of its walls is 7.00 m., after which the zone of transition begins. It consists of four rather big muqarnaṣāt, 1.50 m. in height and 2.65 m. in width. These muqarnaṣāt are framed with marble pointed arches by which the square shape of the turba is converted to an octagon.[4] The dome on its exterior has the usual conical shape which was common during the Atābikid period. Apparently several native historians have not decided yet whether this tomb was originally an Atābikid madrasa

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1. It is also known as Maḥallat al-Shaikh Fatḥī; see al-Daiwachī, Jawāmiʿ, p. 188. The original mosque was destroyed in 1940.
2. Otherwise it is known as Mashhad al-Imām al-Bāhir (ibid.).
3. According to al-Daiwachī, the height of the dome is 15 m., and it is composed of two shells. The exterior of this dome was rebuilt during the 12th/18th century (ibid., p.190). This tomb was also published recently by ʿAbbū, Al-Qubāb al-ʿAbbāsiya, pp. 184-5, fig. 185. The measurements above are taken from this work.
4. ʿAbbū, Al-Qubāb al-ʿAbbāsiya, p. 184.

converted to a tomb for Imām Bāhir by Badr al-Dīn Lū'lū',[1] or whether it was originally built by the latter.[2] Apart from the date 699/1299, which is still to be seen on a stucco panel on the upper part of the right-hand side wall inside the turba, there is no dating inscription to permit an attribution of the turba to an earlier period.[3] In addition to the above-mentioned panel, there are another three panels on the upper part of the walls under the dome which contain naskh inscriptions. They are partly damaged and bear traces of red paint. The panel which is situated on the right-hand side as one enters this turba contains Sūra II, vs. 17-18.[4] The panel which is on the facing wall bears the above-mentioned date of this turba as follows:

بني هذا المقام في شهور سنة تسعه وتسعين وستمايه

"This maqām (mausoleum) has been built in the year 699" [1299]. On the same wall on the other side is another panel giving the name of the architect:

هذا العمل صنعة عبد الرحيم بن أحمد

"This labour is the handiwork of 'Abd al-Raḥīm ibn Aḥmad". The unusual combination of العمل and صنعة suggests that the artist was especially proud of his work. In front of this panel on the facing wall is the fourth and last panel.

1. Al-Daiwachī, Jawāmi', p. 188.
2. D. al-Chalabī, "Badr al-Dīn Lū'lū' wa 'l-Āthār al-Islāmiya al-Qadīma fi'l-Mauṣil", Sumer II (1946), p. 22.
3. No traces are to be seen of the Atābikid names and titles which are said to have been inscribed on this turba (see N. Sīyūfī, Majmū' al-Kitābāt al-Muḥarrara fī Abniyat Madīnat al-Mauṣil, ed. S. al-Daiwachī (Baghdad, 1956), pp. 146-7).
4. See infra, p. 500.

It contains a religious formula as follows: وبشر المؤمنين يا محمد "and inform the faithful O Muḥammad".[1]

Apparently the architect 'Abd al-Raḥīm was responsible for the rebuilding of this turba with its dome, in 669/1299. The decoration of both the doorway and the miḥrāb, which will be discussed below, does however suggest the possibility of an earlier date.

Recently the Iraqi Museum transferred four important objects from this turba to be exhibited in Baghdad.[2]

A. The Doorway of the Turba of Imām Bāhir. A. 9881.

It is built of bluish marble blocks. It measures 3.60 m. in height and 2.55 m. in width. The width of its opening is 0.95 m. (pl. 170). The scheme of its relief decoration is unusual and interesting in that it introduces two entirely new motifs: dragons and griffins. The torus moulding which marks out the shape of the trilobed panels on the miḥrāb of Jāmi' al-Nūrī and the Sinjār niche (pl. 160a, 164) has evolved here to become the elongated bodies of dragons.[3] Six pairs of intertwined dragons together form twelve trilobed panels. The lower panels on each side terminate with two griffin heads (pl. 171b)[4] separated by

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1. This implies that Muḥammad is to give the faithful good news about the reward awaiting them in paradise.
2. They are: doorway, miḥrāb, slab of inlaid marble and a wooden door (pls. 170, 172, 177 and 196).
3. The same feature occurs on the doorway of Mār Behnām (pl. 165). On the dragon motif see infra, pp. 479-83.
4. These griffin heads are strikingly identical to those illustrated in J. Strzygowski and M. van Berchem, Amida (Heidelberg, 1910), figs. 41, 46-7.

an eight-petalled rosette.[1] Apart from the four central upper panels, which contain about six layers of minute muqarnaṣāt crowned with trifoliated motifs, the panels exhibit identical compositions.[2] These comprise pairs of columns with identical capitals and bases of vase shape supporting a pointed arch which frames four layers of diminutive muqarnaṣāt. Above the apex of the arch appears the familiar trifoliate motif. The field between the columns is ornamented by a vertical panel of arabesque, about twice as high as it is broad.[3]

The lintel of the doorway of Imām Bāhir (pl. 170b) is composed of three joggled voussoirs with two other half-voussoirs on both sides.[4] These halves and the middle voussoir exhibit identical arabesques. The two voussoirs which flank the middle one are plain. That on the right side is inscribed الملك which means "the government", while the one on the left is inscribed لله which means "(belongs) to God". Both words are in naskhī style.

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1. The same rosette is to be seen flanking three panels on each side of the doorway as at the doorway of Mār Behnām (cf. pls. 165, 170-1); see also infra, p. 474.
2. The outer frame of each panel, which is formed of the elongated dragon's body, is carved with scale ornament; similar decoration is found in the stucco of Ctesiphon and Kūfa (fig. 49).
3. The arabesque here extends perpendicularly, following a scheme derived from Sasanian depictions of trees. The origins of this style are to be sought in Baghdad, Samarra, and Mosul (Herzfeld, "Damascus II", p. 45, fig. 75).
4. On joggled voussoirs see infra, pp. 428-31.

The inscription of this doorway[1] starts on the lower part of the right side and contains, after the basmalla, Sūra II, v. 255 "the verse of the throne" and ends with "God spoke the truth, and so did His Prophet the generous". Apart from the basmalla, which is carved on an arabesque background, the rest of the text is inscribed on a plain one.[2]

The doorway of the turba of Imām Bāhir with its technique and scheme of decoration could be considered the finest of the extant Iraqi doorways, a fact which might suggest an earlier date than 699/1299.[3]

B. The Miḥrāb of Imām Bāhir.[4]

The miḥrāb of Imām Bāhir (pl. 172) is built of blocks of marble, and measures 2.86 m. in height and 1.72 m. in width; the width of the niche is 0.89 and its depth 0.51 m. The scheme of its decoration is quite markedly elaborate and follows an already established decorative schema. It consists of a band of naskhī inscription, containing Sūra XXIV, vs. 36-8.[5] The arch of the niche bears arabesque ornament

1. First published by al-Naqshabandī and Faransīs, "al-Maḥārīb", p. 216.
2. It is noteworthy that the artist concentrates the floral ornament on the words bism ("In the name of"), thereby according particular honour to the holy name of God (pl.171b).
3. On the development of marble work see infra, pp. 471-86.
4. It was originally in the mosque of Imām Bāhir. It was transferred from this mosque to Baghdad in 1940. It is now exhibited in room 14 at the Abbasid Palace Museum.
5. The text is published by al-Naqshabandī and Faransīs "al-Maḥārīb", p. 216.

on its spandrels executed in shallow carving. The arabesque here is composed mainly of stylized leaf scrolls.

The upper part of the niche has a semi-dome shape which is reminiscent of the system used on the Sinjār niche (pl. 164) and on the mihrāb of Panja ʿAlī (pl. 167).[1] The middle of the niche is ornamented with a fine suspended qandīl, itself contained within a niche on columns which are framed by bands of white marble inlaid with pieces of black lozenge-shaped marble.[2] This qandīl is flanked by four pairs of eight-petalled rosettes and surmounted by a large half-rosette of sixteen petals at the top.[3]

C. The Sarcophagus of Imām ʿAlī al-Hādī

The marble sarcophagus of ʿAlī al-Hādī still in situ in the quarter of al-Maḥmūdīn in Mosul is a relevant parallel to the above discussed marble pieces.[4] This sarcophagus (pls. 173-4) was apparently intended to be used for Imām ʿAlī al-Hādī who eventually died and was buried at Samarra.[5]

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1. It is composed of five hanging layers of pointed muqarnaṣāt surmounted by the nine-segmented shell which forms the scalloped semi-dome.
2. The shape of this qandīl is similar to that on the mihrāb of the turba of Panja ʿAlī (fig. 44b) and the sarcophagus of ʿAlī al-Hādī (pl. 173).
3. This could represent the scalloped semi-dome of the niche, or it could be a symbolic reference to the sun's rays.
4. Iraqi marble sarcophagi of architectural interest in this period are comparatively rare, and a description of this example here may be appropriate.
5. Al-Naqshabandī, "Ṣanādīq Marāqid al-Aima fi'l-ʿIraq", Sumer XI (1950), p. 201.

According to al-'Umarī this sarcophagus was ordered by Badr al-Dīn Lū'lū'.[1]

The sarcophagus is of a bluish colour; it measures 2.17 m. in length, 1.10 m. in width and 1.50 m. in height.[2] Both long sides consist of five panels of trilobed shape, while on the other sides, i.e. front and back, are three such panels. These panels are filled with an arabesque of a characteristic style (pl. 174). The cover of this sarcophagus (pl. 173) is ornamented with a suspended qandīl in bas-relief, hanging from a trilobed arch. Beneath the qandīl appears a geometrical interlaced pattern of white inlaid marble against the bluish ground. These compositions are framed with two bands of inscription in naskh.[3] This inscription states that this sarcophagus is for Imām 'Alī al-Hādī. Its text runs:

بسم الله الرحمن الرحيم هذا ضريح مولانا علي ابن الامام علي الهادي
ابن الامام محمد الجواد بن الامام علي الرضا ابن الامام موسى الكاظم ابن
الامام جعفر الصادق ابن الامام محمد الباقر ابن الامام علي زين العابدين
ابن سيدنا ومولانا الامام السبط الشهيد الحسين ابن الامام المرتضى امام
المتقين وسيد الوصيين علي ابن ابي طالب صلوات الله عليهم اجمعين .

"In the name of God, the Merciful, the Compassionate, this sarcophagus [ḍarīḥ] is for our master 'Alī ibn al-Imām 'Alī al-Hādī ibn al-Imām Muḥammad al-Jawād ibn al-Imām 'Alī al-Riḍā ibn al-Imām Mūsā al-Kāẓim ibn al-Imām Ja'far al-Ṣādiq

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1. Op.cit., p. 105.
2. See al-Naqshabandī, "Ṣanādīq Marāqid al-Aima", loc.cit.
3. The inscription of this sarcophagus was first published by al-Naqshabandī (ibid., pp. 201-2).

ibn al-Imām Muḥammad al-Bāqir ibn al-Imām ʿAlī Zain al-ʿĀbidīn son of our Lord and our master al-Imām, the grandson, the Martyr al-Ḥusain ibn al-Imām al-Murtaḍā, the Imām of the believers [muttaqīn] and the Master of the regents, ʿAlī ibn Abī-Ṭālib, may God bless them all".

On the qibla side panel is another naskhī inscription, stating that this grave is for Ḥusain ibn Sharīf, as follows:[1]

قبر حسين بن شريف العا ... رحمه الله تولى عمله
الحاجي ابراهيم بن محمد بن قاسما الحماي غفر الله ..

"[This is the] grave of Ḥusain ibn Sharīf al-ʿĀ..., may the mercy of God be upon him. This work was supervised by Ḥajjī Ibrāhīm, may God forgive [him]." The inscription which borders the upper part of this sarcophagus is of a comparatively large naskhī type carved in relief on a plain background. The inscription is Sūra II, v. 255 (the verse of the throne).

Apparently this sarcophagus contains no date, but according to its ornament and carving technique, it might be possible to date it at the end of the 7th/13th century. The marble sarcophagus of Nabī Jarjīs in Mosul is also attributed to this date,[2] although it is of inferior quality compared with the sarcophagus of ʿAlī al-Hādī.

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1. Naqshabandī thinks that this text is not original and that it probably belongs to a later period (Ṣanādīq Marāqid al-Aima", p. 201); while Daiwachī thinks that this sarcophagus belongs to Ḥusain ibn Sharīf, whose name is given in this text, and was converted to a tomb for ʿAlī al-Hādī by Badr al-Dīn Lūʾlūʾ (al-Mauṣil, p. 169).
2. See al-Naqshabandī, Ṣanādiq Marāqid al-Aima", loc.cit.

Section 3

Inlaid Marble Slabs

A. Slabs of al-Nūrī Mosque. A. 9887.

These parts of marble slabs are part of a continuous frieze now 8 m. long and 0.36 m. wide. They were transferred to the Iraqi museum from al-Nūrī mosque. They originally formed one long band which was used as part of the decoration of the muṣallā of this mosque. They contain a Qur'ānic text.

Plate 176a bears part of Sūra II, v.144[1] put together with part of verse 150 of the same Sūra as follows:

(" ... شطر المسجد الحرام .... وانّه للحق من ربك وما الله
بغافل عما يعملون " "ومن حيث خرجت فول وجهك ")

Plate 176b illustrates the last word of verse 148 and a part of verse 149, joined together with the previous text as follows:[2]

" ... قدير . ومن حيث خرجت فول وجهك شطر المسجد الحرام وحيث ما كنتم فو (لوا)"

These verses refer to the crucial revelation to Muḥammad concerning the alteration of the qibla.[3]

The style of these inscriptions is of naskh of uncrowded character, making the texts quite easy to read. The letters were cut in a dark coloured marble and inscribed with black paste.[4] The calligrapher here used the vowelling signs, and also other fine decorative motifs - some of which are still in

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1. The other missing parts probably contained the remainder of verse 144.
2. See Pickthall, op.cit., pp. 45-6.
3. See infra, pp. 501-2.
4. Similar pieces of inlaid marble are to be seen in the Māristān al-Nūrī in Damascus and in the Great Mosque of Ḥamā, both built by Nūr al-Dīn (Herzfeld, "Damascus I", p. 7, idem; "Damascus II", p. 43, fig. 16.

use - merely to fill the empty spaces along the text. Although these texts carry no date, on the basis of their technique and their original location they could possibly be attributed to the second half of the 6th/12th century, an era in which Mosul was quite famous for marble technique, both carving and inlaying.[1]

B. Slab from the Turba of Imām Bāhir. A 9896.

The original location of this slab in the turba of Imām Bāhir is unknown, but probably it was to form a part of the architectural wall revetment inside the tomb chamber (pl. 177). It is of bluish-grey colour inlaid with white marble. It is rectangular in shape, about twice as high as it is broad. It appears to have been originally a part of a bigger slab. One word flanked with two letters is the only inscription on this slab, as follows: ظ والمسلمين , which could be translated as "and the Muslims". Most probably these words are either a part of a Qur'ānic text, or a part of either a religious or a historical text. The style of this inscription is of uncrowded naskh embellished with foliated motifs only. The inscription is framed with two elaborate decorative bands repeating the same arabesque pattern.

The rest of the decorative scheme on the lower and widest section exhibits an eight-lobed rosette quite common on the stucco of Samarra (pl. 180),[2] and appears here to have a link with two others on either side, and most probably of

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1. See infra, pp. 471-86.
2. See also Excavation at Samarra I, pls. 7, 9, 14-16 and 18-21.

the same design. This motif is surrounded by highly stylized foliage which is used here to fill out the intervening spaces in this section. The eight-lobed rosette contains a type of stylized Kufic executed in a purely decorative manner which obscures the text, although some of the letters are still to be distinguished, such as lām, alif, hā' and dāl. In trying to read them, however, one faces a riddle impossible to solve, for the neighbouring rosettes have disappeared, and a single word is inevitably enigmatic. The letters might read لا ـه and might make sense in the context of the words in the neighbouring rosettes. It is also possible, but less likely, that the letters are merely decorative and had no meaning. The artist certainly seems to have sacrificed many of the rules of writing for the sake of art.[1]

As several minute pieces of the decoration of this slab are missing they expose the low relief of their background, a fact which illustrates an important point in this technique.[2]

C. Slab from al-Madrasa al-Nūriya[3]

Unfortunately this slab is incomplete. Seemingly the complete slab was cut or broken into fragments, of which this

1. For more detail see infra, pp. 495-6.
2. For more detail see infra, pp. 484-6.
3. Al-Madrasa al-Nūriya was built by Nūr al-Dīn Arslān ibn 'Izz al-Dīn Mas'ūd in Mosul (al-Bāhir, p. 201). Apart from the turba of its founder nothing remains of its original structure. In 657/1259 this turba was converted to a turba for Imām Muḥsin ibn al-Imām 'Alī ibn Abī Ṭālib by the order of Badr al-Dīn Lū'lū' (al-Daiwachī, Jawāmi', p. 258). The dome of this turba was demolished in 1963 and replaced with a flat roof (ibid.). Nothing but a few traces of the original decoration remains: a flat miḥrāb decorated with a suspended qandīl and an inlaid piece of marble which is discussed here.

piece is the only one surviving (pl. 178). It is of bluish-grey marble inlaid with black and white marble of the same material. The scheme of decoration on this slab is purely geometrical, with minute touches of arabesque distributed over three sections. The upper portion is composed of interlaced octagons producing an eight-pointed star inlaid in black, radiating eight white spear-like shapes; the spaces between these are filled with black pieces.

On the middle section, below the interlaced octagons, appear three naskhī words in white on black. They are probably part of a royal title concerning the founder of this madrasa. They read: "(ا)لعدل والانصاف ملك" "the justice and the equitableness, King". The lower and wider section of this slab is decorated with interlaced ten-sided polygonal units, which contain a central ten-pointed star known nowadays by the no doubt traditional term shamsa, "the sun". The radial lines of this star interlaced with each other produce several other geometrical units. Basically the other main units in this section are ornamented with the same pattern. These geometrical compositions are quite popular on Baghdadi brickwork of the Saljuq and Ilkhanid periods.

The traces of the arabesque on this slab are set within a geometrical form known among Iraqi brickwork masons as al-sarj, "the saddle". Obviously these units are formed as a result of the interlacing of the main ten-sided polygons. The technique of this slab suggests that it could well be assigned to the same date as the construction of al-Madrasa al-Nūriya, that is 589-607/1193-1210.

A related example of this elaborate technique has been

discovered recently in Mosul (pl. 179).[1] The pattern is a combination of geometrical interlace framed by a band of plaited Kufic. The piece, which is broken into two fragments, shows a close relation in both design and execution to the slab of al-Madrasa al-Nūriya; it could therefore be attributed to the 6th/12th century.

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1. It has been discussed, and its inscriptions read, by A.R. al-Gailānī in an unpublished doctoral thesis: Islamic art and the role of China (Edinburgh, 1973), p. 398 and pls. 357-8.

Section 4

Stucco Objects

A. Façade from al-Nūrī Mosque. A 9872.[1]

The stucco façade over the miḥrāb is an impressive piece and originally formed an integral decorative arcade motif (pl. 182). Although some parts of it are still missing, as is indicated now by the plain white plastered spaces, what is left is quite enough to establish the basic decorative scheme. The façade is divided by means of decorative columns into three panels.[2] These panels display several architectural and decorative motifs combined with two distinct styles of Kufic inscription.

1. The Central Panel

(a) Lower half of panel

The middle of the lower part of this panel (pl. 183b) consists of a rectangular panel carrying[a] text in high relief and flanked by a pair of ornamented columns. The text (fig. 45) which is executed in angular Kufic, reads as follows:

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1. This piece and the one which follows (pl. 184) formerly adorned the muṣallā of Jāmi' al-Nūrī. During the demolition of the mosque they were brought to Baghdad in pieces. After the necessary treatment at the I.D.G.A., they are now in good condition. Their styles of ornamentation demonstrate what had happened to the styles of stucco ornament in Iraq in the period of more than two centuries after the decline of Samarra.
2. According to the Iraqi Museum Record, the extreme length and width of the whole section is, 5.5 m.

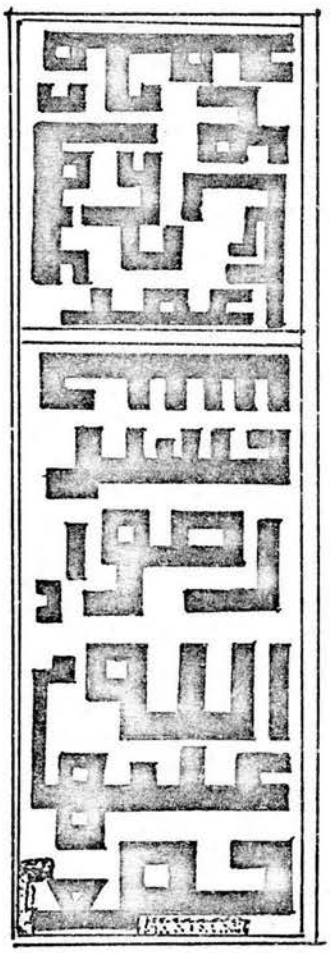
محمد ابو بكر عمر عثمان علي حسن حسين رضوان الله عليهم اجمعين[1]

"Muḥammad, Abū Bakr, 'Umar, 'Uthmān, 'Alī, Ḥasan, Ḥusain. May God's blessing be upon all of them".[2] The columns which flank the text each have two inscribed panels with Kufic inscriptions, one below the capital and the other at the base, each contains two words. The two words are either arranged as الملك لله or لله الملك, "the government belongs to God" or "to God belongs the government".

The shafts are ornamented with a repeated, geometrical pattern which seems to have been used here for the first time in the history of Iraqi stucco-work. It is basically a reversed Y. This design was quite popular throughout the

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1. The last word - ajma'īn - is not wholly clear in the photograph, but the probable shape of the word is indicated by dotting in fig. 45. While the dotting represents only one possible solution (though it is difficult to suggest any other possibility but ajma'īn in this context) it is scarcely admissible that the artist omitted the initial alif and the terminal ya and nūn of the word. The quality of the façade is so high that one can scarcely believe that the artist was incapable of fitting the full word into the space available and it is almost equally unlikely that such a master would be guilty of so gross a linguistic mistake as to write jam' for ajma'īn.
2. Inscriptions with the name of the Prophet and of the four Orthodox Caliphs are also a common feature in Anatolia during the Saljuq period. An identical panel containing this is to be seen on the exterior wall of al-Madrasa al-Khātūniya at Karamān (Hill and Grabar, op.cit., p. 69 and pl. 440). Herzfeld incorrectly read the text as the name Muḥammad, written four times, i.e. chahār Muḥammad; see "Damascus III", pp. 24-5, figs. 43-4.



45. Mosul. Jāmi‘ al-Nūrī: stucco façade over the mihrāb. Detail of a panel with angular Kūfic inscription.

Saljuq and Mongol periods, especially on the brick architecture of Persia. It is to be found executed in doubled stretchers.[1] It is also found as a decorative stone band in Anatolia.[2]

The capitals of the columns of the central panel of the façade, which rest on abaci treated with trellis patterns, are ornamented with abbreviated palmettes and half-palmettes developing vertically, enclosing two lanceolate leaves and surmounted by a globular motif which may be regarded here as a stylized pomegranate.[3] The pine cone is another important

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1. The columns of the middle panel of the left hand side are strikingly close to the decorated brick panel on the entrance façade of the Pīr mausoleum at Tākistān. Other examples of this pattern are to be found on the façade of the Gunbad-i-Surkh, Marāgha, the Gunbad-i-'Alaviyyān, Hamadān, and the khānāqa at Naṭanz. For references see R. Hillenbrand, "Saljūq Monuments in Iran: II. The "Pīr" Mausoleum at Tākistān", Iran X (1972), p. 49, note 33 and fig. 2.
2. E.g. in the tomb of Huand Khātūn in Kayseri, see Hill and Grabar, op.cit., pl. 482.
3. According to Dimand, pomegranates were quite popular in ancient Oriental art, were found also in Sassanian art, and in early Islamic art continued to play an important part in Umayyad decoration. Examples are found in wood carvings from al-Aqṣā mosque, while in the stonework of Mshattā the pomegranate is usually combined with pine cones (Dimand, op.cit., p. 301). These motifs, after being subjected to a further stylization, were used in the Samarra stuccoes (pl. 180). From sources such as this the Saljuq craftsmen who executed these panels drew the inspiration for their motifs.

and well known motif which appears in association with the ornament of these capitals. It is placed at the upper corners of the square Kufic inscription.[1]

Immediately above this square Kufic panel appears another rectangular panel carrying the name Allāh moulded in Kufic style. The elongated letters of the word create an intricate pattern with three knots surrounding a trifoliate motif. This pattern is executed against a stylized foliated field. The aim of the artist here is probably to draw attention to the name Allāh not only by using comparatively large letters, but also by placing them at such a key point. A similar artistic device is to be recognized on the miḥrāb of the mausoleum of Shaikh Fatḥī, in which the names of the four orthodox caliphs also appear but arranged in a different style (fig. 43).

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1. Abbasid art inherited the pine cone motif from such Umayyad decoration as the tie beams of the Dome of the Rock, the consoles of al-Aqṣā mosque, Mshattā and Qaṣr al-Ṭūba. Dimand thinks that the popularity of pine cones was restricted to the early Islamic period, i.e. from the seventh to the ninth century (ibid., p. 332). But the abundant appearance of the motif on this façade suggests that it was simply one of many decorative motifs used during the 6th/12th century. On the other hand, the Mosul area has been well acquainted with this motif since the pre-Islamic period, and numerous examples of pine cone ornament are to be seen on Assyrian sculptures (G.A.W. Budge, Assyrian Sculptures in the British Museum (London, 1914), pls. 32-4, 49-53).

These two panels are framed by a pointed arch enclosing a rich decoration showing several varieties of highly stylized leaves, half-palmettes, pine cones and floral motifs. The motifs within this arch overlap continuously and are connected with each other by an invisible scroll (pl. 182). The spandrels are filled with a very interesting design which at first sight looks like an arabesque scroll, but on closer examination proves to be the name of the Prophet Muḥammad repeated four times at different angles and developing into an elaborate interlaced pattern. It is noteworthy that Kufic is used here in a purely decorative manner.

The arch is flanked by a pair of decorative columns, their shafts and capitals ornamented with identical motifs. The shafts exhibit an interlacing geometrical pattern which creates five six-pointed stars by its vertical progression on each shaft.[1] The whole intricate design serves to define the shape of the semi-cylindrical shafts. Possibly such interlaced geometrical designs were introduced by Islamic artists in order to break the rigid monotony of geometrical patterns.[2] Kufic inscriptions are incorporated in the

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1. This pattern is achieved by an interlaced knot design which is made up of a hexagonal star interlaced with a six-petalled rosette whose petals overlap to develop a smaller hexagonal star in the centre. The skill and virtuosity of the designer of this pattern are extraordinary.
2. During the Saljuq period these designs became quite popular on Islamic metalwork such as on a bucket and ewer in the Leningrad Hermitage (SPA pl. 1306, 1323) and on a jug in the Berlin Museum (ibid., pl. 1227).

ornament of these columns too, and appear in the same places as the Kufic mottoes of the smaller columns. They contain a shortened shahāda. The right hand column reads لا اله الا الله and is completed on the left as follows: محمد رسول الله "There is no god but God; Muḥammad is the Messenger of God". The capitals of these columns are vase-shaped and both form and ornament are identical to those of the smaller capitals below.

(b) Upper half of panel

Above is the focus of the upper part of the façade. Its panel is square in shape, and is flanked by a pair of decorative columns comparatively greater in size, which serve also to separate the three major arched panels (pl. 182). This panel is occupied by a seven-lobed arched frame which encloses the name Allāh, treated again in a decorative style to create an interlaced pattern surmounted by a three-lobed motif and interspersed with pine cones and globular motifs probably denoting pomegranates.[1] The spandrels of the arch are decorated with highly stylized curved foliage.

The rest of the central panel decoration comprises a pair of columns, the largest in the façade. The following description of these columns starts from the base of the right hand side, where there remains part of a panel enclosing the name Allāh written in Kufic script. Outside, the panel

1. Such combinations of heterogeneous motifs in such a purely decorative style are to be seen on wooden panels from Tikrīt and the minbar of Qairawān (Dimand, op.cit., p. 326, figs. 1-9).

is ornamented with a minute arabesque. Next to this is a part of the base bearing a Kufic inscription against an abstract arabesque background. The inscription is again a religious formula consisting of two words, the first of which is not clear, being partly damaged, while the other is the name Allāh. In the same place on the left hand side the inscription reads " العزلله " "the glory belongs to God". Most probably, therefore, the damaged word on the right-hand side was of similar meaning. After the inscription begins the ornamentation of the shaft. It is surprisingly similar to the popular vine scrolls of the Samarra "Style A" (pl.181).[1] The decoration here is composed of circular scrolls sending out trilobed vine leaves, pine cone motifs and other highly stylized half-leaves. The clusters of grapes which appear on Samarra stucco are replaced here by the stylized pine cone motif. Another interesting peculiarity of this decoration is that the name of God written in Kufic, enclosed within a half ten-pointed star motif, is to be seen repeated five times on each side of each shaft. On the upper part of the shaft, directly under the capital, traces of Kufic inscriptions may be seen, among which the name of Allāh is recognisable.

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1. Vine ornament was very popular in Hellenistic and early Christian art. During the Islamic period the popularity of vine ornament continued, but it was heavily stylised so that the vine scroll became an abstract design showing only remote links with the naturalistic design of its Hellenistic prototype (see Dimand, op.cit., p. 294).

The right-hand capital, which is partly damaged, displays a dense and intricate ornamentation which probably denotes a disintegrated type of acanthus leaf.[1] The capital of the other side column is mostly damaged, but probably bore the same kind of acanthus.

The uppermost part of this panel is ornamented with an arch of lobed outline framing a superimposed composition of pine cones, globular motifs, leaves with curling ends and highly stylized foliage. The spandrels are for the most part damaged, but what is left confirms that they were ornamented with basically similar motifs. The outer part of the topmost panel consists of two pairs of bands ornamented with minute vertical arabesques.

2. The Side Panels

(a) Lower and inner part of panels

The panels on either side of the central panel are ornamented with almost the same decorative scheme. Nevertheless, several differences may be noticed. Thus the lower rectangular central panels display not Kufic inscriptions, but

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1. The acanthus in a disintegrated form is well known on several Syrian monuments of the Byzantine period (A.Riegl, Stilfragen (Berlin, 1893), figs. 142, 144-51 and 157), and this tendency continued in the Umayyad period. It appears in such forms on two capitals found at Raqqa (Dimand, op.cit., p. 308, figs. 15-17), on two capitals found at the Dār al-Imāra at Kūfa (pl. 142) and on the capitals of the miḥrāb of al-Khāṣṣakī, now in the Iraqi Museum.

superimposed, stylized leaves. The shafts of the columns flanking these panels have a slightly different geometrical design from that of the columns of the main central panel. The rectangular panel borne by these columns has a Kufic inscription forming a trilobed motif surrounded by three-lobed vine leaves coming from a circular vine scroll. This again differs from the corresponding part of the central panel. The inscription, most probably composed of two words, apparently reads سلوكهم لله "their behaviour is for God". The letter kāf, apart from the other parts of the text, seems to be creating the three-lobed pattern by repeating itself in a peculiarly decorative manner. The same panel on the left side probably has the same text.

Above this is an epigraphic tympanum spelling out the word Muḥammad three times. Presumably the blank tympana of the other two panels had similar inscriptions; such symmetry is a well known feature of Islamic art and architecture. The doubled pointed arches with their decorative contents are identical with that of the central panel. Here, however, the spandrel exhibits circular vine scrolls enclosing trifoliate vine leaves.

(b) Upper and outer part of panels

One of the most interesting peculiarities of the whole façade is the introduction of a new artistic device, apparently applied here for the first time in Iraq. This is the circular disc or medallion composed entirely of a Kufic inscription.[1]

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1. See infra, pp. 493-5.

Fortunately half of such a medallion survives at the top of the left hand panel of the façade, thus indicating the possibility of another one on the right side. Although the Kufic inscription here is partly damaged and written in a difficult ductus, what is left suggests the reading Allāh encircled by the name of the Prophet Muḥammad at least six times. This medallion is surmounted on both panels by a decorative lobed arch. The spandrels of these arches are occupied with different decorative devices. The one on the right side is ornamented mainly with two impressive medallions created from the name of the Prophet Muḥammad repeated six times in Kufic script. Here the bases of the letters shape the circular border of the medallions, while the ends are developed into a central three-lobed motif. A fragment of stylized leaf may be seen between them. The spandrel of the other arch on the left displays a circular vine scroll enclosing three-lobed vine leaves. Pine cones and other similar motifs are also recognizable here.

These lobed arches in both panels rest on a pair of columns which have the ornamented vase-shaped capitals previously discussed. It is interesting to note here that the shafts exhibit interlacing of slightly different geometrical patterns. On both, the interlaced scroll develops a five-pointed star. Apart from this star motif the pattern gives the impression of an abstract arabesque, particularly on the right side column. This pattern invites comparison with the stone decorative column on the miḥrāb of the great mosque of Dūnāysir.[1] These columns bear bands with Kufic

1. See A. Gabriel, "Dūnāysir", Ars Islamica IV, 1937, p. 367, figs. 14-5; idem, Voyages Archeologiques dans la Turquie Orientale (Paris, 1940), pp. 45-52, pls. 31-2.

inscriptions containing popular religious formulae. The right-hand column of the left panel is inscribed " لله الملك ", while on the left one appears " الملك لله "; the translation of both terms has already been given.[1] The outermost columns of both panels are again partly damaged, especially the right-hand one. The column on the left side, which is rather better preserved, has various stylized leaves with curling ends, interrupted five times by a five-pointed star enclosing the name of Allāh in Kufic. The lower part of this column bears another Kufic inscription composed of the two words " العظمة لله ", "the greatness belongs to God". The upper part shows the fragmentary remains of an inscription in which the name of the Prophet Muḥammad is quite clear.

B. Window from al-Nūrī Mosque. A 9885.

No information is available in the Iraqi Museum Records regarding the exact location of this window. Luckily a photograph was recently published by al-Daiwachī showing the interior of the muṣallā of al-Nūrī mosque before its destruction in 1942, in which this window appears.[2] It was originally placed as a frame for an opening situated very near to the left side of the stucco façade above the miḥrāb previously discussed.

The description of this window shows that the scheme of the decoration covers five distinct sections (pls. 184, 185).

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1. See supra, p. 329.
2. Jawāmi', fig. 8.

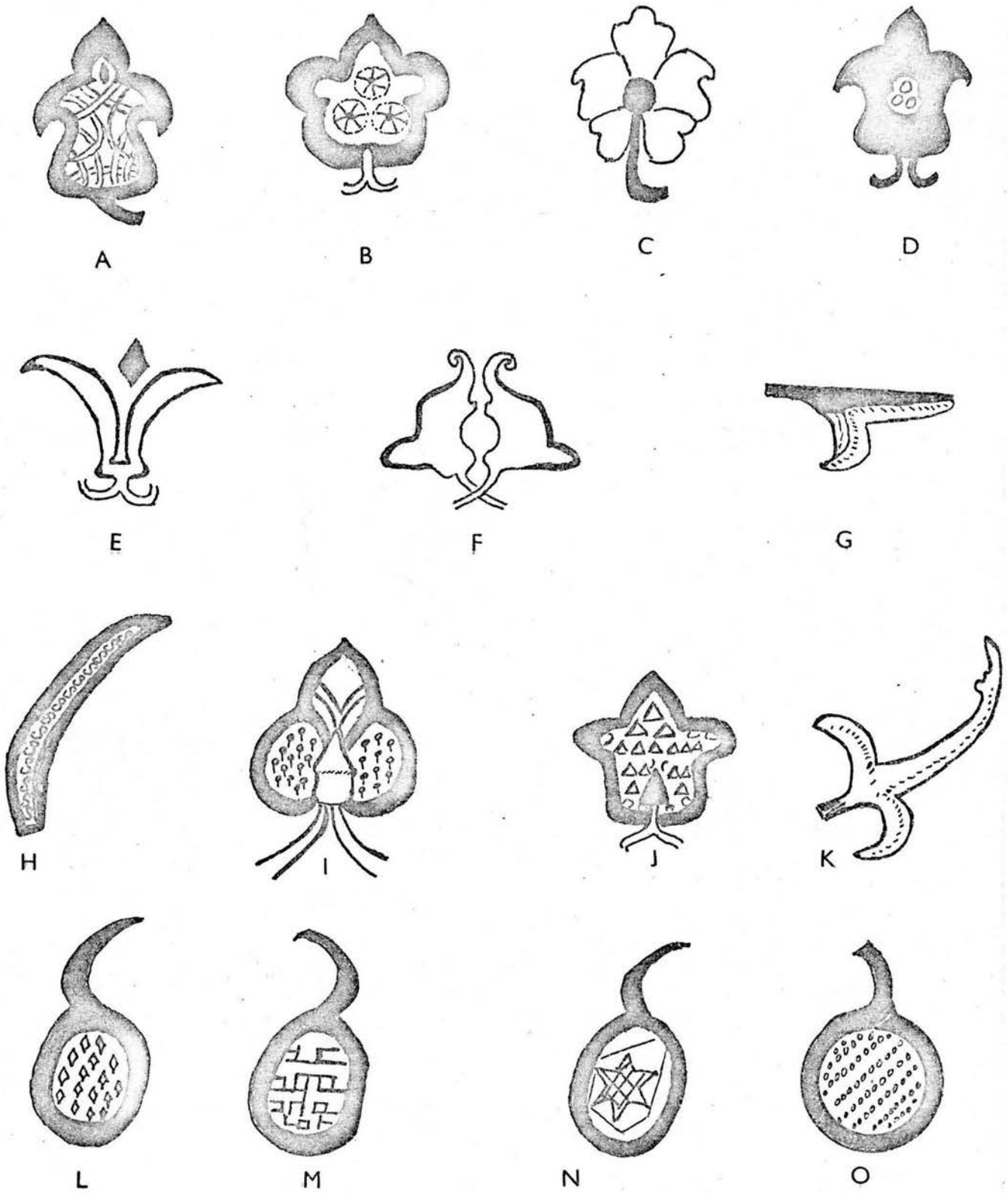
Starting from the innermost frame, the first three sections shape the window proper, while the fourth is a wide decorative band which frames the window and appears wider on the left side. The topmost section is comparatively narrow, though some of its fragments on the right side indicate that it might extend to both sides. Most of the patterns of this stucco window show a great similarity with the patterns of the main stucco façade. The main difference is that here motifs such as the stylized pine cone, the trilobed motif and other globular motifs are drilled with a minute design of various geometrical and arabesque patterns (fig. 46). Such ornamental devices, although they do not occur on the stucco façade over the mihrāb, are found on Samarra stucco, but on this window frame they are more varied.

The design of the uppermost frame consists of a circular leaf enclosing alternately three distinct floral motifs, one of which can be recognized as a naturalistic five-petalled rosette (fig.49c).[1]

Next to this frieze is the largest section which is ornamented with superimposed repeated motifs. The detail of this pattern (pl. 186) consists of two stylized confronted leaves whose ends join to form a stem flanked by a pair of suspended pine cones and surmounted by a three-petalled motif.

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1. A rosette taking a similar shape is known from the possibly Umayyad or early Abbasid stucco of Iraq found at Kūfa in Dār al-Imāra by an I.D.G.A. expedition in 1954 (fig. 48). The full report of this excavation is published by M.A. Muṣṭafā, "Preliminary report on the excavation in Kūfa during the third Season", trans. C. Kessler, Sumer XIX (1963), pp. 36-65.



46. Mosul. Jāmi' al-Nūrī: stucco window-frame. Detail of ornamental motifs.

The stem here splits, and from the stems so formed grow another two stylized leaves which form the repeated pattern. Above each of these foliate compositions is a design of arches made up of intersecting bands enclosing a chain-like or "S"-shaped motif, - possibly even a series of pearl roundels - similar to the Sasanian stucco bead motif found at Ctesiphon, Kūfa (fig. 48) and Samarra.[1] The right side of this major section bears a similar pattern comprising a pine cone of circular shape incised with two distinct patterns, namely geometrical and arabesque. These pine cones bear such patterns as a six-pointed star, a geometrical Kufic-like design, probably an inscription, and minute lozenges. The circular pine cones here are also incised with either minute leaf scrolls or with a net-like motif (fig.46 L-D).

The next section is enclosed by the outermost narrow window frame. It contains a continuous leaf scroll, each scroll enclosing two half-leaves or half-palmettes and crowned by two central pearl-like projections (fig. 46f). Immediately inside this frame is an endless knot pattern forming stars at intervals. It is identical with the previously discussed pattern on the columns of the façade. This part of the window is moulded in a semi-cylindrical shape and marks the window opening (pl. 185). The innermost frame runs round the interior edge. It bears an arabesque scroll interspersed with buds and flowers.

Persia was also famous for its stucco technique which

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1. Dimand, op.cit., fig. 31; Herzfeld, "Damascus I", fig. 17; Excavations at Samarra I, pls.103F, 111-12, and 115.

basically follows the patterns and techniques of Samarra stucco. Many examples survive to illustrate this.[1]

C. The Stucco Miḥrāb of Jāmi' al-Mujāhidī.[2]

This miḥrāb (pl. 187) is still in situ in Mosul. Its stucco ornament, which covers its semi-dome, invites comparison with the stucco of Jāmi' al-Nūrī. The miḥrāb of Jāmi' al-Mujāhidī is regarded as the largest yet known among the surviving Atābikid miḥrābs.[3] The scheme of its ornament

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1. The Persian stucco which has been associated with the bevelled style of Samarra includes a panel above the miḥrāb in the shrine of Duvāzdah Imām in Yazd, dated 429/1037 (see Pope, "Architectural Ornament" in SPA II, pp. 1279-80, IV, pls. 273b, 274c); on the impost blocks above the double columns carrying the main dome of the Masjid-i-Jum'ah in Iṣfahān, dated between 465 and 485/1072 and 1092 (see A. Godard, "Historique du Masdjid-è Djum'a d'Iṣfahān", Athār-è Irān I (1936), pp. 220-30, figs. 147, 151); and in the tomb of Pīr-i Bakrān, 703-12/1303-12 (see A. Godard, "Le Tomeau de Pir Bakrān", Athār-è Irān II (1937), pp. 27-35, figs. 6-10).
2. It was built in Mosul by Mujāhid al-Dīn in 572-6/1176-180 (Ibn Jubair, op.cit., p.235). It is also known by two other names, Jāmi' al-Khiḍr and al-Jāmi' al-Aḥmar "the red" (al-Daiwachī, Jawāmi', pp. 56-7). Apart from a dome which covers the muṣallā of this jāmi' (pl. 20) and a miḥrāb (pl. 187) nothing remains of the original structure and decoration in this mosque, which at present bears many traces of successive restorations of the Ottomān period (ibid., p. 64).
3. It measures 6.80 m. in height, 3.40 m. in width and 3.20 m. in depth, placed under a brick dome of rather small pointed marble muqarnaṣāt 17 m. in height and still carrying fragments of octagonal glazed bricks which were originally used in its exterior decoration (ibid., p. 58).

comprises a minute circular scroll deeply engraved with various stylized leaves, pine cones, simple palmettes, half-palmettes and other globular motifs.

The most interesting peculiarity of this stucco is that animal figures seem involved. This was first suggested by al-Daiwachī.[1] According to him they are very stylized and denote birds, duck, antelopes and lions.[2] In fact this is not the only possible interpretation of this ornament. Indeed, it might be more generally accepted that the decoration depicts stylized arabesque and foliate forms. Thus the shapes which have been interpreted as the bodies of animals or birds could also be pine cones, pomegranates or similar motifs. If, however, the interpretation of this ornament as depictions of living creatures is correct, one can hardly over-estimate the importance of this mihrāb to a history of Islamic art, for it would be the only known example of such a mihrāb in the whole of Islam. This mihrāb would then also help to confirm the theory suggested above to the effect that the niche from Sinjār with human figures (pl. 164) is itself also a mihrāb. But the uncertainty

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1. Al-Mauṣil, p. 133.
2. The central composition consists of a variety of superimposed motifs possibly representing a Sasanian candelabra rising out of an interlaced scroll flanked at the base by a pair of seated birds, then a pair of ducks and at the top a pair of antelopes which flank a pine cone motif. These creatures are crowned with a branch carrying three globular motifs. Apart from these confronted animals which follow the vertical axes of the composition, the other creatures are placed arbitrarily among the leaf scrolls.

which must continue to surround these two monuments (and which could perhaps be partly dispelled by a detailed study of the mihrāb of al-Mujāhidī mosque on the spot, and by new close-up photographs) inevitably precludes any detailed discussion of the implications of such mihrābs for Islamic religious art.

Section 5

Wood

Introduction

The Iraqi Museum possesses a large collection of wooden objects dating from the early Abbasid, Saljuq, later Abbasid and Ilkhanid periods. Those which date from the early Abbasid period mainly consist of fragmentary panels and pieces, some of which bear geometrical painted designs, found at Samarra during the I.D.G.A. excavation in 1936-39.[1] Those which date from the Saljuq and later Abbasid periods are a door from the mosque of Imām Ibrāhīm, a minbar and door from Jāmi' al-'Amādiya, the sarcophagus of Imām Mūsā al-Kāẓim, one part of a door from Imām Bāhir,[2] and a wooden panel decorated with intricate floral patterns from Qara Sarāy in Mosul.[3] From the Ilkhanid period only one object survives. It is a sarcophagus made of mulberry wood for a professor at al-Mustanṣiriya, al-'Āqūlī. A description and analysis of some important examples of these Saljuq and Ilkhanid objects follows.

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1. Excavation at Samarra II, p. 14, pls. 134-7.
2. The texts of these objects are published by N. al-Naqshabandī and B. Faransīs, "al-Āthār al-Khashshab", Sumer V, 1949, pp. 55-64.
3. Two important wooden sarcophagi are still in situ at Mosul. Both display naskhī inscriptions containing Qur'ānic verses and arabesque motifs executed in relief. They were ordered by Badr al-Dīn Lū'lū'. One of them was made for Imām Yaḥyā ibn al-Qāsim in 637/1239. The other was made for Zaid ibn 'Alī in 646/1248. The texts of these two sarcophagi have been published by al-Naqshabandī; see "Ṣanādīq Marāqid al-Aima", pp. 192-202.

A. Door from the Jāmi' al-Imām Ibrāhīm. A 676.[1]

This door (pl. 189) is dated by its inscription to 498/1104. It is made of mulberry wood and consists of two parts, both still in an excellent state of preservation.[2] The panelling of both parts (miṣrā's) is basically the same. Each is composed of five square areas, the middle one of which is bordered by two inscribed friezes, as is the case with the top and bottom panels. Each square area on this door is filled with geometrical panels among which is a small square in the middle, inlaid with a lozenge motif of darker colour. The design thus created might be considered as a simplified swastika motif. The left central post carries an additional shutting post known locally as 'āriḍa. It is ornamented with five rectangular projections at equal intervals. These projections bear a bold geometrical incision. The most distinctive feature of this door, excluding its numerous inscriptions, is the simplicity of its decoration, which most probably represents a characteristic feature of wood carving in the early Saljuq period.[3]

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1. It was also known as Mashhad al-Shaikh Ibrāhīm al-Jarāḥī al-Mahrānī. It was built during the 5th/11th century as a mosque by Shaikh Ibrāhīm, then used as a turba for his wife Ḥasna Khātūn and for himself. Badr al-Dīn Lū'lū' converted the place to a turba for Imām Ibrāhīm ibn al-Imām Ja'far al-Ṣādiq. Hence it is known as Mashhad al-Imām Ibrāhīm (see al-Daiwachī, "Yaḥyā ibn al-Qāsim", p. 175, n. 16).
2. The dimensions of each miṣrā' are length 1.93 m., width 0.45 m.
3. As the time went on the Saljuq artist tended to use more complicated designs (D.T. Rice, op.cit., p. 174).

The inscription of this door is executed in naskh of crowded type which might suggest a prototype for the 6th/12th and 7th/13th centuries naskh.[1] The inscriptions are in two languages, Arabic and Turkish, mixed with marked Persian elements.[2] The inscriptions include important data regarding this door, namely the date and the name of the artist who carried out the work.

The inscriptions are distributed on the four vertical posts, and on the four wide horizontal panels. The upper parts bear Qur'ānic verses. The middle parts contain blessings for the twelve Imāms. The lower part is inscribed with a Turkish text mixed with marked Persian elements as noted. The name of the artist and the date are carved on two separate panels on the lower part of the two central posts.

The inscription on the upper part starts on the top right-hand corner of the right jamb, continues on the top rails, and ends on the left-hand corner of the left jamb. It contains the basmalla, followed by Sūra LXXVI, vs. 7-9.[3]

The central inscription begins vertically on the middle part of the right jamb, and then describes a square encompassing the central part of the doorway. It contains blessings for the twelve Imāms similar to those given above.[4]

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1. See infra, pp. 496-8.
2. Objects carrying inscriptions in two languages are quite rare in Iraq, indeed this is the only surviving example in the Iraqi Museum. The inscription of this door is published by al-Naqshabandī and Faransīs, "al-Āthār al-Khashshab", p. 60.
3. See infra, pp. 499-500.
4. See supra, p. 313.

The inscription on the lowest part of the door is distributed according to the same system as the inscription on the uppermost part. It consists of the above-mentioned Turkish text, mixed with marked Persian elements. Naqshabandī and Faransīs give the following reading.[1]

"برنظر[2] كله · انجاي[3] (؟) بدري بان[4] طالعا امام ابراهيم
وقف · ع ... (؟) بجون امامك نوقند قاسمين خدندي
حق تعالى[5] · قلسون[5] يومزيد[6] "

The date of this door is inscribed on the right inner post and reads as follows:

وكمل عمله في شهور سنه ثمان وتسعين واربعمائه

"Its work was completed in the months of the year 498 [A.D.1104]". The name of the artist is on the corresponding post:

صنعه استاذ نورى بن يونس رحمة الله عليه

"Ustādh Nūrī ibn Yūnis, may the mercy of God be upon him, made it."

B. Minbar of the ʿAmādiya Mosque. A 7209

This minbar, which dates from 548/1153 according to its Kufic inscription, is the only one of its kind in Iraq which dates from this period and which has resisted the ravages of

1. Naqshabandī and Faransīs, op.cit., loc.cit. They do not give a translation. Indeed, the above text is difficult to translate because it is incomplete and disconnected. But this in turn may result simply from difficulties of decipherment. Naqshabandī and Faransīs state that this is a Turkish inscription but there seems to be no evidence for this.
2. This means "look". I am indebted to my fellow-students for this and the subsequent suggestion.
3. انجا means "there" in Persian.
4. The correct reading for this word may be بدربان , "guard".
5. This word means "God's mercy".
6. This word means "abundant".

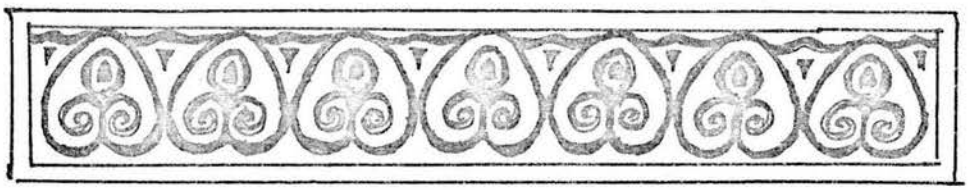
time and of insects. This is probably partly due to the kind of wood it is made of, which is known locally as al-Athal. This minbar was transferred to the Iraqi Museum from the muṣallā of the Great Mosque of al-ʿAmādiya.[1] It was ordered by Prince Qarāja, who was governor of al-ʿAmādiya before the year 541/1146.[2] The minbar is of medium size[3] (pl. 190) and consists of a flight of seven recently renewed steps leading to a platform with no canopy (pl. 194). It is in two parts; the one which carries the platform is a high box-like rectangle with a square base,[4] while the other is triangular in shape,[5] and contains the staircase. This minbar is substantially intact. The construction is solid and the assembly is jointed together by iron brackets held by iron nails. Many of the panels of the minbar have recently disappeared, especially on the left side under the platform, where a total of eleven geometrical panels are missing.[6] These have been replaced in the Iraqi Museum by

1. Al-ʿAmādiya is a city situated to the north-west of Mosul, not very far from the modern Turkish frontier. According to Ibn al-Athīr, it was recognized as an independent emirate ruled by an Amīr during the Saljuq period; see Ibn al-Athīr, al-Kāmil, XI, p. 8.
2. Ibid.
3. The dimensions are: width, 0.87 m.; depth, 2.47 m.; height, 2.61 m. The height is in fact three times the width.
4. 0.87 m. x 0.87 m.
5. The height is 2.30 m., and the base is 1.60 m.
6. Curiously enough the earlier photograph of the left side of this minbar, published by Z. Ḥasan in 1956, showed the complete set of these panels which were identical with the panels now existing on the right side (see Ḥasan, op.cit., fig. 331).

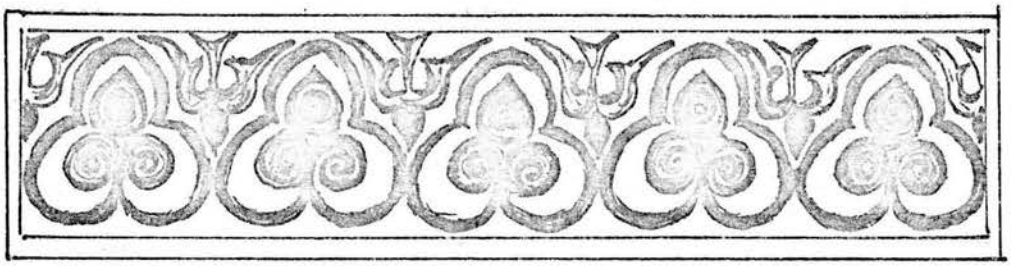
undecorated wooden boards (pl. 191). The other missing parts are eleven variously shaped rails (nargāt, sing. narg) in the balustrade, four on the right side and seven on the left side. The panelling of both sides is identical in technique and design.

The first part of this minbar, which carries the platform, consists of two divisions, known locally as taqfīṣa, per side. The upper taqfīṣa forms the balustrade of the platform. It consists of three horizontal panels known locally as kifsīj, bearing an arabesque pattern executed in a way similar to the bevelled style ("Style C") of Samarra. The upper and the lower kifsīj are basically similar in design, consisting of vine scrolls enclosing three-lobed, stylized vine leaves. However, the trefoil vine leaves in the lower kifsīj are larger in shape and flank simplified palmette motifs (fig. 47a,b). Between the upper and the middle horizontal kifsīj of the platform, on each side, appear five vertical pieces joining them together. These pieces, or nargāt, are identical in both design and ornament. The upper part of each piece has an eight-pointed star-like motif, the middle lower part of which is extended to form a heart-shaped leaf with two rather angular volutes. The decoration of these pieces also describes an abstract arabesque pattern executed again in the bevelled style, but in shallow carving (fig. 47c).

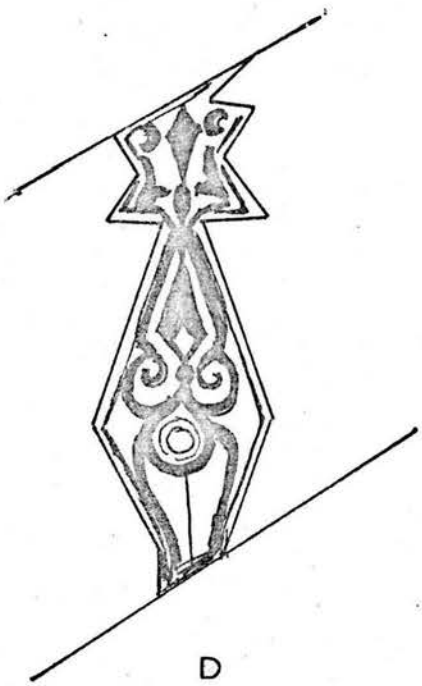
Under this part begins the panelling of the next rectangular field. The pattern here is a combination of geometrical and arabesque motifs. The geometrical compartments



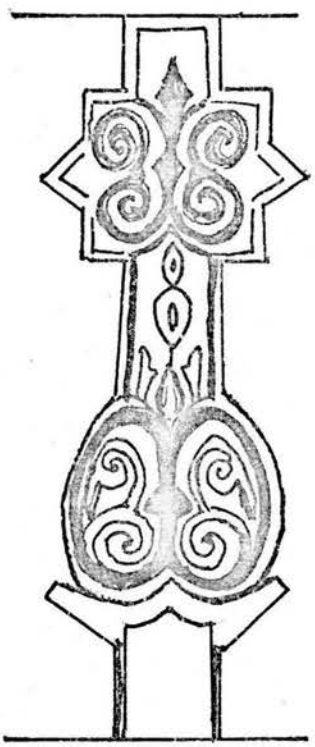
A



B



D



C

47. ʿAmādiya. The minbar of the Great Mosque: detail of ornament.

wherein the hashwas or carved polygons are placed are created by interlaced, undecorated frames. The geometrical units or hashwas here take on a shape quite popular on the Saljuq brickwork of Baghdad. The arabesque pattern inside these geometrical hashwas displays a quite simple and delicate pattern generally similar to that on the mihrabs of Imam Abd al-Raḥmān and al-JuwaichātĪ. It consists here of a wavy scroll bearing stylized leaves with spiral tendrils and curling ends flanked by two winged half-palmettes. The scroll continues on both sides, developing from the middle a superimposed motif surmounted by a lancet leaf with two volutes at its base, elaborately designed to fit into the triangular part of these hashwas. On the hashwas which appear near the borders of this field, where such triangular ends are impossible, the former motif does not appear and the arabesque confines itself to the circular scroll alone.

The left side of the triangular part of this minbar consists of two parts as well, the balustrade of the staircase and the triangular field which bears six hashwas. The upper kifsĪj of the right-hand balustrade bears the beginning of the Kufic inscription which will be discussed shortly. The corresponding lower rail is ornamented with a tiny wavy scroll bearing leaves; the carving technique here is quite shallow. This scroll continues into the upper posts marking the corners of the platform nearest the head of the stairs. From the point where the scroll ends, the posts become cylindrical and terminate in a rather bulbous shape crowned by a finial form. Besides their decorative function, these

posts were most probably placed here to act as a suitable hold for the imām of the mosque when he ascended the minbar to deliver his sermon.

The two kifsīj here are joined together by fourteen narrāt, of which only ten are still intact. They, too, are identical in both design and ornament. However, they are obviously different from those on the platform (fig. 47c,d). Each one has a six-pointed star motif, the middle lower point of which merges with a lozenge shape. All these pieces have borders incised with double lines, and acting as frames for an abstract leaf scroll executed in the bevelled technique. In the middle of the lozenge-shaped parts appears a lanceolate leaf (fig. 47d). The next kifsīj, which is wider than the former, bears a wavy half-palmette scroll similar in quality to the one previously discussed on the first part of this minbar.

The rest of the panelling on this side consists of six hashwas which fill in various geometrical compartments created by vertical and horizontal joints arranged within the frame of the triangular field. The arabesques of these hashwas are mainly based on stylized scrolls, leaves with curling ends and spiral tendrils, palmettes, half-palmettes and lanceolate foliage. Of special interest is the pattern of the two rectangular panels near the base of the triangle. They bear identical arabesque patterns consisting of a winged palmette flanked at the base by a pair of half-palmettes. The winged motif here is strikingly similar to the one found on Samarra stucco during the I.D.G.A. excavation at Dār No.4.[1]

1. I.D.G.A. Excavation at Samarra I, pls. 63,65,69 and 72.

The scheme of decoration on the left side of this minbar displays basically similar decorative compositions, following the symmetrical rule so widespread in Islamic art and architecture. The only noticeable difference is that the kifsīj of the balustrade and two other ones bear the continuation of the Kufic inscription alone (pls. 191, 193), and that the hashwas (of which there are also six) take on slightly different shapes, apparently caused by the decrease in space which resulted from adding the two extra kifsīj which bear the inscription.

The most interesting feature of this minbar is its Kufic inscription.[1] It has a total of five lines, one of which is carved on the upper kifsīj of the right-hand side balustrade. The other four are on the left side. The carving is in relief against a plain field. The calligraphy is similar in style and cutting to the Kufic appearing on the marble miḥrābs discussed above. It contains important information of art historical interest:

1. The name of the Atābikid prince who ordered this minbar, Sirbārīk Qarāja Ibn ʿAbdallāh, and his titles.[2]
2. The name of the trustee of the work, the qāḍī ʿAbdallāh ibn Yaḥyā, and his titles.
3. The names of the three carpenters who designed and

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1. It was first read by Naqshabandī and Faransīs, "al-Āthār al-Khashshab", p. 58.
2. A short historical note regarding the prince Sirbārīk was published in 1949 by M. Jawād: "Al-Malik al-Ṣāliḥ Rukn al-Dīn Ismāʿīl al-Atābikī wa 'l-Amīr Qarāja fī Bāb Jāmiʿ al-ʿAmādiya wa fī Minbarahu", Sumer V, 1949, p. 338 (hereinafter "al-Malik al-Ṣāliḥ").

achieved the work, 'Alī ibn Abu'l-Nuhā, Ibrāhīm ibn Jāmi' and 'Alī ibn Salāma and also their laqab, al-Jazariyīn.

4. The date of the completion of the work, 548 [1153 A.D.]

The inscription on the right side, which fills a band 8.5 cm. in width, is as follows:

1. ا ـ بسم الله الرحمن الرحيم هذا ما تطوع بعمله مولانا الأمير الأجل السيد

Then on the left side within bands 8.5-9 cm. in width:

2. ٢ ـ حسام الدين نجم الاسلام امام الدولة (همام الدولة) شرباريك (سرباريك)[1] قراجه ابن عبد الله سيف الاسلام أمير المؤمنين دام عزه

3. ٣ ـ كان القوام[2] (المتولي) على عمله والناظر في مصلحته القاضي الأجل فخر الدين عبد الله ابن يحيى وافق فراغه سنة ثمان واربعين وخمسمائه[3]

4. ٤ ـ وخمسمائه رحم الله من ترحم عليهما وعلى كاتبه

5. ٥ ـ هذا عمل علي ابن ابو النهى وابراهيم ابن جامع وعلي ابن سلامه الجزريين.[4]

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1. Apparently a prince with such a name is unknown. But Qarāja is known to have been appointed prince of al-'Amādiya shortly after 541/1146 (Ibn al-Athīr, al-Kāmil XI, p.8). Jawād thinks that most probably the name "Shirbābik" should be read in the inscription for Sirbārīk, a Persian phrase which means "the nice head". It could also be "Sirbāz", also a Persian term, which means "a Persian pleasance". During this period names and titles which were based on a distinctive feature of the body of the prince were quite common, e.g. Prince Aibak al-Ṭawīl ("the tall") and Prince Sunqur ("the lion's face"); see Jawād, "al-Malik al-Ṣāliḥ", p. 338.
2. Qawām (nowadays qayim) or mutawallī have the same meaning - "trustee".
3. This word, which means "five hundred", is repeated alone on the following kifsīj.
4. The laqab al-Jazariyīn is probably derived from their native

(Contd.

"1. In the name of God, the Compassionate, the Merciful, this is what had volunteered[1] to be done our lord, the very mighty Prince, the master 2. Ḥusām al-Dīn [the sword of the religious], Najm al-Islām [Star of Islam], Humām al-Dawla [the Knight of the State] Sirbārīk Qarāja ibn ʿAbdallāh Saif al-Islām [the sword of Islam], the Commander of the Faithful, may his glory be everlasting. 3. The trustee of the work and its interests was the mighty Judge Fakhr al-Dīn [the pride of the religion], 2 ʿAbdallāh ibn Yaḥyā, the completion of its work was in 548 [1153 A.D.]. 4. And five hundred. God be merciful to whoever begged for the mercy of God on them and on the writer. 5. This is the work of ʿAlī ibn Abu'l-Nuhā and Ibrāhīm ibn Jāmiʿ and ʿAlī ibn Salāma al-Jazariyīn".

C. Door from the ʿAmādiya Mosque. A 7208.

This mulberry wood door was, according to its inscription, most probably made during the reign of al-Malik al-Ṣāliḥ Ismāʿīl ibn Badr al-Dīn Lū'lū' (who died in 660/1261).[2]

Contd.) city, presumably Jazīrat ibn ʿUmar, or from their province as a whole, Jazīra.

1. The word used here instead of the usual ʿamara suggests that Qarāja financed the work out of his own pocket.
2. Al-Malik al-Ṣāliḥ is a well-known laqab for King Ismāʿīl who became King of Mosul after his father Lū'lū' in 657-60/1259-61. The laqab of his father was al-Malik al-Raḥīm (see al-Ḥawādith, p. 338); al-Naqshabandī, however, thought that it was made during the reign of Badr al-Dīn Lū'lū' (631-57/1233-59), "al-Āthār al-Khashshab", p. 59).

As this door was originally the main and the only door of the musallā it is comparatively large in size.[1] It comprises two leaves,[2] of identical shape and construction. Generally speaking, it is well preserved, although the inscription is partly weathered away. This door exhibits a noticeable lack of decoration which might be regarded as an unusual feature in the context of Saljuq and Atābikid wood carving. Of all the panels, only the middle one on each side is bordered with a shallow decorative band bearing a tiny arabesque pattern. In addition to the usual method of joining woodwork, which is called locally taqfīṣ and consists of fitting pieces of wood into each other, iron nails were also used here, apparently to reinforce the joint between the panels at top and bottom. The arrangement of each leaf (misrā'), consists of three rectangular panels (pl. 195a), the top and the bottom panels of which are set horizontally, and are of the same size.[3] The upper one only is inscribed with two lines of inscription. The middle panel, which is larger in size,[4] is set vertically, and bears six lines of inscription. Another part of the scheme of decoration is that the upper and lower parts of each misrā' are also joined together by an iron band nailed with three horizontal rows of iron nails. The heads of the middle row are of comparatively larger size, each taking the shape of an eight-petalled rosette, a motif quite popular on

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1. Extreme dimensions are: height 2.74 m., width 1.52 m.
2. Each piece measures: height 2.47 m., width 0.75 m., thickness 0.10 m.
3. Each is 0.35 m. x 0.12 m.
4. Each is 1.24 m. x 0.35 m.

the applied decoration of this period.[1] The other touches of ornamentation on this rather bare door are eight iron discs with toothed edges on each misrā'.[2] The surface of each one has radial incisions. These large nails are arranged in vertical rows on the jambs, while others appear on the middle panels. The knockers of this door take the form of a lion's head.[3] They are placed on the central posts of the doorway and are separated from each other by the additional post ('ārida) attached on the left side leaf. This is of shorter length and terminates below in a roundish end.

This door bears a total of eight horizontal lines of shallow carved inscription inside the upper and the middle panels only. The style is naskh of uncrowded quality, carved on a plain undecorated background. Although this inscription is distributed over four panels, each line starts on the right-hand panel and continues horizontally along the left-hand panel. The inscription is published by al-Naqshabandī and Faransīs.[4] Apparently the inscription does

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1. Seemingly nails with various decorative heads were also popular in Samarra. Others creating a decorative geometrical design may be seen on a door of the Māristān al-Nūrī in Damascus, built in 549/1154 by order of Nūr al-Dīn; Herzfeld, "Damascus I", figs. 46-7.
2. At present one is missing on the right misrā' and two others are missing on the left one.
3. Apparently, door knockers of this type were popular on contemporary Atābikid monuments. An example of this type is to be seen on the door of the turba 'Awn al-Dīn in Mosul; Herzfeld, "Damascus I", fig. 50.
4. "Al-Āthār al-Khashshab", p. 59.

not bear a date or a name of an artist as is the case on the ʿAmādiya minbar. Important inferences regarding its date can, however, still be made. The way in which this inscription is composed, and the repetition of the laqab of al-Malik al-Ṣāliḥ suggests that this door was ordered between 657 and 660/1259 and 1261. On the top panels, starting on the right side of the right hand panel, the inscription runs as follows:

1. ١ــعز لمولانا السلطان الملك العالم العادل / المؤيد المظفر
المنصور الملك الصالح ركن الدنيا
2. ٢ــوالدين سلطان الاسلام والمسلمين ملك / امراء الشرق والغرب
اعز الله سلطانه

Then, on the middle panels on the right

3. ٣ــونصر اعوانه رحم الله من دعا لدو / لته بالدوام ولذريته
بالبقاء على
4. ٤ــ مر الليالي والأيام وغفر لمن ترحم / على السلطان السعيد
الملك الرحيم
5. ٥ــ بدر الدين لؤلؤ لمن عبد الله الذى / اعز حريم (حرم)
العبادة لله والمجاهد في
6. ٦ــ سبيل الله / بروحه وعياله
7. ٧ــوغفر لمن ترحم على مستعمله (مشتغله) / ومن في ولايته
العبد الراجي عفوربه
8. ٨ــايبك الطويلاني (الطول) / خاندار (جاندار) الملكي
(الملك) الصالحي (الصالح).

"1. Glory to our lord the Sulṭān, the King, he who knows, the just, the corroborator, the glorious, the victorious, al-Malik al-Ṣāliḥ, pillar of the world 2. and of religion, Sulṭān of Islam and the Muslims, King of the princes of east and west, may God glorify his sovereignty 3. and make his

follower victorious. May God be merciful to whoever prays for his state to endure, and for his descendants to endure as 4. night and day passes on, and may God forgive whoever asked mercy for the Sulṭān, the happy, the merciful king 5. Badr al-Dīn Lū'lū' ibn ʿAbdallāh, who glorifies the sanctuary of the worship of God, the fighter of the Holy war for 6. the sake of God with his soul and his family. 7. May He forgive whoever prays for mercy for his Regent - and for whoever is in his care - the slave who hopes for his care, the slave who hopes for his God's forgiveness, 8. Aibak al-Ṭawīl (the tall) Jāndār al-Malik al-Ṣāliḥ."[1]

D. Part of a door from Jāmiʿ al-Imām Bāhir. A 675.

This left miṣrāʿ is all that remains of the original door of Jāmiʿ al-Imām Bāhir (pl. 196). It is made of mulberry wood and is 2.27 m. high and 0.58 m. wide. It consists of a vertical panel with panels added at the top and the bottom. The central vertical panel exhibits an elaborate geometrical pattern drawn with double lines. All the units of this pattern are carved with a tiny arabesque. The geometrical pattern is achieved here by interlacing lines forming six-pointed stars on the middle axes of the pattern, and half six-pointed stars on both sides. The pattern also displays

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1. His full title was ʿIzz al-Dīn Abu'l-Muẓaffar Aibak ibn ʿAbdallāh al-Badrī known by his laqab al-Ṭawīl. He was dizdār of al-ʿAmādiya during the reign of King Ismāʿīl (al-Ḥawādith, p. 347; Jawād, "al-Malik al-Ṣāliḥ", p. 338).

a variety of polygonal shapes. Designs of this type, in which geometrical units are carved with arabesque motifs, were quite popular on later Abbasid architecture in Iraq.[1]

This door bears neither a date nor any trace of inscription, but judging by the advanced type of its ornamentation, and the fact that the date of the rebuilding of the turba of Imām Bāhir, according to its inscriptions, is 699/1299, it seems reasonable to assign this piece to the same date.

A contemporary wooden door ordered by Badr al-Dīn Lū'lū' in 646/1248 for the mausoleum of Imām 'Awn al-Dīn in Mosul[2] (still in situ) forms a relevant parallel. It is ornamented with an elaborate geometrical pattern composed of eight-pointed stars interlaced with other geometrical units, and can be compared with the misrā' of Imām Bāhir as regards the quality of the decoration and the skill of the execution.

E. Sarcophagus of al-'Āqūlī. A 679.

This sarcophagus is made of mulberry wood. It is in an excellent state of preservation, and constitutes the only surviving example of wood carving in Iraq in the Ilkhanid period (pls. 197-200). It was transferred to the Iraqi

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1. See infra, pp. 457-63. Geometrical patterns like this were very much favoured during the Jalairid period. Identical patterns are to be seen on terra-cotta panelling above the entrance of the Kūfa mosque (pl.145) and on the outer frame of the interior façade of the entrance of al-Madrasa al-Mirjāniya (pls. 106-7).
2. See Herzfeld, Reise II, fig. 264, III, pl. 8.

Museum from the Mosque of al-ʿĀqūlī,[1] who was an eminent professor of fiqh in al-Madrasa al-Mustanṣiriya for a long period of time.[2]

The scheme of decoration on this object consists of bands used as frames ornamented with a dense type of arabesque composed mainly of leaf scrolls. Such an arabesque represents an advanced degree of stylization, a process which began in the later Abbasid period, and continued to feature in Ilkhanid and Jalairid art and architecture. The artist of this sarcophagus used the same arabesque design for the background of the inscription.[3]

The most interesting artistic feature of this sarcophagus is its inscriptions. They are executed in both plaited Kufic and naskh. Plaited Kufic is used on the four lateral rectangular panels, while naskh is used above them.

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1. This mosque, which is situated in al-ʿĀqūliya quarter in the eastern part of Baghdad, was originally the house of al-ʿĀqūlī who died in 728/1327 and was buried in it. The mosque was restored several times during the Ottoman period. The present mosque was rebuilt by Sulṭān ʿAbd al-Ḥamīd in 1320/1902. The minaret of this mosque most probably belongs to an earlier date. For more detail about al-ʿĀqūlī and his mosque, see al-Alūsī, op.cit., p. 46; N. Maʿrūf, Tārīkh ʿUlamāʾal-Mustanṣiriya I, pp. 221-2.
2. Maʿrūf states that according to contemporary authorities al-ʿĀqūlī retained his professorship in al-Mustanṣiriya for half a century (op.cit., p. 223).
3. The inscription of this sarcophagus was first published by L. Massignon in 1912 (op.cit., II, pp. 37-46). In 1949 the inscription was reproduced by al-Naqshabandī and Faransīs, "al-Āthār al-Khashshab", p. 57.

The Kufic inscription is of outstanding beauty and complexity. The sarcophagus of al-'Āqūlī provides important evidence for the chronology of the plaited Kufic script.[1] The inscriptions of the 'Āqūlī sarcophagus mostly consists of Qur'ānic verses; the name and the laqab of al-'Āqūlī and the dates of his birth and death are also inscribed. The central front panel of Kufic (pl. 199) is inscribed with " بسم الله "; the continuation is on the right hand panel (pl. 197) and reads " الرحمن الرحيم يبشرهم ربهم برحمة منه "; then on the rear panel (pl. 200) is: " ورضوان و "; and the last part is on the left hand panel (pl. 198) " جنات لهم فيها نعيم مقيم خالدين فيها ابدا ". The Kufic inscriptions of these four panels are from the Qur'ān, Sūra IX, vs. 21-2.[2]

The naskhī inscription which begins on the uppermost panel (pl. 199) and continues on the left one (pl. 198) consists of Sūra XLVI, vs. 13-14.[3]

The next text is reproduced from Massignon, with a few amendments which will be given as footnotes. This text contains important historical information about al-'Āqūlī. It starts immediately after these verses on the left side and continues on the rear and right side panels (pls. 197-8 and 200). It reads as follows:

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1. See infra, pp. 495-6.
2. See infra, p. 501.
3. See infra, p. 501.

"هذا ضريح المفتقر الى الله تعالى عبد الله بن محمد بن علي العاقولي
ولد في (رجب)[1] سنة ثمان / وثلاثين وستمائه توفي يوم الأربعاء
رابع عشرين (sic)[2] في[3] [4] شوال سنة ثمانيه (sic)[5]
وعشرين وسبع مائه وصلى الله على سيدنا محمد نبيه
وآله وسلم".

"This is a tomb [darīḥ] of one in need of the Exalted God, ʿAbdallāh ibn Muḥammad ibn ʿAlī al-ʿĀqūlī, born in Rajab of the year 638 [July 1240 A.D.], died Wednesday 24th Shawwāl in the year 728 [24th October 1327], and may God's blessing be upon our Lord Muḥammad, His Prophet, and his family".

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1. The Arabic month Rajab does not appear in Massignon's reading (op.cit., p. 40).
2. According to the text it must be read as عشري (ibid).
3. The word fī does not exist in Massignon's reading (ibid).
4. This word, which means "year", does not appear in the text published by Massignon, although it is clearly inscribed in the text (cf. pl. 197).
5. The correct reading of this word should be ثمان and not ثمانية.

CHAPTER VII

ARCHITECTURAL AND DECORATIVE STYLE IN THE MEDIAEVAL PERIOD

Section 1

Building Materials and Methods of Construction

Introduction

In Iraq both the type of materials available and the weather played a decisive part in determining the form of local monuments. Various building materials are to be found in different parts of Iraq. The northern part of Iraq has abundant supplies of stone and wood. The area around Mosul is famous for its limestone and for the special type of bluish-grey marble which is known locally as ḥillān. Stone is also available in the south-western part of Iraq at Shithātha near al-Ukhaiḍir. This area is also famous for having great reserves of gypsum which is used for mortar.[1] The availability of these two materials and the water in the area were the main factors which permitted the building of this colossal monument in the desert. It may be said, therefore, that the kind of building material available in each part of Iraq also decided the kind of architecture. In the central and southern parts of Iraq the lack of wood and stone made brick architecture inevitable, while in the north the use of stone in building has been a common feature since pre-Islamic times. But it seems that brick was preferred even in districts where

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1. During the I.D.G.A.'s successive seasons of restoration of al-Ukhaiḍir the area around its enclosure wall was always used as a handy source of mortar; see Ṭ. al-Janābī, "al-Ṣiyāna al-Athariya fi'l-Ukhaiḍir 1968-9", Sumer XXVI (1970), p. 340, pl. 1.

stone is available. This is because it was cheaper than wood and stone and more flexible than either of them, especially for building arches, vaults and domes.

Combinations of various materials are also known. In the north of Iraq several Assyrian buildings dated 1080-612 B.C. are built of stone and brick. From the Islamic period, al-Ukhaiḍir (2nd/8th century) displays brick and stone architecture. In Mosul, the turba of Imām Bāhir and the walls of Mashhad al-Imām 'Awn al-Dīn are built of rough stone and juss to a height of 12 m. and then completed in brick and juss.[1]

The buildings of the periods under discussion employ the following building materials:-

A. Brick

Brick, which is readily available, has been the principal material of Iraqi architecture throughout all periods of its history. The standard or common bricks were square. A considerable variation in size as well as a variation in colour (resulting from different degrees of firing) is a noticeable feature in the bricks of these periods.[2] This

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1. 'Abbū, al-Qubāb al-'Abbāsiya, p. 194.
2. The variation in brick sizes may be demonstrated by the following examples:-

Name of monument	Period	Brick sizes
The minaret of Arbīl	Atābikid	(25x25x5 cm. (24x24x5 cm.
The minaret of al-Khaffāfīn	Later Abbasid	(22x22x5 cm. and (23x23x5 cm.
The minaret of Qumriya	Later Abbasid	(20x20x5 cm. and (23x23x5 cm.
The mausoleum of Muḥammad al-Sakrān	Ilkhanid	22x22x5 cm.
The minaret of Sūq al-Ghazl	Ilkhanid	26x26x7.5 cm.

(Contd.

fact makes it rather difficult to date any Iraqi monument by depending solely on the size of its bricks. The monuments of these periods show that brick was not only used in the fabric but was also widely employed in many ways to create patterned surfaces, a feature best developed in Persia.[1] A relatively small number of the monuments of these periods display bricks which were made in specially shaped moulds for use in specific parts of the structure, such as for angle colonnettes and for the concave and convex forms at the entrance portals. Examples of such bricks may be seen in the Abbasid Palace, the monumental entrance at Wāsiṭ, al-Madrasa al-Mustanṣiriya and al-Madrasa al-Mirjāniya.[2] Other kinds of specially shaped bricks were made for the construction of arches, which suggest that they were cut before firing. Such bricks occur at the entrance of Khān Mirjān and the entrance of the Great Mosque of al-Kūfa.[3] The fact that each of these buildings has particular shapes of moulded brick suggests that the details of the monuments had been carefully planned before actual construction was begun. The brick monuments of these

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Contd.)

Name of monument	Period	Brick sizes
The minaret of Dhū 'l-Kifl	Ilkhanid	(20x20x4.5 cm. and (22x22x5 cm.
Al-Madrasa al-Mirjāniya	Jalairid	(22x22x7-7.5 cm. and (27x27x7.5 cm.
The minaret of al-Madrasa al-Mirjāniya	Jalairid ?	(15x15x4 cm. (18.5x18.5x4.5-6 cm. (19x19x5.5-6 cm. (21x21x6 cm. (25x25x6 cm.
Khān Mirjān	Jalairid	22x22x5-6 m.

1. S.P. Seherr-Thoss, Design and Color in Islamic Architecture (Washington, 1968), p.23.
2. Cf. pls. 35-6, 44 and 97.
3. Cf. pls. 134, 144-5.

periods show that common horizontal bond, known locally as hal wa shad ("tie and untie"), was favoured. Vertical bond was also used, especially on minarets, to divide the ornamented zones as outer frames for historical inscriptions.[1] Eastern Iranian monuments which use brick in vertical bond for this purpose are the tower of Bahrāmshāh datable between 511/1117 and 544/1149, and that of Mas'ūd III dated 508/1114, both at Ghazna.[2] This technique, which is known locally as 'alē ghāza, was used for both the fabric and the architectural revetment of the monument.[3] This method of construction was first introduced into the Islamic architecture of Iraq in Kūfa at the Dār al-Imāra, especially in the construction of the west rectangular enclosure.[4] Hall 55, which goes back to the Umayyad period, demonstrates this bonding technique. The

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1. E.g. the minaret of al-Khaffāfīn, the minaret of Qumriya, Jisr Ḥarbā, Abbasid Palace, al-Madrasa al-Mustanṣiriya, the minaret of Sūq al-Ghazl, the minaret of Dhū'l-Kifl, the turba of al-Shaikh 'Umar al-Suhrawardī and al-Madrasa al-Mirjāniya.
2. See SPA, IV, pls. 355-7. The so-called tower of Maḥmūd has been shown to have been built under Bahrāmshāh and thus to be later than the second tower of the same type inscribed with the name of Mas'ūd III; see J. Sourdel-Thomine, "Deux minarets d'époque seljoukide en Afghanistan", Syria XXX (1953), p. 116 (apud Hill and Grabar, op.cit., p. 56). The purpose of these monuments is still unclear. They have been called minarets or towers of victory (see Hill and Grabar, op.cit., p. 56).
3. This is evident at the exposed part of the upper gallery of the minaret of Sūq al-Ghazl; see pl. 61.
4. Muṣṭafā, op.cit., p. 36, fig. 1.

bricks there are set upright on their edges in rows, one over the other.[1] This technique was also applied on a bastion of the Great Mosque of Samarra (pl. 2); here the vertical courses alternate with five horizontal courses, creating a simplified geometrical pattern. This may, however, be a later restoration. Apparently this technique of vertical setting combined with horizontal courses reinforces the fabric besides having a decorative effect.

Apart from the exterior shells of some later Abbasid, Ilkhanid and Jalairid domes, which are plastered,[2] the exterior brickwork façades of the Iraqi monuments of these periods are always left without plastering. As for the interior, the case is not always the same; it varies from one monument to another and even within a single building. Iwāns and musallās usually display ornamented façades, while cells and halls are always plastered.

A comparatively large size of brick (32 x 32 x 6 cm.) which is known locally as mātlī was employed in the pavement of the courtyards of some monuments.[3]

B. Stone

The monuments of the period under discussion show that stone was not so popular a building material as brick.

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1. Ibid.
2. Examples are the domes of al-Jāmi' al-Nūrī, al-Jāmi' al-Mujāhidī, Yaḥyā ibn al-Qāsim, Muḥammad al-Sakrān, all muqarnaṣ domes of the later Abbasid and Ilkhanid periods, and the dome of Mirjān.
3. Such as al-Madrasa al-Mirjāniya.

Its use was confined to Mosul and its surroundings. Thus, one may see stonework in the north and brickwork in the middle and the south of Iraq, each area having developed its own method and style.

Stone was used in two ways, either well dressed on the exterior or roughly arranged in the fabric of buildings. Two methods were used to work stone. The exposed face of each block was either cut smooth or was left rough in the middle and surrounded with a smooth edge. The latter method is known by the local masons of Mosul as qubbadār.[1] Examples of such stonework may be seen in the lower part of the river façade of the Qara Sarāy palace and in the walls of Bāshṭābiya, both in Mosul (pls. 16, 18). The smooth stone pieces were very accurately cut and fitted with five horizontal and rising joints, and were apparently laid on a thin mortar bed. The monuments of the Atābikid and the Ilkhanid periods in the north of Iraq show that well dressed stone was confined to the building of portals,[2] miḥrābs[3] and bridges.[4] Rough stone was employed in several Atābikid domed buildings, but most of them were constructed with brick.[5] In the case of rough stone

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1. This type of stone was popular in the pre-Islamic era, and was used in the walls of the Assyrian capital Nineveh (7th century B.C.). It was also used in ancient Syrian buildings (Butler, op.cit., p. 24).
2. Examples are the entrance portals of Mār Behnām, Bāb al-'Amādiya, Bāb Sinjār, al-Khān, Madfan al-Ja'farī and turba of Imām Bāhir (pls. 165, 169b, 170, 175 and fig. 51).
3. Examples are the miḥrābs of Jāmi' al-Nūrī, Sinjār and Panjā 'Alī (pls. 160a, 164, 166).
4. Examples are the bridges of Kisik Kuprū, Eskī-Mosul (Reitlinger, op.cit., figs. 2,5-7) and al-Jisr al-'Abbāsī at Zākhū (pl. 17a).
5. Those which are constructed with rough stone are the domes of Willāda, al-Sitt Zainab and Imām Bāhir ('Abbū, al-Qubāb al-'Abbāsiya, p. 194).

employed as a building material, plaster was used on both the interior and the exterior of the wall to conceal the inferiority of the building material.

C. Mortar

In most brick and stone buildings juṣṣ was the main type of mortar used for bonding the building material. A certain type of juṣṣ known as nūra was used in building the lower part of the minaret of Sūq al-Ghazl. A few examples of Iraqi monuments show that mud was used as mortar and in these buildings the walls were strengthened by their considerable thickness and were plastered with juṣṣ on both their exterior and interior.[1] In 1962 the I.D.G.A. excavated around the minaret of Arbīl (al-Muẓaffariya) and found that the foundation which belongs to the mosque was of bricks with mud used as mortar; thereafter brick with juṣṣ was used for the rest of the foundation.[2] It seems strange that mud was used for mortar in the crucial foundations of a mosque. Mud mortar is of course common in pre-Islamic structures in Iraq, but its use in the Saljuq period is unexpected.

D. Scaffold holes

Plugged and unplugged scaffold holes are apparent on exterior or interior surfaces of many earlier Iraqi monuments. In the early Abbasid period unplugged scaffold holes were left on both the exterior and the interior of al-Ukhaiḍir and Bāb al-'Āmma ("Jawsaq al-Khāqānī") at Samarra. In the later

1. Examples are the domes of Abū Ḥaṭab, 'Alī ibn Idrīs and al-Baqlī.
2. K. Ḥusain, op.cit., p. 206.

Abbasid period unplugged scaffold holes are to be seen on the minarets of al-Khaffāfīn and Qumriya.[1] In the Ilkhanid period the minaret of Sūq al-Ghazl and the turba of Imām Muḥammad al-Sakrān both display rows of such holes (pls. 49, 62). The scaffold holes are always square in profile and their dimensions range from 9 to 15 cm. square. In the periods under discussion scaffolding was an indispensable element in the erection of lofty ornamented monuments, serving, as Wilber has explained, the following purposes: as staging for passing up material; as a working platform for erecting complex elements such as wall arch heads and cornices; and as a platform for applying a decorative revetment to the fabric.[2] Unplugged scaffolding holes were also a common feature during the Ilkhanid period in Persia. An example may be seen in Imāmzāda Ja'far at Iṣfahān (c. 725/1325).[3]

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1. The minaret of al-Khaffāfīn has two rows of four unplugged scaffolding holes and there is a row of six of them measuring 15 x 15 cm. at the minaret of Qumriya. In both these cases they serve to admit light and ventilation (pls. 24, 26).
2. Wilber, op.cit., p. 54.
3. Ibid., pp. 161-2, pl. 144.

Section 2

Types and Styles of Monuments

Introduction

The buildings of the later Abbasid, Ilkhanid and Jalairid periods represent important and distinctive phases in the history of Islamic architecture in Iraq. Although in many cases they reflect the forms of earlier periods, they constitute as a whole one of the glories of Iraqi architecture. The monuments of this period, although belonging to more than one political era, are closely linked in features of plan and construction.

The existing monuments which belong to the 6th-8th/12th-14th centuries are mostly religious ones built by the ruling class and by important individuals as an act of piety. Their substantial structure and elaborate decoration reflect the material prosperity of their times. The surviving secular structures are few and are in a ruinous state compared to the religious ones.[1] Apart from scanty historical information very little is known about the plan and architectural detail of the elegant palaces of these periods. Apart from the ruins of the Qara Sarāy palace in Mosul they have long since vanished.

Monuments of religious character include the mosque, the madrasa, the turba and the zāwiya. Most of the religious monuments included in this work fall into one or another of these categories or display a combination of two of them. Secular structures include palaces, baths, orphanages,

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1. The cause was either their more perishable material or the vandalism associated with political upheavals.

qaisariyas, maristāns, caravanserais, khāns, city fortifications and bridges. Those which survive and belong to the period under discussion include the ruins of a palace, the remains of ruined caravanserais, a khān, city entrances and five bridges. The lack of material concerning the secular structures of Iraq does not allow a detailed discussion of them but only some general remarks.

A. Religious Architecture

1. Mosque

Two types of mosque existed in these periods. Those which were for ordinary prayer were known as masājid (plural of masjid), and were different in style and detail from the jawāmi'. The latter, which is the principle type, and hence is suitable for both Friday and daily prayers, were constructed according to an established plan and style and contained the conventional elements of minaret, miḥrāb and minbar. Masājid were smaller than jawāmi'. They were either built as isolated structures or as a part of another religious structure.[1] For example one may see a masjid, otherwise known as a muṣallā, established as a part of a madrasa, turba or zāwiya. In these types of structures the miḥrāb was a common feature, but to have minaret and minbar in them of course represents neither religious nor architectural necessity. Among the Iraqi monuments which belong to the

1. In Islam any suitable chamber, with or without miḥrāb, or any place, even in the desert, could become or be used as a masjid. The main necessity is that it should face Mecca.

later Abbasid, Ilkhanid and Jalairid periods the jāmi' is very poorly represented. Almost all the jawāmi' which belong to these periods have either vanished completely or have been entirely rebuilt during a later period. Elements of some of them such as minaret;[1] miḥrāb;[2] minbar;[3] door[4] or entrance[5] have survived to shed some light on the decorative style and the architectural composition of these mosques.

In Mosul two mosques of Saljuq date have survived with a fair amount of their original structure intact. They are Jāmi' al-Nūrī, built by Nūr al-Dīn Maḥmūd in the years 566-8/1170-2, and Jāmi' al-Mujāhidī, built by Mujāhid al-Dīn Qaymāz in the years 572-5/1176-9.[6] Unfortunately Jāmi' al-Nūrī was demolished in 1939-42. From the later Abbasid, Ilkhanid and Jalairid periods no complete jāmi' has survived. The surviving mosques are masājid, i.e.prayer halls, attached in three cases to madrasas[7] and in one case to a shrine complex.[8] Among these only one example, that is the masjid of al-Madrasa al-Mirjāniya, retained until quite recently a great many of its original

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1. Examples are the minarets of al-Nūrī, Arbīl, Sinjār, Dāqūq, al-Khaffāfīn, Qumriya and Sūq al-Ghazl.
2. E.g. the miḥrāb of al-Nūrī Mosque (pl. 160).
3. E.g. the minbar of the Great Mosque of al-'Amādiya (pl. 190).
4. E.g. the wooden door of the Great Mosque of al-'Amādiya (pl. 195).
5. E.g. the entrance of the Great Mosque of al-Kūfa (pl. 144).
6. For historical detail see supra, pp. 341-3.
7. In the Abbasid Palace (al-Madrasa al-Sharābiya of Baghdad), al-Madrasa al-Mustanṣiriya and al-Madrasa al-Mirjāniya.
8. The masjid of Dhū 'l-Kifl.

architectural and decorative elements. Apart from their ground plans and a few architectural elements the rest have either vanished or have been completely rebuilt during some recent period.[1] It is obvious that a situation such as this makes it impossible to trace in detail the development of the Iraqi mosque during these periods, although certain general remarks may be attempted.

During these periods the mosque was no longer the only cultic monument in the Islamic city. As a result of population expansion more than one Friday mosque was needed per city or in one part of the same city.[2] This in turn had its effect on the size of the mosque; it became smaller in size compared with those which were built in Iraq during the Umayyad[3] and early Abbasid periods.[4] These earlier mosques were characterized by certain architectural features which

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1. The masjid of the Abbasid Palace no longer exists, while that of al-Madrasa al-Mustanṣiriya was rebuilt by the I.D.G.A. according to its original plan but with a modern type of roof. The masjid of Dhū 'l-Kifl was largely restored during the Ottoman period.
2. According to Herzfeld, in the 6th/12th century the old rule was still strictly observed that no town could have more than one mosque for the celebration of the common Friday prayer and khuṭba. They all had countless masājid, small prayer halls, but no second masjid jāmi'. Seeming exceptions are the largest towns which had grown together from several separate townships ("Damascus IV", p. 120). In mediaeval times both Mosul and Baghdad had three Friday mosques.
3. Examples are the Great Mosque of Kūfa (EMA I, fig. 6) and the Great Mosque of Wāsiṭ (Safar, op.cit., fig. 5).
4. Examples are: Jāmi' al-Manṣūr in Baghdad, the Great Mosque (pl. 1) and the Mosque of Abū Dulaf at Samarra (pl. 3); see also EMA II, figs. 25, 205 and 223.

are no longer to be seen in the mosques of the following periods. These features are: the wide and deep rectangular prayer hall with extensions on three sides, all covered with a roof supported by numerous rows of columns or piers; an extensive open courtyard in the middle of the mosque; and a massive wall with bastions marking the outer limit of the mosque (pls. 2-3). The evidence accumulated from both Jāmi' al-Nūrī and Jāmi' al-Mujāhidī shows that the mosques of that period were built on a smaller scale and that the massive outer wall had disappeared. Essential features such as miḥrāb, minaret and open courtyard were retained. The main difference lies in the roofing system and the detail of the prayer hall in both mosques. The prayer hall, which was rectangular in shape, was preceded by a portico supported by a row of marble columns (pl. 20).[1] As the prayer hall became smaller the architect was stimulated to seek new ideas for roofing and for rearranging the components of the mosque. The prayer halls of these mosques continue the earlier emphasis on the miḥrāb axis, to which a greater width was allotted. The prayer hall was divided into parallel bays by means of columns perpendicular to the qibla. The square bay in front of the miḥrāb was roofed by a dome, while the lateral bays, which were narrower than that in the centre, were roofed with low domical vaults.[2] It seems that the idea of using a dome over the square bay of the miḥrāb was not used in the earlier mosques

1. The original marble bases of such columns remained until quite recently in front of the muṣallā of Jāmi' al-Nūrī.
2. See Reise III, fig. 88. For similar contemporary Anatolian and Syrian examples see "Damascus IV", figs. 12-13, 33.

of Iraq. It was however used in earlier mosques in western Islamic countries,[1] but in Iraq it was first used in Jāmi' al-Nūrī[2] and then appeared again in Jāmi' al-Mujāhidī (pl. 20).

During the Ilkhanid period the roofing system of the masjid at Dhū 'l-Kifl comprised rows of domical vaults resting on substantial piers to cover the miḥrāb bay as well as the lateral bays (fig. 24 and pl. 76). The prayer hall was entered by means of a single arched entrance (pl. 75). In the Jalairid period the prayer hall of al-Madrasa al-Mirjāniya shows that a single row of three domes carried over wide transverse arches was used in its roofing (fig. 27). The Jalairid architect made the middle dome which covers the miḥrāb bay larger than the lateral ones, probably to emphasise its importance.

A triple-arched entrance was used in the muṣallā of the Jalairid period, a feature already found in the muṣallā of al-Madrasa al-Mustanṣiriya.[3] The triple-arched façade is in fact a predominant feature of the Islamic architecture of Iraq and neighbouring countries.[4] In both religious and secular

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1. EMA I, fig. 57; II, figs. 143, 180.
2. Reise III, fig. 88; Jawāmi', pl. 9 and fig. 13.
3. Cf. figs. 15, 27.
4. The triple-arched scheme, as Herzfeld has pointed out, was probably derived from the Roman triple triumphal arch and the triple archways of colonnaded streets, which by that time had spread all over the Near East (Erster Vorläufiger Bericht, p. 34, apud EMA II, p. 89).

buildings it commonly comprises an iwān on one of the interior or exterior façades flanked by two chambers. In Iraq the first use of this architectural feature was at Hatra (first to second century A.D.).[1] In the early Abbasid period it was used in the baits of al-Ukhaiḍir (2nd/8th century), and it is the dominating feature of the Bāb al-'Āmma in the Jausaq al-Khāqānī at Samarra.[2] Façades of this type are also popular in madrasas, turbas and mosques in both Syria and Persia.[3]

The existing pieces of evidence show that the muṣallā of the mediaeval Iraqi mosque was carefully and sometimes lavishly decorated, as is the case in the muṣallā of Jāmi' al-Nūrī and the muṣallā of al-Madrasa al-Mirjāniya (pls. 115-22, 182). Similarly, the monumental street entrance of the mosque could be lavishly decorated, as is the case on the 8th/14th century entrance of the Great Mosque of al-Kūfa (pl. 144). Elaborate and lavish decoration was also given to the miḥrāb, minbar and the minaret of the mosques of these periods.

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1. EMA II, p. 89, also gives pre-Islamic Persian examples.
2. Ibid., figs. 60, 64 and 181.
3. Some examples of this triple-arched façade may be seen in al-Māristān al-Nūrī, al-Madrasa al-Nūriya al-Kubrā and Dār al-Ḥadīth al-Nūriya in Damascus; see Herzfeld, "Damascus I", figs. 1, 28 and 39. It also occurs in al-Madrasa al-'Ādiliya, Turbat Nabī Yūsha at Ma'arrat al-Nu'mān, al-Madrasa al-Rukniya and al-Māristān al-Qaimarī; see idem, "Damascus III", figs. 1, 6, 36 and 53. In Persia the same device was used for interior façades at the Masjid-i Jāmi' at Naṭanz and the Masjid-i Jāmi' of Ashtarjān near Iṣfahān; see Wilber, op.cit., pls. 55 and 93.

2. Minaret

In Iraq two words are used to denote minaret, namely ma'dhana and manāra.[1] The word sauma'a, which also means minaret in other Islamic countries, was not used in Iraq.[2]

Without exception all the minarets of Iraq which survive from these periods and earlier were built of brick, while in other parts of the Islamic world cut stone was used as well, especially in Syria.[3]

Generally the Iraqi minaret consists of four basic parts: the base (al-qā'ida), the shaft (al-badan), the gallery (al-ḥawḍ or al-shurfa)[4] and the continuation of the same shaft that stands in the middle of the gallery but is thinner and shorter and terminates with a rounded summit (al-sham'a - "the candle"). The evidence from the existing later Abbasid minarets in Baghdad, such as al-Khaffāfīn and Qumriya, shows that a minaret with such a basic design is standard. Nevertheless, earlier

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1. It is interesting to note that Persian minarets are often of considerable height and Persians sometimes use the term mīl for them instead of manara. On account of their height the Persian minarets are almost never used for the call to prayer. This is usually given from the roof of the mosque; see E. Diez, "Islamic architecture", SPA II, p. 928. In Iraq the gallery of the minaret is the common place for the call to prayer.
2. Sauma'a is a name given by the Arabs to hermit's tower. This name is used for all Syrian and North African minarets built before the 7th/13th century and having a square shape; see Creswell, EMA I, p. 39.
3. Herzfeld, "Damascus II", pp. 34-9, figs. 51-2.
4. From here the call to prayer is made.

and later Iraqi minarets, although they consist of these parts, also display variations in their bases, galleries, and other architectural details. The Ilkhanid period in Iraq, for example, produced for the first time the minaret with two galleries, as is shown by the minaret of Sūq al-Ghazl (pl. 68).[1]

As is the case in tomb towers, the plan which is used for the base of minarets is not uniform. In Iraq several minarets have survived from the early Abbasid, later Abbasid and Ilkhanid periods and these demonstrate the evolution of the plan from the square and octagonal to the dodecagonal. It will be shown below that although more than one plan was used for the base of the Iraqi minaret the octagonal plan became the commonest. During the later Abbasid period the minaret of Jāmi' al-Nūrī shows that the square plan was used for the bases of minarets (pl. 19). The minaret of Jāmi' Qumriya offers further evidence on this score (pl. 27). Both these two minarets in fact follow an earlier native model so far as the ground plan is concerned. Minarets of completely different shape were constructed over cubic bases as early as the 3rd/9th century. Examples include the spiral minarets of the Great Mosque[2] and the Abū Dulaf Mosque at Samarra (pls. 1, 3).[3]

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1. This particular feature became popular on the minarets of Iraq during the Ottoman period.
2. On this monument see Creswell, EMA II, pp. 254-65, figs. 202-212. Western scholars think that this mosque was built by al-Mutawakkil in 232/847; see for example ibid., p. 254; D.T. Rice, Islamic Art (London, 1965), p. 35. According to al-Arbilī it was built by al-Mu'taṣim during 221-7/836-42; see op.cit., p. 162.
3. On this monument see Creswell, EMA II, pp. 278-82, figs. 222-4.

The plan and the style of these minarets were introduced later on into Egypt by Aḥmad ibn Ṭūlūn.[1] In Persia the earliest type of minarets were constructed as towers on square bases; examples are the first minaret of the Tārik-Khāna mosque of Dāmghān, probably dating from the late 2nd/8th century, and the minaret of the Masjid-i-Jāmi' of Nā'īn.[2] It seems that in the plan of their bases all such early Iraqi and Persian minarets were in fact influenced by earlier Islamic minarets especially those which were built as square towers in Syria and North Africa.[3]

In Iraq, besides the cubic base which carried a cylindrical minaret, there was the octagonal type of base which was even more popular. Iraqi minarets of octagonal base carrying a cylindrical shaft are to be seen in 'Āna, Sinjār, Arbīl, Dāqūq and at Jāmi' al-Khaffāfīn in Baghdad, (pls. 15, 17, 21 and 24, fig. 11). In Persia contemporary minarets show that the Saljuq architects there were following basically the same tradition. Persian minarets of octagonal base and cylindrical shaft include the minaret of Jār Kurgān, probably

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1. An example is the spiral minaret of his mosque, known as Jāmi' Aḥmad ibn Ṭūlūn. On his monument see ibid., pp. 332-56, fig. 247.
2. Schroeder, op.cit., p. 1028.
3. Examples are to be seen at the Great Mosque in Damascus and the Mosque of al-Qairawān; see Creswell, EMA I, pp. 101-143, 325-29, figs. 57, 59 and 399 and pl. 38. For Jāmi' al-Qairawān and its minaret see also A. Fakrī, al-Masjid al-Jāmi' fī 'l-Qairawān (Cairo, 1939).

built towards the end of the 5th/11th or the beginning of the 6th/12th century,[1] the minaret of Gulpayagān datable to c. 494/1100, the minaret of Chihil Dukhtarān in Iṣfahān, dated 501/1107, and the minaret of Saribān, also in Isfahān, probably dating from the late 6th/12th century.[2] According to Schroeder, in Persia the round minaret - which was to become so characteristically Persian - seems to have made its appearance in the north-east long after the arrival of Islam.[3] No examples earlier than the 5th/11th century have been discovered.[4] Minarets at Sangbast, Dāmghān, Simnān and Kāshān appear under the Saljuqs in Persia, while the much heavier but more rapidly tapering variant which appeared in Turkistān is represented by the Qalyān minaret of Bukhārā and the minaret of Uzgand.[5]

As has been noted above, the earlier types of Syrian and Egyptian minarets were square towers, one at each corner of the mosque.[6] Thus, it is quite likely that the Saljuq minarets of both square and octagonal base surmounted by a cylindrical shaft are of eastern origin. The lack of dated and

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1. Schroeder, op.cit., p. 1027, fig. 363. This minaret has the conspicuous taper characteristic of the Turkistān minarets. This type of design obviously inspired the tower of Radkān East and the Quṭb Minār of Delhī (ibid.).
2. SPA IV, pls. 361a,b and 362a. In Persia minarets with octagonal bases continued to be popular during late 8th/14th century. An example is the pair of minarets of Iṣfahān known as Do Minār Dār al-Baṭṭīkh, see ibid., pl. 364; Wilber op.cit., p. 171, pl. 163.
3. Schroeder, op.cit., p. 1026.
4. Ibid.
5. Ibid., and p. 1029.
6. Creswell, EMA I, pp. 121-2.

even datable evidence makes it difficult to decide whether it is Iraq or Persia which should be credited with the invention of this type of minaret. But an Iraqi origin is suggested by two pre-Saljuq minarets in Iraq. One is known as Manārat Mūjda and is situated near 'Aṭshān midway between Ukhaiḍir and Kūfa;[1] the second is the minaret of 'Āna which was attributed by Herzfeld to the 'Uqailid period.[2] The earliest Persian minarets seem to have been, like those of western Islamic lands, square, at least in their lower stories, as is that of the Tārīk-Khāna mosque at Damghān and the minaret of the mosque at Sīrāf. Another example is the heavily restored minaret at Shustar which may partly be of early date. Its lower section is a massive stone tower, square and three stories high. It ends in a shaft of brick and faience tile datable to the Jalairid period.[3]

In Iraq during the Ilkhanid period a new dodecagonal plan was used in Baghdad for the base of the minaret of Sūq al-Ghazl. It seems that this was the first time that such a plan was used in the Islamic architecture of Iraq for the base of a minaret. It may thus be regarded as the final stage in the development of the design of bases for such religious monuments. It is noteworthy that in Persia this form was apparently not used for the bases of minarets, though it was used for the bases of several tomb towers such as that of Rādkān East (possibly

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1. EMA II, p.98, pl. 22. Creswell suggests that this minaret, which is 12 m. in height, must have been built after 159/775-6, the year of 'Īsā ibn Mūsā's retirement.
2. Reise II, pp. 319-21.
3. Schroeder, op.cit., p. 1026.

680/1281),[1] and at Kashmār (c. 700/1300).[2] A few other contemporary buildings in Persia, including the tomb of Ghāzān Khān, also display a completely dodecagonal plan. Probably these examples are not enough to establish any conclusion, but on the other hand it might be possible to suggest that this form of plan was sometimes used for religious monuments in the Ilkhanid period in both Iraq and Persia. The most likely conclusion to draw from the evidence of the surviving buildings is that the 12-sided plan originated in Iran; a Būyid example is the tower outside Rayy, and the same plan was used for the tower of Ma'mina Khātūn at Nakhchivān (582/1186).[3] But Iraq seems to have been the first area where this plan was used for a minaret.

Iraqi minarets which can be assigned with certainty to the Jalairid period no longer exist. But according to the evidence provided by the datable minarets of that period the conventional cylindrical form continued.[4] The only innovation which took place is that the minaret began to be integrated into the entrance portal of the mosque. This happened in Iraq for the first time in the entrance of the Great Mosque of al-Kūfa (pl. 143). The Jalairid architect was obviously imitating an architectural feature quite common in slightly

1. Wilber, op.cit., p. 116, fig. 11. This conclusion is only provisional, and may require revision in the light of future research, especially since 12-sided tomb towers are known and since minarets sometimes used the ground plans of mausolea.
2. Ibid., p. 120, fig. 16.
3. For a discussion of the 12-sided plan see R.Hillenbrand, The Tomb Towers of Iran to 1550 (unpublished D.Phil. thesis, Oxford, 1974), I, p. 266 and II, s.v. Catalogue nos. 18, 59, 67, 77, 80, 82, 114 and 120.
4. Examples are the minaret of al-Madrasa al-Mirjāniya, the minaret of the Great Mosque of al-Kūfa, the minaret of Jāmi' al-'Āqūlī and the minaret of Jāmi' al-Kawwāz.

earlier Saljuq religious monuments.[1]

Apart from the above-mentioned variations in the plan of the base, most Iraqi minarets are structurally more or less similar. Their cylindrical shaft terminates in most cases in a circular gallery[2] carried over one or more layers of muqarnaṣāt.[3] The architectural function of these muqarnaṣāt is to create the projection needed for the gallery. Apart from the minaret of Sūq al-Ghazl, which has two galleries, Iraqi minarets have only one gallery.

Apart from three examples (i.e. the minaret of Jāmi' al-Nūrī, the minaret of Arbīl and the minaret of Sūq al-Ghazl) all the mediaeval Iraqi minarets display a single spiral staircase rotating around a cylindrical brick core known locally as al-faḥal. The three exceptions have entrances leading directly to two stairs which also rotate spirally, but in different directions, around a cylindrical brick core. These stairs are so constructed that those ascending cannot meet those descending.[4] This is to facilitate movement inside the

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1. For discussion with example see supra, pp. 93-4.
2. An exception is the gallery of the minaret of Jāmi' al-Kawwāz at Baṣra which has an octagonal form (pl. 158a).
3. The layers of the muqarnaṣāt range from one at the minaret of Jāmi' Qumriya to five at the upper gallery of the minaret of Sūq al-Ghazl (cf. pls. 26 and 62).
4. Similar double staircases appear in the minarets of Samīrān (possibly 4th/10th century) and Jām (end of 6th/12th century).

comparatively narrow staircase passages.[1] The minarets were used not only for the call to prayer but also for watching for the appearance of the crescent moon at Ramaḍān, especially in the larger cities.

Iraqi minarets are usually topped with a roof similar to a small dome. This small dome in most cases has a smooth exterior with either a slightly or a sharply pointed profile.[2] In other cases it has a bulbous fluted exterior. The existing evidence shows that the latter type of minaret roofing began during the Ilkhanid and Jalairid periods.[3] Thereafter it became popular on most of the Ottoman and Safavid minarets of Iraq. At this period some of these fluted summits were revetted with either tiles of bright blue colour or with a thin layer of gold.[4] Such fluting on top of minarets can be traced back into the Saljuq period.[5] It is permissible to

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1. For other types of minaret staircases which still exist in other Islamic countries see J. Schacht, "Further notes on the staircase minaret", Ars Orientalis IV (1961), pp.137-141.
2. E.g. the minaret of Jāmi' al-Nūrī dated 568/1172 (pl. 19), the minaret of Jāmi' al-Khaffāfīn dated c. 599/1202 (pl. 24), the minaret of Jāmi' Qumriya dated 626/1228 (pl. 26), the minaret of Sūq al-Ghazl dated 678/1279 (pl. 62), the minaret of al-Madrasa al-Mirjāniya dated 760/1358 (pl. 96) and the minaret of Jāmi' al-Kawwāz (possibly end of 8th/14th century) (pl. 157b).
3. E.g. the minaret of the shrine complex of Dhū 'l-Kifl dated 716/1316 (pl. 69), the minaret of the Great Mosque at Kūfa dated in the second half of the 8th/14th century (pl. 143) and the minaret of Jāmi' al-'Āqūlī (possibly 8th/14th century) (pl. 109).
4. For examples see Bāqir, Baghdad, pls. 20-4, 26, 28.
5. An example is found on the minaret of the Great Mosque of Mārdīn in Asia Minor dated in 572/1176 (Hill and Grabar, op.cit., p. 68, pl. 404).

conclude that these two types of small minaret domes copied contemporary local Iraqi domes, but on a small scale.

As regards the position of the minaret in relation to the mosque, the existing evidence shows that the minaret stood at or near the north corner of the mosque. Examples are to be seen in the minarets of al-Khaffāfīn, Dhū 'l-Kifl and the Great Mosque of al-Kūfa. Persian minarets from the Ghaznavid to the end of the Saljuq period usually have the same position. According to Schroeder this rule was not followed in religious buildings which were not mosques.[1] Nevertheless, the adoption of this rule can also be seen in Iraq in two madrasas, one dated in the later Abbasid period,[2] and the second dated in the Jalairid period.[3] Finally a band of inscription which carries the name of the founder and the date was a common feature on Iraqi minarets dating from the Saljuq and Ilkhanid periods.[4]

3. Miḥrāb

Apart from a few examples which are still in situ,[5] most of the extant mediaeval Iraqi miḥrābs are now exhibited at the Iraqi museums in Baghdad.[6] It has been noted previously

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1. Op.cit., pp. 1028-9.
2. Al-Madrasa al-Sharābiya at Wāsiṭ.
3. Al-Madrasa al-Mirjāniya in Baghdad.
4. Examples are the minaret of Sinjār, the minaret of Sūq al-Ghazl and the minaret of Dhū 'l-Kifl (pls. 17, 67 and 73).
5. They are the miḥrābs of Imām Yaḥyā, 'Awn al-Dīn, Sitt Zainab, Muḥammad al-Sakrān, the two Ilkhanid miḥrābs of Nabī Yūnis and the miḥrāb of al-Sifīna in the courtyard of the Great Mosque of al-Kūfa.
6. See supra, p. 293, n.1.

that the mihrābs relating to those periods were executed in several media, such as stucco, brick and marble. The best preserved are those which were made of marble and were produced at Mosul; the material is quite plentiful in that area. It was easily carved. Because of the importance of the mihrāb as a single architectural element endowed with certain symbolic values, and because of its commanding position inside the muṣallā, extreme care was lavished on it. The examples of mihrābs previously discussed show that the mihrāb's surfaces were adorned with almost every known decorative element.

The Atābikid period produced the flat surface mihrāb known as musaṭṭaḥ, as well as the usual concave niched mihrāb (mujawwaf). The flat type was usually executed on a rectangular slab of marble. Examples of this type are the mihrābs of Imām 'Abd al-Raḥmān, Jāmi' al-Juwaichātī, and the tomb of Shaikh Fatḥī (pls. 161, 163 and fig. 43). These Atābikid mihrābs are characterised by bands of Kufic with a Qur'ānic text surrounding the central panel,[1] or a single band containing the shahāda at the top;[2] a pointed arch carried over a pair of decorative columns[3] or a lobed arch supported by a pair of twin columns of the same type;[4] an arabesque depicting a stylized tree of life filling the space within the arch and on its spandrel; and finally an interlaced geometrical pattern which develops a

1. Examples are the mihrābs of Imām 'Abd al-Raḥmān and the turba of Shaikh Fatḥī (pl. 161, fig. 43).
2. As is the case in the mihrāb of Jāmi' al-Juwaichātī (pl. 163).
3. An example is the mihrāb of Shaikh Fatḥī, fig. 43.
4. Examples are the mihrābs of Imām 'Abd al-Raḥmān and Jāmi' al-Juwaichātī.

star motif filling the central panel of the miḥrāb.[1] These arrangements give an idea of the standard flat Atābikid miḥrāb in its early stages. The later examples of this type of miḥrāb follow, to a greater or lesser extent, this basic pattern. The existing examples show that the flat type of marble miḥrābs continued to feature in Mosul at the end of the Atābikid period and during the later Jalairid period.[2] Nevertheless, certain developments occurred. Naskhī bands replaced the Kufic ones and were used to surround three sides of the miḥrāb; the qandīl motif became a predominant feature and replaced the interlaced geometrical pattern and the stars which developed from it; and finally the stylized type of arabesque was used with more emphasis.[3]

Herzfeld records that the local term for marble miḥrābs with lobed arches is muqandal (from qandīl meaning "lamp"), and thinks that this is because of the resemblance of such miḥrābs to a suspended lamp.[4] In fact this is probably not the case because the lobed arch is locally termed mufaṣṣaṣ, a

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1. Ibid.
2. Examples are the miḥrāb of Imām Yaḥyā (637/1239), the miḥrāb of Imām 'Awn al-Dīn (646/1248), the miḥrāb of Sitt Zainab (637-57/1239-50) (Reise II, p. 4) and the Jalairid miḥrāb at the Jāmi' al-Nabī Yūnis built by Jalāl al-Dīn Ibrāhīm al-Khatanī in 767/1365 (Jawāmi', pl. 25 facing page 96). The miḥrābs of Yaḥyā ibn al-Qāsim and 'Awn al-Dīn each comprise two rectangular slabs of marble meeting in a right angle at the corner of the turba. They are of a type known as a "corner mihrab"; see Reise IV, pl. 135.
3. Ibid.
4. "Damascus II", p. 62.

name derived from the Arabic word fuṣṣ which means "lobe". Muqandal in fact refers only to the groups of miḥrābs ornamented with a suspended qandīl. The religious significance of this motif as well as that of the star will be discussed below. The concave niched miḥrābs of the Atābikid period such as those of Jāmi' al-Nūrī and Jāmi' al-Mujāhidī accentuate the stylized arabesque motif. Moreover the miḥrāb of Jāmi' al-Nūrī uses naskh instead of the usual Kufic common on flat miḥrāb. It also has a unique serrated arch (pl. 160b). Apart from minor changes in the scheme of decoration of each individual miḥrāb the marble miḥrābs of Mosul of both flat and niched type have a more or less similar architectural composition and similar decorative motifs. It may be suggested that the sacred and symbolic character of the miḥrāb was probably responsible for a conscious conservatism. The similarity between the miḥrāb of Imām 'Abd al-Raḥmān and the miḥrāb of Jāmi' al-Juwaichātī, and the architectural composition of the niche of the miḥrābs of Sinjār, Panja 'Alī and Imām Bāhir all suggest the use of earlier models. Nevertheless, certain changes may be noted here also. The monumental Ilkhanid miḥrāb of Panja 'Alī, for example, shows a great emphasis on the use of the naskh bands which surround the niche (pl. 166). Arabesque is confined to the spandrel of the arch, a distinct arabesque band decorates the upper façade, and the qandīl motif continues to be more popular and replaces the symbolic star motif. Other flat miḥrābs have one qandīl in the middle of the niche, e.g. the miḥrābs of Yaḥyā ibn al-Qāsim, 'Awn al-Dīn and Nabī Yūnis. The miḥrāb of Panja 'Alī, which has three

qandīls, and the miḥrāb of Imām Bāhir, which has one qandīl, show that the niched type of miḥrāb in the Ilkhanid period also bore the qandīl, which was therefore not restricted to flat miḥrābs.

A prominent feature of the marble miḥrābs of Mosul is the qandīl.[1] This feature does not appear on Iraqi miḥrābs which are made of brick on plaster and date from earlier and later periods. The qandīl was of course used to illuminate mosques before electricity.[2] Introducing this motif into the ornaments of miḥrābs had, however, religious significance. It symbolized the light of the truth of Islamic dogma and has a connection with one of Allah's names. In this context the symbol of the star has also the same meaning. Both elements occur in Sūrat al-Nūr (XXIV), verse 35 as follows:

> "Allah is the Light of the heavens and the earth. The similitude of His light is as a niche wherein is a lamp. The lamp is in a glass. The glass is as it were a shining star. (This lamp is) kindled from a blessed tree, an olive neither of the East nor of the West, whose oil would almost glow forth (of itself) though no fire touched it. Light upon light, Allah

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1. In Persia qandīls also occur frequently in miḥrābs in the Yazd area such as two miḥrābs in the Masjid-i-Jami' at Abarqūh, another in the miḥrāb of the masjid at Bīdakhavīd and in the miḥrāb of the mosque at Ashkadhar (I. Afshār, Yādgārhā-yi Yazd [Teheran, 1969], pls. on pp. 517, 560, 592 and 593 respectively) and in the miḥrāb of Masjid-i-Mīr Chaqmāq (SPA, pl. 449). Another example occurs in the miḥrāb of Imāmzāda Yaḥyā at Varāmīn (formerly in the possession of Kevorkian); see SPA, pl. 402.
2. Examples of these glass lamps are to be seen in Ḥasan, op.cit., pp. 256-7, figs. 758-6.

guideth unto His light whom He will. And Allah speaketh to mankind in allegories, for Allah is Knower of all things".[1]

The lamp or qandīl placed in the miḥrāb accordingly symbolized the illumination of spiritual truth. One might even say that to some extent the niche was made for the qandīl.[2] Coomaraswamy has stated according to Dārā Shikūh that the exegesis of the set of terms which appeared in the above Qur'ānic verse is, that the niche represents the word, the light is the light of the Essence, the glass through which it shines is the human soul, the tree is the self of the truth and the oil is the timeless spirit.[3] The niche, which was interpreted by tafsīr scholars as symbolizing the world from the religious point of view, was itself also a dominant feature of Islamic architecture, both as the miḥrāb in almost every mosque and also as a virtually universal ornamental motif.[4] Niches with suspended lamps were also used to decorate the prayer rugs of Asia Minor during the 7th/13th century. There they have the same religious significance.[5] In this respect Lechler states that the prayer rugs were an especially meaningful symbol because during prayer the niche on the rugs pointed

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1. Pickthall, op.cit., p. 256.
2. A. Y. 'Alī, The Holy Qurān II (Lahore, 1934), pp. 907-8, puts the case still more strongly.
3. Dārā Shikūh, Mudjma' 'l-Baḥrain, Chapter 9, apud A.K. Coomaraswamy, "Note on the philosophy of Persian Art", Ars Islamica (XV-XVI) (1951), p. 127, n. 20.
4. Ibid.
5. Ḥasan, op.cit., p. 232, figs. 686, 688; O. Aslanapa, Turkish Arts, transl. by H. Kreider (Istanbul n.d.), pls. 11a, b and c.

towards Mecca, and the pointed shape of the niche reminded the worshipper of heaven.[1] It might be of interest to note that a special form of vase in the qandīl shape was noted on a fragment of a miḥrāb at Najaf (7th/14th century) by Aga Oglu.[2] Another golden vase in the shape of a lamp with no apparent religious value also appeared in Muslim paintings such as the Maqāmāt of al-Ḥarīrī in the Bibliothèque Nationale dated 619/1222.[3] It has been noted before that in one case the qandīl was carved on a marble sarcophagus, as is the case in the sarcophagus of 'Alī al-Hādī (pl. 173).

The star which appears on the marble miḥrābs of Mosul seems to carry the same religious meaning as does the qandīl, according to the Qur'ānic verse cited above.[4]

Three brick miḥrābs have survived in Iraq from the period under discussion. The first is the later Abbasid miḥrāb of Khān al-Khirnīnā, surviving but in poor condition (pl. 159). The second is the miḥrāb of Imām Muḥammad al-Sakrān which belongs to the Ilkhanid period (pl. 58). The third is the miḥrāb of al-Sifīna which belongs to the Jalairid period (pl. 152). All these three are of niched type and

1. G. Lechler, "The Tree of Life in Indo-European and Islamic Cultures", Ars Islamica IV (1937), p. 396, figs. 1-2.
2. Two fragments of this miḥrāb have survived, according to M. Aga Oglu, and both of them are attached separately to the wall of the mosque known popularly as the Jāmi' Zir Dālān or Jāmi' Sar which he says adjoins the Imām shrine; see "Fragments of a Thirteenth Century miḥrāb at Nedjef", Ars Islamica II (1935), pp. 128-31, fig. 1.
3. D.T. Rice, op.cit., p. 107, fig. 106.
4. To the Arab the star was a sacred object before the founding of Islam. Some pre-Islamic Arabs practised the star worship associated with the Sabaeans (E. Blochet, Musulman Painting tr. C.M. Binyon (London, 1929), p. 3).

have less ornament than the marble miḥrābs of Mosul.[1] The miḥrāb of Khān al-Khirnīnā seems to be decorated with the usual brick ornament of its time. The Ilkhanid example is completely plastered with juss. The only link between it and the earlier miḥrābs of Mosul is that its niche is surmounted by layers of hanging muqarnaṣāt executed in plaster. The arabesques in the spandrels of the niche of the Jalairid miḥrāb of al-Sifīnā form the only decoration. It seems, therefore, that Iraqi brick miḥrābs of these periods were markedly plainer than the marble miḥrābs, though the lack of monuments means that this can only be a tentative conclusion.

4. Turba

Turba is an Arabic name for a domed mausoleum. Other names such as qubba, marqad, mashhad, mazār, ḍarīḥ or maqām are popularly used at present to indicate the same type of building. During the early Saljuq period the term qubba, which means "dome", was used in the historical inscription of the mausoleum of Imām al-Dūr at Samarra.[2] This term was also

1. The miḥrāb of al-Sifīna has a niche with a rectangular section instead of the usual semi-circular one. The rectangular shape of this miḥrāb recalls the one which was discovered in the mosque of al-Ukhaiḍir. It seems that miḥrābs of rectangular instead of semi-circular plan were a distinctive feature of the Persian-Mesopotamian area in early times; examples are to be seen in the Tarīk Khāna at Dāmghān, the Great Mosque and the mosque of Abu Dūlaf at Samarra, and at Nā'īn (see EMA II, p. 76, fig. 64).
2. For this inscription see Herzfeld, "Damascus I", p. 19.

used by one authority in his historical account of an earlier mausoleum which no longer exists.[1] The term turba is commonly used by the authorities who recorded the later Abbasid mausolea which were built by caliphs.[2] During the Ilkhanid period the foundation inscriptions of two Iraqi mausolea show that a pair of terms were jointly used in each of them. The inscription of the mausoleum of Imām Muḥammad al-Sakrān displays the use of turba and qubba,[3] while that of 'Umar al-Suhrawardī shows the use of ḍarīḥ and marqad.[4] Other mediaeval Iraqi examples in Mosul are popularly termed mashhad[5] or maqām.[6]

It is not known when this type of structure was first built in Iraq. The oldest existing example is the Qubbat al-Ṣulaibiya at Samarra.[7] Judging by this substantial early Abbasid example one might suggest that it was based on earlier

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1. An example is Qubbat al-Barmakiya which was at 'Āna. It was built by the caliph al-Rashīd for the mother of al-Faḍl ibn Yaḥyā al-Barmakī who died in 186/802 in Wādī al-Qanāṭir on the Euphrates (al-Shābushtī, Abū 'l-Ḥasan 'Alī ibn Muḥammad, al-Diyārāt ed. G. 'Awād (Baghdad, 1966), p. 229).
2. Supra, pp. 12-24.
3. Supra, p. 110.
4. Supra, p. 155.
5. Such as Mashhad al-Imām Yaḥyā ibn al-Qāsim and Mashhad al-Imām 'Awn al-Dīn in Mosul.
6. Examples are Maqām al-Sitt Zainab at Sinjār and Maqām al-Imām Bāhir in Mosul. On the term mazār, which is also used in recent times for Maqām al-Sitt Zainab, see Van Berchem in Reise I, p. 11.
7. It was built for the caliph al-Muntaṣir who died in 248/862. For this building see Herzfeld, Reise, I, pp. 85-6; Creswell, EMA II, pp. 283-6.

Iraqi prototypes which no longer exist. The erection of a building over a tomb was of course discouraged by several ḥadīths.[1] Despite that, many of them were built in Iraq as well as in other Islamic countries. In Iraq during the periods under discussion turbas seem to have great importance; indeed, those which survive constitute the bulk of Iraqi monuments which belong to these periods. Most of the Iraqi turbas during these periods were built by caliphs or by other members of the ruling class, either for themselves, for close relatives or for saints or theologians.[2] In the Ilkhanid period, however, the existing evidence shows that the turba of Muḥammad al-Sakrān was built by his disciple Shaikh Khamīs in accordance with the will of the former. The turba of 'Umar al-Suhrawardī was completely rebuilt by one Muḥammad ibn al-Rashīd. Apart from the turba of Zumurud Khātūn (the so-called Sitt Zubaida), the rest of the existing turbas are either for the Shi'ite imāms or for Sunnite faqīhs. Thus, the majority of these turbas are held sacred by Iraqis. The Shi'ites attach still greater importance to them. For the majority of Shi'ites almost everywhere, the pilgrimage to Mecca and Madīna must be preceded by a special visit to the turbas of imāms in Iraq and Persia. This custom resulted in regular pious donations for the construction or repair of these turbas.

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1. For examples see al-Tirmidhī, Ṣaḥīḥ al-Tirmidhī (Cairo, 1931) IV, pp. 271, 273; Ibn Ḥanbal, Aḥmad ibn Muḥammad al-Shaibānī, al-Musnad ed. M. Shākir (Cairo, 1949-53), No. 2030.
2. It has been shown above that for political reasons Lū'lū', the ruler of Mosul, was very keen on building turbas in Mosul for the Shi'ite imāms.

The Iraqi turbas were built either as free-standing structures, or attached to a mosque, or as an integral part of a madrasa. However, the majority of the surviving Iraqi turbas are of the first type. A miḥrāb is a common feature in Iraqi turbas, especially those which are built as separate structures.[1] A miḥrāb in a turba means that the place can become a masjid for its visitors. This, in turn, means that the turba will have religious associations and that the deceased will be in the company of Allāh.

The existing evidence of the Iraqi turbas shows that two types of plan were favoured for mausolea and other domed chambers. They are the octagonal and the square plans.[2] Both were used during the periods in question with almost equal regularity. The octagonal plan was well developed in Samarra as early as the 3rd/9th century. The earliest octagonal plan for an Iraqi domed turba is to be seen at the mausoleum of al-Muntaṣir (died in 248/862) at Samarra, known as Qubbat al-Ṣulaibiya.[3] The Iraqi architects of the early Abbasid period applied such a plan to secular architecture as well. An octagonal dome was discovered in Samarra in room 18 at

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1. Examples of Iraqi turbas with miḥrābs are: Mashhad al-Arba'īn at Tikrīt, Qubbat Abū Ḥaṭab, Turbat 'Alī ibn Idrīs, Mashhad al-Shams, Qubbat Willāda, Mashhad al-Imām Yaḥyā, Mashhad al-Imām 'Awn al-Dīn, Sitt Zainab and Turbat al-Imām Muḥammad al-Sakrān.
2. An exception is the turba of Dhū 'l-Kifl which has a rectangular plan (fig. 24).
3. Types of octagonal plan were in fact popular in Christian religious architecture of pre-Islamic date; see A. Grabar, Martyrium I (Paris, 1946), figs. 15, 22, 25, 27 and 91.

house 4 excavated by the I.D.G.A.[1] Al-Qādisiya, a military camp also at Samarra (3rd/9th century), constitutes another perfect example. In Iraq in the Saljuq period the earliest existing turbas show the architect reverting to the square plan. This is demonstrated by three examples dating from the 5th/11th century.[2] Other existing turbas which belong to the later Abbasid, Ilkhanid and Jalairid periods demonstrate the continued popularity of the square plan.[3] Nevertheless, other contemporary turbas show that the octagonal plan was also quite common during these periods.[4] The recurrent use of square and octagonal plans for mausolea in Iraq and the absence of other polygonal types suggest that these two plans were the two most compatible with the actual needs and purposes of such a structure.

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1. This house stands near the vast parade-ground, at present known as Madaqq al-Ṭabul, about 450 m. from the Caliph's Palace. It is the largest yet discovered and the richest in decoration, from the point of view of both quantity and variety of design (see I.D.G.A., Excavation at Samarra I (Baghdad, 1940), pp.15-6, plan 4 on p. 21).
2. They are the muqarnaṣ dome of Imām al-Dūr (478/1085), Mashhad al-Arba'īn at Tikrīt (5th/11th century) and the dome of Umm al-Awlād in Ḥilla (5th/11th century).
3. Later Abbasid examples are the domes of Dāqūq, al-Ḥasan al-Baṣrī, al-Baqlī, Imām Bāhir, Imām 'Abd al-Raḥmān, Imām Yaḥyā, Imām 'Awn al-Dīn, Ibn al-Ḥanafiya. Ilkhanid examples are the domes of Dhū 'l-Kifl and 'Umar al-Suhrawardī; a Jalairid example is the turba of Mirjān.
4. Examples of turbas with octagonal plans are Najm al-Dīn and Awlād Sayyid Aḥmad al-Rifā'ī at Ḥadītha, Sitt Zubaida in Baghdad, Qubbat Willāda at Sinjār, Mashhad al-Shams at Ḥilla and Turbat Muḥammad al-Sakrān near Khān Banī Sa'ad, midway between Baghdad and Ba'qūba.

Apparently the situation in Iraq was similar to that in Persia, where during the 5th/11th and 6th/12th centuries Muslim architects were experimenting to discover the most suitable type of building to serve as a mausoleum.[1] In Persia domes with octagonal and square plans were popular during the Saljuq and Ilkhanid periods.[2] Other types of plan, such as circular and polygonal ones, were also used.[3] Some Turkish mausolea in Divrigi, Kayseri and Akhlāṭ display octagonal and dodecagonal plans,[4] while Syrian turbas generally have a square plan.[5]

Apart from one Ilkhanid example (i.e. Dhū 'l-Kifl) which has a rectangular plan the rest of the Iraqi turbas are either square or octagonal in their plans.[6]

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1. Hillenbrand, op.cit., p. 54.
2. For examples see ibid., fig. 1; Schroeder, op.cit., figs. 353, 359, 363; Wilber, op.cit., figs, 6, 9-11, 23-25, 31, 34-36, 46 and 48.
3. Wilber, op.cit., figs. 12, 21, 26 and 51.
4. A. Gabriel published two turbas with octagonal plans in Kayseri: Cifte Kümbed dated 645/1247 and Turbe 'Alī ibn Ja'far dated 750/1349. In the same town, the turbas known as Döner Kümbed (675/1276) and Sircali Kümbed (750/1349) display dodecagonal plans. Two turbas in Divrigi show another type of polygonal plan; see Gabriel, Monuments Turcs D'Anatolie (Paris, 1931-4) I, pp. 75-85, figs. 49-51, 53 and II, pls. 20-22, 25 and 74. At Ercis and Gevaş are a number of turbas dating from the 7th-8th/13th-14th centuries with similar plans; see B. Ünsal, Turkish Islamic Architecture (London, 1959), pp. 42-6 and figs. 19-21, 89-93; Hill and Grabar, op.cit., p. 71 and pls. 364, 391-395.
5. 'Abbū, Ayyūbid domed buildings, pp. 290, 294.
6. In Egyptian turbas the rectangular plan was more popularly employed (see Creswell, MAE I, p. 135).

Some Iraqi turbas, especially those built as a separate structure, are not entered directly but through a vestibule preceding the burial chamber. This tradition seems to have its roots in pre-Islamic times. Such an arrangement was used in the Sumerian temples in Iraq where the chamber of the goddess, the cella, was entered from another chamber called the ante-cella. The aim is most probably to create a sense of reverence and respect for the goddess.[1] During the Saljuq and Ilkhanid periods in Iraq, architects probably aimed to create the same effect when building domed mausolea with vestibules preceding the burial chamber for very distinguished personalities, such as monarchs and imāms.[2]

The domes which cover the Iraqi turbas built during these periods are not all of the same shape. It will be demonstrated shortly that a variety of domes were used for this purpose. The Iraqi turbas generally have inscribed panels and richly ornamented surfaces on both interior and exterior. Nevertheless, the quality as well as the quantity of the decoration differs from one turba to another.[3]

During the Ilkhanid period the Iraqi turbas, particularly those which were built entirely in brick, developed a

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1. H. Frankfort, The Art and Architecture of the Ancient Orient (Harmondsworth, 1954), pp. 52, 107, figs. 19, 23 and 42.
2. Examples are: Mashhad al-Arba'īn at Tikrīt, Sitt Zubaida in Baghdad, Imām 'Abd al-Raḥmān, Imām Bāhir, Imām Ibn al-Ḥanafiya in Mosul and turbat al-Imām Muḥammad al-Sakrān.
3. The turba of Imām Yaḥyā ibn al-Qāsim in Mosul being the most richly ornamented example among the existing Iraqi turbas.

distinctive monumental entrance façade comprising a high rectangular structure with a lofty pointed arch. This composition, duly ornamented and inscribed, was a characteristic feature of both earlier and later madrasas in Baghdad. Examples of turbas with such an entrance are the turba of Imām Muḥammad al-Sakrān and the turba of 'Umar al-Suhrawardī (pls. 52, 89).

As regards the turba as a part of a madrasa, one example survived until quite recently: the turba of Mirjān. It occupied the middle of the south-east side of the madrasa and was characterized by its square plan which had four internal axial recesses, a feature quite common in Syrian turbas, as noted before.[1]

5. Madrasa

Before the creation of the madrasa as a separate building for teaching, the mosque had an important function as an educational institution. Scholars in the religious sciences taught there and the professorial chair is referred to by the term ḥalqa or study circle.[2] The lessons were usually held near the pillars or the miḥrāb of the mosque. Some pillars kept the names of the professors even after their death.[3] In addition to the jāmi' there were other types of

1. The Ilkhanid turbas of Iraq of both octagonal and square plans also display such recesses. Examples are the turba of Muḥammad al-Sakrān, the turba of Dhū 'l-Kifl and the turba of 'Umar al-Suhrawardī (figs. 21, 24 and 25).
2. Maqdisī, op.cit., p. 4.
3. A. Fikrī, Masājid al-Qāhira wa-Madārisuhā II (Cairo, 1969), p. 144.

educational institution such as dār al-'ilm,[1] "the house of learning", dār al-ḥikma,[2] "the house of wisdom" and dār al-kutub,[3] "the house of books". These were like libraries or academic centres and none of them could be regarded as a full-scale madrasa. The madrasa as a definite structure seems to appear first at Nīshāpūr at the beginning of the 5th/11th century.[4] It has been shown before that it was the Saljuqid minister Niẓām al-Mulk who introduced the madrasa throughout the Saljuq empire. Many were built by him in Balkh, Nīshāpūr, Harāt, Iṣfahān, Marw, Baghdad, Baṣra and Mosul.[5]

It has been demonstrated that many madrasas were built in Iraq during the Saljuq, later Abbasid, Ilkhanid and Jalairid periods, yet very few of them have survived. The majority have completely vanished. The madrasas, or parts of madrasas, which have survived are al-Madrasa al-Sharābiya in Baghdad (the so-called Abbasid Palace); al-Madrasa al-Mustanṣiriya; a monumental entrance probably related to al-Madrasa al-Sharābiya

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1. An example is the house of learning which was established in Kūkh on the west side of Baghdad by the Buwayhid Wazīr Abū Naṣr Sābūr ibn Ardashīr in 383/933 (al-Muntaẓam, VII, p. 172).
2. Examples are the dār al-ḥikma of Baghdad built by al-Rashīd in 185/801 (Amīn, al-Madrasa al-Mustanṣiriya, p. 20) and the dār al-ḥikma at Cairo which was built by al-Ḥākim bi Amr Allāh in 395/1005 (al-Maqrīzī, al-Khiṭaṭ II (Cairo, 1853), p. 341.
3. An example is the dār al-kutub which was founded by the historian Muḥammad ibn Hilāl al-Ṣābī on the west side of Baghdad in 452/1060 (al-Muntaẓam VIII, p. 216).
4. Al-Maqrīzī, op.cit., II, p. 362.
5. Al-Subkī, 'Abd al-Wahhāb, Ṭabaqāt al-Shāfi'iya al-Kubrā III (Cairo, 1906), pp. 136-7.

of Wāsiṭ; and al-Madrasa al-Mirjāniya in Baghdad (mostly demolished between 1942 and 1948). Parts of some Atābikid madrasas have also survived, such as the dome of al-Madrasa al-Kamāliya and the miḥrāb of al-Madrasa al-'Izziya in Mosul.[1] The accumulated evidence from these remains shows that Iraqi madrasas were constructed with either square or rectangular plans. Other basic features are the monumental entrance façade, the open central courtyard around which are grouped the muṣallā with its triple-arched façade, an Īwān or Īwāns and a considerable number of cells in which students and professors could live.[2]

The origin of the plan of the madrasa, particularly the cruciform one, has long been a matter of controversy among western scholars.[3] The lack of early evidence in Iraq does not allow this area to shed light on this vexed question. Nevertheless one Iraqi madrasa with a cruciform plan has survived, i.e. al-Madrasa al-Mustanṣiriya, which has 4 Īwāns.[4] Herzfeld suggests that Persia was the source from which this plan was imported to Iraq. He says "when Niẓām al-Mulk put the Persian architects to the task of building his madrasas,

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1. Supra, p. 28, 301.
2. Herzfeld attaches great importance to the cells. According to him madrasas share all other features with mosques, ribāṭs and caravanserais, but this distinguishes them as a species within the larger genus. ("Damascus I", pp. 44-5).
3. For examples see K.A.C. Creswell, "The Origin of the Cruciform Plan of Cairene Madrasas", B.I.F.A.O. XXI (Cairo, 1922) pp. 1-54; idem, MAE II, pp. 104-33; Herzfeld, "Damascus II", pp. 13-16, and 29-30. For a different opinion see Fakrī, op.cit., II, pp. 125-40 and 167-92.
4. It is interesting to note that al-Madrasa al-Mustanṣiriya has in fact two true Īwāns lying on its longitudinal axis. The other two are not true Īwāns. One of them is an extension of the vaulted main entrance and the second constitutes the

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they had houses, caravanserais, ribāṭs, and māristāns. They made the indispensable alterations to adapt their plan to the different purpose of the new building. One must understand the Mustanṣiriya as a testimonial that, with the Niẓāmiya, the cruciform madrasa was important from Iran to Baghdad".[1] However, since al-Niẓāmiya no longer exists one cannot be sure about the number of its Īwāns. Moreover, the other two Iraqi madrasas - al-Sharābiya (the so-called Abbasid Palace) and al-Mirjāniya - were both built with one Īwān and therefore have no connection with the cruciform plan. Although an Īwān is one of the conventional features of the Iraqi madrasa, it seems that there was no connection between the number of madhhabs in a madrasa and the number of Īwāns that it contained.[2] Al-Mustanṣiriya, which is earlier in date, was endowed for four madhhabs and yet it has only two true Īwāns opening onto the courtyard. It seems that there is more connection between the plan of a madrasa and the weather than between it and the number of rites.[3] The only relation between the number of

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Contd.) middle arch of the triple-arched façade of this madrasa; see figs. 15-16 and pls. 38, 41a.

1. "Damascus II", p. 29.
2. Creswell propounds the theory that the number of rites affects the number of Īwāns that a madrasa contains (see MAE II, p. 121); Herzfeld rejects this (see his arguments in "Damascus II", pp. 14-15). On the same problem see also Fikrī, op.cit., II, pp. 177-82; he takes Herzfeld's view.
3. Herzfeld, "Damascus II", p. 15.

the madhhabs and the madrasas is explained as follows by a contemporary authority. In the case of al-Mustanṣiriya, which was built for the four madhhabs, Ibn al-Fuwaṭī states that it was divided into four separate quarters, each having lecture halls and sleeping cells which belonged to the followers of that particular madhhab.[1] Apart from that, all the students shared the prayer hall, library and other amenities of the building. In tracing back the origin of the Iraqi madrasa and the Timurid madrasa at Khargird in Persia, Herzfeld gives the palace of Fīrūzābād considerable importance as being the source of inspiration for these buildings.[2] The architectural disposition of this palace of Fīrūzābād was, he thinks, originally based on the Iranian peasant's house which seems to have been similar to Mesopotamian examples and consisted of an open room between two closed rooms on one side of a walled-in court, richer families having two such houses opposed on the same courtyard. The same group of rooms was repeated on the four sides of the courtyard, resulting in the cruciform plan which can be seen in mosques and madrasas in Persia.[3] An examination of the Iraqi madrasas shows that

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1. Al-Ḥawādith, p. 58. Al-Madāris al-Ṣāliḥiya in Cairo, built by al-Malik al-Ṣāliḥ Najm al-Dīn Ayyūb, was also divided into four quarters. In this al-Ṣāliḥiya was undoubtedly following the same system adopted in al-Mustanṣiriya, which was built in Baghdad 10 years earlier than al-Ṣāliḥiya (Fikrī, op.cit., II, pp. 60-61).
2. "Damascus I", p. 27; idem, Archaeological History of Iran, p. 98.
3. Idem, Archaeological History of Iran, p. 97. For a similar point of view see also E. Diez, "Islamic Architecture", in SPA II, p. 921.

the underlying concept of their plan is a large house or bait with an open courtyard surrounded by halls and cells. Indeed, among the Qur'ānic verses which are used for al-Madrasa al-Mirjāniya are some which include the term bait. It appears on the interior façade of the main entrance as a part of v. 61 of Sūrat al-Nūr and on the upper front of the muṣallā as part of v. 36 of the same Sūra.[1] In this case the term bait, which is similar to the term dār, does not mean an ordinary house but the house of knowledge, i.e. the madrasa. It is noteworthy that such a planning scheme, i.e. a house with an open courtyard, was discovered at many sites in Mesopotamia datable to pre-Islamic periods. Temples and palaces attributed to the Early Dynastic,[2] Akkadian,[3] New Sumerian[4] and Assyrian[5] periods were based more or less on the same idea.

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1. See infra, pp. 503, 506.
2. E.g. temple VII at Abū Shahrian and the White Temple at Warka; see Frankfort, op.cit., figs. 3-4.
3. E.g. the Gimilsin temple and the palace of the rulers of Eshnunna; ibid., fig. 19.
4. E.g. the Assur temple of the Isin Larsa period and a private house at Ur; ibid., figs. 20-21.
5. Ibid., figs. 27, 29 and 30. The example most strikingly similar to the plan of Iraqi madrasa is the plan of the Emah temple discovered at Babylon, datable to the New Babylonian period (circa 612-539 B.C.). It has an entrance flanked by two buttresses leading to a rectangular open courtyard surrounded by halls and cells of various sizes. Opposite the entrance is the chamber of the goddess which includes the cella and the ante-cella. This corresponds to the muṣallā which is the holiest place in the madrasa; see ibid., pp. 106-7, fig. 42.

Undoubtedly the persistent use of such a plan over such a long period proves the suitability of this plan for the Mesopotamian climate. The same plan with various modifications was used for the Dār al-Imāra at Kūfa,[1] Umayyad desert palaces[2] and for palaces of the Abbasids at Samarra.[3] In Iraq this old traditional Mesopotamian plan was used until quite recently for most houses.[4]

In Iraq the madrasa and the mosque seem to share several basic features. According to Fikrī the architects who planned madrasas usually applied the basic mosque plan apart from certain modifications created to meet the requirements of the madrasa.[5] The qibla wall in both the mosque and the madrasa is the longest and most important side of the plan.[6] It is the focal point to which all other parts of the plan are related. The two sides of the madrasa which are perpendicular to the qibla wall recall the two sides of the mosque which are known as mujanabatain and the Īwān when situated opposite the muṣallā[7] represents the rear portion of the mosque (mū'kharat al-jāmi').[8]

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1. See Muṣṭafā, op.cit., fig. 1.
2. For the plans of these palaces see H. Stern, "Notes sur l'Architecture des Châteaux Omeyyades" Ars Islamica XI-XII (1946), figs. 1-8.
3. Excavation at Samarra I, plans on pp. 19-21.
4. Krunic, op.cit., pp. 37-42, fig. 3.
5. Op.cit., II, pp. 183-192.
6. The importance of the qibla wall in the plan of the madrasa is suggested by Fikrī, ibid., p. 183.
7. Such is the case in al-Madrasa al-Sharābiya (the so-called Abbasid Palace) and al-Madrasa al-Mirjāniya.
8. Fikrī, op.cit., II, p. 96.

It might be suggested that the Īwān, with its open façade which makes it exposed to the weather, is not always suitable as a place for giving lectures or holding certain ceremonies, but it also serves as an additional space for prayer in times when the muṣallā is overcrowded.[1]

In Iraq and particularly in Baghdad the features of the surviving madrasas show great similarities in many respects. If one considers that the so-called Abbasid Palace indeed represents the earliest surviving Iraqi madrasa, one may conclude that the architects of both al-Mustanṣiriya and al-Mirjāniya clearly benefitted from this local experiment, not only as regards the plan but also in architecture and architectural revetments.[2] As has been shown before, al-Madrasa al-Marjāniya is alone among the surviving madrasas in containing the domed turba of its founder. Other features such

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1. Ibid., pp. 120, 181-2.
2. The similarity may be seen in the shape of the Īwāns, vaulting system, plan of muṣallās, shape of cells and halls, entrances, brickwork and brick ornamentation and system of ventilation. The system of ventilation in both al-Madrasa al-Sharābiya and al-Madrasa al-Mustanṣiriya is almost identical. It depends mainly on the use of high air shafts or, as they are called locally, bādgīrs, a word of Persian origin. These bādgīrs are built in the great halls and in the inner corridors and they are actually without windows. Such a system of ventilation is very well suited to Baghdad weather. This feature is to be seen in houses of the later Baghdadī style; see Krunic, op.cit., p. 41. According to Herzfeld these air shafts occur also in Syria, e.g. in the corridors of the Māristān Arghūn at Aleppo; according to him they are of Iranian origin. He thinks that they must have been used in the long corridors and many rooms of the harem of Persepolis ("Damascus I", p. 29).

as the monumental entrance - in some cases flanked by a pair of buttresses with minarets - appeared in the existing Saljuq and later Abbasid Iraqi madrasas.[1] It has been shown in relation to al-Madrasa al-Mirjāniya that the Iraqi madrasas display similarities with some Syrian examples, particularly in the plan, vaulting system and the triple-arched façade of the muṣallā.[2]

One may conclude that the Iraqi madrasa was a descendant of the mosque and other cultic buildings and came into being after long experience in this field not only in Iraq but in both Persia and Syria. Its origin as a house with an open courtyard as shown above can be traced back to the pre-Islamic periods in both Iraq and Persia. From the above discussion it is almost certain that the first full-scale Iraqi madrasa under governmental control was the Niẓāmiya of Baghdad which was built for the Shāfi'ites. However, it seems that after the death of Niẓām al-Mulk, and the return to power of the Caliphs in Baghdad, a new type of madrasa came into being which was at once a reversion to the earlier institution of the jāmi' and yet included the essential features of the madrasa. Al-Mustanṣiriya in fact represents an example of this development.[3] The fact that al-Mustanṣiriya contained the four large law schools representative of the four major Islamic madhhabs shows an

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1. E.g. al-Madrasa al-Sharābiya (the so-called Abbasid Palace), al-Madrasa al-Mustanṣiriya and the monumental entrance at Wāsiṭ (probably al-Madrasa al-Sharābiya of Wāsiṭ).
2. See supra, pp. 182-4.
3. Makdisī, op.cit., p. 55.

important step toward the social unity and religious reform in Baghdad attempted by al-Mustanṣir in 631/1233.

6. Zāwiya

The zāwiyas (Persian khānqāh) were Ṣūfī buildings.[1] Unfortunately in Iraq there no longer exists any building which can be identified with certainty as being a zāwiya. The term zāwiya is incidentally included in the inscription of the Ilkhanid turba of Muḥammad al-Sakrān,[2] but this does not necessarily mean that this turba was really a zāwiya. The only building included in this work which might be a zāwiya is the Sifīna in the courtyard of the Great Mosque of al-Kūfa which dates from the late 8th/14th century.[3] If this is so, it would mean that Iraqi zāwiyas which belong to this period may well have incorporated several architectural elements usually found in both the jāmi' and the madrasa.[4] These include the open courtyard, a suitable place with a miḥrāb to serve as a private masjid, and other chambers and niches for holding religious ceremonies.

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1. For the term zāwiya see EI[1] IV, pp. 1220-1.
2. See supra, p. 110.
3. See supra, pp. 256-73.
4. The Khānqāh al-Farāfra at Aleppo which dates from the Ayyūbid period shows in both its plan and construction almost the same features as those of a madrasa (see 'Abbū, Ayyūbid domed buildings, p. 289).

B. Secular Architecture

1. Palace

In Iraq, apart from the fragmentary remains of the palace of Lū'lū' in Mosul known as Qara Sarāy (pl. 16), no other palaces which belong to the periods in question remain.[1] Practically nothing is known about their plan, style of construction and architectural decoration. But it may be suggested that the palaces of these periods, particularly those which belonged to caliphs and sulṭāns, followed the same basic plan as was employed by the Abbasids in Samarra (3rd/9th century). Samarra palaces were either square or rectangular in their plan,[2] each built on an extensive piece of land and standing in a walled enclosure usually punctuated by circular or rectangular towers. A great number of halls and cells grouped around the central and interior courtyard, following the bīrī type of arrangement, was a common feature in these palaces.[3] It has been shown that some palaces of the later Abbasid caliphs in Baghdad were called al-Dār al-Muthammana[4]

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1. On this palace see Herzfeld, Reise II, pp. 239-49; III, pls. 94-97.
2. I.D.G.A., Excavation at Samarra I, plans on pp. 19-21 and plan facing p. 56; Creswell, EMA II, figs. 194, 214.
3. The bīrī type originated in Ḥīra during the Sasanian period. It became popular during the early Umayyad and early Abbasid periods in Iraq, Syria and Persia. A bait with such a plan has an Īwān situated in the middle. This is called al-ṣadr (the breast). The two rooms which flanked it are called al-kummain (the two sleeves). The part which is situated in front of al-kummain is called al-riwāq (Excavation at Samarra I, p. 10; see also Creswell, A short account, p. 147, fig. 28).
4. There were two palaces with this name, one built by al-Muṭī' and the second by al-Mustarshid (Jawād and Sūsa, op.cit., p. 147).

(the octagonal house) and al-Dār al-Murabba'a[1] (the square house). These names perhaps denote the shapes of their plans. It is evident from the accounts of the historical authorities that both banks of the river Tigris were favoured sites for erecting the palaces of the earlier and later Abbasid Caliphs of Baghdad. Moreover it was almost a rule at that time that these sumptuous places with their gardens and orchards were surrounded by a wall with several entrances. During the Saljuq and later Abbasid periods building of these palaces was confined to the eastern side of Baghdad near the river. They were known as Dūr al-Khilāfa.[2] These palaces extended about one thousand meters along the riverside and were surrounded by a semi-circular wall which started from the Tigris shore, not far from the south wall of al-Madrasa al-Mustanṣiriya, and extended to the south, ending again by the Tigris. It seems that the wall of Dār al-Khilāfa during the Saljuq and later Abbasid periods had eight bābs, presumably as monumental entrances.[3]

2. Khān

The khān or caravanserai was a necessary establishment on every commercial route and they were almost as old as commerce itself. In Iraq almost all the khāns which belong to the 6th-8th/12th-14th centuries have disappeared or have been very badly damaged. In the area north-west of Mosul

1. Built by al-Muṭī' (ibid.).
2. Ibid., p. 157. These palaces were: al-Ḥasanī, al-Firdūs, al-Tāj, al-Shājara, al-Muthammana and al-Murabba'a.
3. These bābs were: al-Ghurba, Sūq al-Tamr, Badr, al-Nūbī, al-'Āma, al-Naṣr, al-Bustān and al-Marātib (ibid., pp. 158-9).

the remains of a large stone building, enclosed by a substantial wall and datable to the 6th/12th century, were identified by G. Reitlinger as a fortified khān.[1] A portion of substantial brick wall with bastions is all that is left of Khān al-Khirnīnā midway between Tikrīt and Baijī, built by al-Mustanṣir (7th/13th century).[2] As regards Khān Mirjān (760/1358), it has been shown that it does not represent the conventional type of caravanserai. It was an enclosed and vaulted commercial centre built for a completely different purpose.[3] The rest of the surviving Iraqi khāns are attributed to the Safawid period. They are quite frequent along the route which connects Khānaqīn near the Persian border (on the Khurasān road) with Baghdad, Karbalā' and Najaf.[4] The purpose of building them, perhaps during the time of Shāh 'Abbās, was mainly to serve as resting places for the groups of visitors to the holy shrines at Karbalā' and Najaf. This was in addition to their usual function of receiving the normal commercial caravans.[5] Herzfeld

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1. Op.cit., pp. 143-4, pl. 1.
2. For the miḥrāb which survives from this khān see supra, pp. 297-8.
3. Supra, pp. 230-46.
4. E.g. Khān Banī Sa'ad which lies midway between Ba'qūba and Baghdad, and those which are situated along the route between Baghdad, Karbalā' and Najaf: Khān al-Yūsufiya, Khān al-Maḥmūdiya, Khān al-Iskandariya, Khān al-Nikhaila, Khān al-Nuṣṣ and Khān al-Rubu'.
5. The building of khāns was particularly encouraged by Shāh 'Abbās. According to Pope, in Persia numerous khāns from the time of Shāh 'Abbās remain, for very early in his reign he recognised that they were indispensable to prosperity ("Bridges, Fortifications and Caravanserais", SPA II, p.1246).

published the plans of two of them, one in Baghdad known as Khān al-Mashāhida and the second south of Baghdad known as Khān al-Maḥmūdiya (fig. 36).[1] These later Iraqi khāns are strikingly similar to the contemporary Persian ones.[2] The evidence accumulated from the above examples suggests that most caravanserais are situated on commercial routes between cities at distances of a day's journey apart, and that they must house large and unpredictable numbers of men and beasts with bulky loads. The main factors which decide the plan and the final shape of such a building are practical convenience and the need for security against raiders. In Iraq and Persia many of them are in fact built as true fortresses.[3] As a rule, khāns are walled with brick or stone and have a bastion at each corner and sometimes also midway along each wall. The gate is strongly made and is usually surmounted by a pavilion which in time of trouble shelters guards to defend it, and in times of peace provides spacious chambers for wealthy or important travellers.[4] The Iraqi khāns are usually rectangular[5] or square[6] and give the courtyard prominence. Internally and

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1. Reise II, pp. 199-200, figs. 223-4.
2. Examples are the caravanserai between Tabrīz and Sulṭāniya, the Chelesieh caravanserai, Rabāṭ-i-Sanchas and the Pāsangān caravanserai (SPA II, figs. 445-8).
3. In Iraq this is evident in the remains of the fortified khān north-west of Mosul and Khān al-Khirnīnā as well as in the later Iraqī khāns.
4. Pope, SPA II, p. 1247.
5. Such as the fortified khān north-west of Mosul (Reitlinger, op.cit., loc.cit.), and most of the later khāns.
6. It seems that in building Iraqi khāns the square plan was favoured even in the pre-Saljuq period. This is evident in the plan of 'Aṭshān, a khān midway between al-Ukhaiḍr and Kūfa (Creswell, EMA II, p. 91, fig. 79). Later khāns with a perfect square plan are Khān al-Mashāhida and Khān al-Maḥmūdiya (Herzfeld, Reise II, figs. 223, 224).

externally, therefore, the architect had to design four elevations focusing on a common centre. In general the architect used a solution which seems almost as old as the problem itself: the four-Īwān plan. This plan, which was adopted in the khāns of both Iraq and Persia, had already been developed in Parthian palaces and probably earlier; how much earlier it is impossible to say.[1] Such a plan provides symmetry and focal emphasis and can be adapted to the practical needs of a khān quite as readily as to those of a mosque or madrasa. Judging by the later Iraqi khāns which presumably follow the earlier prototypes, it seems that the main concern of the architect in planning khāns is to solve the problem of housing animals and facilitating their loading as well as housing great numbers of people. Apparently this was solved by building a series of concentric units. The units within the peripheral wall are for the animals; they are cut off from the rest of the interior by a wall that is pierced only by a few controlled openings.[2] As for the sections for human habitation, these are always above the level of the court, from about 2 to 5 feet, to prevent the animals from gaining access, and probably also to facilitate their loading.[3]

1. Herzfeld, Archaeological History of Iran, p. 98.
2. See Herzfeld, Reise II, figs. 223-4.
3. At the middle of the courtyard, and up to the same height, a square platform is usually erected to serve as a masjid. The plan of Khān al-Mashāhida (fig. 36) shows four such platforms, one of which has a mihrāb. According to Pope some Persian caravanserais even include a bath and sometimes kitchens and other amenities; for further details see SPA II, pp. 1249-51.

3. Bridge

In Iraq the bridge (jisr or qanṭara) is again very poorly represented among the monuments which belong to the 6th-8th/12th-14th centuries. Presumably there were many bridges and viaducts spanning the Tigris and Euphrates and their secondary streams and canals. Historians have reported the building of some of them as early as the Umayyad period.[1] Others which no longer exist were built across the Tigris in Baghdad by the later Abbasid Caliphs.[2] But in spite of this, very few remain from these periods. The scarcity of Iraqi bridges is probably due to the fact that they were exposed to severe weather conditions, and because, in addition to the damage caused constantly by the rivers themselves, they suffered from heavy use. Another cause is the fact that when the river changed its course the bridges soon fell into disuse, were neglected and gradually disappeared. The Iraqi bridges in the northern part of Iraq which survive from these periods are: Kisik Kuprū and Eskī Mosul (both north-west of Mosul),[3] and the so-called al-Jisr al'Abbāsī at Zākhū on the upper Zāb near the Iraqi-Turkish border (pl. 17a), all datable to the

1. According to al-Balādhurī (op.cit., p. 252), Ziyād ibn Abīhī had founded a bridge at Kūfa renewed by Ibn Hubaira in 103/721 and restored by Khālid al-Qasrī in 105/723. Another qanṭara was also founded in Kūfa by Ibn Hubaira. However the exact position of these two bridges is unknown. According to Herzfeld the bridge which is to be seen on the lower Zāb at Altynköprü dates from the 3rd/9th century (see Reise II, pp. 322-26, fig. 306).
2. Supra, p. 19.
3. For these two bridges see Reitlinger, op.cit., pp.144, 146-7, figs. 2, 5-7.

Saljuq period.[1] From the later 'Abbasid period, one example at Samarra has survived in good repair, known as Qanṭarat Ḥarbā, built by al-Mustanṣir in 629/1228 (pls. 12-13). Another example is Qanṭarat Kirī Si'da datable to the late 8th/14th or early 9th/15th century (pl. 153).[2] As regards the building material these bridges fall into two categories. Those erected in the northern part of Iraq have their lower parts built of massive oblong blocks of limestone, while rough stone set in mortar is used for their upper part. The Samarra and Kūfa bridges are built of brick alone. As in almost every brick structure in Iraq which belongs to these periods, the brick bridges were also decorated with brick ornamentation and sometimes with bands of brick inscriptions. An example of this is provided by Qanṭarat Ḥarbā. The name of the architect with the date is sometimes carved on the stone bridge.[3] Almost all surviving Iraqi bridges display one lofty wide arch either set alone[4] or flanked by two smaller ones. These arches carry the roadway which slopes gradually on both sides. An exception is Qanṭarat Ḥarbā which has a levelled roadway and thus is constructed on arches of almost the same size. It is a rule in this respect that the width of the

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1. Supra, p. 279.
2. Supra, pp. 280-1.
3. Reitlinger, op.cit., loc.cit.
4. Examples are the bridges of Kisik Kuprū, Eskī-Mosul and Kirī Si'da.

stream below the bridge always decided the length of the span and subsequently determined the number and the size of the arches required.

Mediaeval parallels to the Iraqi stone bridges and particularly to the so-called al-Jisr al-'Abbāsī are still to be seen in Asia Minor[1] and Persia.[2] These, with the Iraqi examples, are evidence of a splendid system of roads and bridges which was developed all over the Saljuq empire during the 6th-7th/12th-13th centuries. A unique architectural feature in Iraqi bridges, that is the erection of four solid cylindrical towers over the four corners of the span, is presented by the bridge of Kirī Si'da (pl. 153). It has been suggested before that apart from giving support and balance to the span they seem to serve no other architectural function.

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1. Hill and Grabar, op.cit., pls. 387, 390.
2. SPA IV, pls. 261a,b.

Section 3

Types and Style of Architectural Elements

A. Arches

The monuments included in this work display various types of both architectural and decorative arches. They can be classified as follows:

1. The pointed arch

It is not known for sure in what part of the Eastern world, or when, this type of arch was first invented. During the pre-Islamic period, examples, though on a small scale, are found in both Egypt and Mesopotamia. No true pointed arch is known in Sasanian times, although along the top of the Taq-i Kisra façade there is an arcade of pointed arches. According to Pope, "they are not true pointed arches structurally, as they are composed of a few large bricks joined at slight angles to one another, so that the continuous transmission of thrust in the curved line, which is the essence of the pointed arch, is lacking."[1] It seems that the earliest true pointed arch which has survived from the pre-Islamic period is that of the church at Qaṣr ibn Wardān in Syria (561 A.D.).[2] At any rate, the pointed arch seems to be

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1. See "Possible Iranian Contributions to the Beginning of Gothic Architecture", Beiträge Zur Kunstgeschichte Asiens ed. O. Aslanapa (Istanbul, 1963), pp. 19-20 (hereinafter cited as "Possible Iranian Contributions").
2. See Creswell, EMA I, p. 280, n. 8. Pope, basing himself on Prof. Shapiro, has pointed out that this is a brick structure and must therefore be regarded as intrusive in Syria, since this was a stone building region. He also suggests that this form was introduced from the brick architecture of the east, i.e. Iraq and Persia ("Possible Iranian Contributions", p. 20).

the most predominant type of arch in the Islamic architecture of Iraq and the neighbouring countries. During the period under discussion the pointed arch plays a great role and its structural utility was fully exploited in the construction of the vaults and openings of Iraqi buildings. It is known among the local masons as al-daura and is found in two forms, struck either from two or from four centres.[1] The four-centred arch is normal in all periods of Islamic architecture in Iraq and it is also much used in Persia. It is known there as ʿajamānī or ʿajamāna, after ʿAjam, the mediaeval name for western Iran.[2] It seems that the four-centred arch was born in Iraq and took its early steps of evolution in Iraq and Persia.[3] A pointed arch struck from four centres is first experimented with at the Baghdad Gate at Raqqa dated 156/772,[4] then in al-Ukhaiḍir

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1. In the first case it is produced by two curves, each with a radius equal to the span and meeting in a point at the top (The Penguin Dictionary of Architecture, p. 15). In the second case the arch is constructed from segments struck from four centres. This arch is high-crowned, its height being greater than half its span (Wilber, op.cit., p. 68, diagram A).
2. Ibid.
3. In the pre-Islamic periods two kinds of arches prevailed, the semi-circular and the elliptical. These were popular in Iraq, Persia and Syria (Butler, op.cit., p. 25). It is now impossible to trace the origin of either of them, but in the case of the pointed arch the earliest existing evidence points to Iraq as being the homeland of this arch.
4. Creswell, EMA II, p. 43, fig. 29.

c. 161/778, and thereafter at Samarra (3rd/9th century). Basing himself on the Raqqa arch, Creswell supports an Iraqi origin and rejects the idea that the pointed arch spread from Persia through Mesopotamia to the Mediterranean. He also concludes that from the 3rd/9th century this type of arch becomes typical of Iraq, and that from the 4th/10th century it becomes typical of Persia.[1] According to Herzfeld, the pointed arch existed during the earliest period of Islam though its predominance was not yet decided in the middle of the 3rd/9th century. For example, the Great Mosque of Abū Dulaf (246/860), has round-headed, semi-circular arches throughout, but the Jausaq al-Khāqānī (221/836) and Qaṣr al-'Āshiq built between 260-5/873-78 both have pointed arches.[2] He also suggests that this type of pointed arch in brick is derived from the Iranian elliptic arch in pebble and mortar.[3]

1. Ibid. A different point of view is given by Pope, who believes that the earliest true pointed arches so far identified in Persia proper are in the Tarik Khāna of Dāmghān, which according to him should be dated about 143/760. Pope further noted that the pointed arches there are slightly pointed, having been struck from two points just a little way apart; see "Possible Iranian Contributions", p. 20. Perhaps the earliest Persian arches struck from four centres are those at the Great Mosque of Shīrāz in the remains of the original arch of the mihrāb with stucco ornament on its soffit (c. 262/875) and at a mausoleum in Sangbast (perhaps early 11th century) [SPA IV, pls. 259a and b, 260a, b and c].
2. "Damascus III", p. 68.
3. Ibid. It is more plausible to conclude that these arches were developed from local prototypes. The elliptic arch has been used in Iraq since the Sumerian and Assyrian periods and its existence is not confined to Persia.

Herzfeld further concluded that the term "pointed arch" should only be used when it is executed in stone; and this, according to him, happened principally in Syria among the provinces of Islam.[1]

The Iraqi monuments which belong to the 6th-8th/12th-14th centuries display pointed arches struck from two and from four centres. The first type is commonly found on niches of miḥrābs,[2] doorways of cells,[3] entrances of minarets[4] and niches inside some turbas.[5] The second type is usual in the construction of Īwāns,[6] bridges,[7] arches of vaults,[8] triple-

1. Ibid.
2. Examples are: the miḥrāb of Khān al-Khirnīnā, the miḥrāb of Panja 'Alī, the miḥrāb of Imām Bāhir and the miḥrāb of Imām Muḥammad al-Sakrān (pls. 58, 159, 166 and 172).
3. Examples are: the cella of al-Madrasa al-Sharābiya (the so-called Abbasid Palace), al-Madrasa al-Mustanṣiriya, al-Madrasa al-Mirjāniya and Khān Mirjān (pls. 28, 41a, 105 and 138).
4. Examples are the minaret of Sūq al-Ghazl and the minaret of al-Madrasa al-Mirjāniya (pls. 62, 96).
5. Examples are the niches inside the turba of Imām Muḥammad al-Sakrān and the turba of Dhū 'l-Kifl (pls. 59, 81a).
6. Examples are the Īwāns of Iraqi madrasas, the inner Īwāns of al-Bāb al-Wasṭānī in Baghdad and the Īwāns of al-Sifīna in the courtyard of the Great Mosque of al-Kūfa (pls. 29, 38, 127, 148 and fig. 3).
7. Examples are the bridges of the so-called al-Jisr al-'Abbāsī, Ṣarbā and Kirī Si'da (pls. 12, 17a and 153).
8. Examples are the arches of the turba of Dhū 'l-Kifl and its adjacent chamber, the great transverse arches of the muṣallā of al-Madrasa al-Mirjāniya and those of Khān Mirjān (pls. 76, 79, 115 and 138).

arched entrances[1] and some mihrābs[2] and doorways.[3] This type of arch is commonly found in the construction of the large and lofty arched recess which usually surmounts the arched doorway of Iraqi madrasas and turbas and acts as a frame for the main historical inscription.[4] The popularity of this type of arched recess on Iraqi monuments which date from the 6th/12th to 8th/14th centuries suggests that it probably originated in Iraq during the Saljuq period. It continued to be used during the Ilkhanid and later periods.

A unique style of pointed arch with serrated profile is used twice for the mihrāb of al-Nūrī mosque in Mosul (pl. 160) and arches with elongated crowns were apparently used during the Ilkhanid period for both constructional and decorative purposes.[5]

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1. Examples are the triple-arched entrances of the musallās of al-Madrasa al-Mustanṣiriya and those of al-Madrasa al-Mirjāniya (pls. 38, 43 and 110).
2. Examples are the mihrāb of Sinjār, the mihrāb of Jāmi' al-Mujāhidī, the mihrāb of Mashhad 'Alī at 'Āna, the mihrāb of al-Madrasa al-Mirjāniya and the mihrāb of al-Sifīna (pls. 119, 152, 164 and 187).
3. Examples are the doorways of almost all Iraqi religious and secular buildings, particularly those with a monumental entrance façade (pls. 36, 44, 49 and 98).
4. Examples are to be seen on the entrances of al-Madrasa al-Mustanṣiriya, the monumental entrance at Wāsiṭ, the turba of Imām Muḥammad al-Sakrān, the turba of 'Umar al-Suhrawardī, al-Madrasa al-Mirjāniya and Khān Mirjān.
5. Examples are to be seen at the muqarnaṣāt zone of the turba of Imām Muḥammad al-Sakrān and at the base of the minaret of Sūq al-Ghazl (pls. 56, 64).

2. The segmental arch

This type of arch is known locally as al-madanī. It appears with great frequency in the architecture of Iraq dating from the later Abbasid to the Jalairid period. It is much used in the rooms and halls of al-Madrasa al-Sharābiya of Baghdad and appears without exception in the vaults of every student cell in al-Madrasa al-Mustanṣiriya as well as in the vault of its kitchen. It seems that the architects of the Saljuq period in Iraq first introduced this type of arch for decorative purposes. It appears among other ornamental devices executed in plaster in both Mashhad or 'Imārat al-Arba'īn at Tikrīt and Imām Dūr (fig. 1) to the north of Samarra (5th/11th century).[1] The existing evidence shows that its use for the construction of vaults was only developed during the later Abbasid period. Thereafter the popularity of the segmental arch for vaults and decorative recesses increased. In Iraq it became a predominant type of arch during the Ilkhanid and the Jalairid periods.[2] In Persia the segmental arch was also infrequent during the Saljuq period but was quite popular in Mongol architecture. An elaborate decorative variant of this type of arch occurs in the plaster decoration on the interior walls of the Masjid-i 'Alī Shāh at Tabrīz (710-20/1310-20). Other examples of this type of arch are to be seen in the screen wall on the shrine of Pīr-i-Bakrān at Linjān, in the vaults of the Īwān below the shaking minarets at Garladān

1. See Herzfeld, Reise I, figs. 110-11 and 120.
2. Examples are to be seen in the turbas of Imām Muḥammad al-Sakrān, Dhū 'l-Kifl and 'Umar al-Suhrawardī, al-Madrasa al-Mirjāniya, Khān Mirjān and al-Sifīna at Kūfa (pls. 56a, 83a, 91, 133b and 140).

and in the wall arcades upon the exterior of the mausoleum of Uljāitū at Sulṭāniya.[1]

In Iraq the pointed segmental arch was not used in construction but was confined to interior plaster decoration during the Saljuq period.[2] In Persia too it is not very common. According to Schroeder this type of arch when used for construction purposes confers an appearance of inflexible rigidity on the building, thus rendering it with a certain kind of severe energy.[3]

3. The lobed arch

During the periods under discussion, the lobed arch (al-mufaṣṣaṣ) was mainly employed for decorative purposes. Elaborate variants of lobed arches are to be seen on marble miḥrābs and doorways which were made in Mosul during the 6th-7th/12th-13th centuries (pls. 160, 161, 163-5 and 170), and decorative niches with a trilobed arch were extremely popular for framing some marble miḥrābs and doorways.[4] A decorative type of lobed arch composed of seven lobes joined together to form a rather stilted apex was a characteristic feature of some

1. See Wilber, op.cit., p. 69, diagrams E, F, G, and H , pls. 27, 69 and 71.
2. Herzfeld, Reise I, figs. 110-11 and 120.
3. Op.cit., in SPA II, p. 987.
4. Examples are the miḥrāb of al-Nūrī mosque, the miḥrāb of Sinjār, the doorway of Mār Behnām, the doorway of Imām ʿAwn al-Dīn (Reise III, pl. 8) and the doorway of Imām Bāhir. The same motif is also employed, but on a larger scale, on the sarcophagus of Imām ʿAlī al-Hādī (pl. 174).

Atābikid miḥrābs.[1] These arches are usually employed to act as frames for an arabesque motif and in some cases for human figures. The lobed arch with its decorative variants was in fact based on earlier prototypes, found not only in Iraq but also in other western Islamic countries. Such arches occur frequently in early Abbasid art and architecture. Herzfeld thought that they might have been inherited from Sasanian models.[2] In Iraqi Islamic architecture the earliest existing structural lobed arch is found in al-Ukhaiḍir crowning the entrance which leads to the mosque of the palace.[3] It is composed of seven lobes, each lobe representing a semi-circle. Creswell claimed that this arch treated in exactly the same way occurs in the vault of Ṭāq-i-Kisrā at Ctesiphon.[4]

1. Examples are the miḥrāb of Imām ʿAbd al-Raḥmān and the miḥrāb of Jāmiʿ al-Juwaichātī (pl. 161, 163). It is interesting to note that almost identical lobed arches are used as part of the marble decoration of the Christian Atābikid monastery near Mosul known as Mār Yaʿqūb (see Reise III, pls. 104 and 105).
2. Herzfeld, "Damascus II", p. 61. Several examples of decorative lobed arches occur on wooden objects dating from the 2nd/8th century, such as a carved teakwood panel, found at Tikrīt, now in the Metropolitan Museum of Art, a panel found in the cemetery of ʿAin al-Ṣira, now in the Museum of Islamic Art at Cairo, and a panel from the minbar of the Great Mosque of al-Qairawān (Dimand, op.cit., figs. 5-7).
3. Creswell, EMA II, fig. 59, pl. 19b. Contemporary lobed arches are those at the upper façade of the Baghdad Gate at Raqqa (Reise III, pl. 65).
4. According to Creswell the lobed arch of Ṭāq-i-Kisrā was executed as follows: "The vault is formed of four rings of brickwork about a metre and a half deep; the bricks are placed face outwards, and above this part is a deep ring of brickwork built in the ordinary way. After the vault was completed its outer face was carved so as to form a kind of foil and cusp ornament"; (EMA II, p. 90, fig. 78).

Comparison between this arch and that of al-Ukhaiḍir will clearly show that the latter is more geometrical and displays a higher standard in both the design and execution.[1] Lobed arches continued to be favoured during the 3rd/9th century at Samarra. A single multi-lobed arch occurs in the Great mosque at Samarra; originally there were probably more.[2] Other examples occur in the Jāmi' of Abū Dulaf.[3] The upper part of the main façade of Qaṣr al-'Āshiq at Samarra is also decorated with rectangular recesses topped with lobed arches.[4] The evidence shows that from the 4th/10th century onward this type of arch became purely decorative and was executed in various media, such as brick, stucco, and marble. Elaborate examples of this arch occur on the minaret of 'Āna, Imām al-Dūr, Mashhad al-Arba'īn at Tikrīt, the turba of Awlād al-Sayyid Aḥmad at Ḥadītha[5] and the stucco of al-Nūrī mosque.[6] In the minaret of 'Āna the decorative lobed arches are executed in brick; the lobed arches of the other buildings are of plaster.

It has been shown previously that the lobed arch was very frequently used on the marble objects of Mosul. Outside Iraq several elaborate examples of this type of arch executed in dressed stone later evolved in Syrian and Egyptian

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1. Cf. EMA II, figs. 59 and 78.
2. Herzfeld, "Damascus I", fig. 78.
3. Idem, Reise I, fig. 28; Creswell, EMA II, pl. 66d.
4. Herzfeld, Reise I, figs. 31 and 32. On this building see ibid., pp. 78-83.
5. Ibid., figs. 111, 120; II, figs. 301, 303.
6. See pl. 182.

architecture of the Ayyūbid period.[1] These examples, together with the other lobed decorative arches on marble and stucco objects of Mosul which date from the 6th-7th/12th-13th centuries, undoubtedly demonstrate the popularity of this type of arch in the architecture and the architectural ornamentation of these periods.[2]

4. The semi-circular arch

During the periods under discussion this type of arch was not so common in the construction of openings as were the other ones above mentioned. Its use was confined to the windows of some buildings in Baghdad. The windows of the upper river façade of al-Madrasa al-Mustanṣiriya are all topped with semi-circular arches (pl. 37). During the Jalairid period the two windows of the room for the nāẓir of al-Madrasa al-Mirjāniya were also topped with the same type of arch (pls. 97, 106). During the period under discussion, the semi-circular arch is more frequent in the construction of vaults. In

1. For Syrian examples see Herzfeld, "Damascus II", p. 50, fig. 20. Egyptian examples occur in Mashhad al-Imām al-Shāfi'ī dated 608/1211, in the dome of the Abbasid Caliphs datable to 640/1242, in the minaret of Zāwiyat al-Hunūd datable to the 7th/13th century and in al-Madāris al-Ṣāliḥiya dated 641/1243; see Fikrī, op.cit., II, pp. 33, 38, 44 and 80, pls. 10, 12-14, 20 and 25-30.
2. Other types of multi-lobed arches were developed in North Africa and Spain from the 4th/10th century onward (e.g. in the Great Mosque of Cordoba as reconstructed by al-Ḥakam II 961-76; see D. Sourdel and J. Sourdel-Thomine, La Civilisation de l'Islam Classique (Paris, 1968), fig. 59).

section the tunnel vaults and the barrel vaults of the later Abbasid and Jalairid monuments have of course a semi-circular profile. This is evident at al-Madrasa al-Sharābiya (the so-called Abbasid Palace), al-Madrasa al-Mustanṣiriya, al-Madrasa al-Mirjāniya, Khān Mirjān and al-Sifīna at Kūfa. The Īwāns of these buildings, although faced with pointed arches, all have semi-circular vaults.

5. The depressed arch

This type of arch is in fact a segment of an arch in full curve. Its use was confined to the construction of certain openings, such as the doorways of the minaret of Qumriya, the minaret of Dhū 'l-Kifl and al-Sifīna (pls. 26, 69 and 149a). During the Atābikid period this type of arch was used to reduce the weight from the lintels of some marble doorways which were built by means of joggled voussoirs. This technique will be considered below.

6. The flat arch

This type of arch was confined to the construction of lintels of several Atābikid marble doorways in Mosul.[1] These arches were executed by means of three or more (up to seven)

1. Examples are: the doorway of Imām 'Awn al-Dīn (Reise III, pl. 8), the doorway of Madfan al-Ja'farī at the turba of Imām 'Awn al-Dīn (pl. 169b), the doorway of Mār Behnām (pl. 165), the doorway of Mār Aḥūdh--Immī (Reise II, fig. 281), the doorway of the turba of Imām Bāhir (pl. 170), the doorway of Khiḍr Ilias (Hartner, op.cit., fig. 27) and the two doorways of the Chaldean church at Jazīrat ibn 'Umar (Hartner, op.cit., figs. 24-5).

complete joggled voussoirs flanked by two half-voussoirs.[1] The number of courses was decided by the width of the doorway itself. The elaborate joints of these voussoirs always produced ornamental designs, and in most cases the joggled voussoirs themselves had ornamental surfaces. In Islamic doorways the ornament is confined to the arabesque design or the arabesque alternating with pious names,[2] while in Christian doorways, apart from the middle voussoir which bears the symbol of Christ, the voussoirs are either left plain (pl. 165) or ornamented with seated and mounted religious figures.[3] It may be said that in addition to the architectural value of joggled voussoirs in forming the flat arch or the lintel of the doorway from several pieces of marble instead of one piece, they were also used for decorative purposes. In most cases the Iraqi lintels are topped with a depressed arch. It has been mentioned that this feature was introduced to reduce the thrust on the lintel. The depressed arch either appears with a smooth profile as on the doorway of Mār Behnām (pl. 165) or with a decorative one as on the doorways of 'Awn al-Dīn, al-Ja'farī, Mār Aḥūdh-Immī and Imām Bāhir.

A unique artistic feature associated with joggled voussoirs in Iraq occurs on the lintels of two Atābikid doorways. From the lintels of both Madfan al-Ja'farī and Mār Aḥūdh-Immī hang two identical marble ornamental devices set at equal intervals. They could be termed stalactites, consoles or

1. Cf. pls. 165, 169b and 170.
2. Examples are the doorways of Imām 'Awn al-Dīn (Reise III, pl. 8), the doorway of Madfan al-Ja'farī and the doorway of Imām Bāhir.
3. As is the case in the doorway of Mār Aḥūdh-Immī in Mosul (fig. 50).

brackets. Together with the horizontal line of each lintel, these devices produce three segmental arches of al-madanī type (pl. 169b and fig. 50).[1]

The technique of joggled voussoirs is only suitable for marble and similar material, a fact which explains its rarity among the brick buildings of Baghdad. The only example in Baghdad was the stone arch of Bāb al-Ṭilism, which was pointed. In this case the architect supported the arch not by means of brick supports, but by a pair of stone piers and columns to ensure a firmer foundation for the arch (pl. 6).

The flat arch with joggled voussoirs was known to the architects of the pre-Islamic period.[2] But it seems that this technique played an important role during the Islamic period.[3] An earlier Islamic example is that discovered at Qaṣr al-Ḥair

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1. It is perhaps even possible that these ornamental devices have a symbolic religious value, and that the three spaces which they create refer, in this Shi'ite building, to the well-known religious formula known as al-thālūth al-muqaddas, the sacred trio of Allāh, Muḥammad and 'Alī. It may be that the appearance of this same motif in the entrance of Mār Aḥūdh-Immī (see fig. 50) where the central cross can be paralleled by the word al-raḥīm in the corresponding part of the Shi'ite doorway is intended as a reference to the Trinity.
2. Pre-Islamic flat arches with joggled voussoirs may be seen at the Roman theatre in Orange and in the entrance of the Church of the Nativity at Bethlehem (Creswell, EMA I, figs. 417 and 421; see also Fikrī, al-Madkhal, p. 35, figs. 6a, b).
3. According to Creswell joggled voussoirs, although rare before the Islamic period, are found scattered over a very wide area extending from Spain to the Euphrates (Creswell, EMA I, p. 343, figs. 417-21).

al-Sharqī built by Hishām ibn 'Abd al-Malik in 110/728.[1] Thereafter it spread to other Islamic countries. The existing evidence shows that this technique reached its peak in Iraq during the 6th-7th/12th-13th centuries when the voussoirs appear with fine design and rich ornamentation. Joggled voussoirs are also popular on Ayyūbid and Mamlūk monuments.[2]

7. Five shouldered arch

This type of arch was mainly used for decorative purposes. It appears with a very elongated apex, making it an exaggerated trilobed arch. It appears in this form on the zone of transition of the dome of Muḥammad al-Sakrān, dated 667/1268 (pl. 56), on the base of the minaret of Sūq al-Ghazl, dated 678/1279 (pl. 64), at the base of the zone of transition in the tomb of 'Umar al-Suhrawardī, dated 735/1334 (here its elongated apex was converted to a window [pl. 91]), and on the muqarnaṣāt on the intrados of the great transverse arch of the muṣallā of al-Madrasa al-Mirjāniya, dated 758/1356 (pl. 121b).

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1. Fikrī, al-Madkhal, loc.cit. On this building see Creswell, EMA I, pp. 330-43. Creswell holds that the joggled voussoirs of Qaṣr al-Ḥair are directly derived from Ruṣāfa, which is only a little over forty miles away (op.cit., p.344).
2. For examples see 'Abbū, Ayyūbid domed buildings, figs. 84, 126, 250 and 419; Fikrī, al-Madkhal, fig. 7.

B. Vaults

The early history of vaulting is still a matter of dispute. In Mesopotamia, for example, vaults were used as early as the Sumerian period. In Iraq, during the period under discussion, vaults were used for Īwāns,[1] halls and chambers of varied dimensions. New forms and fresh methods were introduced. The existing evidence shows that Iraqi vaults during 6th-8th/12th-14th centuries may be classified into the following major categories:

1. The barrel vault

This type of vault has been dominant throughout the history of Iraqi architecture. The most impressive pre-Islamic example existing is that of Ṭāq-i-Kisrā at Ctesiphon. It represents the most monumental development of this form which is known.[2] In Hatra, where the monuments are dated from the 1st to the 2nd centuries B.C., barrel vaults were very

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1. According to E. Diez the word Īwān or ivān is Persian and can be used for an enclosed hall, but in Islamic architecture it always means a space, whether portal or hall, which is fully or partially enclosed on two or three sides, and thus well adapted to the climate of the Orient. They were built as early as the Achaemenid period; see Diez, "Islamic architecture", SPA II, pp. 918-9.
2. The vault of Ṭāq-i-Kisrā is the biggest and highest of its kind in the ancient world. It forms a part of a great Sasanian palace known during the Abbasid period as the White Palace or "Chosroe's Īwān". With the exception of the vault the walls of this palace have disappeared leaving only some mounds. The surviving section of the vault is a fine brick-work structure; its height is about 30 m., its span is 25.5 m., its length is about 48 m. and the width of the wall is 7 m. (F. Baṣmachī, A historical note on Ctesiphon (Baghdad, 1964), p. 3).

popular. However, excavation has shown that earlier examples of the barrel vault were common in the buildings of the Assyrian capitals, such as Nineveh, Khursabād, Nimrūd and Assūr.[1]

The barrel or tunnel vault requires buttressing to ground the thrust, which is dispersed all along the wall beneath.[2] Such a vault could easily be built without centering and without intermediary cross arches by a device which was familiar as early as the Sasanian period. "The rear wall of the Īwān or the chamber having been built up to its full height, the first and then all the succeeding courses of the barrel vault were inclined toward the wall so that the bricks, laid on their thin edges, had less tendency to slip out of place during the setting of each complete ring of the vault."[3]

In Iraq this type of barrel vault was largely adopted during the 6th-8th/12th-14th centuries, particularly in roofing the monumental Īwāns of the Iraqi madrasas. The inner surfaces of the vaults of these Īwāns were given a variety of brick ornamentation. Elaborate examples of these Īwāns survive in al-Madrasa al-Sharābiya (the so-called Abbasid Palace), al-Madrasa al-Mustanṣiriya and al-Madrasa al-Mirjāniya (pls. 30, 41a, 126b).[4] Tunnel vaults and barrel vaults of segmental

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1. Creswell, EMA I, p. 305.
2. See The Penguin Dictionary of Architecture, pp. 232-33.
3. Wilber, op.cit., p. 58.
4. It has been argued that the Īwān of al-Madrasa al-Mirjāniya was also embellished with brick ornamentation; see supra, p. 205.

and semi-circular sections are also evident in the roofs of cells, corridors, and entrances of most of the monuments which belong to the periods under discussion. This type of vault was also very much favoured in the construction of Iraqi bridges (pls. 12, 17a, 155a).

The outer surfaces of the barrel vault were in most cases exposed to the weather, so some protection from the elements was secured by plastering the exposed outer shell with a mixture of mud and straw, juss, or with a revetment of bricks laid flat.

The continuous barrel vault does, however, have certain disadvantages. No large openings can be pierced in the sides of the vault without endangering its stability and its unbroken surfaces tend to be monotonous. To overcome the problem of bad lighting, particularly when more than one opening was needed, a more sophisticated variant of barrel vault was developed in Baghdad in the 6th/12th century and continued to be used in the 8th/14th century. The vault of the rather long and narrow vestibule which separates the great halls from the student cells in al-Madrasa al-Sharābiya (the so-called Abbasid Palace), and al-Madrasa al-Mustanṣiriya has been divided into bays by transverse arches (pl. 40). The vault in each case is carried over vertical walls built over these arches. These arches together with the side walls bear the thrust of the vault and provide it with substantial support. Enough light and ventilation has been secured through openings pierced in the vault itself without affecting its strength and stability. This scheme reached its full development in Iraq in the 8th/

14th century and was used on a large and more sophisticated scale in the vault of Khān Mirjān, when it is called the transverse vault. This type of vault has been dealt with in detail above.[1]

2. The domical vault

The monuments included in this thesis show that this type of vault was used to roof either square or polygonal chambers. Apart from the domical vault which covers the octagonal chamber of Bāb al-Wasṭānī (fig. 3) the surviving examples were erected over square bays and chambers.

Almost all the Iraqi domical vaults which belong to the Saljuq period have vanished. But judging by Persian examples it seems that Saljuq architects replaced the barrel vaults of their predecessors by a variety of domical types.[2]

The comparatively few Iraqi domical vaults which exist belong to the Ilkhanid and Jalairid periods. The vaulting system of the Ilkhanid mosque of Dhū 'l-Kifl displays areas of piers crowned by a domical vault resting on pendentives of decorative diamond shapes. Each vault has a lantern for light and ventilation (pls. 76-8). Domical vaults, domical

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1. See supra, pp. 238-43.
2. According to Wilber the list of Saljuq and Ilkhanid vaults in Iran is indeed impressive and includes groin vaults, cloister vaults, vaults on groined squinches, vaults on reticulated squinches, vaults on triangular false pendentives, vaults displaying systems of interlacing armatures, domical vaults, domical lantern vaults, saucer domes and flat vaults (op.cit., p. 59). In Iraq the lack of evidence does not permit one to tabulate such a list though parallels for all these types may once have existed.

lantern vaults and saucer domes are all used for the roofing system of al-Madrasa al-Mirjāniya. It has been shown before that the musallā of this madrasa was covered by three domical vaults resting on pendentives, supported by two great transverse arches (pls. 96, 111, 115). At the entrances of al-Madrasa al-Mirjāniya and Khān Mirjān, and in the two compartments of al-Sifīna at al-Kūfa, a type of saucer or flattish domical vault known locally as al-ṣīnniya was employed. The vaults in these three cases are constructed with very fine brickwork and carried over four confronted arches (pl. 150 and figs. 27, 31, 37).

3. The stalactite vault

This extremely impressive type of brick vault was already in use in Iraq during the Saljuq period. Unfortunately only one example survives, that in al-Madrasa al-Sharābiya of Baghdad (pls. 31-2). This vault, with its elaborate muqarnaṣāt which encircle the courtyard of the madrasa, is a good document of the vaulting technique which developed in Iraq during the 6th/12th century.[1] The skill and the high standard of this stalactite vault combined with its architectural and decorative value place it among the outstanding architectural achievements of the Saljuq period in Iraq. Similar types of stalactite vault, but on a lesser scale, were also used to

1. According to Herzfeld the muqarnaṣāt of this vault are genuine vaults, mostly planned like the dome of Zumurud Khātūn (Sitt Zubaida), and their rich arabesque decoration is the model for the plaster arabesques in some of the turbas of Damascus; see "Damascus I", p. 29.

surmount the niches of some Atābikid and Ilkhanid Iraqi mihrābs (pls. 58, 164, 166 and 172).

The same device, but on a larger and more complex scale, is used in the vault of the entrance of Māristān al-Nūrī in Damascus.[1] The Iraqi muqarnas vaults which roof square and octagonal chambers will be treated below as true domes.[2]

In al-Madrasa al-Sharābiya of Baghdad a unique example of the flat vault also occurs. It roofs the Īwān of the mābain[3] and is supported by three layers of corbelled muqarnasāt. The inner surface of the vault as well as the supporting muqarnasāt are decorated with lavish brick ornamentation of high quality. The roof of the mābain itself also has a flat surface and it too is embellished with a similar elaborate type of brick ornamentation (pl. 33). According to Herzfeld the flat vaults of this building reveal great virtuosity in vaulting, and their style became important in Baghdad during later periods.[4]

C. Domes

The earliest dome genuinely resting on a square base occurs in Persia in Fīrūzābād; it has been dated by Reuther around 226 A.D.[5] Other Persian examples exist in Sarvistān,

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1. Herzfeld, "Damascus I", fig. 3 and pl. 43. For more detail on muqarnas see infra, pp. 448-51.
2. Infra, pp. 441-4.
3. For a definition, see supra, p. 65.
4. "Damascus I", p. 29.
5. O. Reuther, "Sasanian Architecture" in SPA I, p. 534.

dated in the 5th century A.D., and in Qaṣr-i-Shīrīn datable between 590 and 628 A.D.[1] Pre-Islamic domes existed at Ḥīra, but these have vanished.[2] During the Islamic period the dome played an important role and it was a definite symbol of civil and spiritual authority. A foundation of a dome was discovered in 1938 at the Dār al-Imāra at al-Kūfa.[3] The Palace of al-Ḥajjāj at Wāsiṭ (83-4/702-3) was famous for its green dome.[4] At the Round City of Baghdad, completed in 149/766, the central building of the palace of al-Manṣūr was also crowned by a green dome which rose above the hall of royal audience to a height of 100 feet.[5] In the later Abbasid period, the Caliph sometimes received the oath of allegiance from his subjects under the principal dome of his palace.[6] These earlier and later examples undoubtedly emphasized the role of the domed building in housing spiritual and temporal power.

From the Abbasid and Mongol periods in Iraq many domes have survived intact and in comparatively good condition.[7] None

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1. Ibid., pp. 537, 539.
2. These domes roofed Christian monasteries; see al-Shābushtī, op.cit., pp. 236 and 241. In Syria there are still several pre-Islamic domed monuments, such as the Cathedral of St. George at Zur'a (515 A.D.), the tomb of Bizzoz datable to the 6th A.D. (H.C. Butler, op.cit., p. 227, 412).
3. See Muṣṭafā, op.cit., pp. 4, 30-1, fig. 1.
4. Safar, op.cit., p. 2.
5. Herzfeld, Reise II, figs. 182-3; G. le Strange, Baghdad during the Abbasid Caliphate (Oxford, 1924), p. 31.
6. G. le Strange, op.cit., pp. 260-1.
7. Namely at al-Ukhaiḍir, Imām Dūr, Zumurud Khātūn(the so-called Ṣitt Zubaida), Mashhad al-Shams, Mār Behnām (two examples), Jāmi' al-Nūrī (demolished in 1942), Jāmi' al-Mujāhidī, al-Madrasa al-Kamāliya, Willāda, Yaḥyā ibn al-Qāsim, 'Awn al-

(Contd.

of them can be dated earlier than that of al-Ukhaiḍir. Like Īwāns these domes represent a major space form which gives the Iraqi monuments their impressive and monumental character. The varied forms and styles of these domes illustrate the development of this architectural feature.

During the period under discussion the dome in Iraq was employed largely in roofing mausolea. These domed mausolea in almost all cases appear as separate structures. Judging by the existing evidence it seems that the dome was not very much favoured in Baghdadi madrasas and that the barrel vault, cross vault and domical vault were commonly used instead. There is one exception in Baghdad, where a true dome was used to top the turba of Mirjān which is a part of al-Madrasa al-Mirjāniya itself. The three domes of the muṣallā of al-Madrasa al-Mirjāniya are in fact not true domes but domical vaults carried over triangular pendentives. One example survives at Mosul in al-Madrasa al-Kamāliya where the dome roofed the central part of its muṣallā (fig. 9). During the Atābikid period the dome was also used to cover the central part of the muṣallā of the jāmi' such as the dome of Jāmi' al-Mujāhidī (pl. 20). Another example survived until quite recently in Jāmi' al-Nūrī

Contd.) Dīn, Sitt Zainab, Dāqūq, al-Ḥasan al-Baṣrī, Najm al-Dīn (on these buildings see Herzfeld, Reise, passim; 'Abbū, al-Qubāb al-'Abbāsiya, passim), Imām Muḥammad al-Sakrān (supra, pp. 96-112), Imām Bāhir (supra, p. 315), Dhū 'l-Kifl (supra, pp. 126-49), 'Umar al-Suhrawardī (supra, pp. 150-62), al-Madrasa al-Mirjāniya (supra, pp. 163-229) and al-Kawwāz (supra, pp. 282-91). The last dome may well date from the early Ottoman period.

in Mosul.

The existing Iraqi domes may be classified as follows:

1. The hemispherical single-shell dome

This may be considered as a direct descendant of the Sasanian and early Islamic domes. During the period under consideration this type of dome was common. It was used over either a square or an octagonal chamber and sometimes rested on a comparatively high collar. A few examples of this type of dome have survived in good condition. They are the two domes of Mashhad or 'Imārat al-Arba'īn at Tikrīt,[1] the dome of Awlād Sayyid Aḥmad at Ḥadītha,[2] the dome of al-Madrasa al-Kamāliya (the so-called Shaikh al-Shaṭṭ) at Mosul (fig. 9),[3] the dome of al-Jāmi' al-Mujāhidī (pl. 20) and the dome of Imām Muḥammad al-Sakrān (pl. 49). Apart from varied compositions of muqarnaṣāt which form the zone of transition and convert the square or the octagonal base into a circle, these domes are more or less similar in their section. Among these examples the Ilkhanid dome of Imām Muḥammad al-Sakrān is characterized by an exterior which rises in three stepped layers, each one smaller than the previous one. On this particular monument there are no traces to indicate that an auxiliary shell was used to regularize the profile, as was done at the Varāmīn Jāmi'.[4]

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1. Herzfeld, Reise III, pl. 30.
2. Ibid., II, p. 321, fig. 302.
3. Ibid., pp. 233-4, fig. 243.
4. Wilber, op.cit., 62.

2. The muqarnaṣ dome

This type of dome is found in the central and southern parts of Iraq. It is not known why none of them were built in the north of Iraq. Perhaps it was because of the severe weather conditions in the north. The muqarnaṣ dome is locally termed al-mīl,[1] and its high pyramidal shape, which recalls church spires, is probably behind this name.

In Iraq ten mediaeval muqarnaṣ domes have survived. Eight of them belong to the Saljuq and later Abbasid periods.[2] The other two are attributed to the Ilkhanid period.[3] The earliest existing example of a muqarnaṣ dome so far known is that of Imām Dūr (pls. 4-5). Next in date come the two Syrian domes of Nūr al-Dīn at Damascus.[4]

1. For a suggested derivation from the Latin mille "milestone", also used for minarets see Herzfeld, "Damascus I", p. 27. According to Massignon this name was used to indiciate muqarnaṣ domes as early as the 7th/14th century (see op.cit., II, p. 83).
2. Namely Imām Dūr (478/1085), Zumurud Khātūn (6th/12th century), Dāqūq, dated to the end of the 6th/12th century, Maqām ʿAlī ibn Idrīs at Baʿqūba (619/1222), al-Najmī, near al-Nuʿmāniya, dated to the beginning of the 7th/13th century, al-Bajlī, to the south of Mandalī, dated in the first half of the 7th/13th century, Mashhad al-Shams at al-Ḥilla, dated in the first half of the 7th/13th century and al-Ḥasan al-Baṣrī near al-Baṣra (7th/13th century).
3. They are the dome of Dhū 'l-Kifl and the dome of ʿUmar al-Suhrawardī.
4. Herzfeld believes that this type of dome is not truly vaulted but is corbelled. It springs from a horizontal line along the upper edge of the supporting wall and culminates in a scallop. He states that the full dome of this type has eleven almost homogeneous zones (Herzfeld, "Damascus I", p. 11; idem, "Damascus III", p. 17).

The corbelled muqarnaṣāt of these domes were constructed over star-shaped bases obtained by the intersection of octagons. Examples, with details, have been discussed in relation to the muqarnaṣ domes of Dhū 'l-Kifl and 'Umar al-Suhrawardī,[1] but it is worth pointing out here that the points of these star-shaped bases occur more often in the later examples than in the earlier ones, thus providing a useful dating control.

All the Saljuq and later Abbasid examples of muqarnaṣ domes have a single shell, the interior of which in most cases reflects its exterior. The Ilkhanid period in Iraq produced for the first time a muqarnaṣ dome which concealed an inner hemispherical shell. Examples of this type are the domes of Dhū 'l-Kifl and 'Umar al-Suhrawardī. This Ilkhanid innovation transformed the muqarnaṣ dome into a decorative shell covering a dome which has a completely different shape, an independent zone of transition and its own painted decoration. The Iraqi muqarnaṣ domes are good examples of the characteristic Saljuq and Ilkhanid striving toward monumentality and verticality. Aesthetic considerations and the desire to make the muqarnaṣ dome an outstanding landmark were probably responsible for their great height. The great height of these domes externally is impressive enough, but internally it can produce an unsatisfactory relationship between the great interior height and the plan dimensions of the dome chamber. This problem was to some extent solved by Iraqi architects during the Ilkhanid period by erecting an inner shell under the muqarnaṣ dome.

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1. Supra, pp. 143-9, 159-62.

The origin of the muqarnas dome cannot be easily traced. Nevertheless recent study suggests that it was derived from the squinches of the semi-domes in the prayer hall of al-Ukhaiḍir, which dates from the second half of the 2nd/8th century.[1] At any rate, judging by the muqarnas dome of Imām Dūr, it is permissible to conclude that during the 5th/11th century it was in Iraq that this type of dome was used for the first time in Islamic architecture. The Iraqi origin of this type of dome may be further verified by the number of local muqarnas domes which have survived and by their continuing popularity which lasted over two and a half centuries.

The dome of Imām Dūr, which introduced an entirely new style into Islamic domes as early as 478/1085, acted as a forerunner of a series of muqarnas domes in Syria[2] and Persia.[3] The derivation of the Syrian muqarnas domes from the type of Imām Dūr is evident.[4] Herzfeld argues that they have been

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1. The transition zone of each of these two semi-domes consists of two stages. The lower one has two squinches set up on the corners, each of them flanked by two small niches. The next stage is composed of engaged corbelled arches, projecting about 10 cm. from their background; see ʿAbbū, Ayyūbid domed buildings, p. 335 and fig. 414.
2. The most notable examples of Syrian muqarnas domes are the dome of Māristān al-Nūrī and the dome of his turba at al-Madrasa al-Nūriya (both in Damascus; see ibid., pp. 2-13, 40-3, figs. 4-10).
3. Examples of muqarnas domes in Persia are to be seen in the mausoleum of a Ṣūfī at Bābā Munīr, in the tomb of Daniel at Sūsa and in the mausoleum of Imāmzāda Mīr Muḥammad on the Island of Khārg (see Herzfeld, "Damascus I", figs, 64, 67 and 69).
4. Herzfeld, "Damascus III", p.17.

entirely naturalized in their new land.[1]

In Iraq muqarnas domes were favoured for roofing square or octagonal turbas. Apart from one Syrian example, the muqarnas dome of Māristān al-Nūrī in Damascus, the rest of the existing Iraqi, Syrian and Persian muqarnas domes are all over burial chambers. Although the muqarnas vault roofing a long and narrow corridor was used in Iraq, e.g. in al-Madrasa al-Sharābiya of Baghdad, there is no evidence in Iraq of the use of the large-scale muqarnas semi-dome similar to the one at the portal of Māristān al-Nūrī. Here the semi-dome comprises a minute colonnade and nine intermediate zones of small cells or alveoli.[2] This type of muqarnas semi-dome was executed in stone and was very much favoured in Syria, particularly in Aleppo where earlier examples still exist.[3]

The lavish plaster decoration of Imām al-Dūr, the fine brick ornament of Zumurud Khātūn (Sitt Zubaida) and the elaborate marble ornament of Imām Yaḥyā are characteristic features of Iraqi Saljuq and later Abbasid mausolea. During the Ilkhanid period this tendency diminished. The muqarnas domes of both Dhū 'l-Kifl and 'Umar al-Suhrawardī show that the interior ornamentation of the Saljuq period was replaced by painted designs on plaster surfaces (pls. 82, 92.).

The muqarnas element which is the essential factor in the construction of muqarnas domes will be treated below.

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1. Ibid., p. 18.
2. Idem, "Damascus I", p. 11, fig. 3.
3. Creswell, MAE II, p. 147; see also 'Abbū, Ayyūbid domed buildings, pp. 336-8.

3. The polyhedral double domes

This type of dome prevailed in the northern part of Iraq. The surviving examples appear on six monuments in Mosul and its surroundings. They are Jāmi' al-Nūrī, dated 568/1172 (demolished 1939),[1] Imām Yaḥyā, dated 637/1239 (pl. 23, fig. 10),[2] Imām 'Awn al-Dīn, dated 646/1248,[3] Sitt Zainab, dated 646/1248,[4] Imām Bāhir, dated 699/1299[5] and Jāmi' al-Nabī Yūnis (8th/14th century).[6] The sequence of this type of dome continues in Mosul during the following centuries.[7] None were built in the middle or in the south of Iraq, where they were replaced by muqarnas domes. The restriction of this type of dome to the north of Iraq may suggest that it was the one most compatible with the severe weather conditions of this part of Iraq. Thus this type of dome may be termed the Mosul type.

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1. Herzfeld, Reise, II, pp. 210-32; al-Daiwachī, Jawāmi', pl.9.
2. Reise II, pp. 249-63.
3. Ibid., pp. 263-70; III, pl. 99.
4. Ibid., pp. 308-11.
5. al-Daiwachī, Jawāmi', pl. 44; supra, p.315.
6. According to al-Daiwachī this dome was built by Jalāl al-Dīn Ibrāhīm al-Khatanī in 767/1365, and then renewed by Tīmūr after he invaded Mosul in 796/1393 and in 804/1401 (Jawāmi', pp. 80-82, pl. 21).
7. See ibid., pls. 46, 51-52. Other types of ribbed dome which are similar to the polyhedral type are also encountered in North Iraq, such as those of Mār Behnām (569/1163) and Willāda in Sinjār. This type also occurs in Asia Minor, in the Mosque of Sulṭān Sulaimān in Ḥiṣn Kayfā, dated 752/1351 (see A. Gabriel, Voyages Archéologiques dans la Turquie Orientale I (Paris, 1940), pp. 66-7, fig. 52).

These domes are always found concealing an inner shell, which is in most cases highly decorative and could hardly have survived if it had been left uncovered on the outside as is the case in the domes of Jāmi' al-Nūrī, Imām Yaḥyā and 'Awn al-Dīn. Thus the high polyhedral dome fulfilled both aesthetic and structural needs.

The Iraqi polyhedral domes are structurally more or less similar. They rest on high octagonal prisms crowned by the conical prismatic shell. In the case of Jāmi' al-Nūrī the outer shell was a 16-sided figure while in both Yaḥyā ibn al-Qāsim and 'Awn al-Dīn it is 12-sided. The dome of Jāmi' al-Nūrī, the earliest known polyhedral double dome in Iraq, apparently had a great deal of influence and acted as a local prototype for later buildings. The only difference is that the inner shell of the dome of Jāmi' al-Nūrī is fluted while those of Imām Yaḥyā and 'Awn al-Dīn are composed of a series of muqarnaṣāt ending in a star figure with eight points (fig. 10).

The polyhedral and conical type of dome is also quite popular in both Persia[1] and Anatolia.[2] The earliest example known in Persia is that of Gunbad-i-Qābūs in Jūrjān dated

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1. Persian examples of the Ilkhanid period are the Imāmzāda Ja'far at Qumm, Rādkān East, the tomb tower of 'Ala al-Dīn at Varāmīn, the Imāmzāda 'Abdallāh at Damāvand, Imāmzāda Ibrāhīm, the Imāmzāda Khwāja 'Imād al-Dīn and the Gunbad-i-Sabz, all at Qumm, and the Imāmzāda Azhar at Darjazīn (see Wilber, op.cit., pls. 12, 13, 18, 49, 128, 182, 208 and 214).
2. For Anatolian examples see Hill and Grabar, op.cit., pls. 328, 337-8, 391-2 and 394.

397/1006.[1]

The origin of this type of dome poses another subject for argument among scholars.[2] However, it is generally accepted that this type of dome was originally derived from the royal tent of the nomadic peoples of Asia. According to Wilber, when the round tent with its conical roof of cloth took on permanent form it became a brick cylinder with a conical brick roof.[3]

The Iraqi polyhedral dome, with its inner shell, was very advanced and displays a certain sophistication in both structure and ornamentation compared with the single conical roof of the Gunbad-i Qābūs and the monuments immediately post-dating it.

The dome over the turba of Mirjān (demolished 1948), although an isolated example, might well have represented another type of Iraqi double dome. The unique feature of this dome is that it was constructed over a high circular drum with fine brickwork and ornament topped with a smooth hemispherical shell of slightly pointed profile (pl. 96). This high exterior shell covered a fluted dome (pl. 126a) similar to the one which was at Jāmi' al-Nūrī.[4]

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1. On this building see A. Godard "Jūrjān and the Gunbad-i-Qābūs" SPA II, pp. 967-74, fig. 336.
2. For examples see G.L. Bell, Amurath to Amurath, p. 353; E. Diez, "Islamic Architecture" SPA II, p. 926; T.T. Rice, The Seljuks in Asia Minor (London, 1961), pp. 141-2.
3. Ibid., p.62. The same suggestion was earlier made by Diez, op.cit., loc.cit.
4. On the fluted inner shell see supra, pp. 204-5.

Squinches, arches, muqarnaṣ, pendentives and corbels were used, often in combination, for the transition zone in the Iraqi dome. In the turba of Dhū 'l-Kifl, for example, squinches and superposed geometrical rows of muqarnaṣ of various shapes are used to transform the square base into a 64-sided figure and thence to a circle (pls. 83-4); in the turba of Imām Muḥammad al-Sakrān arches combined with large muqarnaṣ are used (pl. 56); in the turba of 'Umar al-Suhrawardī, arches, cubical muqarnaṣ and muqarnaṣ of almond shape are used (pl. 91); al-Madrasa al-Mirjāniya displays the use of pendentives in the muṣallā (pl. 117) and rows of corbels in the turba of its founder (pl. 126a). Nevertheless the geometrical muqarnaṣāt was the most popular element in the construction of the transition zone of Iraqi domes. This type will be considered in more detail below.

D. Muqarnaṣāt

The muqarnaṣ, which is the basic element in the construction of muqarnaṣ domes, can be defined as an ornamental frame or a continuous bracket supporting an overhanging wall or concealing the transition from one angle to another. It is known by other names such as the honeycomb or stalactite vault.[1] Herzfeld rejected the term "stalactite" because, as he put it, suspended brackets do not appear before the definite decline of this earlier form in the Mamlūk period.[2] He traces the Arabic term muqarnaṣ to a Greek root meaning "cornice" or

1. EI[1], suppl. pp. 153-4.
2. "Damascus I", p. 11.

"scale-shaped (roof)".[1] The principal element of the muqarnaṣ is a projecting niche-like quarter-dome unsupported at the crown.[2]

The origin of the muqarnaṣ is not definitely known. According to R.P. Spiers it originated in countries where brick is readily available.[3] Rosintal and Schroeder also believe that muqarnaṣāt were originally built in brick. In the middle of the 5th/11th century they were already used for purely decorative brickwork. They were soon imitated in plaster and in stone, and were used in niches, squinches, half-domes, pendentives, straight cornices, and column capitals, and they were even depicted in linear form on flat walls.[4] Prisse d'Avennes, in his work L'Art arabe, suggests that the motif may have been copied from the pomegranate, the section of which consists of a series of small cells.[5] This is of course a romantic suggestion which lacks evidence and is as probable as that which claimed that the Gothic vault was suggested by a grove of trees.[6] At any rate, muqarnaṣ elements of different shape and purpose are widespread throughout Islamic countries.[7]

1. Ibid.
2. Rosintal and Schroeder, op.cit., II, p. 1255.
3. Architecture East and West (London, 1905), p. 47.
4. Op.cit., loc.cit.
5. R.P. Spiers, "Stalactite (honeycomb) vaulting", Journal of the Proceedings of the R.I.B.A. IV (1888), p. 257.
6. Ibid. The problem of the origin of the Gothic vault has been recently reviewed by Pope; see "Possible Iranian Contributions", passim.
7. In Egypt and Syria the motif is generally carved in stone or wood; in Iraq, Persia and India it exists in brick and stone and in many Muslim countries, from the eastern Islamic world to Spain, it is found in plaster (Spiers, "Stalactite (honeycomb) vaulting", loc.cit.)

Research has shown that the muqarnas derives from the squinch in two ways. The first is division within the squinch and the second is the multiplication of the single squinch.[1] The first method was wrongly recognized by Rosintal as being the only way of forming muqarnaṣāt.[2] The second method is very evident in Iraqi and Syrian muqarnas domes.[3]

In Iraq during the period under discussion muqarnaṣāt were used in many ways; for the building of a whole dome,[4] for topping niches and miḥrābs,[5] for forming a vault over long corridors,[6] for composing the transition zone in domes,[7] for making the projection needed for the gallery of a minaret[8] and for composing straight cornices.[9] In almost all these instances the muqarnaṣāt are of geometrical form executed in brick or stone. In Iraq geometrical muqarnaṣāt of three kinds

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1. ʿAbbū, Ayyūbid domed buildings, p. 332.
2. L'Origine des Stalactites de l'Architecture Orientale (Paris, 1938), p. 7, apud ʿAbbū, Ayyūbid domed buildings, loc.cit.
3. ʿAbbū, op.cit., loc.cit.
4. Such as Imām Dūr and Sitt Zubaida; for more examples see supra, p. 441, n. 2.
5. Examples are the miḥrāb of Sinjār, the miḥrāb of Panja ʿAlī, the miḥrāb of Imām Bāhir and the miḥrāb of Imām Muḥammad al-Sakrān.
6. Such as the corridor which surrounds the courtyard of al-Madrasa al-Sharābiya.
7. Different forms and examples occur in all the existing Iraqi domes.
8. Examples are the minarets of al-Khaffāfīn, Qumriya, Sūq al-Ghazl and al-Kawwāz.
9. Examples are in Khān Mirjān and in the musallā of al-Madrasa al-Mirjāniya (pls. 121b, 138).

are found; cubical,[1] prismatic[2] and lozenge-shaped.[3] These types are derived from the curved muqarnas. It is quite possible that these advanced types of muqarnaṣāt were a development from earlier prototypes such as those which existed in the dome and the semi-domes of al-Ukhaiḍir.

The above discussion permits the tentative conclusion that the muqarnaṣ element itself originated in either Iraq or Persia,[4] where early examples exist. Apart from this the muqarnaṣ domes of the Imām Dūr type seem to be purely local Iraqi devices achieved during the Saljuq period.

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1. The earliest example is to be seen in Maqām Sitt Zainab in Sinjār (646/1248). These muqarnaṣāt consisted of multiplied half-cubical figures starting with a triangular corbel and arranged in courses (Herzfeld, Reise II, pp. 308-11, fig. 285; 'Abbū, al-Qubāb al-'Abbāsiya, pp. 219-220).
2. This kind of muqarnaṣ is composed of triangular, square, lozenge-shaped, oblong, star-like or almond-shaped prisms. Examples occur in the domes of Mār Behnām and in the turba of Willāda in Sinjār (594/1198); see Reitlinger, op.cit., pp. 151-2 and 'Abbū, al-Qubāb al-'Abbāsiya, pp. 72-80, 110-14.
3. This type occurs in the turbas of Imām Yaḥyā ibn al-Qāsim (637/1239) and Imām 'Awn al-Dīn 646/1248 (Herzfeld, Reise II, pp. 249-70; 'Abbū, al-Qubāb al-'Abbāsiya, pp. 147-58). Another example occurs in the dome of 'Umar al-Suhrawardī (735/1334); see supra, pp.159-62.
4. An early appearance of the muqarnaṣ in Persia was as a cornice on the tomb-tower of Lajīm in Māzandarān at the beginning of the 5th/11th century, and soon after on the minaret of Sangbast. In the same period occurs an example of the use of an over-sailing quarter-dome in squinches over the doorway of the Gunbad-i Qābūs; for further examples see Rosintal and Schroeder, op.cit., II, pp. 1255-57; SPA IV, pls. 260c, 339A.

Section 4

Materials and Methods of Architectural Decoration

Introduction

Architectural decoration has always played an important role in Iraqi architecture, as examples from the Sumerian and Assyrian periods show. During the Islamic period old techniques of ornamentation were continued over a long period, but new methods were continuously developed with ever-increasing refinement. The architects of the Islamic period were particularly concerned with the treatment of large wall surfaces. Their aim was apparently to clarify and exhibit structural functions, define proportions and mitigate monotony, and decoration for its own sake plays a very important role.

In the second half of the 2nd/8th century a new style of brick bonding began to emerge. In the 3rd/9th century Iraqi architects at Samarra surpassed their Sassanian and early Islamic predecessors in developing a style of stucco decoration which dominated later stucco work all over Islam, and laid the foundations for the supreme Saljuq achievement in the field of architecture and architectural decoration. While the 3rd/9th century was characterized and dominated by stucco decoration, the Saljuq era was responsible for introducing the pure brick style. Saljuq architects in both Iraq and Persia have been credited with exploring fully the textural potentialities of brick although it is doubtful if they were the first to realize its full value in the field of architectural decoration. Nevertheless Iraqi architects during the Saljuq period devised an amazing variety of fresh and complicated methods of brick bonding. The method of laying

brick to create linear patterns, textures and designs was only one method of decoration; another was carving the brick in relief with countless arabesque designs. More surviving examples of this latter technique are found in Iraq than elsewhere in the Islamic world.

In the north of Iraq in the Atābikid period, brick, marble, wood and stucco were used in architectural decoration, while in the middle and the south of Iraq the decoration was mainly executed with brick, not only in the Saljuq period but also in the subsequent three centuries. The method and technique of decoration in these materials will be treated below in greater detail.

A. Brickwork technique

Shortly after the arrival of the Saljuqs, Iraqi architects began developing and producing scores of different bonds created by various methods of laying brick. This technique, with its numerous variations of design, is known as hazārbāf.[1] In Iraq among the earliest existing Saljuq monuments which show the early stages of this technique is the turba of Imām al-Dūr dated 478/1085. It appears just below the cornice of

1. Hazārbāf is a Persian name meaning "thousand weavings". This word indicates a design technique always executed entirely in brickwork, the elements of the pattern and the background all being based on brick courses (see Creswell, A Short Account, p. 186). Among the masons in Baghdad this technique is known as hasīrī, a name derived from hasīr, an Arabic word for a mat woven entirely with dry palm leaves. Such mats resemble hazārbāf brickwork.

the exterior façade (pl. 4). The hazārbāf here comprises simple chevron patterns and lozenges with a zigzag border. In modern Persia one of the earliest dated examples of such geometrical brick ornament occurs in a tympanum on the north-west exterior of the shrine of the Davāzdah Imām in Yazd (429/1037).[1] According to Schroeder, the evolution of this art is not yet clear, since early examples are too rare to indicate the distribution and origin of elaborate brickwork.[2] Nevertheless in Iraq prototypes of hazārbāf brickwork technique occur in the tympanum at the palace of Ukhaiḍir over the door of Room 31 on the south side of the central court, and on the panel to the left of the entrance of the Baghdad gate at Raqqa.[3] Experiments such as these no doubt paved the way for Saljuq architects to develop much more complex bonding techniques. In Iraq towards the end of the Saljuq period hazārbāf associated with ornamented joint plugs in brick began to emerge as a step forward in this technique. It is to be seen on the western façade of al-Madrasa al-Sharābiya (the so-called Abbasid Palace), the exterior façades of the turba of Zumurud Khātūn (Sitt Zubaida), al-Madrasa al-Mustanṣiriya and the monumental entrance at Wāsiṭ.[4] This type of hazārbāf technique became quite

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1. E. Schroeder, "Islamic Architecture", SPA II, p. 1039, figs. 371-5.
2. Ibid. Nevertheless, recent discoveries in Central Asia suggest that in the pre-Saljuq period this area was even further advanced than Persia proper in this respect; see G. Fehérvári, "Some problems of Seljuq art", in The Art of Iran and Anatolia (Colloquies on Art and Archaeology in Asia 4, ed. W. Watson [London, 1973]), p. 6.
3. Creswell, EMA II, p. 44, figs. 31 and pl. 14.
4. Cf. pls. 8, 37 and 45.

popular during the Ilkhanid period and examples may be seen on the minaret of Sūq al-Ghazl and the minaret of Dhū 'l-Kifl (pls. 62, 72). In all these instances the joint plugs are carved in relief with a four-petalled rosette.[1]

In most Iraqi and Persian examples, particularly the earlier ones, the hazārbāf bonding creates simple chevron patterns, concentric lozenges and geometrical designs derived from them.[2] Among other elaborate variants of hazārbāf technique are those which create a swastika motif.[3] In Iraq, this motif plays an important part in later Abbasid monuments such as the ceiling of the niche which faces the māḥain at al-Madrasa al-Sharābiya (pl. 33), and the Īwān of the Dār al-

1. The four-petalled rosette which is carved on these joint plugs is based on a local traditional motif. A similar motif is found on an Assyrian stone relief now in the Metropolitan Museum of Art. It was also popular on the mosaics of Syria which date from the early Christian and Umayyad periods. Florence E. Day, in "The Ṭirāz Silk of Marwān", gives a remarkable survey of this motif; see Archaeologica Orientalia, pp. 45-7, figs. 9-12. The popularity of this motif is proved by its presence in the background of later Abbasid, Ilkhanid and Jalairid brick inscriptions.
2. A similar geometrical pattern was used by Mesopotamian architects as early as the 3rd millenium B.C., though subsequently such decoration evolved independently in other cultures. Such patterns are for example quite popular in Chinese pre-historic art, especially on the silks of the Shang dynasty (1500 B.C.) and the Han dynasty (200 B.C.); see W. Willetts, Foundations of Chinese Art, from neolithic pottery to modern architecture (London, 1965), figs. 17, 22. On the subject of the influence of the Chinese art on Islamic art, see A.R. al-Gailānī, op.cit.
3. The earliest Mesopotamian examples of the swastika occur on the Sassanian stucco discovered at Ctesiphon and in

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Qur'ān and the rear façade of al-Madrasa al-Mustanṣiriya (pl. 37). It underwent further development on the shaft of the Ilkhanid minaret of Sūq al-Ghazl. The swastika on this minaret (pl. 62) has been identified by Massignon as the name of the Caliph 'Alī adapted to the shape of geometrical Kufic writing. It is commonly known as Chahār'Alī ("four 'Alī's").[1] It is quite possible that the swastikas of later Abbasid decoration bear the same meaning of chahār 'Alī. In Persia such compositions in brickwork were also quite popular during the Ilkhanid period and earlier. The name of the Caliph 'Alī arranged in a similar geometrical form may be seen on a bay of the entrance portal of the Shrine of Bayazid (713/1313) at Basṭām[2] and on the tomb of Chelebi Oghlū at Sulṭāniya (c. 730/1329).[3] In Asia Minor a similar motif may be seen on the exterior façades of the tower above the tomb of Kai-Kā'ūs in Sivas dated 614/1217.[4]

It has already been shown that various elaborate types of brickwork technique were particularly favoured for Iraqi

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Contd.) Palace I at Kish. A schematic chronological survey of the history of the swastika, leading up to its appearance in Islamic art, is given by E. Diez, "A stylistic Analysis of Islamic Art" Ars Islamica (1938-9), figs. 10-12, 26, 59, 66 and 131; see also Hornung's handbook of design and devices (New York, 1946), p. 211; J.E. Cirlot, A dictionary of symbols (London, 1962), p. 307.

1. Massignon, op.cit., II, p. 43. It is also known as 'Alīyāt (plural of 'Alī).
2. Wilber, op.cit., p. 127, pl. 33.
3. Seherr-Thoss, op.cit., p. 108, pl. 47.
4. Hill and Grabar, op.cit., pl. 374.

minarets of Saljuq, later Abbasid and Ilkhanid date. Blind arched niches and chevron patterns are a characteristic feature of the minarets of Sinjār, Arbīl and Dāqūq (pls. 15, 17 and 21).[1] The minaret of Jāmi' al-Nūrī is evidence of a mature style of brickwork (pl. 19).[2] The minaret of Qumriya displays brick recessed diagonally and forms decorative bands surrounding the shaft in a spiral pattern (pl. 26 and fig. 12). In the following centuries the brickwork which appears on the minarets of Sūq al-Ghazl, Dhū 'l-Kifl, the Great Mosque of al-Kūfa, and Jāmi' al-Kawwāz show the strength and the consistency of this local tradition.

The second method of breaking the monotony of a plain surface was to apply various kinds of geometrical terra-cotta carved in deep relief with stylized arabesque motifs. The lack of monuments does not permit one to trace the origins of this technique with absolute confidence, though pre-Seljuq Central Asia seems to have the best claim.[3] The earliest standing monument in Iraq which has such ornamentation exists in Baghdad and dates to the end of the 6th/12th century. It is the turba of Zumurud Khātūn (Sitt Zubaida) (pl. 8, figs. 6-8b). The development of this technique can be followed in Baghdad almost without interruption. In the 7th/13th century it appears on al-Madrasa al-Sharābiya (the so-called Abbasid Palace) (pls. 28-35), the minaret of al-Shaikh Ma'rūf (pl. 10), Bāb al-Wastānī (pl. 7), al-Madrasa al-Mustansiriya (pls. 36-39),

1. See also Herzfeld, Reise II, figs. 296-7.
2. See also Herzfeld, Reise II, figs. 238-41.
3. Fehérvári, "Problems", pp. 6-7.

and the minaret of Sūq al-Ghazl (pls. 62-66). In the 8th/14th century it appears on the turba of 'Umar al-Suhrawardī (pls. 89-90), al-Madrasa al-Mirjāniya (pls. 97-124) and Khān Mirjān (pl. 134, fig. 35). This sequence suggests that the technique was centred in Baghdad during the Saljuq period. Thus it can be termed the Baghdad school of ornamentation. From there it spread to other parts of Iraq. Carved brick terra-cotta similar and sometimes identical to that used in Baghdad appears in Mosul on the turba of Yaḥyā ibn al-Qāsim (fig. 10),[1] between Tikrīt and Baijī on the miḥrāb of Khān al-Khirnīnā (pl. 159), in Samarra on Jisr Ḥarbā (pl. 12), in Ḥilla on the minaret of Dhū 'l-Kifl (pls. 72-3), in Kūfa on the entrance of the Great Mosque of al-Kūfa and al-Sifīna (pls. 144-5, 151), and in Baṣra on the remains of the Great Mosque of the ancient city.[2]

In almost all these monuments the carved terra-cotta pieces are brilliantly designed to fill panels, minor borders and surfaces of defined proportions and dimensions. The panels sometimes appear as complete rectangles or rectangles designed to surmount a pointed arched entrance. In other cases the

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1. See also Herzfeld, Reise II, figs. 251-6.
2. Ibid., I, pp. 249-52 figs. 131-2. In Persia similar brick terra-cotta panels were commonly used during the Saljuq period. The most relevant example appears in the tympanum of the arch of the entrance façade of the 'Alaviyān in Hamadān which probably dates from the second half of the 6th/12th century (see SPA IV, pl. 329). This technique continued to be used in Persia during the first half of the 8th/14th century. An example is to be seen in a brick panel at the Masjid-i-Jāmi' of Farūmad, datable c. 720/1320; see Wilber, op.cit., pp. 156-7, pl. 127. According to Wilber, the Ilkhanid period saw a decline in ornamental brickwork (see ibid., p. 50).

panels have pointed-arched shapes or are continuous bands. These bands sometimes have concave or convex surfaces as is the case in the entrances of al-Madrasa al-Mustanṣiriya, al-Madrasa al-Sharābiya at Wāsiṭ and al-Madrasa al-Mirjāniya (pls. 36, 45 and 97). The terra-cotta pieces are fixed on these panels by means of juss applied only on the back of the pieces; thus no joints between the pieces are visible. The shapes and the number of these terra-cotta pieces are apparently decided according to each particular pattern.

The monuments included in this work show that in most cases the pattern is based on the intersecting radiation of groups of stars with a certain number of points set at equal intervals. This procedure in practice can generate various types of geometrical polygons and diamond-shaped units.

Because of the absence of earlier recorded information regarding the classical name for this technique and these ornamented units, the only sources of information are local masons and brick decorators.[1] It seems that some of the terms and names they use are of Arabic origin, while others are Persian. According to these skilled craftsmen the arabesque carved inside the geometrical unit is termed salīmī, popularly derived from the name of the Ottoman Sulṭān Salīm. The star with four points is known as charlang which is partly derived from the Persian word for "four". The 5-pointed star is known as panja and the one which has six points is known

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1. A considerable number of them are at present employed by the I.D.G.A. in restoring the brick ornamentation of the Abbasid Palace and al-Madrasa al-Mirjāniya.

as shashsha. These two words are derived from the Persian words for "five" and "six". A star with more than six points is known as shamsa (Arabic "sun"). The name for octagon and polygon is ṭurunja. A diamond shaped unit (lūza, "lozenge") is named bādamiya, or shūl, and a vase such as that which appears on the entrance of al-Madrasa al-Mirjāniya (pl. 102) is named kulubdān.[1] Apart from the word lūza which is of Arabic origin, meaning almond, the rest of these terms are derived from Persian, an indication of the strength of Persian influence in comparatively recent times. Other Arabic names such as ṭabul ("drum"), sarj ("saddle") and mishṭ ("comb") are used to indicate certain types of polygonal units. Local masons name each pattern according to the number of the points of the star on the shamsa on which it was based. Moreover each pattern is in fact formed by the repetition of a basic unit known as rub' ("quarter"). Thus they name the pattern based on a shamsa with seven points Rub' Abū 'l-Saba', and so forth up to the Rub' Abū 'l-Ithna'ash which is based on a 12-pointed star. Some of the local masons have enormous amounts of such patterns drawn on a long sheet of paper known among them as ṭumār.

The exact method of producing ornamental terra-cotta is unknown. For example it is not known if these terra-cotta were cut and carved before or after firing. The present method used by the I.D.G.A. is to cut the square fired brick to the

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1. The cable moulding which springs from the two vases of al-Mirjāniya is known as mabrūm ("twisted"), malwī ("spiral") or ḥabl ("rope"). These names are of Arabic origin. On this motif see supra, pp. 69-71.

shapes required, then the pattern on these terra-cotta units is printed by means of spraying black paint against a metal ornamental frame. Then these pieces are handed over to trained workmen for carving. After the pieces of each panel are already assembled the mason can easily but carefully finish his job, by fitting these pieces in the panel one by one using a thin layer of mortar. Scientific methods are also used now to reduce the salinity of the brick.

The brick ornamentation which was used in Baghdad during the Saljuq period represents both a summation of inherited factors and an announcement of new principles. These principles which were evolved during the Saljuq period were destined to remain almost continuously operative throughout the subsequent history of Iraqi architecture. In terra-cotta ornament the aim of surpassing earlier work is quite evident. Superficially, Iraqi ornamented terra-cotta motifs look similar to each other but closer examination can reveal many differences in both design and execution. In the Saljuq period, apparently, stars with no more than 10 points were used. Stars with 12 points, which started to appear during the later Abbasid period, became very frequent during the Jalairid period. The use of a star with a greater number of points eventually leads to a more complex design. Another feature of the development is represented in the method of laying the terra-cotta pieces. The terra-cotta on the turba of Sitt Zubaida has an even surface while that used on later monuments, particularly the Jalairid ones, is characterized by varied levels. The unevenness in the depth of the terra-cotta, which creates a

honeycomb effect, is strongly emphasized during the Jalairid period. The brick ornamentation of al-Madrasa al-Mirjāniya and the entrance of the Great Mosque of al-Kūfa both display this feature (pls. 118, 145). Thus Jalairid architects stressed the use of shadow lines and thereby succeeded in enlivening the surface.

It has been mentioned above that the stylized arabesque motif was the principal ornamental theme inside these geometrical units.[1] The stucco of Samarra presumably was the main source of inspiration for the arabesques and leaf scrolls of this terra-cotta ornament. Saljuq terra-cotta in many cases displays a rather complex type of stylised arabesque. Motifs such as the leaf scroll, the tree of life, trifoliate leaves and other vegetal motifs can easily be recognised.[2] This tradition was to a certain extent continued during the Ilkhanid period (pls. 52, 73). During the Jalairid period the arabesque progressed further towards stylization and in some cases was executed as minute densely packed incisions (pls. 121-4). Besides this new device, the Jalairid architect surpassed his predecessors in using ornamented terra-cotta not only for encrustation but also to define new structural

1. On arabesque see EI[1], I, pp. 363-7.
2. An almost identical type of the tree of life motif can be seen on the terra-cotta of the minaret of Shaikh Ma'rūf (pl. 11), al-Madrasa al-Sharābiya (pl. 33) and on the minaret of Sūq al-Ghazl (pl. 65). The tree of life on these monuments resembles the same motif on Assyrian sculpture; see E.A.W. Budge, Assyrian Sculptures in the British Museum (London, 1914), pls. 42-5; G. Lechler, "The tree of life in Indo-European and Islamic Culture", Ars Islamica IV (1937), figs. 81-5.

forms. An example is the triangular pendentives of the middle domical vault of the musallā of al-Madrasa al-Mirjāniya (pl. 118). Jalairid terra-cotta is also characterized by using the knot motif for the first time and by the great variety of minor borders, most of them hitherto unknown. Apart from these developments, 8th/14th century terra-cotta in most cases followed earlier models.

The elaborate brick style which started in Iraq during the Saljuq period continued to flourish during the later Abbasid and Ilkhanid periods until it reached its zenith during the Jalairid period. Eventually, by the end of the 8th/14th century, brickwork and brick ornamentation of this type fell completely out of fashion and were gradually replaced by colourful tiled decoration.[1] Several domes and minarets which were built in Iraq in the following centuries exhibit this development.[2]

During the period under discussion glazed brick was also in use but not as often as brick ornament. The dome of Jāmi' al-Mujāhidī in Mosul dated 572-6/1176-80 still retains some fragmentary pieces of blue glazed brick on its exterior, which may be original.[3] Another piece of evidence occurs on the main shaft of the minaret of Jāmi' Qumriya where the pattern

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1. The same development occurred in Persia (Wilber, op.cit., p.50).
2. Examples are: Jāmi' al-Murādiya (977/1569), Jāmi' al-'Ādiliya (1168/1754), Jāmi' al-Aḥmadī (1211/1796) and Jāmi' al-Ḥaidar Khāna (1242/1826). These mosques were built during the Ottoman period in Baghdad (see al-Alūsī, op.cit., pp.43, 73-4) A further example is the dome of al-Kawwāz in Baṣra (pl.157a). Moreover all the holy shrines in Iraq display Safawid coloured tiles.
3. Al-Daiwachī, Jawāmi', p. 58.

is composed of intersecting recessed brick bands forming lozenge units. Each unit encloses four small square pieces of glazed blue tile recessed in the middle and forming a cross pattern (pl. 27). The minaret of Jāmi' al-Khaffāfīn also displays tile-work, but it might well be attributed to Ottoman restoration. In any case blue or green tile was used in Iraq on domes during the Umayyad and early Abbasid periods, as on the green dome of the palace of al-Ḥajjāj at Wāsiṭ and the green dome of al-Manṣūr in Baghdad.

B. Stucco decoration

Stucco or plaster decoration was another important method of treating wall surfaces in Iraq during the mediaeval period. The delicacy of the plaster decoration demands that its use be confined to the interior of buildings, to avoid the effect of the weather. Although Iraqi architectural decoration during the 6th-7th/12th-13th century is fairly well represented in brick and marble, few examples of plaster decoration, whether carved stucco or painted plaster, have survived. The earliest are to be seen in the turba of Imām Dūr (pl. 5 and fig. 1) and in the mashhad al-Arba'īn, both dated towards the end of the 5th/11th century.[1]

1. The interior plaster decoration of these buildings mostly displays decorative architectural elements such as lobed and segmental arches, columns, capitals and blind niches. Arabesque elements such as leaf scrolls, palmettes and split palmettes, together with eight-pointed stars, were also used to enhance these architectural elements. (Herzfeld, Reise I, figs. 110-13 and 120).

The surviving examples of carved stucco are dated in the 6th/12th century. They include the façade over the miḥrāb of Jāmi' al-Nūrī (pl. 182), a window frame also from Jāmi' al-Nūrī (pl. 184) and the miḥrāb of Jāmi' al-Mujāhidī (pl. 187). These impressive examples, which have already been discussed, are in fact the only comparatively complete specimens of this elaborate art in Iraq which can safely be attributed to the 6th/12th century.[1] These examples demonstrate what had happened to stucco ornament in Iraq in the period of more than two centuries after the decline of Samarra. They also constitute artistic evidence that this technique, which started in Ḥīra and Kūfa and flourished at Samarra, continued to be favoured during the 6th-7th/12th-13th centuries in Iraq as in most of the eastern Islamic world.[2] The surviving stucco work shows that the basic decorative and technical features of the "bevelled style" survived the period of Samarra, though usually in a somewhat modified manner and, in particular, often without the repetitive arrangement so characteristic of the Samarra style.[3]

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1. See supra, pp. 328-43. The stucco work of Mashhad 'Alī at 'Āna also displays a high standard of maturity in both design and execution. Here, too, Samarra-type stucco was the main source of inspiration for the artist. The technique and pattern used at Mashhad 'Alī (dated 589/1193) are strikingly similar to those of the work in the Nūrī mosque. This accords well with their already established date. For an analysis of the building, see E. Herzfeld, "Mashhad 'Alī, ein Bau Zengis II. a.h. 589". Der Islam V (1914), pp. 358-69, pls. 1-5.
2. For examples see supra, p. 341, n. 1.
3. Cf. pls. 162, 180-1.

The stucco of the 6th/12th century, particularly the façade over the miḥrāb of Jāmi' al-Nūrī, shows that varied arabesque motifs were employed to fill or define architectural elements such as columns, capitals, arches and lobed niches. The arabesque, which here includes abbreviated palmettes and half-palmettes, lanceolate leaves, globular motifs, stylized pomegranates, pine cones, vine scrolls and acanthus leaves, sometimes encloses pious names executed in a decorative Kufic script.[1] Patterns such as the reversed Y or the star and knot design, which are popular on mediaeval brickwork and brick ornament, were transmitted to the Iraqi stucco work of the 6th/12th century.[2]

Another characteristic feature is the use of Kufic inscriptions to form either a rectangular panel or a circular medallion. Rectangular stucco inscriptions were known in earlier periods, as is shown by the miḥrāb from Samarra (pl. 2a), but the circular disc or medallion which is composed entirely of Kufic inscriptions may be considered a new artistic device; its first occurrence in Iraq is apparently on the stucco work of the 6th/12th century.[3] The medallion

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1. For similar inscriptions used within the miḥrāb itself, see the rather later example cited by G. Fehérvári in his article "Two early Mihrabs outside Shiraz", Bulletin of the Asia Institute I (1969), 3-11.
2. See supra, p. 329.
3. Two identical medallions survive on two Ayyubid buildings in Syria, al-Madrasa al-'Izziya and al-Māristān al-Qaimarī. Each of these two medallions is filled with a floral design carved in stucco ('Abbū, Ayyūbid domed buildings, p. 365, fig. 214).

motif itself was of course known on the stucco of Samarra[1] and on contemporary minarets. Medallions of rather similar design, but decorated with a central six-petalled rosette, may be seen on the metalwork of Mosul. An example of this is found on the interior face of a copper pen and ink case now in the Iraqi Museum (pl. 188).[2] Radiating inscriptions forming a similar type of disc also appear on metalwork of the 8th/14th century onwards.[3]

Another feature of the stucco of these periods is represented by the window frame of Jāmi' al-Nūrī, where motifs such as the stylized pine cone, the tri-lobed motif and other globular motifs are drilled with a minute design of various geometrical and arabesque patterns as shown in fig. 46. Drilled stucco, although it occurs at Samarra (pls. 162, 180),[4] later bore more detailed and varied designs.[5] Apart

1. See Excavation at Samarra I, pls. 10, 60, 69 and 93.
2. It is decorated with vine scrolls interrupted four times by an eight-petalled rosette and an inscription of naskhī type which contains traditional blessings and laudatory formulae, as well as a poem flanked by two circular medallions bearing arabesque motifs. This case is apparently unpublished apart from being briefly mentioned in the Guide to the Khan Mirjān Museum.
3. Examples of such ornamental devices are to be seen on the candlestick (now in the Museo Artistico Industriale at Rome) made for Muḥammad ibn Qalāūn in 728/1328 and on the lid of a box (now in the Louvre) made for Aydemir al-Ashrafī, governor of Aleppo (died 776/1374). See D.S. Rice, "Studies in Islamic Metal Work" BSOAS XV (1953), p. 498, pl. 3, fig.8.
4. See also Excavation at Samarra I, pls. 35, 60, 66, 63-6 and 93.
5. This technique also occurs on contemporary Persian stucco. It is to be seen on panels from Rayy, from the so-called madrasa datable in the 6th/12th century (R. Ettinghausen,

(Contd.

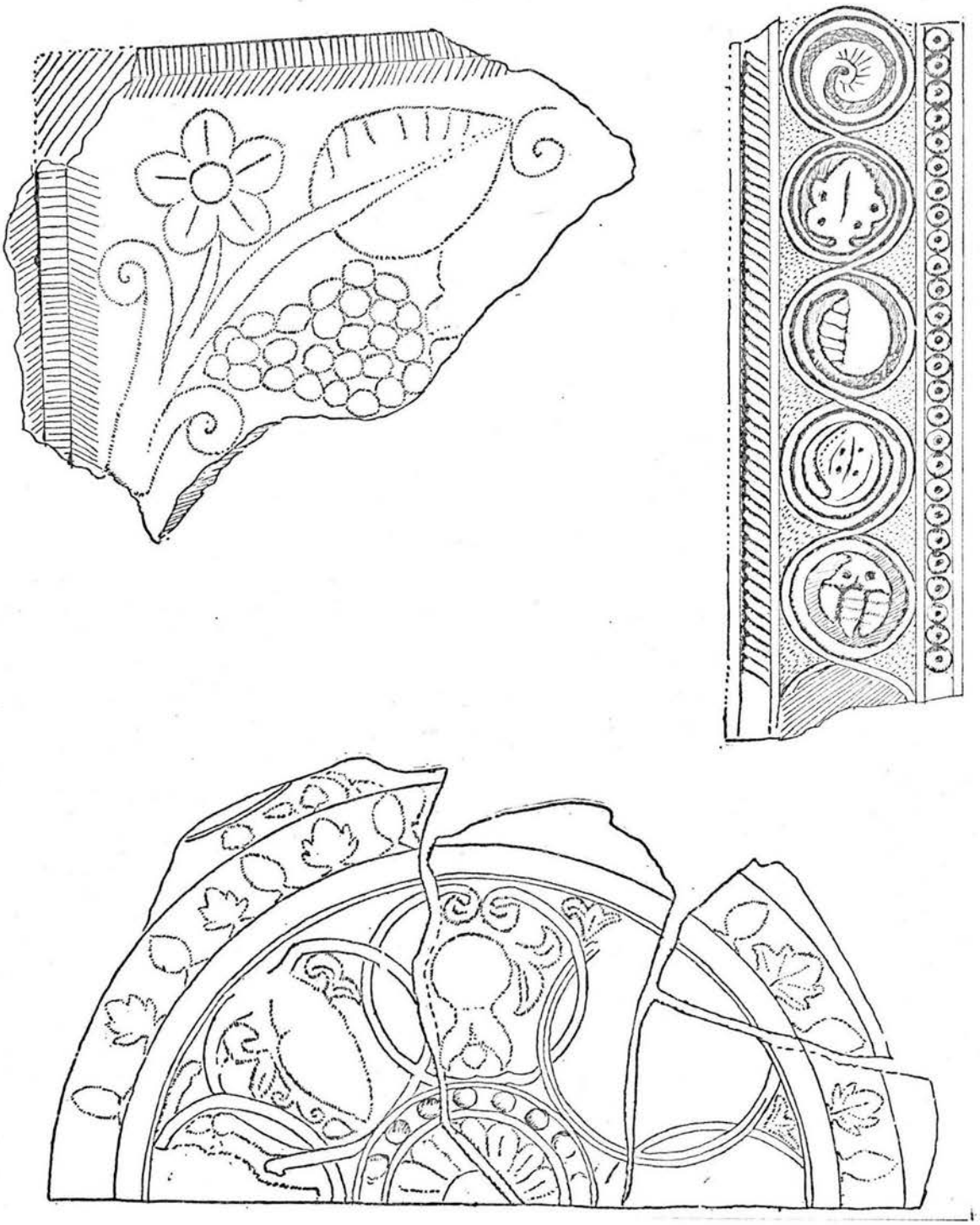
from the above-noted variations most of the patterns used on Samarra stucco work were reused in the stucco of the 6th/12th century, but with further modification and stylization.[1]

In general, the Iraqi 6th/12th century stuccoes demonstrate the persistence of the bevelled style in the post-Samarra period.[2] This style was characterised by the use of moulds, a technique which was in fact known in the pre-Samarra period. It is recognizable on the stucco pieces (possibly Umayyad or early Abbasid) found at Kūfa in Dār al-Imāra by an I.D.G.A. expedition in 1954 (fig. 49).[3] The excavation confirmed that the stucco of Kūfa was made by two different

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Contd.) "The"Bevelled Style" in the post-Samarra period", pl. 14, fig. 4 and pl. 15 fig. 1), on a mihrāb from Būzan erected by ʿAlī ibn Shīrzād al-Anṣārī in 528/1534 (SPA IV, pl. 311b) and on the mihrāb of the Masjid-i-Haydariya in Qazvīn datable in the first half of the 6th/12th century (SPA IV, pl. 316a, b and c); see also supra, p. 341, n.1.

1. Many of the arabesque motifs recall those at Ḥīra, which are assigned to the second half of the 2nd/8th century. Earlier but similar stucco motifs have been discovered at Ctesiphon; see D.T. Rice "The Oxford Excavations at Ḥīra", Ars Islamica I (1934), pp. 51-73; Dimand, op.cit., figs. 26-31, 33.
2. On the origin of the bevelled style, see A.A. Ḥamīd, "The Origin and Characteristics of Samarra's bevelled style", Sumer XXII (1966), pp. 83-99, figs. 1-33.
3. Muṣṭafā, op.cit., pp. 36-65.



48. Kūfa. Dār al-Imāra: stucco fragments showing carving technique.



49. Kūfa. Dār al-Imāra: stucco fragments showing moulding technique.

methods. The first is the method of mould casting which was used later in Creswell's Style C of Samarra. The second consists of drawing and engraving the ornament on the fresh plaster placed on the wall surface (fig. 48).[1] The stuccoes of Kūfa show the influence of Sasanian and other pre-Islamic Iraqi traditions. Moreover these examples probably prepared the ground and provided an immediate local prototype for Samarra stucco in its early stages.

The stucco of the 6th/12th century shows that the group of craftsmen who were involved in this art were fully aware of earlier styles. The stucco of the Nūrī and Mujāhidī mosques, for example, demonstrates the two methods which were used in both Kūfa and Samarra. The school of Iraqi stucco work seems to have been well established and developed in Samarra and Tikrīt during the 3rd/9th century and later in Mosul in the 6th/12th century. According to two Christian authorities,[2] during the 6th/12th century many artists and craftsmen from both Muslim and Christian communities, among whom were wood and stucco carving specialists, emigrated from Tikrīt to Mosul. These groups of artists (who possibly were descendants of Samarra masters), together with the Mosul artists, were most probably responsible for many Islamic and Christian works of art in the Mosul region during the Atābikid period. Of these several

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1. Muṣṭafā, op.cit., pp. 55-6.

2. Al-Rahāwī, al-Tārikh al-Siryānī (the civil part) ed. A. Raḥmānī (Beirut, 1900), p. 343; Q. Isḥāq, Anbā' 'l-Zamān fī Jathāliqat al-Mashriq wa Matārinat al-Siryān (Beirut, 1924), p. 33.

examples are still to be seen in the northern parts of Iraq.[1]

Painted plaster has survived only on two Ilkhanid turbas: the turba of Dhū 'l-Kifl and the turba of 'Umar al-Suhrawardī. The patterns are confined to arabesque motifs, particularly circular leaf scrolls. Ornamental discs or medallions filled with minute arabesque encircled by bands of geometrical elements also seem to be popular in the polychrome painting of the Ilkhanid period (pls. 81-2, 9?).[2] Painted plaster displaying arabesque and floral motifs was popular in Iraq during the Umayyad and early Abbasid periods.[3] Nevertheless its paucity on later Iraqi monuments might tempt one to suggest that it was not favoured during the later mediaeval period.

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1. A good example of Christian stucco work is represented in the interior of the monastery of Mār Behnām. The theme is a purely religious one, representing Saint George mounted on a horse and thrusting a lance into the back of a dragon (al-Mausil, pl. 43).
2. In Persia examples of Ilkhanid polychrome plaster are ubiquitous; examples occur inside the mausoleum of Uljāitū at Sultāniya and in the tomb of Sayyid Rukn al-Dīn in Yazd dated 725/1325 (Wilber, op.cit., pls. 76-7, 80-3 and 143). Painted medallions filled with arabesque are also a common feature on the interior of many Ayyūbid buildings; see 'Abbū, Ayyūbid domed buildings, p. 366.
3. Examples have been discovered by the I.D.G.A. in Dār al-Imāra at Kūfa and at Samarra. See Excavation at Samarra I, pls. 52-3, 75-6 and 104; Muṣṭafā, op.cit., p. 56.

C. Marble decoration

The monuments already discussed in this thesis show that marble and similar materials were used on a large scale for both the fabric and architectural decoration of mediaeval buildings in northern Iraq. The indigenous soft marble which is quite plentiful in the vicinity of Mosul was an important factor behind the evolution of marble work technique not only during the Islamic period but as early as the Assyrian period. A local tradition may well have been created. Perhaps because of this, or as a result of continuous encouragement from the Atābik Sulṭāns and their clients, marble work became the characteristic decorative style of northern Iraq during this period. It is with the beginning of the second half of the 6th/12th century that in addition to its universal fame for its inlaid metal vessels[1] Mosul also became one of the most distinguished international centres of marble work technique, renowned both for carving and for inlaying. The Mosul school of marble work which evolved during the mediaeval period represents an uninterrupted artistic link between the stucco school of Samarra and the Saljuq brick school of Baghdad.

Mosul marble work technique comprises two distinct methods, namely carved marble and inlaid marble. The first method is commonly used on miḥrābs,[2] sarcophagi,[3] interior

1. On Mosul metal vessels see D.S. Rice, "Studies in Islamic Metal work I" Bulletin of the School of Oriental and African Studies XIV (1952), pp. 564-78, pls. 6-11.
2. Examples are the miḥrābs of Jāmi' al-Nūrī, Imām 'Abd al-Raḥmān, Jāmi' al-Juwaichātī, the Sinjār niche (probably a miḥrāb), Imām Bāhir and Panja 'Alī (pls. 160-1, 163-4, 166 and 172).
3. Such as the sarcophagus of Imām 'Alī al-Hādī (pl. 174).

doorways[1] and entrance portals.[2] The second method is commonly found within certain buildings in Mosul when it takes the form of decorative bands and slabs, such as those in Jāmi' al-Nūrī, al-Madrasa al-Nūriya (Imām Muḥsin) and the turba of Imām Bāhir.

1. Carved marble

The techniques used in this medium often owe much to work in brick and stucco. Thus the bevelled style of Samarra was used on the miḥrabs of Imām 'Abd al-Raḥmān and of Jāmi' al-Juwaichātī. Relief carving of varying depth appears on the miḥrāb and the capitals of Jāmi' al-Nūrī,[3] the Sinjār niche, the doorway of Mār Behnām and the doorway of Imām Bāhir. The relief of these examples varies in height and richness of detail.[4] The patterns include bands of inscriptions, arabesques, architectural elements, geometrical decoration and human and animal figures.

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1. Examples are the doorways of Mār Behnām, Madfan al-Ja'farī and Imām Bāhir (pls. 165, 169b and 170).
2. Such as the entrance portal of al-Khān (fig. 51) and Bāb al-'Amādiya (pl. 175).
3. For more examples of carved marble at al-Nūrī mosque see Reise II, figs. 229-36.
4. Although such a style is present in Samarra they are undoubtedly a heritage of the Umayyad art of Iraq which preserved many traditions of both Hellenistic and Sasanian styles. Examples of this Umayyad art may be seen on two marble capitals recently discovered in the Great Mosque of al-Kūfa (pl. 142), on the stucco panels of Dār al-Imara at Kūfa (figs. 48-9) and in the woodwork of Tikrīt (Dimand, op.cit., figs. 1-3 and 26-30).

The inscription is sometimes Kufic and sometimes naskh, but in both cases the inscription bands are usually employed as inner or outermost frames in miḥrābs and entrance portals.[1]

The arabesque with its numerous designs is one of the favourite themes on most surviving marble work; most of its variations are already found on Samarra stucco, on the woodwork of Tikrīt and elsewhere. It has been shown above that certain types of detailed arabesque were especially designed to fit within the niches and spandrels of miḥrābs and doorways.[2] The most detailed and impressive among them all are the arabesques of the miḥrābs of Imām 'Abd al-Raḥmān and of Jāmi' al-Juwaichātī. In the former miḥrāb the arabesque design represents a stylized tree of life made of a series of superimposed stylized half palmettes. The arabesque in the latter miḥrāb probably represents a palmette flanked by two winged leaves or depicts a simplified vase motif flanked by stylized palmettes and winged leaves. The half palmette, which so often appears on mediaeval marble and stucco, plays an important part artistically in Sasanian ornament where it appears either

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1. Examples are the miḥrāb of Jāmi' al-Nūrī (pl. 160), the miḥrāb of Imām 'Abd al-Raḥmān (pl. 161), the miḥrāb of Imām Bāhir (pl. 172), the miḥrāb of Panja 'Alī (pl. 166) the doorway of Madfan al-Ja'farī in the turba of Imām 'Awn al-Dīn, (pl. 169b), the doorway of Imām Bāhir (pl. 170) and Bāb al-'Amādiya (pl. 175).
2. Examples of such arabesques may be seen on the miḥrāb of Jāmi' al-Nūrī, the miḥrāb of Imām 'Abd al-Raḥmān, the miḥrāb of Jāmi' al-Juwaichātī (pl. 163), the niche of Sinjār (probably a miḥrāb) (pl. 164), the doorway of Mār Behnām (pl. 165), Panja 'Alī and the doorway of Imām Bāhir.

individually or as a part of a wavy scroll.[1] The wings were used most frequently as the emblem of royalty; sometimes they enclose a Pahlavī inscription, as on a piece from Ctesiphon.[2] They are also quite popular on Sasanian coins, metalwork and on rock reliefs; they form the top of the royal crowns of several Sasanian kings.[3] The winged motif was also used on Samarra stuccoes as part of an abstract decorative design.[4] It is also popular in such a form on the lustre ware of this period.[5]

A naturalistic eight-petalled rosette in relief occurs very frequently on the mediaeval marble work of Mosul. It appears either associated with other arabesque designs, as is the case on the mihrāb of Jāmi' al-Nūrī (pl. 160), the niche of Sinjār (pl. 164) the turba of Imām Yaḥyā (pl. 169a) and the miḥrāb of Panja 'Alī (fig. 44a), or it appears independently in vertical rows, usually flanking small-scale trilobed panels on marble doorways such as those of Mār Behnām, Imām 'Awn al-Dīn,[6] and Imām Bāhir (pls. 165, 171a). In one case - in the

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1. Dimand, op.cit., fig. 35.
2. O. Reuther, Die Ausgrabungen der Deutschen Ktesiphon Expedition im Winter 1928-29 (Berlin, 1933), figs. 16-7, apud Dimand, op.cit., p. 299.
3. Cf. the examples at Tāq-i Bustān (K. Erdmann, "Das Datum des Ṭāq-i Bustān", Ars Islamica IV (1937), figs. 8 and 13, and drawings 1-16 which illustrate the most well-known types of Sasanian winged motifs).
4. Excavation at Samarra I, pls. 81, 86-7 and 105.
5. Ibid., II, pls. 93-105.
6. See Herzfeld, Reise III, pl. 8. Another example of this rosette appears bordering the exterior façade of the gateway of al-Khān (see fig. 51).

mihrāb of Imām Bāhir - these rosettes flank a qandīl which is set in the middle of the mihrāb (pl. 172). The rosette of eight petals was a motif used frequently in Assyrian sculpture.[1] Large-scale eight-petalled rosettes also appear frequently on the stucco dadoes of Samarra (pl. 180). This flower is the one most common among the species of wild flowers on the slopes of the hills and mountains of the northern part of Iraq. It is known locally as uqḥuwān, "the anthemis coula". In its own natural environment it served, as did many other vegetal and floral motifs, as a source of inspiration for Mesopotamian artists as early as the Assyrian period.

The decorative architectural elements executed in carved marble are also very varied. They include arches of varying profiles,[2] columns with capitals,[3] structural and

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1. The paved floor of the throne room of Shalmaneser III (858-824 B.C.) is virtually a pattern of repeated eight-petalled rosettes.
2. Multi-lobed arches with stilted apices are to be seen on the mihrābs of Imām 'Abd al-Raḥmān and of Jāmi' al-Juwaichātī (pls. 161, 163), pointed arches with serrated profiles appear on the mihrāb of Jāmi' al-Nūrī (pl. 160), while pointed and shouldered arches of al-madanī type are to be seen on the mihrāb of Panja 'Alī (pl. 166 and fig. 44).
3. The columns are always engaged; one or a pair of them flanked the niches of mihrābs. The capitals and bases of these columns are always identical; they represent a vase motif. In the case of the mihrābs of Imām 'Abd al-Raḥmān and Juwaichātī the vase motifs are incised with a floral design. Apart from the columns of the mihrāb of Jāmi' al-Nūrī which have their shafts executed in cable moulding (pl. 160), those which appear on most marble mihrābs have plain cylindrical shafts.

decorative muqarnaṣāt of pointed-arched profile,[1] shell-shaped semi-domes resembling a reversed scallop[2] and small-scale trilobed niches. Although most of these elements are present on stucco work and brick work of earlier and mediaeval Iraqi monuments, some of them are unique and confined to marble alone. These include the two arches with serrated profiles which surmount the outer and the inner niches of the miḥrāb of Jāmi' al-Nūrī and the small-scale trilobed niches there. The latter element is quite common on various Atābikid marble objects of Mosul such as the miḥrāb of Jāmi' al-Nūrī (pl. 160), the niche of Sinjār, the doorway of Mār Behnām (pl. 165), a doorway in the Church of Khiḍr Elias,[3] the doorway of Imām 'Awn al-Dīn,[4] the sarcophagus of Imām 'Alī al-Hādī (pl. 174) and the doorway of Imām Bāhir (pl. 170). On miḥrābs and doorways these tri-

1. Structural marble muqarnaṣāt in the form of pointed arches of varied sizes are to be seen in the transition zones of some mediaeval Iraqi domes such as the domes of Jāmi' al-Mujāhidī, al-Madrasa al-Kamāliya (fig. 9), the turba of Ibn al-Ḥanafiya at Mosul and Imām Bāhir. Other examples of structural muqarnaṣāt are to be seen on the niche of Sinjār (pl. 164), Panjā 'Alī (pl. 166) and the miḥrāb of Imām Bāhir (pl. 172). Minute muqarnaṣāt used for purely decorative purposes are exemplified by those on the doorway of Imām Bāhir (pls. 170, 171).
2. Examples are in the niche of Sinjār, the miḥrāb of Panja 'Alī and the miḥrāb of Imām Bāhir. For further detail see also supra, p. 309.
3. Situated south-east of Mosul. Here the panels enclose figures of saints in the same way as in the doorway of Mār Behnām. C. Preusser dates Khiḍr Elias in the 6th/12th century; see Nordmesopotamische Baudenkmäler (Leipzig, 1911) apud Reitlinger, op.cit., p. 153.
4. Reise III, pl. 8.

lobed niches are arranged in a horizontal row at the top extended vertically on both sides. Apart from the doorways of Mār Behnām and Imām Bāhir, the trilobed niches on the other monuments are executed in a plain torus moulding which is twisted at certain intervals, thus forming trilobed panels which seem to be linked with each other by means of a knot design. On the doorways of Mār Behnām and Imām Bāhir, the same system was adopted but the upper horizontal row is formed by six interlaced pairs of dragons which seem to belong to the same horned species as Chinese examples.[1] The panels of Mār Behnām and Imām Bāhir are in fact the elongated bodies of these monsters, shaped elaborately into trilobed patterns (pls. 165, 170).

Designs composed of geometrical units seem to have been less favoured on carved marble. The few examples which have survived on the mihrābs of Shaikh Fatḥī (fig. 43),[2] Imām ʿAbd al-Raḥmān and of Jāmiʿ al-Juwaichātī recall the designs which are so common in Saljuq and later Iraqi terra-cotta.

Another characteristic feature of mediaeval carved marble was the use of a human and animal figures. The existing evidence reflects the Atābikids' great fondness for figural decoration.[3] Most probably the artists of that time

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1. See infra, pp. 479-83.
2. See also Reise I, figs. 17-18.
3. Among art historians, the question of Islamic figural art has been a matter of controversy since the beginning of the last century (see K.A.C. Creswell, "The Lawfulness of Painting in Early Islam", Ars Islamica XI-XII (1946), pp. 159-66, accompanied by a long bibliography). Despite this vexed question concerning the lawfulness or unlawfulness of figural art in Islam, Muslim artists from the

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were expressing their masters' enthusiasm for such motifs. Figural representation on carved marble includes three themes, namely human figures, animal figures and a combination of both of them. Human figures enclosed within trilobed panels on Islamic monuments usually represent the Sulṭān depicted in different poses taken from everyday life, as is the case in the niche from Sinjār (pl. 164),[1] while those which appear on Christian monuments represent saints, as is the case in the doorway of Mār Behnām (pl. 165). Another example of human figures, also set alone within trilobed panels, is that of Qara Sarāy, the palace of Badr al-Dīn Lū'lū'.[2] The human figures of these monuments are represented with rather square faces, resembling those seen in other types of Saljuq work in Iraq during the 6th-7th/12th-13th centuries. Almost identical parallels can be found in the barbotine pottery so plentiful in the Mosul district[3] and on metal objects of

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Contd.) Umayyad and early Abbasid periods down to the most recent times have always had the opportunity of figural expression in their works. The Umayyad desert palaces, Samarra mural paintings, coins, pottery and miniature paintings provide numerous examples. In Mesopotamia particularly there was a strong local tradition of human and animal representations on pottery, cylinder seals and stone carving.

1. See supra, p. 309.
2. Herzfeld, Reise III, pl. 96.
3. Z. Ḥasan, Aṭlas al-Funūn al-Zukhrufiya wa'l-Taṣāwīr al-Islāmiya (Cairo, 1956), p. 20, fig. 71. Many other fragmentary pieces of barbotine were discovered in Samarra during the excavation by the I.D.G.A. in Samarra in 1936-9; see Excavation at Samarra II (Baghdad, 1940), pls. 47-9. On barbotine pottery see Herzfeld, Reise IV, pp. 13-17, fig. 392, pls. 143-4; see also Reise III, pl. 114.

the time.[1] During the sixth season's excavations at Wāsiṭ by the I.D.G.A. a wide variety of baked clay figurines, both fragmentary and complete, were discovered, all dating from the 7th/13th century or later.[2] They display a striking similarity with the human figures appearing on the above-mentioned material.[3]

The mediaeval bas-reliefs of both Christian and Islamic monuments in Mosul and its environs also display a preference for animals as subjects. The motifs are varied, and include dragons, griffins, lions, horses and birds. Although animal motifs represented alone do exist on carved marble, they are quite rare. The rule on most of the existing monuments is that animals appear in association with human figures. These themes always had some kind of symbolic value.

The most unusual and interesting animal motifs are the dragons which appear on the doorways of Mār Behnām and Imām Bāhir. It has been mentioned that the plain torus moulding which marks out the shape of trilobed panels on the mihrāb of Jāmi' al-Nūrī and the Sinjār niche has evolved on these two doorways to become the elongated bodies of dragons. Such creatures, according to Dimand, are derived from Iranian art.[4] The dragon motif itself was, in fact, also widely used

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1. D.S. Rice, "Inlaid Brasses From the Workshop of Aḥmad al-Dhakī al-Mawṣilī", Ars Orientalis II (1957), pp. 283-326, pls. 1-16 and figs. 1-40; S. al'Ubaidī, al-Tuḥaf al-Ma'daniya al-Mauṣiliya fi 'l 'Aṣr al-'Abbāsī (Baghdad, 1970), pp. 171-2, pls. 14, 21 and 26.
2. Safar, op.cit., pp. 36-7, pls. 18-21.
3. According to Safar, the details of the figures at Wāsiṭ are undoubtedly Mongol (ibid., p. 37).
4. Op.cit., p. 337.

throughout Chinese art, and in the Ming dynasty for coats of arms, the figures usually being shown on a yellow background, for yellow was the imperial colour of China.[1] The dragons which appear on the mediaeval marble doorways show a clear Chinese influence. Chinese examples dating from the Han dynasty invite comparison with the Iraqi dragons represented on marble.[2] It is noteworthy that dragons in a highly stylized shape are also found on Anatolian rugs.[3] The dragon motif is found in different civilisations, though it may represent different symbolic values. Hartner, for example, thinks that when used in both Hindu and Islamic art these monsters have a purely astrological significance.[4] In the scenes where dragons are represented in a defeated position, they might denote an evil spirit. Six pairs of intertwined dragons which appear on the upper part of the doorway of Imām Bāhir (pl. 170b) and one pair of griffin heads on the lower part of the same doorway (pl. 171b) are the only Iraqi examples of figural representation on a clearly identified Islamic religious monument so far discovered.[5] On Christian

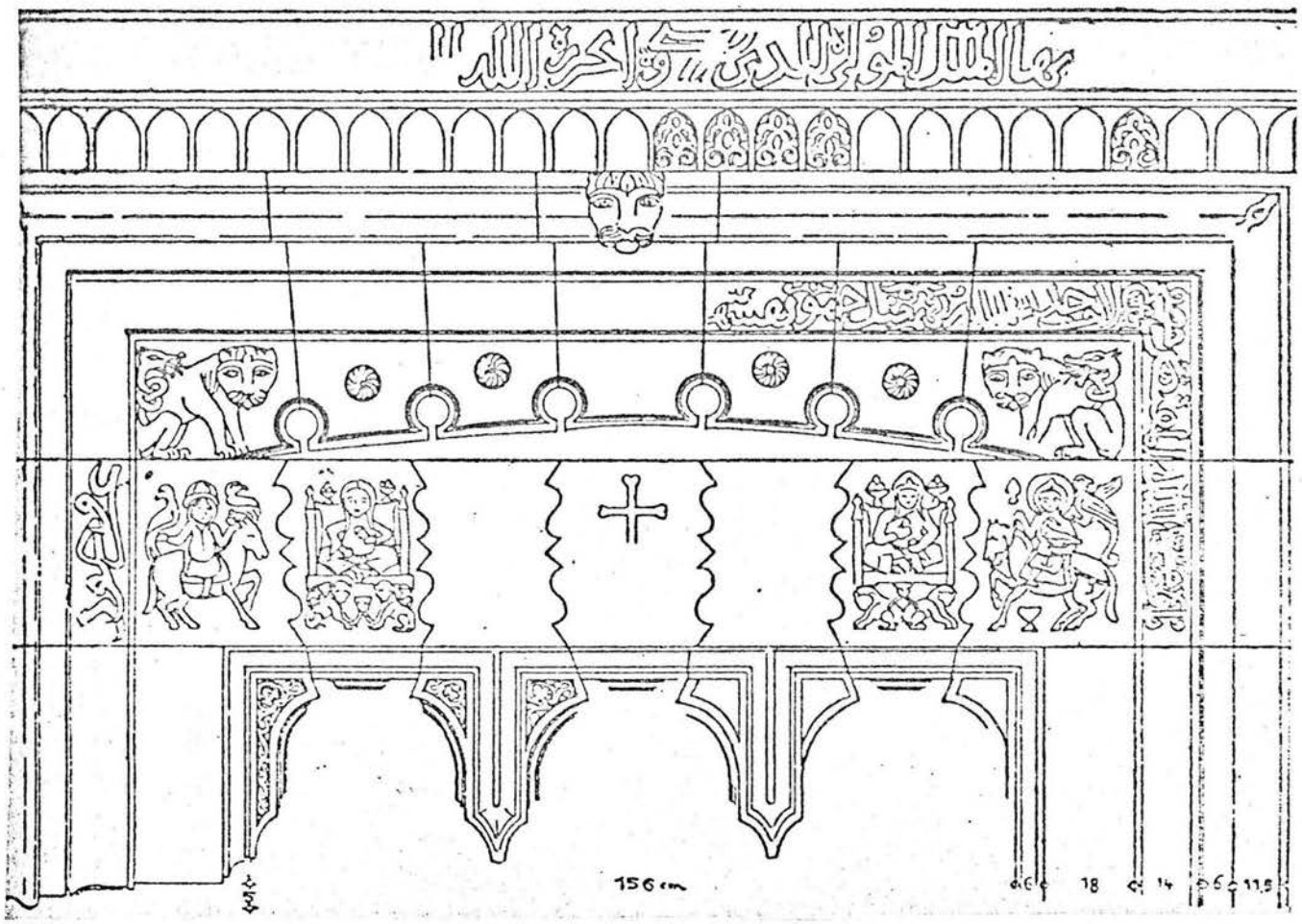
1. O. Aslanapa, Turkish Arts (Istanbul, n.d.), pp. 25-6.
2. Examples of Chinese dragons are to be seen in Willetts, op.cit., figs. 28-30, pls. 102-4.
3. See for example Aslanapa, op.cit., pl. 10.
4. W. Hartner, "The Pseudoplanetary Nodes of the Moon's Orbit in Hindu and Islamic Iconographies", Ars Islamica V (1938), pp. 143-4.
5. It has been suggested that the identification of the Sinjār niche as a miḥrāb is a tentative one and it may well represent a throne niche of no religious significance. As for the stylized animal figures which Daiwachī (al-Mauṣil, p. 188) saw among the stucco arabesques of the miḥrāb of Jāmi' al-Mujāhidī, it has also been argued that they might be interpreted as stylized arabesque; see supra, p. 342.

and secular Islamic monuments of mediaeval date, figural representations are more popular. Christian monuments in Mosul and its surroundings such as Mār Behnām, Mār Shem'ūn and Mār Aḥūdh-ImmĪ display mounted, standing and seated figures (presumably representing saints) as well as lions heads, dragons and hawks.[1] Among Islamic monuments, lions are to be seen on Bāb Sinjār[2] and birds are depicted at Qara Sarāy.[3] These are in addition to the previously discussed human figures of the Sinjār niche. Dragons associated with human figures appear to be the most predominant theme on Islamic marble reliefs from Iraq. A pair of horned and winged dragons flanking a seated figure, probably representing the Caliph al-Nāṣir, occurs in late Abbasid architecture at Baghdad on a panel above Bāb al-Ṭilism dated 618/1221. A pair of seated lions flank the lower part of the same gate (pl. 6). This is the only dated and well-known example of figural architectural decoration in Baghdad.

Apparently Lū'lū' was quite fond of these motifs and several examples may be seen in northern Iraqi architecture attributed to him. In the Mosul area an example is Bāb al-'Amādiya (pl. 175). The spandrel of this pointed-arched portal carries a bas-relief decoration composed of a repeated scene of a human figure struggling against horned and winged

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1. See Herzfeld, Reise II, figs. 279, 281, III, pl. 105. On these monuments see ibid., II, pp. 289-304. Similar Christian iconography occurs at Mār Ya'qūb in NiṣĪbĪn (ibid., III, pls. 103-4).
2. Ibid., II, fig. 228. On Bāb Sinjār see ibid., pp. 211-15.
3. Ibid., III, pl. 97.

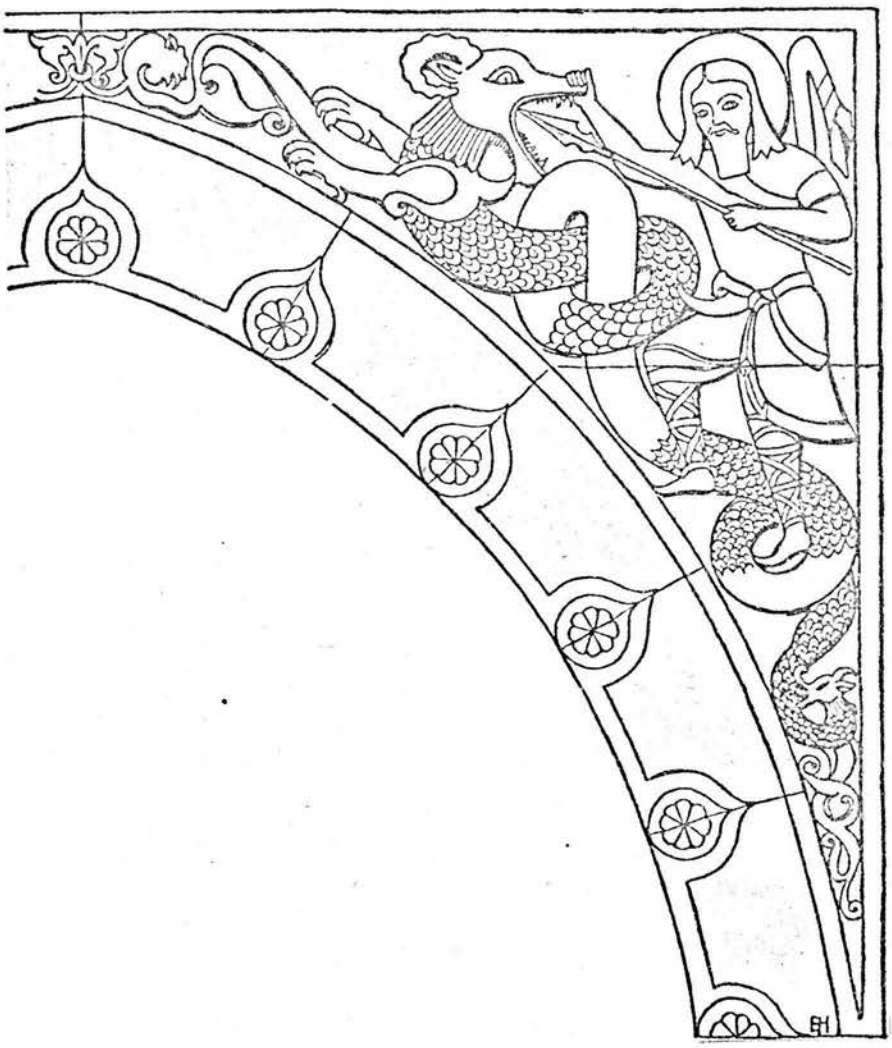


50. Mosul. The monastery of Mār Aḥūdh-Immī: entrance. Detail of upper part (after Herzfeld).

dragons and trying to kill them with a sword which he is holding against the dragon's necks. The elongated and coiled bodies of these dragons frame the arch of the portal.[1] The human figures in Bāb al-'Amādiya most probably represent Lū'lū' himself. Another marble relief carving on the gateway of al-Khān, 22 miles west of Tall A'far and about 15 miles from Sinjār, shows two bearded figures identical with the figures on Bāb al-'Amādiya, thrusting spears into the mouths of coiled dragons (fig. 51).[2] The inscription around this gateway records the construction of this khān by Badr al-Dīn Lū'lū'.[3] In this context it is not impossible to suggest that these dragons represent an evil spirit which was always defeated by the mighty Muslim ruler. The dragon-slayer is identified by Van Berchem with al-Khiḍr, the hero of Muslim legend.[4] Actually this is based on a popular Christian theme which usually represents Saint George mounted on a horse and thrusting

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1. The arch of Bāb al-'Amādiya, which is formed by a pair of coiled dragons recalls the arch of the gateway of the citadel of Aleppo which is also formed by a pair of coiled dragons (Hartner, op.cit., fig. 29). On several other contemporary Syrian buildings this type of arch may be seen (Herzfeld, "Damascus II", fig. 83).
2. Reitlinger, op.cit., pp. 149-50, figs. 9-12.
3. The inscription of this monument was first published by Van Berchem in Reise I, pp. 14-15, fig. 7.
4. Ibid., p. 14, n. 4.



51. Near Sinjār. Al-Khān: entrance, bas-relief showing Badr al-Dīn Lū'lū' thrusting a spear in a dragon's mouth (after Herzfeld).

a lance into the back of this monster.[1] It has been noted that a stucco moulding at the monastery of Mār Behnām has such a theme. The Saljuqs and Atābikids apparently encouraged figural art to a certain extent in architectural decoration, not only in Iraq but also in other Islamic countries. On Anatolian Islamic reliefs animal motifs proved very popular.[2] In Iraq, less than a century after the end of the Atābikid dynasty (631/1233), artists were still using figural architectural decoration, a fact which might indicate that their appearance was a common artistic phenomenon on public secular monuments.

The similarity between the marble architectural decoration of mediaeval Christian and Islamic monuments which has been noted above is a matter of considerable interest. Indeed

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1. This subject was recently discussed by D.R. Howell, "Al-Khadr and Christian Icons", Ars Orientalis VII (1968), pp. 41-51, pls. 1-3.
2. Van Bercham and Strzygowski, Amida, pp. 93-9. Most of the examples which are given in this work represent the winged griffin, with one body and two heads (ibid., figs. 41-8). Others which are more similar to a stylized hawk have no parallel in Iraqi decorative art. A naturalistic type of hawk occurs in association with a mounted figure on the doorway of Mār Aḥūdh-Immī in Mosul (Reise III, pl. 105). The only example of griffin heads which are similar to Anatolian examples occurs on the lower part of the doorway of Imām Bāhir. On Anatolian reliefs see also F. Sarre, Der Kiosk von Konia (Berlin, 1935), passim. Metal objects in the shape of griffins and lions were also popular in Persia during the Saljuq period; see A.S.M. Chirvānī, "Le Griffon Iranien De Pise. Materiaux pour un Corpus de l'Argentérie et du Bronze Iraniens.III", Kunst des Orients V (1968), pp. 68-86, figs. 1-16.

churches and monasteries in and around Mosul exhibit architectural elements and architectural decoration similar to and sometimes even identical with those of the Islamic monuments. One must not forget that the area around Mosul had, and still has, a large Christian population, among which were, as has been mentioned before, many craftsmen specializing in marble, wood and stucco work. Thus one may suggest that the builders' guilds which were responsible for the renaissance of architecture under the Saljuqs and Atābikids were a mixture of both Muslims and Christians working together. The result would be, of course, similarity in both their style and technique. This similarity can be seen in the construction and ornament of several pieces of Christian and Islamic marble work in Mosul.[1]

2. Inlaid marble

Inlaid marble or marble mosaic is the second type of Mosul marble decoration. In the 6th/12th century this type of ornament is peculiar to the mediaeval buildings of Mosul. The few examples of this highly developed technique which have survived include a slab from Imām Muḥsin (al-Madrasa al-Nūriya) (pl. 178), a slab from Imām Bāhir (pl. 177) and two slabs originally relating to one piece recently discovered in Mosul (pl. 179).[2] Another type of inlaid marble occurs on the inscribed friezes from Jāmi' al-Nūrī (pls. 176), Imām Yaḥyā ibn al-Qāsim (pl. 169a) and the sarcophagus of 'Alī al-Hādī

1. Such as the niche of Sinjār, and the doorways of Mār Behnām, Mār Aḥūdh-Immī, 'Awn al-Dīn and Imām Bāhir.
2. See supra, pp. 326-7.

(pl. 173). Here the inscriptions are carved in relief to a certain depth and filled not with marble but with black paste, or asphalt as is the case in Jāmi' al-Nūrī, or with plaster or gypsum as is the case in the inscriptions of Imām Yaḥyā and Imām 'Alī al-Hādī. The technique of inlaying marble is basically similar to the contemporary one used for inlaying metal objects. It is known locally as taṭ'īm or takfīt. A close examination of the inlaid marble pieces shows that the artist was probably adopting the following procedure: after cutting the desired pattern and getting it ready to be inlaid, the artist must repeat the identical design on marble of a different colour, usually lighter or darker than the inlaid pieces, in order to obtain a contrast between the inlaid pattern and its background.[1] Then the pattern must be carved on the slab in low relief to a suitable depth. No mortar is used and the pieces to be inlaid must be slightly greater in width than the beds which receive them. The artist then presumably used a wooden hammer to force the inlay home. Doubtless such a delicate art needed a high standard of skill, taste and care.

No figural representation of any sort is to be seen on inlaid marble, the patterns being confined to highly complicated and fine geometrical interlace, bands of either Kufic or naskhī inscription and bands of minute arabesque and other foliated motifs. Minute geometrical units such as five-

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1. This is similar to inlaid metal work where one may see silver vessels inlaid with gold or bronze vessels inlaid with either silver or copper. Al-'Ubaidī lists 35 various metal objects of Mosul technique; see op.cit., pp. 190-2.

pointed stars, polygons and spear-like motifs are usually employed to fill the spaces created by the geometrical patterns.

During the second half of the 6th/12th century the inlaid marble work technique of Mosul spread westward. Nūr al-Dīn Maḥmūd, who ruled for some time in Mosul during the reign of his nephew Saif al-Dīn Ghāzī, was most probably responsible for introducing it into Syria.[1] The earliest Syrian inlaid marble work occurs in Māristān al-Nūrī, dated 549/1154.[2] Another example occurs in the turba of Baybars I at Damascus which was erected in 680/1281.[3] In these two examples the influence of Mosul technique is quite clear. Nevertheless Syrian examples are inferior in quality compared with examples in Mosul. Patterns on Syrian marble generally display bold geometrical designs.[4] The inlaid marble technique was also used in Egypt, for example in the turba of Qalāūn which was built in 683-4/1284-5. According to Creswell this technique was most probably imported from Syria during the Ayyūbid period.[5]

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1. Herzfeld, "Damascus I", p. 7.
2. The spandrels of its mihrāb in the south Īwān are ornamented in this technique. The pattern consists of small squares containing smaller squares. The scheme is very simple, being based on a network of lines drawn at an angle of 45° to the horizontal (Creswell, MAE II, p. 202).
3. Ibid., pp. 131-2.
4. Examples of such Syrian marble work are given by Herzfeld; see "Damascus. III", figs. 20-2, 90, 96 and 104.
5. Creswell, MAE II, p. 203.

D. Wood carving

It has been mentioned before that a fair number of wooden objects have survived from the mediaeval period. The five wooden objects already discussed above represent three types of wooden furnishings. They include three doors,[1] a minbar[2] and a sarcophagus.[3] The mulberry, which is known locally as tūth, seems to be the kind of wood which is favoured for producing these objects. The conventional method of joining wood work, known locally as taqfīṣ, is used for these pieces.

The surviving doors all exhibit two leaves. The most interesting feature of these doors is their panelling, which incorporates various ornamental devices found on contemporary brick and marble work. Iron nails were used on the door of the Great Mosque of al-'Amādiya, apparently to reinforce the joint. The nails used on the upper part of this door have decorative heads, each taking the shape of an eight-petalled rosette (pl. 195b), a motif quite popular on the applied decoration of this period. Seemingly nails with various decorative heads were also popular in Samarra.[4] Others marking

1. The door of Jāmi' al-Imām Ibrāhīm (pl. 189) dated 498/1104 (supra, pp. 344-7), the door of Jāmi' al-'Amādiya (pl. 195) dated c. 657-60/1259-61 (supra, pp. 354-8) and one part of a door from Jāmi' al-Imām Bāhir (pl. 196), dated c. 699/1299 (supra, pp. 358-9).
2. This is the minbar of Jāmi' al-'Amādiya (pl. 190), dated 548/1153 (supra, pp. 347-54).
3. This is the sarcophagus of al-'Aqūlī (pl. 197), dated 728/1327 (supra, pp. 359-62).
4. Herzfeld, "Damascus I", fig. 47.

out a decorative geometrical design may be seen on a door of the Māristān al-Nūrī (549-1154).[1] Iron door knockers in the form of a lion's head were also used on two Iraqi doors. They occur on the door of Imām 'Awn al-Dīn, ordered by Lū'lū' in 646/1248,[2] and on the door of Jāmi' al-'Amādiya, ordered by his son Ismā'il (pl. 195). These two examples of iron moulding represent the only surviving pieces of figural art on mediaeval Iraqi woodwork. In this context they may also be added to the list of the Iraqi figural representations which very rarely occur on Islamic religious monuments of these periods.

The panelling of the three doors and their filling demonstrate three distinct types which were presumably found on other contemporary wooden doors which no longer exist. The first type, which is highly decorative, is represented by the door of the jāmi' of Imām Ibrāhīm (pl. 189). The panels of this door are divided by means of posts and rails into five equal square panels per leaf. Each panel is filled with finely cut wood pieces forming a square and a four-sided polygon. Apparently no nails were used to secure them. A strong glue was probably used instead. The motif inside each panel is a simplified swastika. A prominent feature of this particular door is the naskhī inscription which is confined here to the posts and the rails only. No Kufic is used, a noteworthy feature given the early date.

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1. Ibid., fig. 46.
2. Ibid., fig. 50; see also idem, Reise II, fig. 264, III, pl.8.

The second type of door, of bolder design and with less emphasis on ornament, is represented by the door of Jāmi' al-'Amādiya (pl. 195). This door, which was unsheltered, was very strongly built to withstand the severe weather conditions of the north. Apart from the usual panelling this door has horizontal lines of inscription carved in relief and confined this time inside the panels themselves.

The third type of door, which has a single panel, is represented by the door of Jāmi' al-Imām Bāhir (pl. 196). It has one rather long vertical panel ornamented in relief with a geometrical linear design, each unit of this design being carved with dense and minute arabesque. The pattern of this door is in fact quite popular on contemporary Iraqi brick ornament, such as the interior façade of the entrance of al-Madrasa al-Mirjāniya (pl. 107) and on the exterior façade of the entrance of the Great Mosque of al-Kūfa (pl. 145).

One minbar has survived, that of Jāmi' al-'Amādiya (pl. 190) ordered by the governor of al-'Amādiya, Qarāja, in 548/1153. It well illustrates the bevelled style of the post-Samarra period in its carved inserted panels or hashwas, and long carved boards and rails.[1]

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1. The reason for the persistence of this style and technique in competition with later and richer forms of decoration lies, according to Ettinghausen, in the abstract quality of the designs, their pronounced movement and sculptural quality, and the possibility of forming endless repeats, all of which appealed to the Muslim mind and eye; see "The "Beveled Style" in the Post-Samarra Period", Archaeologica Orientalia, p. 83.

Six wood sarcophagi dating from the 7th/13th to 8th/14th centuries survive in Iraq in fairly good repair. Four of them are still *in situ*[1] and the other two are to be seen in the Iraqi Museum in Baghdad.[2] Apart from the sarcophagus of al-ʿĀqūlī which was made for an eminent *faqīh* at al-Madrasa al-Mustanṣiriya, they were made for Shiʿite Imāms. Among them, the sarcophagus of Imām Mūsā al-Kāẓim was ordered by the Caliph Mustanṣir, while the rest were all ordered by Badr al-Dīn Lū'lū'. These sarcophagi are characterized by elaborate wood carving mainly displaying Qur'ānic verses[3] carved in relief on an ornamented background, and by bands also decorated with a very stylized type of arabesque. The emphasis on the inscription is in fact very strong. Those which were made for Lū'lū' display a monumental type of *naskh* on the four sides of the sarcophagus. On the side panels of the sarcophagus of Imām Mūsā al-Kāẓim as well as on that of al-ʿĀqūlī monumental Kufic is used instead. On these two

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1. They are the sarcophagus of Imām Yaḥyā ibn al-Qāsim dated 637/1239 (al-Daiwachī, "Mashhad al-Imām Yaḥyā", p. 179, pls. 18, 19), the sarcophagus of Imām Zaid ibn ʿAlī (7th/13th century), the sarcophagus of Imām ʿAwn al-Dīn, 646/1248 (*Reise* IV, pl. 135) and the sarcophagus of Imām ʿAbd al-Raḥmān, 7th/13th century (al-Daiwachī, *al-Mauṣil*, pl. 39). On these sarcophagi see also N. al-Naqshabandī, "Ṣanādīq Marāqid al-Aima", pp. 192-202.
2. They are the sarcophagus of Imām Mūsā al-Kāẓim, exhibited under No. A. 623, and the sarcophagus of al-ʿĀqūlī. For the first example see Naqshabandī and Faransīs, "al-Āthār al-Khashshab", p. 56.
3. Such as *Sūra* II, v. 255, *Sūra* III, v. 18, and *Sūra* V, v. 55.

examples the upper boards are decorated with naskh on an ornamented background. In general the sarcophagi of the period under discussion were similar as regards shape, carving technique, arabesque pattern and even the Qur'ānic text which was chosen for them.

The wood-carving technique on these sarcophagi has quite noticeable variations and innovations compared with that of early Abbasid and Samarra examples. Firstly, the dense arabesque patterns which appear on wooden objects from Tikrīt and on the minbar of Qairawān[1] have been made more simplified and abstract. Secondly, the pattern which formerly covered the whole field now, particularly on the minbar al-'Amādiya, confines itself within geometrical units similar to those found on brickwork. Thirdly, the bevelled style of Samarra type is not so deeply incised as before.

The Saljuq mosques of Syria and Anatolia are especially rich in carved wood which shows a similar high quality to that of Mesopotamian examples.[2] Basically, as Ettinghausen has shown, the bevelled style continued to be used in Anatolia and in other Islamic countries in the post-Samarra period,[3] as is shown outside Iraq by the minbars of the Ulu Jāmi' of Malatya,[4] and the Masjid-i Miyān-i Dih at Abyāneh.[5]

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1. See Dimand, op.cit., figs. 1-8.
2. For mediaeval Syrian wood-carving see Herzfeld, "Damascus. II", fig. 27, 74, 76 and pls. 80-81. For mediaeval Anatolian examples see D.T. Rice, opcit., figs. 176-7. For other mediaeval Islamic wood-carving examples see Ḥasan, op.cit., pp. 88-141.
3. "Beveled Style", pp. 72-83.
4. It is not dated, but according to Ettinghausen it is datable to the 6th/7th century (ibid., p. 82, pls. 16a and b).
5. It is dated 466/1073 (ibid., pl. 11).

E. Epigraphic decoration

In Iraq, as well as in other Islamic countries, the use of calligraphy for architectural decoration stimulated the development of this art. Iraqi architectural inscriptions were carved on brick, plaster, marble and wood and were used as a decorative scheme combined with other motifs for both the exterior and interior of monuments. They usually appear as several lines inside a clearly defined geometrical panel, as friezes around the upper part of a wall or executed in vertical borders normally used to separate and define major units on ornamental surfaces. The background of the inscription is sometimes plain, but in most cases the letters are carved on an ornamented background. In the case of brick inscriptions the latter is composed of minute four-pointed rosettes linked together to form a net-like pattern, while sometimes, as on wooden sarcophagi, the background is composed of a minute arabesque motif. In the Kufic texts of the stucco façade over the mihrāb of Jāmi' al-Nūrī and the turba of Muḥammad al-Sakrān the background ornament is so rich that the inscriptions are fused with and almost overwhelmed by their own background.

The mediaeval monuments of Iraq exhibit a variety of both Kufic and naskh and in some cases a combination of the two were used on one monument. Iraqi monuments display foliated, angular and interlaced or plaited Kufic.

1. Foliated Kufic

This type of script is represented on the mihrābs of Imām 'Abd al-Raḥmān (pl. 161), Jāmi' al-Juwaichātī (pl. 163),

Shaikh Fatḥī (fig. 43) and the minbar of Jāmi' al-'Amādiya. This type was very popular during the Saljuq period, and further examples may be seen on many other Iraqi monuments.[1] Perhaps it was a direct descendant of simple Kufic, i.e. the oldest type, an example of which is to be seen on a miḥrāb at Samarra (fig. 39).[2] In the case of foliated Kufic the foliated motifs grow from the letters, or sometimes from the upper edge of the band of writing, thus giving the latter a more decorative character.

2. Angular Kufic

For the sake of architectural decoration special forms of Kufic script were contrived in which all the letters and particularly their ornament produce rectangular, square, triangular and other geometrical shapes. Moreover, standard and rather large forms of decorative Kufic were ingeniously woven into patterns that spell sacred names and at the same time define medallions. Geometrical Kufic is distinguished from its predecessors by the strictly rectangular form of all its letters, which gives the script the aspect of a regular design. In Iraq the stucco façade of the miḥrāb of Jāmi' al-Nūrī bears angular Kufic forming a rectangular panel (fig. 45)

1. Such as the miḥrābs of Sitt Zainab (Reise I, fig. 6), Jāmi' al-Nūrī (Reise I, figs. 9 and 10; II, fig. 236), the turba of Panja 'Alī (Reise I, fig. 16), Mashhad 'Alī at 'Āna (Herzfeld, "Mashhad 'Alī", figs. 2 and 4) and on the wooden door of Hānī ibn 'Arwa (Fahmī, op.cit., figs. 3-8).
2. Simple Kufic similar to that on the miḥrāb at Samarra also occurs on Iraqi monuments of Saljuq date such as the Kufic of Imām Dūr (Reise I, fig. 22) and on the miḥrāb of Jāmi' al-'Umariya in Mosul (Reise II, fig. 274). On this monument see al-Daiwachī, Jawāmi', pp. 132-9.

as well as decorative Kufic producing medallions (pl. 182). The minaret of Sinjār displays on its base geometrical Kufic forming perfect squares.[1] Later in the Ilkhanid period, the same type of script is used to depict the name of 'Alī repeated four times in a twisted swastika design (pl. 62).[2] The minaret of Dhū 'l-Kifl bears on its shaft the most extraordinary and unique type of geometrical Kufic built up of triangles of unparalleled quality (fig. 23). In Iraq the traditional technique of geometrical Kufic continued to be favoured in later periods too. The minaret of Jāmi' al-Kawwāz at Baṣra shows the repeated formula of الله اكبر written in angular Kufic to form square shapes (pl. 157b).

Geometrical Kufic depicting pious names is also popular during the mediaeval period in Persia,[3] Syria[4] and Anatolia.[5]

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1. See Reise II, fig. 284.
2. The defaced Kufic inscription of the minaret of Sūq al-Ghazl might originally have been a type of angular Kufic (pl. 65).
3. In Persia this type of Kufic, usually with the names Allāh, Muḥammad and 'Alī, was commonly used in architectural decoration to produce rectangular or square shapes (SPA, pls. 387 and 528). The materials in which these inscriptions are executed include brick, plaster, terra-cotta (for brick-end plugs) and tilework (SPA II, p. 1289, fig. 467). A minor stucco border from the Masjid-i-Jāmi', Varāmīn, encloses a repeated triangular shape quite similar to Kufic script, and probably reading 'Alī (ibid., p. 1311, fig. 479f).
4. In Syria this type of script appears in stone at al-Madrasa al-Rukniya (Herzfeld, "Damascus I", pp. 24-5, fig. 43).
5. In Anatolia the Khātūniya Madrasa at Karamān has Kufic script which forms both squares and medallions (ibid., fig. 44).

It is difficult to ascertain the place in which this type of script originated and evolved. According to S. Flury its origin is still obscure. Since it first appears as ornamental panels of brick or terra-cotta in mosque architecture at a time when Chinese influence was active, it is possible that some Chinese script, such as the Chinese rectangular script, contributed to the development of this new style of epigraphic decoration.[1]

3. Interlaced (plaited) Kufic

This type of Kufic introduced so many decorative elements into the script that the original style was greatly changed.[2] The vertical shafts of the script are intertwined with each other or doubled back upon themselves and knotted-in some cases in very elaborate and complex designs. In Iraq this type of script is found on an inlaid marble slab recently discovered at Mosul (pl. 179), on the stucco façade of Jāmi' al-Nūrī (pl. 182), and on the sarcophagi of Imām Mūsā al-Kāẓim (624/1226) and al-'Āqūlī (pls. 197-200). The earliest among these examples is dated in the second half of 6th/12th century.

A highly decorative form of this script survives on a slab from the turba of Imām Bāhir (pl. 177). The script of this particular example is so decorative that it obscures the text and makes it impossible to read. The artist who devised this type of Kufic seems to have sacrificed many of the rules of writing for the sake of art. The use of plaited Kufic

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1. See, "Ornamental Kūfic Inscriptions on Pottery", in SPA II, p. 1747.
2. Flury, op.cit., p. 1744.

on the sarcophagus of al-ʿĀqūlī, which is dated 728/1327, suggests that, although the naskhī script was predominant by this time, Kufic was still favoured for certain purposes. The existing evidence points to Persia as the home of this type of Kufic. At Sīrāf a stone grave cover inscribed with an elaborate plaited Kufic was discovered recently. Its inscription includes the date 383/993.[1] The next two early Persian examples occur on the tower of Rādkān dated 411/1020[2] and on the mausoleum of Pīr-i-ʿAlamdār dated 418/1027.[3] This script became popular from the Sāmānid period onward.[4]

The monumental naskhi inscriptions of mediaeval Iraqi monuments can be classified into three types, namely: crowded naskh, slightly crowded naskh and uncrowded naskh. The letters of the first type overlap one another in a way which makes the script rather difficult to read. The background in this type of script is hardly visible. Crowded naskh is one of the earliest examples of naskhī script, which was generally adopted under the Saljuqs and replaced the old Kufic script.[5]

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1. See D. Whitehouse, "Excavations at Sīrāf. Fourth interim report", Iran IX (1971), pp. 16-17, fig. 7. The Kufic on this grave cover shows a striking similarity to that of the sarcophagus of al-ʿĀqūlī.
2. SPA II, p. 1744, fig. 587.
3. Ibid., fig. 588. A similar type of Kufic may be seen at the Masjid-i Ḥaidariya, Qazvīn, datable in the first half of the 6th/12th century (ibid., IV, pls. 313b, 314-16). An Anatolian example is on the façade of the Sulṭān ʿĪsā madrasa in Mārdīn dated 787/1385 (Hill and Grabar, op.cit., pl. 398).
4. Whitehouse, op.cit., p. 17.
5. E. Schroeder, "What was the Bādī' Script?" Ars Islamica IV (1939), p. 239.

The earliest example of this type of script to survive in Iraq is on the wooden door of the jāmi‘ of Imām Ibrāhīm in Mosul (pl. 189) dated 498/1104.[1] The date of the naskh on this door suggests that it was a prototype for the naskh of the following century, an example of which appears on the miḥrāb of Jāmi‘ al-Nūrī (pl. 160).

A slightly crowded naskh seems to have been characteristic of the script on Mosul marble work during the 7th-8th/12th-14th century.[2] Nevertheless, other examples are also encountered on contemporary Iraqi brick monuments.[3] In general the style is similar to the Ayyūbid naskh on Syrian monuments.[4] The style of the slightly crowded naskh represents an intermediate stage between the crowded and uncrowded naskh. The latter was usually executed in large letters, as on the inlaid marble and brick inscriptions which date from 6th-7th/

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1. According to L.A. Mayer the earliest Persian monumental naskhī inscriptions occur in the Masjid-i Jāmi‘ at Qazvīn dated 507/1113 and at Buzān dated 528/1134 ("A note on some epigraphical problems", SPA II, p. 1806); if this is so the Iraqi naskhī script on the door of Jāmi‘ al-Imām Ibrāhīm antedates the earliest Persian examples.
2. Examples are to be seen on the doorway of Madfan al-Ja‘farī, at the turba of Imām ‘Awn al-Dīn (pl. 169b), the doorway and the miḥrāb of Imām Bāhir (pls. 170-1), the Bāb al-‘Amādiya (pl. 175), Qara Sarāy (pl. 16) and the miḥrāb of Panja ‘Alī (pls. 167-8).
3. Such as the turba of Muḥammad al-Sakrān (pl. 52), the turba of ‘Umar al-Suhrawardī (pls. 88, 90) and the minaret of Ibn 'l-Kifl (pl. 73).
4. For examples see Herzfeld, "Damascus II", figs. 84-5; idem, "Damascus III", figs. 112-3.

12th-13th centuries.[1] Vowelling and other purely decorative signs employed to fill the interstices of the letters are a characteristic feature in the slightly crowded and uncrowded naskh.

These various naskhī scripts cannot be arranged into chronological order, for all types of naskh were used concurrently. For example, the crowded naskh which featured during the 5th/11th and 6th/12th centuries appeared again, with certain modifications, during the 8th/14th century in al-Madrasa al-Mirjāniya and Khān Mirjān. Moreover, examples of uncrowded naskh, typical on the inlaid marble slabs of 6th/12th century, reappear on the Iraqi brick monuments of the 7th/13th and 8th/14th century such as the bridge of Ḥarbā, and al-Madrasa al-Mustanṣiriya.

The inscriptions of Iraqi mediaeval monuments are not consistent in the amount of historical detail they contain. However, in general they give the name and the title of the founder of the building, usually preceded by the word amara "has ordered" or in some cases by the word taṭawa'a "has volunteered".[2] There follow the name and the titles of the

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1. Examples are the slabs of Jāmi' al-Nūrī (pl. 176), the slab from al-Madrasa al-Nūriya (Imām Muḥsin) (pl. 178), the slab from the turba of Imām Bāhir (pl. 177), the bridge of Ḥarbā (pl. 13) and al-Madrasa al-Mustanṣiriya (pl. 36).
2. The inscriptions which start with the word taṭawa' indicate that the building was financed by a benefactor out of his own pocket; the nuance is that the work is not the result of an official command. For a list of Iraqi mediaeval benefactors see Appendix 2.

deceased who is buried in the turba if the building is a turba,[1] or the names of the madhhabs and their founders if the building is a madrasa,[2] the date of the completion of the work and occasionally the name of the architect or artist who designed and executed the work;[3] and the name of the mutawallī who supervised it.[4] A list of waqfs similar to those of al-Madrasa al-Mirjāniya and Khān Mirjān was probably a common feature in the inscriptions on similar charitable buildings which no longer exist. Qur'ānic verses, religious formulae, shortened shahāda, ḥadīth and blessings for the twelve Imāms are all popular in the architectural inscriptions of Iraqi mediaeval monuments.

The verses from the Qur'ān are either included at the beginning of the historical inscription, usually after the basmalla, or inserted within the text, or applied separately to fill border bands and panels. The verses were carefully selected to reflect the purpose of the buildings. The verses used on turbas and sarcophagi of Imāms and holy persons usually reflect the character and the good deeds of such sacred people and also refer to their reward in the hereafter. The verses are:

(a) Sūra LXXVI, vs. 7-9 which reads:

يوفون بالنذر ويخافون يوما كان شره مستطيرا · ويطعمون الطعام على حبه مسكينا
ويتيما واسيرا · انما نطعمكم لوجه الله لانريد منكم جزاء ولا شكورا ·

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1. As is the case in the turba of Imām Yaḥyā ibn al-Qāsim, the turba of Muḥammad al-Sakrān and that of 'Umar al-Suhrawardī.
2. As is the case in al-Madrasa al-Mustanṣiriya and al-Mirjāniya.
3. Examples are given in Appendix 3.
4. Examples are given in Appendix 4.

"(Because) they perform the vow and fear a day whereof the evil is wide-spreading. And feed with food the needy wretch, the orphan and prisoner, for love of Him. (saying): we feed you, for the sake of Allah only. We wish for no reward nor thanks from you".[1]

These verses occur on the door of the Jāmi' of Imām Ibrāhīm and the sarcophagus of Muḥammad al-Sakrān.

(b) Sūra II, v. 274 which reads:

الذين ينفقون أموالهم بالليل والنهار سرا وعلانيه فلهم أجرهم عند ربهم ولا هم يحزنون ٠

"Those who spend their wealth by night and day, by stealth and openly, verily their reward is with their lord, and there shall no fear come upon them neither shall they grieve".[2]

This verse occurs on the turba of Muḥammad al-Sakrān.

(c) Sūra II, vs. 17-18 which reads:

وكانوا قليلا من الليل ما يهجعون ٠ وبالاسحار هم يستغفرون ٠

"They used to sleep but little of the night. And ere the dawning of each day would seek forgiveness".[3]

These verses occur on the turba of Imām Bāhir.

(d) Sūra X, v. 62 which reads:

الا ان أولياء الله لاخوف عليهم ولا هم يحزنون ٠

"Lo! verily the friends of Allah on whom fear cometh not, nor do they grieve".[4]

This verse occurs on the turba of 'Umar al-Suhrawardī.

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1. Pickthall, op.cit., p. 423.
2. Ibid., p. 59.
3. Ibid., p. 373.
4. Ibid., p. 162.

(e) Sūra IX, vs. 21-2 which reads:

يبشرهم ربهم برحمة منه ورضوان • وجنات لهم فيها نعيم مقيم خالدين فيها أبدا •

"Their Lord giveth them good tidings of mercy from him, and acceptance, and Gardens where enduring pleasure will be theirs. There they will abide for ever".[1]

These verses occur on the sarcophagus of al-'Aqūlī.

(f) Similar verses appear on the same sarcophagus. They are Sūra XLVI, vs. 13-14; these read:

ان الذين قالوا ربنا الله ثم استقاموا فلا خوف عليهم ولا هم يحزنون • أولئك اصحاب الجنة خالدين فيها جزاء بما كانوا يعملون •

"Lo! those who say: Our Lord is Allah, and thereafter walk aright, there shall no fear come upon them neither shall they grieve. Such are rightful owners of the Garden, immortal therein, as a reward for what they used to do".[2]

The majority of mosques which belong to the period under discussion have vanished. Nevertheless the verses which appear on Jāmi' al-Nūrī and the masjid of al-Madrasa al-Mirjāniya have a different content from the verses used on turbas. Moreover one might add in this context those verses which appear on the mihrābs of mediaeval buildings which were not mosques, because a mihrāb, whether set in a madrasa or a turba, is an indication that the place is also used as a masjid. The verses are:

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1. Ibid., p. 147.

2. Ibid., p. 359.

(a) Sūra II, v. 144, which reads:

قد نرى تقلب وجهك في السما فلنولينك قبلة ترضاها فول وجهك شطر المسجد الحرام وحيث ما كنتم فولوا وجوهكم شطره وان الذين آوتوا الكتاب ليعلمون انه الحق من ربهم وما الله بغافل عما يعملون ٠

"We have seen the turning of thy face to heaven (for guidance, O Muḥammad). And now verily we shall make thee turn (in prayer) toward a qiblah which is dear to thee. So turn thy face toward the Inviolable Place of Worship, and ye (O Muslims), wheresoever ye may be, turn your faces (when ye pray) toward it. Lo those who have received the Scripture know that (this Revelation) is the Truth from their Lord. And Allah is not unaware of what they do".[1]

This verse, as well as verses 148-50 which have a similar meaning, occurs in Jāmi' al-Nūrī. These verses refer to the crucial revelation to Muḥammad concerning the alteration of the qibla.[2] The choice of these verses for a mosque built in 566-8/1170-2 certainly reflects the religious strife which dominated the period of the Crusades and which also focussed on such questions as the correct qibla.

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1. Pickthall, op.cit., pp. 45-6.
2. This happened on Tuesday 15 Sha'bān in the second year of the Hijra (11 Jan. 624). For more historical detail see Creswell, EMA I, pp. 7-9. The first qibla of the Muslims was Jerusalem, which gave rise to misunderstanding on the part of the Jews of al-Madīna, who wished to draw the Muslims into Judaism. This explained the cause of the Prophet's anxiety stated in the beginning of Sūra II, v. 144. The Islamic world in the middle of Sha'bān of every year still celebrates this religious occasion.

(b) Sūra XXIV, vs. 36-7 which reads:

في بيوت أذن الله أن ترفع ويذكر فيها اسمه يسبح له فيها بالغدو والآصال ٠
رجال لا تلهيهم تجارة ولا بيع عن ذكر الله وإقام الصلوة وإيتاء الزكاوة يخافون
يوما تتقلب فيه القلوب والأبصار ٠

"(This lamp is found) in houses which Allah hath allowed to be exalted and that His name shall be remembered therein. Therein do offer praise to Him at morn and evening men whom neither merchandise nor sale beguileth from rememberance of Allah and constancy in prayer and paying to the poor their due; who fear a day when hearts and eyeballs will be overturned".[1]

These verses occur on the miḥrāb of Jāmi' al-Imām Bāhir and on the upper part of the exterior façade of the muṣallā of al-Madrasa al-Mirjāniya.

(c) Sūra CXII which reads:

قل هو الله أحد ، الله الصمد، لم يلد ولم يولد، ولم يكن له كفوا أحد ٠

"Say: He is Allah, the One! Allah, the eternally Besought of all! He begotteth not nor was begotten. And there is none comparable unto Him".[2]

This Sūra appears on the miḥrāb of Imām 'Abd al-Raḥmān and the miḥrāb of Shaikh FatḤī.

(d) Sūra III vs. 17-18 which reads:

شهد الله أنه لا اله الا هو والملائكه وأولوا العلم قائما بالقسط لا اله الا هو العزيز
الحكيم ٠ إن الدين عند الله الإسلام ٠

"Allah (Himself) is witness that there is no God save Him. And the angels and the men of learning (too are witness). Maintaining His creation in justice, there

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1. Pickthall, op.cit., p. 256.

2. Ibid., p. 454.

is no God save Him, the Almighty, the Wise. Lo! religion with Allah (is) The Surrender (to His will and guidance)".[1]

These verses occur on the mihrāb of Jāmi' al-Nūrī.

(e) Sūra IV, v. 103 which reads:

انّ الصلوة كانت على المؤمنين كتابا موقوتا ·

"Worship at fixed hours hath been enjoined on the believers".[2]

This verse occurs on the mihrāb of the masjid of al-Madrasa al-Mirjāniya.

(f) Sūra V, vs. 58-9 which reads:

واذا ناديتم الى الصلوة اتخذوها هزوا ولعبا ذلك بانهم قوم لا يعقلون · قل يا اهل الكتاب هل تنقمون منا الا ان امنا بالله وما انزل الينا وما انزل من قبل وان اكثركم فاسقون ·

"And when ye call to prayer they take it for a jest and sport. That is because they are a folk who understand not. Say: O, People of the Scripture! Do ye blame us for aught else than that we believe in Allah and that which is revealed unto us and that which was revealed aforetime, and because most of you are evil-livers?"[3]

These verses occur on the mihrāb of Panja 'Alī, dated 686/1287. This choice may also reflect the religious strife which dominated the mediaeval period.

(g) In addition to the above Qur'ānic verses there is Sūra IX, v. 18 which reads:

انما يعمر مساجد الله من آمن بالله واليوم الآخر ·

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1. Ibid., p. 64.
2. Ibid., p. 89.
3. Ibid., p. 102.

"He only shall tend Allah's sanctuaries who believeth in Allah and the Last Day".[1]

Although this verse at present occurs only in a panel over the mihrāb of Sitt Zainab,[2] it is almost certain that it was common on mediaeval mosques which no longer exist.

Qur'ānic verses used for madrasas reflect the purpose of the building and emphasise discipline and the reward of God to those who spend their money on doing good deeds. The following verses which appear on al-Madrasa al-Mirjāniya probably appeared on similar buildings which no longer exist.

(a) Sūra XXXV, v. 28 which reads:

انما يخشى الله من عباده العلماء ·

"The erudite among His bondsmen fear Allah alone".[3]

This verse occurs in al-Madrasa al-Mustanṣiriya[4] and on the exterior façade of the main entrance of the Mirjāniya madrasa.

(b) Sūra XXIV, vs. 61-4 which reads:

فاذا دخلتم بيوتا فسلموا على انفسكم تحية من عند الله مباركة طيبة كذلك يبين الله لكم الآيات لعلكم تعقلون · انما المؤمنون الذين آمنوا بالله ورسوله واذا كانوا معه على امر جامع لم يذهبوا حتى يستاذنوه ان الذين يستاذنونك اولئك الذين يؤمنون بالله ورسوله فاذا استاذنوك لبعض شانهم فاذن لمن شئت منهم واستغفر لهم الله ان الله غفور رحيم · لاتجعلوا دعاء الرسول بينكم كدعاء بعضكم بعضا قد يعلم الله الذين يتسللون منكم لواذا فليحذر الذين يخالفون عن امره ان تصيبهم فتنة او يصيبهم عذاب اليم · الا ان لله ما في السموات والارض قد يعلم ما انتم عليه ويوم يرجعون اليه فينبئهم بما عملوا والله بكل شيء عليم ·

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1. Ibid., p. 146.
2. See Reise I, p. 11.
3. Pickthall, op.cit., p. 313.
4. See Reise II, p. 163, fig. 197.

"But when ye enter houses, salute one another with a greeting from Allah, blessed and sweet. Thus Allah maketh clear His revelations for you, that haply ye may understand. They only are the true believers who believe in Allah and His messenger and, when they are with him on some common errand, go not away until they have asked leave of him. Lo! those who ask leave of thee, those are they who believe in Allah and His messenger. So, if they ask thy leave for some affair of theirs, give leave to whom thou wilt of them, and ask for them forgiveness of Allah. Lo! Allah is Forgiving, Merciful. Make not the calling of the messenger among you as your calling one of another. Allah knoweth those of you who steal away, hiding themselves. And let those who conspire to evade orders beware lest grief or painful punishment befall them. Lo! verily unto Allah belongeth whatsoever is in the heavens and the earth. He knoweth your condition. And (He knoweth) the Day when they are returned unto Him so that He may inform them of what they did. Allah is Knower of all things".[1]

These verses occur on the interior façade of the entrance of the Mirjāniya madrasa.

(c) Sūra IX, v. 72, which reads:

وعد الله المؤمنين والمؤمنات جنات تجرى من تحتها الانهار خالدين فيها
ومساكن طيبة في جنات عدن ورضوان من الله اكبر/ذلك هو الفوز العظيم .

"Allah promiseth to the believers, men and women, Gardens underneath which rivers flow, wherein they will abide - blessed dwellings in Gardens of Eden. And - greater (far)! - acceptance from Allah. That is the supreme triumph".[2]

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1. Ibid., p. 258.
2. Ibid., p. 151.

This verse occurs above the doorway of staircase 6 of the Mirjāniya madrasa.

(d) Sūra VIII, vs. 2-3 which reads:

انما المؤمنون الذين اذا ذكر الله وجلت قلوبهم واذا تليت عليهم آياته زادتهم ايمانا وعلى ربهم يتوكلون · الذين يقيمون الصلوة و مما رزقناهم ينفقون ·

"They only are the (true) believers whose hearts feel fear when Allah is mentioned, and when the revelations of Allah are recited unto them they increase their faith, and who trust in their Lord; who establish worship and spend of that We have bestowed on them".[1]

These verses occur above the doorway of staircase 9 of the Mirjāniya madrasa.

(e) Sūra III, vs. 190-4 which reads:

ان في خلق السموات واختلاف الليل والنهار لآيات لاولي الالباب · الذين يذكرون الله قياما وقعودا وعلى جنوبهم ويفكرون في خلق السموات والارض · ربنا ما خلقت هذا باطلا سبحانك فقنا عذاب النار · ربنا انك من تدخل النار فقد اخزيته وما للظالمين من انصار · ربنا اننا سمعنا منادياً ينادي للايمان ان آمنوا بربكم فآمنا ربنا فاغفر لنا ذنوبنا وكفر عنا سيئاتنا وتوفنا مع الابرار · ربنا واتنا ما وعدتنا على رسلك ولا تخزنا يوم القيامه انك لا تخلف الميعاد ·

"Lo! In the creation of the heavens and the earth and (in) the difference of night and day are tokens (of His sovereignty) for men of understanding. Such as remember Allah, standing, sitting and reclining, and consider the creation of the heavens and the earth, (and say): Our Lord! Thou createdst not this in vain. Glory be to Thee! Preserve us from the doom of Fire. Our Lord! whom Thou causest to enter the Fire: him indeed Thou hast confounded. For evil-doers there

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1. Ibid., p. 139.

will be no helpers. Our Lord! Lo! we have heard a crier calling unto Faith: "Believe ye in your Lord!" So we believed. Our Lord! Therefore forgive us our sins, and remit from us our evil deeds, and make us die the death of the righteous. Our Lord! And give us that which Thou hast promised to us by messengers. Confound us not upon the Day of Resurrection. Lo! Thou breakest not the tryst".[1]

These verses encircle the transition zone of the middle domical vault of the muṣallā of the madrasa.

In the waqf inscription of al-Madrasa al-Mirjāniya, and presumably in other similar charitable buildings endowed with rich waqf, certain verses were included within the text to warn those who change and mishandle the endowment to beware of the curse of God. The following verses are included in the waqfiya of al-Madrasa al-Mirjāniya.

Sūra II, v. 181 which reads:

فمن بدله بعدما سمعه فانما اثمه على الذين يبدلونه ان الله سميع عليم ٠

"And changeth (the will) after he hath heard it - the sin thereof is only upon those who change it. Lo! Allah is Hearer, Knower".[2]

The other verses used in the waqfiya which bear similar warnings are:

Sūra II, v. 161; Sūra III, v. 161; Sūra VII, v. 42 and Sūra XVII, vs. 105-6.

Another Qur'ānic verse popular on Iraqi mediaeval buildings is Sūra II, v. 255 which reads:

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1. Ibid., p. 89.
2. Ibid., p. 49.

الله لا اله الا هو الحي القيوم لا تأخذه سنة ولا نوم له ما في السموات
وما في الارض من ذا الذي يشفع عنده ألا باذنه يعلم ما بين أيديهم وما
خلفهم ولا يحيطون بشيء من علمه الا بما شاء وسع كرسيه السموات والارض
ولا يؤده حفظهما وهو العلي القدير ·

"Allah! There is no God save Him, the Alive, the Eternal. Neither slumber nor sleep overtaketh Him. Unto Him belongeth whatsoever is in the heavens and whatsoever is in the earth. Who is he that intercedeth with Him save by His leave? He knoweth that which is in front of them and that which is behind them, while they encompass nothing of His knowledge save what He will. His throne includeth the heavens and the earth, and He is never weary of preserving them. He is the Sublime, the Tremendous".[1]

This verse, which is considered the most holy one in the Qur'ān, occurs on the miḥrāb of Panja 'Alī, the doorway of the turba of Imām Bāhir and on the sarcophagus of 'Alī al-Hādī.[2]

As regards religious formulae, apart from the basmalla and صدق الله العظيم وصدق رسوله الكريم which are both generally found at the beginning and the end of the above Qur'ānic verses there are several others composed of two words such as الملك لله، لله الملك "the government belongs to Allah" or "to Allah belongs the government", العـزلله "the glory belongs to Allah" and العظمه لله "the greatness belongs to Allah". These formulae occur on the stucco façade over the miḥrāb of Jāmi' al-Nūrī.

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1. Ibid., p. 57.
2. It is also found on many buildings all over the Islamic world. On this verse see al-Qurṭubī, Al-Jāmi' lī Aḥkām al-Qur'ān III (Cairo, 1936), pp. 268-79.

A shortened shahāda which is لاالٰه الا الله محمد رسول الله occurs on the same stucco façade and on the miḥrābs of Imām ʿAbd al-Raḥmān and of Jāmiʿ al-Juwaichātī.

Ḥadīth seems to be very rarely used on monuments. One example occurs after a Qur'ānic verse on the miḥrāb of Samarra[1] and the second instance known from this period occurs in the waqfiya of al-Madrasa al-Mirjāniya.[2]

Among other popular religious inscriptions on mediaeval monuments are those which include blessings for the twelve imāms. This religious phenomenon, which most probably started during the Buwayhid period, became quite common in the later Abbasid and Ilkhanid periods in the northern part of Iraq. Blessings for the 12 Imāms are found on the wooden door of the Jāmiʿ of Imām Ibrāhīm, on the sarcophagus of Imām ʿAlī al-Hādī, on the turba of Imām Yaḥyā (pl. 169a), and on the miḥrāb of Panja ʿAlī.[3]

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1. See supra, p. 296.
2. See supra, p. 219.
3. For more examples see al-Daiwachī, "Mashhad al-Imām Yaḥyā", pp. 174-5.

APPENDIX No.2

List of some Mediaeval Iraqi Benefactors of Monuments

Name	Monument	Site	Date	Reference
Sirbārīk Qarāja ibn ʿAbdallāh	minbar of Jāmiʿ al-ʿAmādiya	ʿAmādiya	548/1153	supra, pp. 352-4.
Masʿūd ibn Badr	Mashhad ʿAlī	ʿĀna	589/1193	Herzfeld, "Mashhad ʿAlī", p. 367
Muḥammad ibn Zangī ibn Aqsunqur	minaret of Sinjār	Sinjār	598/1201	Reise I, p. 9.
Jumʿa bint Amat Allāh	miḥrāb of Shaikh Faṭḥī	Mosul	6th/12th century	Reise I, p. 27.
Badr al-Dīn Lūʾlūʾ	turba of Imām Yaḥyā	Mosul	637/1239	Reise I, p. 22.
Muḥammad ibn al-Rashīd	turba of Shaikh ʿUmar al-Suhrawardī	Baghdad	735/1334	supra, pp. 154-9.

APPENDIX No. 3

List of Some Mediaeval Iraqi Architects and Wood Carvers

Name	Monument	Site	Date	Reference
Abī Shākir ibn Abi 'l-Faraj ibn Masawa	turba of Imām Dūr	Samarra	478/1085	Reise I, p. 33, fig. 22; "Damascus I", p. 19.
Nūrī ibn Yūnis	Wood door of the Jāmi' of Imām Ibrāhīm	Mosul	498/1104	supra, pp. 346-7.
Sunqur al-Baghdādī	The old mihrāb of Jāmi' al-Nūrī	Mosul	543/1148	Reise I, p. 17, fig. 9; al-Daiwachī, Jawāmi', p.33, pl. 5.
'Alī ibn Abi'l-Nuhā al-Jazarī	Wood minbar of Jāmi' al-'Amādiya	'Amādiya	548/1153	supra, pp. 352-4.
Ibrāhīm ibn Jāmi' al-Jazarī	Wood minbar of Jāmi' al-'Amādiya	'Amādiya	548/1153	Ibid.
'Alī ibn Salāma al-Jazarī	Wood minbar of Jāmi' al-'Amādiya	'Amādiya	548/1153	Ibid.
'Īsā al-Natāfa	dome of room 4 in the monastery of Mār Behnām	Mosul	559/1163	'Abbū, al-Qubāb al-'Abbāsiya, pp. 254-5.
Mīkhā'īl	dome of room 4 in the monastery of Mār Behnām	Mosul	559/1163	Ibid.

(Contd.

APPENDIX No. 3 (contd.)

Name	Monument	Site	Date	Reference
Muslim	Mashhad ʿAlī	ʿĀna	589/1193	Herzfeld, "Mashhad ʿAlī", p. 367.
Badr	Mashhad ʿAlī	ʿĀna	589/1193	Ibid.
Muḥammad al-Ḥuzrī	bridge of Eskī - Mosul	Eskī-Mosul	611/1214	Reitlinger, op.cit., p. 147, fig. 7.
Muḥammad ibn Zimām al-Sinjārī al-Badrī	mihrāb of Sitt Zainab	Sinjār	637-57/ 1239-58	Reise I, pp. 11-12, fig. 5.
ʿUmar ibn al-Khiḍr	Wood door of turba of Imām ʿAwn al-Dīn	Mosul	646/1248	Ibid., I, p. 21.
ʿAbd al-Raḥīm ibn Aḥmad	dome of turbat Imām Bāhir	Mosul	699/1299	Supra, p. 316.
Aḥmad Shāh al-Naqqāsh al-Tibrīzī "Zarīn Qalam"	inscriptions of al-Madrasa al-Mirjāniya and Khān Mirjān	Baghdad	758-60/ 1356-8	Supra, pp. 209-27.

APPENDIX No.4

List of Trustees (mutawallī) of Mediaeval Iraqi Monuments

Name	Monument	Site	Date	Reference
Mu'nis ibn Ḥamdān	turba of Imām Dūr	Samarra	478/1085	"Damascus I", p. 19.
Al-Ḥasan ibn Rāfi'	turba of Imām Dūr	Samarra	478/1085	Ibid.
Fakhr al-Dīn 'Abdallāh ibn Yaḥyā	minbar of Jāmi' al-'Amādiya	'Amādiya	548/1153	Supra, p. 352.
Mu'īn al-Dawla 'Umar ibn Muḥammad al-Mallā	jāmi' al-Nūrī	Mosul	566-8/ 1170-2	al-Daiwachī, al-Mauṣil, p.130.
Kamāl al-Dīn Abi' l-Qaṣṣār Mufarraj	Mashhad 'Alī	'Āna	589/1193	Herzfeld, "Mashhad 'Alī", p. 367.
Sa'd al-Dīn Sunbul al-Badrī	Bāb Sinjār and turba of Imām 'Awn al-Dīn	Mosul	641/1243 646/1245	Reise I, pp. 22, 28.
Ḥājjī Ibrāhīm ibn Muḥammad al-Ḥamāmī	sarcophagus of Imām 'Alī al-Hādī	Mosul	7th/13th century	Supra, p. 322.
Shaikh Khamīs	turba of Imām Muḥammad al-Sakrān	Ba'qūba	667/1268	Supra, pp. 110-1.
Shihāb al-Dīn 'Alī ibn 'Abdallāh	minaret of Sūq at Ghazl	Baghdad	678/1279	Al-Ḥawādith, p. 371.
'Izz al-Dīn Abu 'l-Ḥasan 'Alī	miḥrāb of Panja 'Alī	Mosul	686/1287	Reise I, p. 24.

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