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THE 'ABBASID PALACE

AN ANALYTICAL STUDY OF ITS WALL-ORNAMENTS

BY

Miss R. M. AL-KAZWINTI

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A THESIS SUBMITTED TO THE FACULTY OF ARTS,  
UNIVERSITY OF DURHAM FOR THE DEGREE OF  
M.A. IN ISLAMIC ART-HISTORY.

DECEMBER  
1969

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## ABSTRACT OF THE THESIS.

Most researchers differ in their attitude towards the building inside Baghdad Citadel which used to be called "al-MĀ'mūn Palace". Some scholars have given it the name "Abbāsīd Palace" implying that it was where a Caliph used to live. No ancient historical books mention Palace, or discuss it from the artistic point of view.

The first chapter gives a general historical survey, to throw light on some of the buildings periods which preceded the construction of the 'Abbāsīd Palace. In the second chapter a description is given of the plan of the building itself, which is compared with similar plans of other buildings in Islamic countries. In this chapter is also given a description of the ornament called muqarnaṣāt (which used to be called stalactite). A comparison is made between this ornament in the Palace with that in other contemporary buildings.

In the third chapter analytical studies are offered of the wall ornaments; discussing in detail the most important elements of design used in ornament throughout Islamic art and architecture; the particular connexions between those in the 'Abbāsīd Palace and in the other contemporary buildings are elucidated, as well as the history of the elements themselves in the Islamic and pre-Islamic world.

The conclusion demonstrates both the period of the erection of the 'Abbāsīd Palace and the purpose it was designed to serve.

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PREFACE.

Ever since I began to study in the Department of Art at the College for Girls, University of Baghdad, I have been very interested in exploring the basic principles of Islamic art. Having considered sources, development, characteristics and its decline after the decline of the Islamic Empire; I was attracted by its own beauty, skillfulness, uniqueness and greatness.

As Iraq is my homeland, I was lucky enough to be able to observe artistic remains of periods both pre-Islamic and Islamic, many of them monuments which are without equal.

Mesopotamia was the cradle of one of the earliest riverine civilizations of mankind. One can trace back to the earliest phases of its history elements of culture, and particularly of art. Many ingredients in Islamic Art, especially in the decorations of the minārets, mosques, schools and palaces, can be related to ancient patterns. When I first visited the 'Abbāsid Palace, I was amazed by its artistic vividness, ornament, decoration and architectural design. I therefore felt a great desire to pursue the study of its splendour, in particular its decorative art.



I began to look for references in Arabic sources, which might satisfy my desire, but unfortunately without success. The first book to appear in Arabic concerning this subject was by Dr. Zakī Muḥammad Ḥasan entitled "Funūn al-Islām (the art of Islam)" - 1948. He studied Islamic art following in general the line taken by Dimand in his work "A handbook of Muḥammedan decorative art." Some Western Orientalists did, in fact, write treatises and books dealing with Islamic art: the work of Professors Sarré and Herzfeld "Archäologische Reise in Euphrate und Tigris-Gebiet" is a well known example of such academic works. Some Iraqi researchers did write some papers on Islamic art, but their main concern was to examine its historical background: none of them tried to study Islamic art from the artistic and analytical point of view.

This thesis is devoted to an analysis of the artistic features of the 'Abbāsid Palace. Such a study, may throw light upon its artistic value and historical background.

I should like, however, to express my gratitude and acknowledge the assistance and encouragement of those who really helped me throughout this study: the Gulbenkian Foundation; Professor T. W. Thacker, the Director of the School of Oriental Studies; the late Dr. D. G. Bretherton,

Professor D. Talbot Rice of University of Edinburgh and the Staff of the Library of the Oriental Section.

In particular, I should like to emphasize the value of the encouragement, guidance and patience of my supervisor, Mr. P. S. Rawson and my debt to his sincerity and understanding. I should like also to thank my father in Baghdad, who encouraged me and helped me to achieve my aim. Finally I should like to acknowledge the assistance and encouragement of Dr. Inad Gh. Ismail, Assistant Professor, University of Baghdad, who helped me in many ways.

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## CHAPTER 1.

### A HISTORICAL BACKGROUND.

Most writers on the subject hold the view that Islamic art in its broad sense, embracing architecture, painting and decoration, was the product of an interaction between various older traditions of art, including in particular, those of Oriental Christianity and the Sāsānid Empire. It also owed much of its character to the work of the skilful hands of the craftsmen of different regions who may have been Copts, Persians or Byzantines. It is very interesting to note that as a result of the successive wars between the Sāsānids and the Byzantines, many captives were used by both sides in various occupations, among which were building and architecture. It is worth mentioning that conquest of the Arabian peninsula was one of the chief aims in the struggle between these two powers.

Iraq had once been a part of the Assyrian Empire, which governed as well, most of Persia. While the Assyrians occupied Babylon, they too had made efforts to conquer the Arabian peninsula, because it was known to contain much mineral wealth, gold especially.<sup>(1)</sup> It is

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1. G. Zaidān, Tā'rikh al-'Arab qabl al-Islām, Cairo, 1961; pp. 111-120.

known that between 900-651 B.C. the Assyrians actually held the peninsula.<sup>(2)</sup>

Some of the Cities of South Arabia must have been trade-centres on the commercial route by both land and sea. Such were Ma'rib, Ma'in, Najrān, San'ā' and Zūfār. The inhabitants of those cities, who were undoubtedly Arabs, are known to have evolved their own civilization and culture long before the advent of Islam. As far as the art of architecture in South Arabia, early Arab historians and travellers recorded that it had reached a high standard. Many palaces and ports were built in a vivid form and style; such were the Ghamdān palace at San'ā',<sup>(3)</sup> and the Temple of Sheeba near Ma'rib.<sup>(4)</sup> Strabo mentioned that the ornaments of some Arab palaces of this time bore a great resemblance, in both form and design, to those of the Egyptians.<sup>(5)</sup>

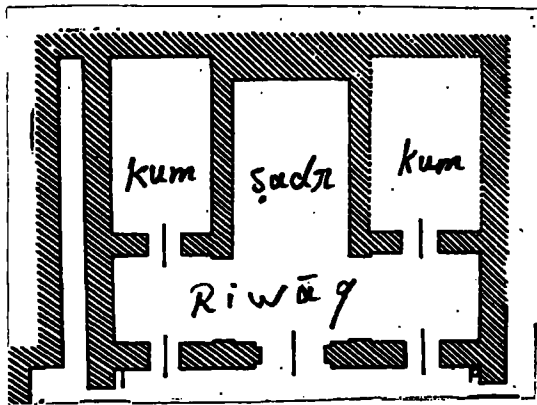
The Lakhamids, who lived in al-Ḥīra, played an important rôle in the dispute between the Byzantines and the Sāsānids. They assisted the Sāsānid empire to gain victory against the Romans. In their Capital, al-Ḥīra,

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2. G. Zaidān, Tā'rikh al-'Arab qabl al-Islām, Cairo, 1961; pp. 111-120.
  3. Al-Hamadānī, al-Ikhlīl, Vol. VIII, Princeton, 1940; pp. 12-19.
  4. G. Zaidān, Op.cit. p. 179 and the Qur'ān, vers. 15, Sūra-Sabā'.
  5. Ibid. p. 179.

which was situated on the Western bank of the Euphrates, the Lakhmids built two famous palaces, al-Khūwarnaq and also Sadīr. (6) Both were based on a "Hīrite design."

It is very interesting that the 'Abbāsīd Caliph al-Mutawakkil (897-861 A.D.) deliberately imitated such a design in building one of his palaces in Sāmarrā'. (7)

However, the Hīrite conception of the palace was based upon what is known in the Muslim world as an "Iwān", situated in the middle of the building, and called "al-Şadr". The two rooms which flanked it were called "Kummain". The part which was situated at right angles



PLAN I

to al-Şadr and fronted the Kummain, is called "Riwāg" as seen in Plan I. Professor Creswell has mentioned that this design was used in some parts of al-'Ukhaidir palace whose date goes back

into the 'Abbāsīd era, Plan 2a. The pattern is also used in Qasr-I-Shīrīn, Plan 2b.

6. Ibn Khaldūn, Tā'rīkh Ibn Khaldūn, Vol. II, Part 1, Beirut, 1966; p. 549.
7. Directorate General of Antiquities, Excavation at Sāmarrā', Part 1, Baghdad, 1936-37; p. 29.

It seems that the Lakhamids had taken this conception from the Sāsānids,<sup>(8)</sup> for it can be seen very clearly in the Firūzabād palace, Plan 2c, which was built by King Sābūr (310-381 A.D.). The Hirite pattern of building is, at present, very popular in Tūnisia. There the middle 'Iwān is called "al-qabū" and each of the Kummain is called "al-maqṣūra" while the Riwāq is called "al-tarkīna".<sup>(9)</sup> This Hirite pattern was also used in the 'Abbāsīd Palace during the reign of al-Nāsīr.<sup>(10)</sup> (1179-1225 A.D.)

The Ghassānids, who arose in Syria under the influence of the Byzantine empire, had erected palaces and built a number of dams. Al-Mshattā palace was built by King al-Nu'mān.<sup>(11)</sup> It was discovered by Layard in the year 1840. Creswell proved that its building can be traced back to the 'Umayyad era, and more precisely to the time of the Caliph al-Walīd II (743-744 A.D.) He drew this conclusion as a consequence of a study of the architecture and the history of the palace itself.<sup>(12)</sup> It is worth mentioning that the arrangement of the zig-zag and the "six-lobed rosette" of the Bābal-'Āmma

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8. K. A. C. Creswell, A short account of early Muslim Architecture, London, 1958; p. 147.
  9. Op. cit.
  10. M. Jawād, al-Qasr al-'Abbāsī-Dāral-Musannāt, an essay in Sumer, Vol. II, Baghdad, 1945; pp. 61-104.
  11. Ibn Khaldūn, Op.cit. p. 586 and G. Zaidān, Op.cit. p.218.
  12. K. A. C. Creswell, Op.cit, p. 144.

(stucco dado) of Sāmarrā' Style A, bears, to some extent, a resemblance to that of the Façade of al-Mshattā palace.<sup>(13)</sup> The arabesque of both, on the other hand, is considered to be based upon a classical pattern which will be discussed in detail in the following chapters.

As for the art of Calligraphy which was used to decorate mosques, palaces and schools, the teaching of Islam played an important artistic rôle in stimulating the Muslim artist to create an exalted art out of the Arabic Calligraphy in which the Qur'ān was written. The "Kufic form" is considered to be the simplest style of this art, and had developed by the eighth century A.D. Between the ninth and sixteenth centuries A.D., the following styles of calligraphy were evolved in the Islamic world; foliated Kufic; floriated Kufic; Naskhī; Thulth; and Naṣṭaliq. Pl. 1<sup>(14)</sup>

The art of architecture was created by the need to develop and advance Islamic life at a time when it began to be influenced by the different social and cultural elements adopted from other nations. This can be seen in the building techniques and architectural styles used for Islamic mosques, schools and palaces. The first

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13. K. A. C. Creswell, Ibid. p. 262, Fig. 52.

14. E. J. Grube, The World of Islam, Haarlem, 1966; pp. 11-12.

mosque that was built in the Islamic world is the mosque of the Prophet Muhammad at al-Madīna. It was originally an ordinary home, in which he used to live, and was built of mud bricks. Its porticos were made of the trunks of palm-trees which supported the ceiling, it too was made of mud, mixed with palm-leaves. (15)

The Byzantine influence on Islamic architecture is most apparent in the mosque of 'Umar b. al-Khaṭṭāb at Jerusalem. This was built on the site of Solomon's Temple. Le Bon has pointed out that this mosque, although it was named for 'Umar, was, in fact built in 691 A.D., after his death. (16) The Syrian architects who built the 'Umayyad monuments (714-715 A.D.) were the bridge over which certain Christian artistic elements, which were based upon late Roman and Byzantine art, penetrated the Middle East. There they evolved into that typical 'Abbāsid design which later became so popular in all Islamic regions. Such 'Abbāsid work was still carried out by Syrian and Egyptian artists; as well, it still betrayed influence from those Sāsānian artistic styles which had prevailed elsewhere in the Middle East before the advent of Islam. (17)

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15. Ibn Kathīr, Al-Bidāya wal-Nihāya, Vol. III, Cairo, 1932; p. 219, also Creswell, Op.cit, p. 5.

16. G. Le Bon, Arab Civilization, Beirut, 1969; p. 157.

17. Z. M. Hasan, Funūn al-Islam, Cairo, 1948; p. 10.



The Arabs never built mosques in Syria until the reign of the Caliph 'Abdul-Malik (685-705 A.D.) and Caliph al-Walid (705-715 A.D.) For a long time, already existing churches were taken over for use as mosques. They were simply divided and altered to fit the Islamic conceptions of the 'Umayyad era. (18)

In the 'Abbāsid period, the Islamic Caliphate was moved to Baghdad. Al-Manṣūr (762-755 A.D.) brought many technicians and artists from Syria, Persia and Babylon to build his new capital. (19) One of Baghdad's gates, the Khurasān gate, was brought from Syria. It is thought to have been made by an Egyptian artist following a Pharaonic plan and style. (20) During the reign of Hārūn al-Rashid (786-809 A.D.), Baghdad reached its golden age, which continued until the reign of al-Mā'mūn (813-836 A.D.). It became a major commercial centre.

During this time the Persians established themselves as a great power on the political scene; al-Mā'mūn's mother was herself Persian. In addition, the 'Abbāsids relied heavily upon Persians to gain victory against the 'Umayyads when the latter emerged in the first half of the

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18. K. A. C. Creswell, 'Umayyad architecture, an essay in al-Muqata'af, Vol. 121, Part I. Damascus, 1952; pp. 206 and 260-261.

19. G. LeStrange, Baghdad during the 'Abbāsid Caliphate, Oxford, 1900, p. 17.

20. Ibid., p. 21.

eighth century A.D., ~~has~~ the aspiring leaders of the Islamic empire. When al-Mu'taṣim succeeded to the Caliphate (936-842 A.D.), Turkish influence came to the fore, once again largely because the new Caliph's mother was Turkish; and the Persian influence was overshadowed. Turks came to control the army and to hold so many other key-positions that the people began to hate them. Al-Mu'taṣim was obliged in the end to remove them from Baghdad so as to avoid serious trouble. He therefore built for them the city of Sāmarrā' in 836 A.D. and erected within it his famous palace called "al-Jawsaq al-Khāqānī". He also built the great mosque of Sāmarrā'. He brought many technicians and architects from all parts of the Islamic empire to help in the building of the City. (21)

The ornamental styles developed at Sāmarrā' constitute a remarkable phenomenon in the history of Islamic decoration. After an initial imitative style, the second and third Sāmarrā' must be regarded as a new departure, which gives a distinctive character to the whole of Muslim art. In particular their treatment of the arabesque is highly individual. (22)

Professor Creswell has divided the Sāmarrā' styles

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21. T. W. Arnold, *Painting in Islam*, Oxford, n.d. p. 31.  
22. F. Shāfi'ī. *Zakhārif wa Turāz Sāmarrā'*, an essay in the *Bulletin of the Faculty of Arts*, Vol. XIII, Part II, University of Cairo, 1951; pp. 1-32.

into three stages, as follows: (23)

Style A: Pl.2, is distinguished by its adherence to Hellenistic motifs. Its decorative elements consist of three and five-lobed vine leaves with bunches of grapes, which each have three lobes; the palmette and the eyes between the lobes can be seen clearly. It is possible to discern the same Hellenism in the style of cutting, in so far as the carving is carefully graded to give variety of depth, deeply shadowed indentation and strong plasticity.

In Style B, Pl.3, the background patterns are diminished until they become merely narrow veins which link the principal elements; these latter nearly lose their connection with each other. Thus the elements developed into big separate units, which are flat and have no stems. Each one completes the other, leaving no space between, so that they fit together like countries, sharing common frontiers. As a result, many interesting shapes were produced.

As for Style C, Pl.4, its patterns, except for a few of the simplest borders, were made with moulds. Pre-fabricated moulds were used to produce multiple casts of

the same design. This was probably the consequence of an increasing need to be more economical in time and money, and was an inevitable consequence of a continuous increase in the scale of architectural projects. In Styles B and C, appear some forms of the palmette and winged leaves. There are some elements based upon complete calices as well as upon cleft-base calices. (24)

The relief method known as the "bevelled technique" appeared in Style C; (25) in this technique, the majority of its patterns are executed. This term is applied to describe the appearance of the open channels of V-section with which the design is executed. These, which are necessary with the moulding technique to avoid the undercuts of the other styles, give its characteristic undulating surface to work in this style.

The changes that appeared in those elements were a result of the expansion of the individual internal units of the design. Such changes give a strange and novel character to the ornament as it grew and developed. In Style C, (26) the pure Islamic characteristic is finally established.

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24. F. Shāfi'ī, Op.cit., pp. 1-32.

25. A. A. Ḥamīd, The original characteristics of Sāmarrā' bevelled style, an essay in Sumer, a journal of archaeology and history in Iraq. Vol. XXII, Part I, Baghdad, 1966; pp. 83-99.

26. F. Shāfi'ī, Op.cit., pp. 1-32.

Even though decorative Style A appears with the oldest parts of Sāmarrā' architecture, particularly in al-Jawsaq palace and the Bāb al-Āmma of 836 A.D., while Style C was characteristic of the decoration of Balkwārā palace in 859 A.D., the difference between the two dates is only twenty-three years. This amounts to only a very short period in the evolution of decorative art. At other periods, such a development might well have taken many generations. Thus what happened at Sāmarrā' in the development of its decoration in such a short time can be considered a true artistic revolution. (27)

All three of these decorative styles were adopted everywhere in the Islamic world as part of the general repertoire of ornament, without losing their originality and their particular forms, especially in the cases of Styles B and C. It may be interesting to mention a few instances of their occurrence arranged in chronological order:

862-863 A.D.: al-Qairawān<sup>(28)</sup> lustre tiles in the great mosque; Styles B and C.

876-879 A.D.: Egypt-stucco in the mosque of Ibn Tulūn,<sup>(29)</sup> Styles B and C.

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27. Shafi'ī, op.cit., pp. 1-26.

28. K. A. C. Creswell, Early Muslim Architecture, Vol. II, Oxford. 1932-1940. Pls. 36 and 86A.

29. Ibid. Pl. 101, a, b, in Style C, and Pls. 103-106 in Style C.

- The end of the 9th Century A.D: Brick capitals at Riqqa<sup>(30)</sup>  
in Style C.
- Marble capitals in Syria<sup>(31)</sup>  
in Style C.
- 9th - 10th Centuries: Egypt, Wādī al-Natrūn and  
in a church in Dairal-  
Surian,<sup>(32)</sup> Styles B and C.
- 960 A.D.: Persia, as in the masjid  
of Nāyīn<sup>(33)</sup> Styles B and C.
- 936 - 1010 A.D.: Spain, some pottery with  
planted elements in Az-  
Zahrā' City,<sup>(34)</sup> in Style C.
- 1030 A.D.: Faris, Ghazna, a wooden  
door of Mahmūd's Mausoleum,<sup>(35)</sup>  
Style C.
- 1055 A.D.: Persia, Ardistān, mihrāb of  
the great mosque,<sup>(36)</sup> Style  
B.
- 11th - 12th Centuries: Faris, Yazd, a stucco  
mihrāb in Shāh Abū al-  
Qāsim's mosque, Style B.<sup>(37)</sup>

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30. Sarré and Herzfeld, *Archäologische Reist in Euphrate und Tigris-Gebiet*, Berlin, 1911-12. Vol. II, Abb. 322-323.
31. *Ars Islamica*, Vol. IV, *The Ann Arbor*, 1936-37; pp. 323-4.
32. K. A. C. Creswell, *Op.cit.* Vol. II, p. 356.
33. A. U. Pope, *Survey of Persian art*, Vol. IV, Pls. 255-269.
34. F. Shāfi'ī, *Op.cit.*, p. 18.
35. A. U. Pope, *Op. cit.*, Vol. VI, Pl. 1462.
36. *Ibid.*, Vol. IV, Pl. 324.
37. *Ibid.*, Vol. IV, Pl. 312.

- 1165-1166 A. D.: Iraq, Riqqa, gypsum capitals in its mosque go back to the time of Nūral-Dīn Zangī<sup>(38)</sup> Style C.
- 1170-1172 A. D.: Iraq, Mouṣil, brick capitals in the great mosque; and gypsum capitals, go back to the time of Nūral-Dīn Zangī.<sup>(39)</sup> Style C.
- 1310 A.D.: Persia, stucco in Aṣfahān mosque,<sup>(40)</sup> Style C.
- 1313 A.D.: Persia, Buṣṭām, stucco mihrāb in Bāyazīd mausoleum,<sup>(41)</sup> Style C.

During the ninth Century A.D., the power of the 'Abbāsīd dynasty began gradually to decline. The empire was divided into many states both in East and West. The rulers of these states used to govern in the name of the 'Abbāsīd Caliph in theory, but were independent in practice. Such were the Ṭulūnids (868-904 A.D.) in Egypt, the Ṭāhrids in Khurāsān (820-874 A.D.), the Ṣaffārīds in al-Ahwāz (868-903 A.D.) and the Buwayīds in Southern Iraq and Persia. (932-1055 A.D.)

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38. Sarré and Herzfeld, Op.cit., p.361 and Abb. 339, 35 and 37.

39. Ibid., pp. 29-290 and Abb. 281 and 282.

40. A. U. Pope, Op. cit., Pls. 396-397.

41. Ibid. Pls. 392-395.

The Sāmānids governed in Fāris (891-1041 A.D.). Their capital was Bukhāra. They had inherited the Sāsānid aristocratic traditions and used to claim that they were the descendents of the famous Sāsānian hero "Bahrām Chubin". Once again danger to this dynasty sprang from the fact its Turkish mercenaries obtained important positions in the army and the administration. The Turks eventually became so powerful that the Sāmānid principality was divided between two Turkish houses; <sup>(42)</sup> The Ghaznawids (962-1186 A.D.) and the Il-Khāns (1256-1353 A.D.).

The art of decoration applied to the Sāmānid buildings is known to have been based upon patterns and styles of Sāsānian origin. In these, certain characteristic tree and animal designs had been initiated. The designs and the architecture of the buildings similarly followed patterns of Sāsānian derivation. The Sāmarrā' decorative styles, however, exercised a powerful influence here too, modifying the traditional types.

The most distinguished historical remains of that era are the tomb of Ismā'īl the Sāmānid in Bukhāra, dated

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42. A. U. Pope, Op.cit., Vol.I, p. 84.



to 967 A.D.,<sup>(43)</sup> and the masjid of Nāyīn (960 A.D.) whose decoration shows the influence of Styles B and C of the Sāmarrā' decorative forms. In Nīshapūr, pieces of lustre pottery have been discovered which also reflected the impact of Sāmarrā' types.<sup>(44)</sup>

In Mesopotamia, Maḥmūd the Ghaznawid was defeated in 1055 A.D. by the Saljūq leader Tughril Beg and the Saljūq dynasty began to establish its own power. It originated with a Turkish family who used to live in Turkistan under the leadership of Saljūq b. Duqāq. In 956 A.D. they migrated into the district of Bukhāra and thereafter their influence expanded.

Nizām al-Mulk, the most powerful minister of Sultān Malikshāh of the Saljūqs (1072-1092 A.D.) built many schools at Nīshapūr and Tūs. Al-Nizāmiyya was one of his most famous schools in Baghdad; in it the four orthodox rites of Islam were taught.

The Caliph al-Nāṣir (1179-1225 A.D.) built the 'Abbāsīd Palace which was called "Dār-al-Musnāt". It is thought that this palace was built expressly as a school and thus might be called "Dār'ilm - a home of knowledge".

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43. D. Talbot Rice, *Islamic Art*, London, 1965; p. 49.

44. *Ibid.* p. 52.

Al-Mustanşir (1227-1232 A.D.) built al-Mustanşiriyya school in Baghdad<sup>(45)</sup>, which bears a great resemblance in its geometrical ornaments, arabesque, planning and the shape of its 'Iwān, to those of the 'Abbāsīd Palace.<sup>(46)</sup>

The Saljūqs also built tombs in the shape of towers with domes. This pattern of building was applied in Khurāsān<sup>(47)</sup> and became popular in other parts of the Islamic world, appearing in the tomb of Sitt Zubaida<sup>(48)</sup> in Baghdad and the tomb of Nūral-Dīn Zangī in Syria.<sup>(49)</sup>

The lustre painted tiles and the abstract floral decorations were the most distinguished characteristics of the Saljūq buildings.<sup>(50)</sup> The most fashionable decorative figures of the Saljūq era are both pictures and abstract patterns based on the shapes of animals and plants.<sup>(51)</sup> Such shapes were at times also engraved in brick. This technique can be seen on the Façade of the Talisman gate which was built during al-Nāşir's reign,<sup>(52)</sup> as well as on the 'Abbāsīd palace which is the

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45. Z. M. Ḥaşan, Op.cit., p. 86.

46. This thesis, Chapter 3, P-65 and Chapter 2, p. 81

47. Z. M. Ḥaşan, Op.cit., p. 87.

48. Sarré and Herzfeld, Op.cit., Vol.II, p. 173.

49. Ibid., p. 228.

50. E. J. Grube, Op.cit., p. 72.

51. Z. M. Ḥaşan, Op.cit., Vol. III, p. 984.

52. Ibid.

subject of our study. A brick style was widely used by the Ghazawids in the middle of Persia, but its best practitioners were the Saljūqs. (53)

Some of the most important buildings for dating the decorative work in the 'Abbāsīd palace are thus; the Talisman gate; Ghaibat al-Mahdī in Samarrā'; the mināret of Sūq al-Ghazāl; and al-Nūrī great mosque. This similarity in their styles of building and their art of decoration seems to indicate that the 'Abbāsīd palace belongs to the above group of buildings, and was established during the later 'Abbāsīd period which coincided with the Saljūq era just discussed.

Such in outline is the rich patrimony of the past upon which the 'Abbāsīd palace drew for its art, decorations, ornaments and building-design, and which give it its importance as a major monument.

An attempt will be made in the next chapters, especially to consider its wall-ornaments, which are richly worked with a large number of decorative elements. This attempt is based upon an analytical study of its artistic foundations. It is hoped that this will help to support the date given for its construction from a stylistic point of view.

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53. A. U. Pope, Op.cit., Vol. III, p. 984.

CHAPTER II.

THE PLAN AND THE MUQARNASAT OF

THE 'ABBASID PALACE.

The old ornamented 'Iwān from the remains of the 'Abbāsīd building popularly known as the palace of "Al-MĀ'mŪn"<sup>(1)</sup> stands in the south-western corner of the Baghdad Citadel. This 'Iwān, a three-walled vaulted room, opens to the west onto a courtyard, and is connected on both flanks with a series of rooms, halls and corridors. On the west side of the building, this series forms a right angle with a second series, and ends with an ornamented corridor and chamber. The ornaments of this chamber surpass in fineness all that can be found in the 'Iwān itself or in any other known ornamented building throughout Iraq. But this chamber as well as its beautiful corridor, was built without any windows; hence no natural light could find its way to its interior. Nowadays some daylight enters through a hole torn in the roof.

As the pillars and walls of this ornamented chamber were in a state of decay and part of its ceiling

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1. Directorate General of Antiquities, Remains of the Abbasid Palace in Baghdad Citadel, Baghdad, 1935; pp. 1-21.

was actually ruined, the Directorate General of Antiquities decided in 1934 to carry out the necessary repairs for the preservation of the building.

It was observed that a number of fairly recent walls had been built within the chamber, perhaps to strengthen the dome. As soon as one of these walls was removed, the remains of some exceedingly beautiful muqarnas-ornament appeared behind it. Having followed the track of this muqarnas, the Directorate General observed that the series of domes extending between this chamber and the 'Iwān was connected with an old ornamented wall, and that the large dome standing on the site of the 'Iwān was supported on walls built in front of other older ornamented walls.

Accordingly, the Directorate General decided to remove all the rooms and walls that had been recently added to the building in order to uncover the old walls, and to strengthen them. Work was started at once to give effect to this decision. All the accumulated debris, that had formed a thick layer over the ground with an average depth of no less than one and a half metres in most parts, was removed.<sup>(2)</sup> Afterwards excavations were made to uncover foundations belonging to ruined parts of the palace.

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2. Directorate General of Antiquities, Remains of the Abbasid Palace in Baghdad Citadel, Baghdad, 1935; pp. 1-21.

Thus, the Directorate-General was able to trace for certain the original plan of the building with its internal arrangements. Plan 3.

During the last stage of the Ottoman régime (1638-1918), the Citadel had been turned into an artillery barracks, and the Palace had been used as an ammunition depot. The use of the building for this purpose necessitated, on the one hand, closing certain old doors and windows by building them up with bricks and mortar, or with bricks and mud; and, on the other hand, opening new doors and windows by making regular or irregular holes in the walls. (3) Similarly, it was deemed necessary to build new walls and domes, some of them erected on old foundations, while some others were built on new ones. Thus, the result was a strange interlacing of old and new, and the whole building lost to a great extent its original shape. Plan 4.

In the course of the preservation work by the Directorate General of Antiquities, the history of the structure was brought to light. It was found that the existing building was the result of three fundamental stages. An interval of not less than seven centuries

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(3) Directorate General of Antiquities, Remains of the Abbasid Palace in Baghdad Citadel, Baghdad, 1935; pp. 1-21.

separated the first from the last stage. The earliest structure was the 'Iwān with its rooms and original halls; the fortified tower seems then to have been constructed after guns and fire-arms had come into common use, perhaps early in the nineteenth century; and finally those storehouses, rooms and domes were added to the building during the last period of the Ottoman régime in consequence of military reorganization.

The Directorate General has removed all the additions which were made to the building during the last stage, but has preserved the fortified tower because it is considered itself to be an old building worthy of preservation, even though it was erected at a date later than that of the main structure. And this tower is in fact independent of the original building, and does not interfere with its original arrangement.

The removal of the recent walls, together with the following of the track of the fallen walls, have clearly shown that the front part of the 'Iwān once ended in two flanking doors which were connected to a gallery extending around the courtyard and ending in the ornamented chamber which is still intact and whose appearance before the repair was that of a dark underground room.

While the walls of the ornamented chamber were being repaired and the recent patches removed, there was uncovered on the river-side of it the remains of an old opening. This connected with a strong, recently built wall which supports one of the large domes forming part of a recent military building incorporated with the palace, which was still in actual use by the army. In spite of the strength of this structure and its advantage to the army, the Directorate General was able to obtain the permission of the Ministry of Defence to pull down the dome together with the walls that support it. After disengagement it was discovered that the opening in question was a door once used as an entrance to the building from the river-side. Thus, the person who entered through this door found himself faced by a highly ornamented mābain. (This is a doorway between the two wings or apartments of a building). He was thus able to pass through this mābain either to the rear halls, or to the gallery which surrounded the courtyard. He could also reach the 'Iwān without leaving the shade of the gallery.



Parts of the Building.

The Iwān. Pl. 5.

The most striking and important part of the whole building is the 'Iwān. The word 'Iwān or 'Ivān is Persian and can be used for an enclosed hall, but in Islamic architecture it means always a space, whether portal or hall, which is enclosed only on three sides, having a certain depth, and a roof. Such halls open on one side, so well adapted to the climate of the Orient, were built as early as the Achaemenid period in Persia. The 'Iwān exemplified in Ṭāq-i-Kisra at Ctesiphon (531-574 A.D.) represented the most monumental development it could achieve.<sup>(4)</sup> Such a conception of the 'Iwān was the main borrowing of the 'Abbāsids from earlier architectural traditions which played the leading part in their plans.<sup>(5)</sup>

Pope said of the origin of the 'Iwān that it was "oriental" and did not develop as a natural consequence of the domestic habits of Babylonians or Assyrians, who preferred to inhabit enclosed rooms, but from the customs of nomadic peoples, who used to live in airy tents or reed-huts. These served only as a shelter against wind and sun enabling their occupants to look out into open

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4. A. U. Pope, Survey of Persian art, Vol. II, Oxford, London and New York, 1938; p. 153.

5. E. Kühnel, Islamic art and architecture, London, 1966; p. 52.

space and the blue sky. (6) The fact that the inhabitants of Hatra had apparently become a settled population only a short time before the city was built seems to be a point in favour of an Arab origin for their house-plan. On the other hand no 'Iwān buildings have as yet been found either in Palmyra or Petra, both however, cities lying within the sphere of Roman influence; but the Arabs in these two cities were no less close to their nomadic forebears than citizens of Hatra.

The 'Iwān had as its original characteristic roof a barrel vault. This has remained one of the chief roofing techniques, along with the square, domed unit, for monumental buildings in Persia from the Sāsānian period down to modern times. (7)

The 'Iwān of the 'Abbāsīd palace resembles a large hall wholly open towards the west side. It is about five meters wide and eight and a half meters long. Its barrel ceiling, Pl.5, reaches a height of more than nine meters above ground level.

The entire inner surface of the barrel vault, the tympanum of the rear wall and the upper parts of the walls are covered with beautiful relief ornament. The ornamental upper parts of the walls project in relief above the plain

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6. A. U. Pope, op.cit. Vol.I, pp. 429-430.

7. Ibid.

surface of the lower parts, which extends to a height of three and a half meters from the floor.

The opening of this 'Iwān is connected with a slightly oblong courtyard, 21.50 meters long and 20 meters wide. This courtyard is surrounded with a gallery opening inward through the wall-face, through void arches lined with muqarnaṣāt. The arches open at both levels onto a corridor, behind which are rooms matching each void arch. In certain places the rooms on the two storeys are so combined as to form high ceilinged halls; Plans 5, 6 and 7.

Most of the portions of the palace standing at the present time lie on the southern side and form part of its southern walls. Some parts of the eastern side also remain.

#### The Southern Side.

The surviving part of the southern side consists of seven small rooms, 2.32 meters by 3.80 meters, L1 - L7 of Plan 3. Each one of these rooms originally had an upper room above it, but the walls and ceilings of only four are still standing. The gallery extended along the frontage of the rooms on the ground storey, supported by eight pillars, each 1.15 meters thick, the distance between the pillars being 2 meters.

Behind these series of seven rooms extended a long and a high corridor parallel to and corresponding with the gallery in front of the rooms. This corridor is 1.28 meters wide, 26.70 meters long and 9.20 meters high.

Behind this corridor, stand four high halls whose floor dimensions are as follows; see Plan 3.

1 - Q5 - 8.8 meters x 4.30 meters.

2 - Q4 - 6.58 meters x 5.21 meters.

3 - Q3 - 6.58 meters x 4.65 meters.

4 - Q2 - 6.45 meters x 4.40 meters.

The height of each hall is about 9 meters.

The corridor to the west of these halls is connected with an ornamented passage-way M. This passage-way has five doors: the first is in the south-eastern angle, and connected with the western corridor. The second door is in the south and opens into the hall Q1 - 4.20 meters x 5.3 meters -, which is adjacent to the hall Q2. The third door is in the west and opens out as an entrance to the main building from the river front. It is exactly opposite a niche of an ornamented chamber. The fourth door is in the north leading to a large hall of which only the foundations exist. The fifth door is in the north-eastern angle leading to the gallery on the south and to the courtyard on the east.

It appears from the above facts that, the passage-way and the chamber are conceived as a mābain connecting the river-front entrance of the building with the various most important parts.

The Eastern Side.

The following are the parts still standing on the eastern side:

- a - The 'Iwān -A- which is in the middle of this side.
- b - Two rooms -B1 and B2- on both sides of the 'Iwān, each room is 2.35 meters wide.
- c - A small room -B3- to the north of B2. It is opened from the north side on a high hall -Q6-, this hall is about 6.40 meters long and 4.40 meters wide.

There are two upper rooms above the rooms B2 and B3 still in situ, but the room that was above B1 is completely ruined.

B1 and B2 are distinct from all the other rooms; firstly by having small windows over their doors; and secondly by the traces of arches in their walls. These remains show clearly that these two rooms are in the position where two staircases used to lead to the upper storey.

The Northern Side.

The portions standing on the northern side consist of small rooms, L8 and L9. They resemble the seven rooms standing on the southern side. Each of them is 2.32 meters x 3.80 meters.

There are some remains of walls and foundations all indicating that the northern side was divided into a series of ground and upper floor rooms much like those standing on the southern side. The doors of these rooms also used to open into a long gallery supported by eight pillars.

No trace of a door corresponding to that of the hall Q6 can be found in the standing wall. But there is an arch of a niche similar to that at the end of the southern side M.

On this assumption it might be stated that the building had two entrances, one on the river front, leading to the quay; and the other on the north-eastern side, leading to the courtyard.

At the present time, the building of the Ministry of Defence stands on this side, leaving no room for the Directorate General of Antiquities to carry out the necessary excavation there, in order to prove the validity of this assumption.

### The Western Side.

The standing portion of the western side consists of the river gate which was connected on a plan, called in Baghdad mābain. The mābain is shifted into the corner, in such a way that only one of its passages leads to the courtyard. The scheme was not created for this building, but it is old and statutory.<sup>(8)</sup> It first appears in one of the gateways of the palace of Balkwārā<sup>(9)</sup> in Sāmarrā', built by the Caliph al-Wāthiq (842-847 A.D.). This scheme is still common to all larger houses in Baghdad.

### The Plan.

The plan of the 'Abbāsīd Palace, is the same as that used in the Palace of Ardashir I, at Fīrūzabād and Kaleh-i-Dukhtar (218-228 A.D.).<sup>(10)</sup> In the 'Abbāsīd Palace the main 'Iwān on the east side of the court had a counterpart on the west or river side.

Apparently this plan represents the Saljūq version of the Iranian palace court, where the 'Iwān occupies the full height of the building. The smaller rooms around the corners use half the height of the halls and are repeated as in madrasa (school), in a first storey.

A court with four 'Iwāns has been found at the Parthian Palace at Ashūr. It is probable that such an elaborate derivative of the old Persian house was also

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8. E. Herzfeld, *Ars Islamica*, Vol. IX, U.S.A., 1942-1943, pp. 27-29.

9. *Ibid.*

10. *Ibid.*

usual for large caravanserais. This ancient plan was adopted in Khurāsān in the tenth century, and was also used for a great madrasa at Baghdad, called al-Niḡāmiyya,<sup>(11)</sup> built by Niḡām al-Mulk in 1065 A.D. This was imitated later in al-Mustanṣiriyya madrasa, built by the Caliph al-Mustanṣir in 1234 A.D.

The plan of the 'Abbāsīd Palace drawn by Herzfeld, Plan 8, shows that the north side is similar to the south, as was proved in a plan published later by the Iraqi Directorate General of Antiquities; see Plan 9. But in the west side of the building, according to Herzfeld, there must have been another 'Iwān opposite to that on the east. The Directorate General, after digging on that side, found that foundations not of an 'Iwān, but of a large hall, A2 in Plan 9, 12.80 meters by 4.50 meters. This hall was connected with small rooms on the north side, and with the mābāin on the south, thus showing Herzfeld's assumption to have been incorrect

There is one outstandingly important feature in the 'Abbāsīd Palace. That is the use of the long corridor, behind the seven rooms on the south. It is a horizontal cloister which reveals great virtuosity in its vaulting.

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11. A. U. Pope, Survey of Persian art, Vol. II, Oxford, London and New York, 1938; p. 990.



The big air-shafts in that corridor, actually without windows, are well suited to the climate of Baghdad. These air shafts also occur in Syria in the corridor of the Mārīstān (Hospital) Araghūn at Aleppo, but they are of Persian origin.<sup>(12)</sup> The air-shafts are called by the Persians "raucanam"<sup>(13)</sup> a term indicating windows in the roof, not in the side walls.

A comparison between the plan of the 'Abbāsīd Palace and the plans of two famous madrasas, al-Mustanṣiriyya (1234 A.D.) and al-Marjāniyya (1356 A.D.), reveals a clear resemblance. The masjid (prayer place), is situated opposite the big 'Iwāns in both al-Marjāniyya and the 'Abbāsīd Palace; while the masjid in al-Mustanṣiriyya, is opposite to the entrance 'Iwān.

In both al-Mustanṣiriyya and al-Marjāniyya there are sets of staircases, six sets in the former and four in the latter. Traces of such steps still exist in the 'Abbāsīd Palace, on both sides of the 'Iwān.

The main entrance in al-Mustanṣiriyya is rather narrow; its ceiling and sides are conspicuously decorated. It also bears traces of an inscription cut into bricks in "Naskhī Kufic". The entrance leads to a high arched corridor decorated with beautiful ornaments.

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12. Herzfeld, Op.cit. Ars Islamica, Vol. IX, pp. 27-29.

13. Ibid.

In al-Marjāniyya there is a high door crowned with ornaments, both its sides are also decorated, together with the side which overlooks the court. Its entrance leads to a corridor, linked with the enclosures of the school. The inscriptions everywhere in the 'Abbāsīd Palace have been obliterated.

The entrance-benches of the 'Abbāsīd Palace were supposed to serve as seats for door-keepers and attendants. This suggests that the entrance must have been intended as a school entrance rather than a palace entrance.

The entrances in al-Murtanşiriyya, al-Marjāniyya and the 'Abbāsīd Palace are similar to each other, except for one main difference. That is, on the left side of al-Marjāniyya's entrance, there is a mināret. The mināret, perhaps, was built by Sulaimān Pāshā, the Turkish governor of Baghdad. In 1200 A.D. he decided to enlarge the masjid and converted the school into a mosque. (14)

There is a clear indication that the 'Abbāsīd Palace was Dār 'ilm (house of knowledge). Indeed according to Professor Jawād, the building in question does look like a school. He has emphasised that the architect who designed al-Mustanşiriyya did in fact

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14. N. Ma'rūf, Bulletin of the College of Arts, Vol. II, Baghdad, 1960; p. 67.

imitate some of the 'Abbāsīd Palace's decorations. (15)

There is no court reserved especially for the ḥarīm as there would have been in a true palace, for the building is constructed so as to have only one big court, exactly the same as in al-Mustansiriyya and al-Marjāniyya schools. In all these cases, there is a masjid in the building, which leads to an 'Iwān, as well as corridors which lead to what must have been students' lodgings. The 'Iwān, in each of those buildings is similar to the middle 'Iwān in the Ḥirite pattern. (16) It was to be used for teaching and for certain ceremonies.

In al-Mustansiriyya to-day, there are four 'Iwāns, where the four rites of the Islamic religion are taught. The decoration and the style of those 'Iwāns are closely linked with the 'Iwān of the 'Abbāsīd Palace. Therefore it is a possibility which cannot be excluded that this last 'Iwān was used during the reign of al-Nāṣir for teaching the Shiah creed, which he had adopted. (17)

The similarity between the 'Iwān of al-Mustansiriyya and that of the 'Abbāsīd Palace can be seen in the shape, the size, the height and the decoration. In the eastern side of both buildings there are two similar entrances,

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15. M. Jawād, Bulletin of the College of Arts, Vol. IV, Baghdad, 1961; pp. 61-164.

16. Ibid.

17. Ibn al-Ṭaṭṭaṭī, al-Fakhrī, Cairo, 1927; p. 236.

which lead to a high corridor characterized by air-shafts in the ceiling. In al-Mustanṣiriyya these air-shafts are more spacious than that in the 'Abbāsīd Palace.

All the corridors of al-Mustanṣiriyya and of the 'Abbāsīd Palace lead to big halls which number seven in the former and five in the latter. These halls are similar to each other in plan, in height, in having air-shafts and bādḡīrs. (This Persian word means ventilation holes or wind towers).

The bādḡīrs were known among the Sāsānians in Persia; they were used in the Sarvistān Palace.<sup>(18)</sup> And even recently they remained in vogue, both in Persian and Iraqi buildings.

The big halls in al-Mustanṣiriyya such as A, B, C, and D in Plan 10, were used for teaching; each one catered for about sixty-two students.<sup>(19)</sup> One of these halls, E, was used as an office for the caretaker, who was responsible for the running of the school; hall F was allotted to the teachers and other officials.

The halls in the 'Abbāsīd Palace may have been used for these same purposes. Hall A2 in Plan 9 looks similar to No.17 in Plan 10 of al-Mustanṣiriyya. The

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18. A. U. Pope, Op.cit. Vol.I, pp. 546-547.

19. N. Ma'rūf, Op.cit., Vol.II, pp. 56-86.

masjid of al-Marjāniyya also much resembles these two other masjids. (20)

From what has been said, it seems quite unlikely that the 'Abbāsīd Palace was ever actually inhabited by the Caliph, his wives or even by commanders of his army. This is mainly because the rooms are so small and lack windows; such rooms were suitable only for accommodating students, as was the case in both al-Mustanṣiriyya and al-Marjāniyya. For these reasons it may be assumed that the 'Abbāsīd Palace must be properly designated a "house of knowledge", not a "Palace".

#### Styles of building.

All parts of the building, archways and ceilings included, are built with the finest brick technique. In general, the archways were built in either of the following two styles: (21)

- a - The style known among architects as the pointed-arch, locally called al-ḍaura.
- b - The style known in architecture as the segmented-arch, locally known as maḍanī.

The 'Iwān and the galleries were built in the first style (a), while those of all the rooms and halls were

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20. N. Ma'rūf, Op.cit., Vol.II, pp. 56-86.

21. Directorate General of Antiquities, Op.Cit., P. 19.

built in the second (b). The largest vaulted roof in the second style can be seen in hall Q4. The roof of this hall is supported above two walls about 5.21 meters apart. The styles of the doors generally combine the two styles; each door consists of two arches, the outer one in al-daura or pointed-arch style, and the inner one in madanī or segmented-arch style.

There are two forms of the pointed-arch commonly used in Islamic architecture; the simple pointed and the compound. The simple pointed type is formed by two segments of circles struck from two centres, Pl.6b. The compound form has two types: the four-centred as in the 'Iwān of the 'Abbāsīd Palace, and the keel arch.

The four-centred arch is constructed from segments struck from four centres, Pl. 6A, while the keel-arch is constructed from two segments of circles projected into straight tangents, Pl. 6C. Sometimes two forms of the compound pointed type closely resemble each other, when the top contours are short, or so crudely executed that it becomes difficult to recognise whether the lines are curved or straight.

The earliest examples of the compound pointed arches known in Islam are:

- a) Iraq - Rīqqa - 772 A.D., the arch is four-centred. (22)
- b) Iraq - Sāmarrā', the mosque of Abū Dulaf 860-861 A.D., four-centred. (23)
- c) Iraq - Sāmarrā' in Qubbat al-Şulaihiyya 862 A.D., some arches of the four-centred type. (24)
- d) Persia - Shīrāz - the great mosque; the remains of the original arch of the mihrāb with stucco ornament on its soffit 875 A.D., four-centred. (25)
- e) Persia - a mausoleum in Şangabāst 997-1023 A.D.; the arches in the interior are four-centred type. (26)

The pointed segmented arch is not very common in Persian architecture. It confers an appearance of inflexible rigidity on the building, thus endowing it with a particular kind of severe energy. (27) It seems that the compound pointed arch was born in Iraq and took its early steps of evolution in that country and in Persia.

#### The Muqarnaşāt.

The so-called stalactite motif dates back to the eleventh century. (28) It consists of an accumulation of niches and arched recesses which seem to have evolved from

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22. K. A. C. Creswell, *Early Muslim architecture*, Vol. II, Oxford, 1932-40, p. 43, Fig. 29.
  23. *Ibid.*, p. 279.
  24. *Ibid.* Pl. 79a.
  25. U. A. Pope, *Op.cit.*, Vol. IV, Pl. 259a and b.
  26. *Ibid.* Vol. IV, Pl. 260 b and c.
  27. *Ibid.* Vol. II, p. 987.
  28. Z. M. Hasan, *Op.cit.*, 152.

a honeycomb or cellular design.<sup>(29)</sup> It is usually employed as a decoration applied to corbelled courses of stonework, and the pointed form of arch is the basic motif in stalactite decoration. It would seem that such an ornamental conception must have developed in countries where stone building prevailed, probably in North Mesopotamia.<sup>(30)</sup>

Herzfeld said that the Oriental term for this phase of decorative method is muqarnaş (plural - muqarnaşāt), a loan-word from the same late Greek word as that from which the word "cornice" comes; it is defined in the dictionary as a "scale-shaped roof." He holds, it seems correctly, that it is wrongly called stalactite; for the suspended brackets characteristic of full stalactite work do not appear before the decline of the earlier form here called muqarnaş in the Mamlūk period (1250-1516 A.D.).<sup>(31)</sup>

The muqarnaş appears in the tomb of Sitt Zubaida. It was thought that Zubaida was the wife of the Caliph Hārūn al-Rashīd (786-809 A.D.); but his wife died in the ninth century, while the ornament of this tomb dates in fact to the Saljūq era. By then stalactite had advanced,

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29. G. T. Rivoira, *Muslim architecture*, Oxford, 1918, p.183.  
30. E. T. Richmond, *Muslim architecture*, London, 1926; p.100.  
31. Herzfeld, *Op.cit.*, *Ars Islamica*, Vol. IX, pp. 27-29.



along with a geometrical type of architecture developed for the building of tombs more advanced in design than those built in the time of Hārūn al-Rashīd.

These Saljūq tombs were usually constructed of stone in the shape of towers, and are probably evolved from simple constructions dating back to the pre-Islamic era.<sup>(32)</sup> They followed this pattern until the end of the 'Abbāsīd dynasty, when the design again developed into a version built of brick.

The tombs were erected upon foundations some of which were circular and some polygonal. The earliest of these is the Gunbād-i-Qabūs which was built in Jarjān, on a star-like foundation-plan and had a conical roof. This type of building was widely used in Western Persia.

The tombs on circular plans with cone-shaped tops were also widely used throughout Persia. Their exteriors are either mainly smooth, like those in Damghān, or were fluted with deep vertical grooves which had pointed apices. Some of the roofs had within their external round tent-shape an internal dome, like those in Rayy, Mousil, and elsewhere in Iraq.

The most famous example, Sittī Zubayda, rises over an

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32. Z. M. Hasan, *Op.cit.* p. 87.

eight-sided prism. Herzfeld and Jawād have both emphasised that the construction belongs in fact to the reign of al-Nāṣir (1179-1225 A.D.),<sup>(35)</sup> and was built for his mother Zumurrad Khātūn, who died in 1202 A.D.<sup>(34)</sup>

The building is brick on the plan of eight-sided prism, each storey narrower than that below it with an interior scattered with light from small holes constructed in the roof of the muqarnaṣ niches. The original decoration consists in the main of variations of the "Hazārbāf" springing from the height of the niches.<sup>(35)</sup> Hazārbāf is the Persian name for a technique of design which is always executed entirely in brickwork, the elements of the pattern and the background all being based on brick courses.<sup>(36)</sup> The Persian name means "a thousand twists".

Above a zone of transition, consisting of eight compound brackets, rise ten zones of muqarnaṣ, like a rich lotus design, Pl.7. Above the seventh the units would have become too diminutive had their number remained at sixteen, and so at the seventh course they change over

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33. E. Herzfeld, *Op.cit.*, p. 25.

34. M. Jawād, *Dalīl Khāriṭat Baghdad qadīman wa ḥadīthan, al-Majmā' al-Ilmī al-Iraqi*, Baghdad, 1958; p. 170.

35. Sarre and Herzfeld, *Op.cit.*, Vol.II, pp. 174-175.

36. K. A. C. Creswell, *A short account of early Muslim architecture*, p. 185.

to eight units. Below, at the springing line, the salient angles of the sixteen must lie in the normal and diagonal axes of the octagon. And the reduction in number, necessary above, has the inevitable effect of changing eight courses of depth into ten, including the conch, about  $11^{\circ}$ ,  $15'$  thick. (37)

Two muqarnaş of that kind were found in Damascus in al-Māristān (hospital) al-Nūrī; one of them is in the vault over the entrance bay and the other in the dome over the entrance hall.

The third example of the muqarnaş dome is in Syria, in the tomb chamber in madrasa-turbāNūr al-Dīn, built in 1172 A.D. The three examples are not built as true vaults, but are corbelled. Also in those three examples the domes spring from a horizontal line along the upper edge of the supporting wall, and then culminate in a conch. The semidome reaches this summit by means of a minute colonnade and nine intermediate zones of small cells; the full domes have eleven almost homogeneous zones.

In the 'Abbāsid Palace the archways of the gallery once rose in front of each door in the southern side by means of a concave dome on the plan of an eight-pointed

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37. E. Herzfeld, *Op.cit.*, pp. 25-26.

star, Pl.8, just like that in the tomb of Sitt Zubaida. Between each two consecutive domes was a low roof. The muqarnaş connected these domes and the ceilings, Pls.8 and 9. Each face of the muqarnaş is decorated with fine arabesque.

The first appearance of the muqarnaş in Persia was in Māzandrān and thence it was spread throughout other parts of this country. But the earliest example in the Arab world appears to be the dome of the mihrāb in al-Qairawān mosque, <sup>(38)</sup> built about 836 A.D. The muqarnaş in that mihrāb is a semicircular squinch on two columns, behind which springs a half-dome in a scalloped-shape. Thence it spread to S<sup>u</sup>sa in 821-850 A.D.; to Tunisia in 864-991 A.D. and to the mosque of Cordova in 916 A.D.

The evolution of the muqarnaş as it spread over North Africa was adopted not as construction but purely for the sake of its ornamental appearance, as in Tlmisān dome. <sup>(39)</sup> In the mosque al-Jayūshī in Cairo, the muqarnaş had evolved away from the type used in Tunisiā, and all the muqarnaş in Cairo are different from those in Iraq and Persia. In Egypt they followed a distinctive local tradition. <sup>(40)</sup>

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38. A. Fikrī, Masājid al-Qāhira wa madārisuhā, Vol.I, Dār al-Mā'rif FI Mişr, Cairo, 1965; p. 163.

39. Ibid.

40. K. A. C. Creswell, Muslim architecture in Egypt, Vol. I, 1951, p. 253.

CHAPTER III.

ARTISTIC ANALYSIS OF THE WALL ORNAMENTS.

Arabesque is a mural or surface decoration in colour or low relief, composed of undulating lines suggesting branches, leaves and scrollwork fancifully intertwined.<sup>(1)</sup> In German the word arabesque denotes the foliage ornament of Muslim art; in a wider sense current since the Baroque period, it is applied to all the ornament of that art in general. The word moresque, properly referring to the art of Muslim Spain, is almost synonymous.<sup>(2)</sup> Modern usage frequently applies the word arabesque to that style of later Renaissance mannerist ornament which is more correctly called grotesque. Similarly in English,<sup>(3)</sup> the word is used in a general way, but without historical accuracy, to denote decoration in the grotesque style, whilst the moresque is frequently distinguished from it as being the ornament of Muslim art. In French the adjective arabesque has long been applied to works of art from countries of Islam;<sup>(4)</sup> and since the Renaissance it has been used as a noun for the corresponding Muslim ornamentation, whence it was transferred to denote decoration in the Grotesque style. There is also an important usage of the word arabesque,

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1. E. Herzfeld, Arabesque, Encyclopaedia of Islam, Vol. I, London, 1913, pp. 363-367.
  2. Ibid.
  3. Ibid.
  4. Ibid.

found in the writings of aestheticians of eighteenth century Europe, which applies it to the regularly recurved line, thus singling out one of the essential features of the styles of ornament under discussion.

Arabesque in Muslim art included as its dominating element, intertwined bands, vegetation, motifs derived from the Arabic script, and less frequently patterns based on figurative subjects.

There are some general characteristics which distinguish Islamic plant ornament from those of the classical period. The former is certainly derived from the latter, with its conventional flora realistically executed, and consisting of palm leaves, acanthus and elements derived from these. But <sup>in</sup> Greek antiquity there was a gradual striving towards life-like forms, a constantly increasing approximation to the complexity of nature, which reached its zenith in the early Hellenistic period; later there began a reaction towards stylization and patterned generalization, which was caused partly by the intrusion of other non-Hellenic ideals and views of art entertained in the Eastern Greek provinces, but partly also by the decline of technical skill. (5) These undercurrents become dominant

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5. F. Herzfeld, Arabesque, Encyclopaedia of Islam, Vol. I, London, 1913, pp. 363-367.

in the art of Islam, which in a general way may be regarded as representing the further development of the reaction. Once it was adopted into Muslim art the arabesque displayed a tendency to become yet more and more abstract, treating ornament based on living forms, more and more as purely geometrical design.

Abstraction in plants goes so far that the whole range of decorative elements taken from plants is reduced to combinations of a small number of basic patterns, some slightly resembling palm or acanthus leaves, but others wholly without reference to nature.

The foliage sometimes has the appearance of a tree, as in the mihrāb of al-Khāsakī mosque,<sup>(6)</sup> and at al-Qairawān in a panel of the minbar dated 862/3 A.D.<sup>(7)</sup> Such tree-forms may well have been connected with the old idea of the tree of life, called cedar, known by Muslims as Sidrat al-Muntahā,<sup>(8)</sup> which is mentioned in the Qurā'n in the Sura of al-Najm. This holy tree grows in Heaven, and is cognate with a kind of plum tree which grows in Arabia. Therefore, the plant elements in the decoration of which they were so fond were felt by Muslims to be emblems of that tree especially when they were used on

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6. Sarré and Herzfeld, Op.cit., Vol.II, Abb. 187.

7. Creswell, Op.cit., Vol. II, Pl. 90c.

8. Qurā'n, Sura al-Najm, vers. 53:15.

the mihrāb inside the mosque.

It is more than likely that the Islamic image of the tree of life was itself inspired by Sāsānian and older pictures of a tree with a similar significance.<sup>(9)</sup> In the ancient Middle East many such images were common. The same image of the tree of life is to be found in the Greek Apoclypse of Moses.<sup>(10)</sup> In this text Adam, facing death, sent his son to Paradise to bring him oil from the "tree of mercy"; and from the wood of this tree "the Cross of Christ" was made.<sup>(11)</sup> This widely diffused symbolism has, by obvious historical channels, influenced strongly the Islamic understanding of the tree with its beautifully ordered branches in art and architecture. And since Muslim art was bred from contacts of the art of Christianity with Islam, the Muslims even adopted the tree-conception to enhance the religious meaning of the decoration of their mihrābs. The tree appeared also in the painting of some Arabic books such as kitāb al-<sup>(12)</sup> Tiryāq from Northern Iraq dated 1199 A.D., Kalīla wa dimna<sup>(13)</sup> (probably from Syria dated) 1200 A.D. and

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9. G. Lechler, The tree of Life in Indo-European and Islamic culture, *Ars Islamica*, Vol. IV, Fig.2.

10. Ibid.

11. Ibid.

12. R. Ettinghausen, Arab painting, The World Publishing, Cleveland 2, Ohio, 1962, 84 and 85.

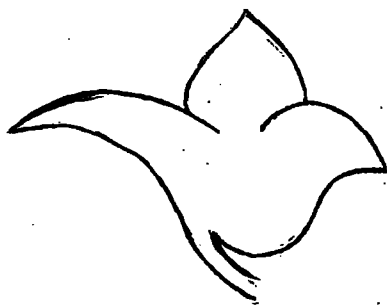
13. Ibid., p. 62.



Maqāmāt al-Harīrī<sup>(14)</sup> in <sup>the</sup> Bibliothèque Nationale, Paris.

It also appeared in a carved wooden Qurā'n stand 1360, the tree of life here being represented as a cypress.<sup>(15)</sup>

The foliage ornament in the 'Abbāsīd Palace is distinguished by two kinds of calices - the two-sepal calyx and the three-sepal calyx. These calices each appear in two main forms, the ordinary calyx in which the stalk meets the base in the axis of the calyx; and the split calyx in which the stalk is connected sideways, thus forming a single curved line with one flank, so that the whole base is placed to one side of the stalk as in Fig. I.



Each of these calices can be divided into five subtypes according to the design of its base, as in Fig. II:

Fig. I. SPLIT CALYX

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14. R. Ettinghausen, Arab painting, the World Publishing, Cleveland 2, Ohio, 1962, ~~Page~~ <sup>P.</sup> 82.  
15. G. Lechler, Op.cit., Fig. 4.

- a. The mono base;<sup>(16)</sup> which is formed either by one curve interrupted by the stem, or by two curves forming a

funnel

shape

with

the help

of the

stem

Pl.11a

and b.

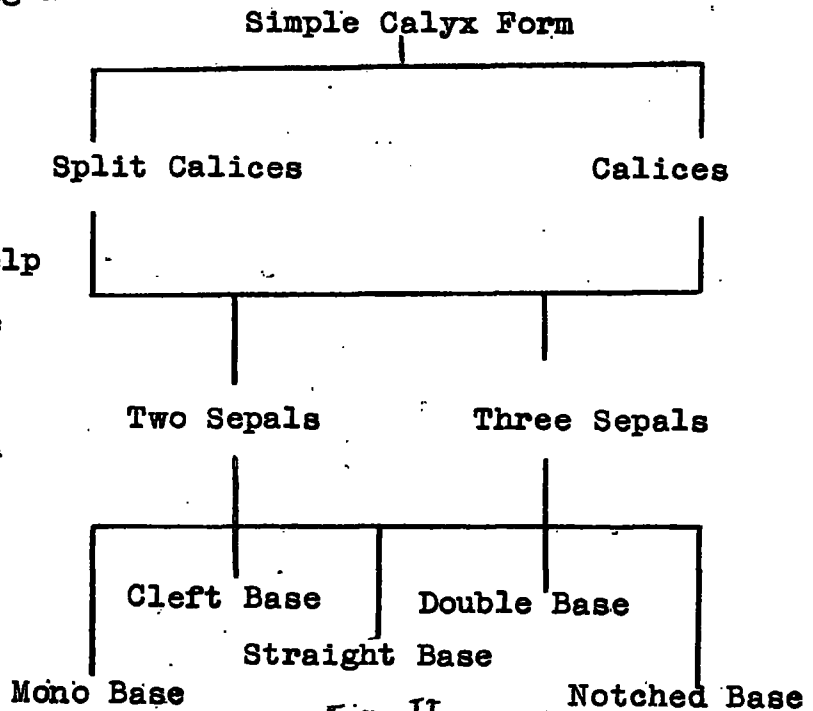


Fig. II

- b. The cleft base;<sup>(17)</sup> which is formed by two concave curves, Pl. 11c and d.
- c. The straight base;<sup>(18)</sup> in which the curves are reduced to a straight line, the flanks being nearly perpendicular to it, Pl.11e and f.
- d. The double base;<sup>(19)</sup> in which the calyx is formed of two separate bases joined by one middle sepal;

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16. F. Shafi'i, Simple calyx ornament in Islamic art, Pl.7a and Pl. 15a.
17. Ibid., Pl. 12h and 28a.
18. Ibid., Pl. 14 b and 38r.
19. Ibid., Pl. 38f.

- e. The notched base;<sup>(20)</sup> in which the joint of the base to the stem is interrupted by a notch or curve twisted inwards, Pl. 12a and e.

The three-sepal notched-base calices, and the two-sepal with split, notched base are the only kinds of calyx to appear in the ornament covering all the muqarnasāt in the 'Abbāsīd Palace. They are also used in the stars which decorated the 'Iwān and the ceiling of the nich facing the mabain. The notched base calyx is perhaps the most important contribution of this ornamental style to the shape of the base.<sup>(21)</sup> In the beginning it is found in the ornament of Sāmarrā' more especially in Style A<sup>(22)</sup> Pl. 12a, in stucco. There it evolved and then spread eastward throughout Islam.

The probable direct origin for the derivation of the notch in the base, is the hollow curve at the base of the winged-leaf motif found in a stucco panel at Sāmarrā'<sup>(23)</sup> Pl. 12b. This winged leaf originated in Sāsānian art. It was used on the royal crowns of Sasanian Kings, such as the crown of Kosro II<sup>(24)</sup> Pl. 12c. The winged leaf is later found simplified in a Sāsānian ewer, by omitting the points.

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20. F. Shafi'i, Simple calyx ornament in Islamic art, Pl. 27a and Pl. 48a.

21. Ibid., P. 43.

22. Creswell, Early Muslim architecture, Vol. II, Pl. 78d.

23. Ibid.

24. Pope, op.cit., Vol. IV, Pl. 214.

of its edge-sides, as in Pl. 12d;<sup>(25)</sup> eventually it was transformed in Sāmarrā' Style A from a winged leaf into a calyx, as a result of the close interaction between the artistic elements in Persia and Mesopotamia.

The design consisting of two sepals with the notched base appears for the first time in stucco at Sāmarrā' in Style C<sup>(26)</sup> Pl. 12e, and from there it was transferred to Egypt during the Tulūmid period, as appears in Pl. 12f<sup>(27)</sup> in stucco in the mosque of Ibn Tulūn at Cairo. The first appearance of this calyx in Persia was in the time of the Ghaznawids between the tenth and the eleventh centuries, as can be seen in Pl. 13a<sup>(28)</sup> from the door of Muḥmūd the Ghaznawid. It seems, however, that the Persian styles were influenced to a great extent by the work at Sāmarrā'. Thereafter this ornamental shape became very prominent and popular in forms of artistic decoration during the thirteenth century.

There is another kind of calyx which also appears in the ornament of the 'Abbāsīd Palace; that is the two sepal split calyx. One of the sepals is elongated

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25. F. Shāfi'ī, Bulletin of the Faculty of Art, Vol. VIII, Part I, Fig. 15, Cairo 1951.
  26. Creswell, op.cit., Vol. II, Pl. 74c.
  27. F. Shafi'ī, op.cit. Pl. 48c.
  28. Ibid., Pl. 491.

upwards and the other downwards, then one calyx is put side by side with another symmetrical calyx, so that the upward sepals meet each other in an inverted heart-shape, crowned with a three sepal notched base calyx, Pl. 14a. This inverted heart-shape in arabesque appeared in most of the buildings of Iraq belonging to the eleventh and the twelfth centuries; an example is shown in Pl. 14b, from the mināret of Sūq al-Ghazl. (29) It appears also in the ornament of Māruf al-Karkhī at Baghdad.

The ornament in the mināret of Sūq al-Ghazl is one of the groups of ornament which have a pronounced similarity to those of the 'Abbāsīd Palace, including both the arabesque and the geometrical designs. The hazārbāf technique appears in both of them. The notched base calices, on the other hand, were a basic element within the arabesque in both buildings. This type of calyx is used in various forms, one being with the calyx at the centre of the design surrounded by its stems, which themselves convert the design into an inverted heart-shape.

Other buildings from Ghazna show a great similarity in decoration to the 'Abbāsīd Palace, particularly in

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29. Mināret Sūq al-Ghazl, survived from the mosque of the Caliphs, built by the Caliph al-Muktafi 962-908 A.D., the mināret restored in 1086 A.D.; its ornaments go back to the period of al-Nasir.

their use of the notched base calyx Pl. 13c.<sup>(30)</sup> The notch, however, in the base of the calices with both two and three sepals is not as deep as it is in those of the 'Abbāsīd Palace; but the notched base calices themselves are still used in the same way. There are other elements in the design which are very similar both in the ornament of the 'Abbāsīd Palace and of certain buildings of Ghazna, Pl. 13d and e.<sup>(31)</sup> These help to confirm the date attributed to the 'Abbāsīd Palace.

There are other contemporary buildings on which appear notched base calices with two or three sepals and some of them we mention below:

- a. al-Qairawān - the great mosque dated to the eleventh Century (three sepals).<sup>(32)</sup>
- b. Persia - in woodwork dated to the eleventh Century (three sepals).<sup>(33)</sup>
- c. Egypt - door in the Museum of the Islamic art, dated to the eleventh Century (two sepals).<sup>(34)</sup>
- d. Iraq - in stone in the great mosque at al-Mouṣil dated 1148 (three sepals).<sup>(35)</sup>
- e. Persia - Merv, in the Mausoleum of Sultān Sinjār dated 1157 (three sepals).<sup>(36)</sup>

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30. Pope, op.cit., Vol.II, p. 1356, Fig. 502b.

31. Ibid., Vol.II, p. 1353, Fig. 499a.

32. F. Shafi'i, op.cit., Pl.21r and s.

33. Ibid., Pl. 21v.

34. Ibid., Pl. 49h.

35. Ibid., Pl. 22a.

36. Ibid., Pl. 22d.

- f. Syria - Hama, in the minbar of al-Nūrī mosque dated 1163 (three sepals).
- g. Jerusalem - in the minbar of al-Aqṣā mosque dated 1168 (two sepals).<sup>(37)</sup>
- h. Egypt - wooden panel in the Museum of the Islamic art, between the eleventh and the twelfth Centuries (three sepals).<sup>(38)</sup>
- i. Egypt - on ceramic between the eleventh and the twelfth Centuries (three sepals).<sup>(39)</sup>
- j. Persia - on cloth, between the eleventh and twelfth Centuries (two sepals).<sup>(40)</sup>
- k. Riqqa - on ceramic, between the eleventh and twelfth Centuries (three sepals).<sup>(41)</sup>

The abstract vase-shape element appeared in the 'Abbāsid Palace.

The "full vase" is an element which played an important decorative rôle in classical art and architecture. It is usually associated with the plant of life,<sup>(42)</sup> and was adopted in Christian iconography in the form of the vase filled with white lilies as an emblem of the Virgin Mary.<sup>(43)</sup>

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- 37. F. Shafi'ī, op.cit., Pl. 50a.
  - 38. Ibid., Pl. 19h.
  - 39. Ibid., Pl. 19i.
  - 40. Ibid., Pl. 49n.
  - 41. Ibid., Pl. 22h and c.
  - 42. Giriot, A dictionary of symbols, Routledge and Kegan Paul, London, 1962; p. 339.
  - 43. Ibid.

In the first stage of Islamic art, when classical elements were to a great extent dominant, the vase appeared, along with the familiar cornucopias, bunches of grapes, acanthus leaves, vine leaves and scrolls used to decorate portals and pilasters. These elements were found in the 'Umayyad and the early 'Abbāsid eras. The following list shows the use of the vase and cornucopia in the 'Umayyad monuments:

- a. The Dome of the Rock at Jerusalem; in mosaics of the intermediate octagon inner place, dated 691-2 A.D. (44)
- b. The Great mosque at Damascus in the west riwāq, dated 714-15 A.D. (45)
- c. Khīrbāt al-Mafjar in Jordan, built during the reign of Hishām 724-743 A.D. (46)
- d. On the façade of al-Mshatta palace, dated 743-4 A.D. (47)
- e. On panels of carved wood in al-Aqsa mosque at Jerusalem dated 880 A.D. (48)

In the early 'Abbāsid era, the vase appeared in

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- 44: Creswell, Early Muslim architecture, Vol. I, Pls. 9c, 11, 14, 16b and c and Pl. 17
  - 45: Ibid.; Vol. I, Pl. 45 a-c.
  - 46: E. Grube, Op.cit., P. 14.
  - 47: Creswell, Early Muslim architecture, Vol. I, Pls. 64, 66-68.
  - 48: Ibid.; Vol. II, Pl. 25 a-i.



the decoration of the mihrāb in al-Khāsakī mosque at Baghdad. The vase here appears with a group of decorative plants extended in a rectangular shape from the top of the mihrāb. The vase is in the bottom whilst the planted elements and the cornucopia grow upwards from it to the top. This mihrāb, according to Creswell, was imported from Syria by the Caliph al-Manṣūr, 762-775 A.D.

From the beginning of the reign of the 'Abbāsid Caliph al-Mu'taṣim until the end of the Ṣafawid period (1499-1524 A.D.) arabesque displayed a tendency to become yet more and more abstract, treating all the decorative elements as a purely geometrical designs.

The first appearance of the abstract vase was in Sāmarrā' styles B and C, <sup>(49)</sup> as well as in all the buildings related to the same period; for example in the mosque of Ibn Tulūn at Cairo dated 876 A.D. and <sup>(50)</sup> Masjid Nāyīn <sup>(51)</sup> at Persia dated 960 A.D.; in the early Faṭimid period 969-1171 A.D. and all of the buildings of Nūr al-Dīn Zangī in Syria and Iraq. These examples frequently refer back directly to the classical scheme of foliage growing out of a vase. <sup>(52)</sup> But along with

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49. Creswell, Op.cit., Vol. II, Pl. 27g.

50. Ibid., Pl. 103a.

51. Pope, Op.cit., Vol. V, Pl. 511 b and c.

52. Herzfeld, Arabesque, the Encyclopaedia of Islam, pp. 363-367.

the other classical elements the vase has developed into an abstractly conceived design of leaves; for example in al-Sālihiyya Jamī' al-Hānbaliyya built by Gokbūrī b. 'Alī Lord of Irbīl in Northern Iraq, dated 1179 A.D.; the vase here is in the middle, and two vine scrolls with bunches of grapes grow from it; one of them to the right and the other to the left. (53)

From the twelfth Century onwards, the vase became more abstract to harmonize with the linear arabesque; but it still kept the shape of a vase with the other plant elements growing from and subdividing round it, as in al-Nūrī mosque at al-Mouṣil in Northern Iraq. See Pl. 10b.

In the 'Abbāsīd Palace made, as we suggest, between the twelfth and the thirteenth Centuries, we find the same technique of using the vase which appeared in al-Nūrī mosque in the arabesque group decorating the muqarnaṣāt; Pl. 10a.

Among other contemporary buildings the abstract vase shape is found in the ornament of Shaikh M'arūf al-Karkhī. (54) The vase appeared again during the twelfth Century together with Arabic Kufic on an unglazed tile from Afrāsiyāb in Persia. (55) This form of vase possibly

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53. Herzfeld, Damascus, Studies in architecture IV, Ars Islamica, Vol. XIV, 1948; Fig. 6.

54. Sarre and Herzfeld, Op.cit., Vol. II, Abb. 203.

55. Pope, Op.cit., Vol.II, P. 1731, Fig. 595.

denotes "Qandīl", a mosque-lamp, which is used to light mosques in the Muslim world. This symbol probably

symbolizes the light of the truth of Islamic religion, as we shall see. The same form of vase was called by

Aga Oglu, qandīl, when he described it as a decorative element occurring in the mihrāb of the mosque at Najaf

in Iraq.<sup>(56)</sup> This mihrab goes back to the thirteenth Century. A golden vase also appeared as qandīl in

Muslim paintings such as the Maqāmāt of al-Ḥarīrī in the British Museum, and Kāshif al-Asrār in the library of the Süleymaniya mosque in Istanbul. Both books are

dated in the fourteenth Century, probably from Syria.<sup>(57)</sup>

This golden vase shows a great similarity in both shape and colour to that in classical art.

The use of the vase continued until the seventeenth Century. It appeared in Masjid-i-Shāh at Aṣfahān, in the northern 'Iwān in marble as a corner post dated about the fourteenth Century. Another marble vase at the base of some cable moulding in the same masjid is dated 1616.<sup>(58)</sup>

#### The decoration of the main 'Iwān.

The ornamental surface of the barrel vault, Pl.16, is composed like a carpet with a very rich basic pattern

56. M. Aga Oglu, Najaf Jam'ī Zīr Dālīn, Ars Islamica, Vol.II, 1935, pp. 128-131.

57. R. Ettinghausen, op.cit. p. 146 and 159.

58. Pope, op.cit., Vol. V, pls. 550 and 551

and a large circular medallion in the centre which is called by Herzfeld "muhr".<sup>(59)</sup> Also apparent in the corners are four triangles each of which is connected from one side by a curve resembling a handled basket. Pl.17. The basic ordering pattern is "tafşıl makhbūt."<sup>(60)</sup> resting on a regular octagon placed on a tip, and arranged in quincunx with an eight-pointed star composed of two diagonally overlapping squares.

The muhr stands in high relief against the decorated background, as does the relief of the Talisman gate. The medallion has a special rosette centre-shape. The frame round the medallion is a kind of astragal with decorated half petals between the ribbon strands. See Pl. 17.

X The arabesque creepers of the medallion and the corners are executed in such a high and alternating relief so deeply cut that they appear to be suspended. Herzfeld observed that this feature represents the most masterly use of the brick material.<sup>(61)</sup> In principle it is the same linear arabesque as in the relief of the Talisman gate, and on the wooden wall of Ghaibat al-Mahdī in Sāmarrā'.

In the medallion, the composition bears an intermittently undulating creeper with radical axes. In the

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59. muhr = Persian word means seal.

60. tafşıl makhbūt = Persian words; tafşıl means making clear, and makhbūt means mixed together.

61. Sarre and Herzfeld, op.cit., p. 171.

corners it develops symmetrically from a tree - like central trunk; consisting of elements that are abstract, and not plant-like, but stem from the vase form. The tile brick-carpet meets at the groin of the vault. On the other sides, they are all enclosed by a strip in hazārbāf. In this way, therefore, three different types and stages of technique and ornamentation contrast one with another. The recesses, which separate this barrel vault from the reinforcing arches, are dealt with in a different way. The whole pattern is astragal of rectangular hexagons, and elongated "bāzūband;<sup>(62)</sup> with triangular spandrels inbetween. The ribs are walled with small pieces of tile. The panels of the hexagons harmonize with the basic pattern of the surface of the vault, composed around the twelve-pointed star, Pl.15. The arabesque in this star is on an infinitesimally fine background of creepers. The hazārbāf of the surfaces, on the other hand, has a woven pattern in plastic double ribs. The pattern is based on the twelve-pointed star arranged in quincunx. Each star shows as a bright arabesque on a dark background of creeper; all other surfaces have only the infinitely fine creeper pattern. The triangular spandrels are surrounded by a free-playing arabesque in the style of the surface of the medallion of

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62. Bāzūband = Persian word, means an armlet.

the carpet pattern. Here the art of brick tile decorative building reached its zenith in the 'Abbāsīd Palace.

The artistic features of the 'Abbāsīd Palace as far as its decorations, ornamentations, and architectural techniques are concerned are clearly related in time to the period of the Caliph al-Nāṣir for there are great artistic resemblances between the former and the work on the Talisman gate, the wooden wall in Ghaibat al-Nahdī, and the ornaments of the mināret of Sūq al-Ghazl, which all belong to the Caliph al-Nāṣir period. (63)

The medallion in the 'Iwān is an instance of same type of geometrical ornament which also appears on Persian pottery from the tenth Century. The arrangement of the medallion and the four corners in the 'Abbāsīd Palace appeared later in the interior of the Sultāniyya mausoleum but with two corners only. This mausoleum dates to 1309-13 A.D.

The medallion may have been taken from the group of small-scale circular forms which occur very frequently in Islamic ornament, possibly based on a natural image such as the sun, the moon in its various phases, the pearl, the sunflower, etc.

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63. Sarré and Herzfeld, op.cit., Vol. II, p. 178.

The geometrical forms.

The use of geometrical shapes in the broad forms of architecture has a universal substratum of meaning. The circle-form, for example, relates to the sky or heaven; the square to the earth, and the triangle most commonly to fire and the urge towards ascension inherent in human nature. It may also symbolize communication between earth and heaven.<sup>(64)</sup> The joining of the square with the circle in such forms as the star, the rose or hexagon was often a symbol of the final stage in the process of individualisation.<sup>(65)</sup>

The geometric linear system wherein complex interlacing is built up by intersecting polygons, was a type of decoration that had developed from Hellenistic antecedents<sup>(66)</sup> in the Western Mediterranean regions, and had entered Persia from the Roman East. Its earliest intrusion being in the form of meanders in the Parthian periods.<sup>(67)</sup>

In the Sāsānian period, geometrical ornament was composed of repeated parallel zigzags or sets of concentric lozenges or circles.<sup>(68)</sup> It consisted sometimes of the Greek key band and elements such as the swastika, as it appears in stucco relief from Kish at Palace I. As for

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64. J. E. Cirlot, op.cit., p. 16.  
65. Ibid., P. 122.  
66. Pope, op.cit., Vol. III, p. 2616.  
67. Ibid., Vol. III, p. 2743.  
68. Ibid., Vol. I, p. 202.

the Western Islamic regions, geometrical ornament was already familiar in the art of European style and expression. (69)

In the tenth to the thirteenth Centuries, specially in the time of the Saljuks Persian artists played an important rôle in the development of the geometrical ornaments which give their designs a great variety and strength. (70) In the eleventh Century, in Islamic interlace geometric ornament asserts its rôle in the ordering of plant decoration, the two being combined; geometrical design is especially suited both to plain brick pattern and to the later mosaic faience. It played a conspicuous rôle in architecture, as in <sup>G</sup>Junbad-i-Kabūd in Persia dated 1196-7.

In the Saljuq period subsequent to the middle of the eleventh Century, a fully evolved interlace style is found in Persia in which the conception of the geometrical forms have already become more profound. (71) This evolved geometrical style was also developed in manuscript illumination and woodcarving, while the metal engravers and inlayers frequently combined it in contrast with more life-like motives. In the Islamic World there

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69. Pope, op.cit., Vol. III, p. 2026.

70. Ibid., Vol. III, pp. 2744-45.

71. Ibid.



can be little doubt that such a combination reflects an image of celestial order, a perpetual reminder of one major aspect of the truth of Islam.

During the thirteenth Century geometrical ornament advanced swiftly - complex interlaces or interrupted meanders are developed as a ground pattern in engraved and inlaid metalwork, and on pottery. (72)

This geometrical tendency within the composition of arabesque is expressed in the intertwining of several disparate systems, which may be arranged in such a way as to create a contrast between larger and smaller geometrical compartments, or between compartments ornamented with greater or lesser fullness, or with different styles of design. Besides the ornament consisting of foliage only, geometrically intertwined bands may be simply combined with foliage; and this combination is the most common form of arabesque. The intertwined geometrical design forms a complicated framework; the manifold irregular polygons formed by the natural crossing of lines being filled by the foliage, either separately or in a repeated pattern. These forms may pass into arabesque of a purely geometrical nature; that is, those consisting of intertwined bands. Here all possible combinations are represented, from the simplest

plaiting, the mere intersecting of systems of parallel lines, to the most complicated geometrical figures.

As in the case of foliage ornament the effect aimed at is the creation of abstraction: a linking up of the positive pattern by means of larger and smaller portions of the ground surface. A wealth of polygonal shapes or stars appear to provide the fixed points which create order in the kaleidoscopic confusion of the small irregular polygons. The compositions, which are often most ingenious, are formed by the well thought out and frequently surprising use of a few lines not infrequently broken so that it is often very difficult to disentangle their fantastic play in order to understand the system. A certain advanced stage of the power of geometrical vision is indispensable both to create and to understand this kind of composition.

The systems most favoured are those based on regular polygons or stars often with an odd number of angles; that is to say, pentagons or hexagons, or stars with many points. These geometrical forms are filled with linear arabesque. The twelve-pointed star inside the main 'iwān and those in its spandr̄ls are filled with another kind of arabesque of which the main element is the

calyx, which is found also covering all the muqarnaṣāt in the Palace.

7 Some lozenges appear in the ornament of the Palace. These lozenges were filled with an arabesque whose wider bands strongly suggest interlacing kufic calligraphy. Each lozenge at each of its obtuse angles runs into the apex of a conjoint triangle; its sides form the sides of adjacent pentagons. Pl.18. These pentagons and the six pointed stars were filled with thin linear interlacing arabesque so dense that it is difficult to follow the beginnings and the ends of the lines. The contrast between the bands and the thin lines of the arabesque create a striking effect in the geometrical group.

The geometrical forms appeared in all buildings in Iraq belonging to the same period as the 'Abbāsid Palace, e.g. in al-Mustaṣiriyya and al-Marjaniyya schools, Sitt Zubaida, M'arūf al-Kalkhī, Bāb al-Waṣṭānī (built during the reign of al-Nāṣir).

#### The swastika.

The swastika is one of the principal geometrical elements which appears in the decoration of the 'Abbāsid Palace. As a symbol, it is to be found in almost every ancient primitive culture all over the world. The swastika is a form of the cross whose extremities are bent

back at right angles. In the West it is called the gammadion owing to its being composed of Greek gammas. In India it signifies acceptance and life, movement, pleasure and good luck.<sup>(73)</sup> It was already revered in India about 3000 B.C. as a charm against evil,<sup>(74)</sup> and its influence has lasted to this day. In China it has meant perfection, infinity, and many blessings.<sup>(75)</sup>

From the earliest times this famous sign undoubtedly referred to the rotation of the heavens, expressing the power of the sun,<sup>(76)</sup> the sky, and rain gods, and has symbolized all harmonious movement springing from a central source.<sup>(77)</sup> It is not unreasonable to imagine it as an early ideograph of the sun's rotation, the axial motion being indicated by the angular deflection of the arms. Thus was indicated both the daily movement of the sun, and perhaps also the annual change of the seasons.<sup>(78)</sup> The swastika was considered also to be a symbol of the succession of the generations.<sup>(79)</sup>

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73. Hornung's handbook of design and devices, Dover publications, INC., New York, 1946; p. 211.

74. Ibid.

75. Ibid.

76. Ars Islamica, Vol. IV, 1938, Fig. 111.

77. Hornung's handbook, op.cit., p. 211.

78. Ibid.

79. J. E. Cirlot, op.cit., p. 307.

Here follows a schematic chronological survey of the history of the swastika, leading up to its appearance in the decoration of the 'Abbāsid Palace:

- a. On Greek monuments since the eighth Century B.C. (80)
- b. In Cyprus in the seventh Century B.C. (81)
- c. Crypt of Jouarre (Monastery of Jouarre situated between Paris and Château-Thierry), dated later than the seventh Century B.C. (82)
- d. Swastika on an old Germanic urn from Bardenfleth 50 B.C. (83)
- e. Mesopotamia - in stucco decoration from Ctesiphon (Sāsānian). (84)
- f. Mesopotamia - Kish, Palace I, (Sāsānian). (85)

The immediate prototypes of the Kish meanders, which include swastikas, were certainly Hellenistic. (86) The linear labyrinths were originally taken over by Greece from Asia; and their various combinations of swastikas and broken lines were clearly established as decorative devices for Sūsa pottery and later in Cretan art. (87) The swastika pattern used at Kish is also found

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80. *Ars Islamica* Vol. V, Figs. 59; 26.
  81. *Ibid.*, Fig. 66.
  82. *Ibid.*, Fig. 10.
  83. *Ibid.*, Fig. 131.
  84. *Ibid.*, p. 221, Fig. 12.
  85. *Ibid.*, p. 221, Fig. 11.
  86. Pope, *op.cit.*, Vol.I, p. 619.
  87. *Ibid.*
  88. I

on a plaque in the Chancel of San Apollinare Nuovo in Ravenna. (88)

Islamic art takes over almost all the versions of this motif, elaborates and refines their various qualities, and in some cases restores even more precisely than the Sāsānian designer had done, the older Asiatic structure. Thus, while the swastika is concealed in a meander at Kish and Ctesiphon, <sup>in</sup> Islamic patterns it assumes its own independent position. (89)

- g. Riqqa (attributed by Creswell to the Caliph al-Mansūr 762-775 A.D.), on the arched hood of the niche to the left of the archway is decorated with a geometrical design including swastikas. (90)
- h. At the Great Mosque of Cordova which goes back to the ninth Century A.D. (91.)
- i. At Madīnat az-Zahrā' in Spain, which goes back to the tenth Century A.D.; a complete ornamented grille is formed of swastikas set in successive rows, the arms directly joined without any Greek key between them.
- j. In the decoration of the mināret Sūq al-Ghazl which goes back to al-Naṣīr's time - 1179-1225. Massignon has identified it as the name of the Caliph 'Alī adapted to the shape of geometrical (92)

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88. Pope, op.cit., p. 619, Fig. 198.

89. Ibid., op.cit., Vol.I, p. 628.

90. Creswell, A short account of early Muslim architecture, p. 187.

91. Pope, op.cit., Vol.I, Fig. 210 b and c.

92. Sarré and Herzfeld, op.cit., Vol. II, p. 158.

Kufic writing, Fig.3. He called it "chahār 'Alī"<sup>(93)</sup> meaning four 'Alīs. The name 'Alī appeared also in geometrical form in Masjid al-Jam'ī at Qazvīn (1113-1119 A.D.), in a panel from Marāgha<sup>(94)</sup> in Persia dated 1147 A.D. and in a rectangular Kufic-form from Persia.<sup>(95)</sup>

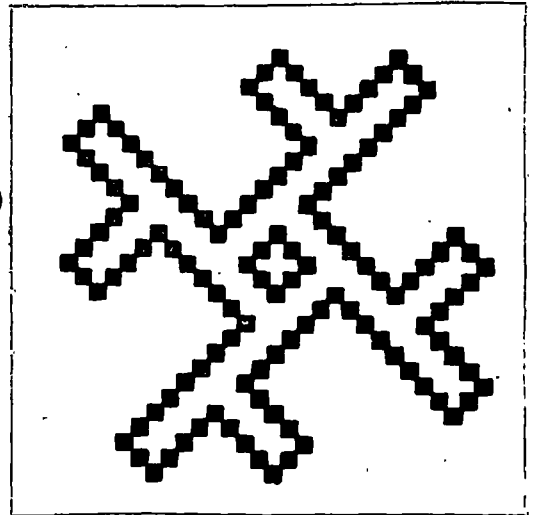


Fig. 8 - Chahār 'Alī

In the 'Abbāsīd Palace the swastika appears on the ceiling of the niche which faces the mabain, Pl.19. The swastika here alternates with stars, each of which has eight points. Each swastika is set inside a square; it is possible that here too it bears the same meaning "chahār 'Alī". A building contemporary with the 'Abbāsīd Palace, is al-Madrasa al-Murtanşiriyya built in 1232,<sup>(96)</sup> also decorated with swastika meander.

#### The star.

The star as a point of light flickering and shining in the darkness, has often been taken as a symbol of the spirit.<sup>(97)</sup> It stands particularly for the force of the

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93. chahār = Persian word, meaning four.

94. Pope, op.cit., Vol.III, p. 2746, Fig. 933.

95. Ibid., Vol.II, p. 1747, Fig. 603a.

96. Sarré and Herzfeld, op.cit., Vol.II, Abb.200.

97. Cirlot, p. 295.

individual spirit struggling against the forces of darkness. This meaning has been incorporated into emblematic art all over the world. The five pointed star for example called the pentagram becomes an important element in the history of magic and witchcraft, with many mystical interpretations. (98)

The 'Arab peoples through the centuries before Islam practised the star worship associated with the name of the Sabaeans. (99) They were dedicated to the observation of the heavens and the interpretation of their phenomena. This interest survived into the Islamic epoch and provided a foundation for the study and knowledge of astronomy in the later ages of Islam.

In the Islamic period the use of the star in various aspects of Islamic art began to take on a religious meaning, which seems to have differed from that which was entertained in the pre-Islamic period. In the Qurā'n in the Sūra of al-Nūr is said: (100)

"Allāh is the light of heaven and earth. His light is like a niche in which is a lamp; the lamp is in a glass, and the glass is like a bright shining star; it is kindled from a blessed tree neither of the east nor

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98. Hornung's handbook of design and devices, p. 212.

99. E. Blochet, Musliman painting, London, 1929, p. 3.

100. Qurā'n. Sūra 24, verse 25.



the west, from which the oil would well nigh burn though no fire touched it, light upon light! Allāh guideth unto his light whom so will and He speaks to mankind in allegories; for He is the Knower of all things." The exegesis of this set of terms which appeared in the above Qurā'nic verse according to religious tradition is: the niche represents the World; the light is the light of the human soul; the tree is the self of the truth and the oil is the timeless spirit.<sup>(101)</sup> Thus each subject indicated by one of these terms has a specific religious significance in the eyes of Muslims. This quotation has a strong bearing on the universal use of the star in Islamic art. The term "nich", which was interpreted as symbolizing the "World" from the religious point of view, was itself also a dominant feature of Islamic architecture, both as the "mihrāb" in almost every mosque, and as a virtually universal ornamental motif.

The schematic chronological survey of the history of the star in ornament is as follows:

- a. On a seal from Palestine - Tell as-Sāfi, pre-Israelite.<sup>(102)</sup>

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101. A. K. Coomaraswamy, *Ars Islamica*, Vol. 15-16, 1951, pp. 125-128.

102. *Ars Islamica*, Vol. IV, Fig. 116.

- b. On Sumerian, Babylonian and Assyrian seals. (103)
- c. Pre-Elamitic - Sūsa, on a seal; might resemble the wheel of the sun. (104)
- d. In the votive gift at the foundation of Šušinak temple; after 2450 B.C. (105)
- e. Egypt - Fustāt, from an ancient house. (106)
- f. On the drum of the Dome of the Rock 691-2. (107)
- g. On a horseshoe arch on the door in the South entrance at the Great Mosque at Damascus. (108)
- h. Qaṣr at-Ṭūba dated 743-4 A.D. on the entrance into the room B. (109)
- i. North Africa - Sūsa, on the spandrels of the north doors of the Great mosque dated 850-1. (110)
- j. Egypt - on one of the windows in the mosque of Ibn Ṭulūn 876-9. (111)
- k. Egypt - on one of the windows in al-Azhar mosque dated 970-2. (112)
- l. Egypt - on the mināret of al-Hākīm mosque dated 990-1013. (113)

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- 103. *Ars Islamica*, Vol.IV, Fig. 117.
  - 104. *Ibid.*, Fig. 118.
  - 105. *Ibid.*, Fig. 122.
  - 106. Creswell, *Early Muslim architecture*, Vol.II, Pl.117a.
  - 107. *Ibid.*, Vol.I, pl. 32a.
  - 108. *Ibid.*, Vol.I, Pl. 33a.
  - 109. *Ibid.*, Vol.I, Pl. 79c.
  - 110. *Ibid.*, Vol.II, Pls. 59e and 60c.
  - 111. *Ibid.*, Vol.II, Pl. 112a.
  - 112. Ministry of al-Awqāf, *Masājid Miṣr*, Cairo, 1948, Vol.I, Pl. 13.
  - 113. *Ibid.*, Pl. 17.

- m. Persia - on the small dome chamber, design on ceiling, in Masjid Aṣfahān 1088. (114)
- n. Persia - on a portal in Rabāṭ-i-Malik dated to the second half of the eleventh Century. (115)
- o. Persia - in a panel in the south corner of al-Masjid al-Jāmi' of Gulbaygān 1104. (116)
- p. Persia - Qurā'n from Sistān dated 1111. (117)
- q. Egypt - on the door and minbar "pulpit" in Masjid al-Ṣāliḥ Ṭalā'i' 1160. (118)
- r. Persia - design on decorated page from commentary of Ṭabarī dated 1210-25. (119)

The star appears in the 'Abbāsid Palace as a symbol which has an important rôle in the geometrical ornaments. It also appears as a principal design motive in all of the buildings contemporary with the 'Abbāsid Palace; at al-Mustansiriyya, (120) al-Marjāniyya madrasas, (121) Shaikh M'arūf al-Karkhī dated 1086 A.D. and Sitt Zubaida. (122) In Persia it appears also in

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114. Pope, op.cit., Vol. III, Fig. 931.

115. Ibid., Vol. IV, Pl. 272.

116. Ibid., Vol. IV, Pl. 308.

117. Ibid., Vol. III, Fig. 932.

118. Masājid Miṣr, op.cit., Pls. 29, 30 and 31.

119. Pope, op.cit., Vol. III, Fig. 935.

120. Sarre and Herzfeld, op.cit., Vol. II, Abb. 200.

121. Ṭ. Bāḡir, Baghdad, ar-Rābiṭa, Baghdad, 1959, Fig. 16.

122. Sarre and Herzfeld, op.cit., Vol. II, Abb. 205, 206, 207 and 208.

contemporary lustre-painted wall tiles from Kāshān dated 1267 A.D. (123)

A short glance at geometrical ornaments and the arabesque of the 'Abbāsīd Palace, would indicate that the arabesque as well as the geometrical techniques, had reached their zenith of perfection. Hence, the decorative styles of the schools that were built after the 'Abbāsīd Palace, had followed the same techniques of ornament, for example al-Mustansīriyya and al-Marjāniyya schools. Undoubtedly, the architect who supervised their construction, seems to have imitated with some modifications, the style of the geometrical ornaments and the arabesque of the 'Abbāsīd Palace, in addition to the great resemblance between those two schools and the Palace, particularly in the ground plan.

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123. Pope, op.cit., Vol V, Pls. 721-723.

THE CONCLUSION.

Most historians, scholars and architects differ in their opinions concerning the actual name of the 'Iwān which was built inside of the Baghdad Citadel. The whole building used to be known popularly as "Qasr al-Mā'mūn - the Palace of al-Mā'mūn".

From the historical point of view it is very important to note that the Caliph al-Mā'mūn (813-833), had lived in Dār al-Khilāfa (the home of the caliphate) on the western side of Baghdad,<sup>(1)</sup> then in al-Ḥasanī Palace which used to be the home of J'afar al-Barmakī who was the minister of his father the Caliph Hārūn al-Rashīd (786-809).

The name al-Ḥasanī Palace was then changed to "al-Mā'mūnī Palace" and the district in which it lay was called al-Mā'mūniyya.<sup>(2)</sup> Then this palace - al-Mā'mūnī - was near Dār al-Khilāfa in the Eastern side of Baghdad. At present Dār al-Khilāfa is situated between al-Samawa'l Street and al-Murabba'a quarter; this district is far from the 'Abbāsīd Palace.

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1. Ibn al-Jawzī, Manāqib Baghdad, Baghdad 1932, p. 7.
  2. Jawād and Sūsa, op.cit. p. 123.

Professor Jawād, the Iraqī scholar who is renowned for his academic knowledge of ancient Baghdad; and Sarkīs<sup>(3)</sup> a second researcher, have reached the conclusion that the 'Abbāsīd Palace was the same palace which was mentioned by Ibn Jubair in his Riḥla (journey), when he related that he had seen the Caliph al-Nāsir li Dīn Allāh (1179-1225) leaving his "sight room" on the Western bank of the Tigris, and catching his boat to make for his Palace at the top of the Eastern bank of the river.<sup>(4)</sup>

Professor M'arūf holds the opinion that the 'Abbāsīd Palace is al-Sharābiyya School which was built by Sharāb al-Dīn, the minister of the Caliph al-Mustanṣir (1226-1242). But this opinion lacks proof from the artistic and historical point of view. Al-Sharābiyya School is known to have been built in a district which used to be called Sūq al-'Ajam (the market of Persians), in the main street near the lane of al-Sulṭān's market, opposite to darb al-Mallāḥīn<sup>(5)</sup> (the sailors road). In ancient plans of Baghdad, the "Sulṭān's market" means the whole quarter which had grown up around the market of Sulṭān Ṭuḡhril Beg. Undoubtedly the Sulṭān's market was

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3. Y. Sarkīs. Mubāḥith Iraqīyya, Vol. II, Baghdad, 1955; p. 80.
  4. Ibn Jubair, Riḥlat Ibn Jubair, London, n.d., pp. 222-227.
  5. M. Jawād, Dār al-Musannāt al-Nāṣiriyya, dār'ilm wa 'ulamā', Baghdad, 1961; pp. 17-18.

not so far from the Sultān's gate which used to be one of the most ancient Eastern gates of Baghdad, and is called at the present time al-Mu'azzam gate. Thus the quarter of al-Sultān's market seems to have covered a wide area of land ending at the quarter wherein are located al-Maidān, al-Bārūdiyya, Tabbat al-Kurd, al-Haiderkhāna and Jadīd Ḥasan Pāshā. Hence it is most probable that al-Sharābiyya school was built in that area, the quarter of al-Sultān's market.<sup>(6)</sup> It therefore seems impossible that al-Sharābiyya school was in fact the 'Abbāsīd Palace.

From our analysis it appears that the ornaments used to decorate the 'iwān as well as the other walls of the building, indicate that the building cannot relate in time to al-Mā'mūn. The grounds are that the decorative styles of that period in Baghdad were at the stage of being a mixture of somewhat disparate elements, Roman, Hellenistic and Sāsānian, despite the existence of Style C at Sāmarrā'. The geometrical shapes in Islamic ornament did not become the pure Islamic style appearing in the 'Iwān until after the emergence of the Saljūqs (1055-1152), when it had reached its peak of development.

The geometrical ornaments and the arabesque of the 'Abbāsīd Palace were the outcome of a full-pledged artistic

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6. M. Jawād, op.cit., Vol. IV, Baghdad 1961, pp. 17-18.

and architectural development, in which are integrated almost all the decorative styles used in the Islamic world of that period. As for the Arabesque, the 'Abbāsid Palace has some ornamental designs based on the arabesque which had been used on a big scale since the days of the Ghaznawids, as can be seen in Pl.13 c and d. The linear arabesque which appears in that palace is found in some other buildings: mināret sūq al-Ghazl, the Ṭalisman gate, the wooden wall in Ghaibat al-Mahdī, and all the buildings of Nūr al-Dīn Zangī in Iraq and Syria. This indicates that all these buildings belong to the same period. Some of the arabesque elements, such as the notched base calices with three sepals which are found in the ornament of the 'Abbāsid Palace are similar to those in the mināret of Sūq al-Ghazl. This mināret according to Herzfeld must go back to the time of al-Nāsir.<sup>(7)</sup> The notch in the base of the calices in both buildings is very deep, and the calyx frequently appears in the centre of an ornamental group surrounded by the linear arabesque in an inverted heart-shape. This heart-shape arabesque is found in some of the Ghaznawid ornament (carved in stone and later in the Suljūq period in metal work.<sup>(8)</sup>

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7. Pope, op.cit., Vol. II, Fig. 499 a and c; Fig. 500c, Fig. 501a.

8. Ibid., Pl. 1348.



The hazārbāf technique which is found in the 'Abbāsīd Palace is found also in the mināret mentioned above and the Ṭalisman gate. The same abstract vase-shape in the 'Abbāsīd Palace appeared in the ornament of al-Nūrī's great mosque at Mouṣil in Northern Iraq. This shape of vase did not appear in any of al-Mustansiriyya and al-Marjāniyya schools which were built later than the 'Abbāsīd Palace.

As for the muqarnasāt it can never be recognized as used in architectural art until the beginning of the eleventh Century. Whilst the Ḥirite design of building was not used in Iraq until the reign of al-Mutawakkil (847-861). The muqarnasāt of the 'Abbāsīd Palace greatly resemble that of Sitt Zubaida's tomb as well as to that of the tomb of Nūr al-Dīn Zangī at Aleppo. This kind of semi-dome muqarnas were developed in the time of the Suljūqs.

Jawād has demonstrated that the 'Abbāsīd Palace was the same dār (home) as that occurring in the book of al-Ḥawādith al-Jami'a (collected events) by Ibn al-Fuṭī - died in 1303 A.D. - under the name of Dār al-Musannāt (the home of the quay). The description given in the book is similar to that given by Ibn Jubair, who passed through Baghdad in the year 1184 A.D. since the contention

of this study is that the Palace must belong to the time of al-Nāṣir, and since the beginning of al-Nāṣir's Caliphate was in 1179 A.D., it is therefore clear that the erection of the 'Abbāsid Palace must have taken place within that interval of five years.<sup>(9)</sup> The fact that al-Nāṣir had established in Dār al-Musannāt an "honourable library" is lent further probability by the fact that he is known to have been devoted to discussing with al-'Ulamā' (the scholars) various religious and academic themes and subjects. He was regarded in academic circles of his time as particularly interested in the field of al-Ḥadīth<sup>(10)</sup> (the traditions of the Prophet Muḥammad). Furthermore Ibn al-Qiftī (1172-1248) wrote that the Caliph al-Nāṣir had endowed what he called dār al-Musannāt with a great number of valuable books, as many as fifteen thousand, because of his interest in and knowledge of al-Ḥadīth.<sup>(11)</sup>

The 'Abbāsid Palace, called, as mentioned, dār al-Musannāt, is also in fact located near a contemporary "quay" whose remains appear at a distance of <sup>a</sup> hundred meters from the Palace itself. Some portions of it are still standing which show that the quay was used as a

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9. Y. Sarkīs, op.cit., Vol. II, p. 80.

10. Al-Thaqāfa Bulletin, No.559, Cairo 1949, p. 14.

11. Y. Sarkīs, op.cit.

landing place for embarkation. This quay may be understood as the quay which occurred in "Manāqib Baghdad" by Ibn al-Jawzī. He related that in the year 1159 A.D.; during the reign of the Caliph al-Muqtafī (1136-1160 A.D.) Baghdad was flooded. As a consequence al-Muqtafī tried, as a matter of urgency, to protect Baghdad's fort by building a quay.

In the year 1296 A.D. Dār al-Musannāt was being used as Ribāt (gathering place) for mystics. Such gathering places (Rubūṭ) in the Islamic world emerged in the middle of the eleventh Century A.D., and survived until mediæval times. They were regarded as homes for migrant scholars who moved from one country to another seeking knowledge, information or following a religious mission. The Rubūṭ were also used as centres for the writing of books and for delivering lectures on various topics, especially religious ones. (13)

The 'Abbāsīd Palace can best be considered a "dār 'ilm", from the design of its building, which is similar to that of schools and not of palaces. It is unlikely that our dār al-'ilm was used as a palace for the Caliph, partly because its rooms which surrounded the courtyard were so small and there is no light inside.

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13. Jawād and Sūsa, op.cit., p. 187.

them. All the rooms have only small lanterns in their roofs instead of ordinary windows. And even the big halls could not have accommodated a caliph with his numerous family and retinue.

Whatever the names given to the 'Abbāsid Palace, we know it was in practice used as dār 'ilm for the students of theology and other subjects. The fact that later on the name "dār al-Musannāt" was given to it conflicts with the social and academic functions reflected in its structure. Even that name, however, need not indicate that the building was used as a residential palace for the Caliph. The term "dār" has a general meaning, covering both a home, an office, a palace and a school. Thus dār was applied to different buildings<sup>(14)</sup> according to their aim, purpose and function such as: dār al-Suknā (the office of residence), dār al-'Ustādhiyya (the home of professors), dār al-Khilāfa which is the main office of the Caliph, dār al-Wizāra (the office of ministry), dār al-Tashrīfāt (the office of reception), dār al-Raqīq (the home of slaves), dār al-Qurā'n (the home of the Qurā'n), dār al-Ḥadīth (the home of the traditions of Prophet Muhammad), dār al-Shifā' (the hospital), dār al-ḡarb (the office of making

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14. M. Jawād, op.cit., pp. 5-8.

money and taxation), dār al-ḡiyāfa (the home of hospitality and guests) and dār al-'amma (the home of the public).

It is most probable, therefore, that the 'Abbāsīd Palace was built not in the time of either al-Mā'mūn or al-Mustaḡsir, but in the time of al-Nāṣir between 1179-1184 A.D., as dār 'ilm.

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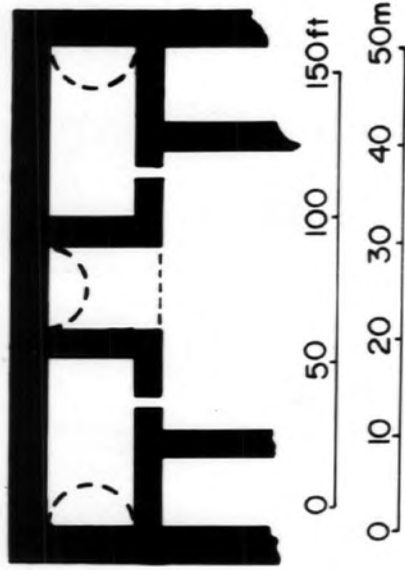
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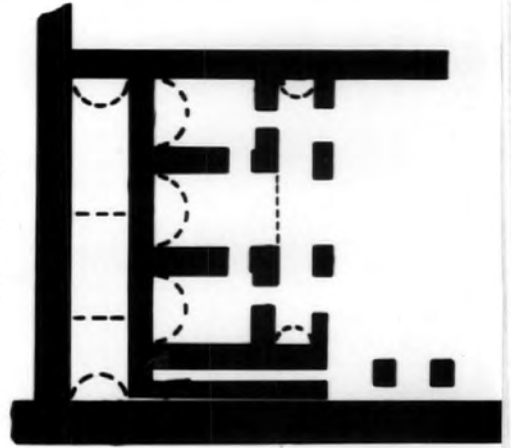
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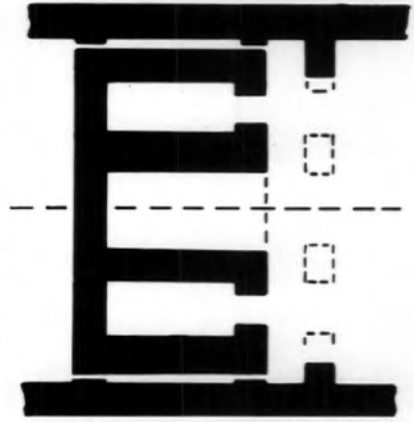
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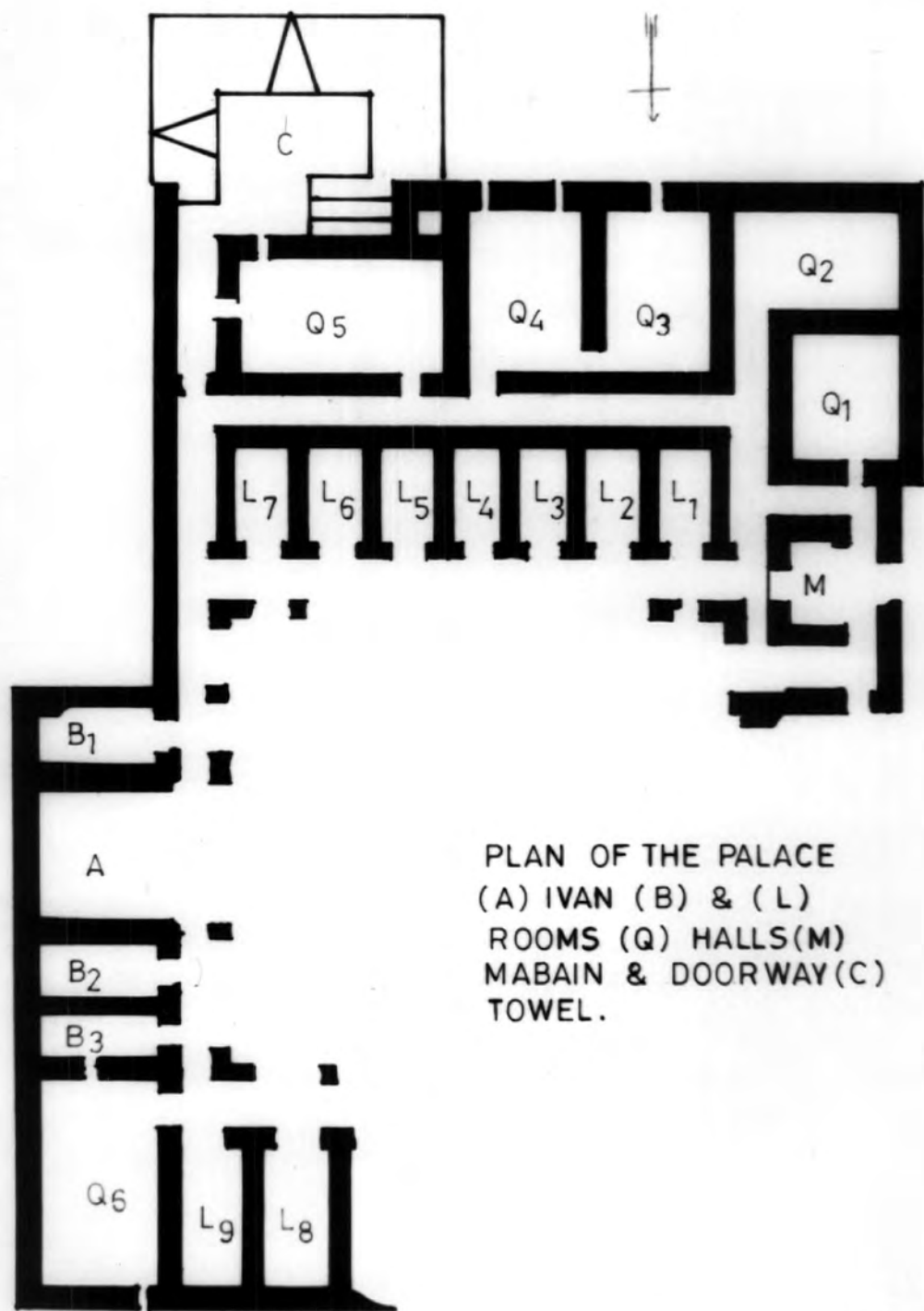


UKHAIDIR

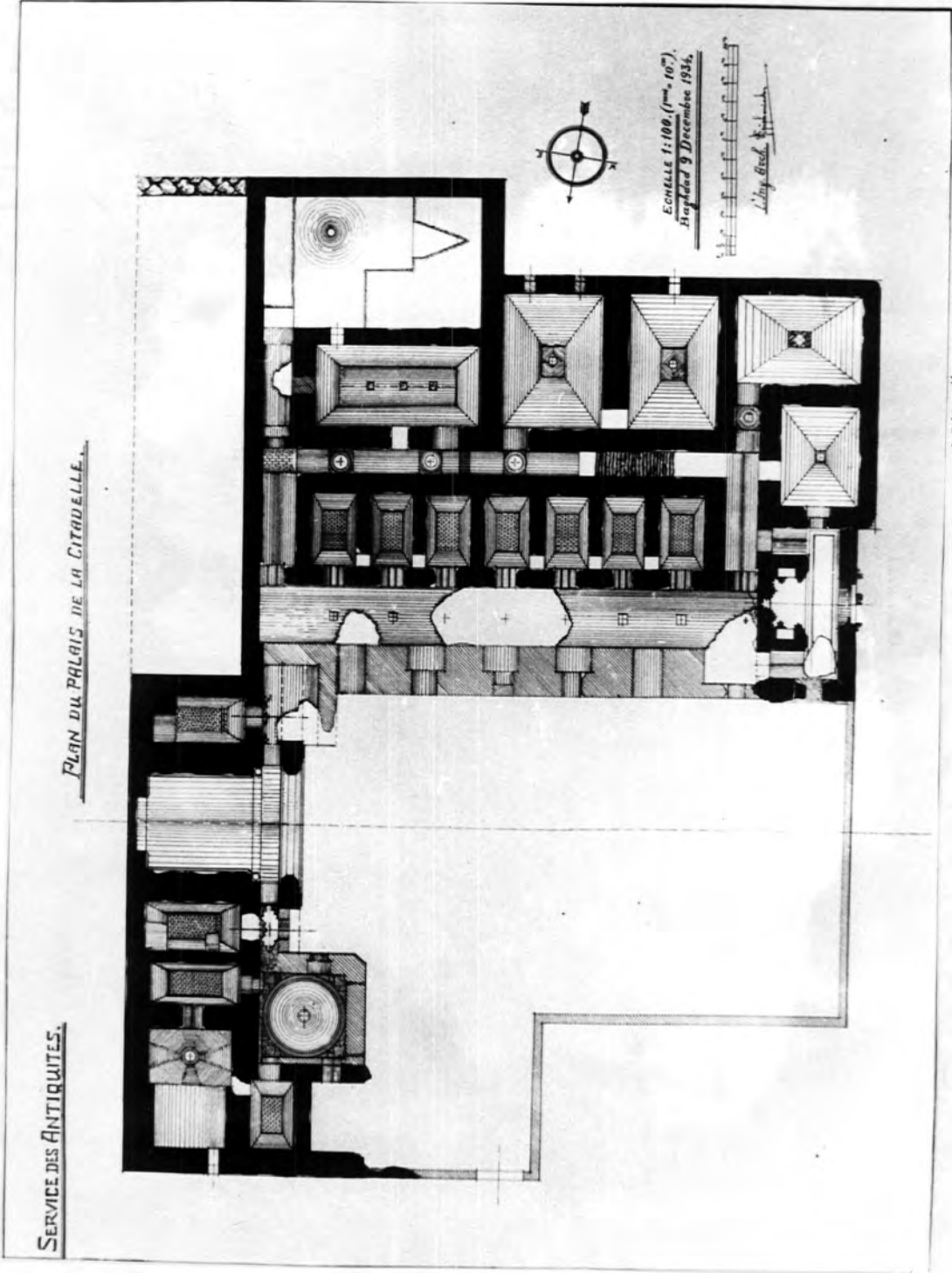


QASR - I - SHIRIN





PLAN OF THE PALACE  
 (A) IVAN (B) & (L)  
 ROOMS (Q) HALLS (M)  
 MABAIN & DOORWAY (C)  
 TOWEL.



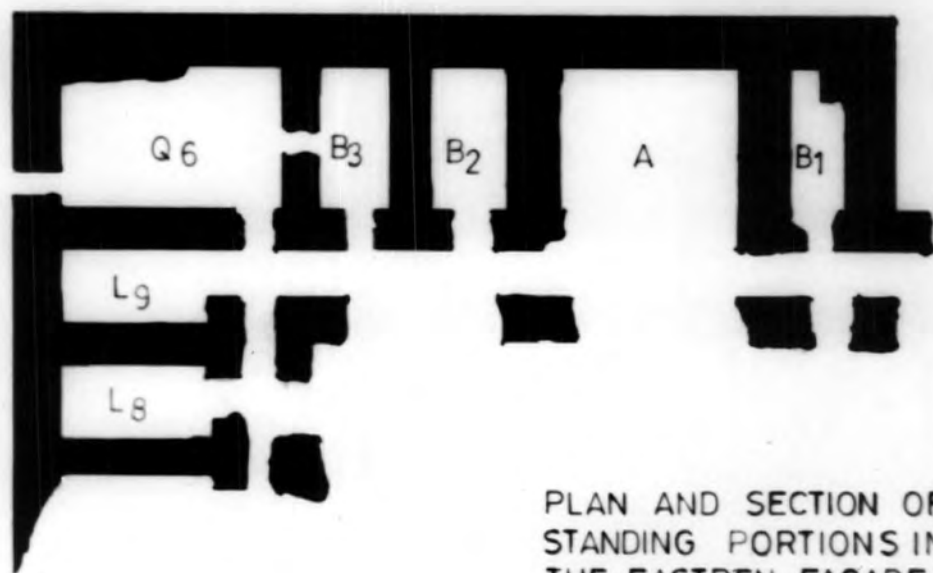
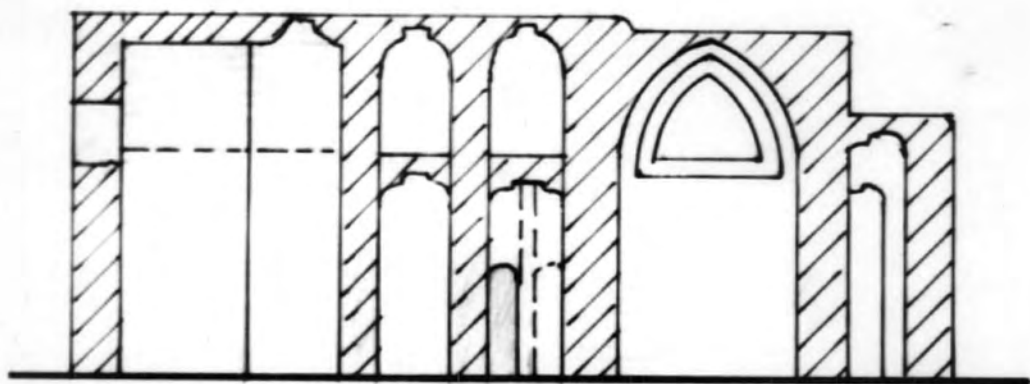
PLAN DU PALAIS DE LA CITADELLE.

SERVICE DES ANTIQUITES.

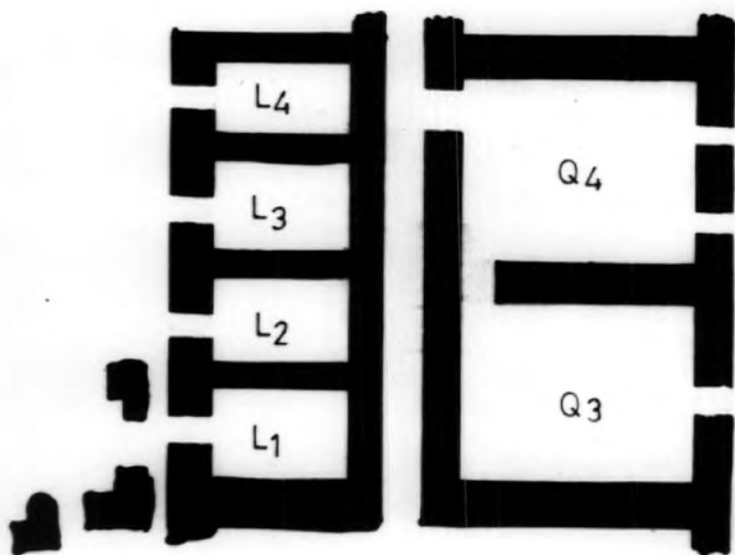
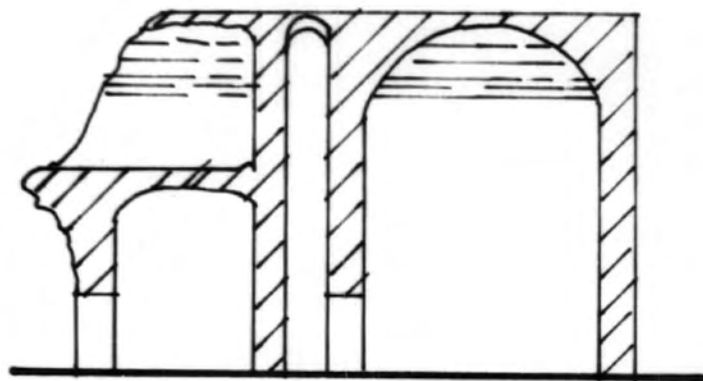
APRES LE DIRECTORAT DES ANTIQUITES

ECHELLE 1:100 (1<sup>m</sup> = 10<sup>m</sup>)  
Hayé le 9 Décembre 1936.

Liby Bach

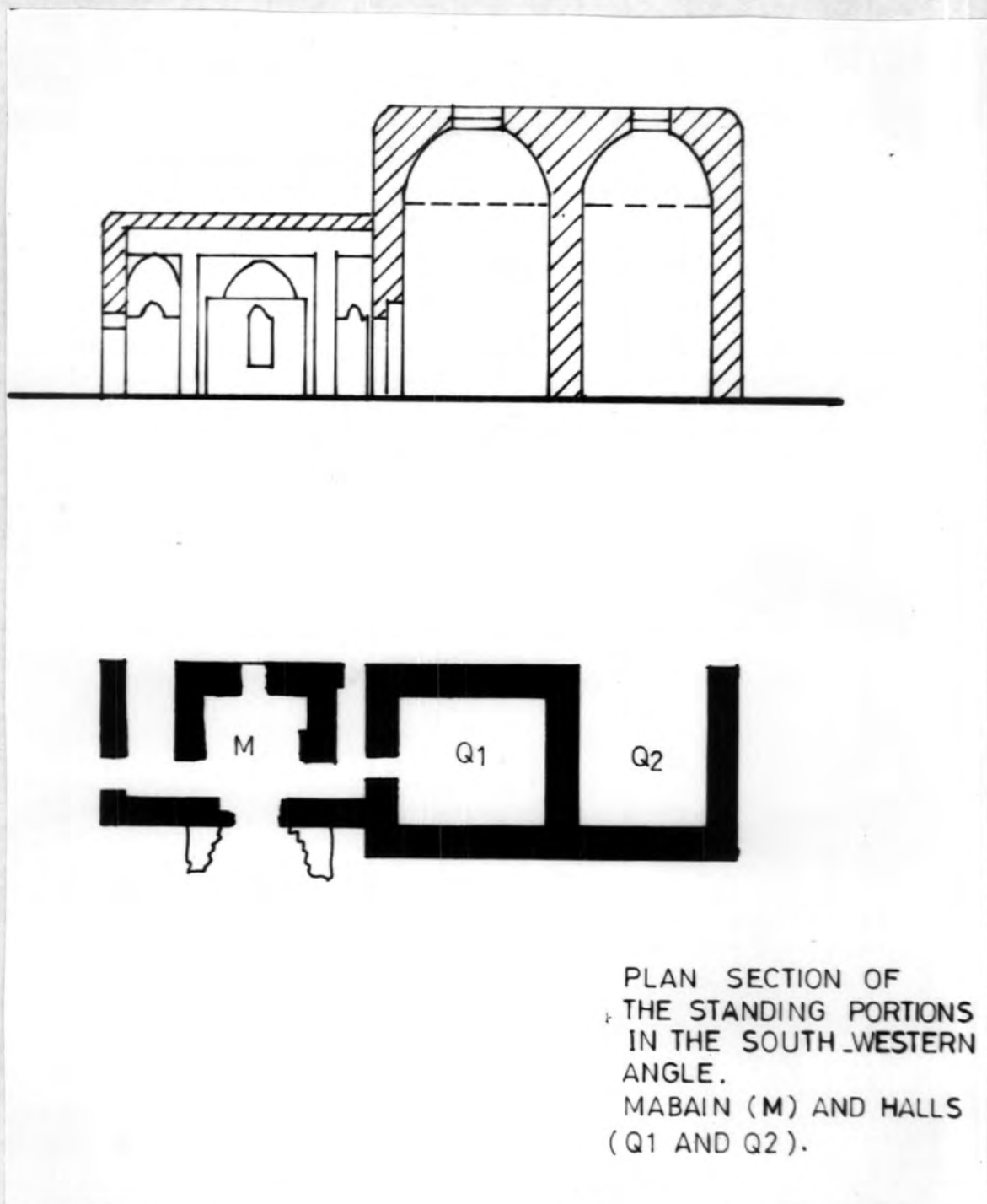


PLAN AND SECTION OF  
STANDING PORTIONS IN  
THE EASTERN FACADE.  
REPRESENTS ROOM (B1)  
THE IVAN ROOMS (B2 & B3)  
AND HALL (Q6).



PLAN AND SECTION  
OF THE STANDING  
PORTION IN THE  
SOUTH FACADE  
(L1 - L4) ROOMS  
(Q1 - Q4) HALLS.





PLAN SECTION OF  
THE STANDING PORTIONS  
IN THE SOUTH-WESTERN  
ANGLE.  
MABAIN (M) AND HALLS  
(Q1 AND Q2).

*AFTER the Iraqi Directorate of Antiquities*

ERNST HIERZFELD

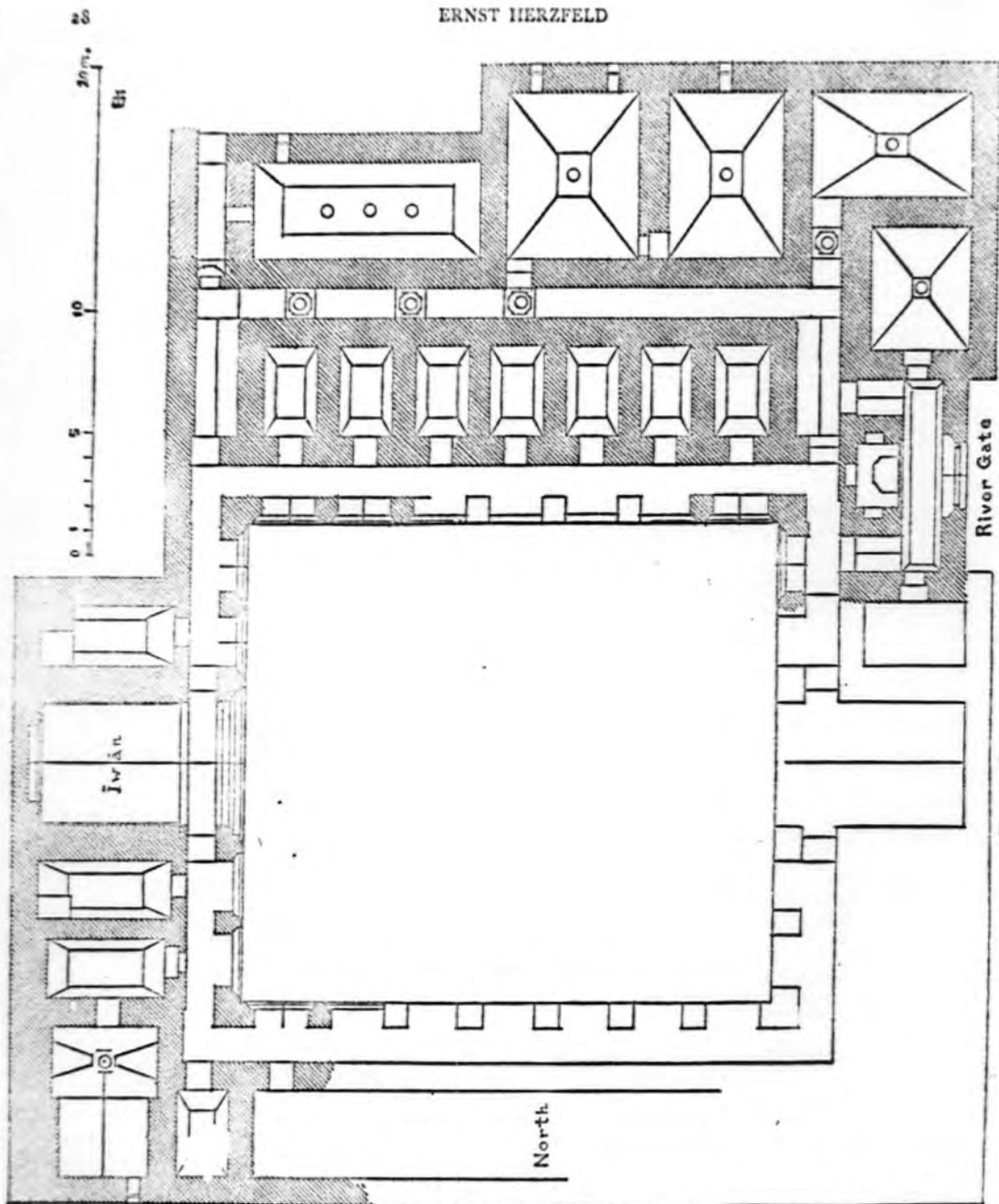
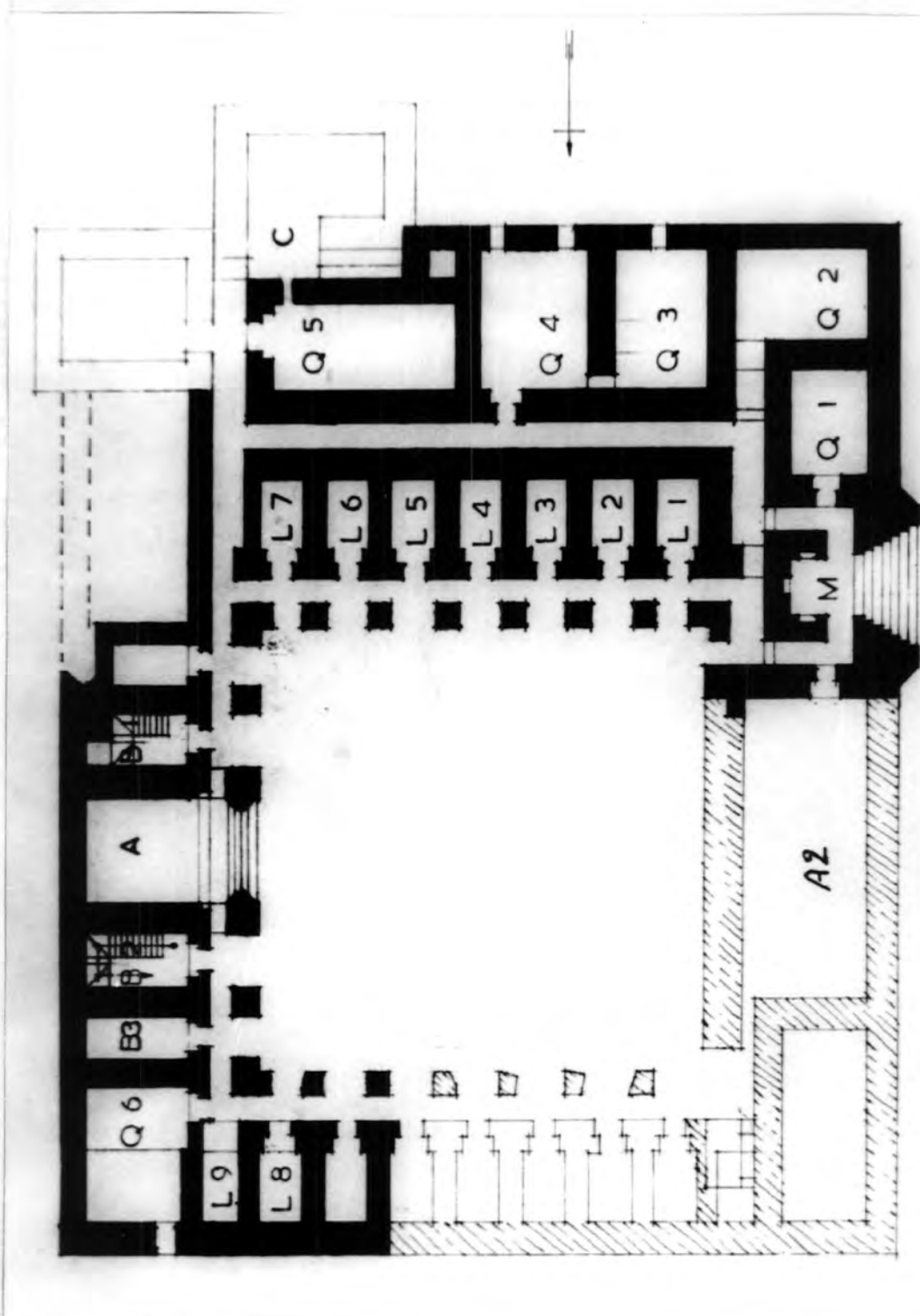
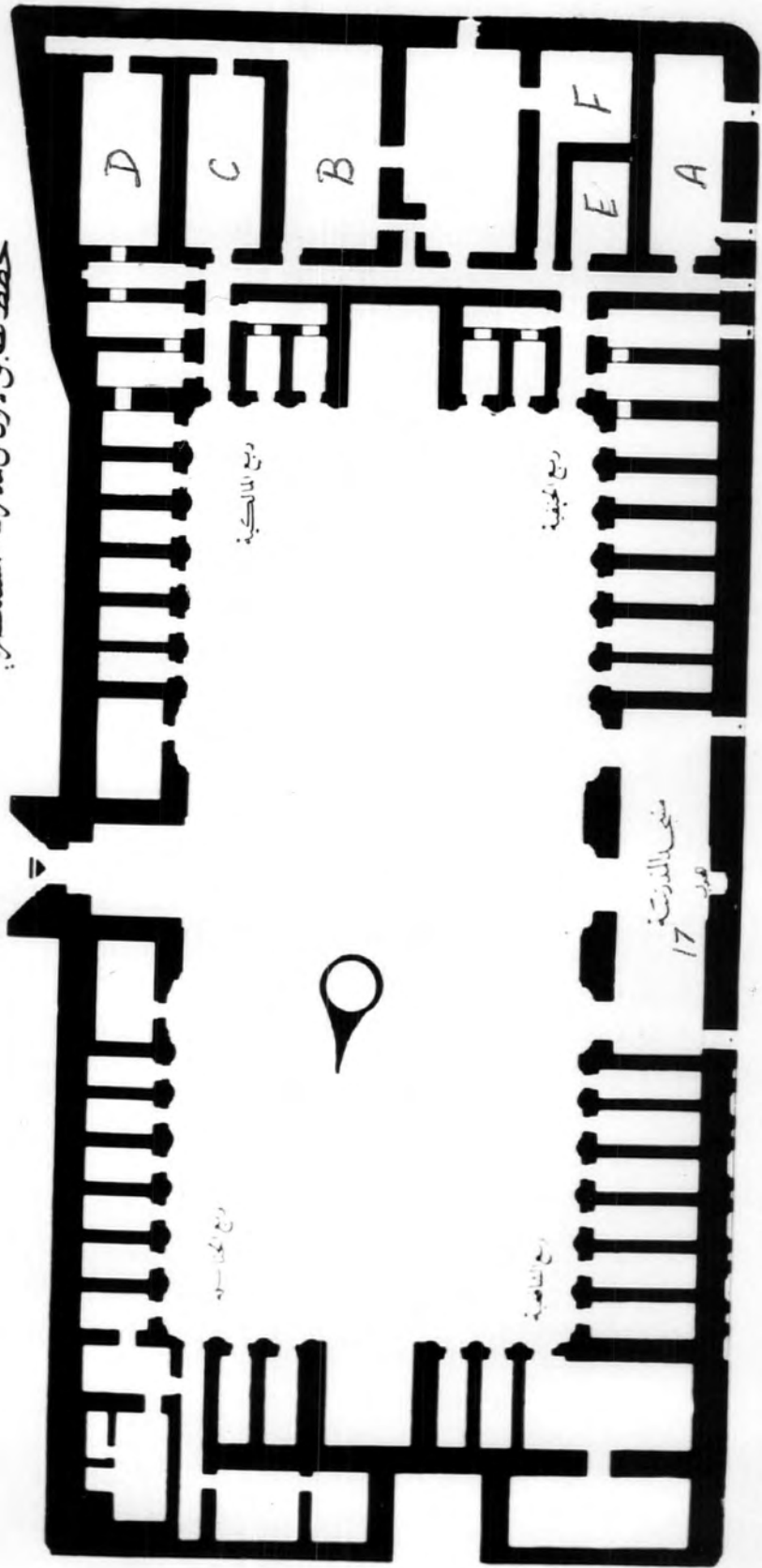


FIG. 19—BAGHDAD, PALACE INSIDE THE KA'FA, PLAN



A SKETCH OF THE PALACE AFTER REMOVAL OF REMAINS AND REBUILT PARTS AND REVEALING THE ORIGINAL FOUNDATIONS

مخطط الطابق الاول للدرسة المستنصرية



AFTER H. Amih

al - Mustanşiriyah school

لا اله الا الله و تحده

a

وله هو الله ا لى

b

الله اعلم الله اعلم الله اعلم الله اعلم

c

الله اعلم الله اعلم الله اعلم

d

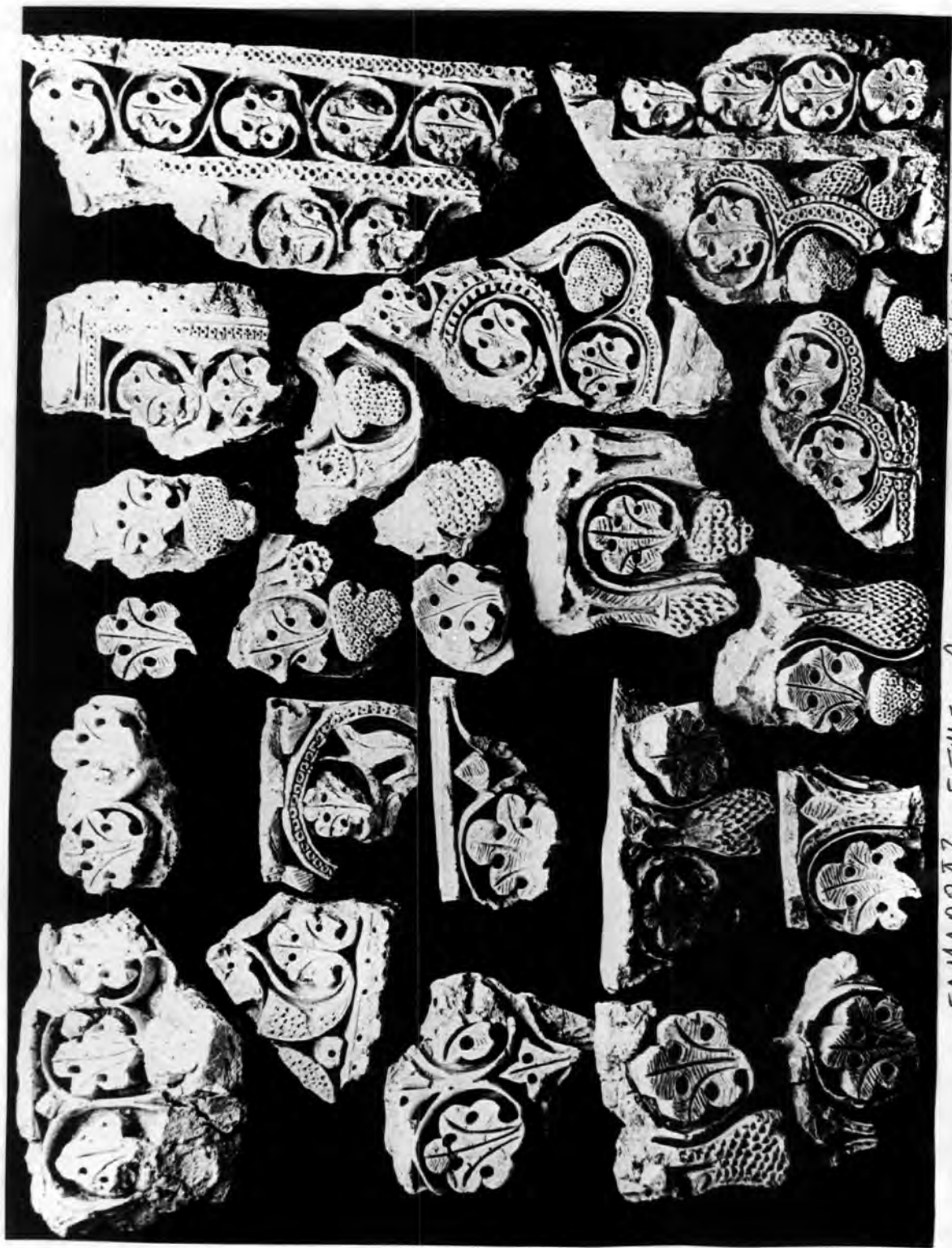
الحق القبول اننا خلدنا و انو

e

منت خذ ايراع و جركه طاعش موجب

f

After Grube



After the direction of  
P. S. U. U. U.

SAMARRA' STYLE - A -



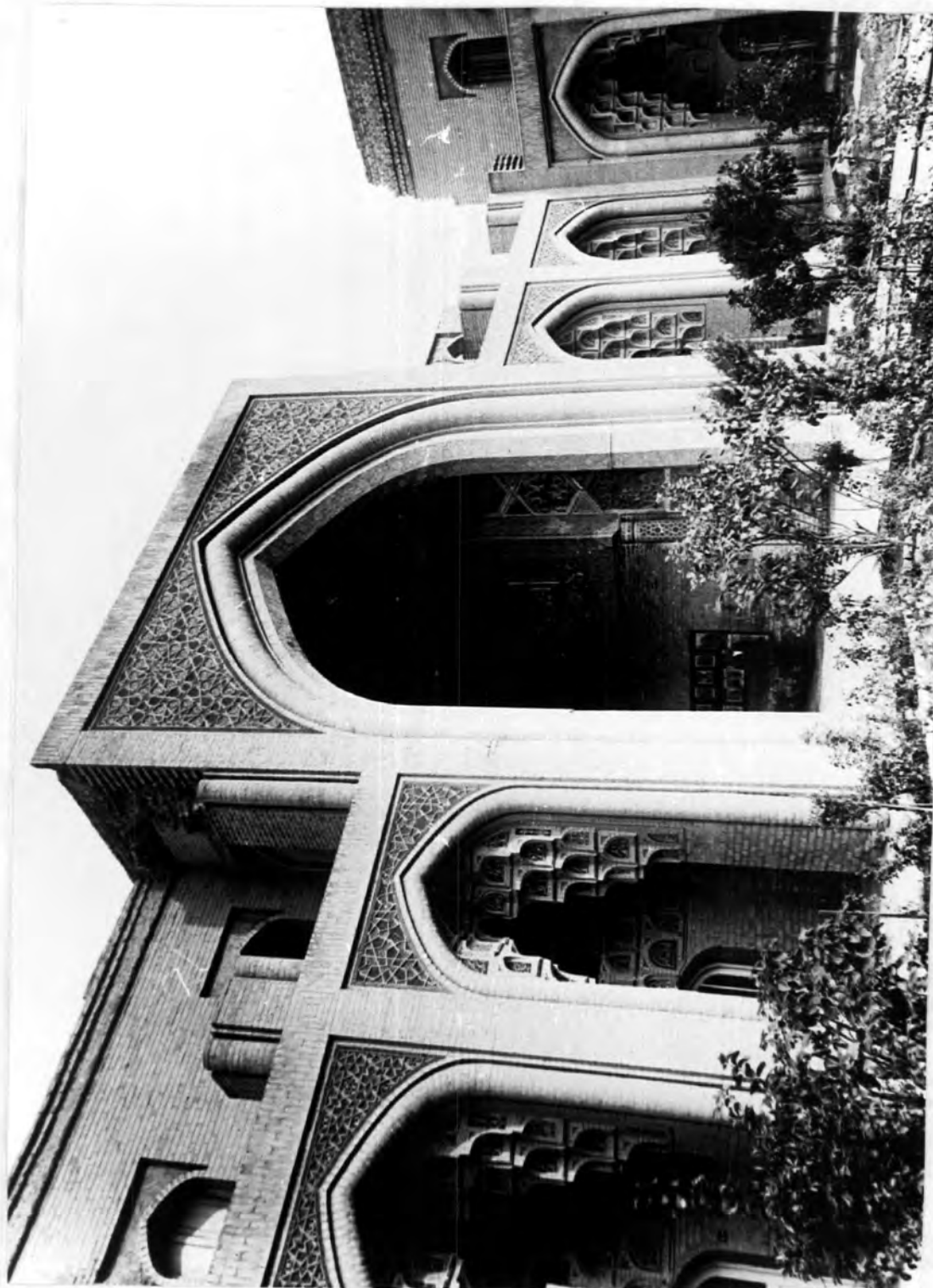
SAMARRA' STYLE - B -  
After the direction of Anty.  
G. H. R.



After the Discovery of  
Antiquities

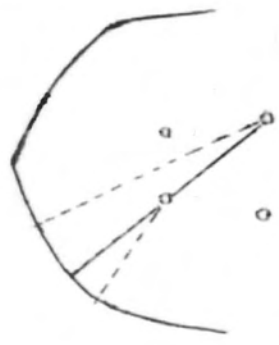
SAMARRA' STYLE - C -



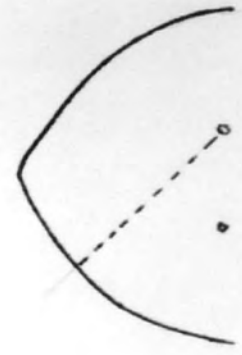


After the Party, Directorate of Antiquities

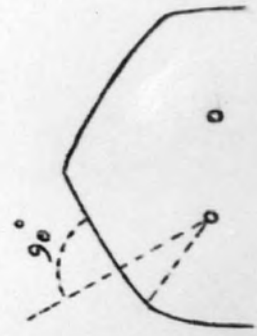
The 'Abbasid Palace - The main Iwan -



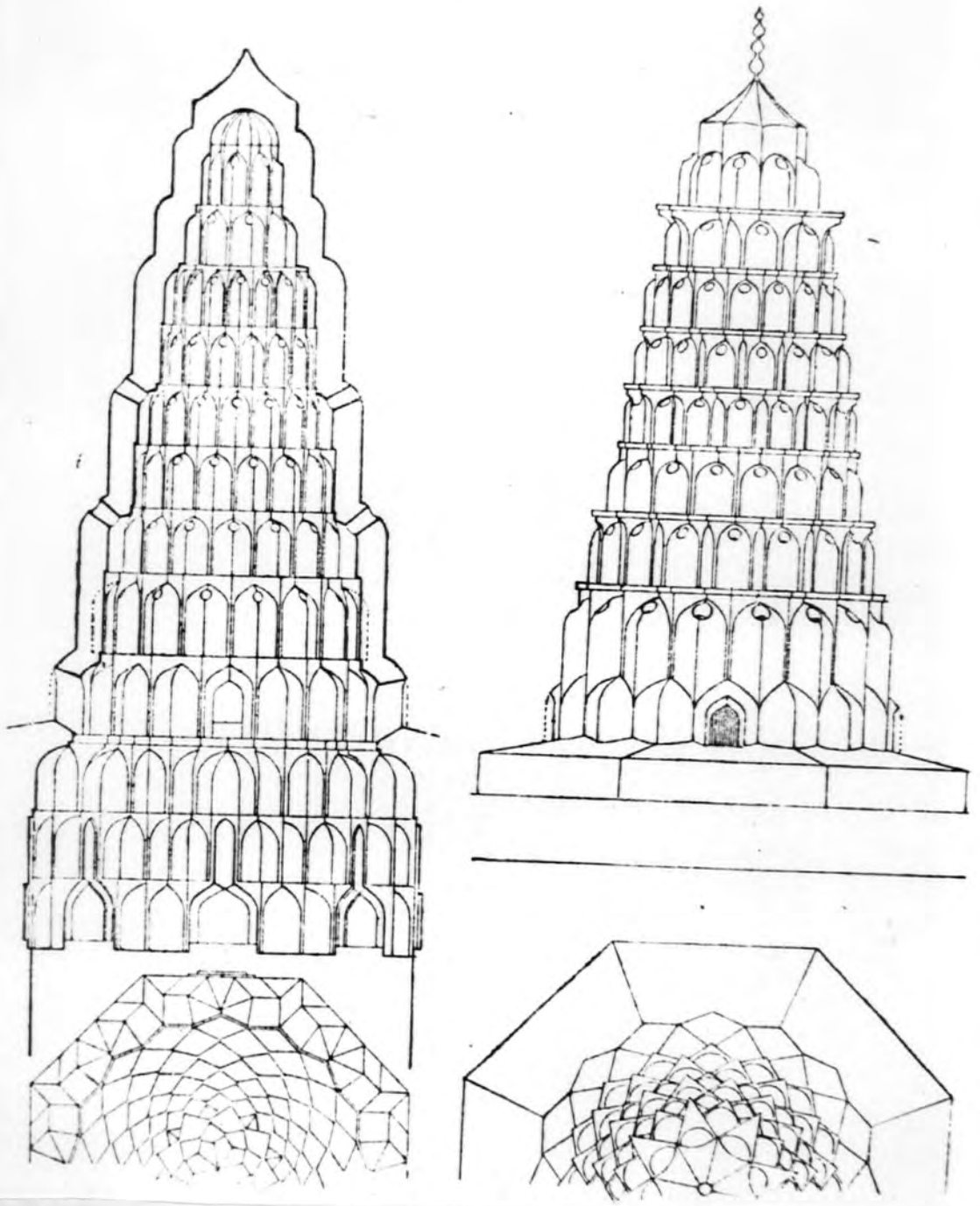
a. Four-centred Arch



b. Simple Pointed Arch

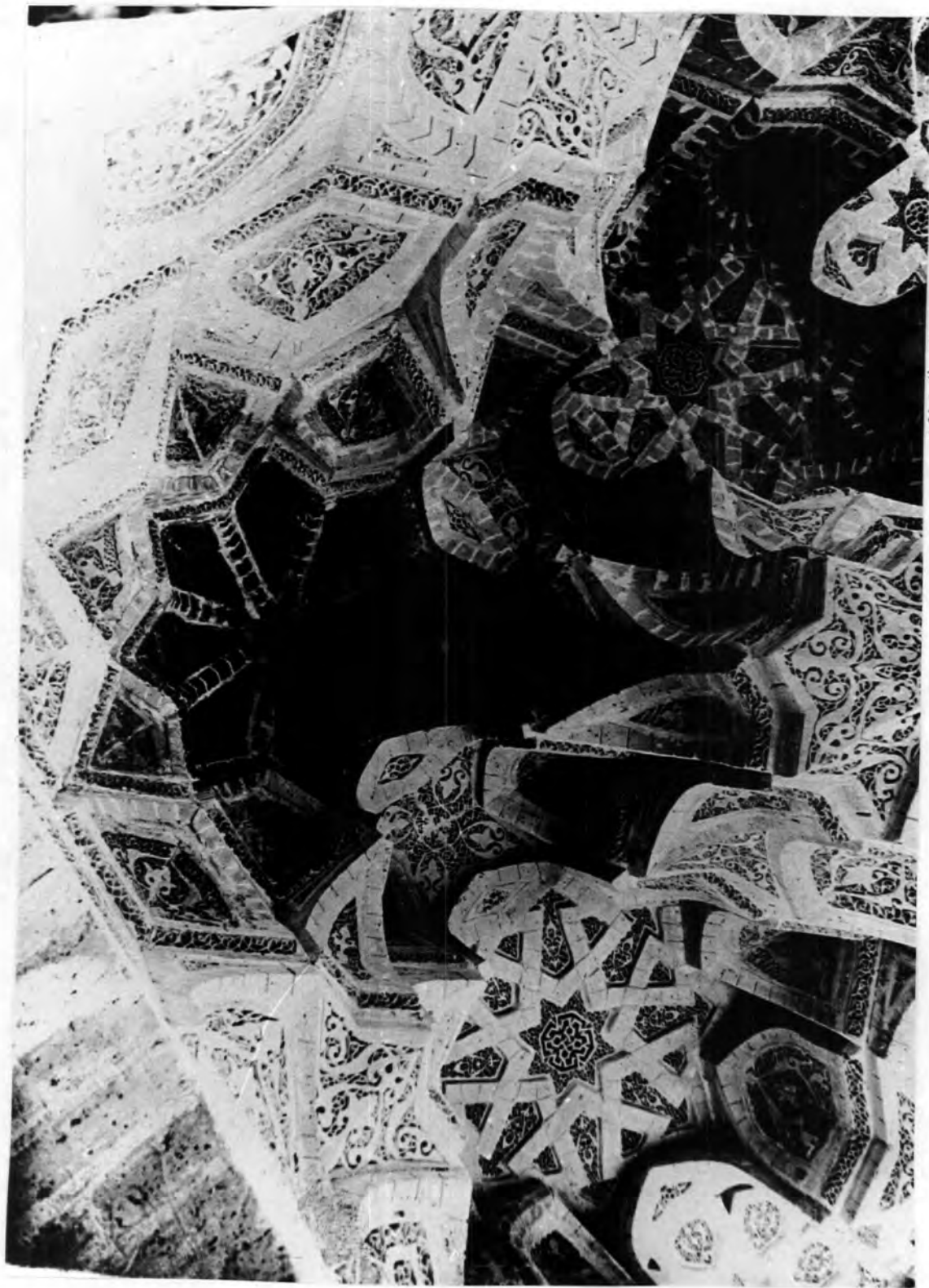


c. Keel Arch

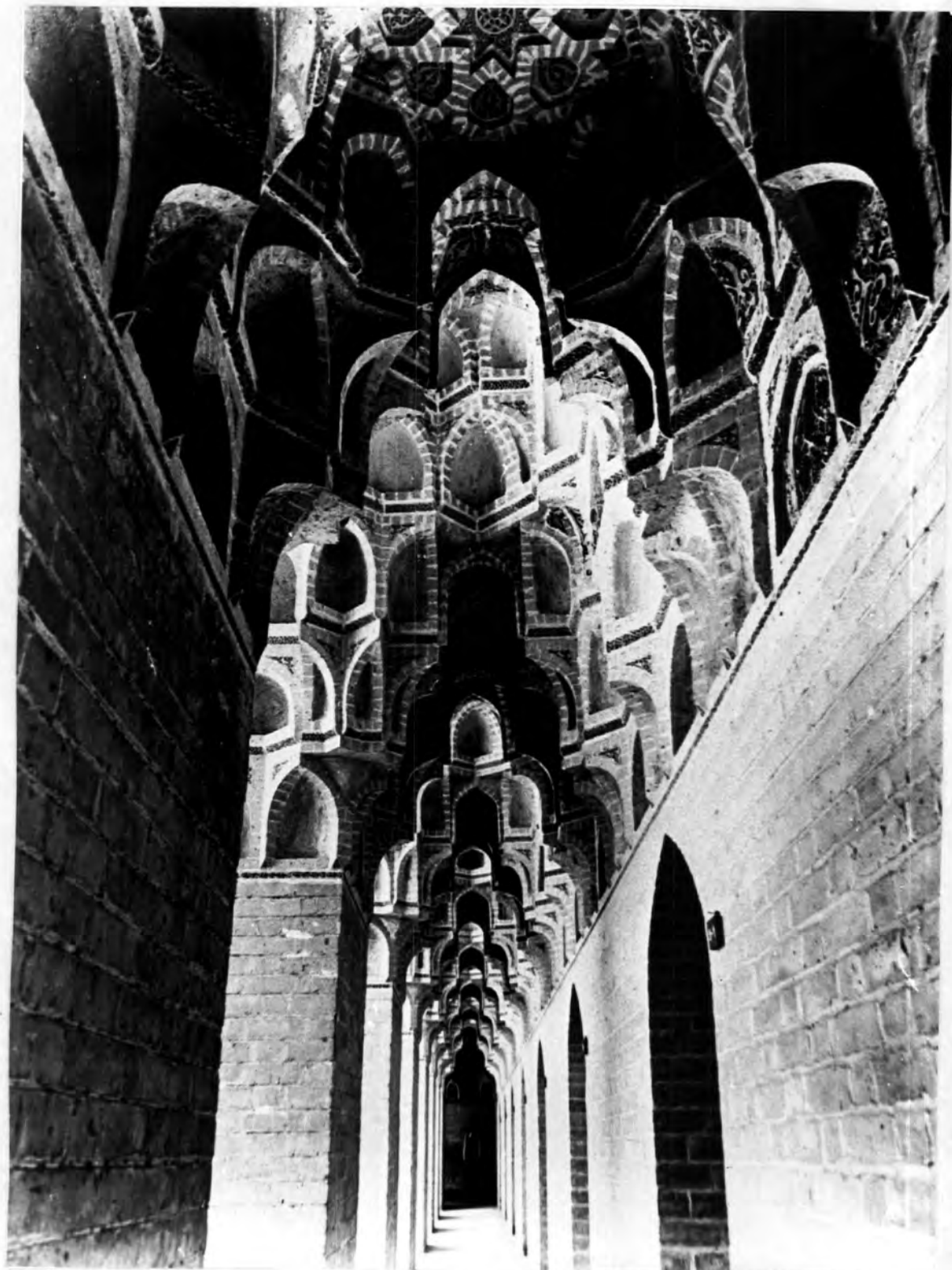


AFTER Sarre & Herzfeld

SITT ZUBAIDA



After the Iraqi Director of Antiquities  
The 'Abbasid Palace - The archway megaliths.



After the Iraqi Directorate of Antiquities

The alchway mugharnasāt



a - The Abbasid Palace

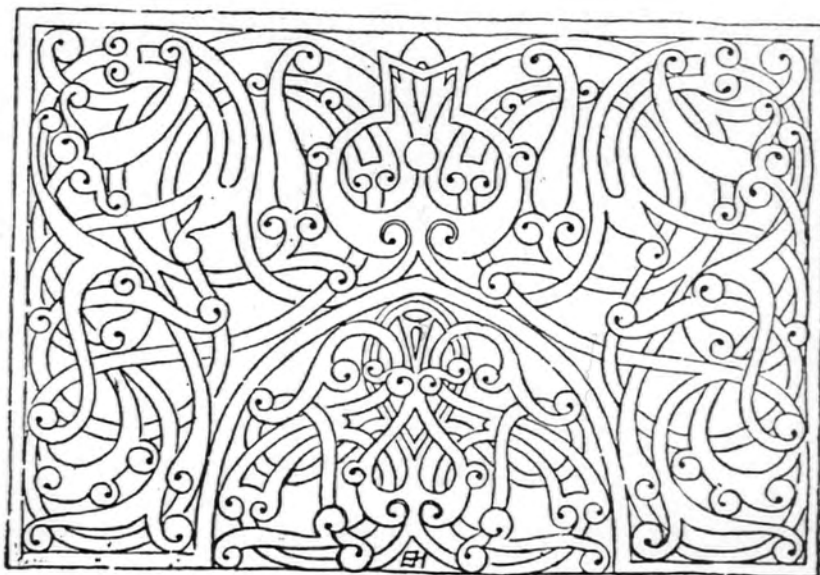


Abb. 234. Mosul, Mihrab der Großen Moschee.

b -

After Herzfeld

The Abstract vase shape



a. JERUSALEM 691/2



b. SYRIA 744



c. PERSIA XII/XIII



d. IRAQ VIII/IX



e. AFRICA bef. 1286



f. SYRIA 1289/49



a. SĀMARRĀ'



b. SĀMARRĀ'



c. SĀSĀNIAN



d. SĀSĀNIAN

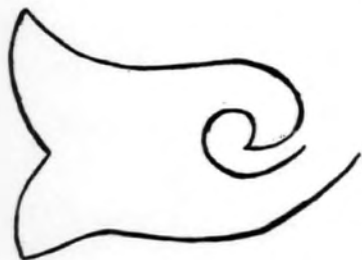


e. SĀMARRĀ'



f. CAIRO 876/9





a. CHAZNA 1030



b. CAIRO 1094/1121



c. CHAZNA 11th or 12th century.



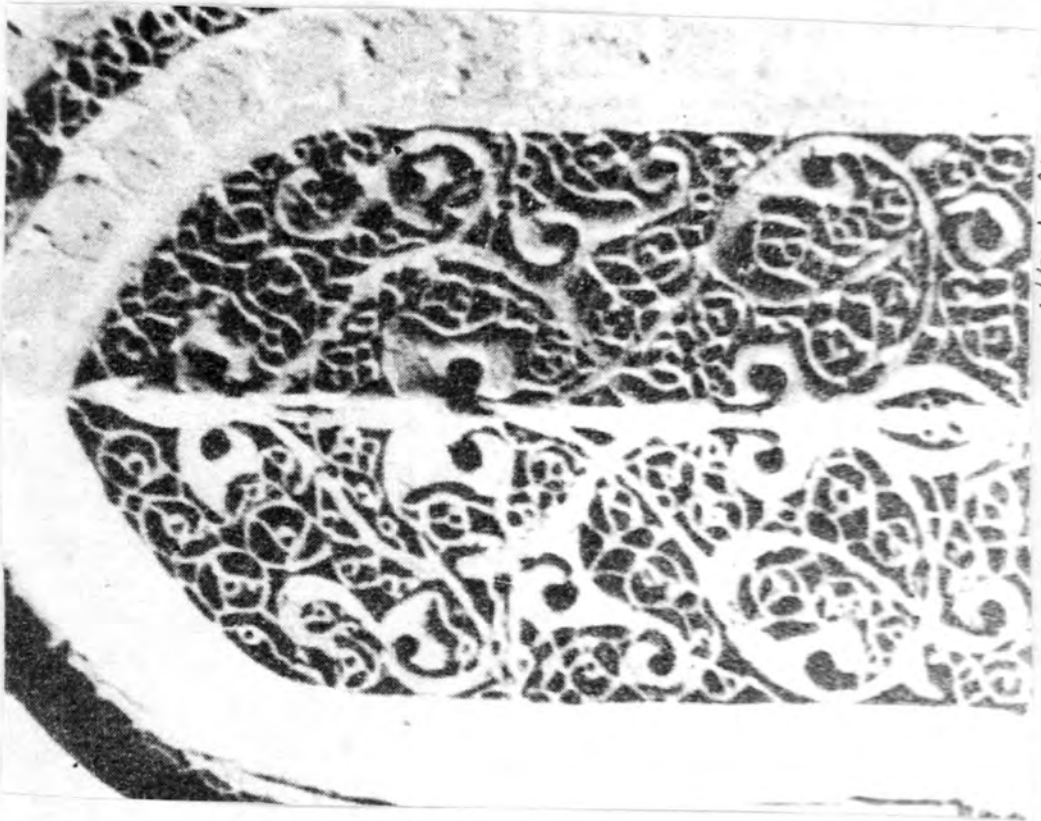
d Chazna 11th or 12th Century



e The 'ABBASID PLACE

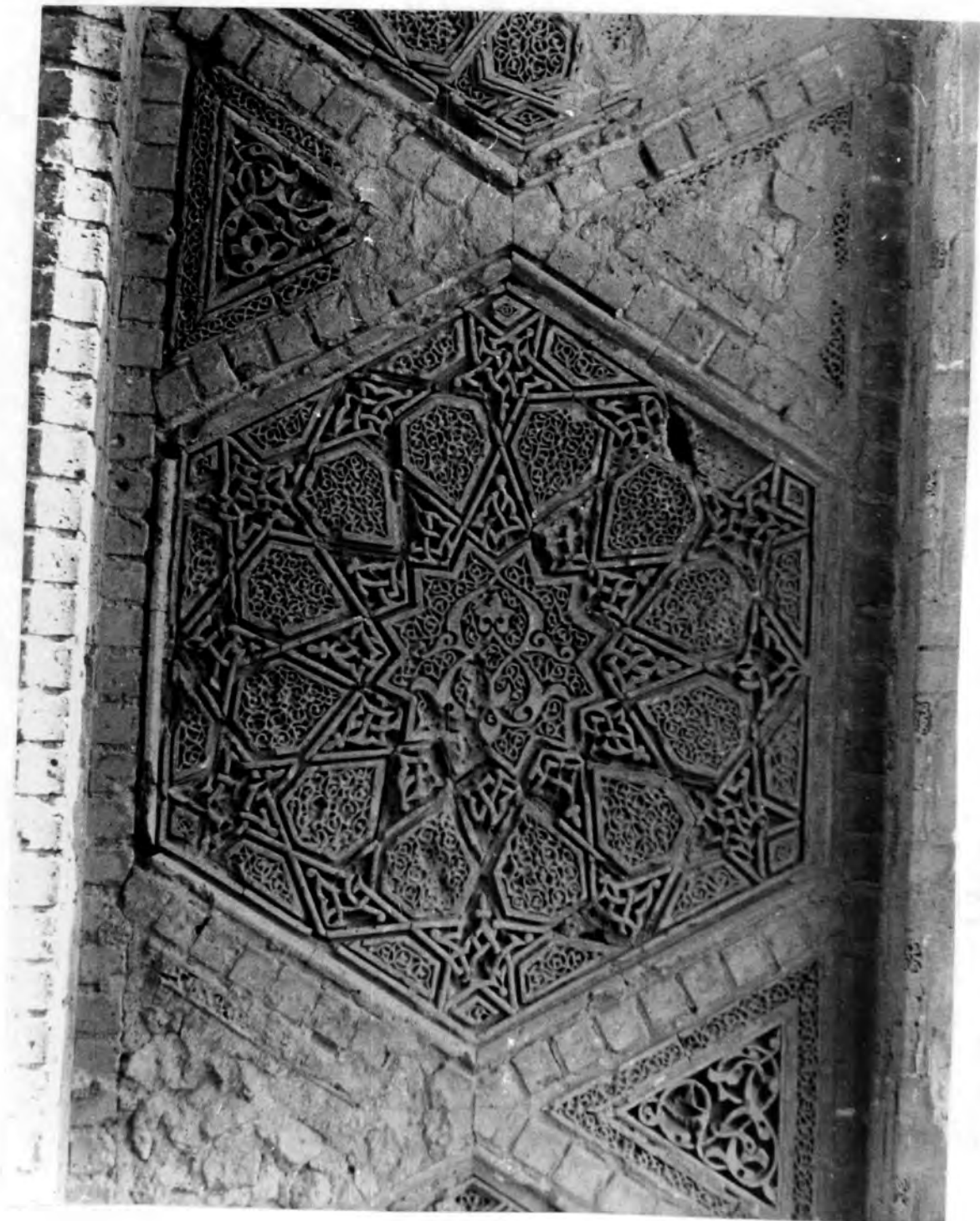


b. The 'Abbasid Palace



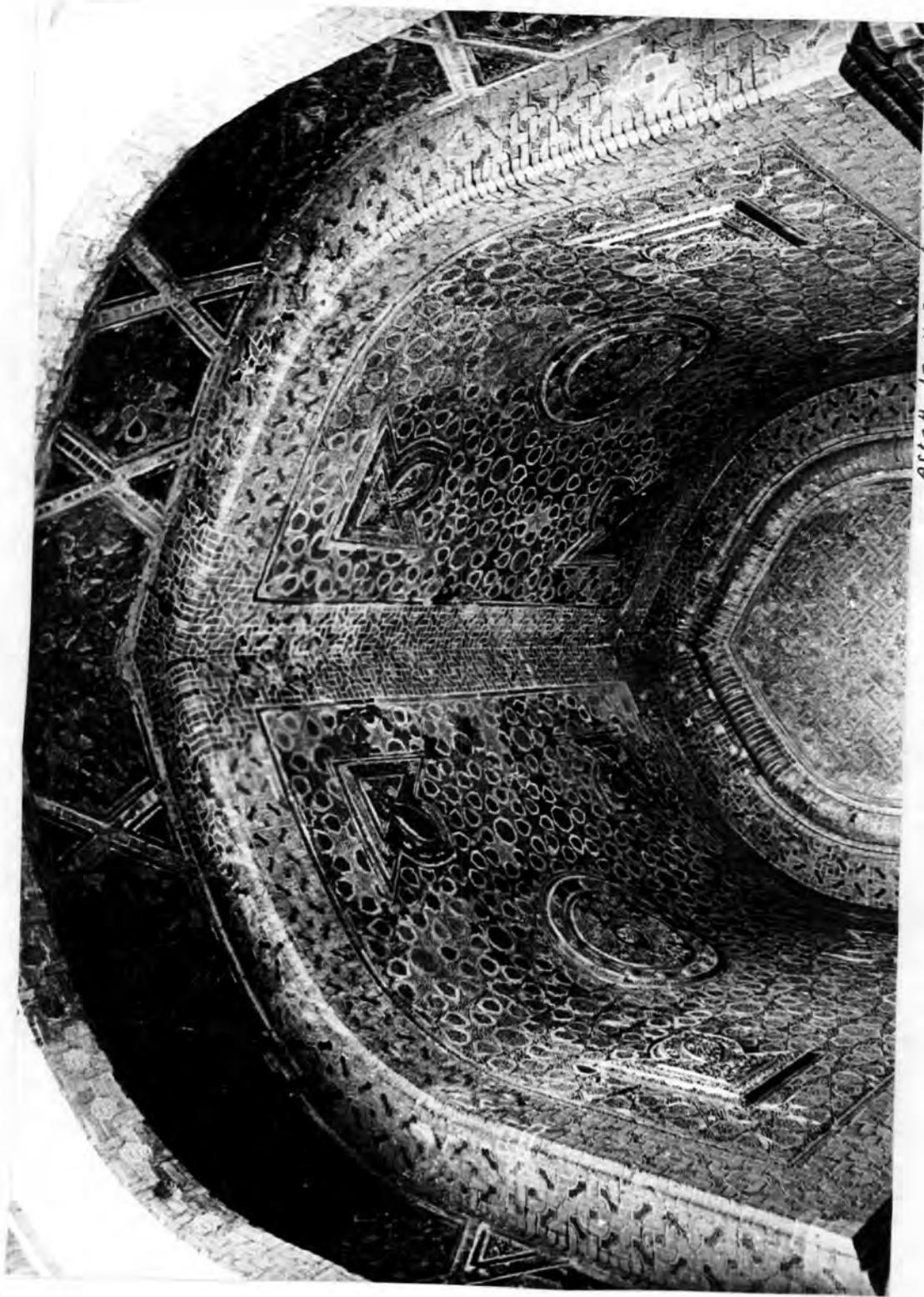
Alex K. Al-Jarābi

c. Mināret Suq al-Gharz



After the Iraqi Directorate  
of Antiquities.

The Twelve Pointed Star



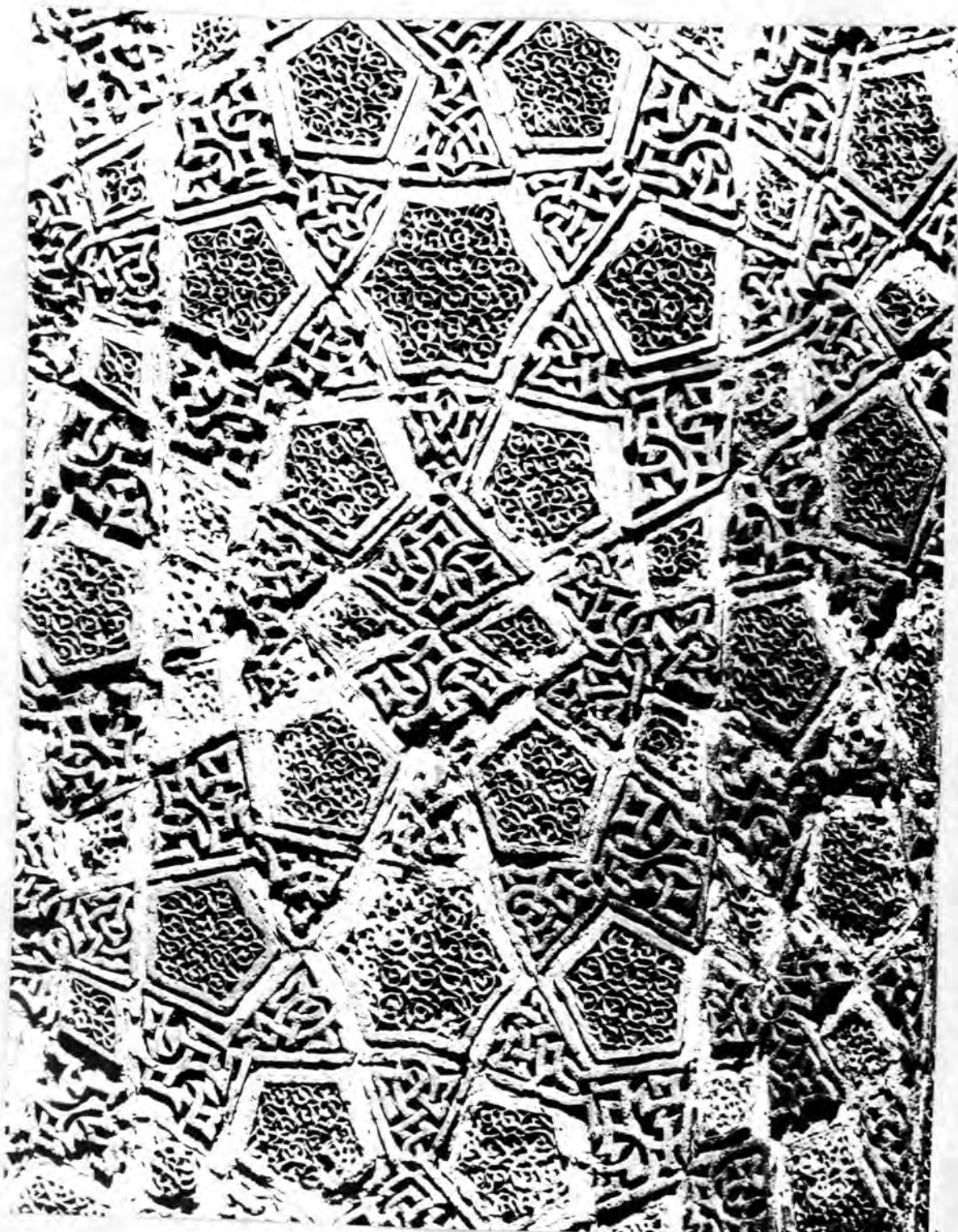
AFTER THE 1749 EARTHQUAKE OF ANTIGUA

The Barrel Vault



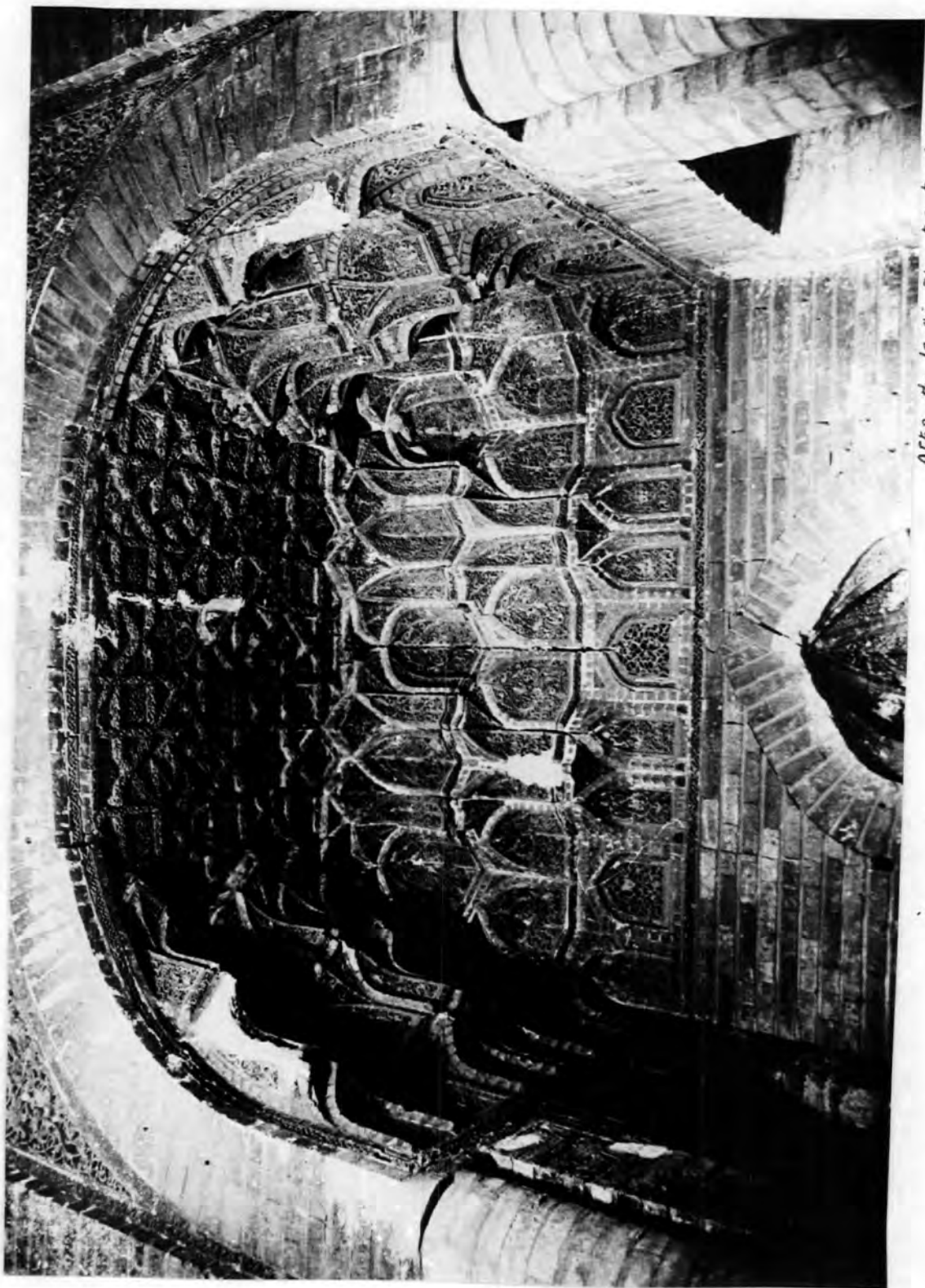
After the Praxi Discharge of Antiquities.

The medallion in the barrel vault



After the Directorate of Antiquities

The geometrical ornaments



After the Hoji Directorate of Antiquities

The decoration of the niche