THE ŞEHZADE KÜLLIYE IN ISTANBUL

A STUDY OF ITS STRUCTURAL AND AESTHETIC CHARACTERISTICS

BY

BEHİCE BİRSEN PEKÖZ

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THE CESSATION

- IN THE NAME OF ALLAH, THE COMPASSIONATE,

THE MERCIFUL -

"WHEN THE SUN CEASES TO SHINE;
WHEN THE STARS FALL DOWN AND
THE MOUNTAINS ARE BLOWN AWAY;
WHEN CAMELS BIG WITH YOUNG ARE
LEFT UNTENDED AND THE WILD
BEAST ARE BROUGHT TOGETHER;
WHEN THE SEAS ARE SET ALIGHT
AND MEN'S SOULS ARE REUNITED;
WHEN THE INFANT GIRL BURIED
ALIVE, IS ASKED FOR WHAT CRIME
SHE WAS THUS SLAIN;
WHEN THE RECORDS OF MEN'S DEEDS
ARE LAID OPEN AND THE HEAVEN
IS STRIPPED BARE;
WHEN HELL BURNS FIERCELY AND
PARADISE IS BROUGHT NEAR;
THEN EACH SOUL SHALL KNOW
WHAT IT HAS DONE."

Translated by N.J.Dawood
1966-P-17.

IN MEMORY OF MY BELOVED FATHER

CONTENTS

ABSTRACT

The purpose of this study is to investigate the structural and aesthetic characteristics of the Şehzade Külliye (950-55/ 1543-48) and to draw attention to its important place in the evolution of the centralized Ottoman mosque architecture.

Chapter one gives a brief outline of Ottoman history, while chapter two describes the principles of Ottoman mosque architecture. It consists of three parts: terminology of Ottoman mosque architecture, the evolution of the four semi-domed Ottoman mosque plan, and finally types of mosques built after the konquest of Constantinople. Chapter three deals with the exterior description of the Şehzade Cami, and makes comparisons with other mosque exteriors. The following chapter analyses the interior of the mosque. It is divided into several parts: supporting elements, the mihrāb, the minbar, the hünkâr mahfili, the müezzin mahfili, the kadinlar mahfili, the zone of transition, the roofing elements and illumination, and whenever it is relevant reference is made to Ottoman decoration in general, and specifically to paintings (renkli kalem işleri) and calligraphy. Chapter five describes the structures of the külliye. It begins with the madrasah, then continues with the taphane, the han, the imâret, the sübyan mektebi, the türbes, as well as the interior tile work, the çeşmes, and finishes with the outer enclosure.

In the concluding chapter, a detailed study of the origin and development of the four semi-domed mosque plan is given with due consideration to the aesthetic and structures of earlier examples, and the influence of the Şehzade Cami on later developments is also shown.

ACKNOWLEDGEMENTS

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Last, but not least, I must thank my brother, Birol Peköz, for the tremendous help I have received from him.

NOTE ON TRANSLITERATION

Modern Turkish spellings and terms are employed throughout this study, except specialist mosque terms, which are spelt in Arabic, for example, _ṣaḥn_ and _miḥrāb_ as used by the _Encyclopaedia of Islam_.

From time to time common English spellings are used where there is a well-known English equivalent.

The modern Turkish alphabet is similar to the English except for the letters c(j), ç(ch), ş(sh), ğ(gh) and ö and ü which are pronounced as they would be in German.

In this study, 'fig.' indicates the pictures and drawings, while the plans are shown as 'Pl'.

LIST OF ABBREVIATIONS

A.I.F.Y.A.D.	Ankara Ilâhiyat fakültesi, yillik araştirmalar dergisi
A.Ü.D.T.D.	Ankara Üniversitesi Dil Tarih dergisi
A.R.	The Architectural Review
A.Ris.	AdsizRisale
ATHÂR-É IRÀN	Annals du service archéologique de L'Iran
E.I.^{2}	Encyclopaedia of Islam - second edition 1936
I.A.	Islâm Ansiklopedisi - I.M.B. 1960
I.Ü.E F S.T.Y.	Istanbul Üniversitesi Edebiyat fakültesi, Sanat Tarihi yayinlari
I.Ü.I.F.Y.	Istanbul Üniversitesi Iktisat fakültesi yayinlari
I.T.Ü.M F.	Istanbul Teknik Üniversitesi Mimarlik Fakültesi
R.M.	Risalet-ül Mimarin
SURVEY	A survey of Persian art edited by A.U.Pope, Oxford 1939, six volumes, reedited in Tokyo in 1964/65 in twelve volumes.
T.B.	Teskeret-ül Bünyan
T.D.	Tarih dergisi - Istanbul
T.E.	Teskeret-ül Ebniya
T.M.	Türkiyyat mecmuasi
T.S.T.	Türk Sanati Tarihi

T.T.K.Y.	Türk Tarih Kurumu Yayinlari - Ankara
V.D.	Vakiflar Dergisi

Chapter I

HISTORICAL INTRODUCTION

The name of Turk appears in history for the first time in the sixth century A.D., when Chinese annals speak of a powerful empire in Central Asia, founded by a people called the Tu Kiu.[1] It is from one of the most important Turkish tribes, the Oghuz ("Ghuzz"), who migrated from Central Asia towards the south and west in the tenth century that the Seljuks and Ottomans are descended.

The conquest of Asia Minor by the Seljuks began after the battle of Manzikert ("Malazgirt") in the highlands near Lake Van, in 454/1071. The slow conquest of Asia Minor was fundamentally the work of migrating nomadic tribes and bands of Ghâzîs ("warriors of the faith"), who accomplished without any deliberate intention or plan the annexation of Byzantine territory and the forming of a Seljuk state.[2] Konya was the capital of the Seljuk state; it was there that an urban Muslim culture developed in Anatolia with its administrators, men of letters, divines, merchants, and artisans bringing with them enthusiasm and knowledge of the culture of the Islam and impressing on the country the traditional pattern of Islamic society. The collapse of the Seljuk state after the battle at Kösedağ in 641/1243 opened the way to the division of the peninsula into a number of rival principalities, a process which continued

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[1] M.F.Köprülü, Les origines de l'empire Ottomans, pp. 82-6; A.H. Lybyer, The government of the Ottoman Empire in the time of Süleiman the Magnificent (Cambridge, 1913), p.19; E. Chavannes, Documents sur les Tou Kiue (Turcs) occidentaux (Paris, 1900), p.4.

[2] D.Sinor, Orientalism and History (Cambridge, 1954), pp. 92-3.

into the next century. Among the warrior principalities was one, known by the name of its first ruler, Osman (699-727/1299-1326), whose people were called after him Ottoman ("Osmanli") in a dynastic sense.[1] Though the Ottoman Beylik was smaller thanthe other beyliks, for example the Karamans, who ruled over Konya, their positinn in the far west, on the frontier with the Byzantine provinces of Bythynia and Constantinople, gave them a greater task and greater opportunities.[2] They expanded progressively into Europe and each war of conquest was preceded by an expansion of the Anatolian base either by military or by peaceful means.[3]

A mark of their growing importance was the granting by the caliph of the title of Rûm to the fourth Ottoman sultan Beyazid I (792-805/1389-1402), known as the 'Thunderbolt' ("Yildirim").[4] No longer a frontier chief, Beyazid, who was now the sovereign of an Islamic empire and an heir to the glories of the Seljuk Sultans of Konya, began to blockade Constantinople in 798/1395. From this he was briefly distracted by a crusade of Western Chivalry on which he inflicted a crushing defeat at Nicopolis ("Sirp Sindigi") in September 799/1396.[5] After this victory, he was again disturbed

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[1] B.Lewis, The Emergence of Modern Turkey (London, 1968) second ed., p.2. (With the Ottomans the term Turk was only used to indicate the Turcoman nomads.)

[2] H.A.Gibbons, The foundation of the Ottoman Empire (Oxford, 1916), pp. 81-3.

[3] P.Wittek, The rise of Ottoman Empire (London, 1965), p.47;

[4] P.Wittek, Les Sultans de Rûm (Bruxelles, 1938), p.1.

[5] G.Kling, Die schacht bei Nicopolis in Jahre 1396 (Berlin, 1906), p.3; A.S.Atiya, The Crusade of Nicopolis (London, 1934).

by the Mongol armies. On 28th July 805/1402 the two armies clashed on a plain near Ankara, and the Ottomans for the first time in their history suffered a defeat. The consequences of this defeat were the restoration of the beyliks of Anatolia and the division of the remaining Ottoman territory. All this clearly shows that the fabric of the young empire was still a very unstable one. Ten years after the defeat Prince Mehmet began the restoration of the Ottoman state. Under his son, Murad II (825-55/1421-51), the Ottoman forces won great victories against the Greeks, Serbs, Hungarians and Western Crusaders. In 855/1451 Murad II died and was succeeded by his son, Mehmet II (855-86/1451-81), known as the 'Conqueror' ("Fatih"), who inherited an empire that was still divided by Constantinople into two parts. On 29th May 857/1453, two years after the Sultan's accession, the janissaries ("Yeniçeris") made the final assault on the walls of Constantinople. With the conquest of Constantinople the last piece had fallen into place and had sealed the union of the two parts of the empire, Asia and Europe. The Sultanate of Rûm had found its fulfilment with the conquest of Constantinople. It was without doubt an empire strongly established within its territories, an empire recognising no limits to the further extension of its borders.

The Ottoman state was under no threat from the east, partly because the Tīmūrids were no longer strong; secondly, the Kara Koyunlu State was engaged by its enemy, the Ak Koyunlu. In western Anatolia the principalities of Çandar, Karaman and Dulkadir continued to exist under Ottoman suzerainty. On the European continent there was no single country which could withstand an Ottoman offensive. The remainder of Mehmet II's reign was occupied with

series of military campaigns aiming further to consolidate his empire. No major development occurred during the reign of his son, Beyazid II (886-918/1481-1512). His successor, Selim II, known as the 'Grim' (Yavuz) (918-27/1512-20), defeated the armies of Shah Ismā'īl of Persia at the battle of Çaldiran in 920/1514.[1] A swift campaign in 922-3/1516-7 destroyed the Mamlūk Sultanate, and swept Syria and Egypt into the Ottoman Empire.[2] The Ottomans also held some control over Western Arabia, including the Hijaz with Mecca and Medina. Selim I assumed the title of caliph (halife) in 923/1517.

The reign of his son Süleyman (927-74/1520-66), called the 'Lawgiver' (Kanuni) by Turks and the 'Magnificent' by Europeans, is regarded as the apogee of Ottoman glory and power. The largest part of the Islamic world: Syria, Iraq, Palestine, Egypt, Hijaz, the holy cities of Islam, Mecca and Medina, North Africa, and the other leading capitals: Damascus, Baghdad, Cairo, the vassal state of the Khanate of Crimea, and the Balkans, were united by the Ottoman Sultans.[3] The wide extent and military power of the empire was equalled by its strong economy, its well-organised state, and by its rich culture. Istanbul became a vast and flourishing city. From all over the empire poets, scholars, artisans, architects, administrators and men of religion came to Istanbul, which helped to give it a special character to the new and vital

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[1] D. Vaughan, Europa and the Turk: A Pattern of alliances - 1350-1700 (Liverpool, 1954), p.100.

[2] G.W.F.Stripling, The Ottoman Turks and the Arabs (U.S.A., 1942), p.57.

[3] A.H.Lybyer, op.cit., p.7.

Ottoman civilization that had grown from the merging of several traditions - nomadic, Islamic and Byzantine. The Byzantine elements in the Ottoman civilization died out in the fifteenth century, partly because of the incorporation of former border lands into classical Islamic civilization, and partly because of the decline of Byzantium itself.

Sinan, who was the most famous of all Ottoman architects, was mainly active during the time of Sultan Süleyman the Magnificent.[1] Our information on Sinan derives from five manuscripts, two of which are attributed to his close friend Mustafa Sâ'i, who is said to have composed them upon Sinan's dictation.[2] These manuscripts are: Teskeret-ül Ebniye (Book of Buildings), Teskeret-ül Bünyan (Book of Structure), Adsiz Risale (Anonymous text), Tuhfet-ül Mimarin (Architectural Masterpieces) and Risalet-ül Mimarin (Book of Architecture). According to his biographer, the Teskeret-ül Bünyan, he was the son of 'Abdülmenan' ("the erring servant of God") meaning that he was not of Muslim origin.[3] He was born in 897/1491 in Kayseri. Sinan was brought to Istanbul

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[1]Koca Sinan lived through the reign of four Ottoman Sultans: Yavuz Selim I (918-27/1512-20), Sultan Süleyman (927-74/1520-66), Sultan Selim II (Sari) the 'Sot' (974-82/1566-74), and Sultan Murad III (982-1004/1574-95).

[2]F.Babinger, Die geschichischreiber der Osmanen und ihrewdrke (Leipzig, 1927), p.137; C.E.Arseven, "Mimar Sinan", TST (Istanbul, 1954), pp. 61-7.

[3]The name Abdülmenan was one usually given to the janissary recruits on enrolment. Sinan's origins did not affect his works. R.M.M.Meriç, Mimar Sinan hayati, eserleri I (Ankara, 1965), pp. 53-129; E.Akurgal, "Sanat tarihi bakimindan Sinan", AÜDTD II, 1944, pp. 375-84.

in 918/1512 as a result of the devşirme system.[1] Later he was transferred to the janissary.[2] He served as an army engineer in Iran at Çhaldiran (Çaldiran) 920/1514, in Syria at Marj Dâbiq (Mercidabik) 922/1516, and in Egypt at Raydāniyya (Ridaniye) 923/1517 with Yavuz Selim II. He was also present during the fighting on Rhodoes, and at the conquest of Belgrade in 928-30/ 1521-23. Sinan had assisted with the building of defences and bridges during these campaigns. He had the opportunity to see monuments of different cultures and faiths. With this international knowledge,he developed the skill of making huge domed mosques. He designed his first recorded building for Hüsrev Paşa in Aleppo. Here, he built a square mosque, named after his patron, with a relatively low dome( ). A year later, he was about forty-seven, he became an imperial architect (Şehir Emini) in 945/1538.

Sinan's first building in Istanbul was the Haseki Complex built for Hürrem, the Russian wife of Süleyman (946/1539). The mosque is a single domed building. The whole building was enlarged by the addition of a new part covered by a second dome in 1021/1612.

In Teskeret-iül Bünyan he classified his works. He states that "The Şehzade Cami is the work of my apprenticeship, the Süleymaniye Cami showed me tobe a good mason, but the Selimiye Cami is my masterpiece". Our subject, the Şehzade Cami, was begun

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[1] Dewshirme (devşirme), the practice is said to have been first introduced by Orhan. The compulsory levy boys, originating in early Ottoman times, gradually died out in the seventeenth century. V.L.Menage, "Dewshirme" article in E.I.[2], pp. 952-3. According to Evliya Çelebi, Travels I, p.210, this practice still existed under Murad II.

[2] Lybyer, op.cit., p.12.

in 950/1543 and was completed in 955/1548. It was built to the memory of Sultan Süleyman's eldest son, Şehzade Mehmet (the crown prince). Here, Sinan solved the problem of creating a large dome, measuring 19m. in diametre, with minimum support; this provided a better view of the qibla wall for the faithful (pl.14). The Şehzade Cami is very important, partly in forming an essential starting-point for later Ottoman mosque architecture and, secondly, it leads to the widening and heightening use of space, reaching its climax in the Selimiye Cami in Edirne (977-82/1569-74), and further in being the first major complex created by Sinan. While building the Şehzade Sinan also experimented with a three semi-domed plan in the Mihrimah Mosque in Üsküdar, finished in 955/1548.

In the Mihrimah Cami near Edirnekapi (completed in 965/1557), he enlarged the interior by building the dome (measuring 19m. in diametre) resting on four piers and augmented by three equal sized small domes.

When Sinan was sixty years of age in 957/1550 he began the Süleymaniye Cami, which was not completed until 965/1557. In this mosque he used for the first time the two semi-dome plan. The main dome, which measures 26.50m. in diametre, 53m. in height, is the largest in Istanbul, with the exception of that of St. Sophia (pl. 16)

After several experiments on a smaller scale Sinan, at the age of eighty, created his masterpiece, the Selimiye Cami in Edirne (977-83/1569-75), on the orders of Sultan Selim II (Sari). (pl. 17). The enormous dome is 31.30m. in diametre and 43.28m. in height. It shows the climax of Ottoman domed roofing.

Sinan died in 966/1587.[1] His buildings influenced Ottoman architecture throughout the empire and his pupils transmitted his ideas to later generations.[2] He could be compared with his contemporary, Michelangelo. They both built huge domes, and they strongly marked their age with their buildings. Their ideas were carried on in later periods by their numerous followers.

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[1] A.Refik, Onuncu asri hicrîde Istanbul Hayati, Mimar Sinan, p.46. S. Corbett, "Sinan, architect in chief to Suleiman the Magnificent", AR CXIII (1953), pp. 201-307; "Sinan" article in E.I.[2] IV, pp. 428-32.

[2] During his long life time Sinan built one hundred mosques, forty three mescids, fifty-five mekteps, seven Dar-ül Kurras (Kuran schools), sixteen imârets, nine dar-üs şifas (hospitals), seven kemers (acqueducts), eight köprüs (bridges), eighteen sarays (palaces), sixteen hans (caravanserais), three ambars (storehouses), thirty-nine hamams (baths), and nineteen türbes (tombs).

Chapter II

GLOSSARY OF OTTOMAN MOSQUE ARCHITECTURE

The mosque: Jāmiʿ, Ulu Cami, Mascid-i Jāmiʿ or Masjid-i Jumaʿ.

The English word 'mosque' derives from the Arabic verb sajjāda, "to prostrate oneself", from which the word masjid is formed, "a place for prostration". The interpretation of the term masjid has gradually changed.[1]

The Ottomans called an imperial mosque with several minarets a selātin cami. The word masjid was used only for smaller religious structures. Mosque architecture accepted no frontiers, and accordingly it was influenced by the other cultures, and adopted foreign elements, gradually developing its own style.[2]

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[1] J.Pedersen, "Masdjid" in E.I.[2], III, p.315.

[2] Before the advance of Islam, the vast majority of the population of Arabia was nomadic. The first Arab mosques were primitive, their boundaries were arranged by an archer who threw an arrow towards the qibla, then another towards the north, and so on. They were simply enclosed by a fence of reeds or ditches, such as in the mosque of Baṣra (14/635) and Kūfa (17/638-9). The Great Seljuks of Iran developed earlier Turkish architecture, for example, the Karakhanid and Ghaznavid, and created a monumental Friday mosque plan with a dome in front of the qibla wall. The Mascid-i Jumaʿ at Isfahan is an example of this type, where the northern miḥrāb dome and the small domed chamber were built in the reign of Malikshāh (465-85/1072-92) and the four iwān courtyard constructed later. A.Gabriel, "Le Masdjid é Djumʿa d'Isfahan", Ars Islamica II (1935), pp.7-44; A.Godard, "Historique du Masdjid-é Djumʿa d'Isfahan", ĀTHĀR-É IRĀN I, pp. 213-82. Further examples are the Masjid-i Jumʿa at Zawāre (530/1135) and the Masjid-i Jumaʿ at Ardistan (553-5/1158/60). The battle of Manzikert (Malazgirt), 464/1071, marks the formal beginning of the conquest of Asia Minor. This area had been dominated by several different cultures in succession. The Seljuks brought with them their spiritual cultural values and material, and tried to establish a certain cultural unity. Anatolian Seljuk architecture was the architecture of the vaults. The dome, which is built in front of the qibla wall, shows an emphasis on the miḥrāb. With the Ottomans, the mosque architecture is gradually changed and developed. They used the dome as a principal roofing system, and they covered considerably large areas with the dome, augmented by semi-domes and smaller corner

Ottoman mosques consist of the following parts:

I Dış Avlu

This is an outer enclosure, a kind of transitional area between the mosque proper and the street. The külliye structures were usually built in this area.

a. The Muvakkidhane

The muvakkidhane is a small building, in which the clocks were kept. It is usually attached to the outer gate of the mosque.

b. The imam and müezzin odalari

These are the resting places of the imams and müezzins. The imam, who is a mosque official, conducts the ritual prayer. Müezzin is a mosque official, responsible for the call to prayer from şerefe of the minaret.

II Iç Avlu (Courtyard)

The courtyard is surrounded by arcades (riwāqs), and in the centre an ablution fountain is placed. It is the area where the faithful wash and prepare themselves for the ritual prayer.

a. The Şadirvan (Ablution fountain)

These fountains are either square or octagonal in shape. They are used for ritual ablutions before prayer. These

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domes. The vaulting system usually used for secular buildings, for example, libraries. After the Ottoman transitional period (699-907/1299-1501) the mosque complex (külliye) was enlarged with several buildings, the madrasah, the imâret, the taphane (guest house), the dar-üşşifa (hospital), the kütüphane (library), the sübyan mektebi (primary school), the türbe (tomb), the hamam (bath), the çeşmes (fountains), the arastas (bazars), and the hans (caravanserai). F. Akozan, "Türk Külliyeleri", VD VII, pp. 300-8; U.V. Göknil, Ottoman Architecture (Switzerland, 1966), pp. 47-8.

fountains are surrounded with wrought iron screens (şebeke), and covered by either a dome or conical roof supported by marble columns.[1]

b. The Son cemaat yeri (Porch)

This porch is for the late-comers to the ritual prayer. The first Arab mosques had no son cemaat yeri. This part first appeared in the mosque of 'Bu Fatātā in North Africa.[2] The son cemaat yeri generally has a secondary miḥrāb.

c. The Minaret (Minare)

A minaret is composed of seven parts: the base, the shoe, the shaft, the şerefe (balcony), the petek, the külâh (cap) and the âlem (finial).[3] The minarets are usually set at the junction of the courtyard and the mosque structure; if there are more than two, then the others are placed at the extreme north corners of the courtyard.

III The Interior (Sahn)

It is an Arabic word meaning simply a 'courtyard'. But in Ottoman Turkish the term is applied to the interior of a mosque, where the ritual prayers are performed. This unit is again divided into several parts:

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[1] E.Tokay, Istanbul Şadirvanlari, I.T.Ü.M.F., 1951.

[2] K.A.C.Creswell, A Short Account of Early Muslim Architecture (Penguin Books, 1958), p.268. The son cemaat yeri is first seen in the last quarter of the fourteenth century in Anatolia, in the mosque of 'Isa Bey at the town of Seljuk. In earlier times this part was usually covered with vaulting; during the Ottoman Golden Age (907-1143/1501-1730) the dome was widely used.

[3] E.Diez, "Minaret" article in E.I.^{2}, pp. 227-31. There are three words used in Arabic to denote minarets: midhana, saum'a and manarā. The third word, manarā, is more usual than the others. From this word the term minaret originates. K.A.C.Creswell, The Evolution of the Minaret, with special reference to Egypt (1926), p.1.

a. The miḥrāb

It is a niche in the qibla wall of a mosque, indicating the direction towards Ka'ba in Mecca. The imam stands in front of it, when he conducts congregational prayer.[1]

b. The minbar

It is set to the right of the miḥrāb niche. From here, the hütbe (khuṭbah, 'Friday oration', or when a new sultan may be announced) is recited.[2]

c. The Hünkâr mahfili (Royal box in a mosque)

The enclosure, which is generally set to the left of the miḥrāb niche. The sultan stands during the ritual prayer. The hünkar mahfili is the Ottoman word for the Arabic maqṣūra.[3]

d. The Müezzin mahfili (Tribune for müezzins)

It is a rather simple replica of the previous mahfil.

e. The Kadinlar mahfili (Tribune for ladies)

It is normally placed inside the son cemaat yeri entrance wall.

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[1] E.Diez, "Miḥrāb" article in E.I.[2] III, pp. 485-90; O.Aslanapa, "Türk miḥrâblari" article in I.A. VIII (1960), pp. 301-4. Originally the prophet Muḥammad prayed facing towards Jerusalem. The change of direction came suddenly while he was praying in the mosque in Medina, during the second year of Hijra, when he received an inspiration to pray in future towards Mecca. He therefore immediately turned towards the south.

[2] O.Aslanapa, "Anadoluda Türk minberleri", I.A. VIII (1960), pp. 337-39. Formerly the minbar consisted of three steps. Prophet Muḥammad in addressing the congregation stood on the uppermost step, 'Abu Bakr on the second, and 'Umar on the lowest. In early days it was a movable wooden structure, and later it was made of brick, stone or marble, and placed against the qibla wall.

[3] According to Ibn Khaldūn, the first maqṣūra was installed by Mu'āwiya as a result of an attempt on his life by a Kharijite, who had struck him with a sword. Ṭabarī I, 1278-81; H.Z.Ülgen, Islam Sanati (I.T.Ü.M.F., 1948), p.39; M.Sudali, Hünkâr Mahfilleri, (I.T.Ü.M.F., 1957), p.10. The oldest existing maqṣūra is that in the Great Mosque of Qairawan, dated first half of the eleventh century.

THE EVOLUTION OF THE FOUR SEMI-DOMED OTTOMAN MOSQUE PLAN

The history of architecture, as of any other art, must not be confined to masterpieces, nor is it primarily concerned with aesthetic evolution which, in any case, may be repeated from time to time. The subject is much bigger and comprises all that mankind has done, and is doing, by means of building to shape his environment. Architecture cannot be properly understood without knowing the forces which influence it: social, political, economic and religious. No artist works in isolation, least of all the architect, and no building exists in isolation. Our concern is the inter-relationship, and the effects of this upon building.

A brief outline of the domed plan

The circular plan is not a Greek, let alone a Roman invention, but round huts and houses have been known since ancient times, from the traces of these buildings. Round stone buildings from as early as the sixth century and fifth millennium, however, are known in Iraq, for example in Tell Arpachiyah, and Eridu, and also in Khirokitia in Cyprus.[1]

In Roman architecture the four semi-domed plan is originally derived from the martyrium.[2] Early Christian architects experimented

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[1] M.E.Mallowan and R.J.Cruthshank, "The excavations at Tell Arpachiyah, 1933", IRAQ II (1935), pp. 31-33; P.Dikaios, Khirokitia, Final report, 1953.

[2] A.Grabar, Martyrium I (France, 1946), p.152: "Nous avons le certitude que, dans la deuxiéme moitié du iv^e siècle au plus tard, il y avait deja des martyria de plan cruciforme, et que des cette époque on rapprochait ce plan du signe chrétien de la croix." On p. 370 he says: "Personne n'a doubté, d'autre part que les églises médiévales de Constantinople telles que Bodrum Jamiet Kilise

with axial emphasis, crossed longitudinally and with a transept axis, and with rotundas and octagons. An example of the rotunda can be seen in Santa Costanza (fourth century A.D.).[1] Possibly intended as a mausoleum, this domed building owes much to the centrally planned structures of the Romans, such as the Pantheon. Santa Costanza consists of two thick concentric rings of brick-faced concrete. The inner and higher ring rests upon coupled columns set out radially from the central vertical axis. The outer lower ring encloses a circular ambulatory between its columns into the axial cylinder. With the exception of Santa Constanza, none of the buildings of thefourth century have been preserved other than in a fragmentary way. In the fifty century centralized and vaulted forms also appeared in Italy. Their plans can be traced to concepts expressed in the early fourth century Temple of Minerve

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église (X^{e} and XI^{e} siècles) ne dérivent des monuments antérieuses dans la genre d'Attik Mustafa Paşa ou de Kalender église descenes aux autres, on n'assiste qu'à une evolution esthétique et d'une adoptation plus pratiques des élements du même type, progressivement, leç arcs qui s'ouvraient sur les compartiments des coins s'elancent et s'élargissent de piliers sur les quels viennent s'appuyer ces arcs se substituent aux murs de séparation continus et les piliers eux-mêmes cedent finalement la place à des colonnes. A la fin de cette évolution, tout l'espace compris entre la carré des murs extérieurs n'est plus qu'une salle unique, et l'ancienne ordonnance en croix de la partie centrale ne se lit que dans le groupement des voutes que soutiennent les colonnes effilées."

[1] G.T.Rivoira, Roman Architecture, trans. by G.M.Rushforth (London, 1925), p.238.

Medica in Rome.[1] The mausoleum of Galla Placidia in Ravenna from the middle of the fourth century, with its plain brick surfaces and simple lines of blank arcading shows a Greek cross plan.[2] In this building, barrel vaults and a pendentive dome join the vertical planes of the wall.

In Greater Syria, early Christian buildings, such as the Cathedral of Bosra (513 A.D.), in the south, we find the scene of a major experiment in rotunda plan (pl. 1).[3] A huge dome 36.42m. in diametre was encased within a rectangular niched interior. The Cathedral of St. George in Ezra (first quarter of the sixth century A.D.) follows a similar plan.

Byzantine architects used two basic plans for churches: the basilica, and the centrally planned domed structure. Here, our interest lies in the second type. In the centrally planned Byzantine churches, the unity of space is emphasized by a central dome. The longitudinal axis which predominates in the basilica gives new limits, which did not originally exist in the simple centrally planned buildings. In the rotunda plan, the impression is of an equal force radiating from the centre in all directions. It was aesthetically isolated as a complete and self contained space. In the basilica, on the other hand, there is the persistent tendency towards the transept. It was useful from the liturgical point of view, because the sanctuary, where the divine liturgy took place,

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[1] W.L.Macdonald, Early Christian and Byzantine Architecture (London, 1962), figs. 6-7.

[2] T.F.Mathews, The early churches of Constantinople Architecture and Liturgy (Pennsylvania, 1971), p.42.

[3] M.Golding, "The cathedral at Bosra", Archaeology I (1948), p. 150; Creswell, Early Muslim Architecture I, part one, pp. 101-15.

found its natural position at the end of the longitudinal axis, with the apse as a background. This is the main difference between church and mosque from the religious point of view. In the case of centralized churches, the only natural place for the sanctuary would be the centre of the building, which was inconvenient in that it provided no background for the congregation. Eventually it became necessary for the rotunda plan church to shatter its unity by a longitudinal axis, and by placing its sanctuary at the end, as in SS. Sergius and Bacchus (520 A.D.) in Constantinople (fig. 1a),[1] or in San Vitale.[2] The main tendency in Byzantine architecture was to combine the basilica with the rotunda. The combination and assimilation of these two types of Byzantine church plans is represented in the domed quadrofoil church, and its variations. According to Choisy, the basic combinations of the dome's abutment are three: a) by four barrel vaults; b) four semi-domes; and c) by a combination of both.[3] Naturally these combinations affected the rotunda churches. An example of the third type is the St. Sophia (537 A.D.)[4] in Istanbul, which was constructed to overawe the faithful by giving the impression of a great space. This domed basilica by Isidorus and Anthemius is a combination of Roman vault construction and the Greek system of support. Four huge arches support the dome, which is counter-supported by two large

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[1] T.F.Mathews, The early churches of Constantinople Architecture and Liturgy (Pennsylvania, 1971), p.42.

[2] P.A.Michelis, An aesthetic approach to Byzantine Art (London, 1955), p.83.

[3] A.Choisy, L'art de bâtir chez les Byzantins (Paris, 1883).

[4] Mathews, op.cit., p.95.

semi-domes and two rows of cross vaults (pl. 2). The centre space makes a movement primarily towards depth. One single axis - longitudinal - is clearly defined in the church, as in the basilica. Of the four arches supporting the dome only two are clearly visible and the northern and southern arches are closed by screen walls. Without the screen walls in the St. Sophia the central symmetry would have been weak. The Byzantine churches give a general impression of subdued light, and a welcome contrast is made by the use of chandeliers.

The Greek cross plan was fully developed in Armenia. This can be seen in the cathedral of Etchimiadzine at Vagharachabad (618-50 A.D.), the church of St. Jean de Mastars (seventh century), and the church of the Apostles, in Ani (eleventh century).[1]

In later times the quadrefoil plan is also used by the Renaissance architects, for example Bramante in St. Peter (pl. 3).

The evolution of the four semi-domed Ottoman mosque plan

There is a feeling of space on entering the four semi-domed Ottoman mosque. Mosque architecture is distinguished from other arts by its ability to create a space as the other arts can do so indirectly. In a well-planned closed space one is not conscious of being imprisoned. The sky is the simplest and the most majestic form of a boundary to space. Therefore, a dome gives a feeling of space simply and impressively.

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[1] E. Utudjian, Armenian architecture, 4th to 7th century, trans. by G. Capner (1968), figs. 48, 49, 68, 69, 133.

In Byzantine churches, for example St. Sophia, the central dome makes a movement primarily towards depth. The stress is on the longitudinal axis. The basilical interior provides a suitable space for Christian rites, because the whole congregation does not need to see the clergy, while Muslims need to be able to see the imam in front of the mihrāb for ritual prayer. Therefore the emphasis in a mosque is in the breadth and not in the length in order that the majority can clearly see and follow the imam. It follows that a very important achievement of Ottoman architecture is the centralized mosque plan. The subdivision of a given space into smaller sections, each of which could be covered with a dome, was a primary step towards the unification of the interior space. The main problem that faced all Ottoman architects was how to avoid the numerous supports for all the domes. These supports subdivided the space below interfering with the concept of unity, and the view of the mihrāb. Each stage of development tried to avoid some of the problems involved.

During the early years of Ottoman architecture, the most frequently used mosque plan is the single-domed structure. The dome completely dominates the interior and draws the attention towards the centre. Some examples are the Haci Özbek Cami in Izmik (734/1333),[1] the Alaaddin Bey Cami in Bursa (736/1335),[2] the Firuz Aga Cami in Istanbul (896/1490) (pl. 4).[3] In early single domed

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[1] A.Kuran, The mosque in early Ottoman architecture (Chicago, 1968), p.34.

[2] Kuran, op.cit., p.32.

[3] G.Goodwin, A History of Ottoman Architecture (London, 1971), pp. 166-7.

mosques the zone of transition is carried out in several ways. In the first type the thrust of the dome is carried by the squinces. Secondly, a widely used form of the zone of transition was the belt of Turkish triangles. This was preferred to squinches during the period from beginning to the end of the fourteenth century by architect builders.[1] Finally, pendentives are used, but the beginning of their use can only be seen in the second quarter of the fifteenth century.[2]

The important stage in the development of the centralized mosque plan is to be seen in the Üç Şerefeli Cami in Edirne (841-51/1437-47 (pl. 5).[3] It is a huge almost square mosque 66.50m. by 64.50m. The central large dome dominates the interior, and measures 24.10m. in diametre. The dome rests upon two massive hexagonal piers, 6m. apart, and four engaged-piers. The zone of transition is formed by a belt of Turkish triangles. The dome rests upon pendentives. The high drum is supported by eight buttresses on the outside. The exterior four stepped pyramidal appearance can be seen in this mosque for the first time in Ottoman architecture. The corners of the interior are roofed with two small equal sized domes. The triangular spaces between the side domes and the central dome are covered with unusual shaped domical vaults (pl. 5). These

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[1]The belt of Turkish triangles as a zone of transition is used in the several transitional period mosques, such as the Alaaddin Bey Cami in Bursa, the Haci Özbek Cami in Iznik and the Hüdavendigâr Cami in Behramkale.

[2]The pendentive transition is widely used after the second quarter of the fifteenth century in the single-domed Ottoman mosques, for example in the Haci Şahabettin Camin in Edirne (840/1436) and the Firuz Ağa Cami in Istanbul (868/1490).

[3]O. Aslanapa, Turkish Art and Architecture (London, 1971), pp. 203-5.

triangular spaces are the weakest parts of the interior.[1] The centralized plans of sixteenth century Selâtin camis originated from the Üç Şerefeli Cami, which derived from the Van Ulu Cami (late thirteenth, early fourteenth centuries) and the Manisa Ula Cami (776/1374).[2]

The single dome gives a rather limited space. Ottoman architects were not satisfied with this plan and tried to enlarge this limited space by adding rooms attached to either side of the prayer hall, for example, the Sultan Beyezid Cami in Edirne (889-93/1484-88) and the Sultan Selim Cami in Istanbul (completed in 929/1522).[3] The dome of the Selim Cami is 24.50m. in diametre and 32.50m. high (pl. 6).

Another important factor for the Ottoman centralized mosque plan can be observered in the 'Ters T' shaped mosque, which resulted from a different line of development beginning from the twelfth century. In this particular plan there are two main parts, one of which is the central prayer hall and the other the iwān (eyvan), which originated from the Seljuk enclosed madrasah.[4]

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[1] D.Kuban, Osmanli Mimarisinde iç mekan teşekkülü (I.T.M.F., 1958), p.21.

[2] B.B.Pekuz, "Türk camilerinde mekân gelişmi", On Asya XVI, 1966.

[3] Goodwin, op.cit., pp. 146, 184, 185.

[4] M. von Berchem, "Architecture, Madrasah", E.I.[1] I (1913), p.429. The madrasah is a theological institute usually recognised by the state. It has four iwāns, which provide a cross-axial scheme. This scheme can be seen in Buddhist monasteries of Central Asia, Mémoires de la Délagation Archéologique Française en Afghanistan VIII (1959), p.116. The model for the evolution of the four iwān madrasah was the Mesopotamian/Anatolian-Tarma house, which had a courtyard with rooms built around it. The houses of Khurāsān and Bamiyān date back to the tenth century, A.Godard, "Khurāsān", Athār-é Iran IV (1949), pp. 75-6; "Origine de la madrasah de la

Two iwāns can be seen in the Çukur madrasah (hollow) in Tokat (547/1152. A single iwān appears in the madrasah of Karatay in Konya (649/1251). The enclosed madrasah can also have three iwāns, as in the madrasah of Caca Bey in Kirşehir (671/1271).[1] In these madrasahs, because of the weather conditions, the courtyard in the middle is roofed with a single dome. The main iwān is placed on the qibla side and is usually covered with a barrel vault.

The first ters T shaped Ottoman mosque plan appears in the Beylerbeyi Cami in Edirne (832-3/1428-9).[2] It has a central domed prayer hall flanked by two domed square zaviya rooms.[3] The iwān, which is placed in the qibla axis, consists of two units with two different types of roofing. The unit in the qibla side is hexagonal in plan and is surmounted by a fluted semi-dome, while the rectangular unit is covered with a domical vault in the middle, with triangular panels filling in the corners. Another important

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mosqué et du Caravanserail à quatre iwans", Ars Islamica 15, 16, pp. 1-9. Islam scholars generally accept that Niẓām al Mūlk (434/1042 d.), who was the great vizier of the Selçuk Sultan Alp Arslan (455-65/1063-72), and his son Malikshāh (465-75/1072-82) were responsible for the introduction of the four iwān madrasah. P.K.Hitti, History of the Arabs (London, 1956), sixth ed., pp. 410, 78. Niẓām al Mūlk established a policy for Sunnite education and incorporated it with the madrasah institution. Therefore the madrasahs built by Niẓām should not be considered a beginning, but rather a turning point in an evolutionary pattern of education. The madrasahs were built by Niẓām, ere in Baṣrā Mosul, Rayy, Iṣfahān, Marw, Herat, Ṭūs, Balkh and Khargird, and none of them have survived. Creswell, however, does not accept Godard's hypothesis and proclaimed that the first cruciform madrasah was built in Cairo. K.A.C.Creswell, "The origin of the cruciform plan of the Cairene madrasahs", Bulletin de L'institute Française D'archéologique orientale XXI (1922), p.43. The idea of four iwān around a courtyard was adopted and widely used in the mosques and caravanserais in Iran and also in Anatolia.

[1] A.Kuran, Anadolu Medreseleri (Ankara, 1969), I, TTK.

[2] Kuran, The mosque in Early Ottoman architecture, p.90.

[3] S.Eyice, "Zaviyeler ve Zaviyeli Camiler, Ilk Osmanli Devrinin içtimaî bir müessesesi", No. 1-4 (I.U.I.F.D., 1963).

example of this type is the Yahşi Bey Cami (Yeşil Cami) in Tire, built about 845/1441 (pl. 7).[1] A domed central prayer hall, flanked by two domed square rooms, and the iwān constitute the first appearance of a real semi-dome built by Ottoman masons, so far as we know.[2]

The Rum Mehmet Paşa Cami in Istabul (876/1471) (pl.19) is also given the same plan.[3] The square prayer hall is 11.15m. by 11.15m. It is roofed by a single dome. The two side rooms also are covered with domes.

Another important step occurred in the Old Fatih Cami, completed in 876/1471, and reconstructed on a different plan after the first mosque collapsed in the earthquake of 1179/1765 (pl. 8).[4] The dome has a diametre of 26m. and rests upon two piers, two engaged piers, and two columns, and it is enlarged by three domes on either side and one semi-dome on the qibla side. The semi-dome is an auxiliary roofing element, which has no architectural value by itself except to provide an additional space.

The other one semi-domed mosque is the Atik Ali Paşa Cami in Istanbul (902/1496) (pl. 9).[5] I conclude therefore that this new group of mosques no longer has a square room on the qibla axis.

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[1] R.M.Riefstahl, Turkish art in Southern Anatolia (Cambridge, 1931) gives the date as 735/1334, which is rather early for this plan. Eyice, op.cit., p.40, and S.K.Yetkin, Islam mimarisi, (Ankara, 1958), p.390, accepted the date of 1441.

[2] Goodwin, op.cit., p.38.

[3] S.Ögel, Der kuppelraum in der Türkischen Architektur (Istanbul, 1971), p.50.

[4] H.B.Kunter and A.S.Ülgen, "Fatih Camii", V.D. I (1938).

[5] S.Eyice, "Atik Ali Paşa Camiinin Türk mimarî tarihindeki yeri", TD XIV, no. 19 (Istanbul), p. 114.

The mihrāb part is roofed by a semi-dome. So for the first time one sees an attempt to combine the dome and the semi-dome in one building. Because of this, pendentives were used as a zone of transition. The central prayer hall is more strongly emphasized. No longer one visualizes two equal size rooms as in the earlier mosques. Here, one has a domed prayer hall with an adjoining mihrāb unit. A further development is the disappearance of the walls that divide the side parts from the central prayer hall.

In the Beyazid Cami in Istanbul, completed in 911/1505, new achievements can be seen (pl. 10). Its plan is similar to that of the St. Sophia. However, the Beyazid's central dome has more emphasis than that of the St. Sophia. The dome, which measures 18m. in diametre, rises on pendentives, beneath which are four massive piers, and two columns. It is augments by two semi-domes on the longitudinal axis and is flanked by two side portions consisting of four small equal sized domes. There are two wings, which further enlarge the space.

One of the early examples of the four semi-domed Ottoman mosques is the Çelebi Mehmet Cami in Dimetoka (825/1421)[1] (pl. 11). It is an important step towards the Şehzade Cami. Its square interior is 30m. by 30m. The dome, which is 12m. in diametre, stands upon the four octagonal piers. The subdivisions are covered with barrel vaults (pl. 11), while the corner areas are roofed by cross vaults. The Fethiye Cami in Athens (863/1454),[2] has a

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[1] E.H.Ayverdi, "Dimetokada Çelebi Sultan Mehmet camii", VD (1956), No. 111, pp. 13-17, figs. 1-11.

[2] S.Eyice, "Yunanistanda Türk Mimari eserleri", TM (1954-5), nos.161-120, I, pp. 151-82: II, pp. 205-30.

similar plan.

In the Fatih Paşa Cami (Biyikli Mehmet Paşa) in Diyarbakir, built between 924-7/1518-20, the architect has developed the use of the four semi-domed plan (pl. 12).[1] The dome is supported on four massive square piers. The four subdivisions are surmounted by four semi-domes smaller in size. The small corner domes and semi-domes are carried on squinches, while the central dome rests upon pendentives.

The Piri Paşa Cami at Hasköy, which was completed in 930/1523, is the first four semi-domed mosque built in Istanbul.[2] Some of the other four semi-domed mosques are the Sinan Paşa Cami at Haci Hamza (912-3/1506-7), the Elbistan Ulu Cami, the Hadim Süleyman Paşa Cami in Cairo (935-6/1528-9), the Çankiri Ulu Cami (966/1558), the Lala Mustafa Paşa Cami in Erzurum (970/1562), the Sultan Ahmed Cami in Istanbul (1015-25/1609-16) and the Yeni Cami in Istanbul (19007-74/1598)[3] (pl. 13). The Şehzade Cami (950-5/1543-8) (pl. 14), which makes a further advance in the evaluation of the four semi-domed mosque plan, will be demonstrated in detail further below (see p. 39). It consists of two equal squares, a courtyard and interior. The dome is partly supported by four semi-domes, each augmented by two exedrae, and partly by four massive free standing piers, which are themselves linked by pointed

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[1] M. Sözen, Diyarbakirda Türk Mimarisi (Istanbul, 1971), p.261, fig.85.

[2] Goodwin, op.cit., pp. 177-8.

[3] Sözen, op.cit., pp. 261-2.

arches to engaged-wall piers. In this particular monument, Sinan gave to the faithful a square interior under the sky-like dome and provided an obstructed view of the mihrāb from almost every angle of the interior, a feat which had never been achieved before.

After the Şehzade Cami, another important building is the Süleymaniye Cami in Istanbul (957-65/1550-7) (pl. 16),[1] which shows Sinan to be a 'good workman' (see p. 15). In this mosque Sinan had abandoned the square in favour of a rectangular courtyard 40m. by 57m. The interior is 69m. by 63m. The dome, which is 26.50m. in diametre, rests upon four massive piers. Their measurements conform to the symbol of a circle in a square. The exedrae are one-third of the size of the semi-dome. The lateral galleries cover one-third of the central area of each aisle. These galleries are again divided into three parts by two columns, which are not visually excluded from the square beyond them. Unlike the Şehzade Cami, four corner areas, which in Christian churches would be turned into the side chapels, are cut off from the central interior (pl. 16). Therefore the Şehzade Cami expresses a more unified Ottoman mosque interior until the Selimiye, in which the unified-domed interior reaches its climax. In his masterpiece, the Selimiye Cami in Edirne (977-82/1569-74) (see p. 15) (pl. 17), Sinan abandoned the longitudinal basilical scheme of the Süleymaniye Cami and turned to the scheme of Üç Şerefeli Cami (pl. 5). The Selimiye's dome is 31.30m. in diametre, and rises to a height of 43.28m. It is still one of the largest domes in the

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[1] Goodwin, op.cit., pp. 215-39.

world. The dome stands upon four elegant piers and four engaged-wall piers, augmented by five exadrae. Unlike those of the Şehzade, its piers are two-thirds fluted from the base and the upper third is plain. The pointed arches seem to grow integrally out of the piers. The dome gives the impression of standing without visual support.

After the Selimiye Cami, there was a period of more than a half century during which no Selâtin camis were built. The power of the Ottoman Empire fluctuated under the rule of weaker sultans, and internal strife allowed little opportunity for building Selâtin camis. Later buildings, such as the Sultan Ahmed Cami (1015-25/1609-16) and the Yeni Cami (1007-74/1598-1668), revert to the plan of the Şehzade Cami. However, the result is less successful since the proportions and supportings are not so well chosen.

One can conclude from the above examples that, in early Ottoman mosque architecture, the single-domed building predominated. But with the advance of technical knowledge and skill Ottoman architects evolved the use of the semi-dome as a part of structural element by the second quarter of the fifteenth century.

TYPES OF MOSQUES BUILT AFTER THE CONQUEST OF CONSTANTINOPLE

The mosques which were built after the conquest of Istanbul in 857/1453 can be divided into the following groups:

I It includes a mosque with a square single domed interior with two subsidiary small domes. There are so called ters T (Bursa type) shaped mosques,[1] for example the mosque of Mahmut paşa[2] (pl.18)

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[1] S.Çetintaş, Yesil Cami ve benzerleri cami değildir (Istanbul,1958); A. Gabriel, "Les mosquees de Constantinople", Syria VII (1926), pp. 353-419.

[2] S.Eyice, op.cit., p.90, figs. 86, 87.

dated 867/1463, the mosque of Davut Paşa (890/1485) and the mosque of Sultan Selim (929/1522). From this type there derived the single dome with the adjoining semi-dome over the qibla wall, for example the mosque of Rum Mehmet Paşa (872-5/1467-70) (pl. 19) and the mosque of Atik Ali Paşa (902/1497)[1] (pl. 9).

II This group followed the scheme of the Seljuk Ulu Camis. The rectangular sahn is covered by several domes equal in size, such as the mosque of Zincirli Kiyu (906/1500) (pl. 5) and the mosque of Piyâle Paşa (981/1573) (pl. 20).

III The single unit mosques followed the traditional scheme of the Beylikler single-domed mosques, such as the Alaaddin Cami of Bursa (736/1335), the Ilyas Bey Cami at Milet (802/1404) and the Firuz Ağa Cami in Istanbul (896/1491) (pl. 4).

IV They have a central dome with two subsidiary semi-domes, for example the Beyazid Cami (911/1505) (Pl. 10), the Süleymaniye Cami (957-65/1550-5) (Pl. 16) and the Kiliç Ali Paşa Cami (988/1580).

V This group of mosques have a square interior, which is covered with a dome, augmented by four semi-domes, such as the Şehzade Cami (950-5/1543-8) (Pl. 14), the Sultan Ahmed Cami (1018-25/1609-16) and the Yeni Cami (1006-74/1597-1663) (Pl. 13).

The three domed Mihrimah Cami at Üsküdar (955/1548), and the Manisa Muradiye Cami (994/1586 (Pl. 21) can be treated as a derivation of the above-mentioned group.

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[1] Eyice, "Atik Ali Paşa camiinin T.M.T. yeri", pp. 99-114, op. cit

VI The last group have a single dome which rests either upon the square base, for example the Bali Paşa Cami (910/1504), the Zal Mahmut Paşa Cami (968-74/1560-6), the Mihrimâh Sultan Cami at Edirnekapi (970-3/1562-5), or on an octagonal base, such as the mosque of Rüstem Paşa (969/1561) and the Sokullu Mehmet Paşa at Azapkapi (985/1577), or on an hexagonal base, such as the mosque of Sokullu at Kadirga (979/1571) and the Hekimoğlu Ali Paşa Cami (1147/1734).

Chapter III

EXTERIOR DESCRIPTION OF THE MOSQUE

History of the Şehzade Külliye

On his return from his Balkan campaign (950/1543), Sultan Süleyman the 'Magnificent' heard the news of the death of his beloved son, Şehzade Mehmet, at the age of twenty-two. He decided to build a large complex in honour of his son. The work began in November 950/1543 at Şehzadebaşi near the Byzantine acqueduct of Valens on the way to Beyazid.[1] This complex includes a mosque, a madrasha, a taphane, a han, an imâret, a sübyan mektebi, türbes, and several fountains (pl. 22). So far as we know there is no trace of its vakfiye. The külliye was completed in 955/1548, costing 300,000 ducats from the treasures of Sultan Süleyman's Balkan campaign[2] (figs. 1, 2, 3). Before the Şehzade there were only two selâtin camis in Istanbul, besides the converted St.

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[1] Evliya Çelebi, Evliya Çelebi Seyahatnamesi, Cilt I, pp. 167-70; W. Dilich, Eigendtliche, kurtze Beschreibung und Abriss der-ostadt Constantinopel, Cassel (W. Wessel, 1606); M. Lorichs, Konstantinpel unter Sultan Suleiman dem Grossen Aufbenommen im Jahre 1559, Durch Melchior Lorichs aus Flensburg (Munich, 1902 (1570-83)), p.14. tf.xi; F. Babinger, Hans Dernschwam's tagebuch einer Reise nach Konstantinopel und Kleinasien (1553-55) (Munchen und Leipzig 1923), pp. 55-56 (he gave the date 1555). P. Hammer, Constantinoplis und der Bosporus (1822), reed.1967, I, pp. 413-15. idem, Histoire de L'Empire Ottoman depuis son origine jusqu'à nos jours (Paris, 1836), V, p.360; H. Ayvanserayi, Hadîkat-ül Cevâmi I (Istanbul, 1281/1864), p.15. A. Mordtmann, Esquisse topographique de Constantinople (1892), pl. 125; A.S.ÜLGEN, "Şehzade Cami ve heyeti", Mimarlik (1952), nos. 5-6, pp. 13-16; H. Şehsuvaroğlu, Asirlar boyunca Istanbul (Istanbul, 1967), p.67.

[2] S.Eyice, Petit Guide, à travers les monuments Byzantines et Turcs (Istanbul, 1955), pp. 55, 73; Çelebi, op.cit., p.168 (yüz elli yük akça - 150 akça , one yük is 100,000 akça); Hammer,

Sophia.[1] Here, Sinan used for the first time, the four semi-domed plan, and created an almost ideal central-domed structure, which was the dream of Renaissance architects.[1] His structure seems to follow the evolution of four semi-domed mosque plan:

Description

The Şehzade Cami stands almost in the middle of the outer enclosure (pl. 22). The külliye buildings, the madrasah, the taphane, the han (wrongly marked as kitchen on the plan), are placed at the north-east enclosure, the imâret and the sübyan mektebi are set opposite to the south-east enclosure, and the türbes, which have an enclosure of their own, are scattered in the area between the qibla wall of the mosque and the south-east enclosure.

The masonry, which is used in the Şehzade complex, is well-dressed and finely joint stone-blocks, in courses varying from 30cm. to 60cm. Generally, in the Ottoman bond, all the blocks in one course are laid as 'headers', that is, showing their ends, and in the next course as 'stretchers', showing their sides, and so on alternatively. The quoins are ordinary.

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[1] D.H.Foster, "Bramante", Encyclopaedia of World Art (New York), II; In Bramante's plan for St. Peter the divisions are merged together to create an interior space for above the crossing piers (pl. 39). The only part of Bramante's plan that was completed was the gigantic dome, which rises to a height of 100m. Here, Bramante intended to give a new height to the most impressive reminder of Roman glory, that is, the Pantheon, to the observer. In the work of Bramante one can find the manipulation of space and the treatment of the surface. In both these respects the qualities inherent in Bramante's works tend to be exaggerated in those of his followers. But the balance between any two extremes that marks Bramante's work is absent.

The Şehzade Cami

The arrangements and proportions of the structural elements make the Şehzade Cami (950-5/1543-8) one of the most interesting four semi-domed mosques of the Ottoman Selâtin camis. The Şehzade Cami, which is the first major work of the famous Ottoman architect Sinan, is composed of two equal squares as a prayer hall and courtyard, measuring 38m. by 38m. (pl. 14). The interior is roofed by a dome measuring 19m. in diametre and rising toa height of 38m. at the centre (pl. 15) Four semi-domes, each augmented by two exedrae, give further support to the central dome. The corner smaller domes complete the general scheme of the upper structure. The piers through pendentives carry the direct thrust of the dome. This is treated in this particular mosque as lightly as possible to allow little visual obstruction to the enclosed space. The interior space is no longer compartmented by the galleries. The absence of galleries gives the interior a wider effect. With the Şehzade Cami, Sinan almost reached the creation of the more unified Ottoman mosque plan.

It is suggested that the exterior description of the mosque should start with the façade of the south-west loggia, on which the main portal is situated. Then it is followed in a clock-wise route by the direction of the south-west façade of the courtyard, the north-west façade of the courtyard, the north-east façade of the courtyard, which is identical to that of the south-west, accordingly it will not be described in detail. The exterior description of the mosque continues with the loggia on the north-east façade and is completed with the qibla wall.

The south-west façade

The loggia of the south-west façade (figs. 6, 7)

Both the south-west and the north-east lateral walls are flanked by outside loggias, which are only one storey high. This adds a new dimension to the exterior. They conceal the lateral buttresses, except at each end, which are clearly visible on the ground plan (pl. 14). The loggia is terminated at the south-east corner by a small square room which houses a staircase giving access to the upper part of the mosque. At the other end the base of the minaret is situated. Between these the loggia is divided into five sections by four massive piers. These piers are lightened with double moulded-framed niches (figs. 7-8). These niches measure 4.72m. in height, 1m. in width, 10cm. in depth.

The portal is placed in the middle of the loggia, and is flanked by two side units on either side (pl. 14). Each of these side units is again divided into two equal parts by a single free-standing column and two engaged columns at either end.

The podium of the loggia is 80cm. high (fig. 6). The lower part of the loggia is closed by marble panels running between the piers. They are 45cm. high. These panels are composed of three moulded-framed panels (fig. 7).

The roofing elements of the loggia are carried by a row of columns: four free standing, eight engaged to the piers. The slender shafts of the marble columns, which are 3m. in height, are set between the piers. Their bases have plain muqarnas transitions at the corners (fig. 8). The pointed arches, which carry the domes, have an elegant profile with the span of 2m. The voussoir

of the arches are composed of pink and white marble blocks. The well-executed muqarnas capitals carry the arches with the help of doubld moulded cornices. The plain chamfered drain spouts (çörtens) are set on the façades between the arches (figs. 8-11). Above these the bed moulding is carried on a palmette cornice. The loggia is roofed by domes, except the cloister vaulted entrance (figs. 10-12). The domes are equal in size, and entirely made of bricks. They rest upon pendentives without using any centering. Every two-domed unit is opened to the mosque interior with two windows, measuring 1.40m. by 3m. (figs. 6-7). The moulded frame encloses the window. The gablet is opened with iron bars, like the window itself. The symmetry of the loggias is very strong. In the Şehzade loggias the difficulty occurs between the height of one storeyed loggias, and the outer walls of the interior (figs. 10-13). In the Selimiye, however, having built two storeyed loggias, this difficulty is soon solved very skilfully by Sinan (fig. 14). The loggias of the Selimiye are vertically divided into three parts by two wall-buttresses. They are pressed between the two minarets, and the counterbalance between the horizontal and vertical lines is well established. In the Şehzade, in order to provide a higher appearance, the columns of the loggias are higher than in the Selimiye. The lateral wall buttresses of Şehzade, which are concealed in the loggias, except at each end, have round corners, while in the Selimiye they have pointed angles. The flat roofing of the Selimiye loggias is concealed behind the parapet, acting as decoration on the lower roofing element. The roofing strengthens the four stepped exterior appearance (fig. 14). Furthermore, the loggias of the Selimiye are more functional than these of the Şehzade. The Şehzade loggias almost act as porches.

In later buildings, for example in the Sultan Ahmed Cami, which follows the four-semi-domed mosque plan, the two storeyed elegant loggias give rather an unbalanced feature to the massive-arranged façades (fig. 15) The question soon arises, why Mehmet Ağa, architect of Sultan Ahmed, did not repeat the Selimiye's loggias? It may be possible that he used these loggias in order to give a lighter atmosphere to the uppermost façades. In the Yeni Cami (1006-74/1597-1663) the same unbalanced feature can be seen (fig. 16).

The portal of the south-west loggia (fig. 8)

The portal is placed in the middle of the eight-domed loggia (see supra, p. 41). Four steps lead to the portal. Its height is double its width, which is 4.12m (fig. 8). The two coloured pointed arch rests upon the muqarnas capitals of the engaged-columns. This rectangular area is covered with a cloister vault, which is higher than the roofing elements of the loggia (fig. 9). The four blind ogee arches carry the thrust of the cloister vault. Above this, there is a cornice consisting of alternating smaller and larger conventional palmettes, which run all round (fig. 8). This cornice is made of plaster, painted in red. Judging from the character of the palmettes, it has been added at a later unknown date. The doorway, which is 4m. high and 2.80m. wide, is composed of two coloured joggled-lintel (fig. 6).

The inscribed rectangular gablet is set upon the doorway (fig. 8). The thuluth inscription is gilt, and reflects the decorative nature of this portal. This inscription is a Qur'ānic quotation; it reads:

"Allah may be glorified says: Prayer is enjoined

on the faithful at fixed times."

Below this, there is a curtain with an inscription panel in the upper part, which is of a later date. It says:

"Lāillāha illā Allāh" (There is no god, but Allah)

The south-west façade of the courtyard (fig. 18)

This main façade is divided into five equal rectangular moulded framed units including the portal which is the second unit from the minaret base (fig. 18). Four units have four windows, grouped in twos. The lower windows have rectangular double hood-moulded frames with lintels, and rise to a height of 3m., while their width is 1.95m., and they are 1.40m. deep. They have two double moulded framed gablets, whose spandrels are framed with moulded red-brick bands. The upper windows, which are set in double hood-moulded frames with a sharp pointed arch, measure 3m. in height, 1.30m. in width. The voussoirs of the arches are alternately made of red bricks, and well-dressed stone blocks. Their spandrels are composed of red bricks (fig. 1). In the upper windows, instead of iron bars, gypsum honeycomb grilles are employed. The north-east courtyard façade is identical to the north-west façade.

The façade composition of the Şehzade is better executed than in previous mosques, such as the 'Isā Bey Cami at Selçuk (Ephesus) (777/1375). In the 'Isa Bey Cami, however, the architect tried to establish new forms over the façade, such as the flanking muqarnas window frames and inscribed lintels for the upper window (fig. 20).[1] The lower window of the 'Isa Bey Cami

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[1]As a form, the muqarnas is the transition from one cubical or

is entirely different and almost has a later Ottoman window shape. This particular window is spanned by a lintel with a two coloured relieving arch above. However, its inscribed bracket cornice shows uncertainty. The marble entablature is left plain.

In the south-west courtyard façade of the Şehzade the balance between the vertical and horizontal lines is well arranged, while the rhythm is fully preserved.

The portal of the south-west courtyard façade (fig. 18)[1]

This portal does not project from the wall. Three steps lead to the portal, which rises to a height of 6m. The doorway measures

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spherical surface to the other, like stalactite formation. E. Diez, "Muqarnas" in E.I. Supp., pp. 153-4; L. Hautecoeur, "Dela trompe aux mukarnas", Gazette des Beaux Arts (1931), p.27. The squinch is the main roof of the muqarnas, as a general rule, not of Iranian origin, but as far as we know it underwent developments in Iran and in Syria. J.Rosintal, Pendentives, trompes et stalactites dans l'architecture orientale (Paris, 1928), p. 64. This construction originated in brick work, and had probably a predecessor in the making of unbaked bricks in Iran and Turkestan where such materials were used essentially because of the lack of wood. In Iran the first known appearance of the muqarnas can be seen in the gate lunette of Qunbad-i Qâbûs in Jurjân (397/1007). A.U.Popè, Survey, III, pp. 970-74.
The muqarnas was enthusiastically adopted in all regions for almost all purposes. Muqarnasses have been used for squinches, exedrae, capitals and the serefe of minarets. In later periods, this was sometimes overdone in buildings of Iran. But, generally, the muqarnas scheme, which has a higher quality of individualty, refinement and expansion, was used in a beautiful manner and with often good taste in Seljuk and Ottoman architecture.

[1]The portal tradition comes from Central Asia and Iran. All the emphasis over the façade structure is collected by the portal. The portals of Seljuks of Rûm are much closer to the traditional pishtaq structures. They are richly decorated with floral motifs, enormous knots, and relief vegetals showing the Central Asian nomadic tent influence. N. Diyarbakirli, Hun Sanati (Istanbul, 1971), pp. 154-60. Their tents have a portico, decorated with knotted curtains, hanging vegetables, and totemic figures, for example heads of wolves, foxes or birds. The Seljuks brought with them these nomadic influences to Asia Minor. They used these elements as a decoration in brick, stone or marble. They give all their decorative skill to the portals. The other parts of the façades are almost left plain (figs. 25, 25a). But, with the rise

3.50m. in height, 2.25m. in width, and 1.70m. in depth. The door is 25cm. deep. It has a seki (some kind of stylobate), measuring 10cm. high. The portal is set in a rectangular double hood-moulded frame, which is 8cm. thick. The double hood-moulded pointed arch is not so sharp as those of the preceding windows of the upper part of the north-west façade (fig. 19). Top of the stairs there are two blocks, measuring 40cm. by 60cm., which have the appearance of bases. However, no columns rest on them, nor can columns ever have been intended in this scheme. The doorway is spanned by a joggled-lintel consisting of two coloured blocks (fig. 21).

The north-west façade of the courtyard (figs. 19-22).

This façade is identical to the north-east and south-west façades, except that the higher portal, which is situated in the middle, projects out of the wall surface.

The north west portal of the courtyard (figs. 23, 24).

Four steps lead to this portal. It shows the classic Ottoman forms and measures 1.90m. in width and 1.75 m. in depth. The portal is decorated with two rectangular moulded frames. The bolectioned moulded frame carries a palmette cornice at the top and

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of the Ottomans, the traditional portal scheme is totally changed. The portal structure became a secondary unit in the façade arrangement. The decorative treatment is shared with the windows, the niches as well as portals. The portal is no longer the most important feature. Ottoman portals are very different from Seljuk portals. The Seljuks of Rûm were used to the rich twisted columns, rectinear knots with large inscriptions in their portals. For example, in the madrasah of Haci Kiliç Cami in Kayseri (647/1249) the portal characteristics of Seljuks can easily be seen (fig. 256). A. Gabriel, Monuments Turcs d'Anatolie, I, pp. 52-4, pl.ix. Its height is little more than its width. The portal has five frames. Geometric and muqarnas decorations are widely used, and no plain surfaces are left. The frame of the ogee arch is again heavily decorated. There is imbalance between the higher appearance of the muqarnas niche and the lintel of the door. After the

is made of well-dressed stone, left in its natural colour. The two marble columns have bases measuring 30cm. in height, 1.25m. in width, and 40cm. in depth (fig. 23). The fluted columns with their fillets make round corners. The bottom of the columns has an ornament resembling a ribbon tied in a bow. Transition from square base to the circle shaft is arranged by simple Turkish triangles. The base is decorated with two selvis (Cyprus tree). The muqarnas portal niche is enclosed ny a moulded frame. Rosettes appear in the lower part of the muqarnasses (fig. 24). The doorway is spanned by a joggled-lintel composed of green and white marble blocks. It measures 8m. high, 3m. wide, and 1.50cm. deep. Inside the portal structure there are two small muqarnas niches, measuring 63cm. in width, 2.50m. in height, 30cm. in depth.

The loggia of the north-east façade:

This façade is arranged in the same way as that of the south-west façade (figs. 6, 18, 19, 28, 29), except the entrance fo the Hünkar mahfili (figs. 30-31).

Seljuks, in the principalities (Beylikler) period, the portal structure made progress. However, the apprenticeship appearance is still evident, as in the 'Isa Bey Cami (Fig. 27). Its flanked portal has a three-tiered muqarnas niche with scallop-shell (divided into grooves) design above, followed by moulded rectangular frame. But here, the unity between the façade arrangement and the portal structure is still absent. The Şehzade portal has almost classical Ottoman portal forms. After this particular portal, development continues. For example, the portal of Sultan Ahmed which produces a more elaborate pattern and higher appearance than the Şehzade (fig. 26), measures 2m. in width, 2m. in depth. The surface of the portal is framed with several simply arranged double hood-mouldings. The more elaborately formed muqarnas niche is enclosed by double hood-moulded frames. Above this muqarnas niche a rectangular inscribed panel is set. The upper bolectioned moulded cornice carries a crown-like scalloped gablet (fig. 26) The monumental appearance is given to the portal partly by the elaborately arranged muqarnasses and partly by the simple mouldings.

The entrance of the hünkâr mahfili

It is placed in the unit next to the south-east corner (figs. 30, 31). Four steps lead to the rather impressive entrance. The marble binek taşi (mount stone), which is attached to the stairs, measures 80cm. in height, 47cm. in depth. Its string course is 20cm. high. The lower part of the binek taşi is decorated with pointed arched blind niches (fig. 31).

The podium of the hünkar mahfili is 85cm. high (fig. 34). The marble panel, which carries the marble grille, has moulded frames measuring 50cm. high. The marble grille is 1.75m. in height, 3cm. in depth, and 4.35m. in width, and is divided into two parts by the portal. These marble grilles have a lace-like appearance. The wide marble grille which is placed between the lateral wall-buttresses and the marble column is composed of three-tiered eight complete polygons. The left small panel consists of three-rowed three complete polygons. The polygons, which intersect each other, produce a six pointed star in the middle (fig. 32). It is hardly possible to set free the individual motifs without spoiling the entire composition. A look from the different angles provides six petalled flower in the grille, while the right part has three identical compositions. It is possible to draw imaginary lines between the intersecting angles. Then the composition turns out to be intersecting squares. This kind of composition is also repeated in several parts of the mosque, for example in the gablets of the courtyard windows (fig. 40).

The same kind of decoration could also be seen throughout Turkish architecture, especially in portal structures, as a bas or high relief in brick, stucco or stone. With the Ottomans this

pattern is gradually developed, and gained a lace-like appearance. Sinan used the same decoration several times in his other buildings, for example in the marble grilles of the outside loggia of the Selimiye Cami in Edirne (fig. 14). Here the arrangement of the polygons is much bigger and almost circular.

In the hünkâr mahfili of the Şehzade the palmette band is situated at the apex of the marble grille (fig. 30). The palmettes have sharp heads, flanked edges, and join one another by their stalks. Their sepals are round in shape. They have a cleft base with recessed base-eyes. The portal has a moulded frame, measuring 1.05m. in width, 2.65m. in height. Its lintel supports the plain moulded rectangular gablet with the palmette band, measures 45cm. by 1.27m. The doorway is 95cm. wide, 1.97m. high. The column of the hünkâr mahfili is covered with the simple moulded framed marble panel from the outside, measuring 1.27m. high, 45cm. wide. This area, which is 3m. by 5.40m., is roofed by two cloister vaults (Fig. 30). The two corner wall buttresses, a free standing marble column with two engaged columns which are 3m. high, support the vaults. Voussoirs of the arches are alternatively composed of two coloured marble blocks. It has three windows. Inside the entrance there is a marble sedile attached to the mosque wall. This sedile is 30cm. high, 33cm. wide and 2.20m. long. Three steps lead to the inside door. The door measures 96cm. in width, 2.40m. in height. The door has a seki 9cm. high. The wooden landing, which leads to the interior of the hünkâr mahfili, is carried by the console and consists of two recessed volutes (fig. 30).

The façade of the qibla wall (Figs 33, 34, 35)

This façade is divided into five units by four buttresses. The two outer units, which are attached to the hünkâr mahfili entrance, and the other, attached to the south-west corner, are set in flanked pointed relieving arch. The quoins are decorated with moulded frames (fig. 34). Six windows are grouped in twos. The first four have rectangular moulded frames with iron-bars. This type of window continues along the qibla façade, except in the lower central miḥrāb unit. Their gablets and spandrels have a red brick-band. The upper two have ogee arched windows with gypsum grilles. The cornice and its bed-moulding continue all round the qibla façade. The corners of the buttresses have plain muqarnas niches.

The second part, which is attached to the middle unit, is again divided into three parts by three windows (fig. 33). A double moulded frame ogee arched window appears in the second row. An upper round window is placed between this window, and the recessed part framed with the pointed arch. Above the arch, there is a simple muqarnas cornice (fig. 39). The wider middle part has three units. Because of the miḥrāb niche, the lower two rows of the middle are left plain. The upper three windows have no moulded frames (fig. 35). The second tier of the windows has a double hood-moulded rectangular frame like that of the adjacent side (fig. 36). The vertical lines, which are more firm than the horizontal lines, stress the structural grandeur, also well-arranged movement from ground level to the apex of the dome (figs. 32, 33). The light and shade arrangement is artistically balanced. Here, variety is provided by using round windows, moulded frames,

and flat or recessed areas, which is the great development since the transitional period (699-907/1299-1501).

In the Ulu Cami of Bursa (799-802/1396-99) there is much less differentiation of the two façades. There, the unframed windows, grouped in twos, are placed in the recessed blind-niches (fig. 37). Above the slightly pointed arched niches, the bolectioned cornice is set. The simply arranged smooth-finished drain spouts, which rest upon the moulded consoles, are situated between the blind-niches. The repetition of similar elements tends to be monotonous.

The courtyard (fig. 38)

The courtyard covers an area equivalent to that of the interior of the mosque proper, 38m b y 38m. (fig. 38). The sixteen domes cover more than three-fifths of the area of the whole courtyard. The twelve columns are set at regular intervals, which are equal to half their height.

In later mosques the courtyard arrangement shows a different kind of solution, for example in the Sultan Ahmed Cami. Here, the courtyard, which is the largest in Istanbul, measures 59.03m. by 58.73m. It is nine bays wide, eight bays long, and has three portals. The side walls of the courtyard are not placed in line with the walls of the mosque, as had been the previous practice, but extend from the outer loggias. On each side of the courtyard there are covered galleries. These galleries give additional sheltered places of ablution (fig. 15).

a. The son cemaat yeri (fig. 39)

The podium of this porch is 45cm. high (fig. 40). The four

marble cylindrical free standing columns have moulded bases, with a torus. They measure 30cm. high; the slender shaft of the column is 3m. high. The muqarnas capitals (fig. 41) have moulded imposts, which are linked to one another by iron-beams. The five pointed arches have a span of 6.50m. Their voussoirs are composed of two coloured marble blocks. The son cemaat yeri is covered with five equal-sized domes, one of which is higher than the rest (fig. 39). The thrust of the domes is carried by the muqarnas belt, the pendentives, consoles, and with the help of pointed arches (figs. 42, 43, 44). The porch has twelve windows, eight of which are open to the interior of the mosque, measuring 1.40m. by 3m each, while the other four are set in either side of the courtyard façades (fig. 43) The windows, which are open to the mosque interior, have rectangular moulded frames and rise to the consoles of the blind pointed arches. These windows and their gablets have iron-bars, while their spandrels have double red-moulded frames. The recessed partsof the upper relieving arches have blind ogee arched niches (figs. 42, 43). The two recessed parts, which are attached to the portal, have square framed windows (fig. 44).

The son cemaat yeri has two mihrābs which are situated between the windows. They are muqarnas headed five-sided niches, measuring 4m. in height, 1.05m. in width and 50cm. in depth, and are composed of forty square marble blocks, each being 27cm. by 27cm. The two plain rosettes set below the muqarnasses.

The gablet decoration of the son cemaat yeri (fig. 42)

The porch has four designed gablets with identical patterns. The main design, which is a honeycomb forming ten-petalled flowers,

is repeated ten times (fig. 42). The frame of the gablet has a floral pattern. Unfortunately, the patterns in the gablets are not in good condition and little remains in some of them.

The portal of the son cemaat yeri (fig. 45).

The moulded frame juts out only 10cm. from the wall, and continues all round the portal. The ventilation slits are set between this particular frame and the consoles. The octagonal corner columns are fluted. Above this the monumental ten-tiered muqarnas niche rises (fig. 41). The niche has a double moulded frame. The apex of the muqarnasses is decorated with ribbed patterns, while the bottom row of the stalactites is ornamented with floral-designed rosettes (figs. 44, 45) The square inscription panels divide the portal into two equal units (figs. 46, 47).

According to Dr. T. O. Gandjei the inscription written in Persian, does not make very good sense. It is possible that the workman involved in making this inscription did not know Persian very well and mistakes crept in.

Acording to Evliya Çelebi, in the portal inscription of the son cemaat yeri the date of the building is given.[1]

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[1] E. Çelebi, Seyahatname, Cilt I, p.168 - "... büyük kapi üzerinde ki tarih (Mabed-i ümmet-i Reśûl-ü Mübin, sene 955), yazilidir."

The doorway has twin small niches on either side. These moulded framed muqarnas niches, which are 3m. high, 70cm. wide, 40 cm. deep, are composed of fifteen marble blocks, measuring 70cm. by 20 cm. The width of the portal is one-third of the height.

The monumental appearance of the portal is partly gained by the combination of triangular-shaped muqarnasses, the impressive mouldings, fluted columns, and the inscription panels, secondly by its well chosen proportions.

The courtyard is roofed by eleven equal sized domes (fig. 39). The domes rest upon pendentives, except the dome opposite to the portal of the porch, which rises upon a belt of Turkish triangles (fig. 48). This part has a moulded-framed cartouche-designed gablet. It finishes with a band of palmettes. The windows are grouped into twenty twos. The lower windows have double moulded rectangular frames, while the upper ones have none. The upper windows have gypsum grilles (fig. 49). The lower windows have polycrome designed gablets (fig. 50), in a combination of red-brick with a stucco base, which makes the gablet composition more attractive. There are four patterns, one floral and the others geometric, which are used in the gablet decoration of the courtyard windows.

The floral designed gablet

There is a strong contrast between the combination of the floral design and the structural double-moulded frame (fig. 50) The recessed area of the gablet is filled with stalks, which are joined one to another in the shape of concentric circles, and the sepal split rûmies are finished with beaks and scrolls. The scrolls make concentric circles. In the centre of the gablet there is a six pointed star. The whole decoration is on a stucco base. An air of continuity is provided by the half-finished patterns at the edges.

The geometric designed gablets (figs. 51, 52, 53)

At first glance, the tremendous variety of geometric shapes, squares, various kinds of polygons and an endless variety of geometrically conceived star patterns, and concentric circles which seem to show imagination and inventiveness. There are three different geometrically arranged gablet decorations in the courtyard:

1. The patterns, which are entirely made of stucco, are in relief upon the red-brick base. This geometric decoration is based on the two concentric circles which intersect one another in order to provide closed six-pointed stars in the middle (fig. 51). (Second gablet from the left.) There are eight complete six-pointed stars and seven half six-pointed stars (fig. 52). The combination of concentric circles produces again six petalled flowers. The contrast between the geometric decoration and the red-plain spandrel fillings with moulded frames is well-established.

2. Here, the stucco patterns are again relief upon a red-brick base. The composition consists of parallel lines, which are intersected by lines either vertically or horizontally (fig. 48).

These lines produce polygons (fig. 53). Each polygon has a circle with its centre marked with a star. The centres of the circles are filled with stucco in order to obtain a twelve-pointed star. The patterns have no limits, and continue beyond the frame. The composition is similar to that of the fan-vaulting.

3. This last pattern is composed of concentric polygons, six-pointed stars, and squares (fig. 48 - far right).

The lower windows of the courtyard have wooden well-preserved casement-shutters which are designed in a variation of two different geometrical patterns:

a. This particular casement-shutter has two panels, which are divided into three parts (fig. 54). The upper and lower parts have moulded framed rectangular horizontally-arranged panels, left plain, while the middle rectangular vertically-arranged panels have geometric designs. These panels have double-moulded frames. The moulded interlaced border-like patterns, which run vertically, are composed of elongated cartouches alternating with rather small, simply arranged cartouches. The elongated cartouches have six-pointed stars in the middle. These two vertically arranged patterns touch each other.

b. Here, the panels are again divided into three parts (fig. 55). The upper rectangular horizontally-arranged units have a four staged double-moulded frame. The main composition consists of rectangular horizontally-arranged panels alternating with vertically-arranged panels. This pattern is also repeated at either side. The double moulded frames produce two squares either side of the horizontal panels.

The combination of the different uses of materials: stucco-brick, and wood, the strong discrepancy between the elaborate gablet decorations; and the simply arranged casement-shutters, provides a more decorative aspect to the courtyard of the Şehzade Cami than any of the previous examples has had.

According to the examples there is no other building which has decorative window gablets in the son cemaat yeri, or the courtyard, before the Şehzade Cami. From time to time the inscribed tile work can be seen, for example in the Fatih Cami in Istanbul. After the Şehzade Cami these kinds of decorations were used by Sinan in his other buildings, such as the Selimiye Cami in Edirne.

Judging by the character of these gablet decorations, one may conclude that the floral designed gablets must have been a later work, while the geometric gablets belonged to the same period as the building itself.

Three inside portals of the courtyard (figs. 40-48)

These identical portals are placed in the recessed-area of the relieving arches (figs. 40-48). The moulded frame covers three-quarters of the rectangular area. Above this, another moulded frame divides the portal structure horizontally. The door has a double-hood moulded pointed arch, which is 25cm. thick. Both the gablet and the spandrels have red-brick bands. The area between the engaged-wall piers and the portal is decorated with muqarnas niches (figs. 40-48). These niches are 63m. wide, 2.50m.high, 30cm. thick. The palmettes are placed on the bottom tier of the muqarnasses. The door has an ogee arch instead of the usual joggled-lintel.

b. The Şadirvan

The open area of the courtyard is further diminished in the centre by the massive canopy which covers the şadirvan (fig. 38). However, this canopy is an addition, made in the reign of Murad IV (1033-50/1623-40) (fig. 49). This octagonal structure includes eight columns, which are 2.30m. in height, 94cm. in circumference. Their moulded bases rise above the iron-bracelet, which is 40cm. high. The lozenge-shaped capitals are 30cm. in height. The octagonal water-tank has a moulded framed pointed arched decoration.

c. The minarets (figs. 56, 57, 58, 59)

The Şehzade cami has twin minarets, which are set at the south-west and north-east corners of the mosque (figs. 56, 57). They rise to a height of 41.50m. The base, which is 2.90m. wide, 6m. high, is decorated with a double moulded frame (fig. 57). The door of the minaret is 60cm. in width, 1.70m. in height, 12cm. in depth. It has a double moulded frame with two coloured lintel. The palmette band is set over the string course (fig.55). In the shoe, the transition from a square base to a twelve-sided shaft is through Turkish triangles. The flanked moulded frame divides the base and the shaft. From this frame to the şerefe the fluted twelve-sided shaft is decorated with high relief cartouches, pointed stars and geometrical patterns (figs. 56, 57, 59). The pattern is repeated on every side. The palmettes and two intersected crosses are linked one to another by mouldings. The patterns alternate between a palmette, which consists of six-petalled flower, and intersected crosses rising to the lower şerefe brackets culminating with crescent moon motifs (figs. 10-11).

Each side of the shaft has a double-moulded frame, which is finished with a pointed arch at the top. It may appear surprising that these kinds of decoration were used by Sinan for the first and the last time in his long career[1] (fig. 60)

The minaret has two şerefes. The lower şerefe sets upon simple arranged three tiered muqarnasses (fig. 59) The grilles are composed of twenty-four marble panels (fig. 50). These rectangular marble panels have moulded frames. The recessed area is decorated with intersecting circles and culminates with a hood-moulded arch (fig. 59) The upper şerefe is placed upon the elaborated muqarnasses. The marble grilles are composed of twelve rectangular horizontally-arranged panels. They are decorated with honey-comb patterns (fig. 57). The petek is left plain. The külâh and the âlem are certainly not original (figs. 56, 57, 58). The upper and lower petek, of diminishing circumference, contrast with

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[1] Evliya Çelebi, op.cit. I, p.169; Semavi Eyice, "Minare", I.A. VIII (1960), p.330. In early times the minaret was not known. The Prophet and his followers, when they first moved to Madina, prayed without any preliminary call to prayer. They wanted something similar to the Jews and Christians. The Prophet Muḥammad therefore ordered Bilâl, who had a beautiful voice, to become the first mu'addhin (müezzin) to give the call to prayer. He pronounced it from the highest roof othe courtyard of the Prophet's house. K.A.C Creswell, "The evolution of the minaret", Burlington Magazine (March-May, and June 1926), p.1. The first mosques, Kūfa and Baṣra, had no minarets. The minaret first appeared in the Umayyad period, in the Great Mosque of Damascus. With the Seljuks, the minarets, which are polygon, cylindrical or square in plan, were decorated with glazed tiles and inscriptions. In many Seljuk minarets it is brick which gives its texture to the walls. Brick, as ornament, spread from the cities of Central Asia to Iran and even to Anatolia. Stucco is also used in interstices between bricks. In Ottoman times, the minaret has gained more height and more elegance. In spite of the earlier examples, which followed the traditional Seljuk minarets, the Ottoman minarets were decorated with structural elements: mouldings, flutes and muqarnasses. It is hardly possible to explain why Sinan used these irregular shaped designs in the Şehzade minaret. After these minarets, Sinan turned to the classic Ottoman minaret scheme.

the relief-decorated shaft, giving an impression of increased height. The Ottoman tradition was that the minaret was likened to the hands of the faithful praying to God.

The structural beauty of minarets gradually disappeared in later periods. For example, of the six minarets of Sultan Ahmed, four of which rise at the four corners of the mosque, and the other two, of lesser height, at the western corners of the court-yard, produce a more elegant appearance than those of the Şehzade cami (figs. 581-61). They definitely lost their structural beauty. Their fluted shafts are more slender. The şerefes rest upon the elaborated muqarnasses. The relief decorated shaft of the Şehzade minaret is more close to the Seljuk minarets than the Ottoman.

Exterior description of the upper supporting and roofing elements

The exterior of the mosque in its upper supporting part gives an almost identical appearance on all façades (figs. 12-62).

a. The upper south-west façade

The upper façade of the square base of themosque is divided into three units by the flanked wall-buttresses (fig. 12). Three ogee arched windows are set in a bolectioned-moulded frame. The ogee arches are alternately composed of red-brick and stone. The spandrels between the frame and the recessed area of the arch have a red band. The windows have gypsum grilles. The bolectioned-moulding is set upon the bed-moulding above the plain wall-surface (fig. 62).

b. The semi-dome of the south-west façade

In front of this semi-dome a gable is set culminating with corbie steps (figs. 9-13). However, this gable has the appearance of a gable,

but actually it is a decorative feature only, providing no structural support. The red-band runs above the façade of the gable. The corbie-steps have a bed-moulding, and culminate in a palmette band. These simple base palmettes with sharp pointed heads are joined one to another by their stalks. The gable is lightened with three windows with recessed-moulded frames and cypsum grilles (fig. 13).

The semi-dome is covered with lead.

The drum of the semi-dome is divided into fifteen sides by the vertical projecting buttresses. The windows, which have single-moulded frames with gypsum grilles, are set between these buttresses. Above the windows the bed-moulding is placed. The semi-dome is buttressed to the corner supporting turrets (fig. 62)

The only discrepancy between this upper façade and the north-west upper façade is the structural use of the gable (fig. 39). In the north upper façade the gable in front of the semi-dome has some kind of a roofing role, as can clearly be seen in figure 39, covering the kadinlar mahfili.

c. The two exedrae of the semi-dome of the south-west

These two exedrae, which begin at the end of the corbie-steps, are again covered with lead. The two round arched windows give light to the interior. These arches are composed of mono-coloured stone blocks. The palmette band, the bed-moulding and the red-band are in the same feature as those of the previous ones. The area at the corners between the semi-dome and the exedrae is covered with two triangle units (fig. 9).

d. The corner domes

The octagonal drum of the small corner domes rises to the same height as the semi-dome (fig. 64). The lead covered dome with the âlem is rested upon the bed-moulded bolectioned cornice culminating with palmettes (figs. 23-64) The transition from square base to the octagonal drum is arranged by the squinches (fig. 66). The space between these domes and the central dome is filled with the supporting turrets (figs. 12-66).

e. The supporting turrets

These four turrets at the corners of the square enclosure of the mosque rise to the same height as the drum of the main dome (fig. 66) Their cylindric shäft is surrounded by the elegant as well as structural ribbed-dome. The bolectioned-moulding culminates with the palmette-band (fig. 62). These turrets are joined to the main dome with flying buttresses (fig. 62).

f. The central dome

The central dome is a brick and a half thick. The flanked wall buttresses divide its drum into several units. The recessed-units are pierced with the gypsum grilled-round arched windows. The dome is projected by eight external buttresses. From the pyramidal silhouette of the building into the cavity of the court-yard is successfully achieved. The external appearance reaches for a traditional architectonic expression, which was achieved by the mid-sixteenth century through the genius of Sinan (fig. 18).

This particular mosque stands on the dividing line between the transitional period (699-907/1299-1501) and the Ottoman Classic age (907-1115/1501-1703) The external pyramid appearanne is ensured by a square within square system (fig. 67). The external

supportings are reduced to a minimum, and the thrust of the roofing elements is counterbalanced with four corner turrets (figs. 19-31). It seems that the external thrust of the roofing elements are carried with almost invisible elements. It is a fact that this has never been achieved before so successfully in Ottoman architecture.

If one compares the Şehzade Cami with the lower dome and immense buttresses of St. Sophia, which give sturdy picturesqueness, this is entirely different from that of any other mosque.[1] In the St. Sophia the interior was obviously the main consideration (fig. 67). For example, the Süleymaniye, which shows the same scheme as the St. Sophia, produces a better exterior arrangement (fig. 68). The four stepped exterior arrangement reaches its climax in the Selimiye (fig. 14). Considering the pyramidal appearance, all exterior roofing elements have right-angled corners, while in the Şehzade, they produce round-corners (figs. 63, 14). In the Şehzade, however, it is hardly possible to find the well-arranged combination of solid squares, elegant as well as structural, arches elsewhere.

In later buildings, for example, the exterior of Sultan Ahmed, which strongly indicates the evolution of the Ottoman mosque exterior (fig. 69)

The corner domes of the Şehzade have higher drums than Sultan Ahmed. The supporting turrets of Sultan Ahmed are heavier than those of the Şehzade. Furthermore, in the Sultan Ahmed, there are two additional cylindric turrets which signify the flanked engage wall piers of the son cemaat yeri entrance (fig. 69)

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[1] M. Martin, CHARLES "Hagia Sophia and the great imperial mosques", The Art Bulletin XII (1930), pp. 321-44; F. Thomas, The early of Constantinople "Hagia Sophia" (1971), U.S.A., p.95.

The Şehzade has a scheme which can be called a 'square within a square', which gives a necessity for the double wall, and leaves the external wall to bear directly the outer end of exedrae. In the Yeni Cami, there is no 'square within a square' system. The simple external walls hold the outer exedrae-ends. The dome of the Yeni Cami, which appears to be set a little high for its size, has a four-stepped external appearance similar to that of the Sultan Ahmet (figs. 70,71)

Chapter IV

INTERIOR DESCRIPTION OF THE MOSQUE

The plan

The plan of the Şehzade Cami, which shows a square within square system, exhibits several developments in the architectural evolution of the solution for an ideal prayer hall. The first important development is that of augmenting the semi-domes at four sides of the main dome. The absence of the side divisions, galleries, make the interior take all the emphasis below the centralized domed area. Another well-defined development is that of the introduction of the subsidiary exedrae to support the semi-domes, in place of the traditional pendentives. The massive piers and the outer walls are firm enough to carry the roofing system. The interior of the mosque covers an area equivalent to that of the courtyard, measuring 38m. by 38m. (pl. 14). The prayer hall is roofed by a dome 19m. in diametre, rising to a height of 38m. Four semi-domes, accompanided by two exedrae each, support this dome. The four small corner domes complete the inside pyramidal affect of the roofing elements (longitudinal sec. 15). This requires the presence of the double walls, and it is the outer wall that carries directly the outer end of the zone of transition.

The lower zone

I The walls

The walls of the mosque are well preserved and are 1.16m. thick, entirely made of well-dressed stone blocks. In the interior, these are plastered during the restoration, which took place in 1281/1864. This restoration date is recorded on the wooden disc

which is placed on the wall above the kadinlar mahfili (fig. 86).

A. The qibla wall (fig. 72)

It is vertically divided into five parts by four engaged-wall piers (pl. 14). In the centre of this wall the mihrāb is situated. The qibla wall is horizontally divided into two units by a cornice (fig. 72), which continues all round the interior. This cornice is formed by two tiers of muqarnasses, followed by bed-moulding at the top. The contours of these cornices are outlined in red. It is believed that this painting is much later, but that will be discussed further below, when the other decorations are described (see infra, p. 68).

The lower portion of the qibla wall is two-thirds in height of the whole wall, and the remaining upper portion between the horizontal cornice and the second upper horizontal cornice (fig. 73) is therefore one-third of the total height. The upper part of the qibla wall below the zone of transition is framed by a moulding cornice which in turn runs all round the mosque. This is formed by a series of leaves, executed in the Ottoman Baroque style of the nineteenth century, and is painted entirely in red. The detailed description of the qibla wall should start with the central, the so-called mihrāb, unit. This unit is almost three times wider than the side recessed ones. The upper part, which is framed by the semi-circular relieving arch and the second horizontal cornice, has three windows (fig. 73). The window in the middle is bigger than the other two. They are framed with red lines. Between these two horizontal cornices there is a portion of the wall which is pierced with three windows of equal size. The windows are framed with painted double mouldings and culminate

in crown-like gablets (fig. 73). These gablets consist of stylized leaves and garlands on a red painted base. The rectangularly arranged panels between the windows, which were executed during the Ottoman Baroque period, form a border-like decorative aspect (fig. 73).[1] These panels are decorated with interlaced

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[1] Islamic decoration can be categorised into several parts. The first category is human or animal representations, which are the rarest elements in all Islamic art.

(see supra, p. 45).

D. Hill and O. Grabar, Islamic architecture and its decoration (London 1967), fig. 412. A second decorative theme is an architectural feature: columns, capitals, bases, muqarnasses and mouldings. There are two techniques of architectural decoration involved of construction itself. Firstly, in Anatolia, where the traditional construction was stone, carved stone became the major element for ornamentation. Secondly, in later centuries, variation in brick work came to emphasize the major architectural lines of the structure, as well as to distinguish the surfaces to be decorated. The third technique of architectural ornamentation is stucco, which originated in Iran. A third theme of Islamic decoration is the geometric ornamentation, consisting of rectangles, squares, an endless variety of geometrically conceived star patterns, meanders, circles, various 'net' patterns based upon geometric features. The fourth theme is floral ornamentation. Other themes of Islamic decoration may be called abstract designs (arabesques), and finally the most ambiguous of them all is calligraphy. Calligraphy appears as an inescape/motif of Islamic architecture, partly because it served to explain the function of buildings, and secondly to immortalize the memory of the founder. The Selçuks of Rûm used stylised floral ornamentations, epigraphic or geometric patterns, which were engraved in lower or high relief. The turquoise coloured bricks took an important part in the decoration. The Ottoman artists, who inherited Selçuk patterns, searched for more elaborate and interesting designs, and produced unusual combinations and supplementary themes, interlaced bands, spirals and zigzags. The elementary patterns were the palmettes, the rumîs, the hatâis, the vine leaves and branches. Their favourite pattern was polygon. Polygons were presented everywhere, on the walls, the doorways, the minbars, marble grilles, and even on the Qur'ān illuminations. The squares,polygons, lozenges and variety of geometrically conceived star patterns, are intersected each other, and could be arranged in different ways without upsetting the general harmony. The floral motifs are repeated unimpedimently along the extended band, or the geometric ornaments are repeated over a certain length. The artists depended on a technique that had to be taught, which was handed down through

borders, which consist of three and a half discs, painted in red, brown and dark blue. These discs are again decorated with six petalled flowers. The spacesbetween the frames and interlaced borders are filled with three sepalled palmettes in Ottoman Baroque style. The mihrāb is placed in the middle of the lower portion of the qibla wall (fig. 72) Beneath the first horizontal cornice two windows, equal in size, are set on either side of the mihrāb. The original stained-glass windows have disappeared. These upper windows have painted frames which are composed of guilloches, while the lower windows have rectangular moulded frames entirely made of well-dressed stone. The lower windows, which measure 1.91m. by 3.30m., are exactly the same size and are placed all round the lower part of the interior of the prayer hall. They have inscribed gablets, framed with a band of red palmettes. The inscriptions, which are placed in the gablets,

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their studies. There were few sudden changes, and when they did occur it was usually due to sudden arrival of a new artist or craftsman. With the Ottomans the use of poly-coloured bricks gave way to the well-dressed stone blocks, or smooth-finished marble panels. The combination of the art of Selçuk tile mosaic with the technique of polychrome glazed laid the foundation of the Ottoman tile art. Ottoman tile, which are covered with foliate motifs with fine outlines and details, is different from the Selçuk tile. Decorative painting is another art which took an important place in interior decoration. This was done in coloured plaster and there is a form in relief known as malakârî. Painted decoration had a very wide field of use in Ottoman art in accordance with the style of every period. The medallions, Chinese cloud-scrolls and garlands of the tiles of the period are repeated in the painted decorations. The relation between the architecture and decoration is defined by a kind of rule distinguishing three stages. In the first stage, the supremacy of architecture is fully emphasized. The stress is equally put on the architecture and decoration in the second stage, while the third is marked by the victory of the decorative over the architectural spirit, which can be seen in the later Ottoman Baroque or Rococo. It seems that architecture is a clash between the constructive and the decorative impulses. However, in the Ottoman architecture, these two impulses have always counterbalanced,except in the above mentioned periods.

begin from the south-west corner of the qibla wall, continue with the six gablets of the lower windows, and end at the north-east corner. The style of the inscription is thuluth (suls), which is a more elegant form than naskhi.[1] But, probably the date, which is given on the wooden disc (fig. 87), may cover the execution of the inscriptions as well as the decorative paintings. The inscriptions here are quotations from Qur'ān, sūrah forty-eight (Al-Fath), verses from one to halfway through the fourth.

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[1]Apart from the use of naturalistic and geometric patterns, Islamic calligraphy played an important role in Islamic architecture. The Islamic calligraphy, which played for centuries the same role in all Islamic countries as Latin played in Medieval Europe, was based upon the free and flowing rhythm, E. Kuhnel, The minor arts of Islam, trans. by K. Watson (1970), p.14. The Muslims received the tradition of calligraphic art from the Jews and the Christians as well as from the Manichaeans. The Manichaenist religion was especially bound up with painting and calligraphy. Their works must have existed from the fifth century A.D., A. Stein, Serinda II, p.819, pl. clxii. These manuscripts also contain punctuation marks. There are two scripts employed in early Islamic calligraphy, the angular Kufic, and the cursive Naskhi, H.A.Fazā' Ili', Atlas-i Khatt i tahqiq dar Ktuṭūt-i Islāmī,(Isfahan, 1380). Kufic, which is the earliest form, is alleged to have been invented at Kūfa. The earliest examples show the undecorated letters in broad heavy hand, and there are no pointing or other diacritic signs. It was widely used during the first five centuries of Islam in architecture, Qur'ān, textiles, and tiles. There are several different types of Kufic, such as a plain kufic, foliated kufic, which is composed of vertical strokes ending in half palmettes, and floriated kufic, in which floral motifs and scrolls are augmented to the leaves and the palmettes. From the eleventh century onward, kufic gradually gave way to naskhi. With naskhi style, the history of Islamic calligraphy was brought to an important period of renaissance. The naskhi style holds a mediate position between the kufic and nasta'liq. The naskhi presents the cursive kufic softened to wider curves. Another type of cursive writing is the thuluth (Suls). This writing looks like naskhi, but vertical strokes are more exaggerated. The nasta'liq has curves, developed into sensual and elegant profile. There are three types of calligraphy employed in the Şehzade Külliye, the kufic, the thuluth and the nasta'liq. The calligraphy, which was written over the marble, might have belonged to the school of the most famous Ottoman calligrapher, Ahmet Karahisar, who died in 964/1556. His pupils were Derviş Mehmet Çelebi, Muhittin Halifa and Hasan Çelebi, who was responsible for the stone and marble calligraphy of the Süleymaniye(fig. 74): 1. Riḥāni, 2. Thuluth, 3. Thuluth, 4. Thuluth,

b. The second casement-shutter pattern, which produces an even more elaborate and refined design, consists of one oak rectangular panel (fig. 76).

The patterns are composed of three large lozenges (baklavas) which are joined one to another by parallel rectangular panels. Each lozenge has three intersecting Greek crosses, forming a ten pointed star in the middle. The spaces between the relief contours (moulded lines) are decorated with engraved spirals, palmettes and rumîs. In spite of being framed the patterns continue beyond the lines.

The miḥrāb (fig. 77)[1]

As stated above, this is situated in the middle of the qibla wall (fig. 72). The miḥrāb, which rises to the height of the first

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[1]The word miḥrāb (meaning a throne, recess, or a place of honour) first of all was used as a qasr in South Arabia, especially among the Ḥimyarites (from 115 B.C. to 300 A.D.), Lisān 'l 'Arab, II, p.296; P. Khitti, History of Arabs, tenth ed. (London, 1970), p.55; G. Fehérvári, Development of the miḥrāb down to the XIVth century, London Ph.D. thesis 1961, I, p.29. The qibla was originally indicated not by a niche, but by some mark such as a strip of paint or a stone-block marked in some way, R.F.Burton, Personal Narrative of a Pilgrimage to Mecca and Medina (1874), p.72. Miḥrāb as a prayer niche was first introduced during the reign of Al-Walīd (87-97/705-15), Maqrīzī, Khiṭat II, 247, Miḥrābs are flat, concave, semi-circular or rectangular, crowned by a semi-dome, and flashed by columns. The earliest surviving example is the Khāṣṣakī miḥrāb ('Abbasid period) in the Baghdad Museum. It has a semi-circular niche decorated with grooves, Here, the scallop decoration appears for the first time in the miḥrāb niche. K.A.C.Creswell, Early Muslim Architecture, II, pp. 35, 36, fig. 26. In Persia and Anatolia the muqarnas head prayer niches were widely used from the first half of the twelfth century, while in Egypt the scalloped-head became popular in the end of the thirteenth century. The horse-shoe arched prayer niche first appeared in the Great Mosque of Qairawān, then it was used in a few miḥrābs of north Africa and Spain, the miḥrābs of the Mausoleum and madrasah of Qalā'ūn in Cairo (completed in 683/1284). Another interesting feature of the Maghribī miḥrābs was the use of window openings above the niches. These windows first appeared in the miḥrāb of the Great Mosque of Cordoba (about 360/970) and

horizontal cornice on the qibla wall, and is 3.90m. wide, is entirely made of smooth-finished marble blocks. It is flanked with a fluted column at either side. The capitals of the columns are composed of two tiered triangle-filled muqarnasses with bolectioned cornice above. They culminate with âlems. The âlems, which are decorated with grooves, finish with mono-base scalloped palmettes. Within these columns, there is a double hood-moulded rectangular frame, which projects 35cm. from the flat spandrels

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spread all over north Africa to Anatolia. The stucco decoration, which was first introduced in the mihrābs in Samārrā (ninth century), lasted to the twelfth century. A brick used as a decorative purpose during the end of the eleventh century and the beginning of the twelfth century. During the thirteenth century in Persia and Anatolia a new technique appeared - the lustre-faience. Marble, which was introduced in Syria, soon triumphed over stucco not only in Syria and Egypt, but also in Anatolia in later periods. In Anatolia the mihrāb evolution shows a different scheme than the other Islam countries. The prayer niches, which were built during the rule of the Selçuks of Rûm and the Beylikler period, are made of either stone or tile. The weel-known earlier stone mihrābs are in the Ulu Çami in Dunaysir (Kiziltepe) (601/1204), A. Gabriel, Voyages Archéologiques dans la Turquie Orientale (Paris, 1940), p.50, pls. 28, 31, The Alâadin Cami in Niğde (621/1224); A. Gabriel, Monuments Turcs D'Anatolia (Paris, 1931), tome I, p. 120, pl.36, and the Ulu Cami in Divrik Gabriel, op.cit., tome II, p.180, pls. 72-3. The earliest tile mihrāb can be seen in the Alaaddin Cami in Konya (617/1220), which is not fully preserved. M.Z.Oral, "Konyada Alaeddin Cami ve türbeleri", Ilâhiyat fakültesi, Türk ve Islam sanatlari tarihi enstitüsü, Yillik I,(Ankara,1956-57), p.46. A well-preserved tile mihrāb is in Eşrefoğlu Cami in Beyşehir (684/1285). It is decorated with geometrical patterns with spirals, rumîs and palm leaves. In the Arslanhane Cami (689/1290) stucco and tile were alternately used, K. Otto Dorn, "Der mihrāb von Arslanhane Moschee in Ankara", Anatolia I (1956), p.7175,pl. 21-28. After this mosque, this mixture technique has never been practised. After the fourteenth century, parallel to the decline of the tile-technique, the tile-mihrābs were also their characters. The mihrāb of Taşkin Paşa Cami in Ürgüp (fourteenth century) is the only surviving wooden Anatolian mihrāb, O. Aslanapa, IA, VIII, p.303. Early Ottoman mihrābs follow the traditional Selçuk forms, with some differentiations, for example the use of naturalistic floral motifs. From the sixteenth to the eighteenth enturies marble was widely used. From the sixth century onwares, mihrāb as a decorative element appeared especially on tombstones, ceramic and wooden works. It was also used in textiles in the so-called sajjādas (prayer rug).

of the muqarnas niche. The recessed part of the niche has again another three double hood-moulded frames. This gives the miḥrāb a three dimensional effect (fig. 77). The five sided miḥrāb niche is 80cm. in depth. It is composed of thirty marble blocks, each of which measures 41cm. by 47cm. The corners of the prayer niche are smoothed by the rounded small columns (sütünçe). Their capitals have an ornament resembling a ribbon tied in a bow (fig. 77). The upper part of this niche is composed of ten-tiered triangularly arranged muqarnasses which culminate in a scallop pattern at their apexes,[1] while the bottom row has rosettes. This

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[1]The earliest known example of the architectural use of the scallop motif is dated back to the year 87, B.C., M.Wheeler, The Scallop, A symbol in ancient times (London, 1957), p.37. It occurs in a grotto dedicated to the God Pan in Syria. Its popularity seems to have spread quickly. There are many examples of it at Pompei and its contemporary neighbour, Herculaneum. During the period of the Roman Empire, particularly in its eastern half, the scalloped niche was used on almost every type of monument. The same kind of decoration can be seen in the Byzantine art, D.T.Rice, The art of Byzantium (London, 1959), fig. 47. Scallop decorations were widely used by Muslims, either as a miḥrāb decoration or as a portal ornament. The first scalloped niched miḥrāb is in the Khaṣṣakī Jāmi in Baghdad, F. Sarre and E.Herzfeld, Archäologische Reise im Euphrat und Tigris Gebiet (Berlin, 1919), pp. 139-45, ABB. 183. The Great Mosque of Qairawān (248/862-3) has also scalloped head prayer niche, Creswell, op.cit., II, pls. 83-84. This form of niche was again apparent in Anatolia, in the Ulu Cami in Dunaysir, Aslanapa, op.cit., p.95, fig. 5. Scalloped decoration used on the portal structure can be seen in the Mosque of Baybars (665-7/1266-9), Creswell, Early Muslim architecture of Egypt, p.48, and in the portal niche of the Isa Bey Cami (777/1375) (fig. 27). The scalloped designed wooden panels of the Aqṣā mosque in Jerusalem (163/780), Creswell, E.M.A., I, pl. 25, and also mosaics of the Great Mosque in Damascus (87/705), Creswell, op.cit., I, part II, pl. 53, show the Hellenistic influences. On the other hand, this design was also used in domestic buildings, in the palace of Ukhaidar (second half of the eighth century) and the Khirbat al Mafjar (Umayyad period), R.W.Hamilton, Khirbat al Mafjar (Oxford, 1959), pl. 5.

upper part of the niche is framed with double moulded frames. The inner upper part of the mihrāb has a rectangular inscription panel (fig. 77). It has a moulded frame. Inside the panel there is a gilt inscribed cartouche, which finishes with floral motifs on the base painted in black. The thuluth calligraphy gives the mihrāb a monumental atmosphere. This inscription is a quotation from the Qur'ān, Sūrah third (Āl-Imrān) It says (fig. 17):[1]

"Allah glorified says: Whenever Zachariah went into the Sanctuary (mihrāb)..."

The prayer niche has a gablet (fig. 77). It finishes with a band of palmettes alternating with three sepal palmettes with a notched base and three sepal palmettes with a cleft base. The inside of the gablet is decorated with scrolls, rumîs, beaks and mono-based palmettes on a base painted in black. In the space between the horizontal cornice and the gablet there are two identical scallop decorated rosettes. This style of mihrāb niche can be observed in Sinan's later buildings, for example, in the Selimiye Cami in Edirne (see p. 73)(fig. 78). In the Selimiye, the mihrāb is formed by a concave surface within the square frame, which increases the sense of depth, while the Şehzade, the prayer niche is less concave within the rectangular frame. Unlike in the Şehzade, where the columns are fluted, in the Selimiye the outer columns of the mihrāb are circular (figs. 77, 78).

On either side of the mihrāb section there is a portion of the qibla wall between the engaged-wall piers spanned by a two-

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[1] M. Pickthall, op.cit., p.71, verses 37 (part of).

coloured semi-circular relieving arch, which is painted in white and red as an imitation of marble and brick, set vertically with three windows (fig. 72). The light passes through the round, pointed and rectangular framed windows. The side parts, which are placed between the engaged-wall piers and the corners, have six windows grouped in twos (figs. 33, 34). The upper area between the first horizontal cornice and the relieving arch of the recessed part has two windows with painted frames. The middle two windows are exactly the same as those of the preceding lower part. Here, the qibla wall arrangements gives more light to the interior, unlike in the previous mosques such as the Ulu Cami in Bursa (fig. 37). However, in later buildings, the qibla wall is differently arranged, for example in the Selimiye Cami (fig. 78). The qibla wall is recessed and has only four windows.

Another, different, qibla wall arrangement can be seen in the Sultan Ahmed Cami in Istanbul (fig. 78). Unlike in the Şehzade Cami, the side units of the Sultan Ahmed have twin windows at the upper part. The engaged-wall piers are thinner than those of the Şehzade, and there is less space between the windows. This makes the wall lighter. Therefore, the wall loses its real meaning as part of the lower supporting element. However, in the Şehzade, the wall still holds its structural role, because of the wider engaged-wall piers and the wider parts between the windows. Here, the balance between the function of the wall, either as a lightening feature, or as a structural aspect, is preserved.

The minbar (figs. 79, 80)

The minbar is situated to the right side of the mihrāb, opposite to the hünkār mahfili, in front of the engaged-wall pier.

This marble minbar has a classical Ottoman minbar form, which often repeats in contemporary, or later, buildings, for example in the Süleymaniye Cami, the Selimiye Cami, the Sultan Ahmet Cami and the Yeni Cami.

The podium of the minbar measures 40cm. high. The height of the minbar is 4m. to the kiosk (köşk) unit. Seventeen steps, which are approximately 25cm. high, lead to the kiosk. This part is the only unit which is made of wood. The roof of the kiosk is conical. The portal of the minbar is 2.66m. in height, 1m. in width, and 5.25m. in depth. It has a rectangular gablet 38cm. high, and a crown, which is set upon the muqarnas cornice (fig. 72). This crown is composed if three sepal palmettes with a cleft base (fig. 79).

The area between the crown and the doorway has rectangular framed inscribed cartouche. It says (fig. 17):
"No God, but Allah, Muḥammad is the prophet of Allah".

The marble grilles of the minbar

The upper grilles (figs. 79, 80)

These twin grilles, which are composed of eleven square panels, have double hood moulded frames. They are 81cm. high. Each panel consists of interlocking polygons. The polygons, which interlock with each other, produce a four petalled flower. In the middle of this flower there is a six petalled star (fig. 81) The square panels produce four sided big stars (fig. 79). The forms, which are cut in half at the two ends, give a continuity to the decoration.

The side triangular grilles of the minbar (figs. 79, 80)

The side triangular grilles have double hood-moulded frames. This lace-like marble panel is composed of one huge circle and two twelve-petalled flower compositions (fig. 89). The area between these motifs is filled with floral motifs.

The decoration of the big circle (fig. 82)

The entire composition consists of six and a half polygons. The circle is divided into five fan-like panels by diagonal lines, measuring 2cm. deep. The centre of the polygons link one to another by the lines, which produce lozenges. These lozenges are again divided by a diagonal line into two parts. The whole polygons and the half one intersect each other at two points. The intersecting lines demonstrate various types of geometric patterns. The polygons are composed of three concentric circles. The composition of the polygons provides high-relief flowers in the middle of the ten petalled flowers. The entire composition gives a cob-web like feature. It is hardly possible to divide the patterns. This panel must be observed as a whole. Without one single pattern the entire composition loses its phenomenon.

The decoration of twelve petalled flowers (fig. 82)

The main pattern is a floriated Greek cross. Every arm of the cross is filled with the pomegranate flower, spirals, and one sepalled palmettes. The middle pattern has two intersecting stars. The space between the outer contours, and the central pattern is decorated with spirals, roses at the outer corners of the cross.

The space between the two twelve petalled flowers and the main circle is filled with gilded spirals, roses, rumîs, carnations

and beaks.

The upper outer vertical part below the kiosk has three units. The upper unit has a square marble grille consisting of interlacing circles framed with double-hood moulded frame. The pattern is identical to the upper grille of the minbar (fig. 80). The middle portion has a cusped arch opening framed with double hood-moulded frame, while the lower unit has a sharp pointed arch, measuring 2.55m. high, 58cm. wide. The lower horizontal unit has four broken headed arches, which are 81cm. high, 51cm. wide, frame with double mouldings.

The outer frame of the minbar, which begins from the podium, to the apex of the kiosk grille, is composed of well-executed zigzags.

Hünkâr mahfili (figs. 83, 84)

This wooden mahfil , which is placed opposite to the minbar, is situated between two engaged-wall piers on the qibla wall opposite to which there is a single pier, and the other two sides are formed of marble columns (fig. 83). Further support is provided by wooden columns parallel to the engaged-wall piers and four wooden consoles. The wooden floor of the mahfil which is 8.65m. by 17.15m. rests upon the lintels. The pointed arches are only decorative and do not carry the real thrust. The columns have muqarnas capitals and no bases. The marble panel, which is placed between the wooden grille and the lintel, is 40cm. in height. It is decorated with niche patterns painted in red (fig. 84). The wooden grille, which is 1.20m. high, runs along the other side as well. It is divided into three equal panels by

two columns. The wooden columns have lotus bases, fluted shafts and palm-leaved capitals. The panels are vertically divided into seven parts, each of which has twin honey-suckle patterns in green, pink, and yellowish brown. The use of honey-suckle pattern and lotus bases indicates that these works were executed in the Ottoman Baroque period. The hünkâr mahfili has four windows on the qibla wall, grouped in twos (fig. 84). The upper two windows have painted frames. Between these windows there is a medallion framed with garlands painted in dark red (fig. 84). The lower windows have simple moulded frames with inscribed gablets. They read:

Basmala (Bi-ismi'llahi'l-raḥmani'l-raḥīm) "In the name of God, the Compassionate, the Merciful", and Ayātal Kürsu, quotations from Qur'ān, Sūrah II.[1]

"Allah ! There is no God save him, the Alive, the Eternal,
Neither slumber nor sleep overtaketh Him.
Unto Him belongeth whatsoever is in the heavens and whatsoever is in the earth. Who is he that intercedeth with him save by his leave? He knoweth that which is in front of them and that which is behind them, while they encompass nothing of his knowledge save that he will. His throne includeth the heavens and the earth, and He is never weary of preserving them. He is the sublime, the tremendous."

An inscribed disc is placed between the lower two windows painted in red (fig. 84) The thuluth writing says:[2]

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[1] Pickthall, op.cit., p.59, sūrah II, verse 255.

[2] Pickthall, op.cit., p.676, sūrah CXII.

"He is Allah, the One!

Allah, the externally Besought of all!

He begetteth not nor was begotten.

And there is none comparable unto Him."

In the hünkâr mahfili there is no staircase leading to the interior of the mosque. The entrance wall at the north-east side has three windows placed in the recessed area of the relieving arch (fig. 84). They have Baroque frames. The door, which is set beneath these windows, opens to the hünkâr mahfili entrance. This rather small door is spanned by a lintel. This mahfil has a simpler interior than the outer entrance (figs. 30, 31, 32). The structure of the hünkâr mahfili is fully developed in later periods, for example in the Sultan Ahmet Cami and the Yeni Cami (figs. 78a, pl.10). In the latter, the mahfil is built separately and used as a qasr.

b. The walls of the courtyard entrance (figs. 85, 86, 87)

These walls of the interior are heavily composed because of the kadinlar mahfili. They require that they should be thicker and stronger than the other three walls, 1.86m. thick. It is divided into five equal parts by four engaged-wall piers and two corner piers (pl. 14). The middle part consists of the entrance and part of the kadinlar mahfili (fig. 85). The piers make the vertical separation. The gallery, which is in the three central units of this particular wall, is divided by these three sections horizontally in the middle. The result is an effective harmony between the vertical and the horizontal lines. The two corner niches each have two windows at floor level. In this unit, the handling of the illumination is completely different from

that of the qibla wall because of the gallery.

The kadinlar mahfili (figs. 85, 86, 87)

This mahfil is set over the entrance wall of the son cemaat yeri. It is divided into three units by the engaged wall piers. Thirty-one steps, each approximately 22cm. high, lead to the mahfil. The mahfil measures 3.73m. by 16.39m. Its marble grille, which is composed of broken headed arches of the 'Bursa' type, is 48cm. in height, 30cm. in width, 30cm. in width (fig. 86). The frames have a double moulding. In the mahfil there is a small door, which leads to the roof of the mosque.

The paintings of the courtyard entrance (fig. 85)

The spandrels of the doorway arch and the side arches are decorated with spirals, rumis and two-sepalled palmettes. The areas between the two upper cornices over the engaged-wall piers are oovered with geometrical patterns (fig. 85). The main form is octagon. A kufic-like border frames the composition. The guilloche patterns from the corners produce a six pointed star in the middle, the contours of which are painted in red. The upper part of the wall and the soffits of the arches are painted in red and white, as an imitation of the brick and the marble (fig. 86). The spandrels have panels. The baskets, ribbon-like leaves and heavy scrolls, which are painted over the red base, show strong Ottoman Baroque characteristics. The red painted outlines of the muqarnasses complete the decorative aspects of the wall.

The müezzin mahfili (figs. 85, 88) Doesn't seem to appear in Plan II?

This mahfil, which is set on the opposite of the north-west ?

attached to the massive pier, is entirely made of marble (fig. 85). The frame of the marble floor is carried by a pier and eight marble columns. A wooden floor is superimposed upon the marble floor. The octagonal columns are 2.20m. in height and are set in the podium, which is 24cm. high. Their pahli base is about 28cm. high. The span between the columns is 1.53m. wide. The wooden floor of the mahfil is supported by the consoles, which are 3.46 m. in height, and 10cm. in depth. The marble grille, decorated with pointed arches, is 1.02m. in height. Seven steps lead to the mahfil proper, which is 6m. by 5.6m. The massive shaft of the pier and the slender elegance of the müezzin mahfili not only gives contrast, but also a well-established interior elevation (fig. 88). This is demonstrated particularly by the use of different materials: the well-dressed stone and the smooth finished marble.

c. The south-west and north-east walls (figs. 88, 89)

The construction of these walls is identical. The four engaged-wall piers divide this unit into five sections (pl. 14). The flat portal, which has a double hood-moulded frame, is constructed in the middle unit of the recessed area of the pointed relieving arch. The north-east wall has an inscription (fig. 90). This hadith says: "Carry out your duty to God, so as to be obedient". The wall is again divided horizontally into two parts (fig.88) by a bolectioned cornice, which carries the broken-headed arched marble grille of the upper false gallery. The upper recessed unit, between the pointed relieving arch and the false gallery, has three windows. The other side units, grouped in twos,

have three upper windows and two lower windows, which are similar in size to those of the lower rectangular windows of the qibla wall, and courtyard entrance walls (figs. 72, 85). Above this part, there is a bed moulding, which separates the roofing elements from the wall part. In the span of the upper relieving arch three windows are set. The rhythm continues from the floor level to the summit of the dome (fig. 89). In this mosque, Sinan has sought to convey by his arrangement of the domes in relation to the floor space linked by four massive central piers, the expression of togetherness between man and God.

The paintings of the loggia walls (figs. 88, 89)

The spandrel fillings of the portal are decorated with spirals, and rûmis framed with mouldings in a red base. The lower windows have gablets framed with three sepalled palmettes (fig. 88). The soffits of the relieving arches are again painted alternately resembling a marble and brick. The upper windows have simple painted frames. The spandrel fillings between the relieving arches, decorated with the baskets, ribbons, three sepalled stylized palmettes, are scattered around the red base. The upper muqarnas cornice and the corbels have both red contours. The uppermost area between the relieved arches of the exedra and the middle releiving arch are filled with triangular shaped panels. The bouquet of Baroque-styled flowers produces the rhythm.

It is a fact that the lower parts of the walls are always decorated with floral motifs, in rather Classical Ottoman style, while in the upper area the Ottoman Baroque patterns were used. This probably indicates the periodical differentiation of the

execution.

II The engaged-wall piers (figs. 73, 86, 88)

There are sixteen wall piers and four corner piers in the interior of the mosque (pl. 14). They are different in size. The engaged-wall piers of the qibla wall are 52cm. deep, while the courtyard entrance engaged-wall piers are 1.86m. deep (figs. 72, 86). The south-west and north-east engaged-wall piers measure 2.61m. wide, 55cm. deep (fig. 88). These engaged-wall piers rise to the same height as the four central piers from the floor to the horizontal cornices.

The continuation of the action is again established by this particular cornice which runs all round the sahn proper and the engaged-wall piers (fig. 72). The recessed engaged-wall piers along the three walls, that is the qibla and the two loggia walls, are related to one another by the lower pointed arches without anyinterruption. But the relationship is entirely different in the arrangement of the son cemaat yeri entrance wall. Here, the thick wall-piers are joined to each other by the span of the pendentives of the semi-dome (fig. 85). All the engaged-wall piers are left plain. This plainness produces a sense of solidity. The contrast between the wall-surface pierced by the windows and the solid engaged-wall piers is well balanced. The central piers, the engaged-wall piers and the wall unite to act as a single structure.

In its conception, without the later embellishments, the structural beauty of the interior combines with the elegant materials, i.e. marble and stone, to create a feeling of manliness in a form not complimented by the use of decorative elements which might have softened andintroduced a more sensitive feeling (fig. 87).

III The piers (figs. 72, 88)

The four massive unequal sided octagonal piers, which are set at 16.52 m. intervals, are 12m. high. The circumference of each pier is 12.75m. These four piers, each having a single corner facing each other, are smoothed by the niches, measuring 7.10m. in height, 94cm. in width, and 94cm. in depth (fig. 72). The transition between the flat surface and the niche depth is arranged by a five-tiered muqarnasses. The small inscription within a fret-frame is set above the niche. These inscriptions consist of the name of Allah, which begins from the right pier of the qibla side, continue to the opposite left pier with the name of the prophet Muḥammad, and finish with the names of the first four orthodox caliphs: Abū Bakr, ʿUmar, ʿUthmān and ʿAlī, at the two piers of the courtyard entrance side. The part between the bed-moulding cornice and floor level, which is made of well-dressed stone blocks, is two-thirds of the total height of the pier. The fluted part of the pier begins above the plain blacking course which is 8m. high from the floor level. There is a cornice above the fluted part leading into the pointed arch. This cornice consists of serrated-leaves running along the interior of the mosque (figs. 72, 91). This horizontal cornice emphasisss the interior clock-wise movement. The contours of the fluting are painted in red. From the aesthetic point of view these painted outlines might belong to a later period, that is to say, they are Ottoman Baroque.

The centralized unity is further stressed by the using of these piers. The part between the horizontal cornice and the floor level, which is made of well-dressed stone blocks, is two-thirds of the total height of the pier. This provides a wider space to the

interior, which was never achieved before.

The piers are the most important supporting elements, especially in the Ulu Cami type mosques. In the early Ottoman Ulu Camis the internal support was always provided by the piers, and never by columns. The piers are square or hexagonal in shape, however they are always symmetrical, for example in the Zincirli Kuyu Cami (at the end of the fifteenth century (pl.20). The piers were used in the hexagonal based mosques, are polygonal in shape, for example in the Üç Şerefeli Cami in Edirne (841-51/ 1437-47) two huge piers spanned 6m. apart (pl. 5). The piers of the Beyazid Cami (completed in 911/1505) (pl. 10) are one step behind those of the Şehzade. Here the piers have right angles. These stop the clockwise movement within the side loggias and the central unit. However, in the Şehzade the massive piers have only one right angle diagonally facing each other. This provides more emphasis to the central space unit, measuring 16.52m. by 16.52 m. The other ridge-ribbed edges face to the semi-domed and a small single domed areas (pl. 14). This emphasises the clockwise movement from one exedra to the other one as well. Therefore, these side parts have a continuous circle movement. In the side parts the movement is the first importance, while in the middle unit the emphasis goes to the space. In the early examples of the four semi-domed mosques, for example in the Fatih Paşa Cami in Diyarbakir (924-27/1518-20) (pl. 12), the piers are square in shape. Therefore, the outer circle movement does not exist. In later buildings, such as the Selimiye Cami (pl. 17), the two-thirds of the total height of the pier is double moulded, while one-third has simple moulding. However,

this does not effect the interior space, because the piers are arranged to provide a hexagonal plan. Therefore, the piers have no influence whatsoever on the interior space.

In the Sultan Ahmed Cami (1015-25/1609-17) (figs. 78a, b), the four circular piers, the so-called 'elephant leg', rise massively towards the great pointed arches. The harmony of the interior is obstructed by these piers, which are without scale.

The upper Zone

The pointed arches[1] (figs. 85, 88, 91, 92)

The pointed arches, which span 16.52m., carry the thrust of the central dome (fig. 92). They spring above the upper

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[1]The pointed arch consists of similar arcs struct from two or more centres. Their centres may fall above or below the base line of the arch. The origin of the pointed arch was the subject of several discussions. No true pointed arch is known in the ancient Near East before the Sāsānians. However, on the top of the Tāq-I Kisrā façade there is an arcade which appears to be composed of pointed arches. They consist of a few large bricks linked one to another at slight angles, therefore the continuous transmission of the thrust which is a curved line, an essence of the pointed arch, is absent here. The earliest surviving pointed arch is that of the Qāsr-i Ibn Wardān in Syria, dated 561 A.D. Mr. Butler says as follows: "Many of the arches in Wardān are not semi-circles, but are two centred, and consequently bluntly pointed". H. Butler, Ancient Architecture in Syria, Sect. B. Northern Syria, p.28, pls.1-7. See also in Creswell, op.cit. I, part II, pp. 441-44. Herzfeld claims that "Not a single pointed arch can be shown to exist in any pre-Islamic buildings in the whole East. As an architectural principle the pointed arch is completely foreign to the pre-Islamic period", Herzfeld, op.cit. II, p.92. However, Littmann supports Butler's theory, Littman, Deutsche Literaturzeitung (1921), I, 1012. The earliest true pointed arch in Iran is in the Tārīkhāneh of Dāmghān (143/760), E. Schroeder, Survey III (1964-1965), pp. 933-4. Like the arches of Wardān they are only slightly pointed (this is due to the later restoration, originally these are elliptical arches as can be seen in the old photographs), having been stuck from two points just a little way apart, and have no elegant aspect whatsoever, unlike the later examples. The Syrian two-centred pointed arch is built of stone blocks. This gives a structural advantage by making it possible to build higher vaults than those made of brick. This type of arch must have been seen in Egypt and Syria by merchants

horizontal cornice above the fluted shaft of the pier and rise to the ring of the dome (fig. 91). Their voussoirs are painted red and white in order to give the appearance of brick and marble effect (fig. 85). The soffit of the arches is divided into two equal parts by a belt which runs from one pier to the next one. It consists of five rosettes and straw-like panels painted in rich red (figs. 85, 91). The contrast between the height of the four central pointed arches and the side lower arches is very strong. This differentiation in height emphasises the movement in each direction from the central dome. The lines from the floor level to the ring of the dome come without any impediment. However, in the Sultan Ahmet Cami (figs. 78a, b), the pointed arches

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and pilgrims, even before the Crusaders. In Central Asia, at Kizil, Kumturah and Khotcho, various examples of pointed arches can be found, belonging to the end of the eighth century, Creswell, op.cit. I, part II, pp. 441-44. These examples in Central Asia indicate that the tradition of the pointed arch goes back to much earlier periods than in the Middle East. The forms of pointed arches are to be found in the niches of the temples of the early Buddhist traditions. Remove the images, and the sculptured ornament of these niches, and one can easily find an ordinary arch as well as stilted or pointed forms. However, these arches have a decorative character, E.B.Havel, Indian architecture (London, 1913), p.91, and P. Brown, Indian architecture (Buddhist and Hindu periods) (Bombay, second edd., p. 55. Choisy attributed the origin of the pointed arch to the Roman period like Rivoira. But, in effect, no proper pointed arch form is to be found in Roman architecture, Choisy, Histoire de L'Architecture (Paris, 1899), tome I, p.514. Rivoira, Muslim Architecture its origin and development (Oxford, 1918), pp. 135-48, 53. Pointed arches were only used in Armenia at the end of the tenth century, J. Baltrusaitis, Le problème de l'ogive et L'Arménie (Paris), p.8. With the Seljuks of Iran, the pointed arch form has gradually gained its proper form. Their pointed arches have a narrower springing line than the previous examples in Iran. The Ottoman pointed arch has two centres and their abutments are much higher than Seljuk pointed arches, while the springing line is wider.

have ogee-like profiles. This appearance breaks the movement from one pier to the other.

The zone of transition (figs. 85, 91, 92, 94)

a. The pendentives[10]

The thrust of the dome is carried by pendentives (figs. 91, 92). These concave transitional areas have a rather weaker appearance, due to the firm piers and wider spanned arches (fig. 85).

The painting of the pendentives (figs. 85, 91, 92)

These are richly and identically decorated, except for the inscribed medallions. They are framed with floral motifs. This frame, which runs along the ring of the central dome and the extrados of the pointed arches, consists of eight petalled roses, serrated leaves, and carnations on a red base. The motifs are linked to one another by their stalks. The inner and outer edges of the frame are emphasised, each by a white line. The character of this frame is very similar to that of Sultan Ahmed (fig. 78b). Here roses, pomegranate flowers and carnations are used. The

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[1] A pendentive is a concave spandrel leading from the angle of two walls to the base of the dome, J. Fleming, H. Honour and N. Pevsner, The Penguin Dictionary of Architecture, second ed. (1972), p.215, and also see D. Jones and G. Micheal, "Squinches and pendentives Problems and Definitions", AARP, Art and Archaeology Research paper (London, June 1972), pp. 9-25. After the Romans, the greatest achievement of the Byzantines was carrying a dome over a square base by pendentives in a larger scale, for example the St. Sophia (pl. 2). Generally there are two types of spherical pendentives. In the first type the pendentive and the dome belonged to different planes and curves, for example in the Şehzade Cami (fig. 91). In the second type, the horizontal course of bricks continued to the apex of the dome. However, the brick courses of the spherical area of the dome are smaller than the pendentive fillings. The Selçuk of Rûm generally used Turkish triangles, D. Lamb, The annual of British School of Athens (1914-16), No. 21, while the pendentive transition was widely used by the Ottomans.

details of the patterns are more carefully executed than those of the Şehzade. This indicates the later date. The Şehzade's motifs are more stylized and executed carelessly. Here, probably the artists tried to imitate the Sultan Ahmet's motives. The triangular areas between the frames are composed of a medallion in the middle and three small triangles attached to it (fig. 85). Each of these is framed with a heavy red line, which finishes with Baroque styled palmettes. The side three panels again have red borders. Between the red lines and the middle decoration of the triangular area there is a second border, painted in white. The inner panel has garlands, heavy leaves, and round beads painted on a red base.

The middle pattern, which is framed with a red circle, is composed of three interlacing Greek crosses formed by celi thuluth writing on a red base again.[1]

The crosses provide two more small interlacing crosses at the middle (fig. 85). These two crosses produce an eight-pointed star in the middle. The inscription begins fromthe qibla side and finishes on the south-west side. Each verse is repeated three times.

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[1] Naskhi and thuluth were followed by a large type of cursive script called celi (Jeli), Aslanapa, op.cit., p. 323; C.E.Arseven, L'art Turc - depuis son origine jusqu'a nos jour (Istanbul, 1939), p.246, fig. 415. This is a form of writing generally used for the decoration of religious edifices. The celi script first created by Yāqūt of Amasya, a Turkish calligrapher, who was the secretary of the last 'Abbāsid Caliph, Al Musta'şim (640-56/1242-58). With Sheikh (Şeyh) Hamdullah (died 926/1519) it developed its classical style. His influence has continued throughout the centuries in Ottoman calligraphic art. Ahmet Karahisarî, who developed the celi script by using thick strokes, was responsible for the writing over the dome of the Süleymaniye Cami. At the end of the eighteenth century, hattāt Mustafa Rakim Efendi gave a new form to celi by using different forms.

It says (fig. 90):

"Oh, the Compassionate, Oh the Generous (fig. 94)
Oh,the owner of the judgment day, Oh, the Forgiveness (fig. 92)
Oh, praise be to God (fig. 95)
Oh, you who give relief (fig. 85)"

The decoration of the pendentives in earlier mosques, for example in the Beyazid Cami (fig. 92a) are entirely different. The triangular panel is completely filled with classical Ottoman styled spirals, roses, rûmis, and carnations,very similar to thos of the minbar panels of the Şehzade (fig. 79). This explains that the paintings and calligraphies of the Şehzade are works of a later date.

b. The exedrae (figs. 72, 83, 84, 85, 96 (pl. 14)

A difficulty arises in fitting the curves of the exedrae within the square lines of the ground plan (pls. 14, 15). This was solved by Sinan in the Şehzade Cami by splaying back the central massive piers, in order to provide more space behind the wide pointed arches for the proper build-up of the semi-domes and this device was generally adopted. The curves of the exedrae left only small spandrels (pl. 19) to be supported and these were filled out with muqarnasses, projecting from the walls below.

The semi-domes of the Şehzade Cami rest upon two identical exedrae at each side (figs. 72, 84, 96). Because of the thickness of the kadinlar mahfili, the semi-dome of the son cemaat yeri entrance has three exedrae. The two side exedrae are identical with the previous ones. The middle exedra, which is rather smaller than the other two, has three true windows. The zone of transition is arranged by three-tiered muqarnasses, and the bed

moulding cornice. This exedra has a lower profiled relieving arch than the other two. In order to give identical height, the extrados of the relieving arch have two-storeyed two-coloured frames (figs. 84, 85). The zone of transition from square to semi-circle is arranged by the five-tiered muqarnasses, the bed-moulding cornice and the corbels at each side (fig. 88). The contours of the muqarnasses are painted in red. The top tier of the muqarnasses consists of triangles, while the second row has small consoles finished with scallop designs. The muqarnasses end with a single console at the bottom (fig. 88). The filling is thicker in the middle, gradually narrowing at either side. The exedra stands upon the horizontal cornice, which runs along the mosque interior. The arch of the exedra rests over the corbel on the wall side, and a pier on the interior part, and links one to another by an iron beam. The thrust of the exedra is partly carried by the engaged-wall piers, and the central free-standing pier with the help of lower pointed arches (fig. 91).

In the Mihrimâh Sultan Camiin Üsküdar (955/1548), Sinan used the exedra system in a different way (fig. 92b). The semi-circular arch of the exedra rests upon the corbels which project more than usual from the wall. The muqarnasses carry the thrust of the exedra. However, here, their appearance seems better than in the Şehzade, because they are built on a smaller scale.

In later examples, for example in the Sultan Ahmed Cami (figs. 78a, b), the exedra system is not used very successfully, unlike that of the Şehzade (fig. 88). Here, the projection of the buttresses, first seen in the Süleymaniye Cami (pl. 16), is

repeated, and they extend on all four sides of the main dome. This makes it possible to build three exedrae instead of the usual two. In previous mosques the third exedra was represented merely as a wall arch (see above, p. 1) (pl. 14).

To the candidate it appears to be of weaker aspect and produces a more complicated roofing system, which most Ottoman architects tried to avoid.

The semi-circular arch of the Şehzade's exedra is alternately painted in red and white. The white parts are lined with black in an imitation of layers. The spandrels between the exedrae are identically decorated (figs. 91, 92). A white border frames the triangular panel. This panel consists of an Ottoman Baroque styled bouquet of garlands; heavy vine scrolls, and ribbons cover the rich red base.

Each exedra, which has two framed windows, culminates in decorative gablets (fig. 88) which consist of heavy-lined scrolls and end with three-sepalled palmettes. The third window is a false one. It is there in order to provide symmetry.

The decoration of the exedrae

The top decoration of the exedra, which is again identical on all façades of the exedra, consists of a three-tiered frame and an inscription panel in the middle (fig. 96). The outer tier has an alternately black lined lozenge and circle motif. These patterns are stylised flowers with hooks or stems. They are very similar to those of Ottoman carpet patterns[1]

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[1]Aslanapa, op.cit., pp. 291, 30, patterns 7-10.

of later times. It seems however that, like the other decorative paintings, they are not well executed. The second border has bigger alternating patterns than the previous one. The patterns are stylised flowers and interlacing garlands. The third, thinner, border is comprised of chainpatterns on a white plaster coat. These decorative panels finish over the soffit of the semi-circle arch of the exedra (fig. 96).

The inscriptions of the exedrae (figs. 85, 86, 92)

These are Qur'ānic quotations from sūrah II; they begin from the right exedra of the mihrāb and continue to the left (figs. 93, 96), and finish at the south-west exedra. They are written in the thuluth style of Arabic. The letters are linked one to another at the top (fig. 74, number six).[1] They read:

"In the name of Allah, the Beneficent, the Merciful.

The messenger believeth in that which hath been revealed unto him from his Lord and /so do/ the believers. Each one believeth in Allah and His angels and His scriptures and His messengers. We make no distinction between any of His messengers - and they say:

We hear, and we obey. /Grant us/ Thy forgiveness, Our Lord. Unto thee is the journeying.

Allah tasketh not a soul beyond its scope. For it /is only/ that which it hath earned, and against it /only/ that which it hath deserved. Our Lord! Condemn us not if we forget, or miss the mark! Our Lord! Lay not on us such a burden as

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[1] Pickthall, op.cit., sūrah II, p.64, verses 285-6.

thou didst lay on those before us! Our Lord! Impose not on us that which we have not the strength to bear! Pardon us, absolve us and have mercy on us, Thou, our Protector, and give us victory over the disbelieving folk."

8. The sūrah finishes with "Sadaqa Allah al ʿAzīm al jabbār wa ballagh rasūl ha al Mukhtār." It reads: "Allah the Great and Mighty has told the truth and His chosen messenger was delivered /the message/."

The roofing elements

a. The small corner domes (figs. 83, 84)

These corner domes stand over a square area, which lies between the engaged-wall corner piers, the single pier and the engaged-wall piers (figs. 83, 84) (pl. 14). The pointed relieving arches carry the zone of transitin. The transition from square to octagon is arranged with four muqarnass-filled squinches. The zone of transition from octagon to circle is composed of four blind niches (fig. 84). These transitional units are set upon the corbels. Every corner dome has a single window. These corner domes are identically decorated. The squinches and the blind niched arches have red contours. The spandrels are decorated with Baroque bouquets (fig. 84). The dome itself has an eight-petalled flower in the middle. The area between the outlines of the flower and the ring of the dome consists of interlacing thin scrolls shaped like three-sepalled stylized palmettes over a rich red base. In the centre of the dome there is a medallion.

b. The semi-domes (figs. 92, 94, 96)(pls.14-15)

Four semi-domes, augmented by two exedrae each, expand the main dome to rest on the outer walls. The thrust of the semi-dome is carried by two exedrae and a relieving arch in the middle (fig. 96).s The semi-domes have nine windows. They are framed with two mouldings painted in white, and culminate in decorated gablets, which are identical to those of the exedrae (fig. 96).

The painting decoration of the semi-domes (figs. 92, 95, 96)

All the semi-domes are identically decorated (fig. 88). The decoration is composed of four frames. The first frame, which is wider than the others, is comprised of palmettes and circles alternating along the hemispherical surface. The three-sepalled palmettes finish with lozenge-shaped tassels and lances (fig. 96). This frame is finished with palmette figures. The other pattern has two discs and one oval at the bottom. The second frame has heavy black lined zigzags. The third one consists of two-sepal palmettes with clef-base, while the last is thinner than the other three and is comprised of dotted-chains.

The inscription of the semi-domes

The middle circle of the decorative panel is filled with writing in thuluth style, which ends with star-shaped decoration (fig. 96). The darker red background produces a contrast with the white letters. The sūrah Al Baqara 'Cow' begins from the miḥrāb semi-dome, continues to the north-east and north-west semi-domes, and finishes in the south-west dome figs. 85, 88, 95, 96).

It reads:[1]

"In the name of Allah, the Beneficent, the Merciful.

And verily ye used to wish for death before ye met it /in the field/. Now ye have seen it with your eyes!

Muḥammad is but a messenger, messengers /the like of whom/ have passed away before him. Will it be that, when he dieth or slain who turneth back doth no hurt to Allah, and Allah will reward the thankful.

No soul can ever die except by Allah's leave and at a term appointed. Who desireth the reward of the world, We bestow on him thereof; and who desireth the reward of the Hereafter, We bestow on him thereof. We shall reward the thankful."

c. The central dome (figs. 91, 92, 93)[2]

The central dome of the Şehzade is 19m. in diametre, which is half that of the square prayer hall (38m. by 38m.) and 37m. in height up to the key stone. We may presume that the height, 38m., related the proportions, as is usual in Ottoman architecture. The one and a half brick thick dome rests upon

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[1]Pickthall, op.cit., sūrah II, pp. 82-3, verses 143-5.

[2]A dome is an architectural form for a roof covering, circular or polygonal in plan, and half circular segmental, or half polygonal in section. A dome is often supported by a cylindrical substructure known as a drum. Where the dome rises from a non-circular base, it is usual to make transition from polygon or square base to the circular dome by pendentives, corbelling or squinches. Our modern word 'dome' originates from the Greek and Latin 'Domus', Pevsner, op.cit., p.79, "In Roman architecture, a house for a single well-to-do family, as distinct from the huts or tenements of the poor and the paartment house (insulae) of the middle class." For centuries, apparently, 'dome' was applied to any outstanding and important 'town-house', New English Dictionary on historical principles, (Oxford 1897), III, pp. 592-3. In ancient Italy, Syria, India and Islam words for

the pendentives. It has a drum, on which twenty-six windows are set. The thrust of the main dome is partly carried by four semi-domes and four massive piers with engaged-wall piers (figs. 92, 94). Although the dome is not large it gives a feeling of lightness as a result of the elegant proportions of

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house, tent or primitive hut, for example kuliibe, vihāra, and qubba came to mark a dome or a domical structure. The word qubba indicates the various meanings as "a qasr saray (palace) or cami, G.P.Badger, An English-Arabic Lexicon (London 1881), p.262. The earliest domes were probably built on the ring system, as in the Eskimo igloo. A notable earlier survival example is the Mycenaen treasury of Atreus dated the fourteenth century B.C., D.E.Strong, The Classical World (London 1965), fig. 5. The Assyrian architects were acquainted with both hemispherical and oval domes, as is shown by the well-known bas relief of Koyuncuk (Ninevah), discovered by Sir A.H.Layard, A second series of the monuments of Nineveh, pl.17; H.R.Hall, Babylonian and Assyrian Sculpture in the B.M. (1928), pl.16. There were many different religious beliefs associated with the dome. With the Christians, who inherited this belief, the dome was considered to be a God-given structure. In Syria, a dome combined with Hellenistic ideas regarding the Tholos and Omphalos, and with the Roman conceptions of the dome as a mortuary symbol. Because the location of Syria was in the middle of the trade routes to the East, the older domical beliefs of India (stupa), which went back to similar primitive dwellings, might have been influenced by the Syrian domed buildings. A question arises: what is the origin of the dome? According to some art historians, for example Strzygowski, the wooden structure originated from the primitive wooden dwellings of Central Asia, a square building with a wooden dome built by corbelling, that is placing short wooden beams across the angles of the octagon thus formed and continuing so. J. Strzygowski, The origin of Christian church art (Oxford 1923), p.51, and L'Ancien art Chretien de Syria (Paris 1936), p.39. This type of dome can still be seen in the village-houses of Anatolia. According to Creswell the Islamic wooden dome went back to its probable prototypes in Syria, Creswell, op.cit., I, pp. 83-7. However, the wooden dome has left very little archaeological evidence. The people in northern Iran had adopted this type at a very early date and, since wood is scarce in this part, they had used sun-dried bricks instead. From here, this type has passed into Armenia, and there has been transferred into stone. There are several types of domes, the double-shell domes, the bulbous domes, and the usual hemispheric domes. The Selcuks used the dome in front of the qibla wall in order to provide an emphasis to the mihrāb. However, the Ottoman usage of the dome is totally different. They used domed roofing elements in every possible way. Without the dome, their architecture would lose its proper meaning.

of the pendentives (compare the more abrupt effect of the pendentives with that in the Sultan Ahmet Cami (fig. 101). There is uninterrupted movement from the floor level to the summit of the dome. The circular movement between the corner domes and the dome in the middle can be easily observed in the longitudinal section (pl. 15). A square within a square system is clearly visible (pls. 14, 15). The height of the piers surmounted by pointed arches provides the dome with a feeling of greater height than it actually has (fig. 94). The omission of the usual galleries produces a pyramidal appearance.

The decorative paintings of the central dome (figs. 91, 94, 98)

The dome has five concentric framed decorations in the middle (fig. 94). The drum has a red frame just above the window level. Above this frame, there is a band consisting of two alternating patterns (fig. 92). The bigger pattern has two palmettes placed one above the other. The upper design consists of three-sepal palmettes linked one to another by scrolls on either side. The small pattern has one big and one small interlacing palmettes. They produce lozenges in the middle.

The outer frame of the middle panel is thicker than the other four. It is again comprised of alternating patterns on a white plaster coat (fig. 98). Their identical bases consist of honey-suckle designs. The pattern, which has a darker framing-line, has two palmettes. The lower pattern, which is framed with white scrolls, is composed of a three-sepal palmette with a cleft-base, while the upper one has a three-sepal palmette with a notched-base on a pale blue base. The second pattern, which begins between

the honey-suckle bases, has three motifs. The lower pattern comprises two-sepal split palmettes with a mono-base, while the middle one has a three-sepal palmette with a mono-base. The upper design has a three-sepal palmette with a notched-base. All palmettes are framed with scrolls producing bulbous shaped motifs (fig. 98), which link one to another by their stalks.

The second frame is composed of inscribed cartouches over a blue base. These cartouches are further decorated with a bunch of flowers and two-sepal split palmettes with a mono-base. The areas between the cartouches are filled with basket and dot designs. All frames are divided from one another by darker heavy lines. The frame, which is placed between the inscriptions, comprises alternating pomegranate blossoms and pumpkin flowers in a very naturalistic way painted in pink, blue, and white. The medallion, which has a circle in the middle, further produces three palmettes and three unusually shaped polygons. The areas between these motifs are filled with scrolls. The insides of the palmettes are ornamented with crescent motifs, while the others have eight-sepal daisies. Between the outer ring of the dome and the outer frame of the middle panel twenty-four cartouches are set (fig. 94). These cartouches have a disc in the middle. Two mirror-imaged palmette-like motifs are placed each side of the disc. The disc is composed of daisies painted on a blue base. The cartouches have scalloped frames. Because of these cartouches, the dome has a chandelier-like appearance (fig. 92).

The inscription of the central dome (fig. 98)

The inscription is in thuluth. The outer inscription reads:[1]

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[1]Pickthall, op.cit., sūrah 17, verses 1-2, p.282.

"In the name of Allah, the Beneficent, the Merciful.

Glorified be He Who carried His servant by night from the Inviolable Place of Worship /Mecca/ to the far Distant Place of Worship /Jerusalem/ the neighbourhood whereof We have blessed, that We might show him of our tokens! Lo! He, only He, is Hearer, the Seer.

We gave unto Moses the Scripture, and we appointed it a guidance for the children of Israel, saying: Choose no guardian beside me."

The entire sūrah one, Al-Fātiḥah, is given in the inner circle, followed by the calligrapher's name, Al-Hayārā. (The name of the calligrapher has not beentraced to an identifiable person.) It reads:[1] (fig. 100)

"In the name of Allah, the Beneficent, the Merciful.

Praise be to Allah, Lord of the Worlds,

The Beneficent, the Merciful.

Owner of the day of judgement,

Thee /alone/ we worship; Thee /alone/ we ask for help.

Show us the straight path,

The Path of those whom thou hast favoured;

Not /the path/ of those who earn Thine anger nor

of those who go astray."

The Illumination system of the interior

While in a church relative darkness may be acceptable or even desirable as creating a mystical atmosphere, in a mosque a greater degree of illumination is favoured since Muslim sentiment prefers not

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[1]Pickthall, op.cit., sūrah 1, whole verses, p.21.

to see shadows while performing the ritual prayer. Sinan arranged the illumination of the Şehzade in a masterful way. The ideal mosque illuminations can be easily solved in a square plan. In the Şehzade, the light comes directly from the roofing system which illuminates the interior equally (fig. 96). The roofing elements of Şehzade have eighty-one windows, which give the feeling of a huge sky-like chandelier (figs. 93, 96). There are thirty rectangular windows on the lower part of the square interior. The qibla wall has fourteen windows in the upper part. These windows have gypsum grilles which indicate the later period. In the classical Ottoman epoch, stained-glass windows were always used in the qiblawall. The upper divisions of the south-west and north-east walls have twelve windows (figs. 88, 89). Because of the outside galleries, which made the interior darker, the lower rectangular windows have iron-bar gablets.

The north-east wall has only two windows apart from the usual lower rectangular windows (measuring 84cm. by 1.45 m. (fig. 44). Judging by their unusual shape, they might have belonged to the later period. The upper wall surface has six windows (fig. 85). According to Evliya Çelebi the mosque is illuminated at night by eight thousand oil lamps.[1]

The illumination system of the Süleymaniye is again arranged by the windows over the roofing elements. There are thirty-two windows in the drum of the main dome, thirteen in each semi-dome, and five in each exedra, while the Şehzade has eighty-two windows. The roofing area of the Süleymaniye, which is bigger than the Şehzade's, is 26.50m. in diametre (pl. 16). Therefore the

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[1]Evliya Çelebi, Seyahatnamesi, I, p.169.

windows of the Süleymaniye are not enough for the illumination of its vast interior. The area in front of the qibla wall has seventeen luxed light, while the Şehzade's mihrāb area produces twenty luxed illumination. However the apsis wall of the St. Sophia gives only fifteen luxed light. Even greater illumination can be observed in the Selimiye, that is fifty lux. The mosque of Sultan Ahmed produces the same illumination as the St. Sophia.[1]

The use of pillars in the Ulu Camis makes the interior relatively dark. While the thrust of the roofing elements was partly carried by the outer walls, it was hardly possible to include more windows than necessary. In the Ottoman transitional period (699-907/1299-1502) the use of the Turkish-triangle belt transition was again made necessary by the use of solid walls. After the middle of the fifteenth century, the wide use of pendentives made it possible to have more windows than did previous mosques. Therefore the mosques which were built after the Transitional period are more illuminated than the previous examples. However, the use of the rectangular plan, for example, the Beyazid Cami (pl. 10) or the ters T shaped plan, such as the Atik Ali Paşa Cami (pl. 9), provides less illumination, due to the side galleries or side rooms. The use of the square plan, for example, the Şehzade Cami (pl. 14), or the hexagonal plan, namely the Selimiye Cami (pl. 17), produces an equal and greater illumination, which is ideal for Muslim ritual prayer and had neverbeen achieved before.

Comparative analysis of the Şehzade Cami's interior

The plan of the Şehzade Cami, which gives a square within

1. O. Bolak, Camilerin aydinla tilmasi üzerinde bir araştirma, I.T.U.M.F., 1967, p.28.

a square system, exhibits several new architectural features for the solution of an ideal prayer hall (pl. 4). The first important development is the augmenting of the main dome on four sides by semi-domes. Because of the absence of side divisions, such as galleries, the interior takes all the emphasis below the unified dome area.

Another development is the introductinn of subsidiary exedrae to support the semi-domes, in place of the traditional pendentives. The massive piers and the outer walls are firm enough to carry the roofing system. The strong contrast between the solid piers and the elegance of the main dome makes the interior seem wider. The movement, which comes from the ground level to the apex of the dome, runs without any interruption. The proportions are well adopted. The diametre of the central dome, which is half of the square prayer hall, is 19m. the four massive piers, at 16.52m. intervals, give more space to the inner square.

The arrangements and proportions of the structural elements make the Şehzade Cami one of the most interesting and well planned mosques of the Ottoman Selâtin Camis. One of the most important achievements of the Ottoman architecture which is almost perfected in the Şehzade Cami is the centralized-mosque plan. The subdivision of a given space into smaller sections, each of which could be covered with a dome, was a primary step towards a unification of the space of the interior. The main problem that faced all Ottoman architects was how to avoid numerous supports for all the domes, which also subdivided the space below, interfering with the concept of unity.

In earlier four semi-domed mosques, for example the Çelebi Sultan Mehmet Cami in Dimetoka (pl. 11), the plan provides less unified space than in later, because of the complex roofing. The dome is augmented by barrel vaults on each of the four sides. The outer circle movement is interrupted at each corner, because of the cross-vaulted corner areas. The omission of semi-domes and exedrae provides a complex roofing system and less illumination than in the Şehzade.

In the Biyikli Mehmet Paşa Cami in Diyarbakir the space seems wider due to the use of exedrae and semi-domes (pl. 12). The square piers cut the counter-relationship between the outer square and inner circle. In the Old Fatih Cami in Istanbul (pl. 8) the space is divided by columns. Here, there is an interrupted movement between the side divisions and the inner rectangular area.

In the two-semi-domed mosques, for example the Beyazid Cami (pl. 10), a square within a rectangular system can be easily observed. However, the unity of the interior is still not perfect, because of the side galleries.

The same thing can be observed in the Süleymaniye Cami (pl. 16). The interior measures 69m. by 63m. The dome, which is 26.50m. in diametre, is set upon four massive piers. The exedrae are one-third the size of the semi-dome. The side galleries cover again one-third of the central area of each aisle. These galleries are divided into three parts by two columns. Four corner areas, which in Christian churches are turnedinto side chapels, are cut off from the central part (pl. 16). Therefore the Şehzade expresses the ideal Ottoman mosque-interior, before

the Selimiye, in which the ideal scheme reaches its climax.

In the St. Sophia the roofing area is only in indirect contact with the floor level (pl. 2.). The dome, which is 30.90m. in diametre, rises to a height of 56.08m. The interior of the St. Sophia, which is 76.60m. by 69.70m., is surmounted with a dome augmented by two semi-domes flanked by two exedrae each. The longitudinal extended interior is visually clear. The domed unit is clearly cut off by the side columnar screen. The difficulty occurs in bringing the exterior to a rectangle. The huge supporting buttresses and walls make the exterior solid (fig. 67). This kind of solid exterior could not be seen in Ottoman mosques. For example, the Süleymaniye, which shows the scheme of the St. Sophia, produces a better pyramidal exterior appearance (fig. 68). The wide dome and the immense exterior buttresses of the St. Sophia are sturdy picturesqueness, and these are entirely different fron those of any other mosque. The St. Sophia is not a central typed building whereas the Ottoman mosques.are. Ottoman architects accepted once and for all the necessity of placing a square under a central system. Once a western art historian said: "The unsatisfactory effect of squinch /he actually means the exedrae/ trouble of Şehzade" and continues, "they start up prosaically from the ground and about half way up suddenly break into a systematic confusion of little domes, pill boxes, buttresses, huge semi-domes etc., which pile up into a pyramidal crowned by a central dome."[1]

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[1] M.Charles, "Hagia Sophia and the great imperial mosques", "The art Bulletin XII (1930), pp. 321, 44.

The square plan seems to produce more centralized space than the rectangular scheme. It is structurally impossible to cover such a huge area with a single dome. The middle section, which is generally square in shape, is crowned by a dome augmented by semi-domes and exedrae, e.g., the Süleymaniye and the Şehzade Camis (pls. 14-16). Their main aim is the unity of the faithful.

The introduction of a centralized mosque interior reaches its climax in the Selimiye Cami (pl. 17). Here, Sinan abandoned the longitudinal basilical scheme of the Beyazid and turned to the scheme of the Üç Şerefeli Cami in Edirne (pl. 5). The dome, which is 31.30m. in diametre, rises to a height of 43.28m. It is still one of the largest in theworld. This dome rests upon four elegant piers and four engaged-wall piers, and is extended with five exedrae (pl. 17). Unlike the Şehzade's piers, its huge piers are fluted from floor level to two-thirds of their total height, and one-third is left plain. The arches seem to grow integrally out of the piers. Without any doubt, the Selimiye Cami has the most successful exterior of all Ottoman mosques, while its interior, where Sinan's genius lies in its arrangement, is as impressive as the interior of the St. Sophia.

In later mosques, for example the Sultan Ahmed Cami (figs. 69, 78a, b), the centralized interior plan loses its real character. The interior of the Sultan Ahmet is 47m. by 47m. Its courtyard, which is the largest in Istanbul, measures 71m. by 61m. The dome is 23m. in diametre and rises to a height of 43m. (fig. 101). The thrust of the dome is carried by huge piers. The interior is divided by galleries on three sides, but not on

the qibla wall (fig. 78a.). The four semi-domes, which are less than half the size of the main dome, stand upon two columns each. This is the most important discrepancy between the Sultan Ahmet Cami and the Şehzade. In the Şehzade, the semi-domes, which are half the size of the central dome, rest upon the engaged-wall piers. The preference for the rectangular scheme appears in the use of different types of roofing elements. There are twelve barrel vaults. It seems that the increasing number of exedrae, which is three instead of the usual two, shows a weaker appearance than the Şehzade (figs. 72, 78a). The tremendous size of the 'elephant leg' piers diminishes the proportinn of the moderate sized dome (figs. 78a, b). The blue coloured tiles cover seventy-five per cent of the wall surface. It is logical to say therefore that its beauty lies in its decoration and not in its structure. However, its exterior produces a more pyramidal appearance then that of the Şehzade (fig. 15).

The Yeni Cami, however (pl. 13), which is comparatively smaller in scale, 41m. by 41m. still has agreeable proportions. The dome, which is 17.50m. in diametre, rises to a height of 36m. (fig.16). The central dome is augmented by four semi-domes with two exedrae each, except on the son cemaat yeri side, where the plan of the Sultan Ahmed is recalled by three real exedrae (pl. 13). The piers, which are slender and cruciform in plan, are covered with tiles to two-thirds of their total height. The higher appearance of the central dome effects the interior. The exterior appearance is more close to that of the Sultan Ahmed than to that of the Şehzade (figs. 69, 70).

The proportions of the Yeni Cami are generally well adopted, although the dome appears to be set a little high for its size.

Chapter V

DESCRIPTION OF THE KÜLLIYE

Beside the mosque first described, the külliye consists of the following other buildings: the madrasah, the taphane and the han (pl. 22). These are situated in the north-eastern part of the outer courtyard (dış avlu), while the imâret and the sübyan mektebi are situated on the opposite side of the street to the south-east enclosure. In addition to this, there are several türbes having an enclosure of their own and they are scattered in this area between the qibla wall of the mosque and the south-east part of the enclosure.

Our description of the külliye begins in the north-eastern part with the madrasah, follows with the taphane and the han (figs. 102, 103) and continues clockwise with the imâret and the sübyan mektebi, which are placed on either side of the small street opposite to the south-eastern part of the enclosure (figs. 104, 105). The description concludes with the türbes (fig.106), the çeşmes, the outer enclosure, the muëzzin odasi and the muvakhidhane (fig. 107).

a. The Madrasah (pls. 23, 24; figs. 102, 108)

The madrasah is rectangular in plan (pl. 23), measuring 52m. by 31.88m. At present it is used as a girls' hostel. The building dates from the same period as the cami, and is also the work of Sinan. It was written about by A.S.Ülgen some thirty-five years ago. Unfortunately this publication is not available and

it contains several mistakes, as has been stated by Professor A.Kuran.[1] As far as one is aware, a detailed plan of the madrasah is given for the first time in this thesis. A photograph (fig. 109) taken from the north-east minaret of the Şehzade Cami also gives a clear idea of the plan.

The building has only one entrance, which is in the middle of the south-west side (fig. 102). The large rectangular courtyard is surrounded on all four sides by riwāqs and there is a şadirvan in the middle (pl. 23). These riwāqs are enclosed on three sides, but not on the façade, by a series of hücres (student rooms). These hücres total nineteen in all. In the middle of the qibla side there is a large room, almost square in plan, measuring 6.10m. by 7.08m. It was used as a okuma odasi (reading or lecture hall). This room is larger than the flanking hücres. All hücres are covered by domes and the riwāqs, with the exception of the entrance and the bay, on the opposite side, are roofed likewise (pl. 23).

Description of the façade (figs. 102, 109)

Thewalls are entirely made of well-dressed stone blocks similar to those of the mosque. The façade of the madrasah is constructed symmetrically (fig. 102). The portal divides it into two equal parts. Each side has four rectangular windows (fig. 102). These windows are 3m. in height and 1.56m. in width (pls. 23, 24). Their marble frames are 12cm. thick and have two-dimensioned double-hood mouldings (fig. 108). The gablet of each

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[1] A. Kuran is writing a book on the architect Sinan and his works.

window is formed with a blind ogee arch, while the surface of the gablet is left plain. The windows have iron-bars. At the top of the wall there is a cornice, which is carried by a bolectioned moulding (figs. 102,108). The counter-balance between the horizontal and vertical lines gives the façade a harmonious effect.

The portal of the madrasah (pl. 24; fig. 108) is made of smooth-finished marble blocks which gives an air of dignity to the façade. The rectangular frame of the portal is projected from the wall surface by 24.5cm. and its width is 75cm. It has three double mouldings. The portal measures 223m. in width, 8m. in height and 1.81m. in depth. This frame is 3m. higher than the façade structure (fig. 108). The portal frame and the apex of the façade are linked to one another by a big three-sepal reliefed palmette with a notched base.

The portal frame culminates in the reliefed three-sepal palmettes. This crown-like cornice is carried by the bed-moulding (fig. 102)

The portal niche is placed on the third frame. At the top of the niche the spandrels are again framed with a double hood-moulding, and have projected floral rosettes on either side (fig. 108). The arrangement of the muqarnasses is entirely different from those of the mosque portals (figs. 44, 45, 46, and 108). On either corner of the niche, the muqarnasses are composed of big triangles, and culminate in a horse-shoe arch at the apex. At the bottom of the niche, there are again two rosettes, which are similar in design to those of the upper ones, but smaller

in scale. The four-stepped appearance is clearly visible from the outer surface, while the inner surface produces broken lines (fig. 108). The two-dimensional effect is due to the artistic use of light and shade at either corner of the niche.

The sunken area between the spandrels of the doorway and the upper niche, which is covered with a pink-marble panel, has an inscription. The rectangular inscription panel consists of six bas-relief cartouches which are linked to each other by the shape of three-sepal palmettes (fig. 108). These palmettes are further decorated with small floral rosettes. The thuluth inscription is in Persian.

The inscription of the Madrasah portal reads (fig. 108b):

1. "With the help of Allah, this honourable madrasah is completed and will succour us always."
2. "This madrasah will give knowledge as well as ability to the people who deserve it."
3. With the help of Allah, during our lifetime this madrasah will be the immortal foundation of knowledge and education."

date 954/1547

The doorway, which is 1.48m. in width, 3m. in height and 22cm. in depth, has a joggled-lintel (pl. 24). This lintel is not original. The original lintel might have been set upon the console on either side, which now has no function (fig. 108). The spandrels of the lintel are left plain. This plainness focuses attention on the inscription panel situated above.

Cont'd

The width of the portal is a quarter of its total height. This feature draws attention to the portal in the façade arrangement similar to those of the Anatolian Seljuk portals. Usually as in Anatolian Seljuk hans and madrasahs the portal feature formed almost the only highly decorated part of the building. The whole façade of this structure was included in the composition whose centre was a monumental gate. Here, because of the proportions, this portal is again the central composition in the whole façade arrangement. Only in this sense (not in the decorative sense) is this portal close to the Seljuk portals.

The entrance hall, which is 1.81m. in depth (plan 24, no.2) is covered with a cloister vault (fig. 107). The middle square panel of the cloister vault is decorated with rosettes. The entrance hall gives access to the rectangular courtyard and measures 19.88m. by 31.13m. (plan 23).

The Şadirvan (fig. 110, pl. 25)

A twelve-sided kümbed. The şadirvan is placed in the middle of the courtyard.[1] It has a polygonal plinth 10cm. high (pl. 25). The shaft of the şadirvan is 2.10m. high. Each side of the şadirvan is 60cm. in width and has a double-moulded framed niche with an ogee arch at the apex (fig. 110). The taps are placed on alternate sides. These niches are 58cm. wide, 98cm. high and 5cm. deep. Above the shaft there is a conical roof carried by the bolection

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[1]The Kümbed (tomb) plan can certainly be traced back to the nomadic traditions of the Central Asia, probably to the form of tribal tents, N. Diyarbakirli, Hun Sanati (Istanbul, 1972), pp. 132-204; B.B.Peköz, "Göçebelikten medeniyete geçiç, Türk mimarisinde kümbedler", Ön Asya, no. 17, 1966.

moulding.

The Riwāqs (figs. 110, 111).

The rectangular courtyard which is surrounded by riwāqs and is completely covered with smooth-finished stone-blocks. The pointed arches, which are composed of alternating two-coloured stone and marble blocks, rest upon the twenty-four cylindrical columns over the podium which is 25cm. high (pl. 23, 24). The pointed arches are placed on the axis, have wider spans than the others and have also ogee-like profiles (fig. 111). The bases of the columns are not original and measure 15cm. high (pl. 24). The capitals of the columns are lozenged in shape and the majority of them are not original (fig.111). The simple-chamfered drainspouts (çörtens) are placed upon the spandrel of the arches (fig. 110). Above this, a bed-moulding carries the cornice. The cornice culminates in engraved three-sepal palmettes and runs all round the courtyard. The axial units have higher cornices (fig. 111).

The riwāqs have recently been glazed against weather conditions.

The roofing elements (fig. 109)

The riwāqs of the madrasah are covered with six equal sized domes on three sides, except the entrance and the unit opposite to the entrance, which are roofed by cloister vaults (fig. 109). The riwāqs,which are placed in front of the oḫuma odasi, have four equal sized moderate domes, while the axis is covered with a higher and also larger dome than the other side domes (fig. 111). The riwāqs have four additional domes at each

corner. All domes are entirely covered with lead.

The zone of transition from square to octagon is arranged by the pointed arches and the consoles. Pendentives were used for the transition from octagon to circle. Beyond the riwāqs are a series of nineteen domed hücres (student rooms) on three sides only and not on the façade side, as has already been mentioned (pl 23). Every student room has a chimney.

The okuma odasi (figs. 108, 111, 112, pl. 23), or the reading room, is placed in the middle of the south-east side of the madrasah, and projects from the outer wall (figs. 109-11). The door of the reading room has a marble moulded rectangular frame with a joggled lintel. It is 1.12m. in width, 2.24m. in height, and 99cm. in depth (pl. 24). Above the lintel there is a plain rectangular panel framed with moulding (fig. 111). This rather thick door leads to the interior of the reading room. The inside door has an ogee arched formed frame with two muqarnas designed rosettes above. The room is almost square, measuring 6.10m. by 7.08m. The podium is 38cm. high from the actual floor and is 1.50m. from the door. The okuma odasi has four lower windows rectangular in shape. They are 81cm. in width, 1.54m. in height, and 1.05m. in depth. The upper seven windows have ogee arched frames with gypsum grilles.

The three dimensional rather simple mihrāb niche is placed in the middle of the qibla wall (pl. 23). It measures 91cm. in width, 3m. in height, and 12cm. in depth. There are two small alcoves (hücres) on either side of the room (pl 23). These alcoves are divided into two equal parts by ogee arched frames, formerly the hücre on the left side was used as a fireplace. The

room is roofed by a larger sized dome. The zone of transition from square to octagon is arranged by four blind niches and squinches (fig. 112a) The white plastered squinches which are decorated with scallop patterns are formed by ogee arches frames, consisting of fret designs painted in red. This is hardly recognisable on the photographs (fig. 112a). The squinch is further supported by four tiered muqarnasses. The first tier is comprised of plain panels, while the second tier has alcoves. The third tier is composed of triangles (fig. 112a). The latter have unusually shaped panels. The transition from octagon to circle is achieved by a belt. This belt is composed of five frames. The upper one consists of fret patterns outlined in red, while the second frame has double hood-mouldings. The third one, which is wider than the rest, is composed of moulded framed ogee arched blind niches (fig. 112a) The last frame consists of two sepal palmettes, and is encircled with fret patterns. However, these fret designs are thinner than the first pattern.

This type of squinch was also used in the earlier Ottoman secular buildings, for example in the Fatih Köşkü in Topkapi Sarayi[1] (fig. 112b). Here the transition from square to octagon is arranged by squinches. The squinches are formed by ogee arches and transfer the thrust from the dome to the two intersecting walls. These arches bridge diagonally and thrust continuously. The upper part of the squinches is filled with five thick grooves.

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[1] O.Aslanapa, Turkish art and architecture (London, 1971), pp. 248-9, pl.53) Fatih Köşkü (Kiosk of the treasury) is built by Fatih. It is situated to the east of the third courtyard of the Topkapi Sarayi, and consists of a chamber with a fireplace (ocak) and two domed units side by side, which are hamams.

(fig. 112b). These scallops, which are thicker than the grooves of the okuma odasi (fig. 112a), rest upon four tiered muqarnasses. Here, the first tier of the muqarnasses is thicker, like those of the scallop pattern above. The other tiers of the muqarnasses are pressed between the windows and the side of the wall (fig. 112b). Because of the high drum, there is a rather big gap between these two transitions. The transition from octagon to circle is arranged by a belt as well as the muqarnasses. These muqarnasses are formed by triangles and are linked to each other by zigzags (fig. 112b). This gap between these two transitions cuts off the visual continuation from ground level to the apex of the dome. In the reading room of the Şehzade madrasah, as a secondary transition, Sinan used blind niches instead of muqarnasses and there is no gap between these two zones of transition. (fig. 112a). Therefore there is an unimpeded movement from the ground level to the top of the dome.

The student rooms (hücres) (pl. 23, fig. 109)

There are nineteen equal sized student rooms in the madrasah all together. A comparatively small door, which is 80.50cm. in width, and 67cm. in depth, leads into each of these rooms. The rooms are almost square and measure 3.67m. by 3.33m. They have two windows. The lower rectangular window, which has an iron-bar, is 73cm. in width, 1.31m. in height, and 68cm. in depth (pl. 23). The upper window has an ogee arched frame with gypsum grille. The ocak (the fireplace) is placed on the riwāq side (pl. 23). It has a rectangular shape and measures 84cm. by 45xm. The relatively small dome rests upon four blind niches.

The plan of the madrasah is closer to the Ottoman madrasah plan than to those of Seljuk madrasahs.[1]

b. The Taphane (the guest house) (figs. 103, 113, 114, 115)

The taphane is placed between the madrasah and the han (pl. 22) and is attached to the north-east gate of the enclosure. This rectangular building consists of two identical structures attached to each other (fig. 113). Their façade is on the opposite side to the outer courtyard (figs. 114, 115). This building is used for domestic purposes. Therefore, unlike with the madrasah, there is no necessity to join it to the outer courtyard of the mosque.

Since no dated inscription can be found on the building, our knowledge of this structure owes a great deal to Evliya Çelebi who referred to it.[2]

Due to the bonding system of the walls, and the style and arrangement of the windows, one can easily say that this building belonged to the same period as the mosque itself. The

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[1]The basic plan of the Sunni madrasah is an arcaded courtyard surrounded by student rooms, roofed by either domes or vaults, such as in the Çifte Minareli madrasah in Erzurum (dated second quarter of the thirteenth century), R.H.Ünal, Les monuments Islamiques anciennes de la ville d'Erzurum et de sa région (Paris, 1968), p. 101, fig. 33, and consisting of four lecture rooms. The sunni doctrine accepted four main interpretations of the Qur'ān, such as the Ḥanafi, the Mālikī, the Ḥanbali and the Shāfi' schools, P.K.Hitti, History of Arabs (London, tenth ed., 1970), p.398. Therefore Seljuk madrasahs had four lecture rooms in the form of an open iwān. However, the Ottomans admitted only one interpretation, that of Abu Ḥanīfah, accordingly Ottoman madrasahs had only one lecture room (reading room) usually situated on the qibla side. It is also used as a small mescit. The extreme climate of Anatolia necessitated abandoning the open iwān in favour of a rather small covered room surmounted by a dome. The Ottoman architect, however, used the open courtyard surrounded by the riwāqs and student rooms, although on a smaller scale.

[2]According to Evliya Çelebi, the taphane was built at the same time

is the roofing system (fig. 113). The roofing system is higher than the madrasah (figs. 108, 113), and with its different bonding gives the façade a rather poor impression (figs. 114-5).

The taphane is 41.34m. by 17.88m. The south-west wall of the taphane (figs. 103, 113) is 41.34m. long and is divided into six units by five engaged-wall piers (fig. 113). These units are almost identical and measure 1.78m. in width. The only exception is the fifth one, which is 2.80m. wide. The engaged-wall piers are 1.40 m. in width and 9cm. in depth. Every unit has four windows grouped in twos (fig. 113). The lower windows have rectangular marble moulded frames. These frames are 1.25m. in width and 1.90m. in height, while the windows are 80cm. wide and 1.50m. high. Their gablets are left plain and are formed by an ogee arch similar to those of the madrasah (figs. 102,113). The upper windows have double moulded frames culminating in an ogee shape with the gypsum grilles, while the lower windows have iron-bars. At the top of the wall there is a cornice.

The façade of the taphane (figs. 114,115)

At present the taphane building is in the courtyard of the Vefa Lisesi. It is locked and no permission was granted to the candidate to see the inside. Since there is no plan available our knowledge of the interior depends on the external appearance. According to the roofing system the taphane is divided into two

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as the Külliye. No dated inscription has been found. Evliya Çelebi, Travels, I, p.170, "Bu büyük avlunun etrafında imâret ve medresesi ve mutfağı ve ziyâfet evi ve diğer hayir ve sevab eserleri vardir. Ama hastahane ve hamami yoktur."

rectangular units identical in shape (figs. 114,115). The middle section, which is bigger and higher than either side (fig. 114), has two lower rectangular windows and three upper windows. The lower windows have simple moulded marble frames with iron-bars. Their gablets are left plain and formed by an ogee arch. The two upper windows are placed above the gablets of the rectangular windows, while the third window is situated in the middle of the façade near to the cornice at the top. They have gypsum grilles and ogee-arched crowns at the apex (fig. 114).

The door is placed between the rectangular windows and gives a simple effect. It has a two coloured joggled-lintel. Above the lintel there is a rectangular inscription panel, which is unfortunately left plain (figs. 114, 115). The canopy, covered with lead, is situated between the upper middle window and the door. It appears to be a later addition.

At the top of the façade there is a simple cornice running all round the taphane. The middle unit is divided from the side parts by the small engaged wall piers (fig. 114).

The side wings have four windows grouped in twos (fig.115) similar to those of the south-west wall of the taphane (fig.113).

The walls of the main façade differ from the south-western walls of the taphane (figs. 113, 114). In the main façade on either side of the entrance, the engaged wall pier to the right side is different from that on the left (fig. 114).

In the Ottoman architecture the mortar is invisible (horasan). Here this is not the case, therefore one may conclude that this part is due to a later restoration. If each rectangular wing is divided into halves of equal size, then each half is composed of

a larger central unit with a dome in front and a cloister vault behind flanked on each side by two equal sized domes (figs. 113, 114). This central dome has a high octagonal drum, and opens into a lantern (fig. 114). All domes are covered with lead. The dome, as it appears from outside, rests upon squinches. The small domes have no lanterns. However, from their drums protrudes a chimney. The chimney-stacks are rather short and octagonal in shape. They are crowned with a small cone and have openings at the side for the escape of smoke. They are entirely made of well-dressed stones. The area surmounted with a larger dome was probably used as a summer dining-sitting area, while the small rooms were dormitories.

There is a visible discrepancy between the south-western wall and the main façade of the taphane (figs. 113, 114). The south-western wall is arranged and executed more carefully than the latter. Partly because it is built on the outer enclosure of the mosque and therefore it was constructed to be viewed from the mosque, while the main façade cannot be seen from the mosque. Secondly, the difference between these façades could be the results of restoration.

c. The Han (figs. 103, 113, pl. 26).

The han adjoins the taphane and is placed on the north-east enclosure of the mosque (fig. 113). At present it is used as a large storeroom. It has a rectangular plan measuring 12.60m. by 24m. (pl. 26). The south-western wall, which is 12.60m. long, is divided into two equal units by a single engaged-wall pier (fig. 113). This engaged wall pier is 1.50m. wide and 9 cm. thick. The

corner pier is attached to the taphane and is 1.44m. wide, while the other corner pier is 1.50m. wide. For defensive reasons the recessed units of the side wall have only two ventilation slits instead of windows. The upper cornicebegins in the taphane and continues on the han. The han and the taphane are divided from each other by three-stepped walls on the roof.

Because of the caravans, the han has no opening to the outer courtyard of the mosque.

The caravanserai has an almost square courtyard measuring 17.42m. by 17.88m. The main façade measures 24m. in length. It has three windows 80cm. wide (pl. 26). The small door is situated between the second and the third windows. It measures 1.80m. in width, 2.86m. in height and 80cm. in depth. The door is formed by a horse-shoe arch. These three windows and the two slits do not give much illuminatinn to the interior. The interior of the han is divided into eight units by three free piers (pl. 26). The piers are 1.50m. in width and 2m. in height. There are eight engaged wall piers and four corner piers. The engaged wall piers are 1.50m. wide and 75cm. deep, while the corner piers are 75cm. wide. The square units,which are 4.47m. by 4.47m., are roofed by equal sized domes. The domes are built without any centering. These domes are 5m. in diametre, 4.47m. in height and one brick thick. They rest upon pendentives supported by the consoles and piers.

The plan of this han is closer to those of Seljuk hans rather than to those of the Ottoman period, except in its domed feature.[1]

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[1] Şarapsa Han (Şerefza Han) (634-43/1236-45) is a rectangular structure covered with barrel vaults, K. Erdmann, Das Anatolische Karavansaray des 13th Jahnhunderts (Berlin, 1961), p.117.

Hans were built at convenient distances along the important trade routes to provide a safe and comfortable resting place for caravans. Under the Ottomans these were built in towns and organized as wholesale market centres. The Seljuk caravanserais were built as a complex of its own, having stores, hamams, and various shops as well as dormitories. While the Ottoman hans were built as part of Külliye structures. Here they had no stables, therefore the caravans were put up in the han, while the travellers probably stayed at the nearby taphane. The goods were guarded by night-watchmen and the servants of the caravan owners.

Again this han has no inscription. However, according to the identical bonding system for this mosque and madrasah, one mayassume that it is of a similar date to that of the madrasah.

d. The imâret (figs. 103, 104, 105, 116, 117, 118, 119, 120, 121)[1]

The imâret is situated in the small street opposite the south-eastern enclosure of the mosque (fig. 105). At present some restoration work is being carried out on this building by the Istanbul Universites and the Vahiffar. After the restoration it will be used as a museum for Islamic inscriptions.

The imâret is composed of two square buildings measuring 19.59m. by 20m. and 17.73m. by 20m. and separated by a rectangular courtyard, 18.36m. by 20m. (fig. 117, 118).

Description of the imâret façade

Our façade description begins from the left wing of the imâret and continues clockwise with the courtyard and concludes

[1] O.Ergin, Türk Şehirlerinde imaret sistemi (Istanbul, 1939), p.68. The name of imâret is given in Anatolia to eating houses, where the sübyan mektebi and theological student and the poor get their meals, consisting of bread (fodla) and hot dishes of mutton with vegetables. The first imâret was built in the reign of Orhan in 1336 in Iznik, called the Nilüfer Hatun imâreti, K.Otto Dorn, Das Islamische Iznik (Berlin, 1941), p.52. Usually there is an imâret beside each of the great selâtin

finally with the right wing of the imâret (fig. 105). The façade is composed of well-dressed stone blocks similar to those of the other Külliye buildings. It is arranged symmetrically. Their quoins are ordinary.

The left imâret is 15.69m. in length. It has an extra part measuring 3.90m. wide and 9cm. projecting fromthe façade (figs. 105, 117). This additional part is roofed by a cloister vault and has four square chimneys (fig. 116). Probably it was used as a kitchen unit.

The section on the left is divided into two units by an engaged wall pier (fig. 117). This engaged wall pier is 1.11m. in width, and 8cm. in depth with pahli corners (broken corners). Each unit has four windows grouped in twos. The lower windows are situated between the corner pier and the middle engaged wall pier. They have marble double moulded frame 22cm. thick with iron-bars (fig.117). They measure 1.14m. in width, and 1.87m. in height. Their gablets are left plain and are formed by an ogee arch. The upper window is placed above the gablet of the lower window. Instead of a gypsum grille, it has lead-glazing with ogee arched frame at the top (fig. 117). There is a door nearby to the right corner pier. According to the symmetrical character of the façade, this particular door was probably a later addition. At the top of the wall there is a simple moulding carrying the cornice running all round the façade. The blocking course is placed above the cornice. At the apex of the blocking course, the bolection moulding carries the second cornice (fig. 117).

This structure is internally divided into three equal units,

camis, F. Akozan, "Türk külliyeleri", VD VIII, pp.303, 8, Figs. 1-38. At the end of the eighteenth century the imârets of Istanbul fed over 30,000 poor every single day.

each of which is covered with two equal-sized domes standing on lower drums. Thrust of the domes is carried by pendentives. The drums also have double hood moulded frames. In this façade the vertical lines, for example the engaged pies and the window-frames, are stronger than the horizontal lines. Therefore the impression of height is stressed but the arrangement of the upper cornices detracts from this impression.

Description of the courtyard façade (figs. 118, 119, 121)

The courtyard façade's height is two-thirds of the adjoining imâret buildings (fig. 118). It is 1836m. in length. The rather impressive portal is situated in the middle of the courtyard façade (fig. 119). It has a rectangular double hood moulded frame. The portal niche is formed by a pointed arch composed of well-dressed stone blocks. The key stone of the arch has a plain rosette. The door has a joggled lintel consisting of pink and white stones. It measures 1.68m. in width, 2.33m. in height and 22cm. in depth.

The spandrels of the door are decorated with six pointed engraved stars (fig. 119). The sunken surface of the niche is left plain. The door has two oak panels decorated with moulded rectangular frames.

The portal of the imâret is different from the other portals of the mosque and the madrasah (figs. 8, 24, 102). It is not made of smooth-finished marble but ordinary well-dressed stone. This portal is wider than the previous examples. Since this structure has no sky-ward movement there is a strong counterbalance between the vertical and horizontal lines.

As already mentioned above the portal divides the court-yard façade into two equal units (fig. 118). These side units are

further divided into two equal parts by engaged wall piers. These engaged wall piers are 1.13m. wide and 9cm. deep. Each unit has a rectangular window formed by a double moulded frame 22.5cm. thick and with an iron-bar. Their flanked gablets are left plain. They have ogee arched frames (fig. 119). At the top of the wall the bolection moulding carries the coping stone, convex in shape and tilted to throw off water.

The right section of the imâret which is similar in plan to that of the left part (figs. 117, 120), is 18.86m. in length. The only exception is the extra additional part adjoining the imâret to the left (fig. 117). The roofing system also shows a similar arrangement to that of the previous example (fig. 104).

The portal leads to the rectangular courtyard. The inner portal is 1.68m. in width, 263m. in height and 1.03m. in depth. It has a broken headed reversed-curved arch which is reminiscent of the decorative Ilkhanid arches.[1] It stands with a curve near to a quarter circle and continues to the apex in a broken line.

The rectangular courtyard has no riwāqs and is surrounded by imâret buildings on either side (fig. 118). The imâret blocks are divided horizontally into three equal rectangular units. Each unit has two equal sized domes, and opens into the courtyard with one door and two windows. The door has a lintel and measures 1.30m. wide, 2.20m. high, and 22cm. deep. The walls are composed of alternating courses of bricks and stones, 90cm. thick. The use of brickwork is reminiscent of the Byzantine masonry. However, the combination of brick and stone within the thin layer of mortar

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[1] D.N.Wilber, The architecture of Persia, the Ilkhānid Period (U.S.A.) 1955), pp. 68-72.

is Ottoman in character.

From the inside these rectangular units are further divided into two equal squares by the engaged wall piers. These piers are 1.11m. wide and 9cm. deep. Every bay has two ogee arched gypsum grilled windows opening to the courtyard. The domes are set upon high drums. The zone of transition is arranged by pendentives. In the third unit there is a door leading to the kitchen part. Due to the restoration in progress permission to take photographs was not granted.

The horizontal central façade of the courtyard gives the impression of thrusting the two imârets apart as well as providing the essential link between them.

e. The Sübyan mektebi (figs. 104, 120, 121, 122).

The sübyan mektebi adjoins the right end of the imâret by a rectangular courtyard (fig. 122). It measures 3.77m. by 11.42m. The façade of the courtyard is simply arranged. The door is placed in the middle of it, measuring 1.52m. in width, 2.11m. in height and 22cm. in depth. Ir has a plain lintel (fig. 122).

The school is a square building 11.42m. by 11.42m. Its façade is divided into two equal sections by an engaged wall-pier. The corner piers and the pier in the middle of the façade are 1m. wide and 9cm. deep. Each sunken unit between the piers has two windows. The lower rectangular window measures 1m. in width, and 1.87m. in height and it is placed 50cm. above the pediment.

This window has a double moulded frame 22cm. thick with an iron-bar. Above the frame there is a plan gablet formed with

an ogee arch (fig. 121). The upper window has also an ogee arched frame and it is recently glazed.

Between the eaves and the bolection moulding there is a blocking course. This cornice only covers the four corners. The high drum of the dome cuts the top cornice in the middle of each façade. The drum itself culminates in a similar cornice to that of the building. The dome is 5.71m. in diametre and rests upon squinches and is covered with lead (fig. 122). It has a simple door on the north-east side. This structure is not mentioned in Evliya Çelebi and others.

The window arrangement, the top cornice and the bonding are similar to that of the imâret. Therefore it belongs to the same date as the Külliye structures.

f. The Türbes (pl. 28, figs. 106, 123, 124, 125, 126).[1]

The türbes are situated between the qibla wall of the mosque and the south-eastern enclosure (fig. 106). They have abeautiful

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[1]The Türbes: The Turkish tomb tradition goes back to Central Asia in the district of Pazyryk - the foothills of the Altai mountains. These tombs (Kurgans) date from the third or the second century B.C., N. Saracoğlu, Türk Mezarlarina dair araştirma (A Study of the Turkish tombs), I.T.Ü. (1947), p.8. These kurgans are 6m. or 7m. in diametre. They include the human and animal bodies preserved in ice, and further consist of the caftans, boots, furniture, household vessels, rugs and leather objects with gold inlay animal designs. The excavations in the Orkhon valley throw light on the history of the Göktürks. According to Orkhon inscriptions and excavations the tombs include the inscription-stone (Bengütas) surrounded by Balbals (Statues portraying enemies overcome by the heroes), T.T.K.Belleten, No. 43 (1947); H. Ziya, " orta Asyada Türkmen", Mihrap Mecmuasi (1924), B.Ögal, Islâmiyetten önce Türk Kültür tarihi (cultural history of the Pre-Islamic Turks (Ankara, 1962), p.131. Prophet Muḥammad said in one of his ḥadīths: "It is better for you to forget your beloved

garden of their own with cyprus trees (selvis). This garden is

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ones' tombs". Because of this ḥadīth no tomb structures were built in early days of Islam. The first known türbe in the Islamic world is the Qubbat-as Ṣulaibiyā in Sāmarrā. It was built by the mother of Al-Muntaṣir after his death (248/862), K.A.C. Creswell, Early Muslim architecture (Oxford), part two, pp. 283-5. It was made of sun-dried mud-bricks. The tomb consists of an outer octagon and an inner octagon. This part was probably covered with a barrel vault. Each remaining face of the outer octagon has a portal. The remains of squinches indicates that the building was formerly covered with a dome. No other examples of a mausoleum with an octagonal ambulatory can be found anywhere in the Middle-East. In India however there are several tombs with octagonal ambulatories surrounding the octagonal central part, for example the mausoleum of Mubārak Shāh (835/1434) near Delhi, P. Brown, Indian architecture (Islamic period) (Bombay), third ed., p.28, the mausoleum is attributed to Sikondar Lodi in Delhi (924/1517), P.Brown, op.cit., p.28, and the mausoleum of ʿAlī ad-dīn ʿĀlām Shāh in Tejara in Sahsarām (937-47/1530-40). The second oldest tomb in the Islamic world is the mausoleum of Ismāʿīl the Samānid at Bukhārā (296/907), K.A.C.Creswell, op.cit. p.367, Survey, III, p.945. The walls of this square structure are built of tile-like bricks with four round corner piers. On the exterior a gallery masks the transitional part with a small cupola at each corner. The thrust of the dome is carried by squinches. The Arab Ata mausoleum at Tīm (367/978), is the oldest existing example of Turkish-Islamic funerary architecture, G.A.Pugachenkova, Iskusstwo Zodchikh Uzbekistana II, Mauzolei, Arab Ata, Akademiya Nauk Uzbekskoi (S.S.S.R., 1963), figs. 110-20. This square tomb is covered with a higher dome standing upon tripartite squinches. The next oldest tomb is the Tomb of Arslān Jādhib at Sanhast (387-419/997-1028). With the eleventh century a new kind of tomb structure was developed. These buildings were called Kümbed in Turkish, Qubba in Arabic, and Gunbad or Imāmzādeh in Persian, have been found in Iran and Anatolia in later periods. These conical roofed cylindrical shafted tombs, the so-called tomb tower, which is reminiscent of the tent, goes back into earlier times to the tent form of the nomads (see supra, p.113 , footnote). One of the well-known examples of this type is the Gunbad-i Qābūs in Jurjān (397-98/1006-7), Survey, III, p.974. This tomb tower is built entirely of fired brick. Its cylindrical shaft is decorated with ten buttresses which begin below the slope of a base course above the ground level and disappear beneath the corbel at the top. The other cylindrical tomb-towers are the Imāmzādah ʿAbd Allāh at Lajim (413/1022), Pir-i ʿĀlamdār (417/1026), and Chihil Dukhtarān in Dāmghān. Cylindrical tomb towers are rarer after the eleventh century, though some examples survive at Marāgha and the tomb towers at Rayy (584/1139), Damāvand, Varāmīn and Biṣtām. The octagonal tomb towers are the Gunbad-i ʿAlī at Abarqūh (448/10 6), Imāmzāda Yaḥyā at Varamin, the tomb of Khwāja Atābek at Kirman (the middle

separated from the outer courtyard of the mosque with an enclosure of its own (fig. 127). There are several türbes scattered

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of the twelfth century), the tomb towers at Kharragān near Qazvīn (460-61/1067-68), D. Stronach and T. Cuyler Young Jr., "Three Seljūq tomb towers", Iran, III (1965), pp. 7-13, the tomb of Mu'mina Khātūn at Nakhichevan (582/1186) and Gunbad-i Kabūd at Marāgha (593/1197). The square tomb towers like the Gunbad-i Surk (542-43/1147-48) continued little changed in form until the fifteenth century, Survey, op.cit. pp. 1026, 26, "Tomb towers" by E.Schroeder. The Anatolian Seljuk kümbeds followed the plans of previous examples. These tombs usually have a cylindric tower-like shaft covered with conical roof. Their shafts are sometimes decorated with sculptures, but generally left plain, in which latter case the beauty depends on the quality of masonry, and on the proportions of the buildings. They are generally two storeyed buildings. The lower floor, which serves as a mortuary chapel (mumyalik), contains the embalmed body in a stone coffin and covered with a barrel or a cross vault. Few steps lead to the upper floor, consisting of a mihrāb. The roof often takes the form of a dome inside, and appears conical from outside. The gap between these two shells is very small. The zone of transition is usually squinches (hollow-backed) or triangles, while pendentives and muqarnasses are not yet apparent. Seljuk kümbeds are usually built next to a mosque or a madrasah. There are several types of kümbed to be found in Anatolia: a) Octagonal kümbeds, for example the kümbed of Emir Saltuk in Erzurum (eleventh or twelfth century), the Khalifet Gazi Kümbed in Amasya (540-41/1145-46), the Kirk Kizlar Kümbed in Niksar (617/1220), and the Huand Khātūn Kümbed in Kayseri (635/1237), A.Gabriel, Monuments Turcs D'Anatolia II (Paris, 1931), pp. 39, 46, 57); b) the hexagonal kümbeds, for example the Keykāvus kümbed in Sivas (614/1217), the kümbed of Kiliç Arslan in Konya (617/1220), the Döner Kümbed in Kayseri (675/1279); c) the cylindrical kümbeds can be seen in the Seljuk necropolis (Mezarlik) in Ahlat at Lake Van, for example the Ulu Kümbed (672/1273), the Hasan Padişah kümbed (674/1275), the Bugutay Aka Kümbed (681/1281) and the Mama Khātūn at Tercan (thirteenth century). There are only two examples of the vaulted iwān tombs. One is the Gömeçhane in Konya (second half of the thirteenth century), F. Uğur, "Gömeçhane", Konya mecmuasi, No. 9, May 1937. The second example is the Emir Yavtaş türbesi in Kirşehir, S.K.Yetkin, Islam Mimarisi (Ankara, 1959), pp. 205, 8. In Anatolia there are only two square planned tombs. They are the Ebul Kasim türbesi in Tokat (631/1233) and the Nureddin Ibn Sentimur türbesi in Tokat (713/1314). The Ottomans diverted from the Seljuk kümbed plan. However, they preferred square or octagonal structures, although there are some kümbeds following the traditional plan. Unlike the conical roofs of the Seljuks they used domes. The oldest Ottoman türbe is the Çandarli Hayrettin Paşa türbesi in Iznik (781/1379), while the well-known example is the Ye'şil Türbe (the green tomb) in Bursa (826/1421), G.Goodwin,

around this garden (fig. 106). These are the türbes of Şehzade Mehmet, Rüstem Paşa, Ibrahim Paşa, Şehzade Mahmut, Destâni Mustafa Paşa and the türbe of Hatice and Fatma Sultans. Among these türbes only the two türbes of Şehzade Mehmet and Rüstem Paşa were the works of Sinan (Figs. 106, 127, 126).

Description of the türbe enclosure (figs. 123, 127 (Plan detail of the wall - 27).

This wall adjoins the hünkâr mahfili on the right, and the south-eastern portal of the outer enclosure of the mosque on the left (figs. 104, 127). It is different from the outer enclosure (figs. 106, 107). This enclosure wall is 2.40m. high and 40cm. thick. The façade of the enclosure has windows alternating with blind niches. The blind niches are 1.80m. in width, 2.20 m. in height and 3cm. in depth. It has double moulded rectangular frames (pl. 27). The window, measuring 1.12m. wide and 1.35m. high is also set in a blind nich. The window has a lintel. On either side of the window the plain consoles have broken-headed arched profiles and are a purely decorative feature giving

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A History of Ottoman architecture (London, 1971), p.66. This octagonal structure follows the kümbed tradition. Formerly the dome and its high drum were both covered with green glazed tiles The Ottoman necropolis, called the Muradiye Mezarliği, is in Bursa. Up to the period of the conquest of Istanbul, all the Ottoman Sultans were buried in Bursa. The domed türbes, sometimes with a portico, are scattered all round the large garden covered with oak trees and handsome selvis (Cyprus trees). The most important türbe, that gave its name to the cemetery, is the tomb of Murad II. It has an open dome standing on muqarnass filled squinches, and four columns and four piers, surrounded by a vaulted corridor. There are eleven türbes, nine of which belong to Şehzades (crown prince) and Sultans, except for two tombs. These two türbes are the türbe of Ebe Khātūn (the nurse of Fatih, the Conqueror), and the Cariyeler türbesi (palace servants). The interiors of these türbes are richly decorated with colourful tiles.

no support. However, they give the monotonous façade some sort of harmony.

The iron bars of the windows are original. The five vertical iron bars are crossed by six horizontal iron bars producing square frames between them (pl. 27 cross section). The bolection moulding which supports the coping stone is set 10cm. above the rectangular frame (fig. 127).

The türbe enclosure gate is situated at the south-east corner of the enclosure. It is 2.49m. wide, 2.68m. high, and 1.13m. deep. This rather simple gate projects 28cm. from the wall surface (pl. 27, detail of the door). It is roofed by a simple vault. It has a pointed arch, framed by a rectangular moulding. The spandrels are slightly flanked and left plain. This gate leads to the türbe garden (fig. 126). Our description of the türbes deals only with the two türbes built by Sinan:

The türbe of Şehzade Mehmet (pl. 28, figs. 123, 124, 125).

This türbe was built in 950-51/1543-44.[1] The portal is situated on the north-east side. The well-dressed stone walls are further enriched with white and green marble and terra-cotta (fig. 124).

The shaft of the tomb is surrounded on the outside by a podium 23cm. high (pl. 28).

The façades are identically arranged. The rectangular façade has a double hood moulded frame projecting 6cm. from the wall surface (fig. 125). The corners are smoothed by round corner

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[1] Aslanapa, op.cit., p.219.

columns. The sunken area between the moulded frames is again divided into three units by double hood-moulded frames. The flat space between the moulded frames is alternately decorated with cartouches and six-petalled flowers (fig. 125). The lower windows are grouped in twos. The lower windowsbegin above the podium and are 1.35m. in width and 2.33m. in height. They are also framed with mouldings. Their flanked gablets are formed by a pointed arch (fig. 129). The inscription panel is situated between the lower and the upper windows. The green base of the panel is framed with hood moulding. The celi-thuluth reliefed inscriptions are framed by cartouches with a terra-cotta base. The basmala and the surah of Al-Fatḥ run all round the façade. Above this panel there are two upper windows. These windows are formed with an ogee arch consisting of alternating pink and white joggled marble blocks (fig. 125). The spandrels are made of terra-cotta. The upper windows have lead-glazing while the lower ones have iron-bars. Above the outer frame of the façade there is a terra-cotta blocking course (fig. 125). The two-tiered muqarnas is situated between the blocking course and the upper bolectinn moulding. The muqarnas, composed of elaborate panels, culminates in straight arches, while the lower row is comprised of bow-like horizontal mouldings (fig. 125). Above the bolection moulding there is a crown-like cornice running all round the upper façade. This cornice is composed of alternate small and large ornaments similar to those of the north-west portal of the mosque (fig. 23). The bigger ornaments have three-reliefed palmettes, each of which consists of three sepals with a cleft base (base eyed), while the small ornaments have a single three-

sepal palmette with a notched base (plain filling).

The dome and its high drum are decorated with thirty-six deeply fluted ribs. These ribs have a double-mouthed cornice carrying the upper cornice consisting of alternating palmettes (fig. 124). The large palmettes are composed of three-sepal palmettes with a cleft base (plain filling), while the small three-sepal palmettes have floral fillings. This cornice is reminiscent of the upper galleries of the double-shell domed tombs.[1] Here this cornice gives a three-stapped appearance to the dome and more height than it actually has (figs. 123,124). The hemispherical lead-covered dome has thirty-two ribs (figs. 106, 123) with an Alem.

The portico of the Türbe (fig. 129, pl. 28).

It is situated on the north-east side and covered with a lead canopy (fig. 124). The three steps, which are 20cm. high, lead to the outer platform of the portico (pl. 28). This platform is decorated with a big lozenge in the middle and four terra-cotta triangles at each corner (fig. 128). The portico, which was recently glazed, measures 2.10m. in width and 5.16m. in length. The four marble pink and green columns are 2m. high. Their pahli bases are 12cm. high. The muqarnas capitals carry the pointed arches. These arches, which are 1.42m. wide, are composed of green joggled voussoirs. Above this, the simple muqarnas niche runs all

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[1] The mausoleum of Öljeitü Khudabānda at Sulṭāniya (709-13/1309-13), Survey, op.cit., pp. 1107, 18, is built entirely of brick. The double-shell dome is surrounded by two-storeyed galleries. The dome which is carried on the inside by corbels on a thick wall rises from the upper gallery. The eight minarets around the dome have no structural function, although they have decorative feature. These double-shell domes were not favoured by the Ottomans, and only used in some türbes, G.Goodwin, op.cit., p.238.

the façade of the portico. There are two podiums at each side of the portico, 48cm. high. The floor is situated between the podiums and has a frame decorated with diaper work (fig. 128, on left). The portal is 1.67m. in width, 4m. in height and 40cm. in depth. It has a moulded frame 7cm. deep. This frame culminates in a broken-headed arch, carried by consoles. The lintel of the door is made of alternating white and green joggled-blocks. In the area between the frame and the lintel there is a green marble inscription panel. This thuluth inscription written in Persian is indecipherable due to grammatical errors (Fig. 129).

The wall behind each podium is covered with beautifully coloured tile-panels measuring 92cm. in width, 3.04m. in height and 5.5 cm. in depth. Above the tiles there is a reliefed inscription saying (fig. 129):

1. "Greetings beyond you."

According to Dr. T. Ö. Gandjei the inscription, written in Persian, does not make very good sense. It is possible that the workman involved in making this inscription did not know Persian very well and mistakes crept in.

Description of the tile panels[1] (fig. 130)

These two tile-panels are identically decorated and composed of several square tiles, surrounded by a gold-yellow frame 1.5 cm. thick (fig. 130). The patterns are symmetrically arranged

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[1]The tiles: The Seljuks and their Ottoman successors decorated the interior walls of their buildings with tiles. At the end of the fifteenth century Ottoman tile technique was fully developed. The wares of Iznik were well-executed. At the beginning only blue coloured were used, then later a clear turquoise was added. The harmonious range of soft grey, olive greens, purple and black were the favourite colours. The green is given by oxide of copper and iron, the turquoise of pure copper, and the

and the panels are divided into three parts by heavy spirals.

The upper part has a palmette as a main pattern, on a navy-blue base. In the middle there is a pomegranate flower. The use of colour makes the flowers bright - turquoise, a variety of greens and lilac. Above this pattern there is a palmette composed of yellow spirals and dagger-like leaves, culminating ina crown-like palmette (fig. 130). This three-sepal palmette with a cleft base is the main figure. On each side of the palmette are yellow and lilac coloured roses. The area between the frame and the roses is covered with carnations and tulips. These flowers are linked one to another by spirals and leaves. The area between the outer and inner frames is filled with a rose with dagger-shaped leaves, and a half carnation (fig. 130). The second part of the panel is again divided into two halves by a palmette in the middle. Both sides are again similarly decorated. A couple of roses, pomegranate flowers and a chrysanthemum are interwoven, one with another, by heavy spirals and serrated leaves (fig. 130). The flower pattern consists of three parts. The

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blue of cobalt. Their patterns can be distingiushed from those of the Iranian wares. Iznik tile relied mainly on the naturalistic treatment of the favourite Turkish flowers: tulips, carnations, pomegranates and lilies, C.E.Arsevan, Les arts décoratifs Turcs (Istanbul, 1952), pp. 147-75. The tile techniques which first appears in the first half of the sixteenth century in Anatolia is called Guerda Seca. In Anatolia they used melted sugar instead of thread, R.M.Riefstahl, "Early Turkish tile revetment in Edirne", Ars Islamica IV (1937), pp. 249-81. Aslanapa, op.cit., p.276. The patterns were marked by melted sugar before the application of the coloured glass. After the tile was fired the contours stand up in perceptible relief. The tiles of the Şehzade Mehmet türbesi were the last and well-known examples of this particular type. There is a certain similarity between these Ottoman tiles and Timūrid tiles of the early fifteenth century. The turquoise glaze predominates the tiles, for example in the Bibi Khanum Mosque (802-7/1499-1504), and the Ulugh Beg madrasah (823/1420) in Samarkand.

The central section is framed by yellow spiralsof a three-sepal palmette mirror-imaged. The nine-petal flower is the main pattern. Here, the background is painted in yellowish-green. At the top there are two flowers. The lower part has a couple of roses, violets and a single tulip linked to one another by heavy spirals and dagger-shaped leaves.

The area between the central motif and the frame has a large pomegranate flower further embellished by serrated leaves and buds. A heavily decorated rose is linked to the simple pomegranate flower and a half-open bud on either side. The bottom row has half-flowers. This unfinished pattern makes the composition continuous.

In this panel the approach is naturalistic. The prevailing colours in these tile panels are yellow, green, white, navy blue and lilac. The several shades of yellow and blue are skilfully applied with no outlining. in these panels. These tiles are superior to the Bursa tiles, for example, the Green Mosque and Türbe (first half of the fifteenth century), in technique, colour and naturalistic variety of pattern.

The interior of the türbe (pl. 28, fig. 131)

The interior of the türbe is reminiscent of the garden due to its marvellous coloured tiles. It is tiled up to the stained glass windows. Every inner façade of the türbe is divided into two parts by the tile panels (fig. 131). The panels are decorated similarly to the outer panels (fig. 130). Here, the only exception is the thick bordering frame. The walls are covered with twenty-seven square tiles and nine rectangular relatively small

panels. The rectangular panels are framed by a thick border. This border is composed of pomegranate flowers, tulips, daisies and serrated leaves linked one to another by yellow spirals. The sepals of the carnations and the surface of the leaves are in turquoise, while the petals of the flowers are green. The background is navy blue.

The panel is again framed by a thick border from the upper part. The apex has a broken-headed arch profile. The area between this frame and the outer border is filled with hatāis and two-sepal split palmettes with a monobase on a white background. The symmetrically arranged frame is decorated with a spring branch consisting of violets, a couple of pomegranate flowers and a single dahlia with buds and lilies on a beautiful turquoise coloured background.

The main pattern is the broken-headed arch profile consisting of two-sepal palmettes and spirals. The upper part has a medallion formed by spirals. This medallion has a pomegranate flower with turquoise sepals, green petals, a pink stigma and turquoise stamens. The medallion culminates in a three-sepal palmette with a cleft base. At the summit on either side of the palmette there are blue carnations with turquoise serrated leaves tog ether with navy blue dagger-shaped leaves.

Immediately below there are two branches of spring flowers meeting at the pomegranate flower in the medaillion. It begins with a dahlia and tulip, and continues with a pomegranate flower, and a rose and is completed by a tulip and a daisy.

In the middle there is an intricate palmette. It is decorated with two pomegranate flowers and a single tulip.

The lower part has a three-sepal palmette medallion in the middle. The heavily decorated pomegranate flower covers the entire medallion area. The background is navy blue, similar to that of the upper medallion. Turquoise, green, navy blue, yellow and purple are used with white outlining.

The patterns are arranged symmetrically.

Above the tile panels is the inscription from the sūrah of Al-Fatḥ which started on the outside and is completed here.[1]

The sarcophagus of Şehzade Mehmet includes a marble kürsü (a high chair for the imam or kadi when teaching) standing on four ivory inlaid legs.[2] This probably indicates the throne that Sultan Süleyman had hoped his beloved son might inherit or it might well be a kiosk for a prince in the Heavenly Garden. The Şehzade Mehmet's sarcophagus is surrounded by two other coffins which belonged to his brother Şehzade Cihangir and his daughter Hümaşah Sultan.

The inner shell of the dome is covered with plaster. The zone of transition is arranged by pendentives.

Although the türbe is built on a small scale, this tomb of Şehzade Mehmet, with its marvellous tiles and richly decorated exterior, shows a sense of beauty and creates a feeling of awe.

The türbe of Rüstem Paşa (figs. 64, 106, 126)

This is situated between the qibla wall of the mosque and the türbe of Şehzade Mehmet (figs. 64, 106). It has an octagonal

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[1] The meaning of the Glorious Koran, an explanatory translation by M. Pickthall, (London, 1952), third ed., Victory, pp. 528-35.

[2] T.Öz, "Şehzade Mehmet Türbesi", Arkitekt (1946), pp. 221, 225; H.C.Dwight, Constantinople, old and new (New York, 1915), p.61.

plan also. The corners of each façade are smoothed by the round elegant columns, which are reminiscent of the heavy supporting towers of the earlier Islamic buildings and are placed on the double moulded framed pahli corners. The façade is divided into two equal parts by an inscription panel (fig. 106). The façade has a hood-moulded frame. It has two windows. The lower window ha a double hood-moulded outer frame culminating in a pointed arch above. The inner marble frame of the window has double mouldings. The marble gablet is left plain. Above the outer frame the rectangular inscription panel is situated. It is the quotation from the Qur'ān of the sūrah Al Fatḥ which runs all round the façade. It was written in celi-thuluth.

The upper window has a hood-moulded frame. This frame culminates in an ogee arch (fig. 126). The spandrels of the arch have mouldings also. The upper window has stained-glass while the lower has iron-bars. The area between the outer frame of the upper window and the eaves is decorated with two mouldings and a single bolection moulding. The sunken area between these mouldings is further decorated by a row of bas-reliefed three-sepal palmettes (fig. 126). The corner columns culminate in âlem-like features, which aree very seldom used in Ottoman türbe architecture (fig. 2). They also have three-stepped profiles at the apex (fig. 126).

The türbe is roofed by a dome covered with lead. The entrance of the türbe is on the north-west side (figs. 64, 106, 126). It is covered with a lead canopy similar to that of the Şehzade Mehmet türbesi. Although this portico is smaller than the former, the canopy stands upon the two columns (fig. 126). The muqarnas capitals carry the pointed arches. The door is simple.

Between the türbes there are several tombs belonging to the later period. The only exceptions are the two marble tombstones which are decorated with similar designs to those of the selsebils and the marble water-tank (figs. 132, 133). These tombstones have scalloped niches framed by mouldings. The use of bouquets and branches is very naturalistic.

g. The Çeşmes (the fountains)(figs. 104, 132, 133, 134)

The Külliye has no sebil construction.[1]

There are only three fountains surviving. The largest çeşme is situated between the han and the türbe enclosure and adjoins the south-eastern enclosure (fig. 104). The second largest one, which is a marble water tank, is in the outer courtyard opposite the north-west enclosure (fig. 133). The third one, is the so-called selsebil (the qur'ānic name for one of the rivers of heaven. This term is also applied to the ornamental fountains). placed to the south-west enclosure of the mosque (fig. 106). There is another çeşme which adjoins the south-west enclosure at the far left corner. Ir has an inscription which gives the date 1012/1603.

The çeşme of the north-east outer courtyard (figs. 104, 134)

The çeşme adjoins the outer south-east enclosure of the mosque. It is entirely made of well-dressed stone with a clumsy

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[1] B.B.Peköz, Sebiller, licence thesis, Istanbul (1963), p.8, "a public fountain, this term is also applied to fountains providing drinking water which are not independent constructions. These installations appeared in the mosque architecture of Seljuk Anatolia and become in the Ottoman period an essential aspect".

bonding (fig. 134). This structure measures 9m. in width, 13.88m. in length and 3m. in height.

The façade of the çeşme has four niches, formed by round arches. They measure 1.62m. wide, 1.45m. high and 1.15m. deep (fig. 134). At the top of the façade the eaves are finished with a cove. Above this, the blocking course is set. The çeşme is covered with a vault. There is no inscription. The use of big stone blocks, the round arches without any usual mouldings and the plain upper cornice indicates the later date (fig. 134).

The marble water tank (fig. 133)

This marble water tank is placed in the courtyard near to the north-west enclosure (fig. 133). It collects the water from rain. This tank is 1.25m. in width, 1.58m. in length and 1.10m. in height.

The two rectangular faces of the tank are decorated identically (fig. 23). The façade has three rectangular panels formed by a moulding (fig. 133). There are two cartouches placed next to each corner. These cartouches have mirror-face leaves divided by four-petalled flowers. The side panels are arranged similarly. These panels consist of a moulded vase with a relief-bouquet. This bouquet has three tulips and a couple of carnations with serrated and ordinary leaves. At the apex the panel culminates in a blind multi-cusped arch. The spandrels of the arch are filled with a bunch of lilies.

The middle panel has a double-moulded frame completed at the summit with a knot (fig. 133). The mihrāb-like niche has ten moulded grooves with a decorated rosette at the middle. The spandrels of the niche are further decorated with a bunch of tulips.

The lower rectangular panel has a similar arch to that of the side panels. The area between the upper niche and the arch frame has a bunch of lilies. The panel has twin selvis. There is a rosette (kurs) at the middle top formed by an eight-petalled flower. Formerly every façade had three drinking-basins (yalak) like that of the one next to the right.

The decoration of the tank is very elegantly done. The use of bouquets, handsome selvis and scalloped mihrāb niches gives this flat surface a rather three-dimensional feature.

Twin selsebils (figs. 106, 132)

These twin selsebils are set between the two higher windows areas of the south-west enclosure (fig. 106). These public fountains are entirely made of marble, measuring 61cm. by 1.76 cm. The fountain consists of three parts. The upper rectangular panel which is set horizontally has a palmette crown formed by double mouldings and culminating in a three-sepal palmette at the top (fig. 132). This palmette consists of split palmettes. There are two reliefed rosettes decorated with flowers on either side of it. The crown, decorated with spirals and two-sepal palmettes, is carried by muqarnasses.

The middle panel has a double moulded frame with a border. This border has serrated leaves and flowers joined to one another by spirals. The selsebil has an inscription panel consisting of two cartouches. The inscription is written in Persian. It is very difficult to decode. At the right the upper stanza begins with the word hayr meaning "pious foundation".

The selsebil's niche has a multi-cusped arch. The spandrels

have a bunch of flowers in very naturalistic style. The tap (lüle) is 5cm. flanked. The lüle is decorated with leaves and a flower, and stands upon the reliefed leaves.

The last part is again set horizontally. The marble basin (yalak) has reliefed-egg motifs, 31cm. flanked. It is finished with a fluted corbel (fig. 132).

The window opening to the türbe's gardens give a mystical view and reminds the person who drinks water from the selsebil to pray for the souls of those who are buried in the garden.

h. The Outer enclosure (figs. 22, 63, 64, 65, 106, 107, 133, 135, 136, pl. 22)

Our description of the outer enclosure begins from the main façade, the south-west enclosure (fig. 66), which contains the muvakkidhane and the müezzin odası (figs. 65, 235). It continues in a clock-wise direction with the north-west enclosure (fig. 22) and the north-east enclosure (fig. 63), and finally completes with the south-east enclosure (fig. 104).

The outer enclosure has seven gates (pl. 22). The walls, which are 50cm. thick and generally 2.27m. high, are made of well-dressed stone blocks.

a. The south-west enclosure (figs. 66, 64, 65, 135)

Our description of the south-west enclosure walls begins from the south-east corner (fig. 66). The walls from the south-east corner to the water-scale (su terazisi) have fourteen different shaped windows. The square windows measure 2m. by 2m. (fig. 66). They have double-moulded frames. Above this the cove carries the coping stone. The selsebils are set between the higher parts. The

right part is higher than the enclosure (fig. 66). This part has two windows. Their different shape indicates the later period. The square window between the selsebils has a double simple frame measuring 1.50m. by 1.50m. (fig. 132).

The four windows are set on the second higher part. This part is again 75cm. higher than the general height of the walls. These rectangular windows are 1.24m. in width, and 2.10m. in height. The water-scale which is placed 6m. after this part, belonged to the later period. The area between this water-scale and the window next to the müezzin odasi has no windows, because there is an opened ablution fountain attached to this wall from the courtyard (figs. 9, 64).

The müezzin odasi is rebuilt except for the two windows over the enclosure (fig. 65). These rectangular windows have plain marble frames, measuring 1.24m. by 2.10m.

The main gate (fig. 63, 135).

This gate is squeezed between the müezzin odasi and the muvakkidhane. It has a moulded frame. The gate is 1.90m. in width, 2.50m. in height, and 1.36m. in depth. Its linetl is simple. Above the lintel the cove carries the bolection moulding. It is covered with a cloister vault.

The muvakkidhane (figs. 65, 135, 137, 138)

The muvakkidhane is placed on the south-west enclosure and adjoins the main gate (fig. 65). It has a redangular plan measuring 5.85m. by 13.71m. The façade has eight windows grouped in twos (fig. 135). The lower windows have a double moulded frame 9.5cm. wide and 6cm. deep. The lower windows are 99cm. in width

and 2m. in height. The upper windows are set upon the frames of the lower windows. They have ogee arched frames. The upper windows have gypsum grilles while the lower ones have iron-bars. The single window next to the gate is opened to the portico of the muvakkidhane. At the top of the façade the bed-moulding carries the moulded cornice above. The muvakkidhane has a portico on the courtyard side (fig. 137). This portico is 1.85m. in width and 4.85m. in length. It has podiums on either side, 50cm. high. The four columns and two engaged columns are 84cm. in circumference and 1.95m. in height. They have lozenge-shapped capitals and simple moulded bases.

The columns relate to each other by the pointed arches, two of which are wider than the other two. These arches have double hood moulded frames. Their spandrels are decorated with floral decorated rosettes and moulded frames. The egg-decorated cove carries the moulded cornice. The portico is covered with a cloister vault lower than the muvakkidhane roofing. Its door is framed with a moulding measuring 1.65m. by 2.75m. The door has a simple lintel, flanked spandrels and a rectangular plain gablet. There is no inscription in the gablet. The door measures 53m. in width and 250m. in height. The other façade of the muvakkidhane, which is set on the courtyard, has six windows grouped in twos (fig. 137). The lower three windows are 1.45m. wide, and 2m. high. They have moulded marble frames while the upper windows have ogee arched frames. The corners of the building are rounded. At the top the plain blocking course carries the palmette decorated cornice (fig. 137).

The muvakkhidhane is roofed by a dome and two barrel vaults

either side of it (fig. 65). The zone of transition is arranged by pendentives and a double-moulded belt.

This building was used as a türbe in later periods. The small cemetery adjoining the muvakkhidhane might have belonged to that period.

The enclosure walls from the muvakkhidhane to the çeşme at the north-west corner have eighteen windows (fig. 135). These windows are of different shape. Some of them are set in the upper part of the wall. This asymmetrical arrangement signifies the later date. The çeşme adjoining the north-west corner gate has an inscription giving the date of 1012/1603.

The gate adjoining the çeşme is similar to the main gate (figs. 136, 65). It measures 2.50m. in width, 2.70m. in height and 2m. in depth, and is covered with a cloister vault.

b. The north-west enclosure (figs. 22, 133, 136)

This enclosure has only four windows (fig. 22). These windows have no frames.

The small gate set in the middle of the enclosure leads to a small mescit of later date (fig. 133).

The gate adjoining the lavatory is similar to the south-west enclosure gates. It is 1.84m. in width, 3m. in height and 1.60m. in depth (figs. 22, 136) and covered with a cloister vault.

The lavatory is set in the area between the madrasah and the gate. It is roofed by a barrel vault.

c. The north-east enclosure (figs. 63, 103, 104)

This enclosure is shorter than the previous enclosures, because it is set between the madrasah and the taphane and from the han to the south-east corner.

The part situated between the madrasah and the taphane is the longer part (fig. 63). It hasonly three equal sized windows measuring 1m. by 2m. They have no frames similar to those of the north-west enclosure windows. At the top of the wall the bolection moulding carries the coping-stone.

The gate attached to the taphane (figs. 63, 103) is 1.85m. wide, 1.70m. high and 1.55m. thick. The north-east enclosure is completed by the short part placed between the han and the south-east enclosure. The small gate is open to the street opposite to the imâret structure (fig. 103). This gate makes an angle with the han's courtyard. It is 97cm. wide, 2.30m. high and 85cm. thick (fig. 104).

d. The south-east enclosure (figs. 103, 104).

This enclosure is divided into two equal parts by the gate placed next to the türbes enclosure (fig. 104). Between the gates the fountain is situated.

The gate adjoining the türbes enclosure is rather monumental. It measures 2.40m. in width, 3.50m. in height and 1.74m. in depth. The gate has a simple lintel and is covered with a cloister vault (fig. 104). The other part of the south-east enclosure has four windows with double moulded frames.

The enclosure walls unite the Külliye structures, except the imâret and the sübyan mektebi (pl. 22).

The principal units of the larger Külliye existed in the Şehzade complex, except the dar-üşşifa, the library and the hamam. The principal features of the larger complex were: the mosque, which was the meeting place as well as a place of worship, and the madrasah, where any acceptable student lived free of charge. There was also the taphane, where the traveller (tann misafiṅ) could stay free and be fed for two or three days. The han was where the caravans were kept in safety. There was also a small building, a sübyan mektebi, where the young boys learnt the Qur'ān by heart. Finally there was the muvakkhidhane, where the clocks were kept and the auspicious hour for great events decided, and also there were several fountains built as a hayrat (pious foundation).

Chapter VI

CONCLUSION

Every building is in some degree a historical document, a demonstration of structural technique, a comment on the values of the society which produced it and also a reflection of the richness or poverty of its architect's imagination.

The religious buildings, which were built before the modern age celebrated the power of gods or God, and so rulers, and may have been used in additinn to maintain a victory over human mortality. Every religion of those that have left their mark on architecture has a different character.

The pagan temple was a guarded enclosure for the safe keeping of the god's image and treasure, or for the performance of rites by the limited circle of the god's attendants. The Christian churches originated as a special kind of community houses for a liturgical assembly while the Islamic place of worship, "the mosque", is a meeting place as well as a place of worship, and also a lecture hall.

Earlier mosques were built on a large scale in order to gather the entire garrison in one building. They were the meeting places which gave a higher community morale to the soldiers as well as places of worship. The only solution to the problem of covering such a massive space is flat roofing, which stands upon columns or piers. When the Muslim state gradually became wealthier and more powerful it was able to build more mosques. The necessity for large structures soon died out.

Every Islamic country developed its own mosque style. In Iran, the iwān mosque scheme was the favourite plan and consisted

of a qibla iwān with the mihrāb and a dome in front of it, three more iwāns opening to the courtyard and a minaret.[1] The best examples of four-iwān mosques are:

The Masjid-i Jāmi' in Isfahan (465-84/1072-92)

The Masjid-i Jāmi' in Zawarah (550/1135)

The Masjid-i Jāmi' at Ardistān (553-55/1158-60)

The Masjid-i Jāmi' at Gülpaygān (498-511/ 1105-18)

In Syria the favourite scheme was a mosque which has a several-aisles deep sanctuary with a transept in the centre. The courtyard was surrounded by riwāqs on three dies. This type of mosque was widespread, extending even to Eastern Anatolia (in the Artūkīd region), for example the Ulu Cami of Diyarbekir (end of the eleventh or beginning of the twelfth century). It repeated the original plan of the Umayyad mosque in Damascus (97/715)[2] with a simple style of architecture without a dome. Other examples are the Ulu Cami of Silvan (Mayyāfāriqīn) (547-52/ 1152-57) and the Ulu Cami of Kiziltepe (Dunaysir)(601/1204).[3]

The Seljuks of Rûm generally used the Ulu Cami plan with flat roofing or vaults, with the occasional use of the dome, for example the Alaaddin Cami in Konya (twelfth century) and the Alaaddon Cami in Nīgde (618/1223).[4]

The successors of the Seljuks of Rûm, the Ottomans, favoured the domed structures. During the early years of Ottoman architecture

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[1] Survey III, pp. 949

[2] K.A.C.Creswell, Early Muslim Architecture I, part 1 (Oxford 1969), second ed., p.226.

[3] O. Aslanapa, Turkish art and Architecture (London 1971), pp. 93, 96, 98.

[4] O. Aslanapa, op.cit., pp. 108-110.

the frequently used plan was the single domed building. The dome completely dominates the interior, for example, the Haci Özbek Cami in Iznik (734/1333), the Alaaddin Bey Cami in Bursa (736/1335) and the Firûz Ağa Cami in Istanbul (896/1490) (see supre, p.27). In the Firuz Agā Cami (pl. 4) the dome, which is 10.50m. in diametre, rests upon pendentives. The single domed mosques were favoured by the Ottomans during the fourteenth and fifteenth centuries, apart from slight constructional differences, that is, the use of triangular belts, squinches or pendentives, or ornamental differences. The majority of the single-domed mosques followed the same traditional scheme. The Ottoman architects, however, were never content with the limited space of the single-domed plan. Their dream was to create a larger prayer hall surmounted by a huge single dome.

The Üç Şerefili Cami in Edirne (841-51/1437-47) (see supra, p.28) is the first answer to this idea (pl. 5). The almost square interior measures 66.50m. by 64.50m. The dome, which is 24.10m. in diametre, rests upon two strong hexagonal piers 6m. apart and four engaged-wall piers. The zone of transition is achieved by a belt of Turkish triangles. The dome stands upon pendentives. The corners are roofed by two small equal sized domes. The triangular spaces between the side domes and the main dome are further covered with unusually shaped domical vaults (pl. 5). However, these triangular parts are the weakest units of the interior. Ottoman architects at that time had not yet experimented with semi-domes. They returned once more to the previous single-domed plan and tried to give more space to the interior by adding wings on either side of the prayer hall; for

example, in the Sultan Beyazid Cami in Edirne (889-93/1484-88) and the Sultam Selim Cami in Istanbul (929/1522). These wings, however, were not the answer to the problem. The interior remained limited whether the wings existed or not.

Next the architect turned to the traditional scheme of the Seljuk enclosed madrasahs, for example in the Çukur Madrasah at Tokat (547/1152), in the Karatay Madrasah in Konya (649/1251) and in the Caca Bey in Kirşehir (671/1271) (see supra, p.30).

The ters 'T'-shaped mosques usually have a central prayer-hall, which is roofed by two domes, one behind the other, and two domed square zāviye rooms (sometimes covered with several domes or vaults) adjoin on either side of the central dome, for example the Yeşil Cami in Bursa (815-22/1412-19) and the Muradiye Cami in Edirne (839/1435).[1]

In the Yahşi Bey Cami in Tire (845/1441) (pl. 7) another development occured for the first time. This new development is the first use of a real semi-dome built by Ottoman architects. Here, the central dome is enlarged by a semi-dome situated on the qibla axis. There are no dividing walls between the main prayer hall and the adjoining unit. Therefore the interior gives a more centralized feeling than the previous examples, although the side zāviye rooms are separated from the central unit by heavy walls and thick doorways (pl. 7). Further development can be observed in the Rum Mehmet Paşa Cami in Istanbul (876/1471) (pl. 19), the old Fatih Cami (876/1471) (pl. 8) and the Atik Ali Paşa (902/1496) (pl. 9).

In the Beyazid Cami of Istanbul (911/1505) a new achievement can be readily noticed (pl. 10). The square prayer hall consists

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[1] G. Goodwin, A history of Ottoman Architecture (London, 1971), p.69, pl.62; A. Kuran, The mosque in early Ottoman Architecture (U.S.P., 1968), p.129.

of a central dome augmented by two semi-domes on the longitudinal axis and four small equal sized domes on either side. The square hall is further enlarged by rectangular units on either side. These wings are covered with a dome in the centre and two equal sized domes on each side. Apart from these wings the plan of the Beyazid Cami is similar to that of St. Sophia (pl. 2). The central dome, which measures 18m. in diametre, rises on pendentives. Four piers and two columns carry the dome. The square interior is still divided from the side galleries by two free-standing columns although the use of the central longitudinal axis gives more space than the previous examples. The basilical rectangular scheme is not yet dissolved in the square interior. The unity of the interior is pierced by side domes as well as by the wings.

A further step towards the centralized mosque plan is taken in the four semi-domed mosques. This type is first seen in the eleventh century in the Karakhanid Mosque in Khazar (near Bukhara).[1] The central dome, which measures 6.5m. in diametre, is carried by four round piers and augmented by four vaults on either side. The corners are covered with small domes. The earliest Ottoman example of this type is the Çelebi Mehmet Cami in Dimetoka (825/1421) (pl. 11). The square interior measures 30m. by 30m. The central dome is 12m. in diametre and rests upon four octagonal piers. The four barrel vaults augment the main dome on four sides. The corners are covered with cross vaults (pl. 11).

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[1] O. Aslanapa, op.cit., p. 46, pl. 1a.

The real four semi-domed mosque can first be seen in the Fatih Cami in Diyarbakir (924-27/1518-20) (pl. 12). The dome, which is carried by four square piers, rests upon pendentives (pl. 12, cross section) and is further augmented by four semi-domes with two exedrae each (pl. 12). The plan of this mosque is the most developed of its type before the Şehzade Cami.

When one enters the Şehzade Cami, one finds two tendencies, the awareness of space and the awareness of structure. The awareness of space comes directly from the point where the eye beings to measure the distances of the interior and the height of the roofings. The awareness of structure is partly due to the observation of the world around us, and also partly due to personal experience (figs. 72, 88, 94).

The interior of the Şehzade Cami gives an impression of lightness. The plan shows a square within a square system (pl. 14). When one stands in the middle of the square prayer hall, one is almost able to see every part of the interior without obstruction (pl. 15), for example no columnar screen nor the side galleries can be seen, as can those of the St. Sophia (pl. 2) and the Süleymaniye Cami (pl. 16). The absence of side galleries, which is a new feature here, gives the interior the appearance of agreater space than it actually has (the interior measures 38m. by 38m.). The strong piers, which are set at 16.52 m. intervals, carry the dome, 19m. in diametre, which rises to a height of 38m. at the centre. To the observer the roofing elements from curves can be seen without visual obstruction. The main dome stands upon pendentives and is augmented by four semi-domes accompanied by two

exedrae each. Here, the pendentives have a light appearance. Therefore, the space exists around them without visual impediment (fig. 88). The Cami not only stands in space but it also encloses space. The shaping of the bounding surface is also important. The dome, semi-domes and exedrae give the sensation that the interior space is pressing outward against its boundaries, while the arches can tempt the eye by their rhythms from one part to the other (fig.94) so that structure and space seem to melt together (fig. 88). In the interior there is a continued dialogue between space and structure. The demand for the expansion of space presses against the restrictions imposed by structure.

The outer structure of the mosque, for example the walls, especially the qibla wall, conceals the heaviness of the support (fig.72). The wall surface is lightened by the windows. However, this wall is strong enough to carry the outer ends of the zone of transition (pl. 15). The curves of the roofing elements are also continued over the wall surface because of the engaged-wall piers and relieving arches (fig. 72).

The arrangement of rhythm, scale and proportions show the genius of its architect, Sinan.

The massive unequal-sided octagonal piers, which are set at 16.52m. intervals, are 12m. high. The circumference of each pier is 12.75m. These free-standing piers, each having a single corner facing each other, are smoothed by the niches culminating in mugarnasses (fig. 72).

The first two-thirds of the total height of the pier is left plain. The fluted part of the pier begins 8m. above floor level, and terminates with the horizontal cornice leading to the

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pointed arch (fig. 88). These fluted areas of the pier produce an upper square frame within the rectangular frame (pl. 15). This is the first step towards the apex of the dome, while the final step is the horizontal cornice below the dome. These intervals stress the interior pyramidal aspect (fig. 72, pl. 15).

There is a close relation between the scale of the ground floor and the roofing elements. The dome has a diametre which is equal to half the side of the square hall. The semi-domes are half the size of the main dome. The courtyard of the mosque covers an area equivalent to that of the mosque proper. The mosque has a perfect pyramidal appearance, both from the exterior and the interior (figs. 88, 96, pl. 15).

From the exterior, grandeur of the pyramidal structure is due to the effectivensss of rhythm, scale and proportions. Three of the upper façades of the Şehzade Cami (the exception being the qibla façade) are almost identical in appearance (figs. 10-13). The outer walls with their cornice at the top represent the base of a pyramid (fig. 12). The exedrae and their concealing panel-gable form the second stage towards the apex of the pyramid (fig. 10), while the semi-dome is the third step (fig. 9). Impressive though it may be, the Şehzade Cami has not, however, attained perfection in this type of structure. The pyramidal visual impact is somewhat impaired by the discrepancy between the height of the semi-dome and the centraldome at the summit (figs. 12, 62). This difficulty was solved by Sinan later in the Selimiya Cami (977-82/1569-74) (fig. 14). In plan the two identical squares of the Cami and its courtyard adjoin each other (pl. 15). Their meeting points are stressed by a minaret on either

side (fig. 13).

In the Şehzade Cami the treatment of the problemsof thrust, balance, lightness and heaviness, as well as of weakness and strength, which are the essential architectural features, are handled with artistry.

The outer supports are almost invisible. The engaged wall buttresses give the impression of a division to the upper square side walls (fig. 10), while the corner piers are elegantly pointed skywards by the supporting turrets (fig. 12). The buttresses are set on either side of the dome next to the supporting turrets in order to give a clear unobstructed view. There is an established counter-balance between vertical and horizontal lines. The horizontal lines are represented by the side loggias and the lines which produce the upper four-stepped appearance, while the vertical lines are the piers and columns of the loggia and son cemaat yeri, the engaged wall-buttresses, the supporting turrets and finally the silhouette of the main dome (fig. 10).

The impressions of lightness and of heaviness co-exist- in equal degree - in the exterior of the Şehzade Cami. The lightness is given by the arcaded loggias, elegantly designed window frames and also by the palmette decoration over the horizontal cornices, while the heaviness is expressed by the square bases of minarets and the roofing system (figs. 10, 13).

From whichever angle one contemplates the Şehzade Cami, one is aware of its structural strength as well as its elegance (figs. 10, 13, 33). Nor are coloristic effects absent from the exterior; they are obtained partly from the use of well-dressed gray sand

stone blocks with red brick frames and partly from the lead covered roofing element.

The influence of the Şehzade Cami on later buildings can easily be discussed in the Sultan Ahmet Cami in Istanbul (1015-25/1609-16) and in the Yeni Cami in Istanbul (1007-71/1598-1668). The interior of the Sultan Ahmed Cami is 47m. by 47m. The dome measures 23m. in diametre and rises to a height of 43m. (fig. 101). The thrust of the dome is carried by the huge 'elephant leg' piers and four pointed arches (figs. 78a, 78b). The main dome is further augmented by four semi-domes with three exedrae each, except on the qibla side. By the use of an additional exedra the exterior wall is pushed back until it comes under the outer edge of the central exedra of each semi-dome on three sides. There is a free-standing column under the inner corner of each exedra (fig. 78a), which somewhat weakens the advantage gained by the third exedra. A square within a square system exists without these galleries. The third exedra also makes the roofing system weaker and more complex than in the Şehzade Cami (fig. 78b). The main dome rests upon the pendentives which are, however, heavier than those of the Şehzade (figs. 94, 101).

The apparent disproportion between the size of the huge piers and the proportions of the dome militate against the harmony of the interior, making it inferior to that of the Şehzade Cami. The division of the piers in to two units by horizontal cornices and heavy fluting further detracts from their appearance by making them seem shorter than they actually are, since the eye is interrupted twice on the pier before it reaches the dome. In consequence the dome also seems lower. Furthermore, because of the

gigantic proportions of the piers, the intervals between the piers seem to be shorter than in the Şehzade Cami (figs. 72, 78a). While the interior of the Şehzade Cami may seem more spacious than it actually is, that of the Sultan Ahmed seems, on the contrary, smaller, owing to the use of the ungainly piers.

However, it should be admitted that the exterior of the Sultan Ahmed is superior to that of the Şehzade Cami (fig. 15). The four-stepped profile is similar to that of the Selimiye in Edirne (fig. 14).

The Yeni Cami follows an identical plan of a four semi-domed mosque (pl. 13). It measures 41m. by 41m. The central dome, which is 17.5m. in diametre and rises to a height of 36m., is augmented by four semi-domes with two exedrae each. Although its dome appears to be set a little high for its size, the proportions of the Yeni Cami are generally harmonious. The exterior is more close to that of the Şehzade (figs. 69, 70).

The plan of the Şehzade Cami exhibits several new architectural developments towards the solutions of an ideal prayer hall (pl. 14). The most important of these developments is the augmenting of the central dome on four sides by semi-domes. Because of the absence of the side galleries the entire emphasis concentrates in the interior below the unified domed area.

Another development is the introduction of subsidiary exedrae to support the semi-domes in place of the traditional pendentives.

In the Şehzade Külliye the madrasah, the <u>taphane</u>, the <u>han</u>, the <u>imâret</u> and the <u>sübyan mektebi</u>, the <u>türbes</u> and the <u>çeşmes</u> were grouped around the Cami. They constitute a harmonious set in the

district of Unkapani.

The arrangement and proportions of the structural elements gives the Şehzade Cami an outstanding place in the history of the Ottoman Selâtin Camis.

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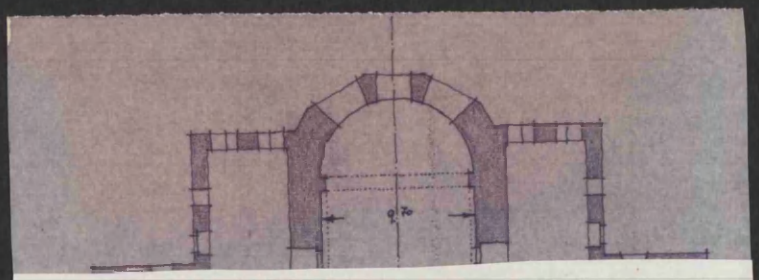
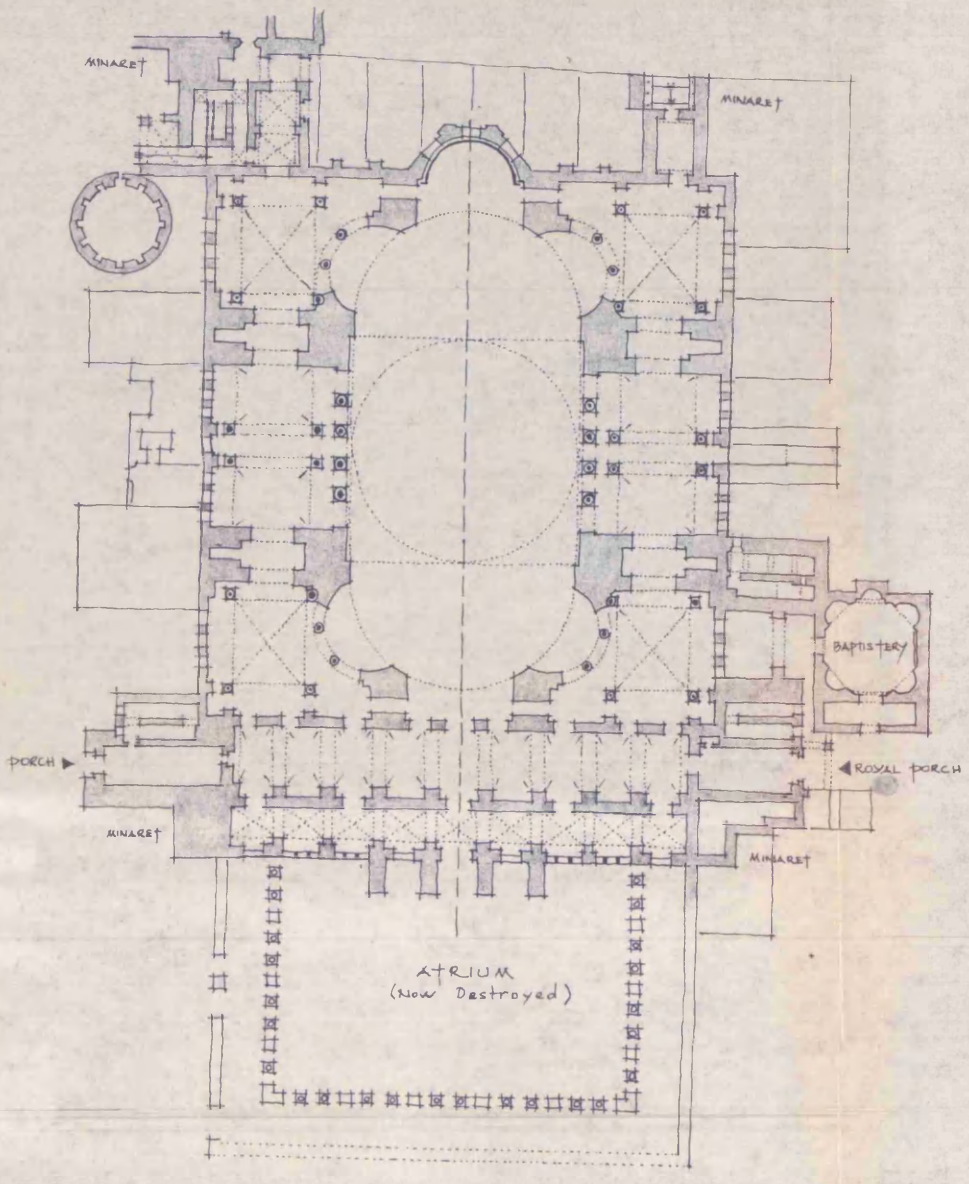
136. The north-west enclosure

137. The portico of the muvakkidhane

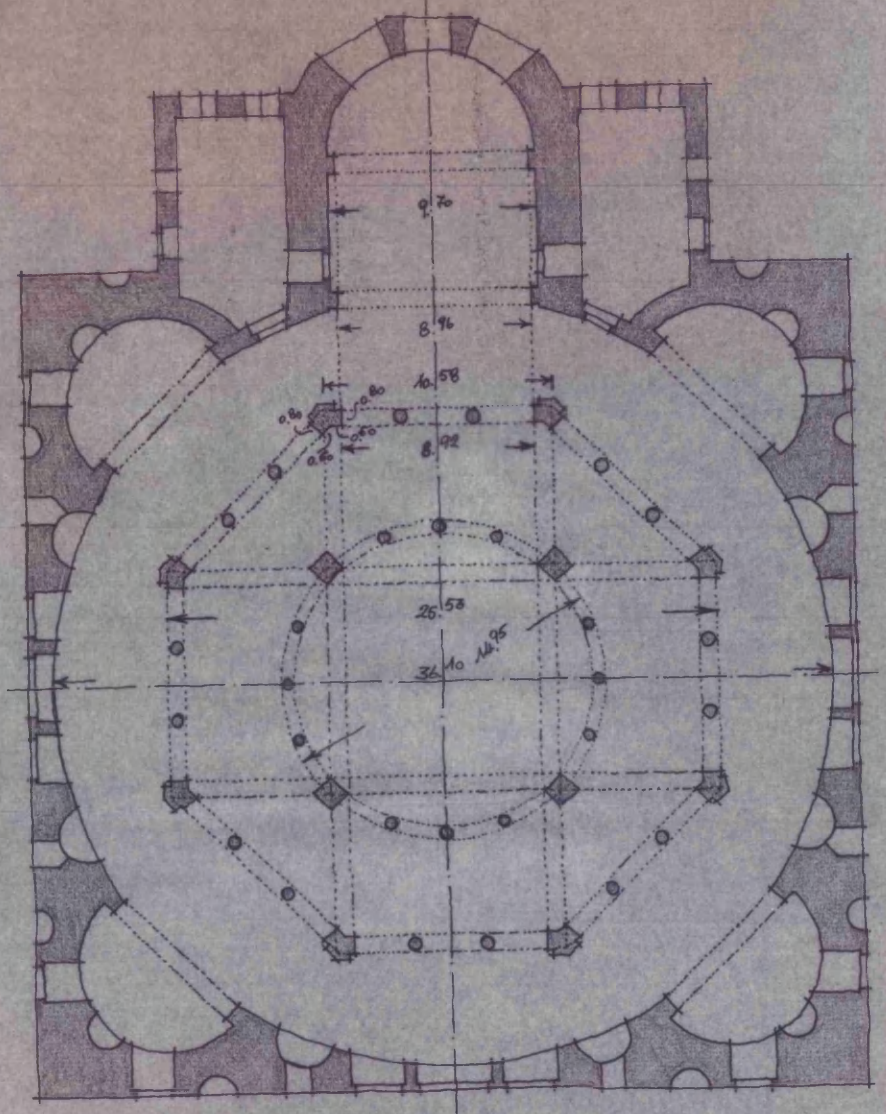
138. The cemetary attached to the muvakkidhane



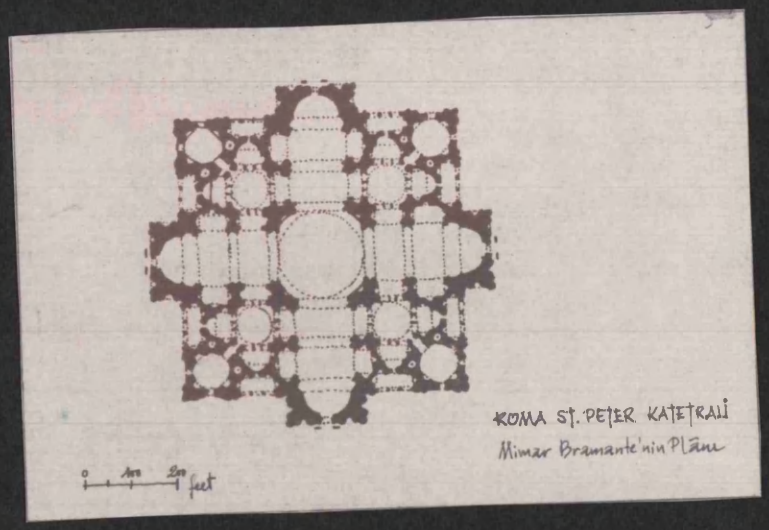
Pl. 1 - FROM CRESWELL



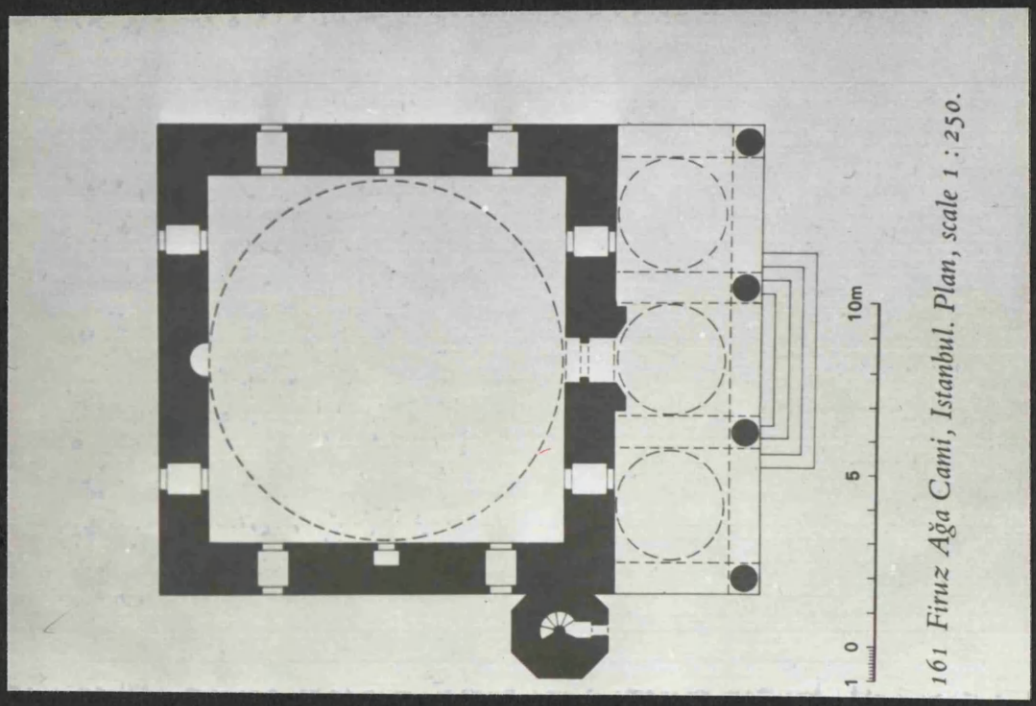
The CHURCH of St. SOPHIA



BOSRA KATEDRALİ

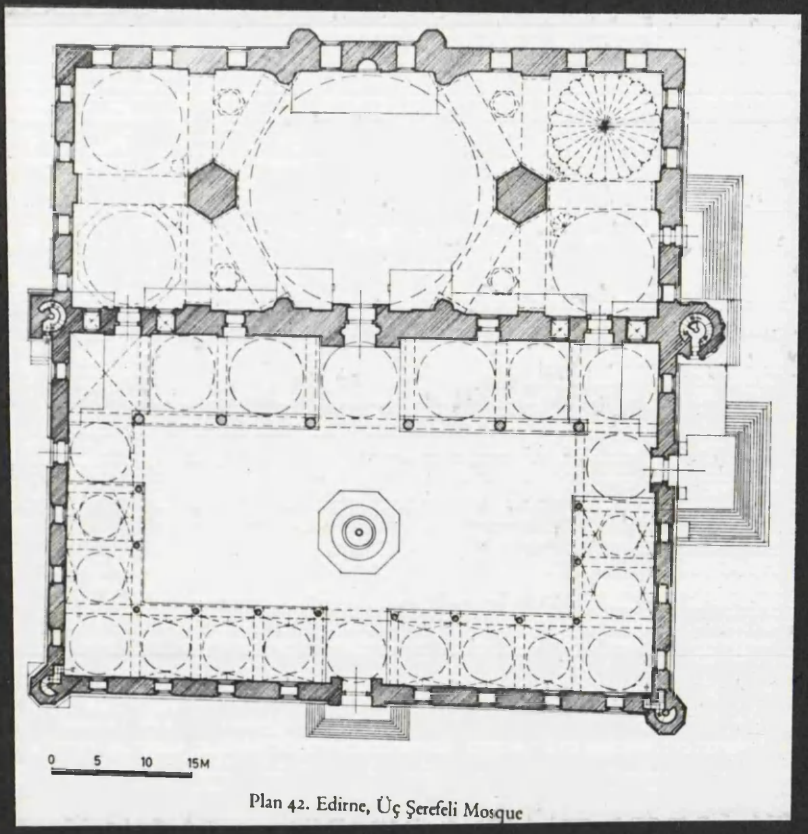


PL_3



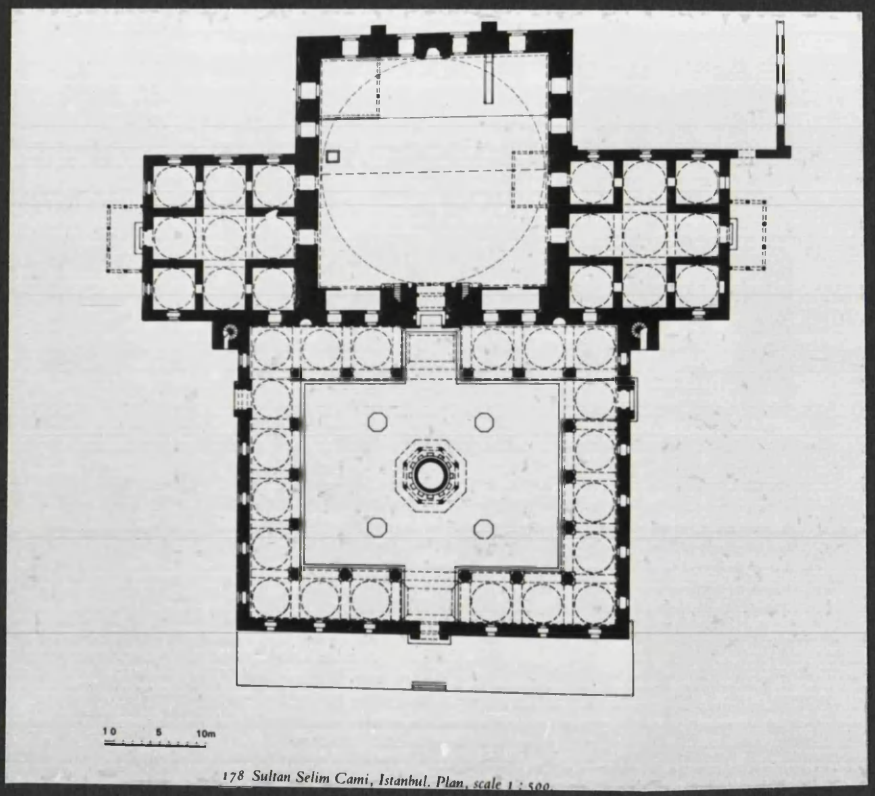
161 *Firuz Ağa Cami, Istanbul. Plan, scale 1 : 250.*

PL 4 - FROM GOODWIN



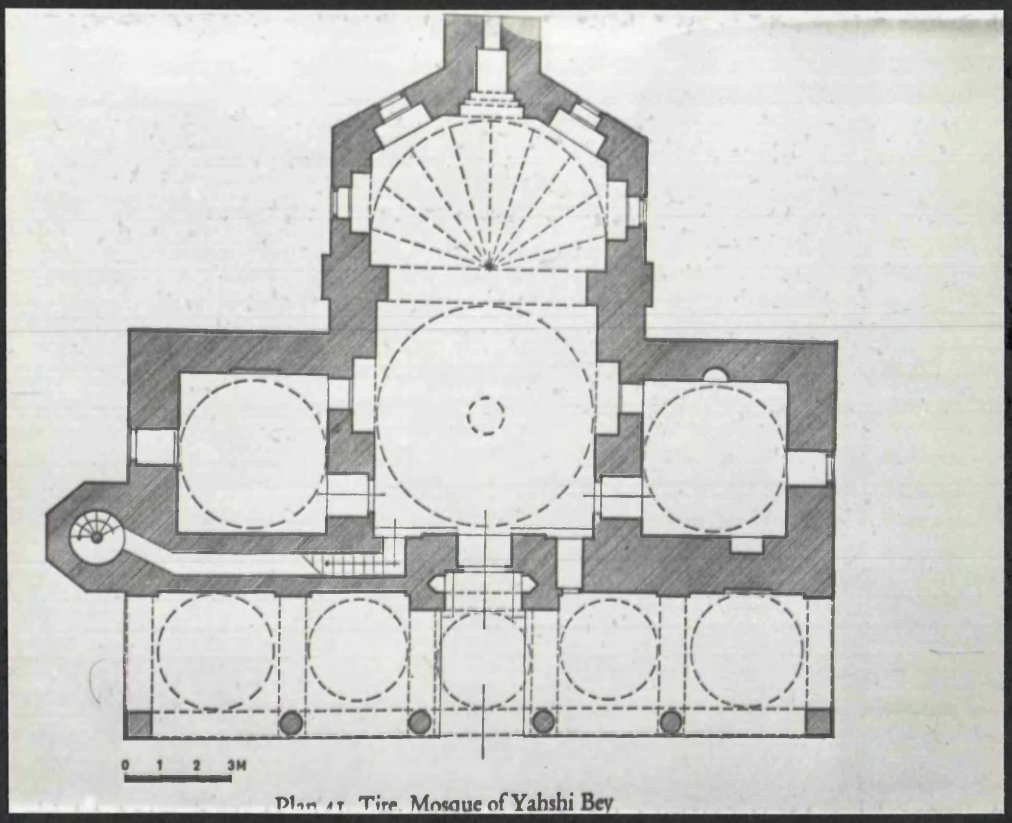
Plan 42. Edirne, Üç Şerefeli Mosque

PL-5 – FROM ASLANAPA



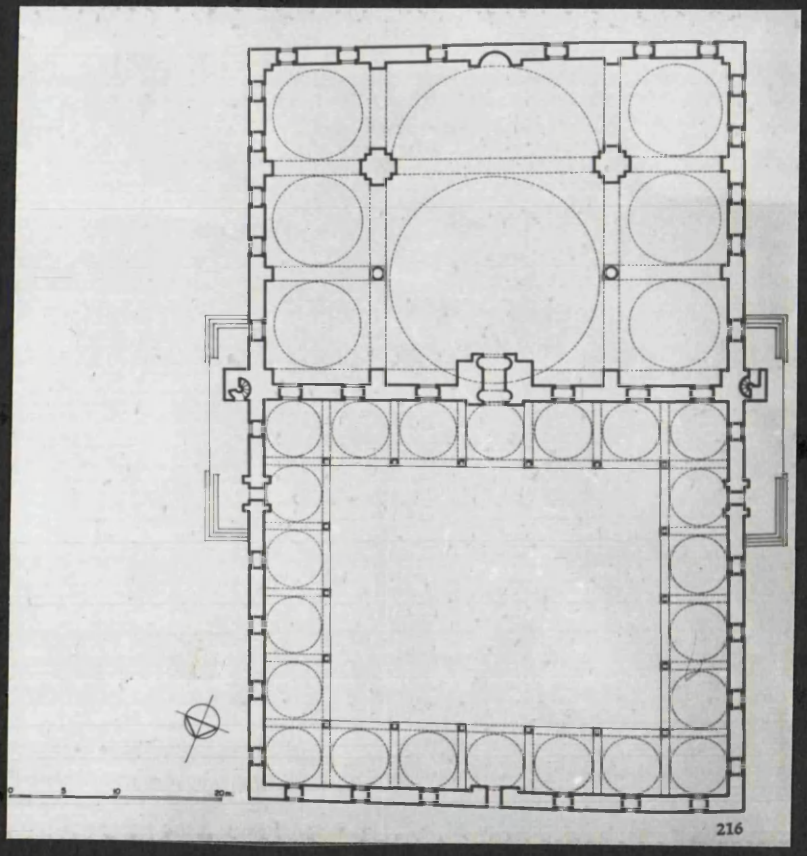
178 Sultan Selim Cami, Istanbul. Plan, scale 1 : 500.

PL-6 – FROM GODWIN –

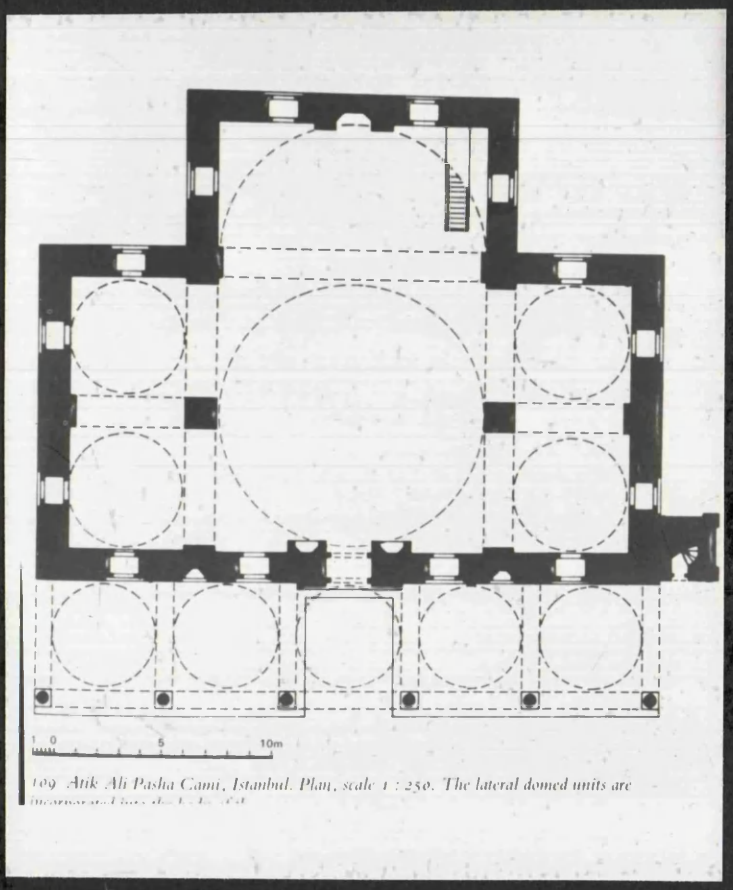


Plan 41. Tire. Mosque of Yahshi Bey

PL-7 FROM ASLANAPA

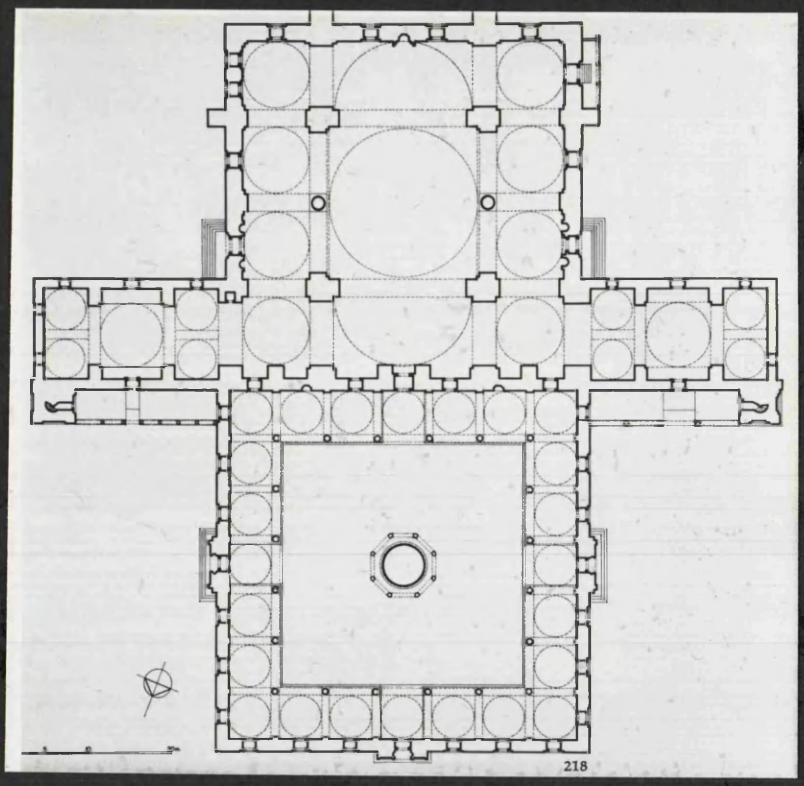


PL-8 FROM KORAN

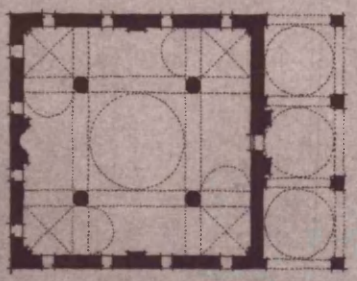


109 Atik Ali Pasha Cami, Istanbul. Plan, scale 1 : 250. The lateral domed units are

PL 9 - FROM GOODWIN -



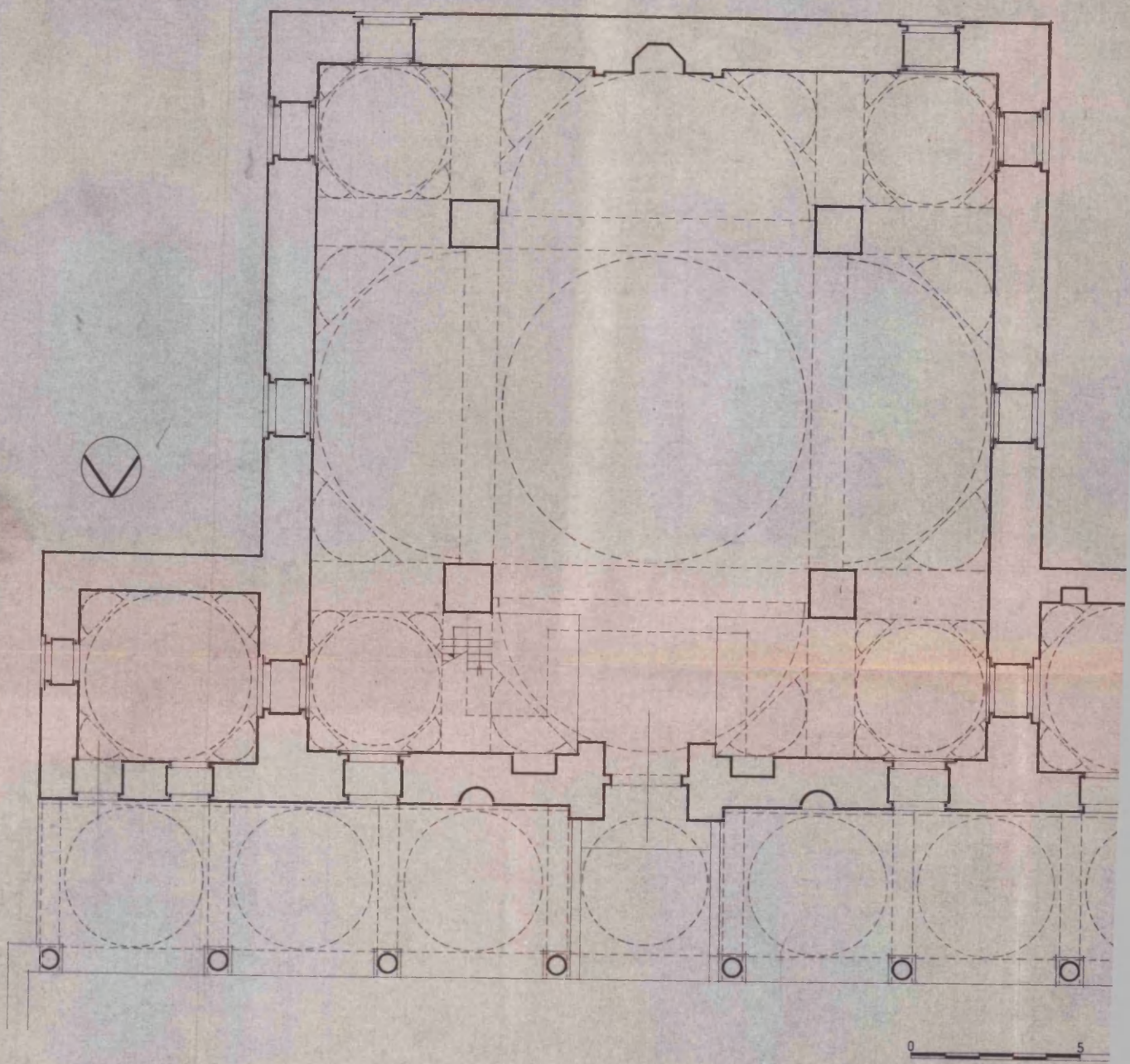
PL 10 - FROM KUBAN -

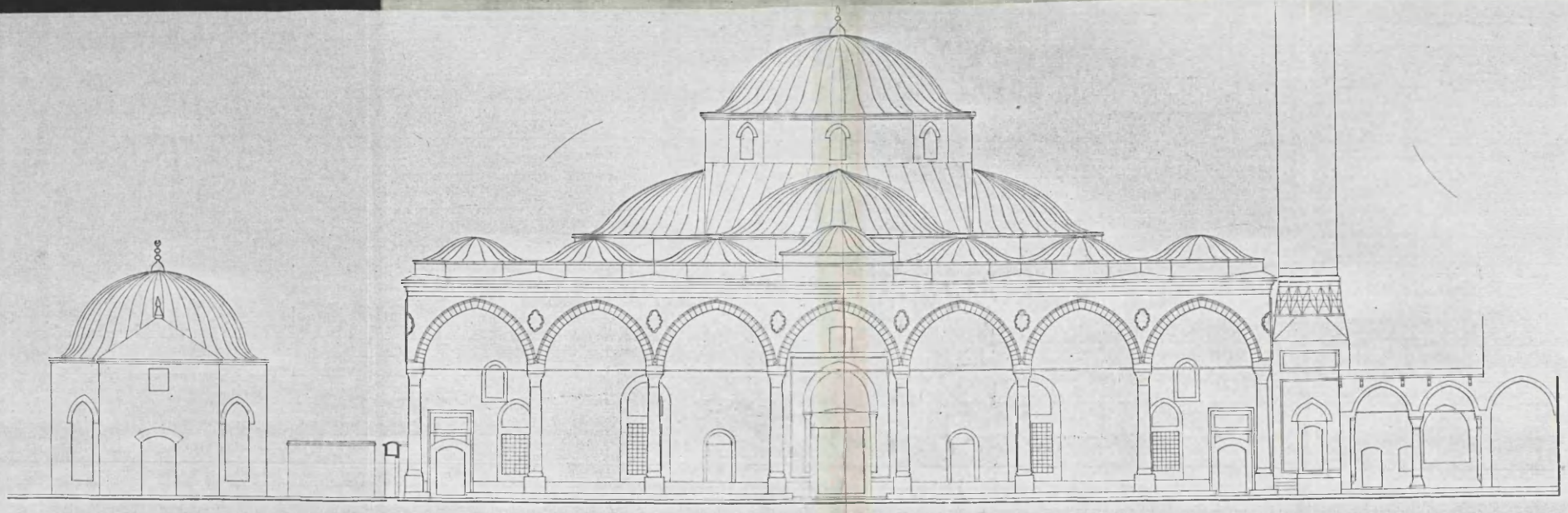


Mosque of Celebi Sultan Mehmet
— Dimetoka —

PLAN

PL. 11

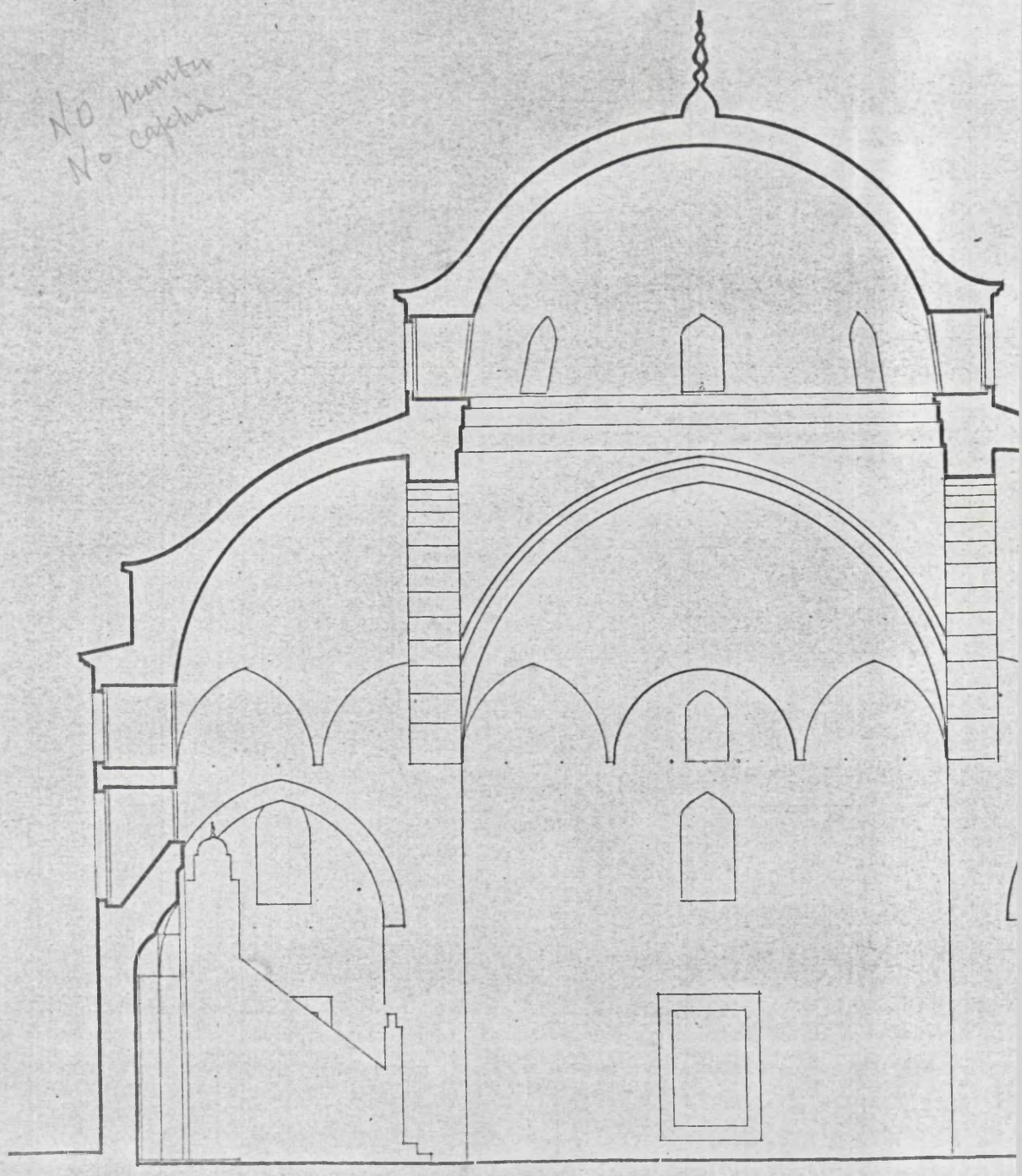


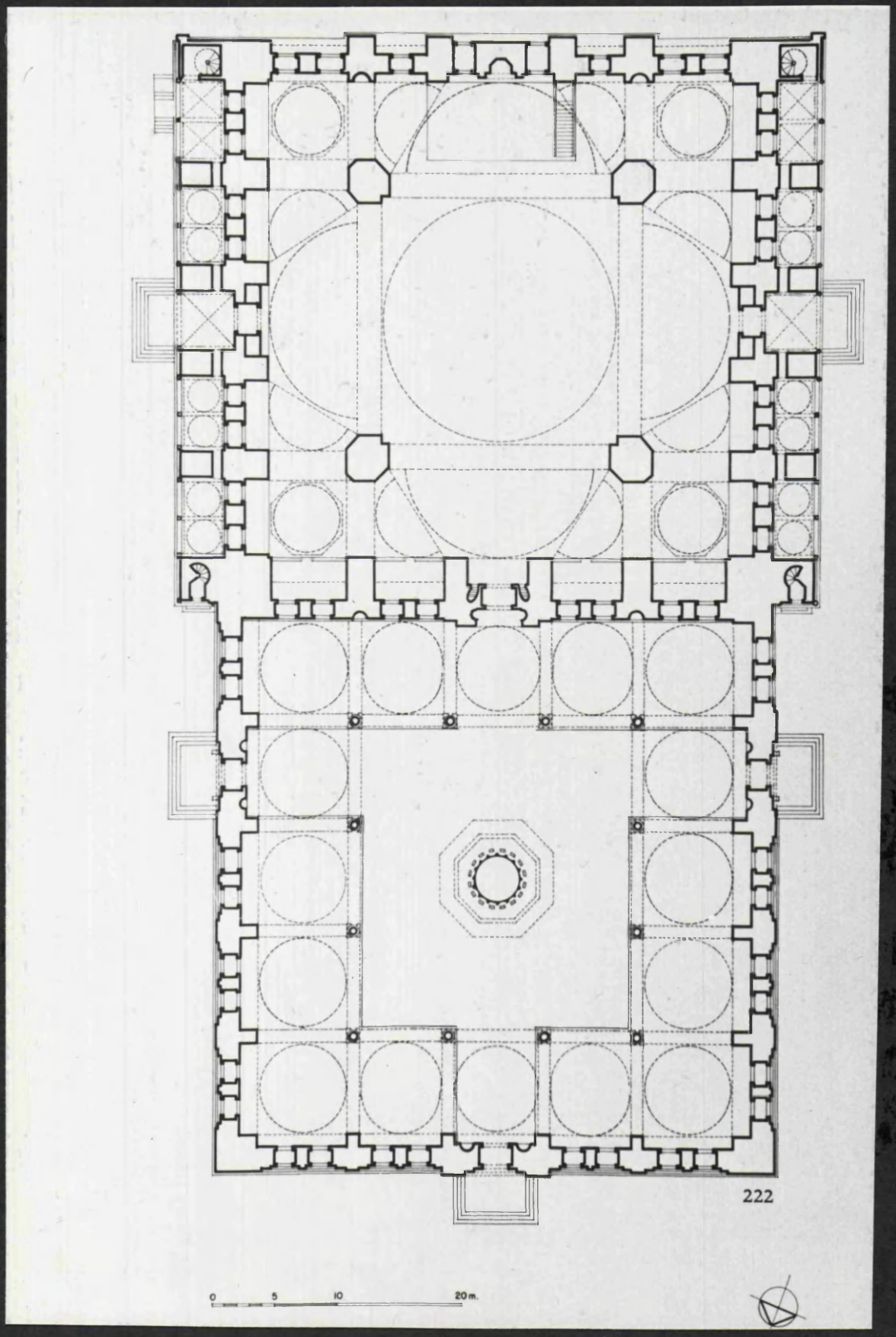


FATİH PAŞA CAMİSİ VE ÖZDEMİROĞLU OSMAN PAŞA TÜRBESİ
DİYARBAKIR
avlu cephesinden görünüş

0 5 10

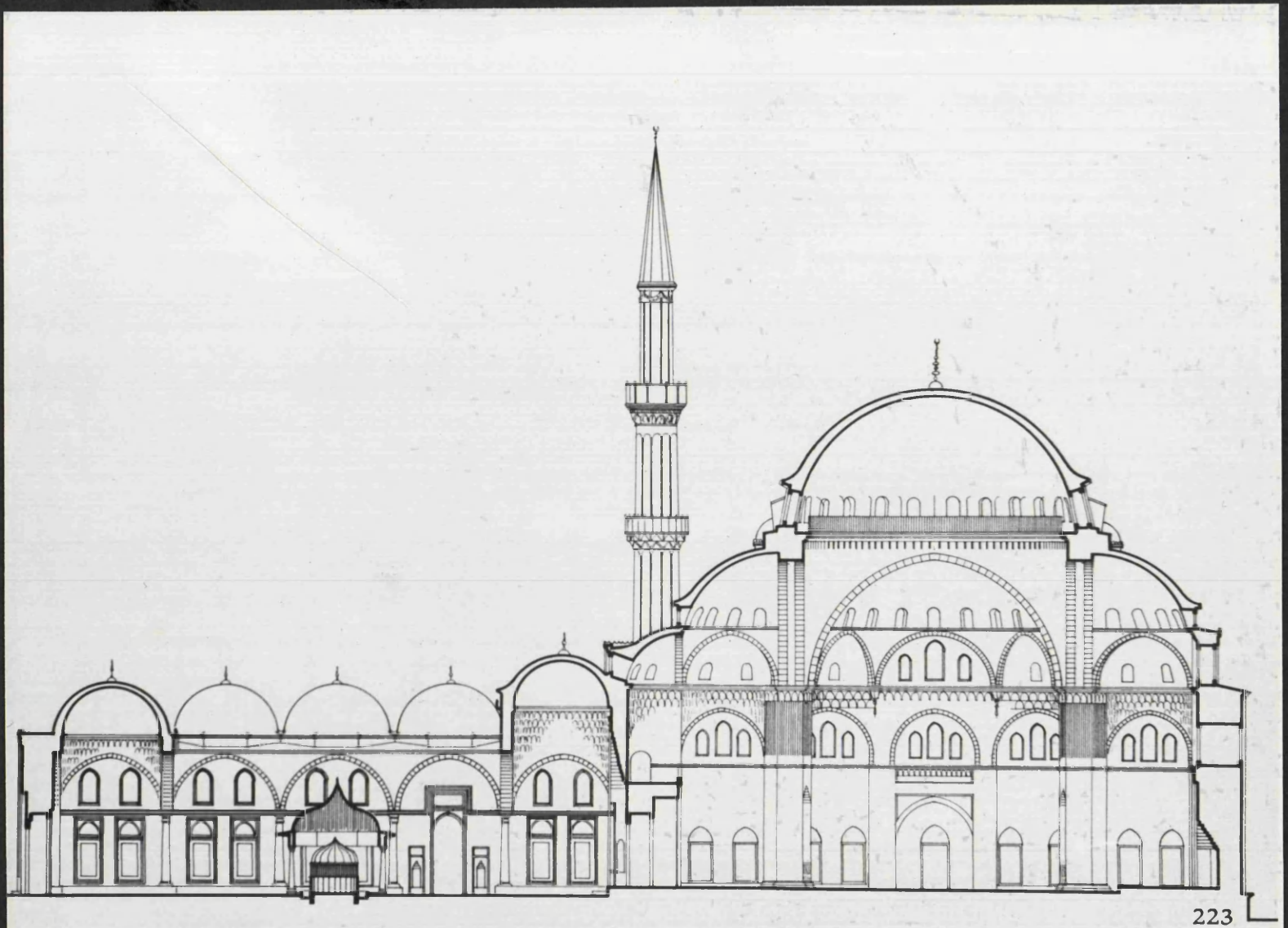
No number
No caption



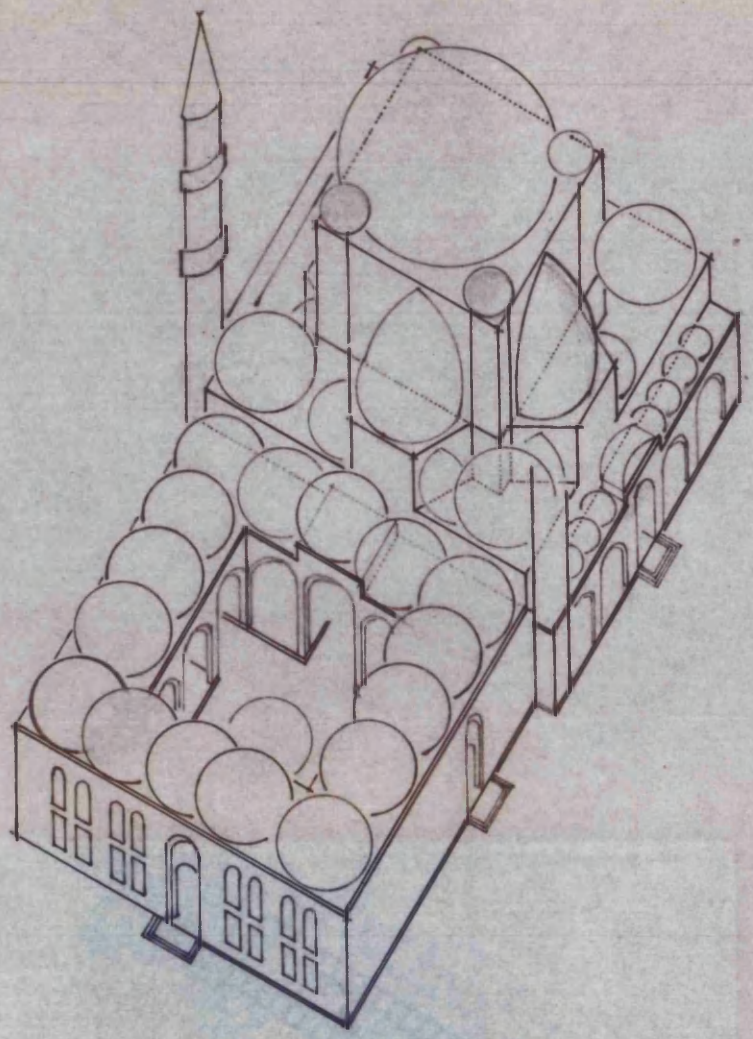


PL 14

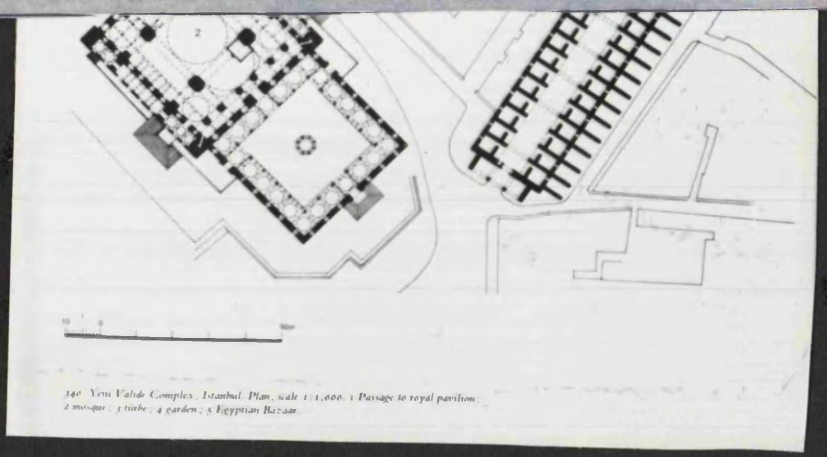
- FROM KURAN -



223



the SEHZADE MOSQUE
— perspective : 1/750 —

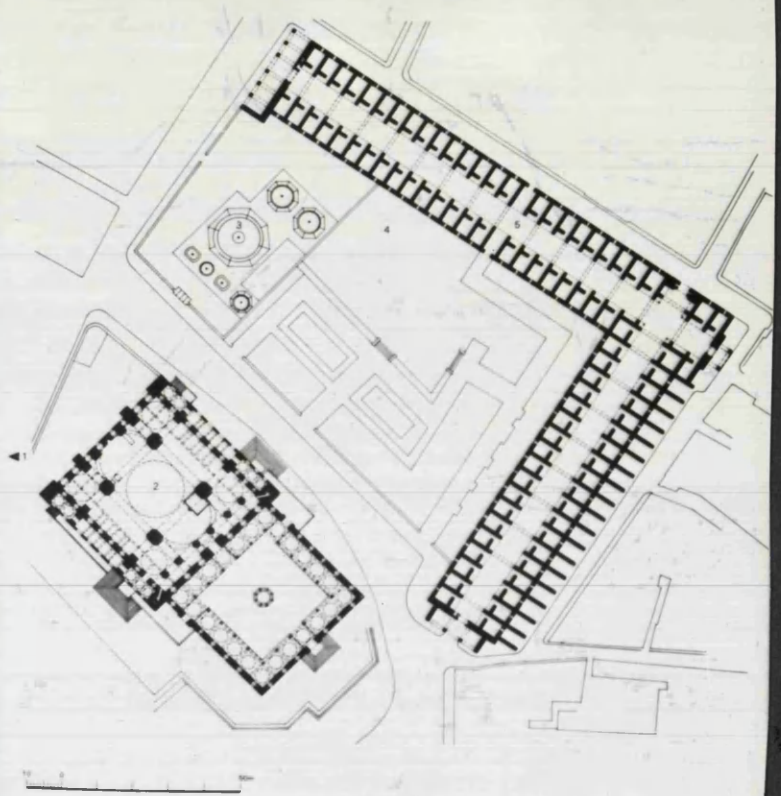


346 Yeni Valide Complex, Istanbul. Plan, scale 1:1,000. 1 Passage to royal pavilion, 2 mosque; 3 tirbe; 4 garden; 5 Egyptian Bazaar.

PL 13
- FROM GOODWIN

PL_15a

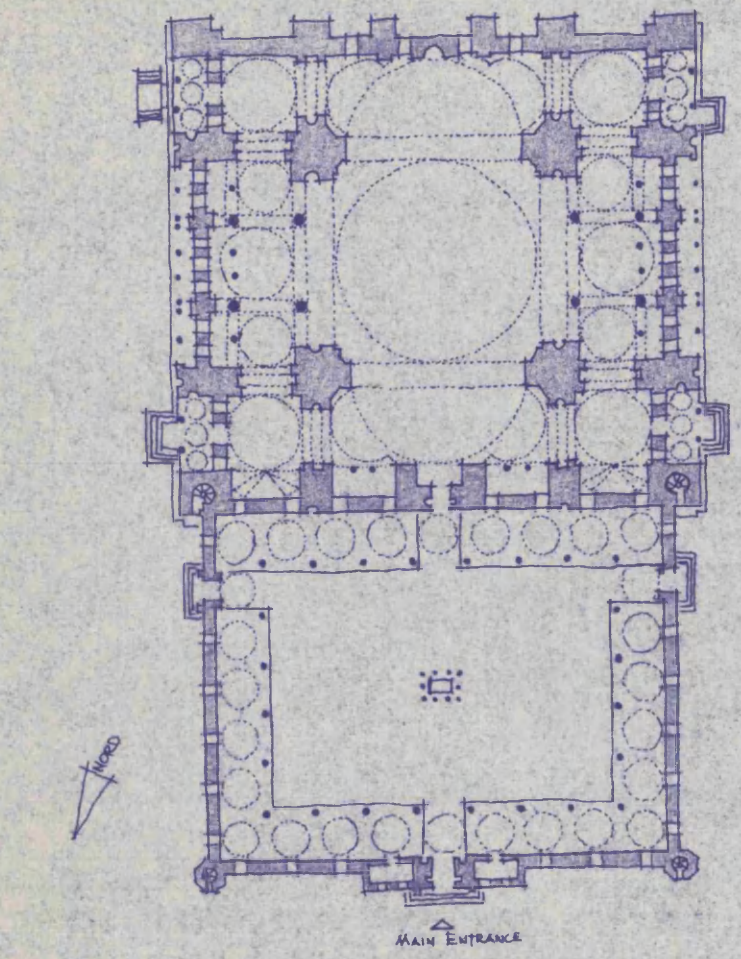
BİKOL PEVSZ



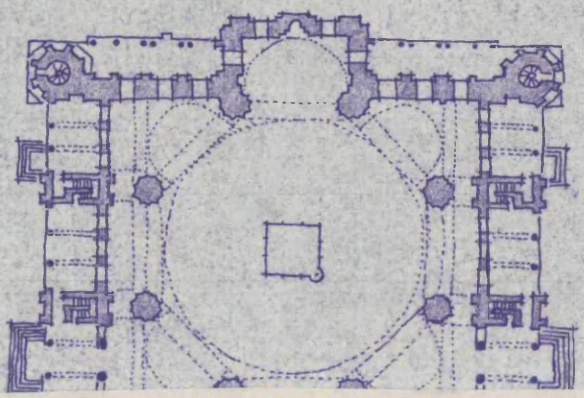
340 Yeni Valide Complex, Istanbul. Plan, scale 1:1,000. 1 Passage to royal pavilion; 2 mosque; 3 tomb; 4 garden; 5 Egyptian Bazaar.

PL_13

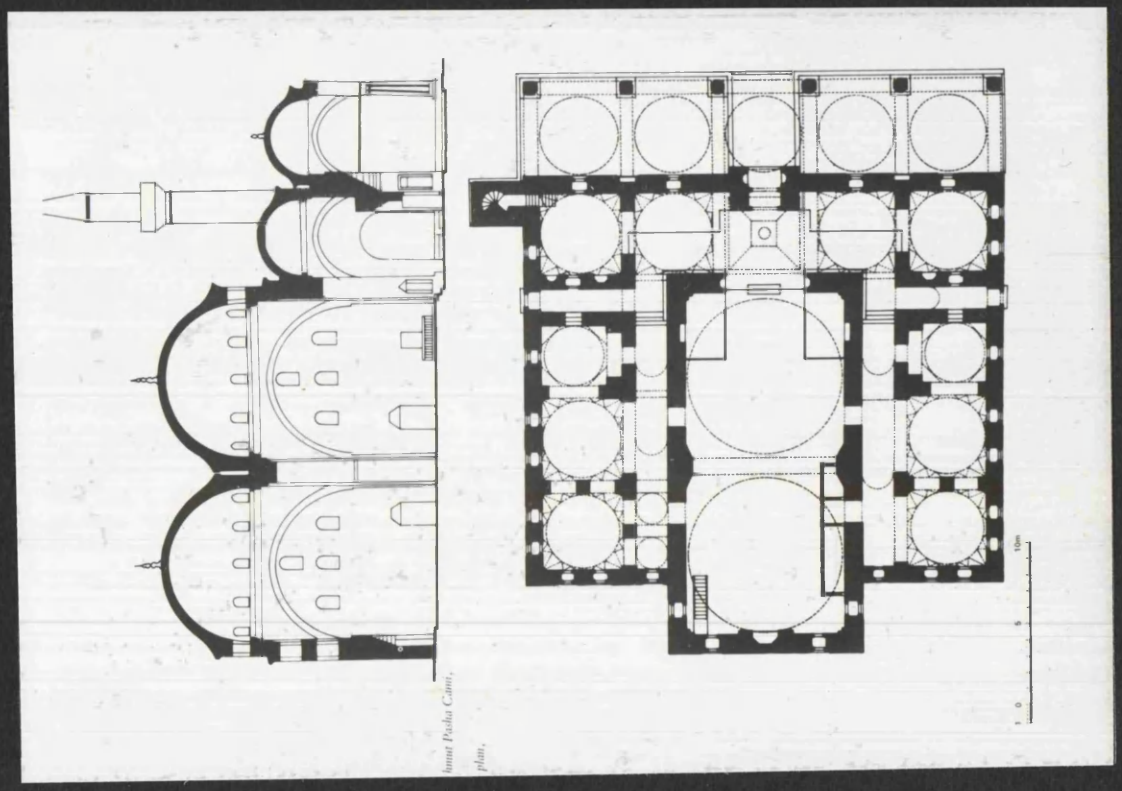
- FROM GOODWIN



the MOSQUE of SÜLEYMANİYE
in İSTANBUL
PLAN

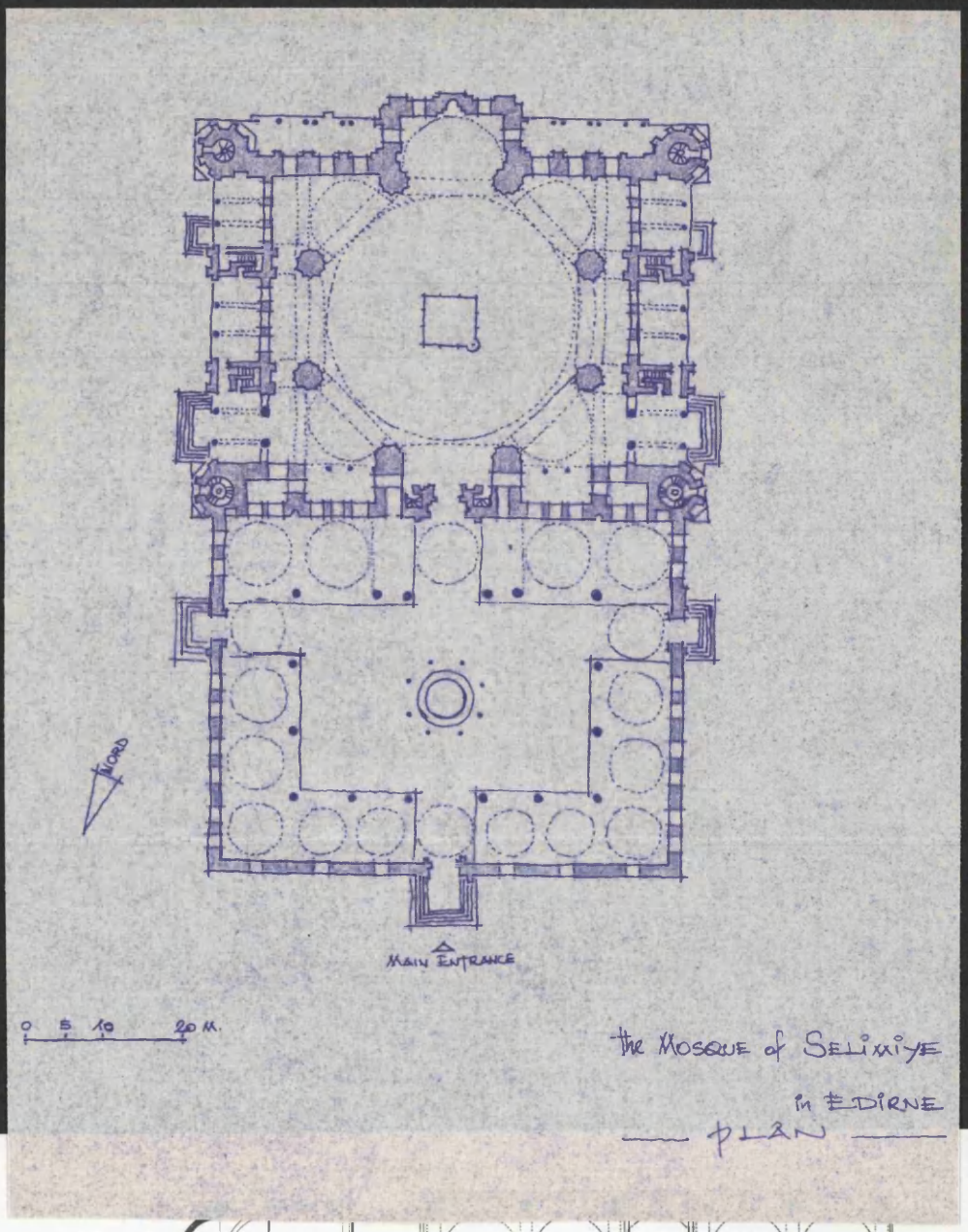


PL_17

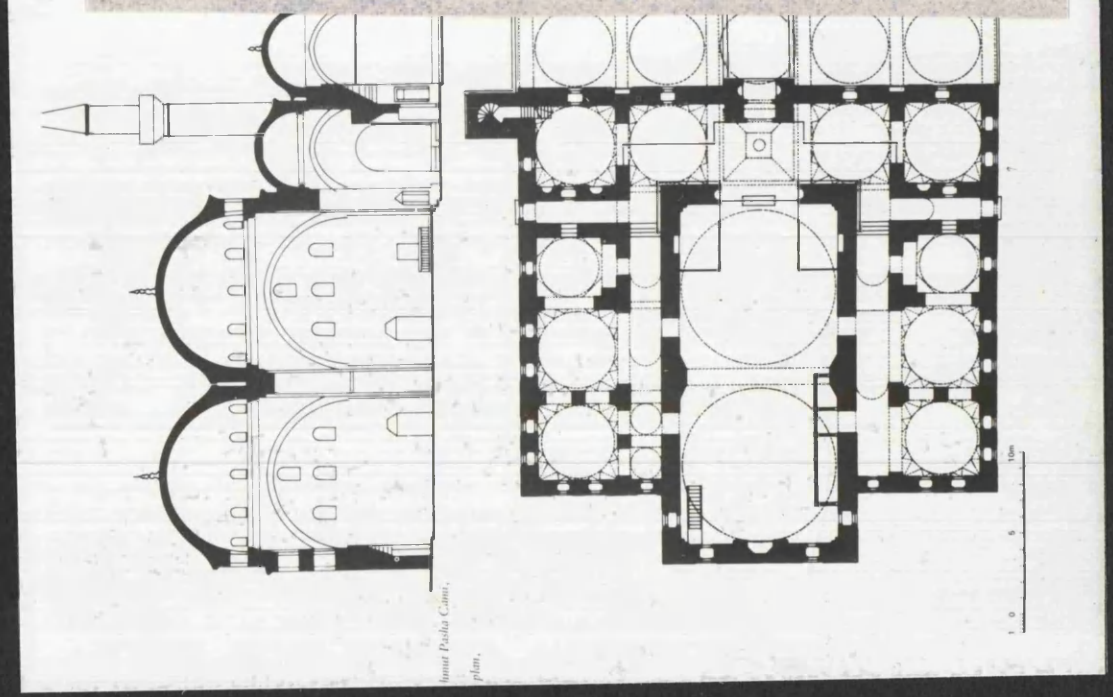


Sinan Pasha Cami, plan,

PL_18



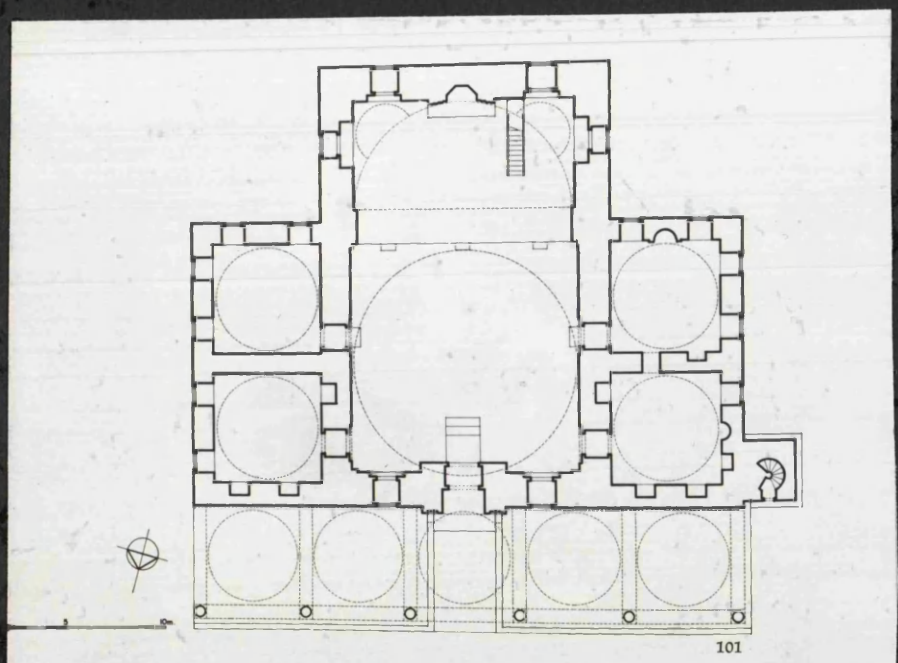
the MOSQUE of SELIMIYE
in EDIRNE
— PLAN —



Sinan Pasha Cami, plan.

PL_17

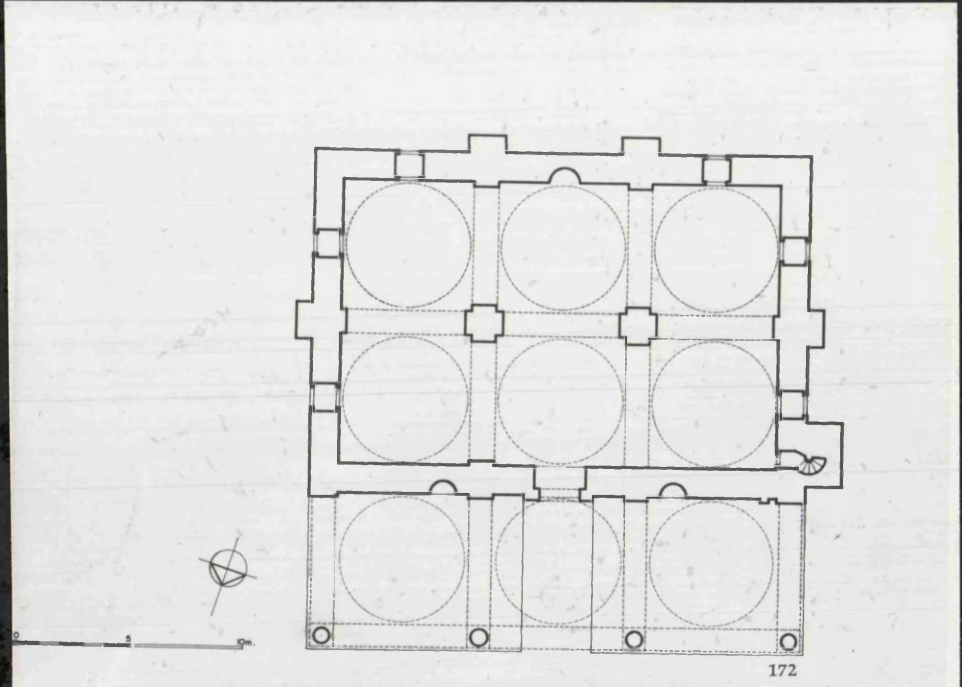
PL_18



101

Mosque of Rum Mehmed Paşa in Üsküdar, Istanbul

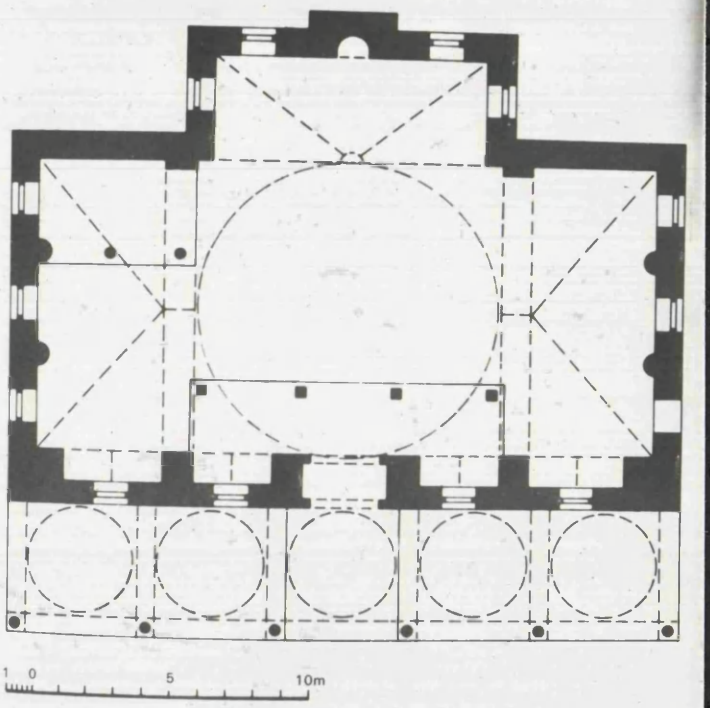
PL_19



172

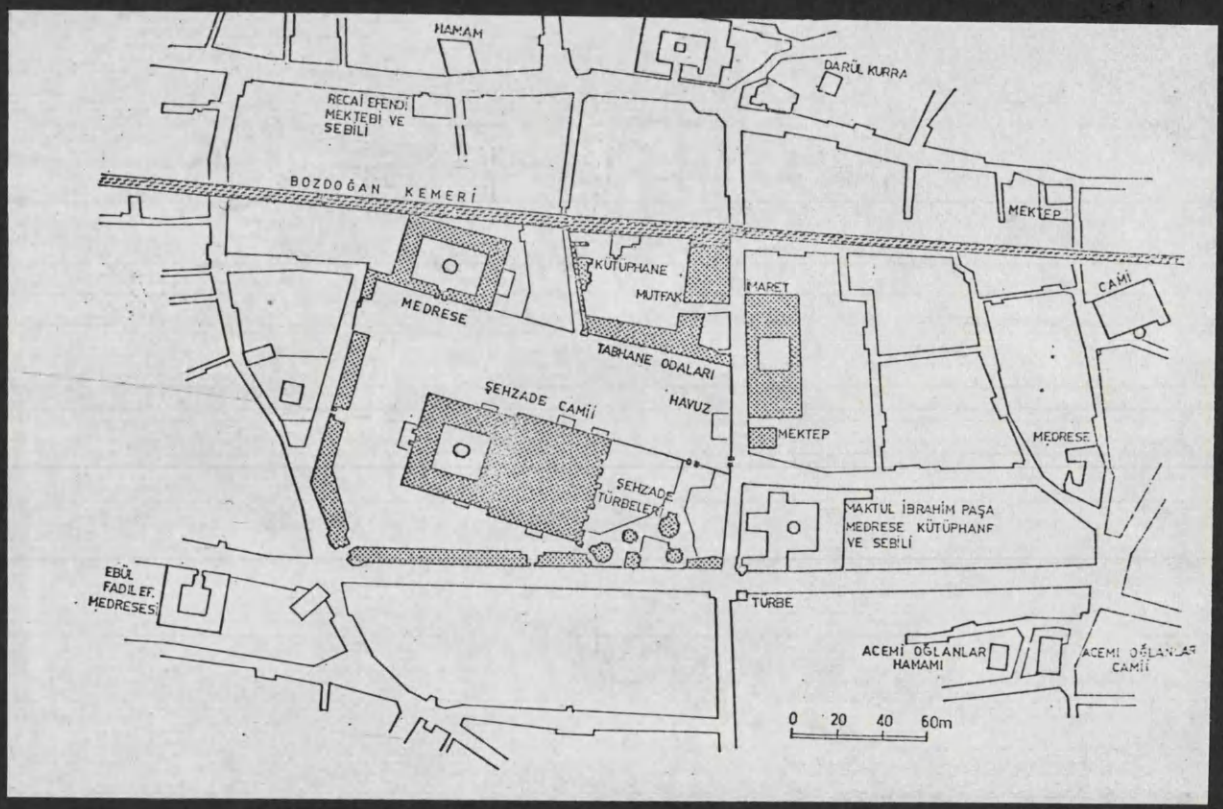
Zincirlikuyu Mosque in Istanbul

PL_20



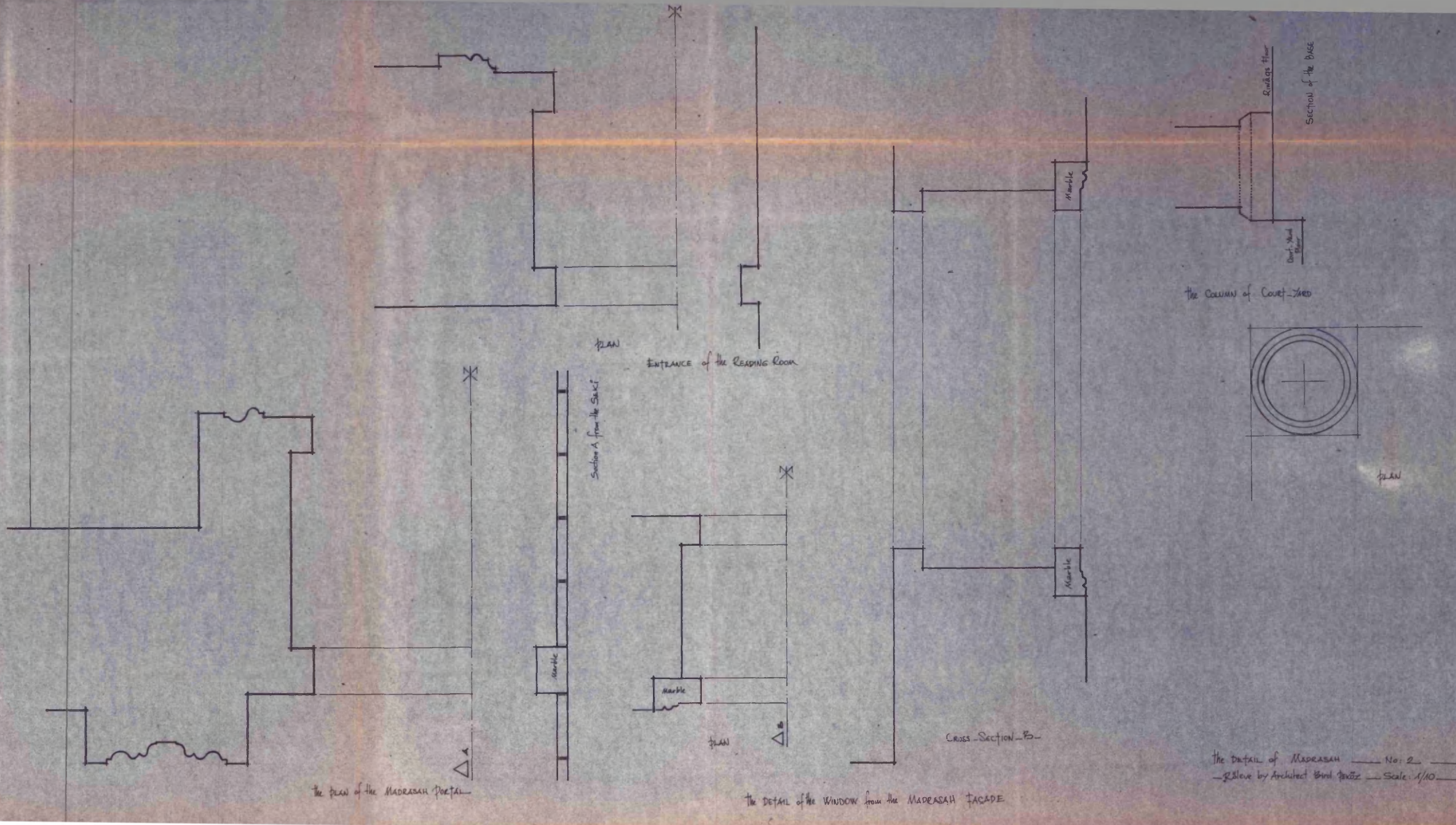
315 *Muradiye Cami, Manisa. Plan, scale 1:250.*

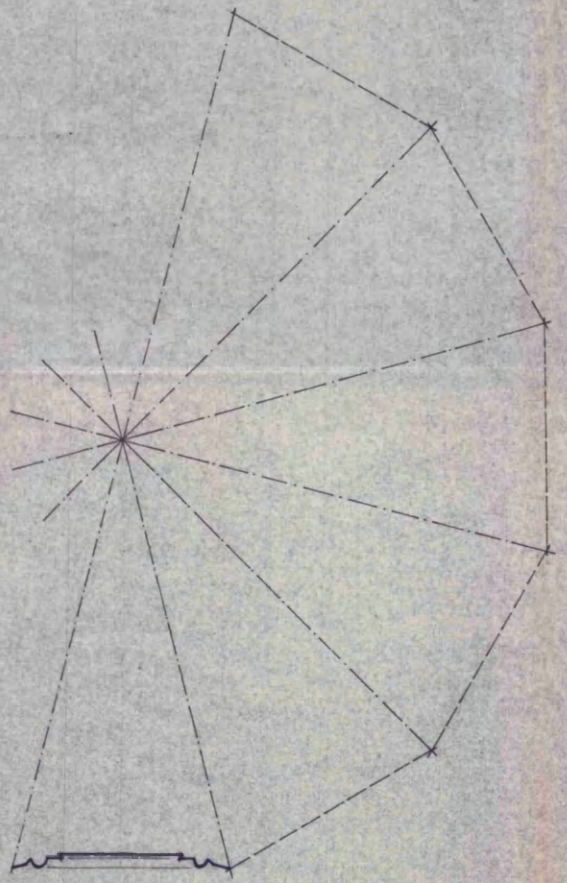
PL 21



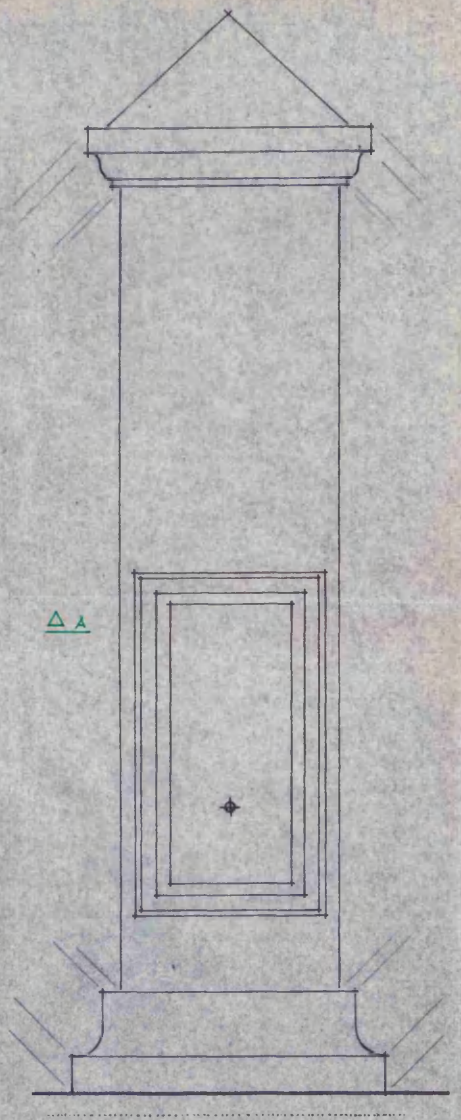
PL 22

The Plan of Madrasah ____ reserve ____
____ by Architect Yusuf Peker ____ Scale 1:100 ____


Section of the BASE
Rubble stone
Dark Red Floor
the COLUMN of Court-YARD
plan
ENTRANCE of the READING ROOM
plan
Section A from the Sketch
Marble
the PLAN of the MADRASAH PORTAL
Marble
Marble
plan
CROSS-SECTION-B-
the DETAIL of the WINDOW from the MADRASAH FACADE
the DETAIL of MADRASAH ____ No: 2 ____
Sketch by Architect Birol Yeniter ___ Scale: 1/10 ____



Section A

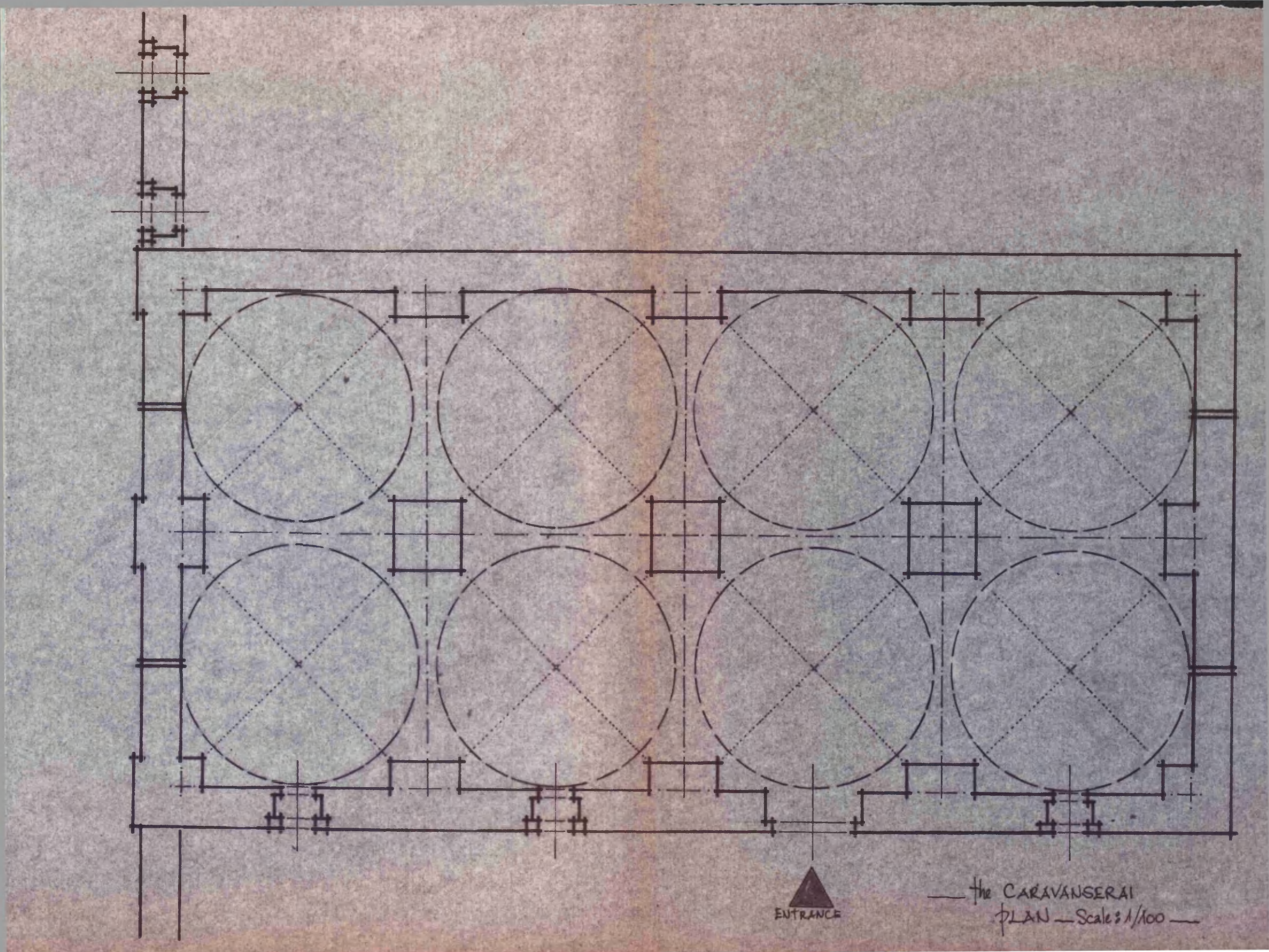


Façade

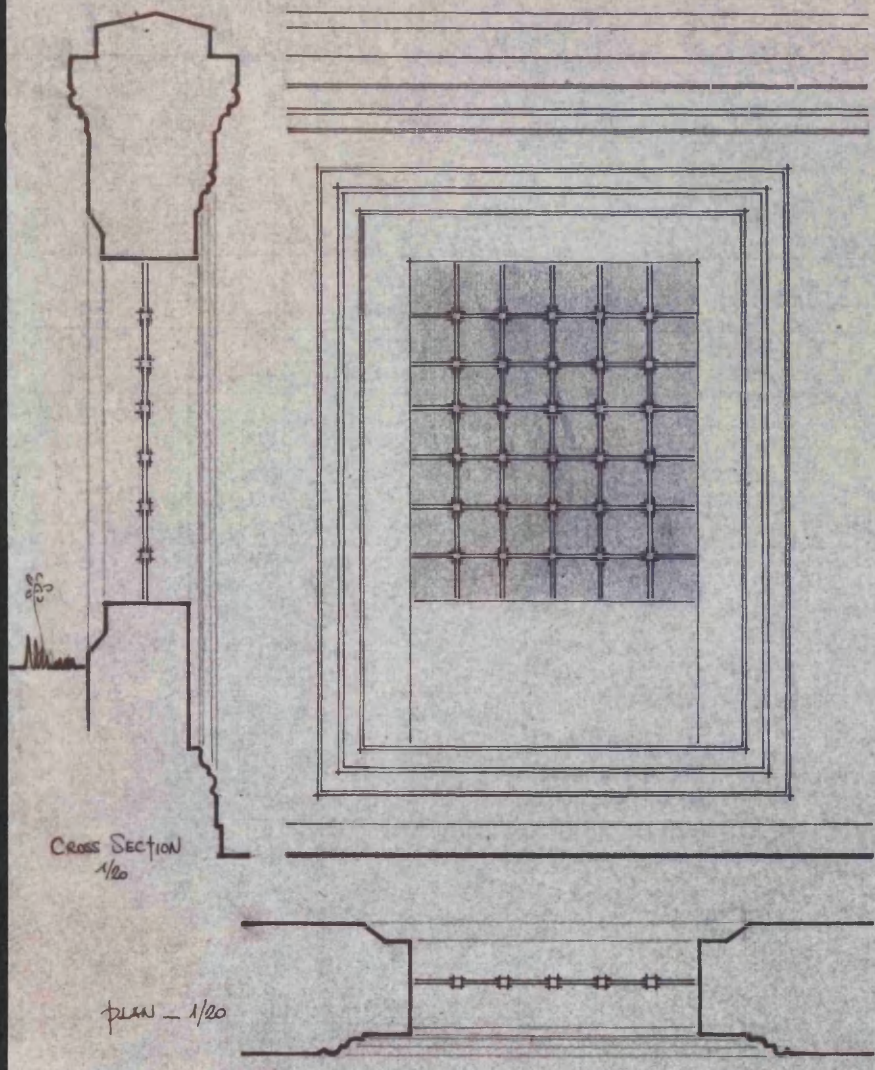
Section B

SADIRVAN ____ The DETAIL of MADRASAH ____ No: 1 ____

_R.Sieve by Architect Farol Qazvin ____ Scale: 1/10 ____

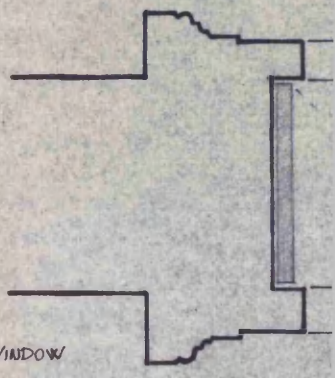


— the CARAVANSERAI
PLAN — Scale: 1/100 —



Cross Section 1/20

plan — 1/20



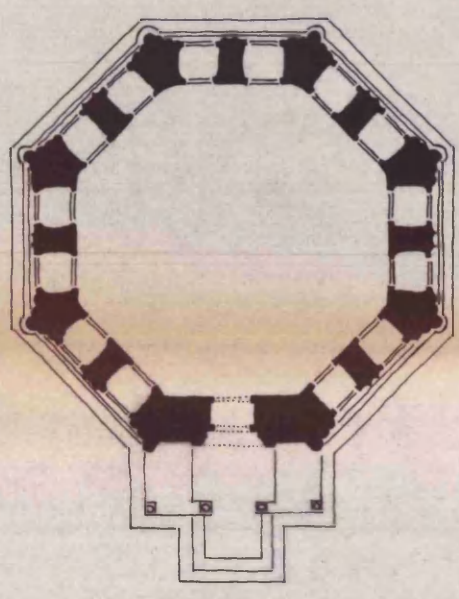
← the Detail of window

the Detail of Door →

facade of Courtyard — 1/20

Pl 27

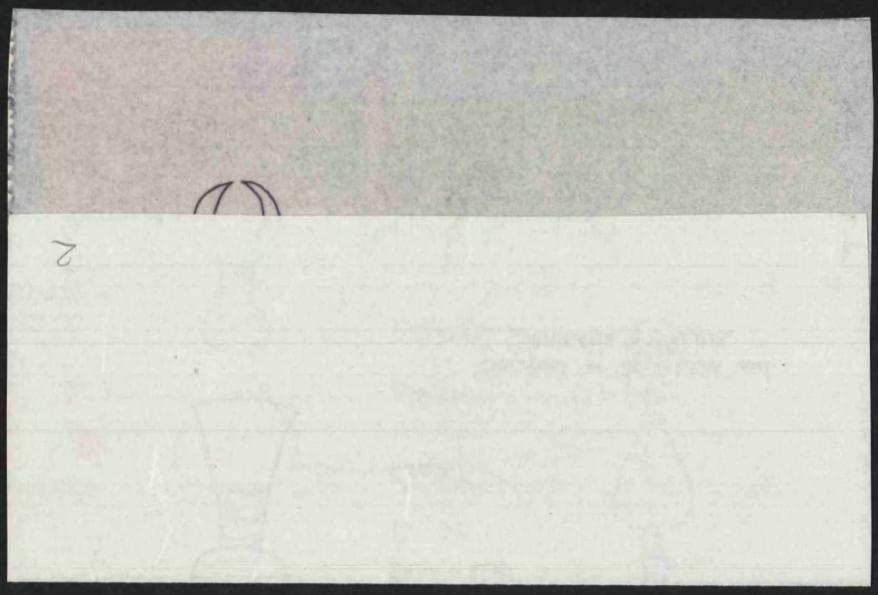
Pl 28



0 1 2 3 4 5 M

the türbe of Sehzade Mehmet

FIG_1a THE CHURCH of SERGIUS AND BACCHUS



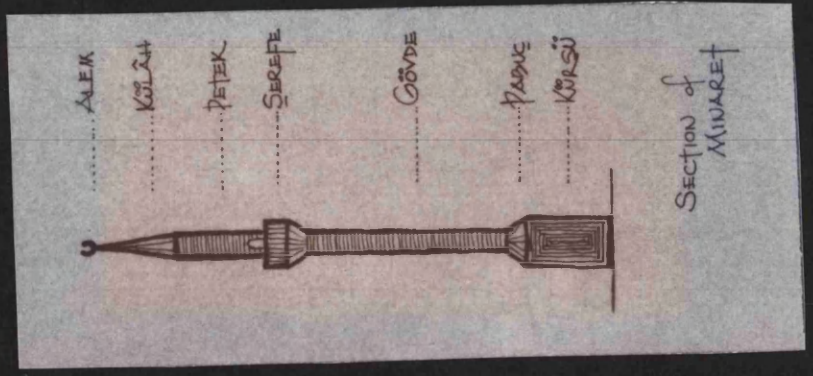


FIG_1b_1_c

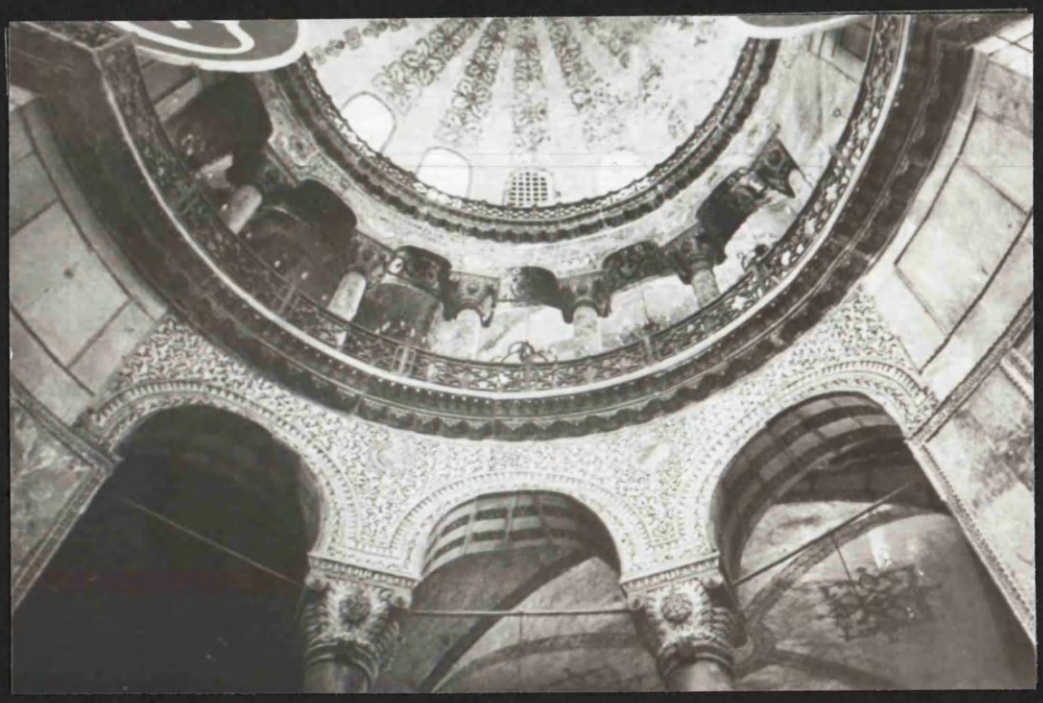


FIG_1a THE CHURCH of SERGIUS AND BACCHUS

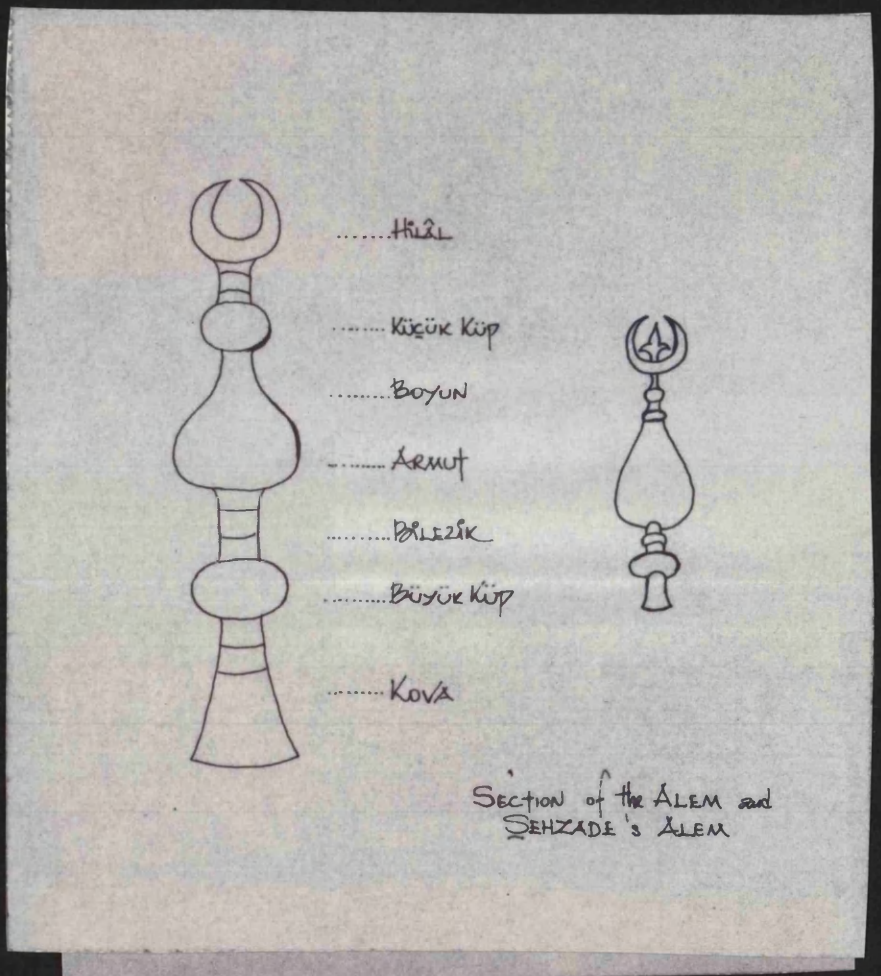
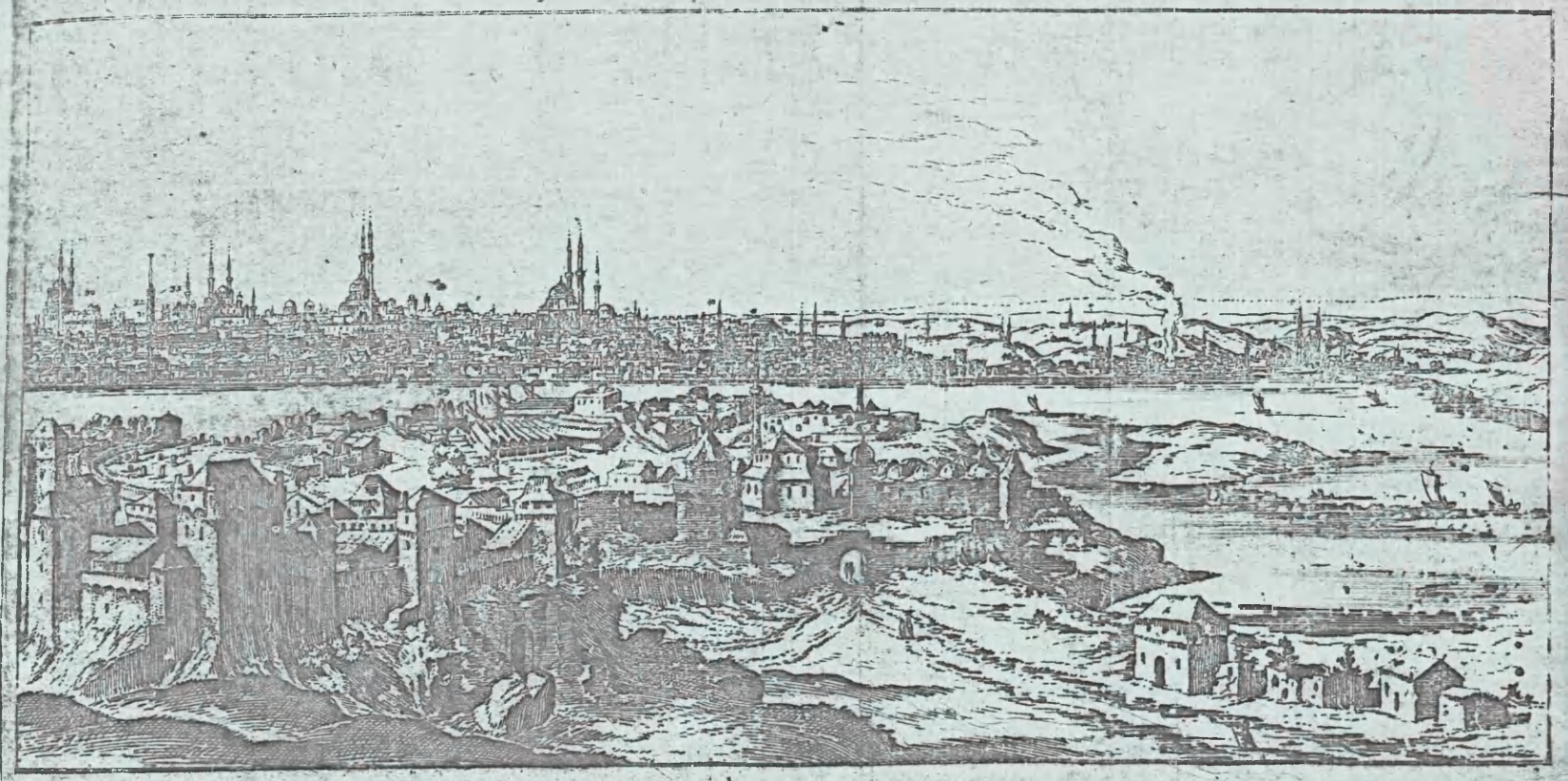


FIG_1b_1_c

FIG 3



FROM, E. HAMBOURY

FIG. 6 - THE SOUTH-WEST LOGGIA

FIG. 7. THE SOUTH-WEST LOGGIA

FIG. 8 _ THE MAIN PORTAL

FIG-9 THE ROOFING SYSTEM OF THE SOUTH_WEST LOGGIA

FIG. 10 THE SOUTH_WEST MINARET BASE

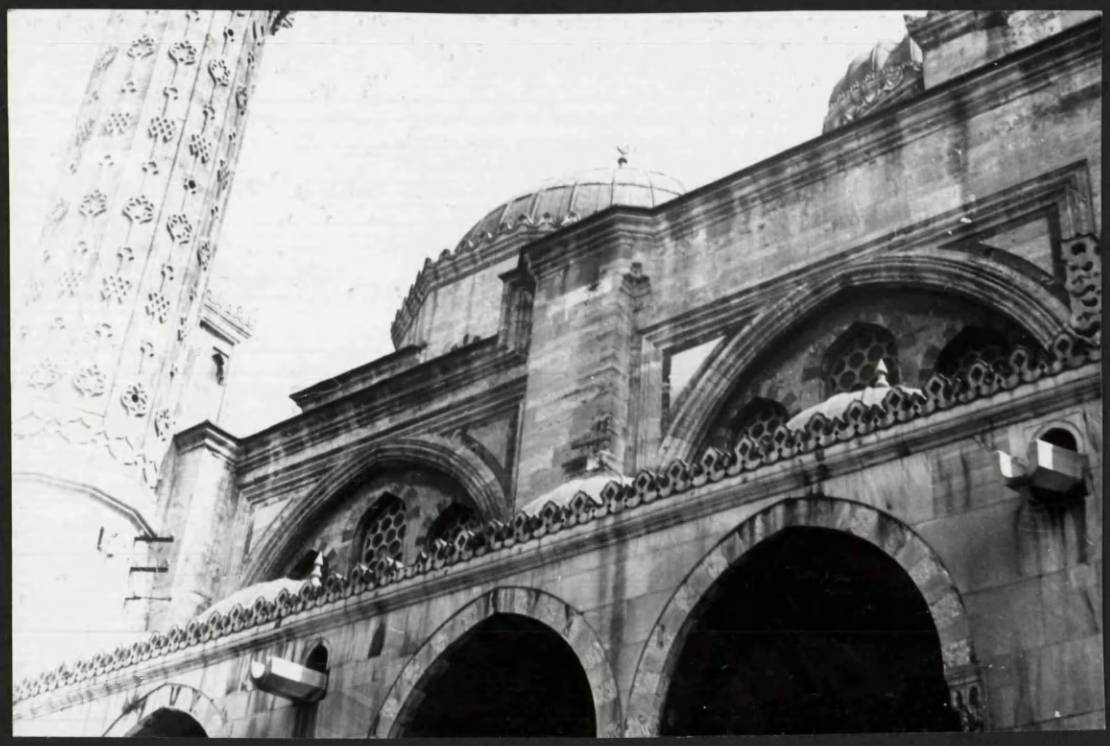


FIG. 11 THE SOUTH_WEST UPPER FAGADE

FIG. 12 THE SOUTH-WEST UPPER FAÇADE

FIG. 13 THE NORTH-EAST LOGGIA

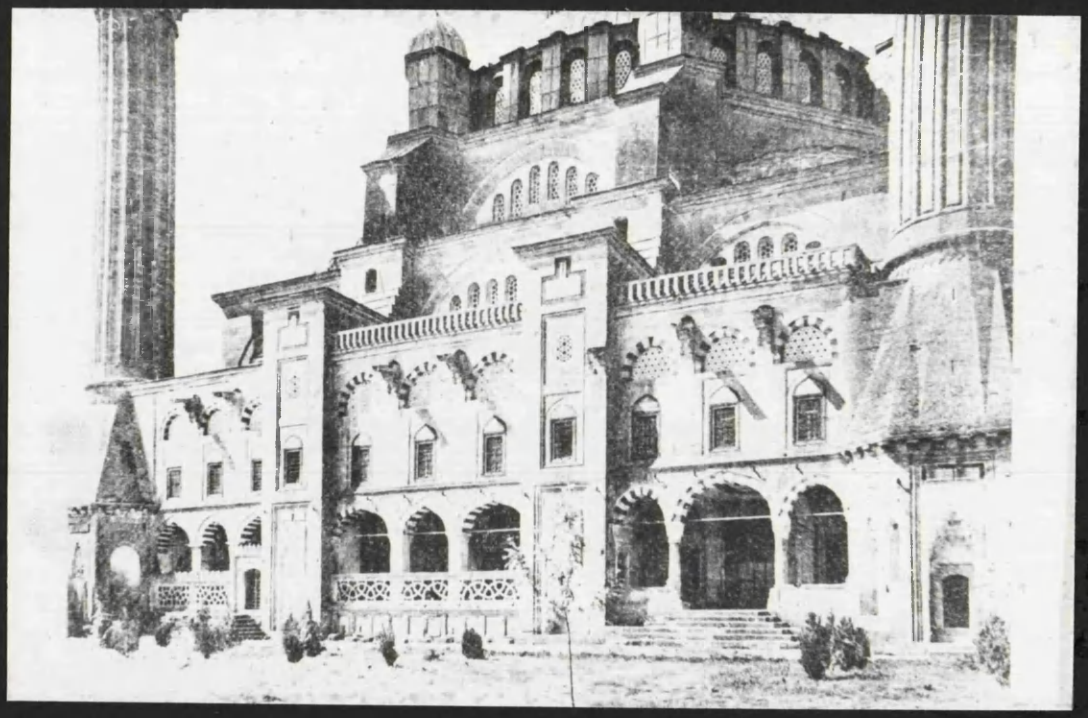


FIG. 14 THE FAÇADE OF SELİMİYE

FIG. 15 THE LOGGIA FAÇADE OF SULTAN AHMED

FIG. 16 THE EXTERIOR OF THE YENİ CAMİ

قال الله تعالى كلما دخل عليها زكريا المحراب

the Inscription of MIHRĀP

لا إله إلا الله محمد رسول الله

the Inscription of MINBĀR

قال الله تعالى إن الصلوات كانت على المؤمنين كتابا موقوتا

the Inscription of the South-West Portal

FIG.18 THE SOUTH-WEST COURTYARD FAÇADE

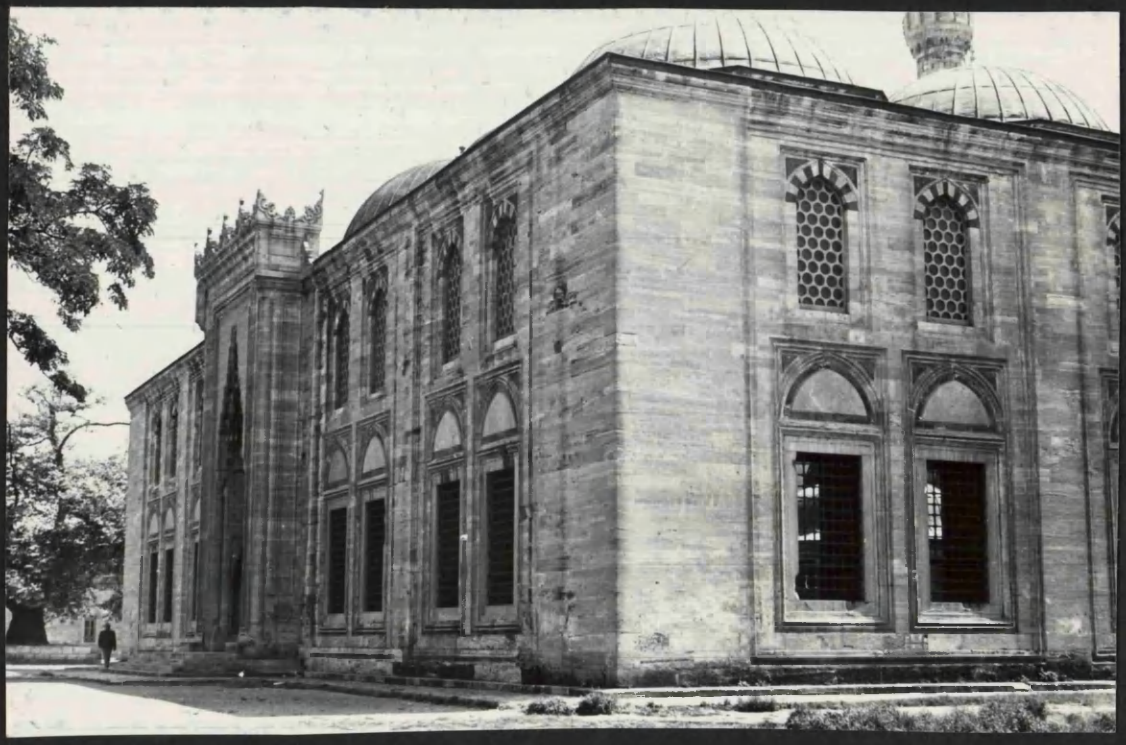


FIG. 19 THE NORTH-WEST COURTYARD FAÇADE

FIG. 20 THE FAÇADE OF İSA BEY

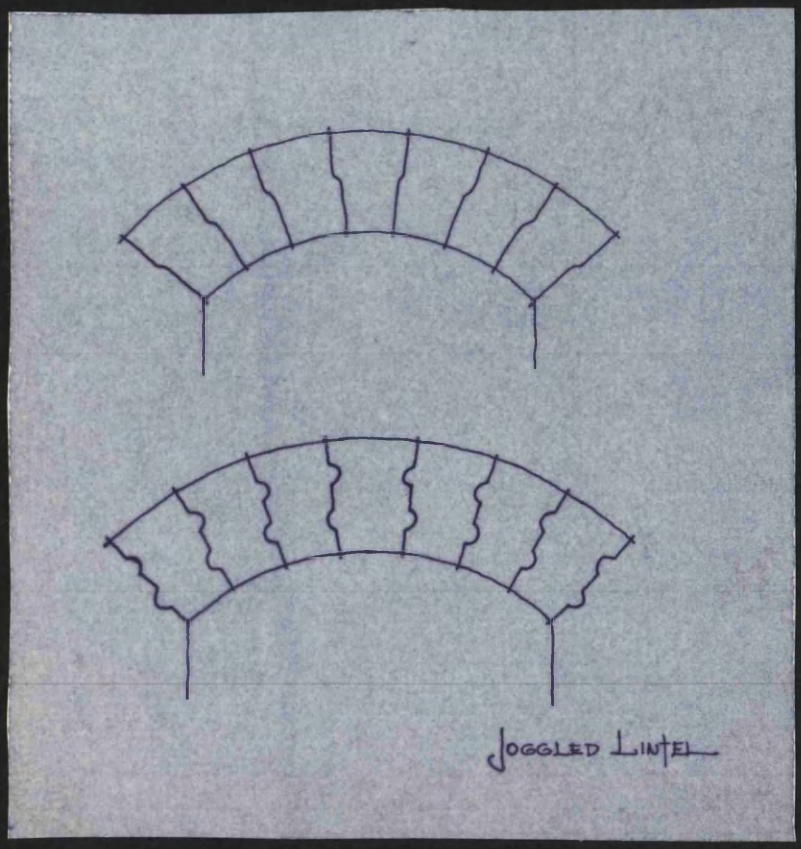


FIG. 21

FIG. 22 THE NORTH_WEST FAÇADE

FIG. 23 THE NORTH_WEST FAÇADE

FIG. 24 THE PORTAL DETAIL OF THE NORTH-WEST COURTYARD FAÇADE

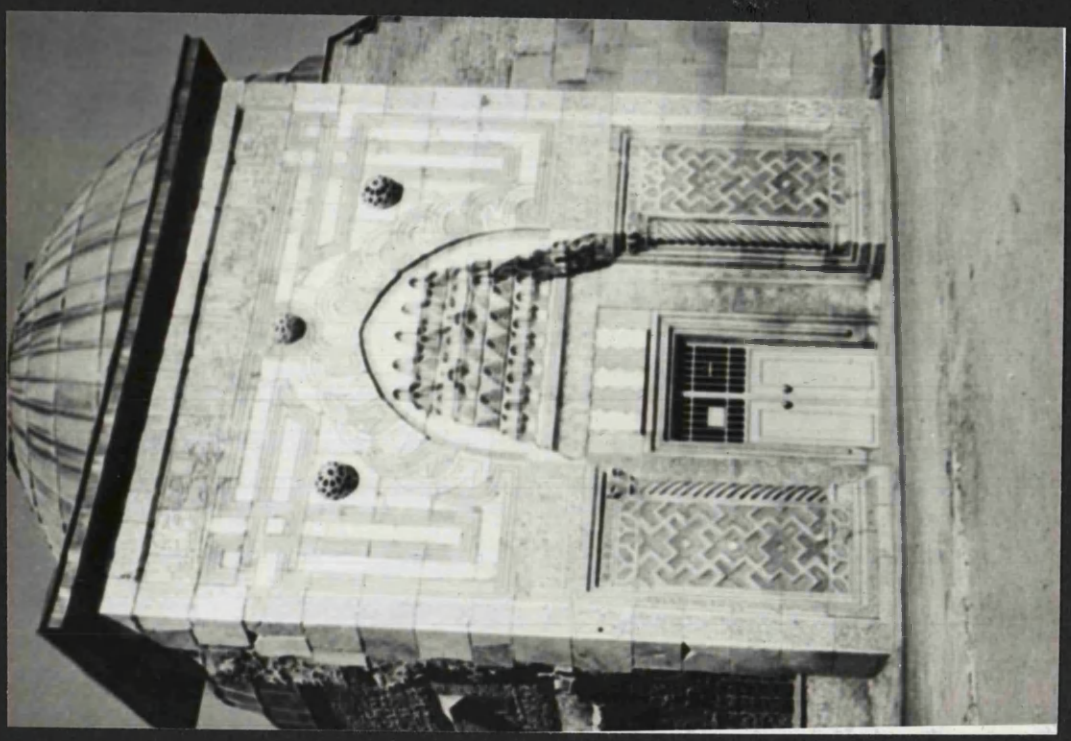


FIG. 25 a THE PORTAL OF THE KARATAY

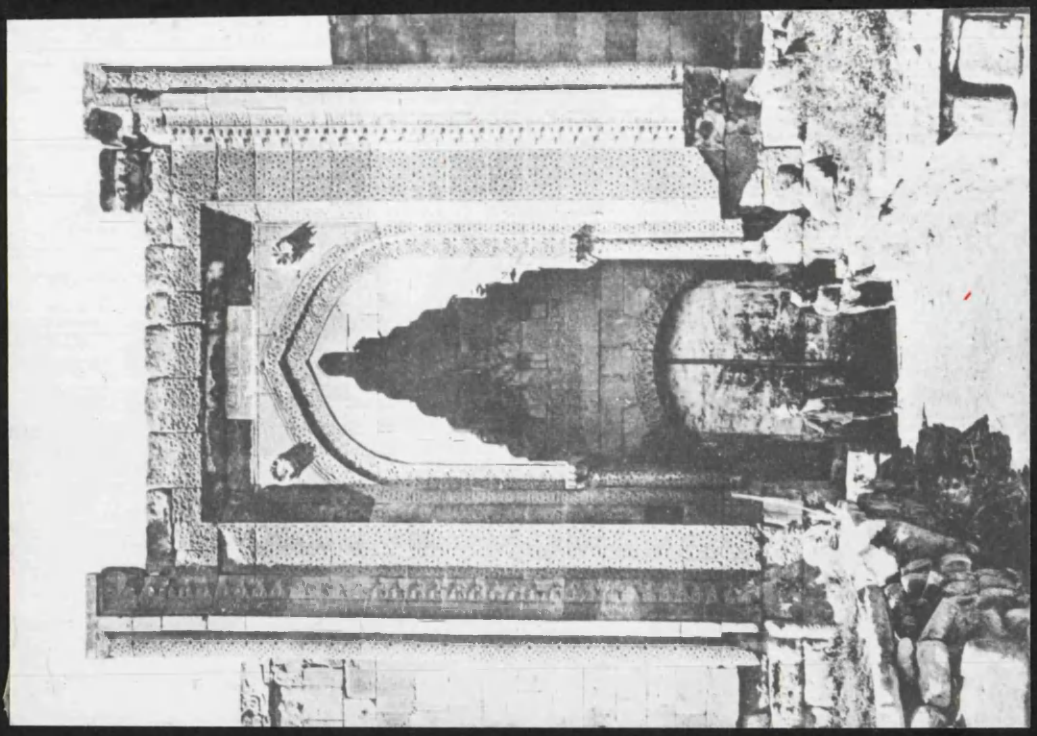


FIG. 25 b. THE PORTAL OF THE HACI KILIÇ CAMI in KAYSERI

FROM GABRIEL

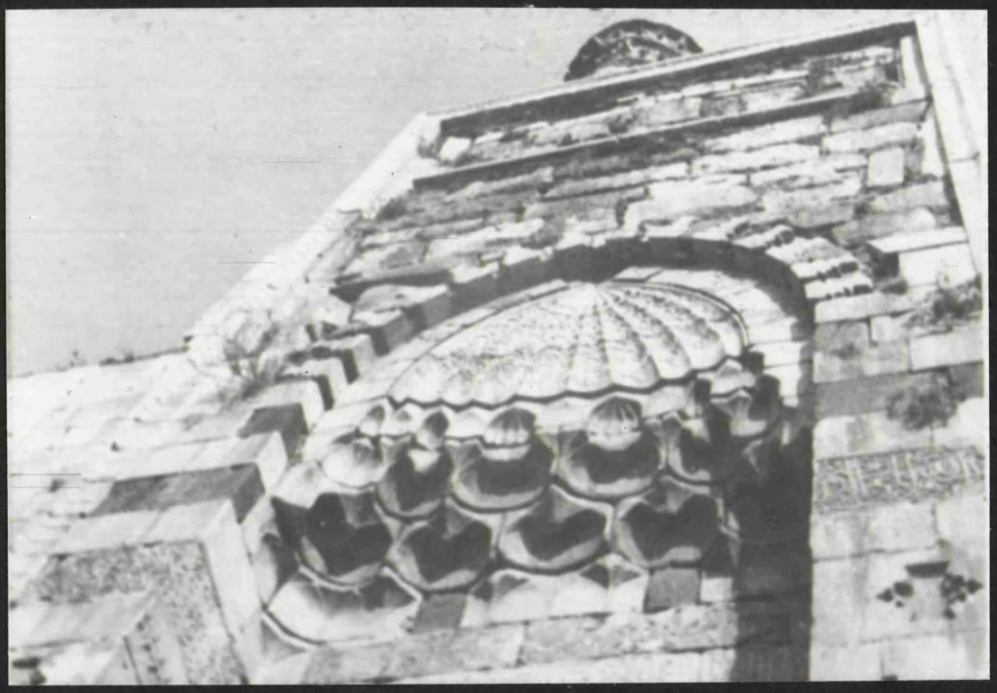


FIG. 27 THE PORTAL OF İSA BEY

FIG. 28 THE PIERS AND COLUMNS OF NORTH-EAST LOGGIA

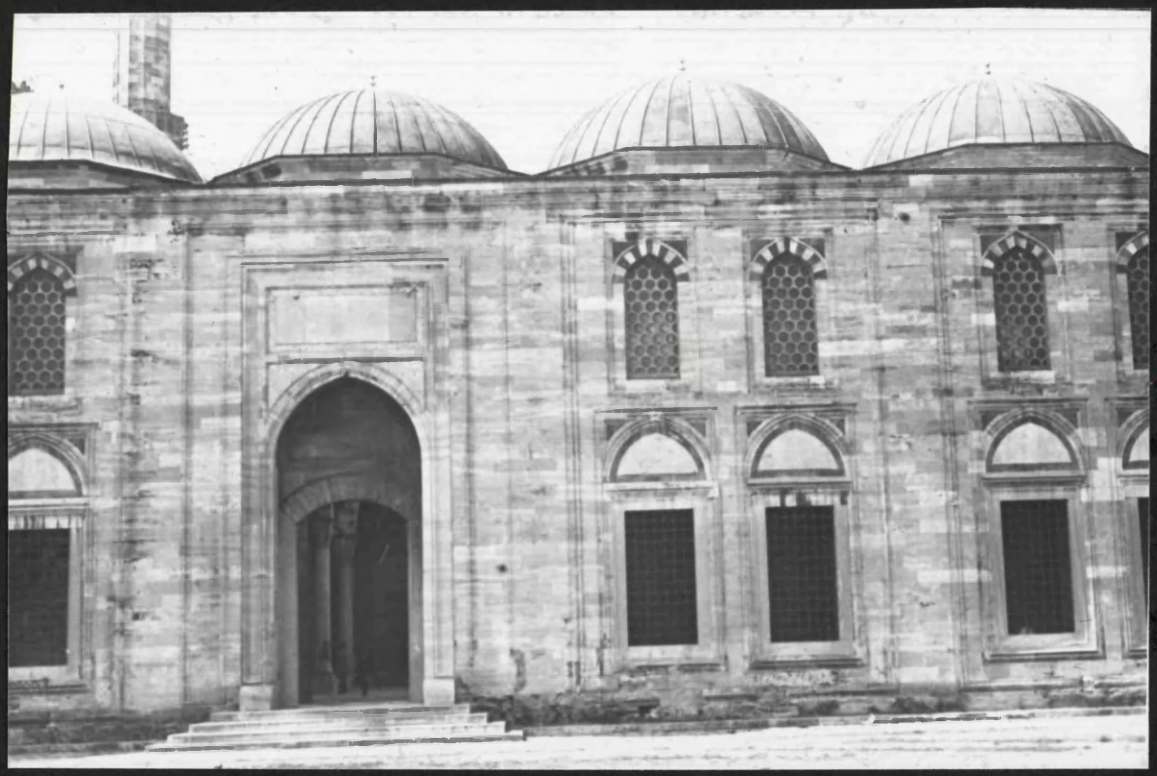


FIG. 29 THE FAÇADE OF THE NORTH-EAST COURTYARD

FIG. 30 THE HÜNKÂR MAHFİLİ

FIG. 31 _ THE HÜNKÂR MAHFILI

FIG. 33 THE QIBLA FAGADE

DETAIL of the MARBLE _ GRILLE of the HÜNKÂR MAHFİLİ
Scale: 1/1

FIG. 34 THE FAÇADE OF THE QIBLA WALL

FIG. 35 THE FAÇADE OF THE QIBLA WALL

FIG.36 _ THE FAÇADE OF THE QIBLA WALL

FIG.37 THE ÇAĞADE OF THE BURSA ULU CAMI

FIG. 38 THE COURTYARD

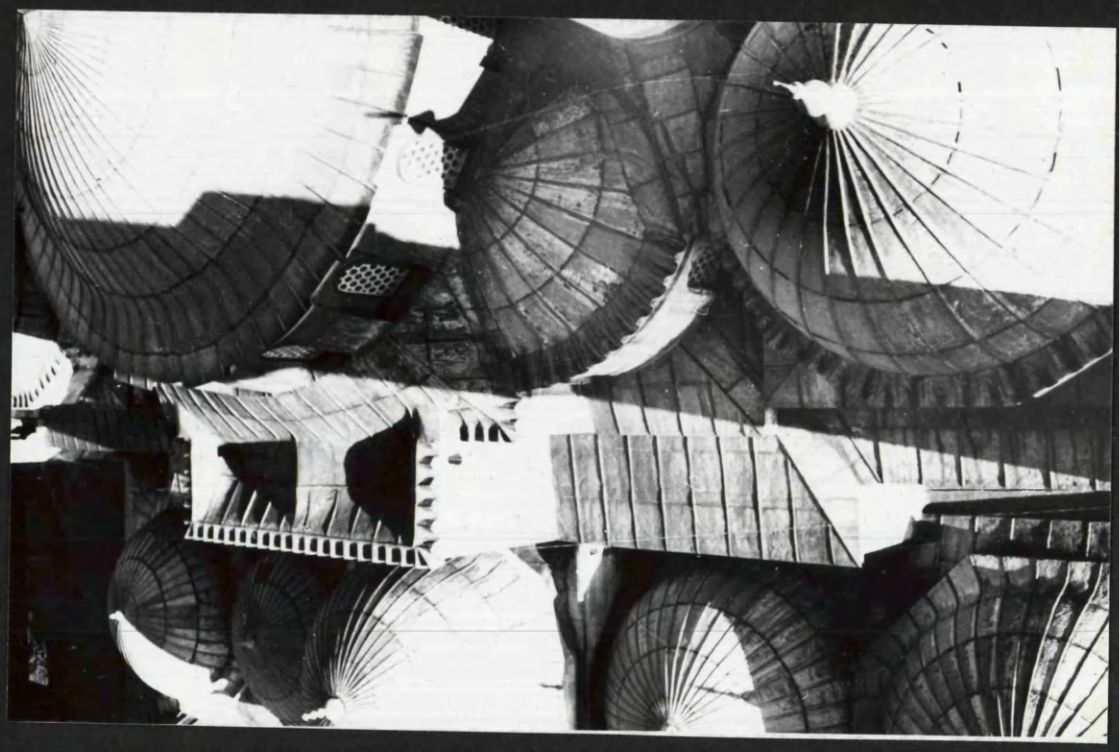


FIG. 39 THE ROOFING SYSTEM OF THE SON CEMAAT YERI

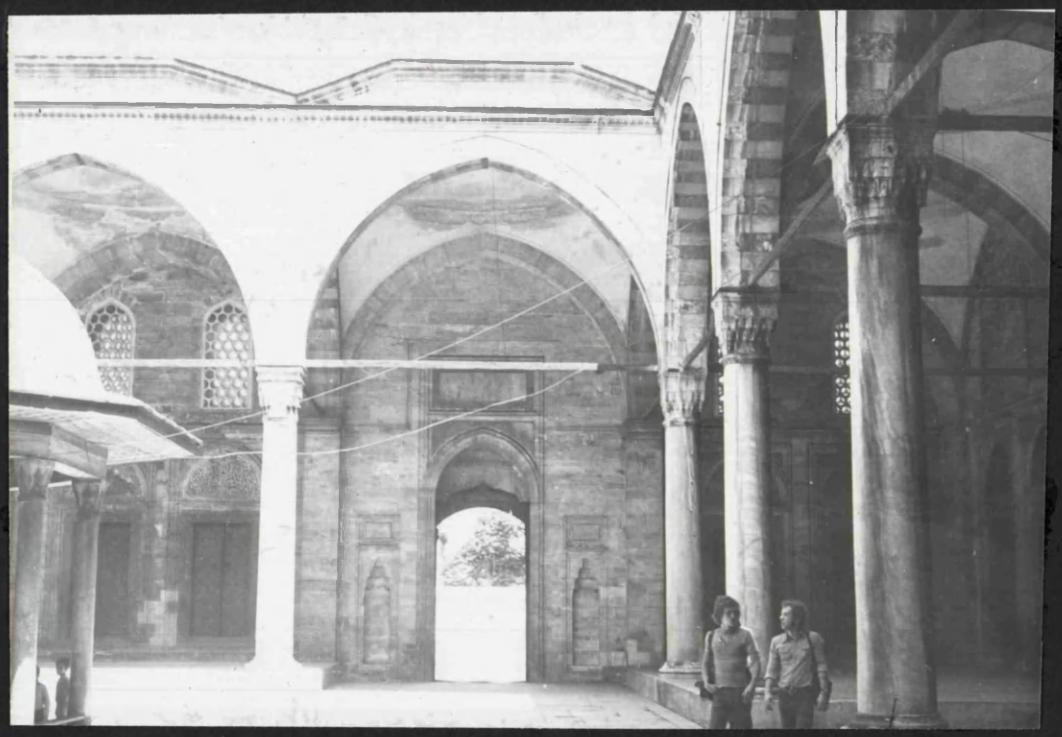


FIG. 40 THE PODIUM OF THE SON CEMAAT YERİ

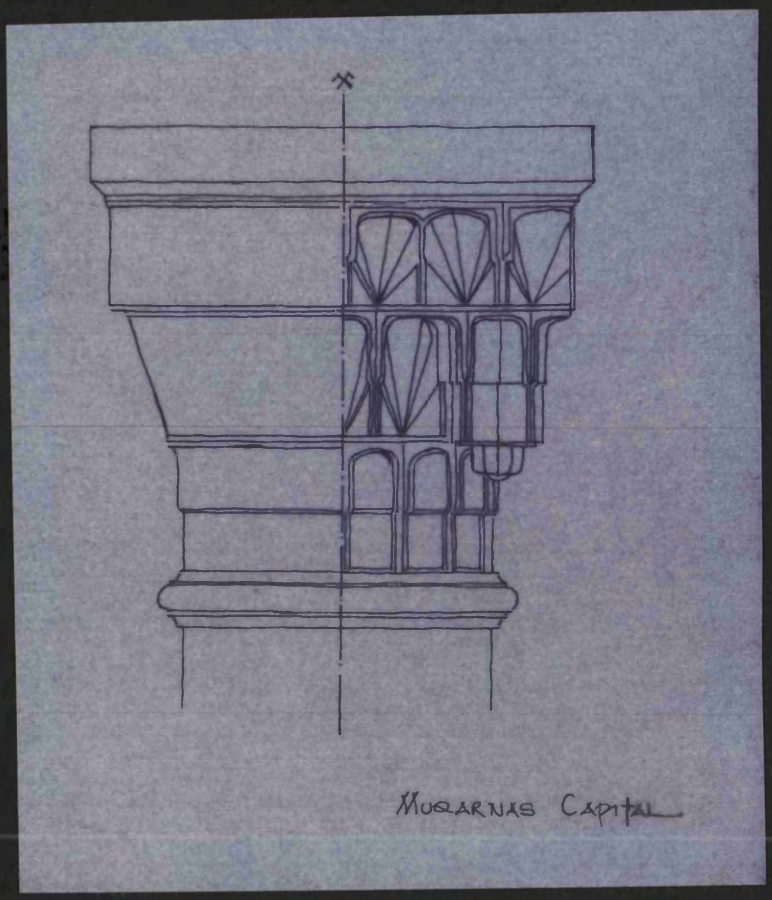


FIG. 41

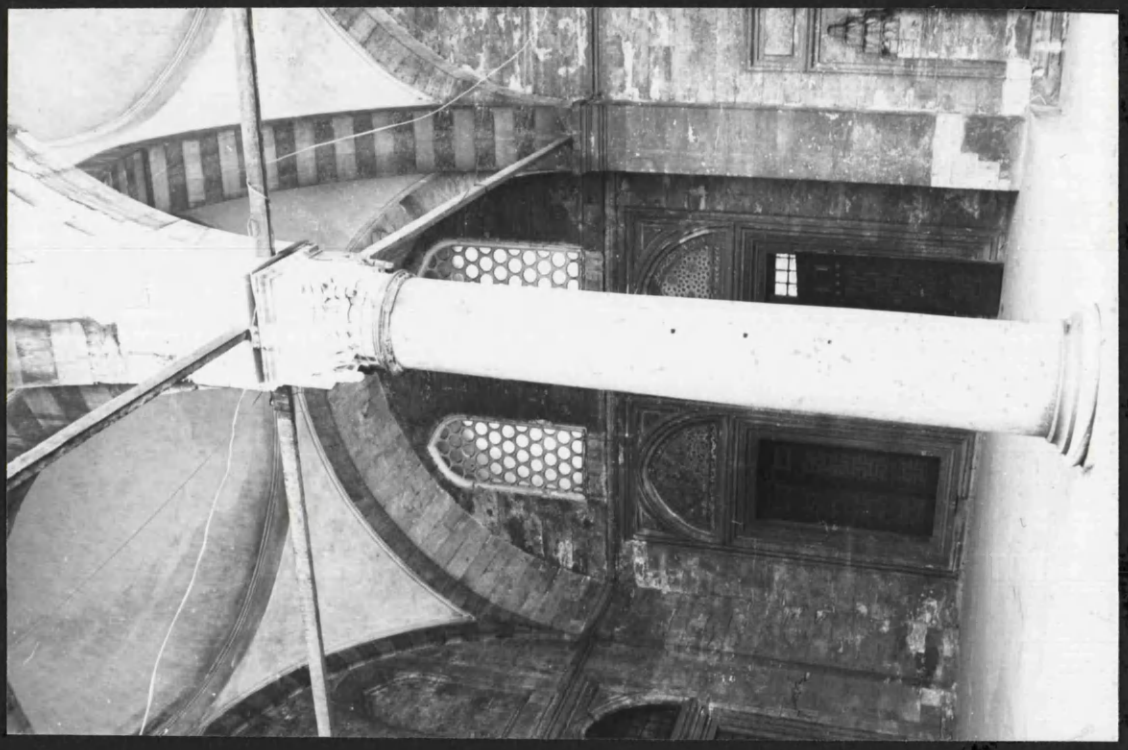


FIG. 42 THE COLUMN OF THE SON CEMAAT YERİ

FIG. 43 THE MİHRÂB OF THE SON CEMAAT YERİ

FIG. 44 THE PORTAL OF THE SON CEMAAT YERI

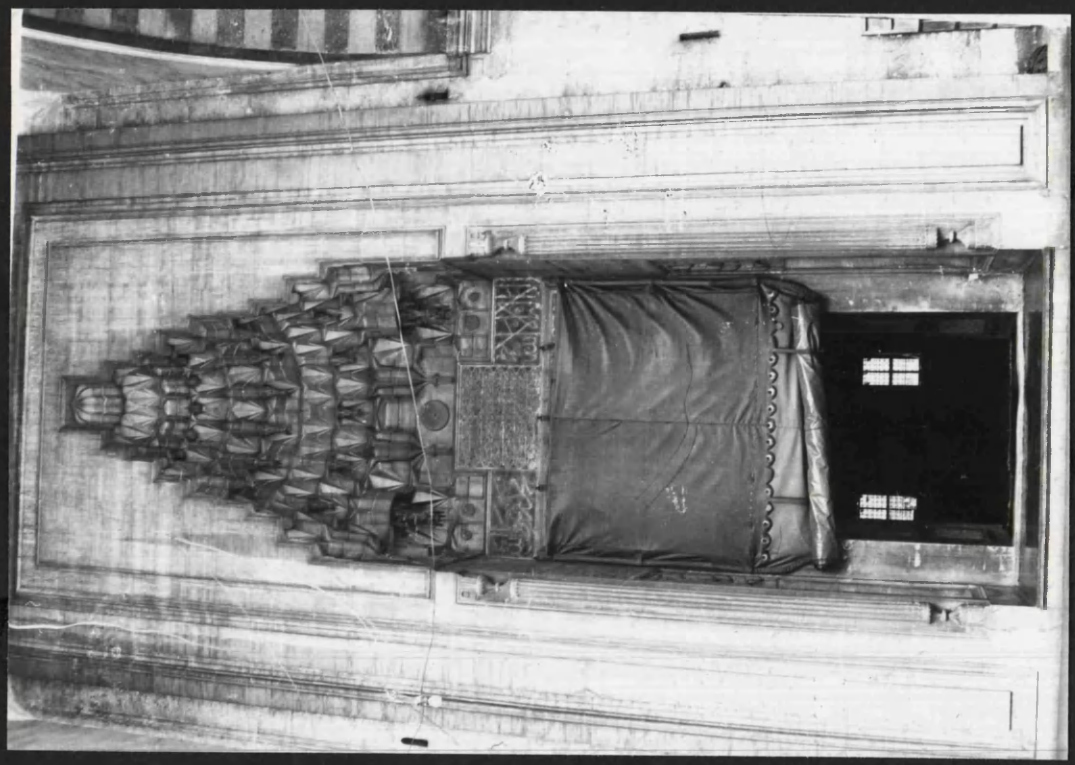


FIG. 45 THE PORTAL OF THE SON CEMAAT YERI

FIG. 46 THE MUQARNAS NICHE

کان خیرات شد سلیمان خان
هست او پادشاه روی زمین

ساخت جامع به روح شهزاده
خواند از آن شما ملک تحسین

این بنا از ایشان روشن شد
مثل فردوس و خلد برین

بحر و فلک فرد شریف بحر و بر
شاد گشتند جمله اهل الیقین

ادل این بنا بخدا شد
شمایش بخمس و خمسین

ابتدا ده ربیع اول ده
در کرخب شد تمام و همین

گفت منیر سخن به او تاریخ
عبده امت رسول امین

the Inscription of the Son Cemaat-Yeri Portal

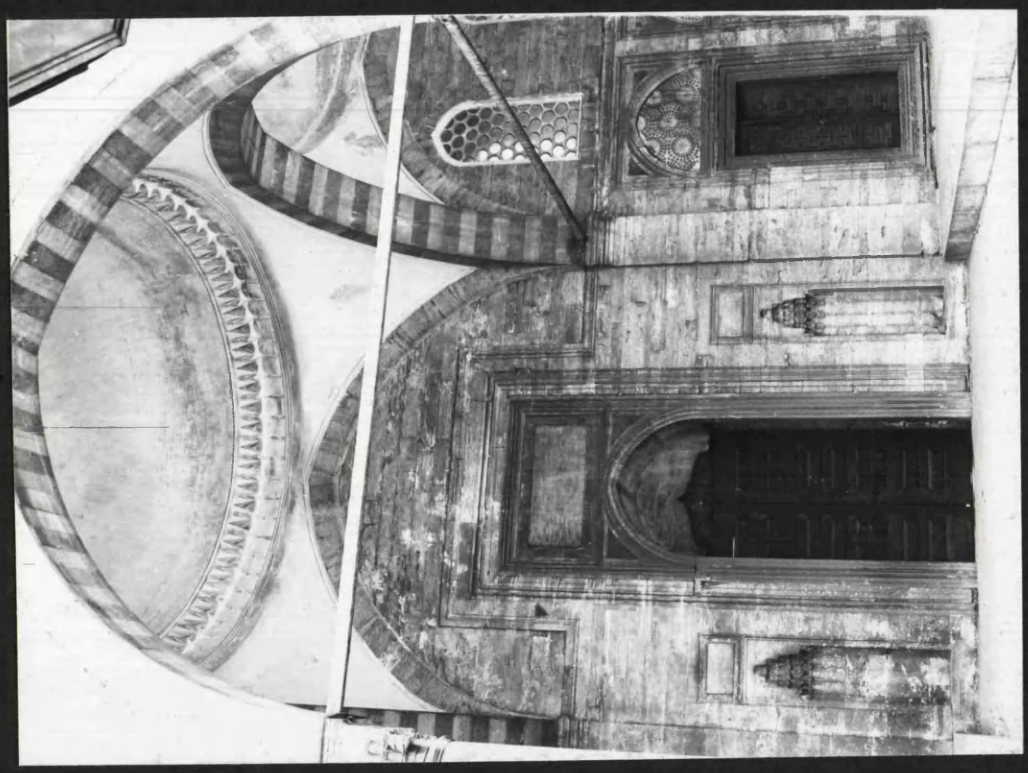


FIG. 48 THE RIWAQ-DOME

FIG. 49 THE ŞADIRVAN

FIG. 50. THE FLORAL GABLET

FIG. 51 THE RIWAQS

FIG. 52 THE GEOMETRIC GABLET

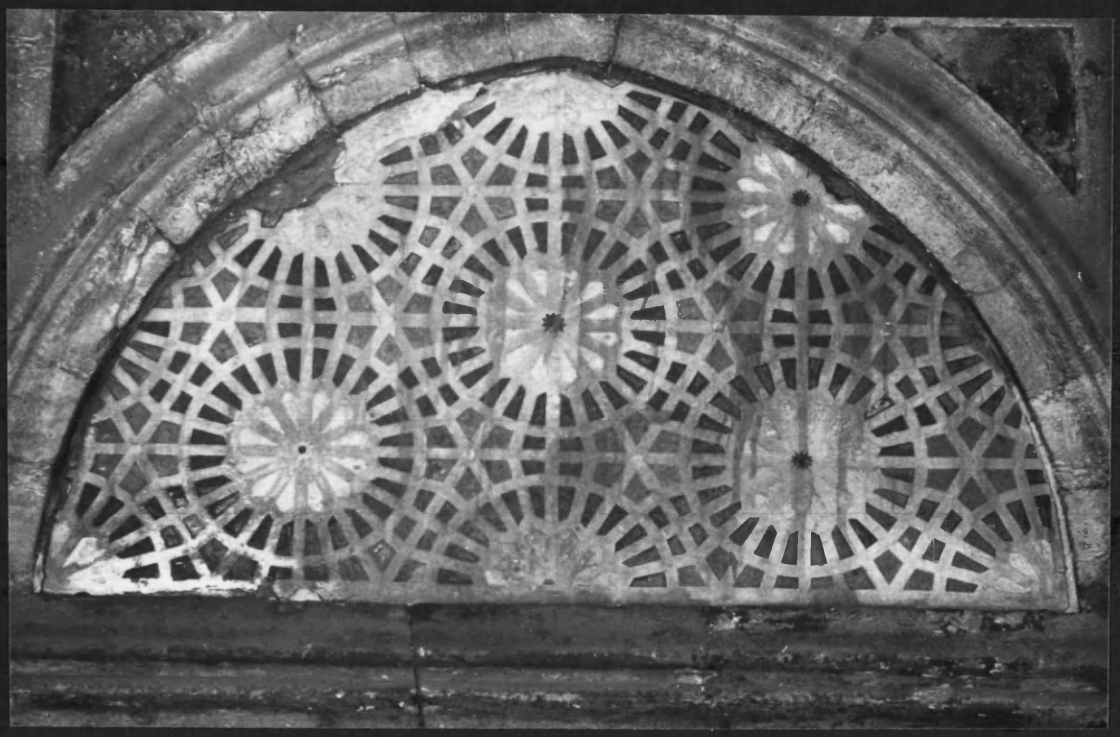


FIG. 53 THE GEOMETRIC GABLET

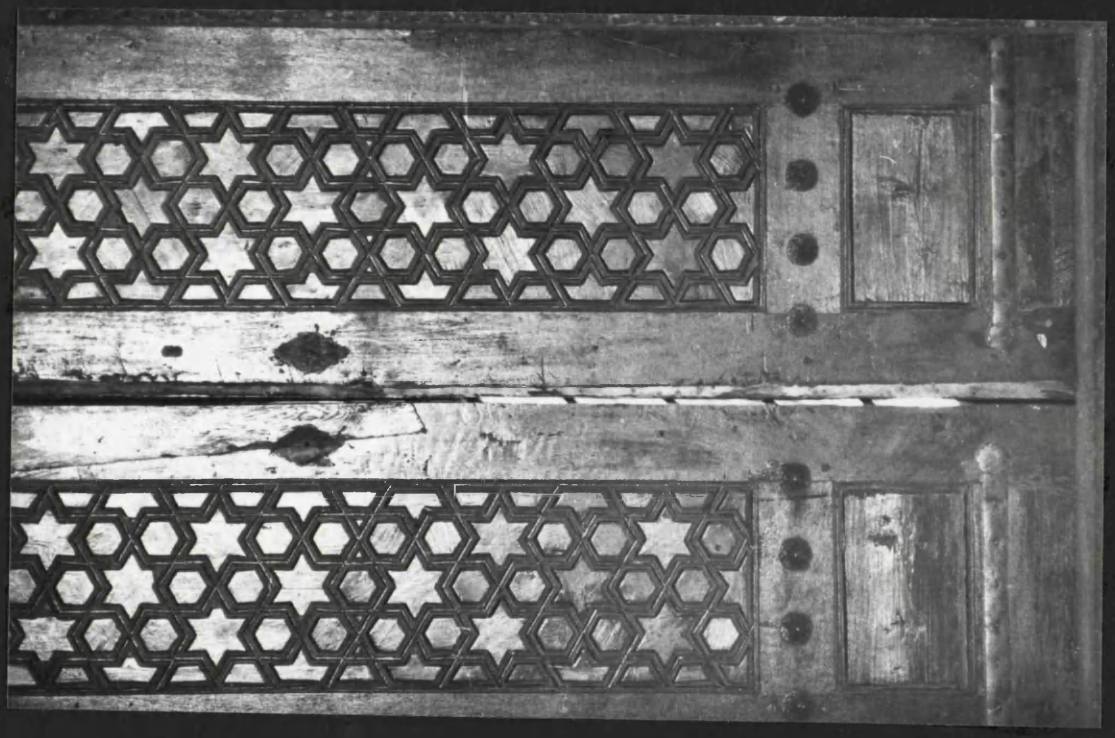


FIG. 54 THE CASEMENT SHUTTER

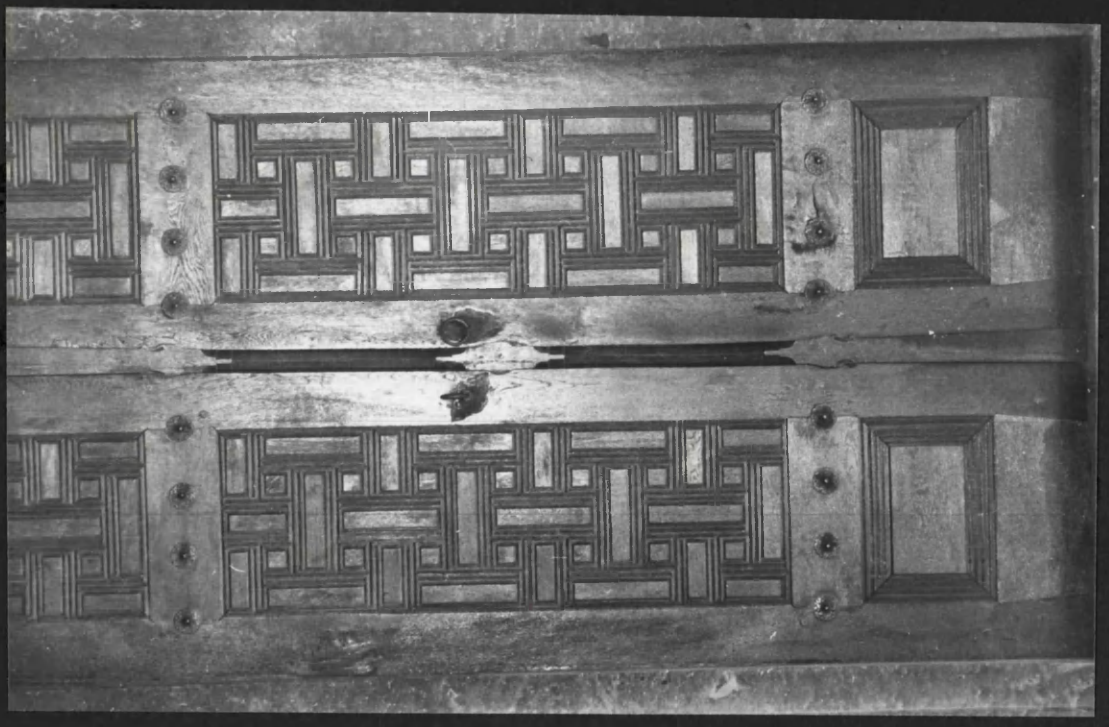


FIG. 55 THE CASEMENT SHUTTER

FIG. 56 THE MINARET

FIG. 57 THE MINARET

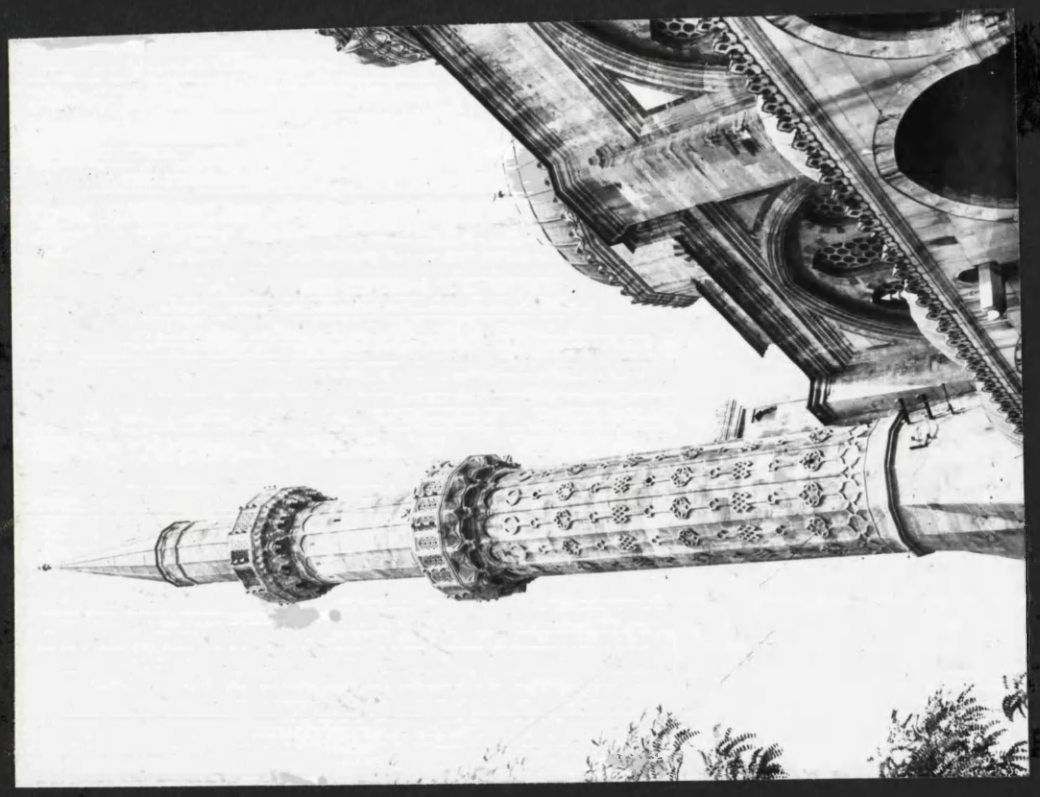


FIG. 58 THE MINARET

FIG. 59 THE MINARET

FIG. 59 a. THE MINARET

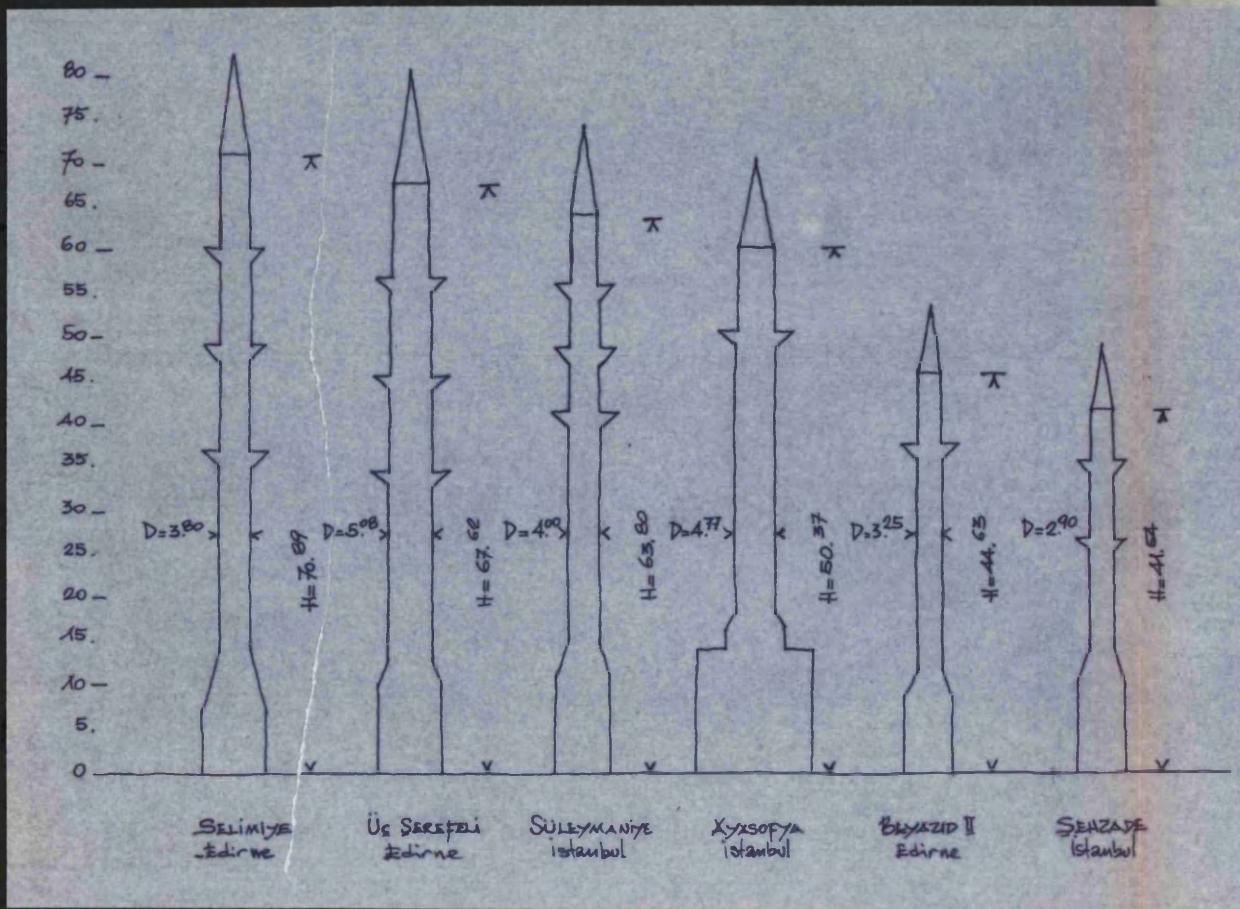


FIG. 60

FIG. 61 THE SULTAN AHMET CAMI

FIG. 62 THE NORTH-EAST FAÇADE OF THE CAMI

FIG. 63 THE NORTH-EAST FAÇADE OF THE CAMİ

FIG. 64 THE SOUTH-WEST FAÇADE OF THE CAMİ

FIG. 65 THE MUVAKKITHANE

FIG. 66 THE QIBLA WALL

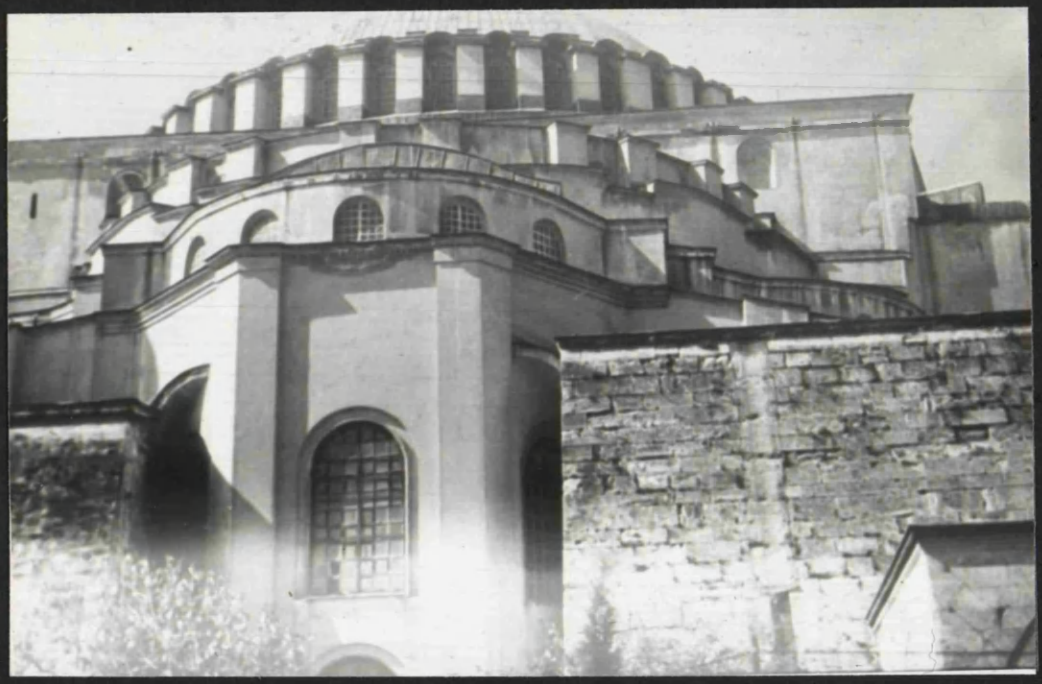


FIG. 67 THE EXTERIOR OF THE ST. SOPHIA

FIG. 68 THE SÜLEYMANİYE CAMİ

Fig. 69 THE SULTAN AHMET CAMİ

Fig. 70 THE YENİ CAMİ

FIG. 71 THE YENI CAMI

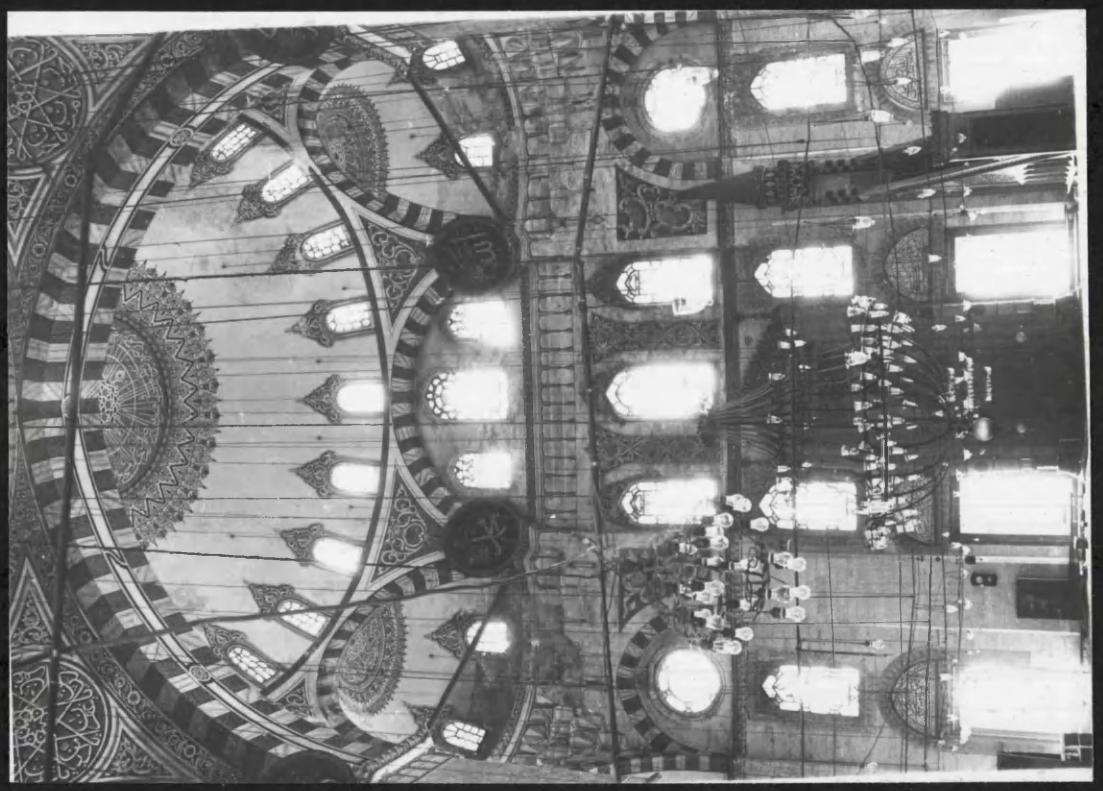


FIG. 72 THE QIBLA WALL OF THE ŞEHZADE

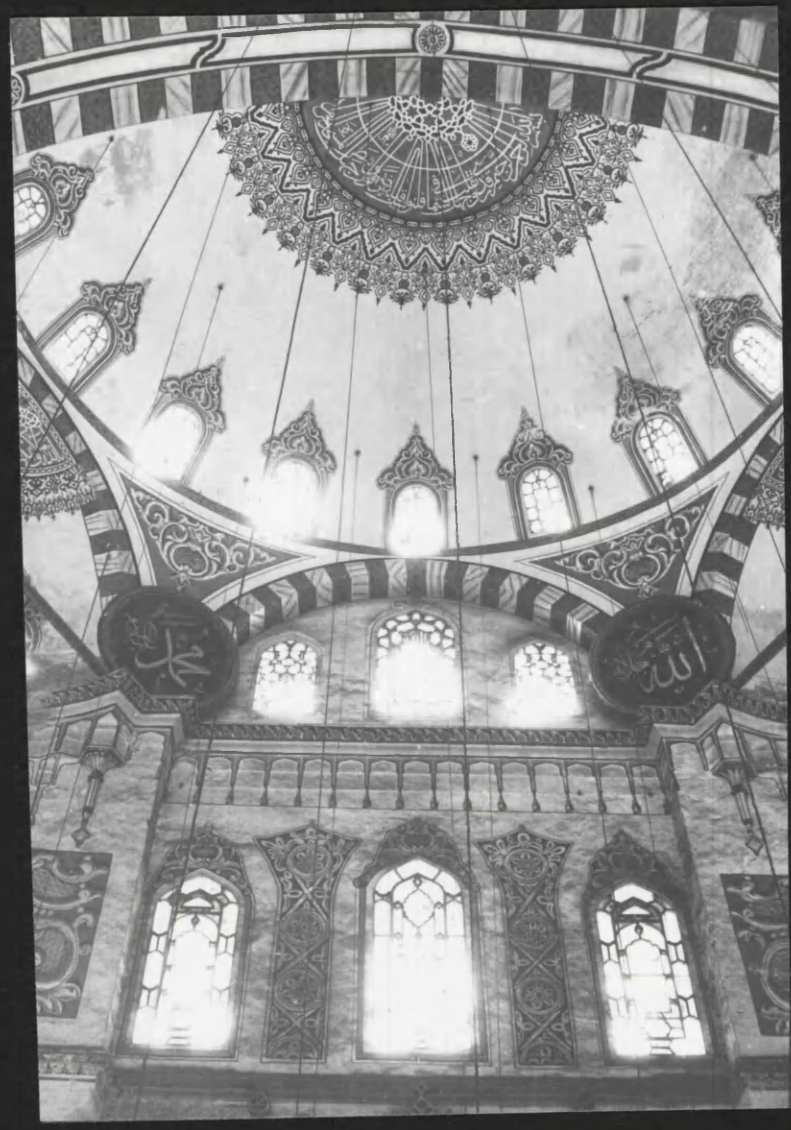


FIG. 73 THE UPPER PART OF THE QIBLA WALL

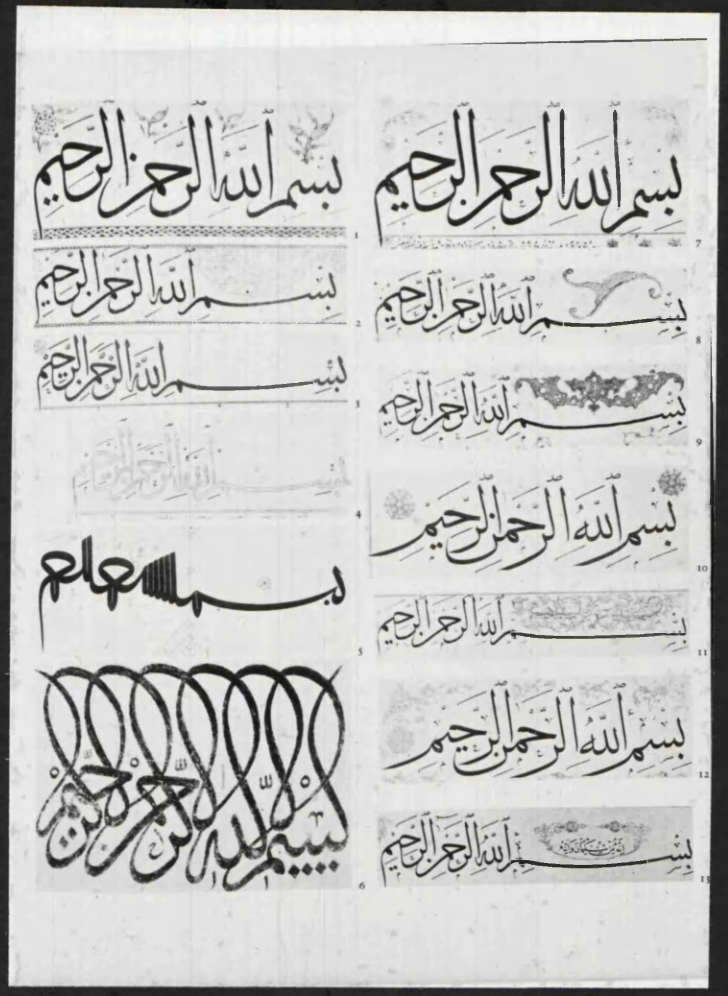


FIG. 74 SOME EXAMPLES OF THE CALLIGRAPHY

(1) بسم الله الرحمن الرحيم

(2) إنا فتحنا لك فتحا مبينا

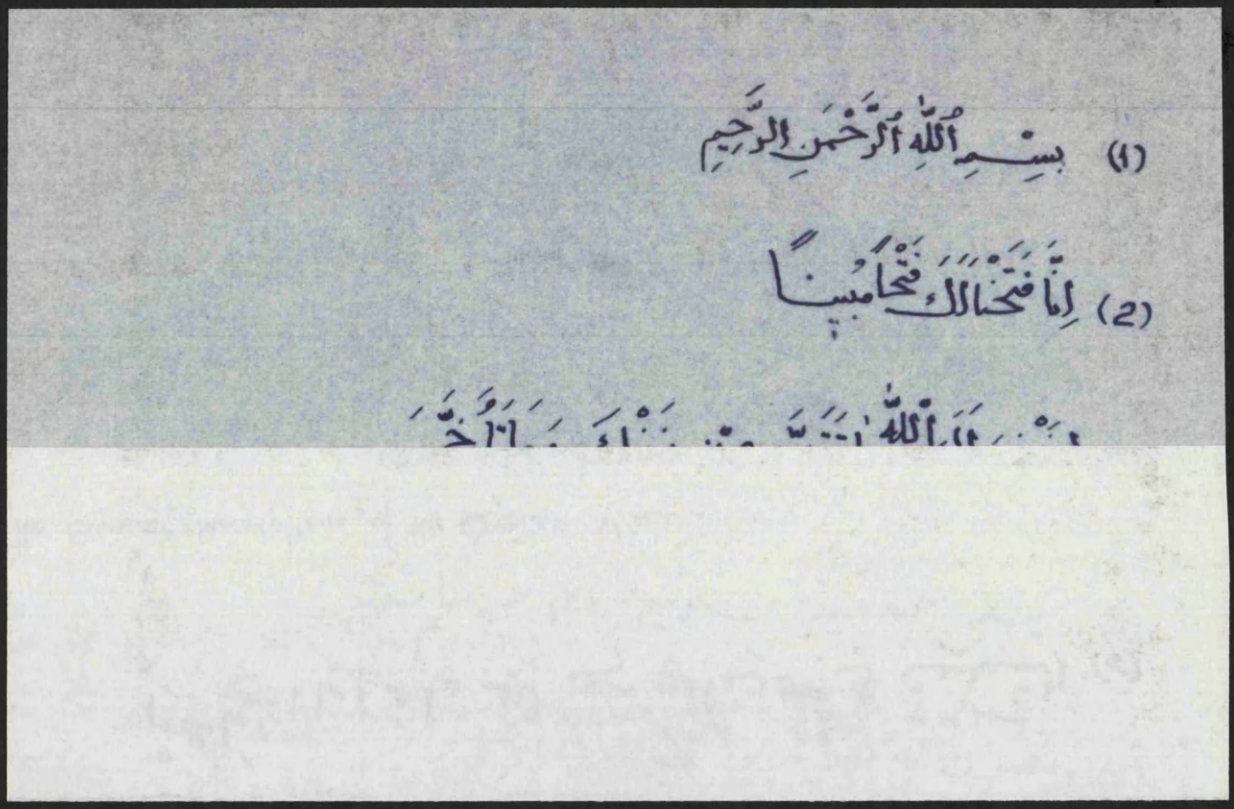


FIG. 75

FIG. 76 THE CASEMENT SHUTTER

(1) بسم الله الرحمن الرحيم

(2) إنا فتحنا لك فتحا مبينا

(3) ليغفر لك الله ما تقدم من ذنبك وما تأخر

(4) ويتم نعمته عليك ويهديك صراطا مستقيما

(5) وينصرك الله نصرا عزيزا هو الذي أنزل

(6) السكينة في قلوب المؤمنين ليزدادوا إيمانا مع إيمانهم

The Gablet Inscriptions of the Qiblah Wall

FIG. 76 THE CASEMENT SHUTTER

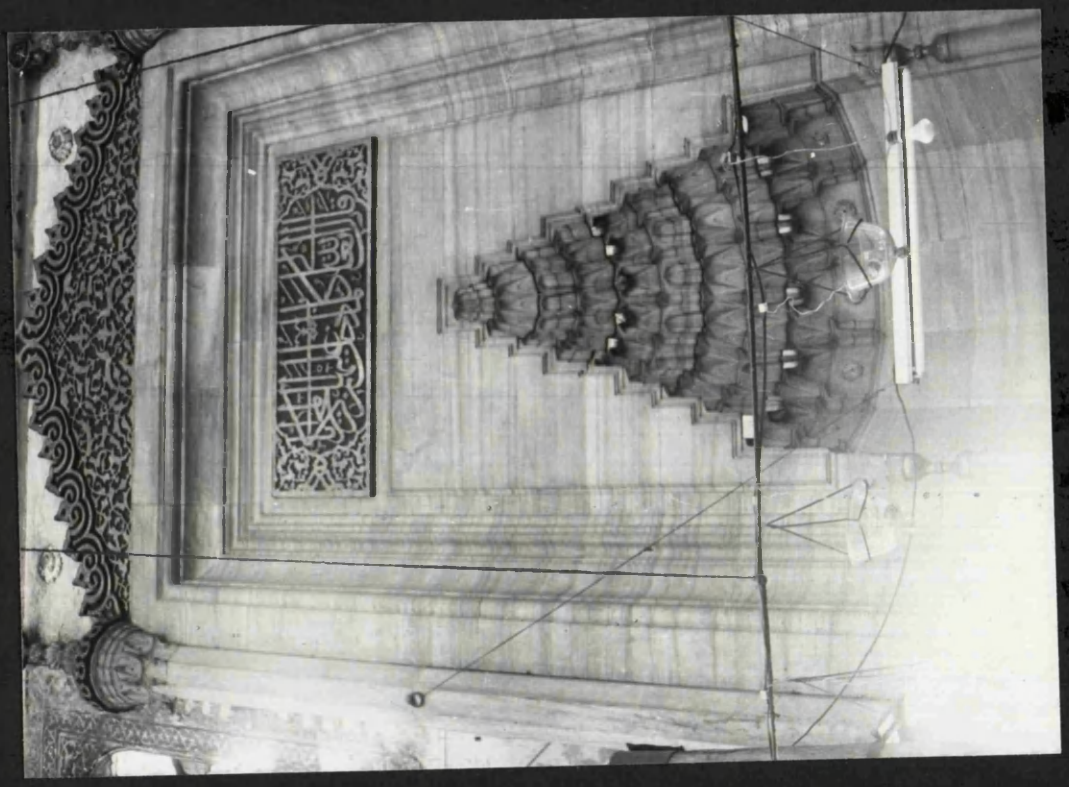
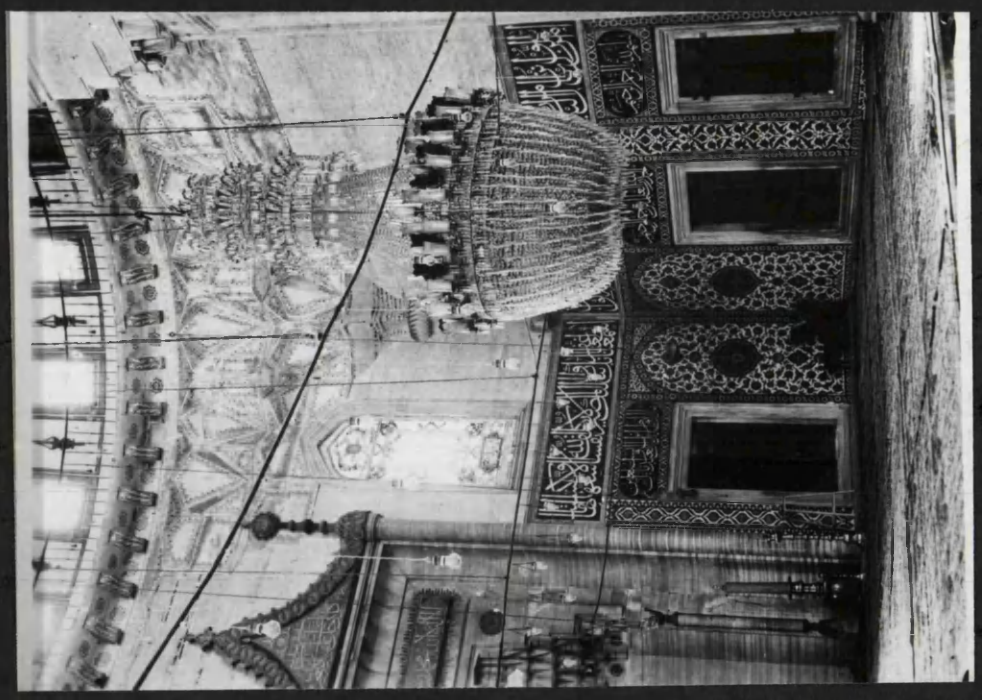


FIG. 77 THE MIḤRÂB OF THE ŞEHZADE



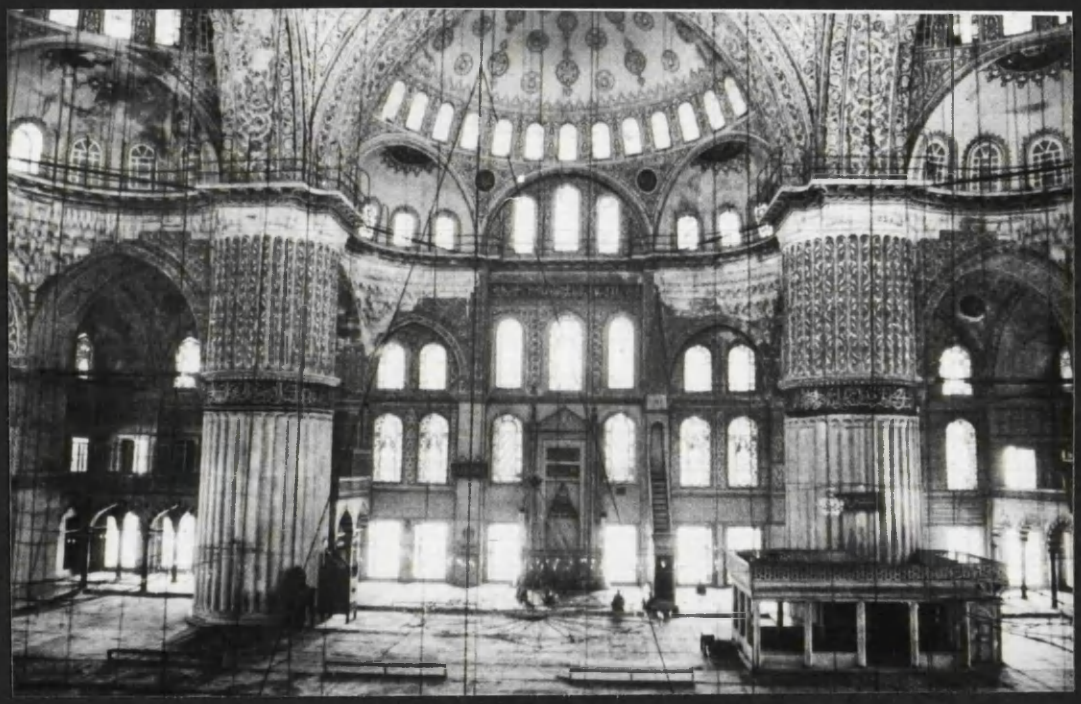


FIG. 78a - THE QIBLA WALL OF THE SULTAN AHMET

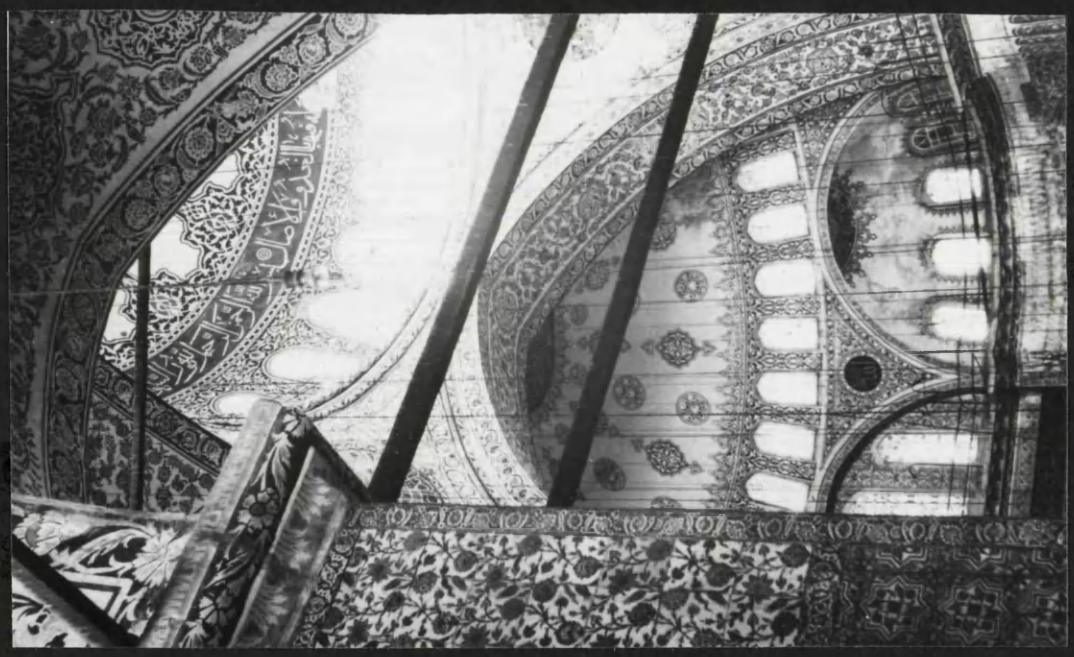


FIG. 78b - THE UPPER PART OF THE QIBLA WALL

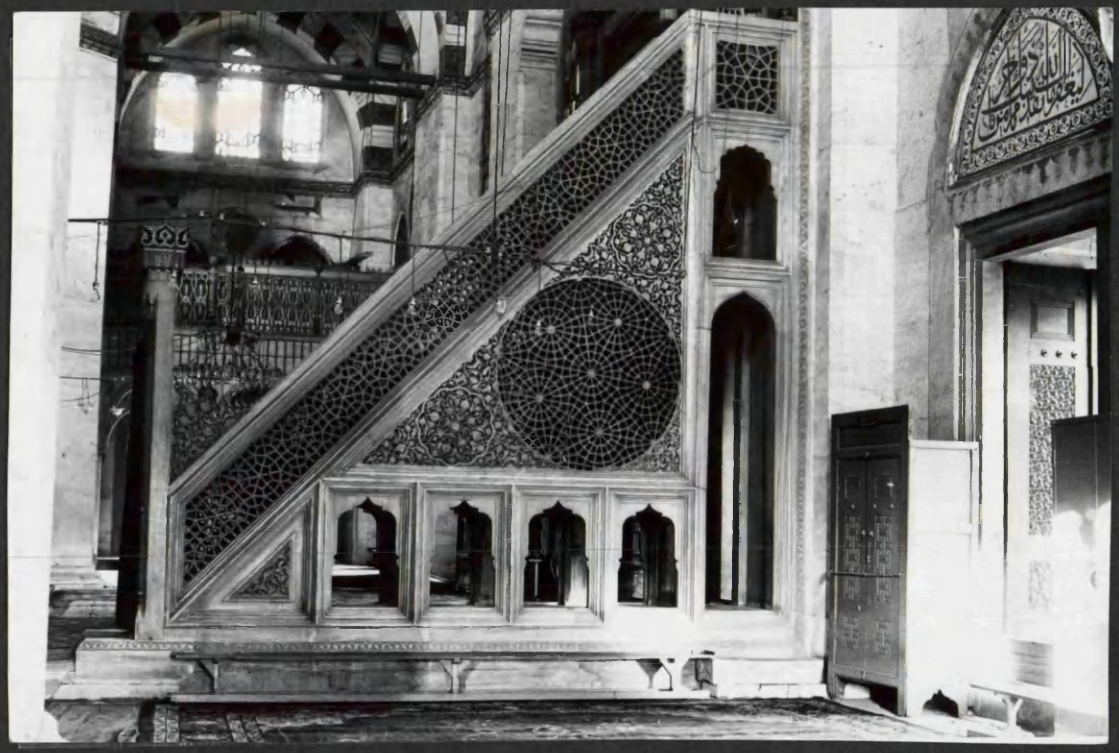


FIG. 79 THE MINBAR

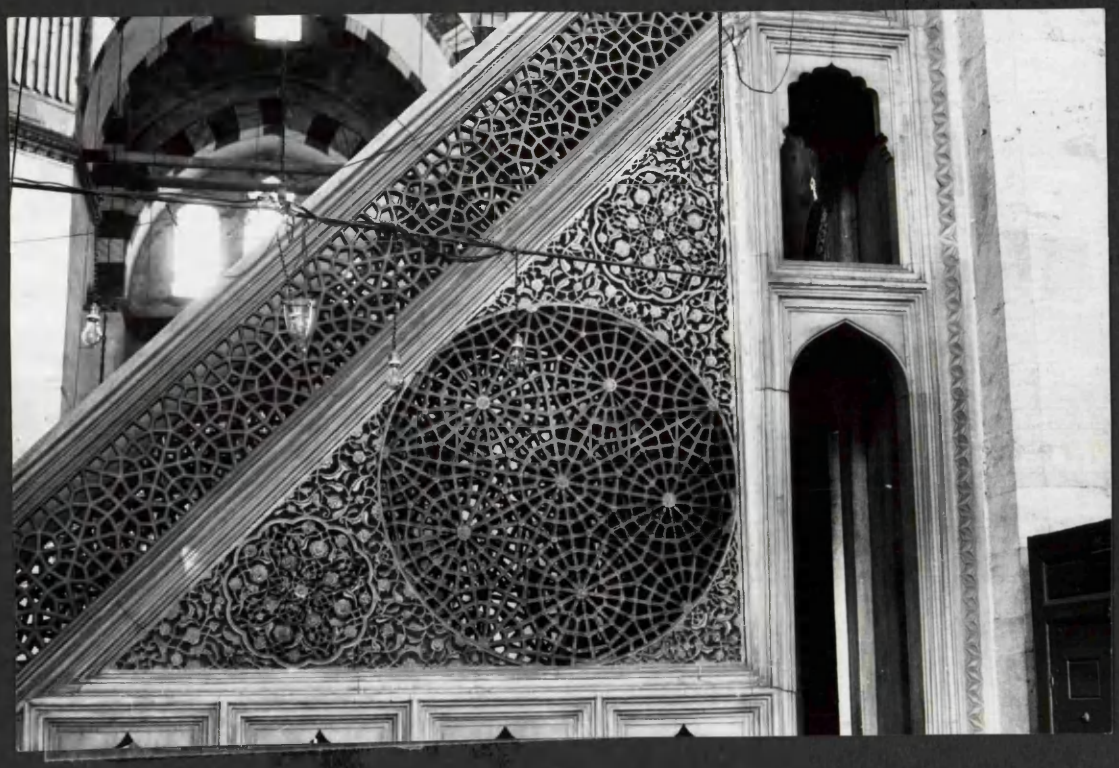
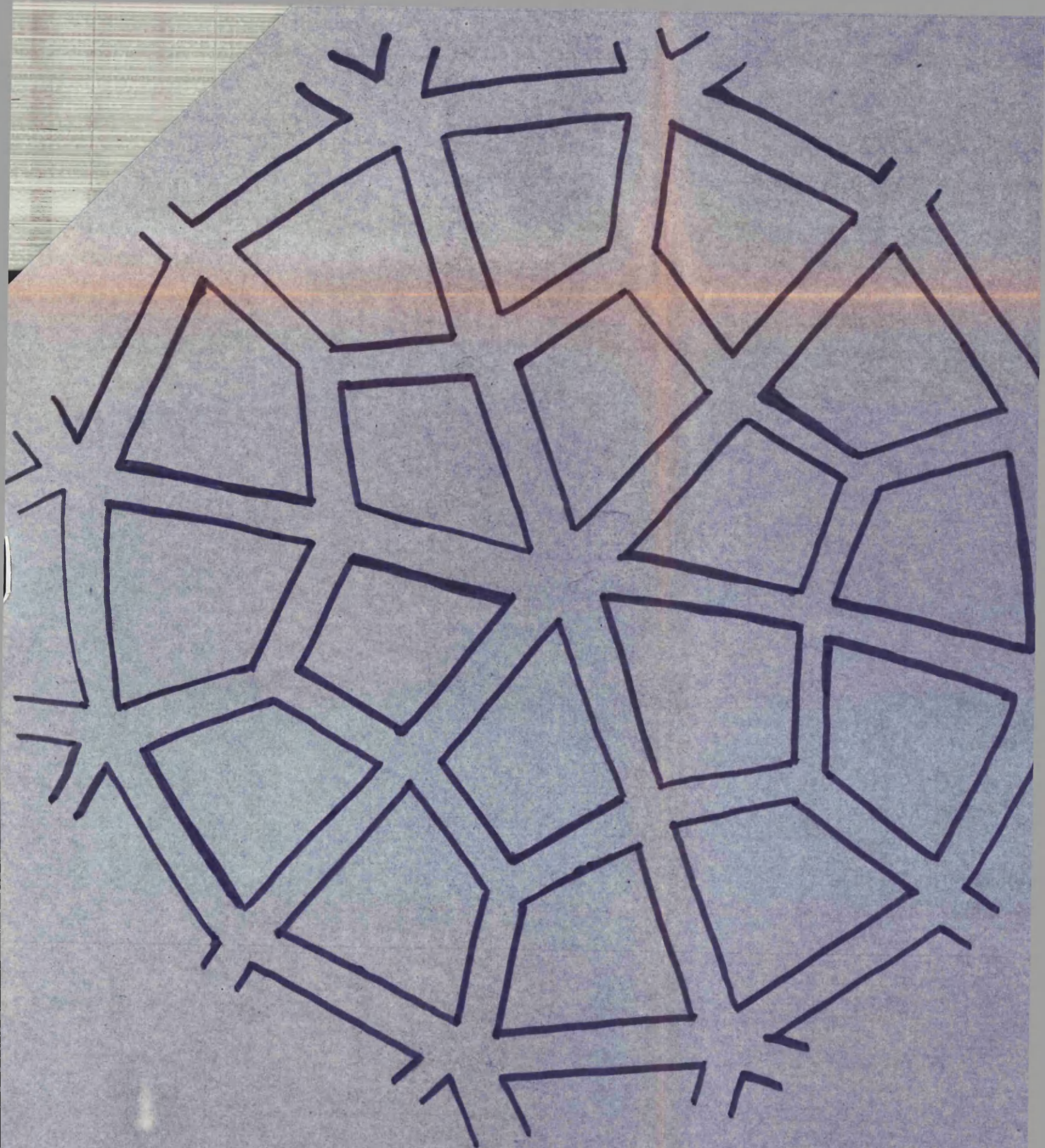


FIG. 80 THE DETAIL OF THE MINBAR



the DETAIL of the MINBAR GRILLE

Scale: 1/1

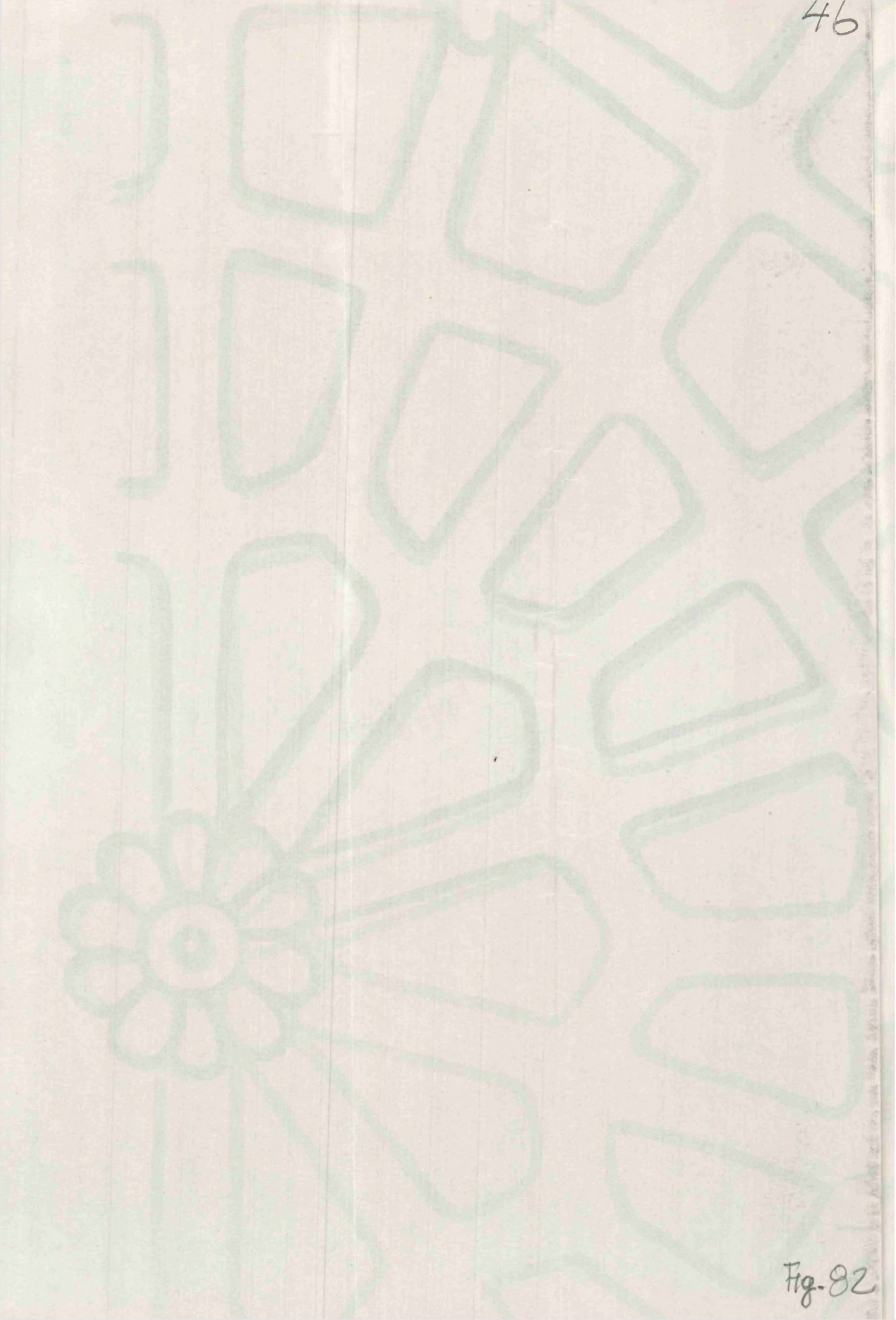


Fig-82

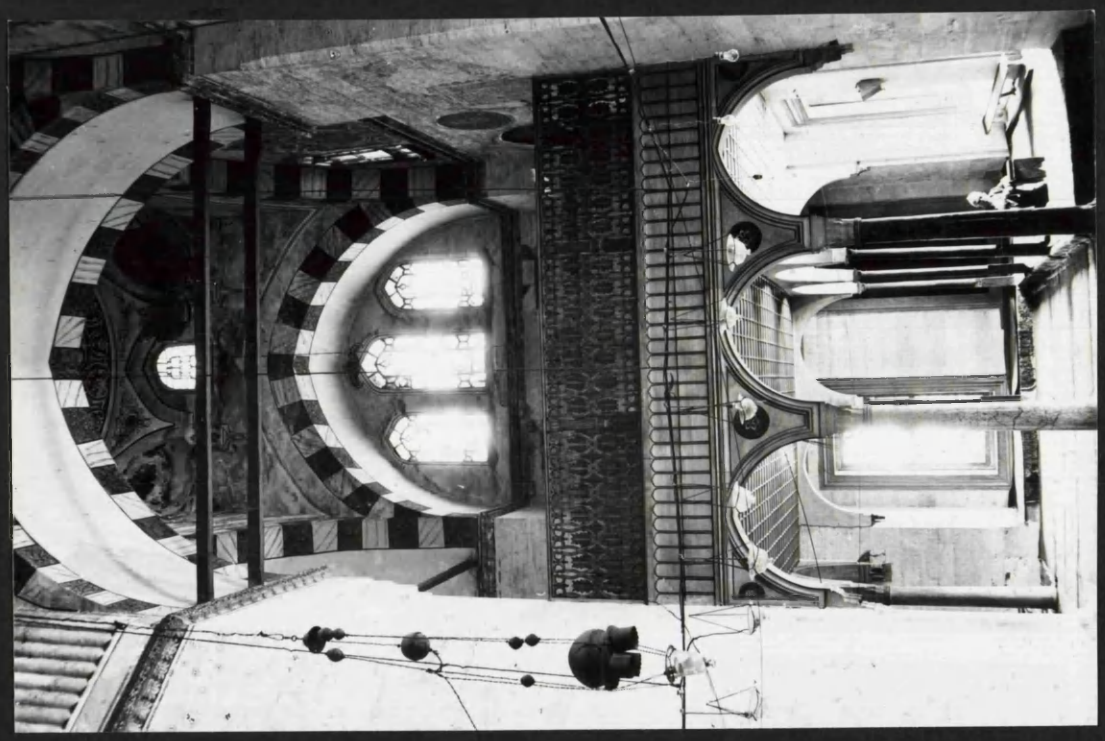


FIG. 83 THE HÜNKÂR MAHFILI

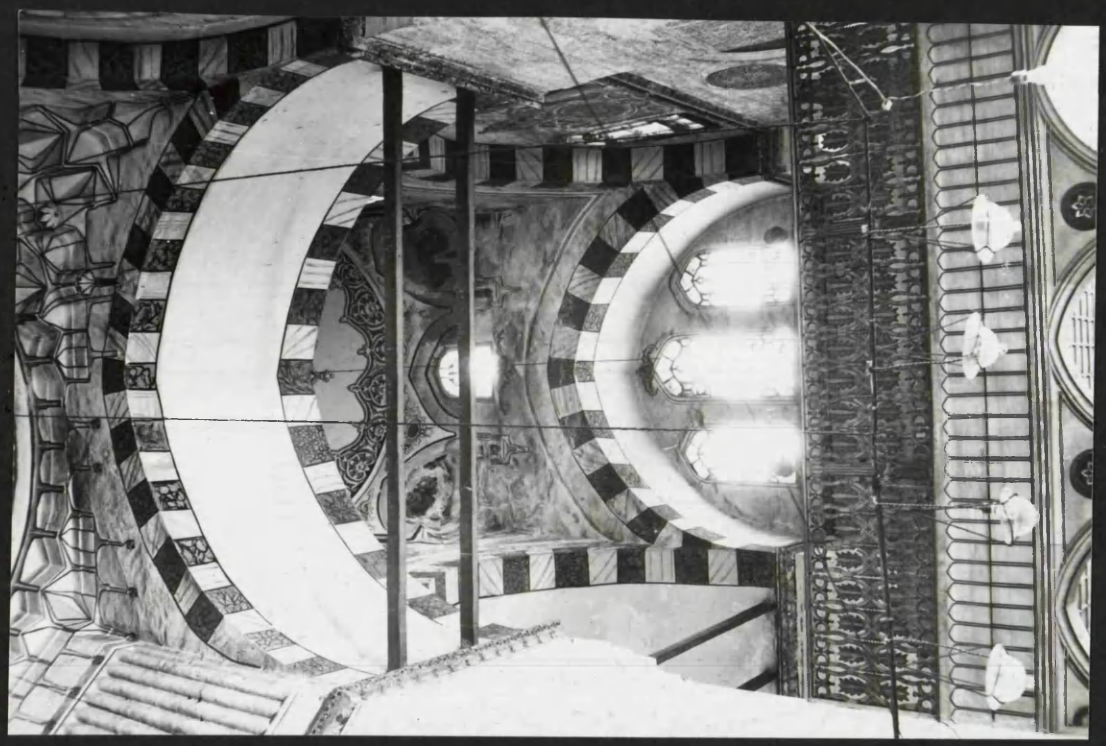


FIG. 84 THE HÜNKÂR MAHFILI

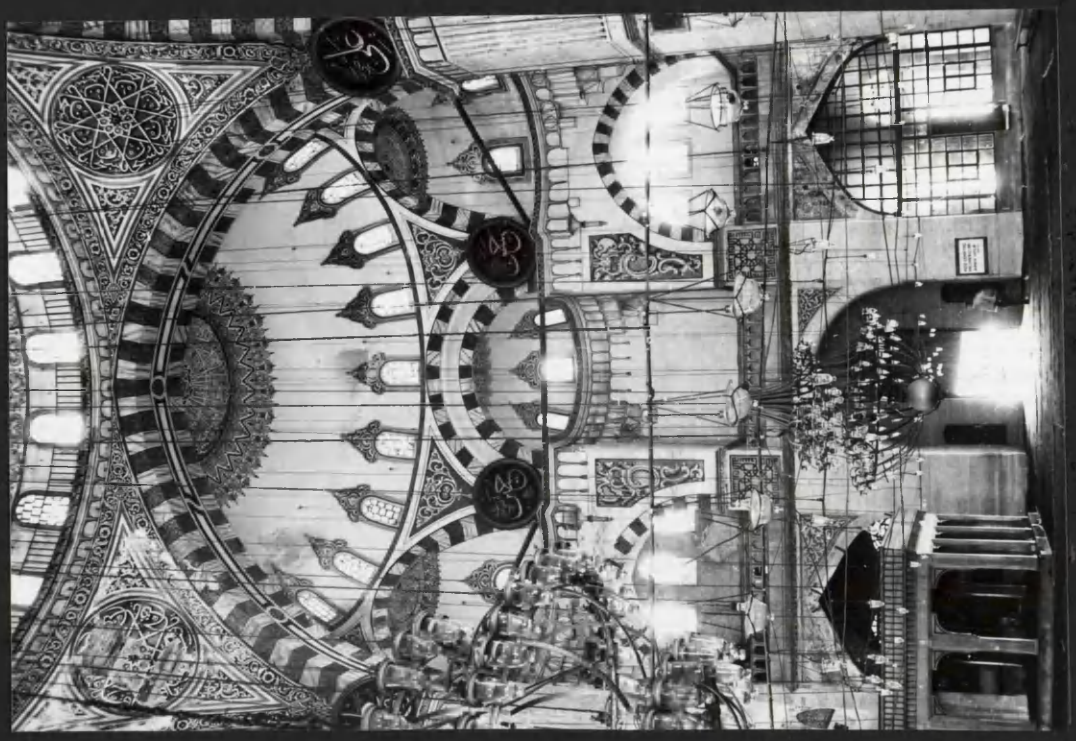


FIG. 85 THE KADINLAR MAHFILI

FIG. 86 THE KADINLAR MAHFILI

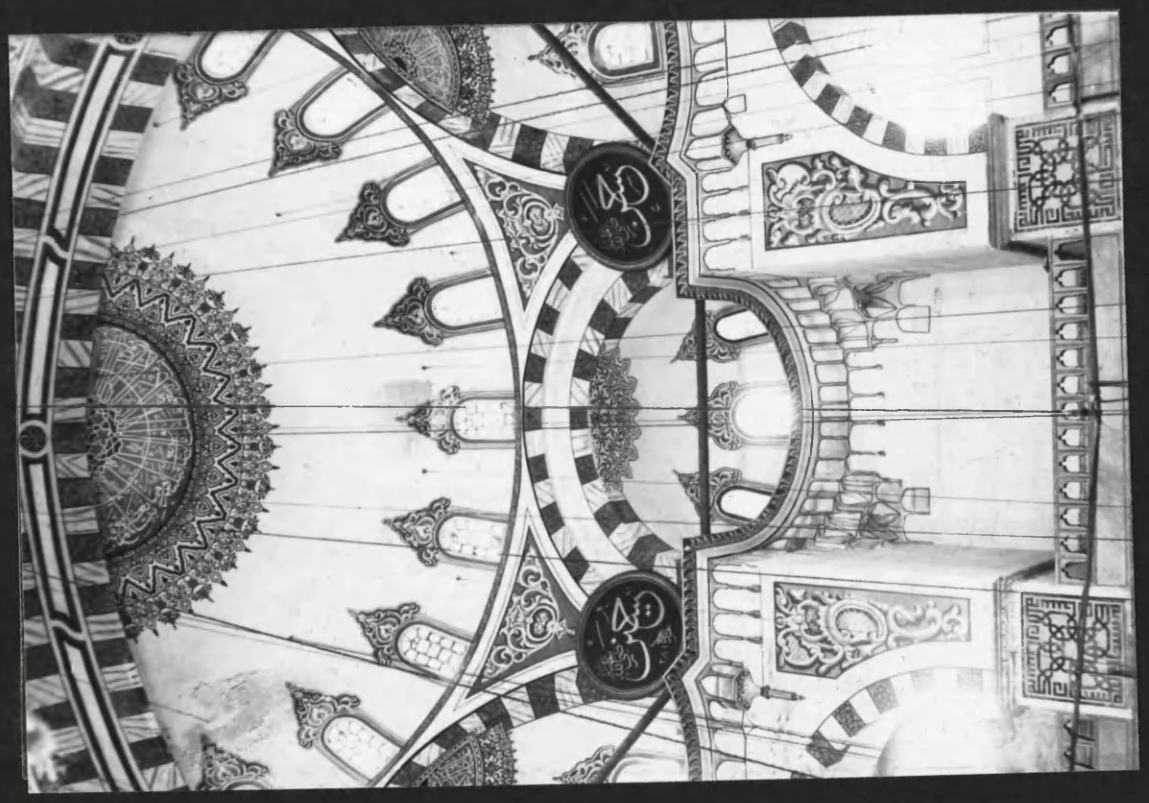


FIG. 87 THE UPPER WALL OF THE KADINLAR MAHFILI

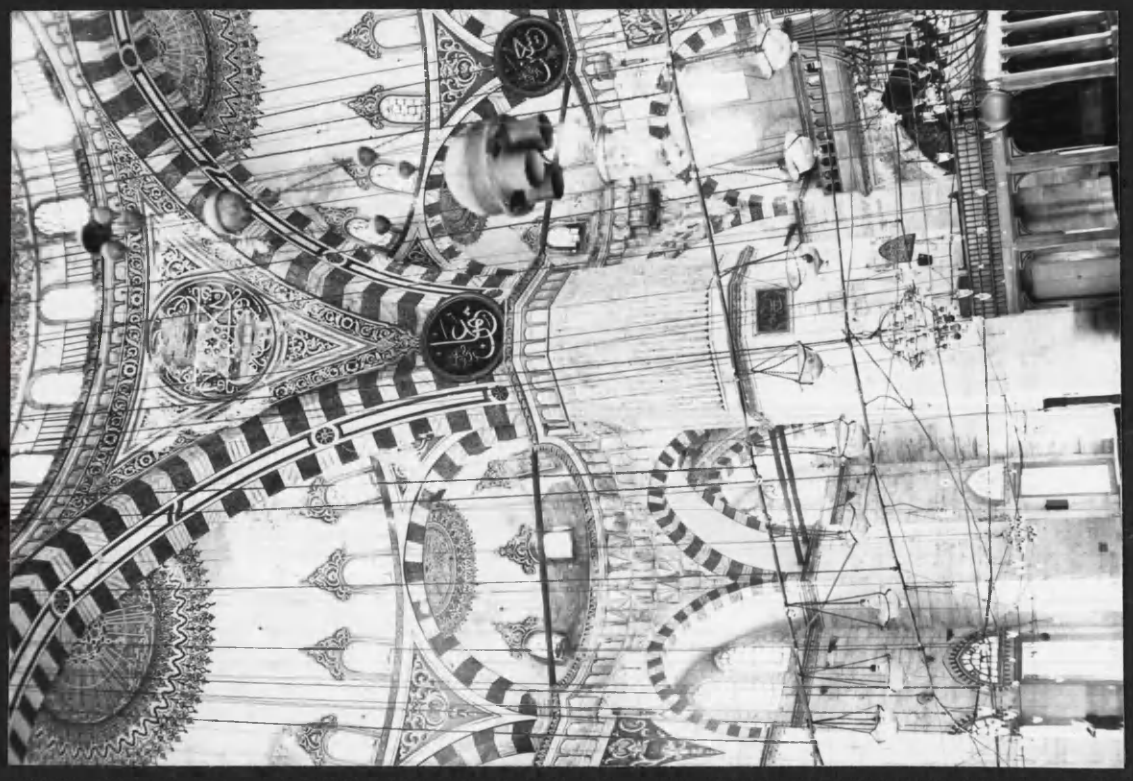


FIG. 88 THE MÜEZZIN MAHFILI

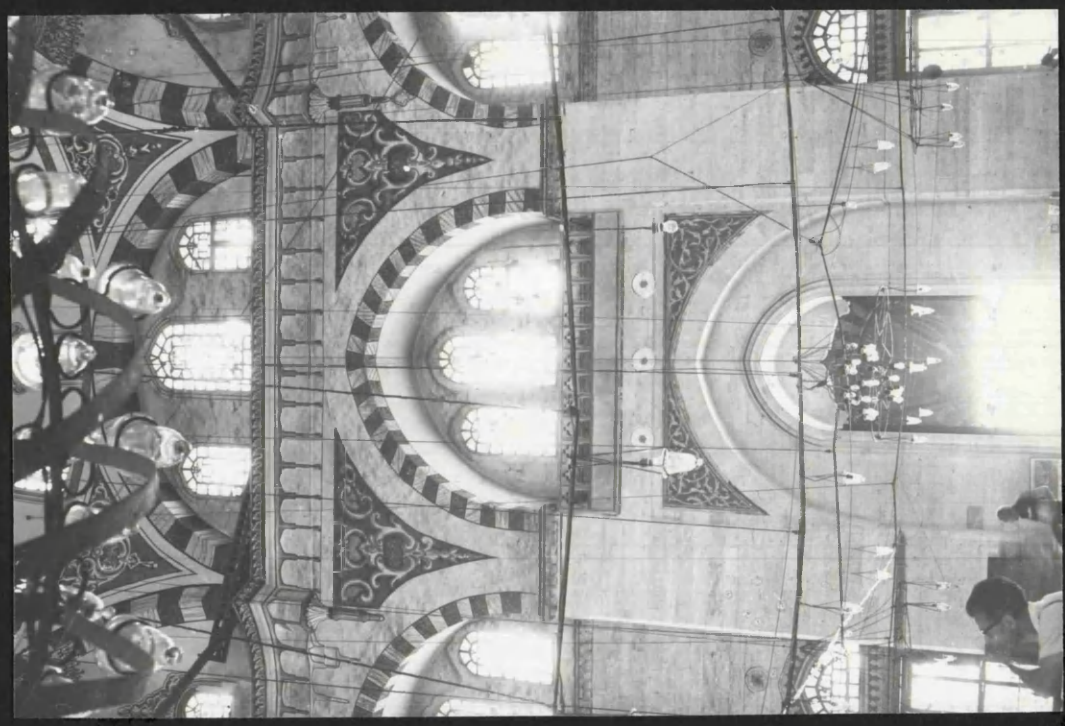


FIG. 89 THE SOUTH-WEST WALL OF THE CAMI

يَا حَنَّانُ يَا مَنَّانُ

يَا دَيَّانُ يَا غُفْرَانُ

يَا سُبْحَانُ

يَا فَتَّاحُ

the inscriptions from the PENDENTIVES

اُدْعُ فَرَائِضَ اللّٰهِ تَكُنْ مُطِيعاً

Hadis-i Serif

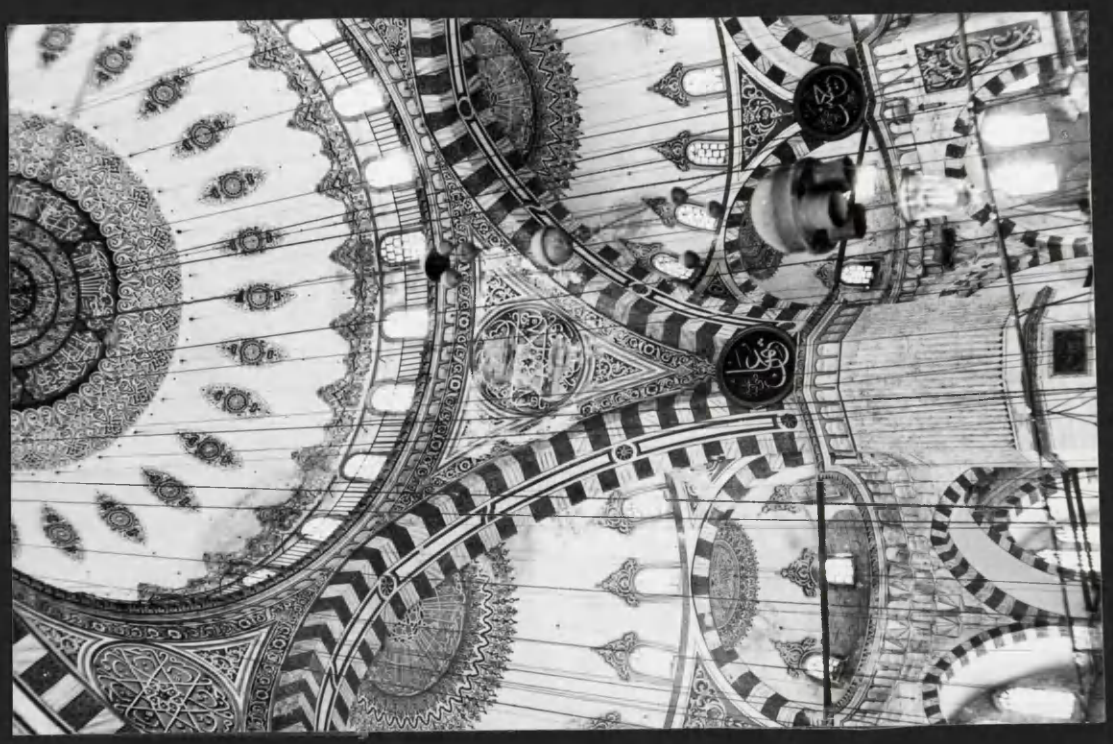


FIG. 91 THE PENDANTIVES

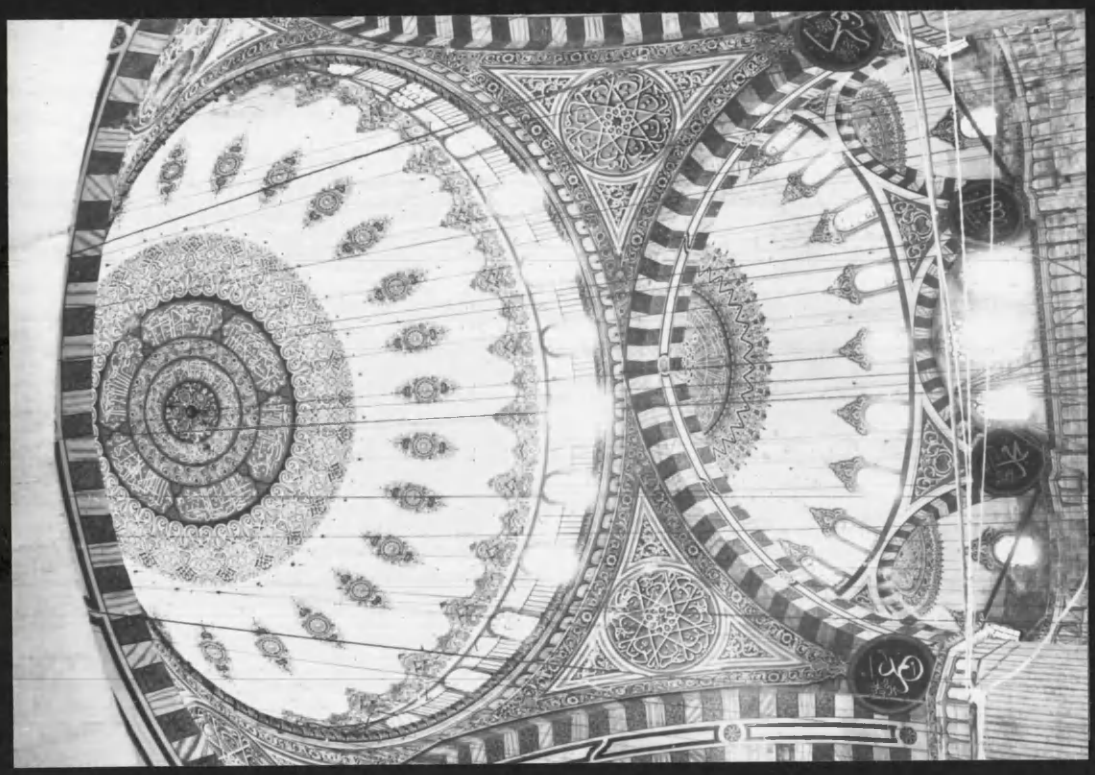


FIG. 92 THE DOME

FIG. 92 a. THE PENDENTIVE FROM THE BEYAZID CAMI

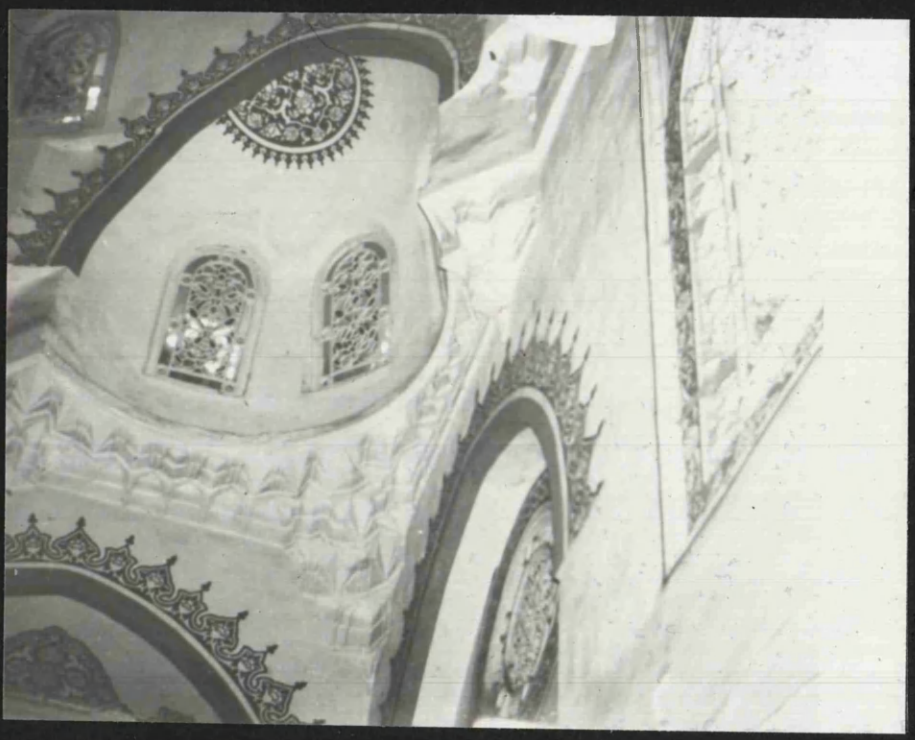


FIG. 92b. THE EXEDRA FROM THE ÜSKÜDAR MIHRIMAH CAMI

(1) آمَنَ الرَّسُولُ بِمَا أُنْزِلَ إِلَيْهِ مِنْ رَبِّهِ وَالْمُؤْمِنُونَ كُلٌّ آمَنَ

(2) بِاللَّهِ وَمَلَائِكَتِهِ وَكُتُبِهِ وَرُسُلِهِ لَا نُفَرِّقُ بَيْنَ أَحَدٍ مِنْ رُسُلِهِ

FIG. 93

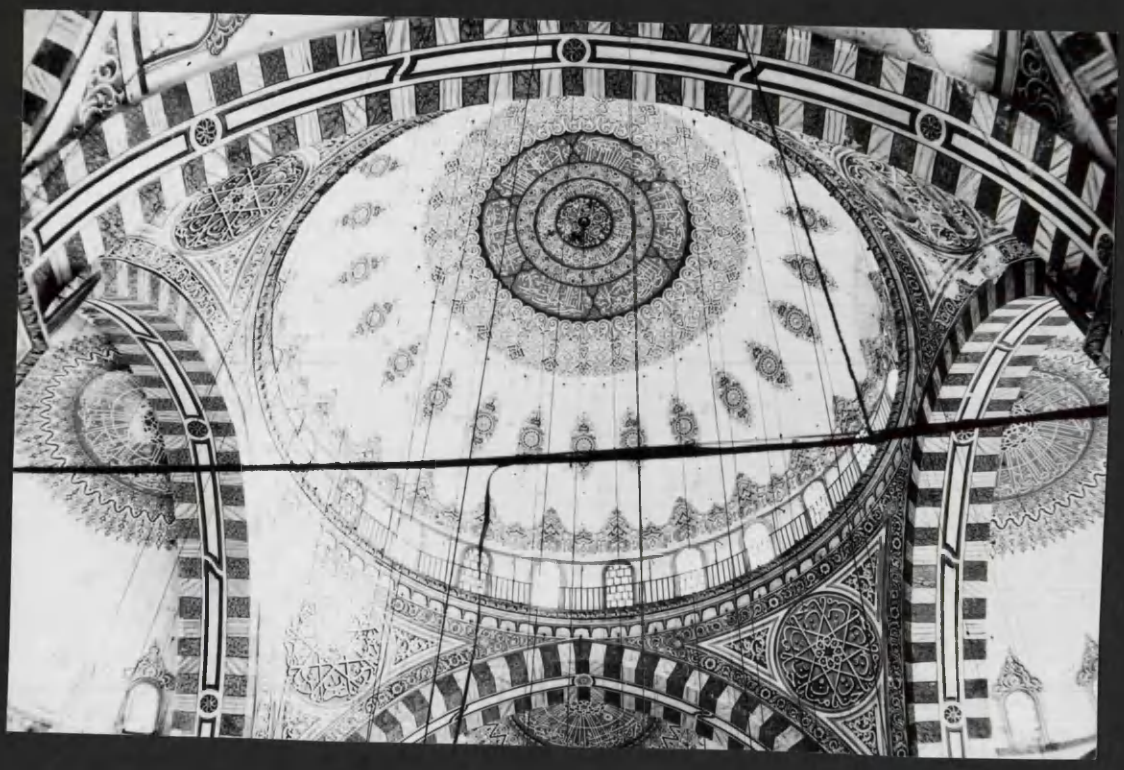


FIG. 94 THE DOME

(1) آمَنَ الرَّسُولُ بِمَا أُنْزِلَ إِلَيْهِ مِنْ رَبِّهِ وَالْمُؤْمِنُونَ كُلٌّ آمَنَ

(2) بِاللَّهِ وَمَلَائِكَتِهِ وَكُتُبِهِ وَرُسُلِهِ لَا نُفَرِّقُ بَيْنَ أَحَدٍ مِنْ رُسُلِهِ

(3) وَقَالُوا سَمِعْنَا وَأَطَعْنَا غُفْرَانَكَ رَبَّنَا وَإِلَيْكَ الْمَصِيرُ

(4) لَا يُكَلِّفُ اللَّهُ نَفْسًا إِلَّا وُسْعَهَا لَهَا مَا كَسَبَتْ وَعَلَيْهَا مَا اكْتَسَبَتْ

(5) رَبَّنَا لَا تُؤَاخِذْنَا إِنْ نَسِينَا أَوْ أَخْطَأْنَا رَبَّنَا وَلَا تَحْمِلْ

(6) عَلَيْنَا إِصْرًا كَمَا حَمَلْتَهُ عَلَى الَّذِينَ مِنْ قَبْلِنَا رَبَّنَا وَلَا تُحَمِّلْنَا

(7) مَا لَا طَاقَةَ لَنَا بِهِ وَاعْفُ عَنَّا وَاغْفِرْ لَنَا وَارْحَمْنَا أَنْتَ مَوْلَانَا فَانْصُرْنَا

عَلَى الْقَوْمِ الْكَافِرِينَ

(8) صَدَقَ اللَّهُ الْعَظِيمُ الْجَبَّارُ وَبَلَّغَ رَسُولُهُ الْمُخْتَارُ .

the Inscriptions over the EXEDRAES
— Beginning from the right exadra —

FIG. 94 THE DOME

FIG. 95 THE DOME

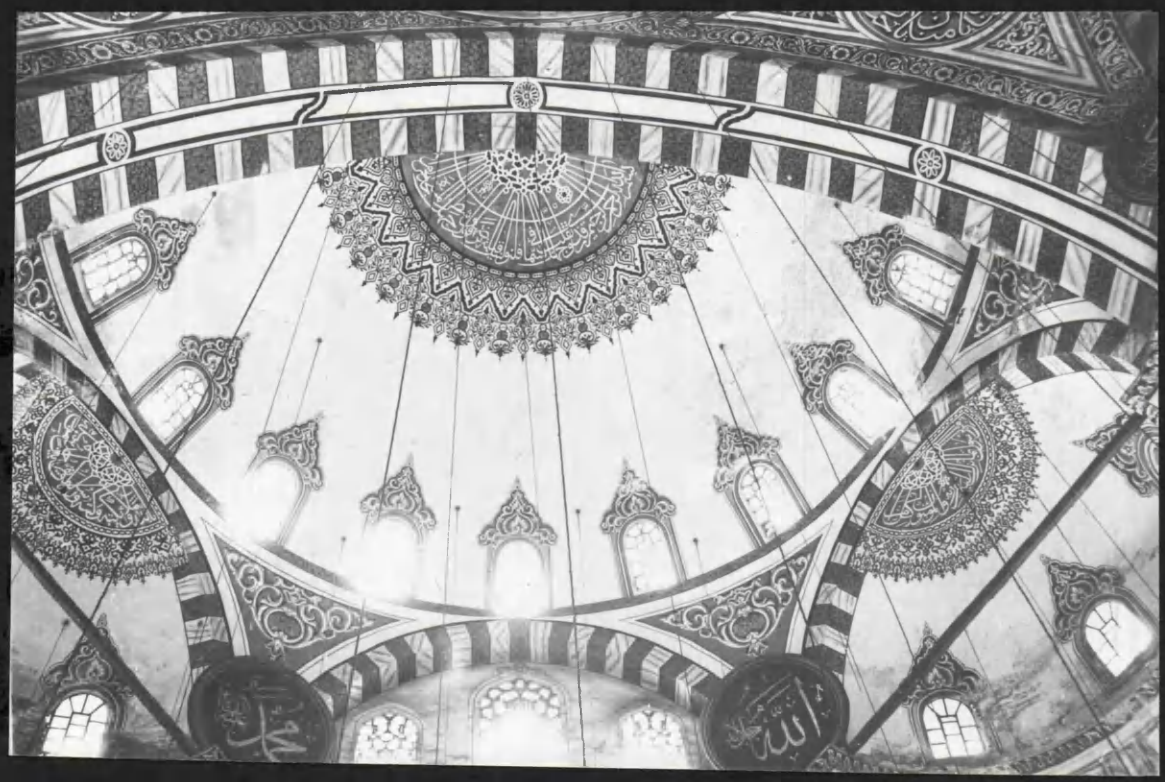


FIG. 96 THE SEMI-DOME

بسم الله الرحمن الرحيم

FIG. 97

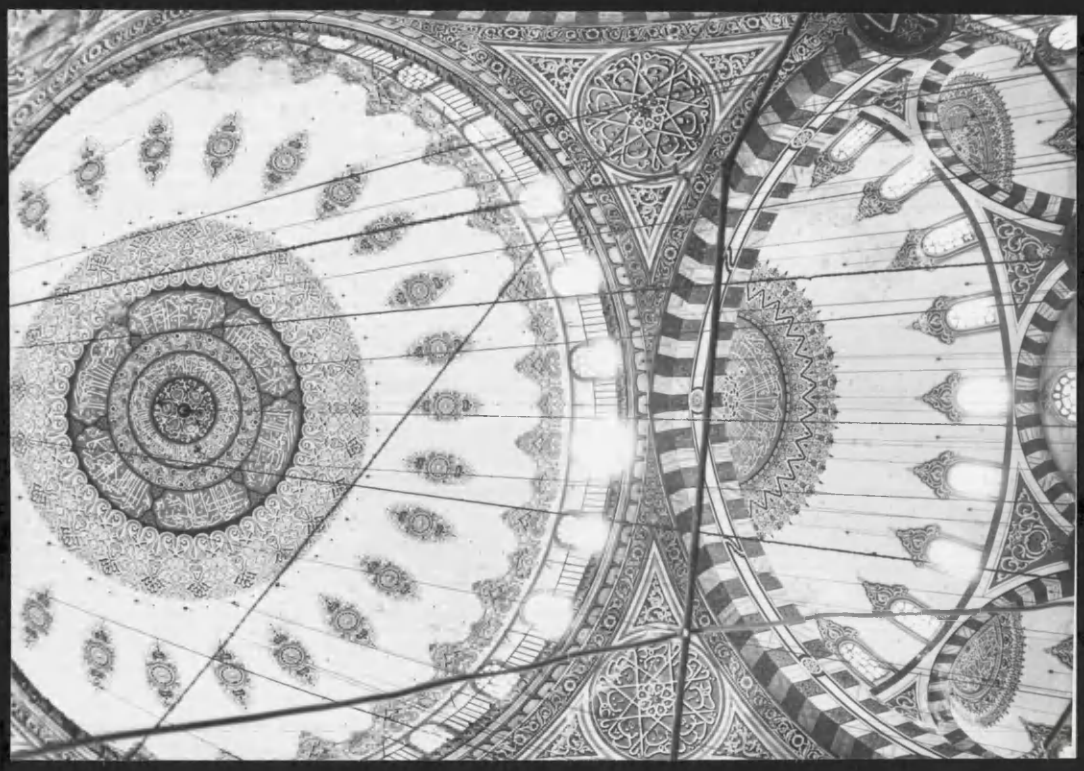


FIG. 98 THE DOME

بسم الله الرحمن الرحيم

(1) قد نرى تقلب وجهك في السماء فلنولينك قبلة ترضاها فول
وجهك شطر المسجد الحرام

(2) وحيث ما كنتم فولوا وجوهكم شطره وإن الذين
أوتوا الكتاب ليعلمون أنه الحق من ربهم وما الله بغافل عما يعملون

(3) ولئن أتيت الذين أوتوا الكتاب بكل آية ما تبعوا قبلتك
وما أنت بتابع قبلتهم وما

(4) بعضهم بتابع قبلة بعض ولئن اتبعت أهواءهم من
بعد ما جاءك من العلم إنك إذا لمن الظالمين

صدق الله العظيم

The Inscriptions over the SEMI — DOMES

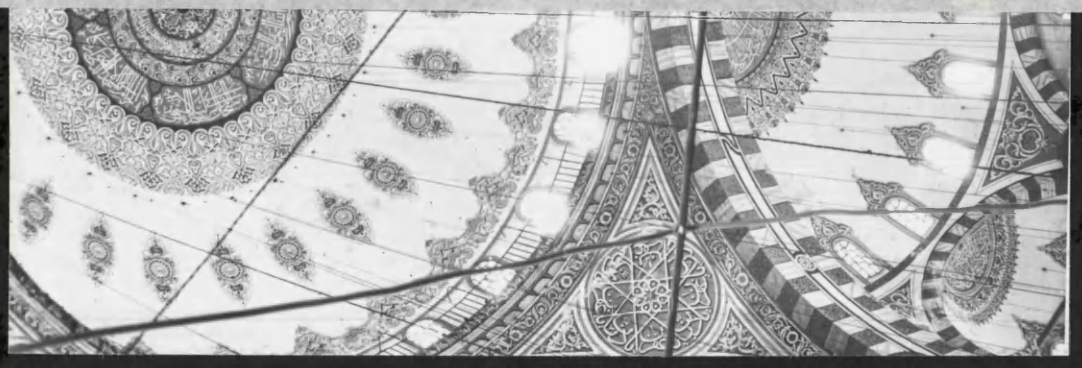


FIG. 98 THE DOME

بِسْمِ اللَّهِ الرَّحْمَٰنِ الرَّحِيمِ

سُبْحَانَ الَّذِي أَسْرَىٰ بِعَبْدِهِ لَيْلًا

FIG. 99

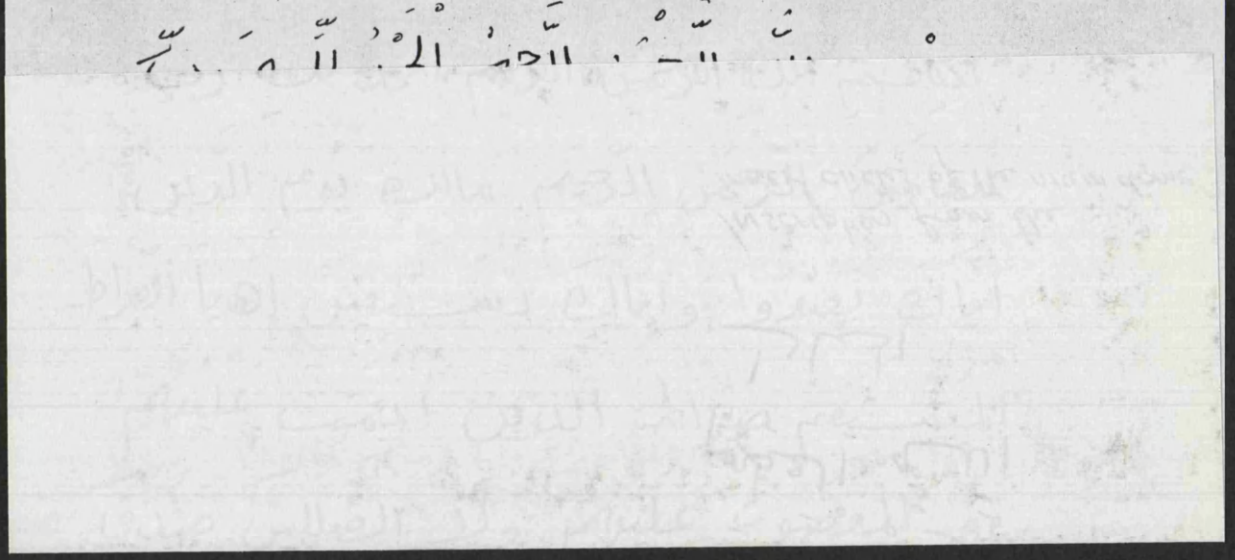


FIG. 100

بسم الله الرحمن الرحيم

سبحان الذي أسرى بعبده ليلا
من المسجد
الحرام إلى المسجد الأقصى الذي باركنا
حوله لنريه من آياتنا أنه هو السميع
البصير.
وآتينا موسى الكتاب وهدى وجعلناه
لبني إسرائيل ألا تتخذوا من دوني وكيلا

Inscription from the outer circle of the main dome

بسم الله الرحمن الرحيم الحمد لله رب
العالمين الرحمن الرحيم مالك يوم الدين
إياك نعبد وإياك نستعين اهدنا الصراط
المستقيم صراط الذين أنعمت عليهم
غير المغضوب عليهم ولا الضالين صدق
الله العظيم

الحيار

Inscription from the inner circle of the main dome

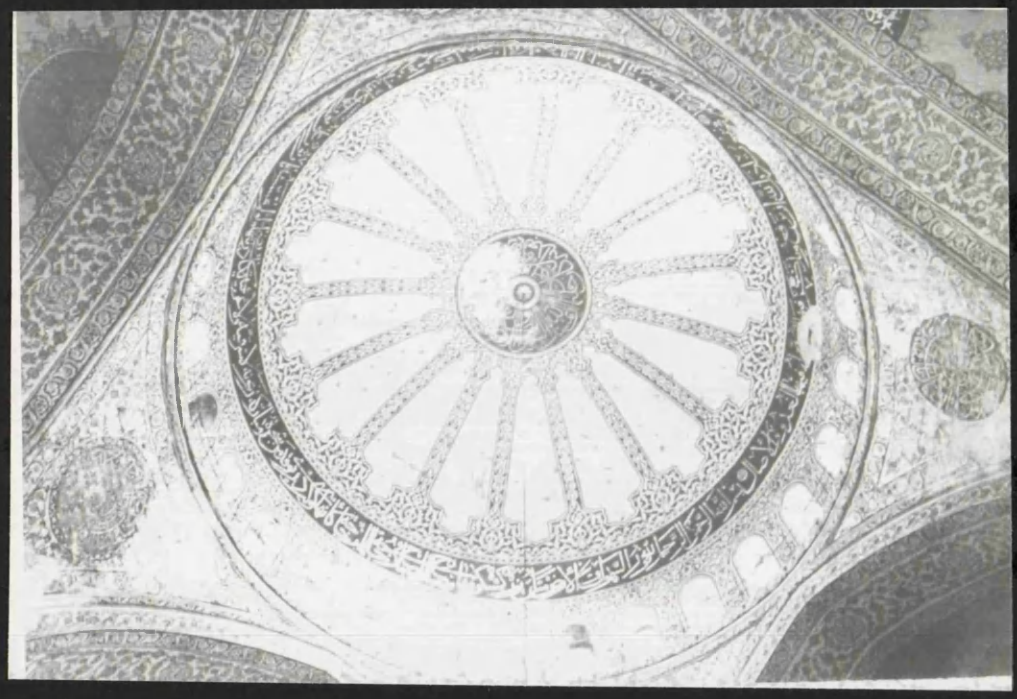


FIG. 101 THE DOME OF THE SULTAN AHMET

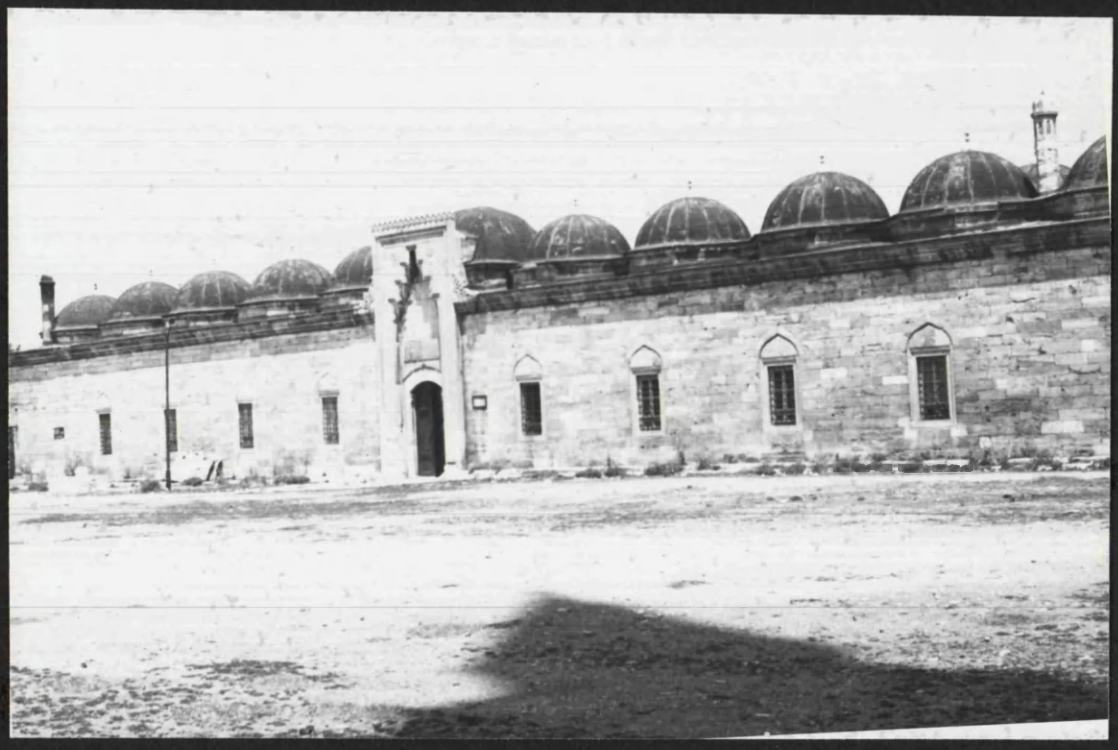


FIG. 102 THE MADRASAH FAÇADE

FIG. 103 THE TAPTANE, THE HAN AND THE İMÂRET

FIG. 104 THE İMÂRET, AND THE SÜBYAN MEKTEBİ

Fig. 105 THE İMÂRET AND THE SÜBYAN MEKTEBİ

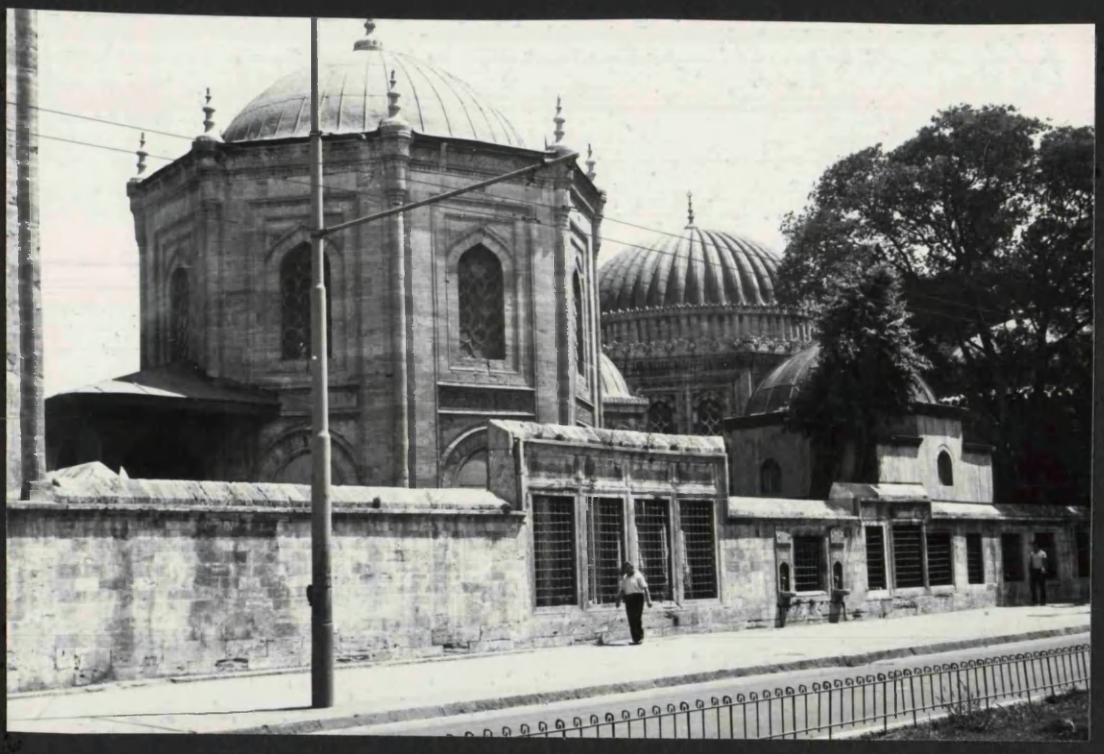


Fig. 106 THE TÜRBES

FIG. 107 THE MUVAKKITHANE

شد تمام این مدرسه باعزوجاه . باشرف دار وعمیم مستفاد 1-

این مقام فضل وعلم ومعرفت شد برای قابلان وفاضلان 2-

حضرتنا الهام حق یاقرار دار تحصیل علوم خلوات 3-

سنه 904

1- Allahın yardımı ile bu okul bitti.
Bu şerefli okul devamlı yardımcımız olsun.

2- Bu okul hem ilim ve hem marifat kaynağıdır.
Olsun kabiliyetli ve faziletli insanlar için.

3- Allahın desteğile okulumuz yaşamımız boyunca.
ölümsüz bir ilim ve tahsil kaynağı olsun.

YIL. 954

FIG. 107 THE MUVAKKITHANE

FIG. 108 a. THE MADRASAH PORTAL
FIG. 108 b

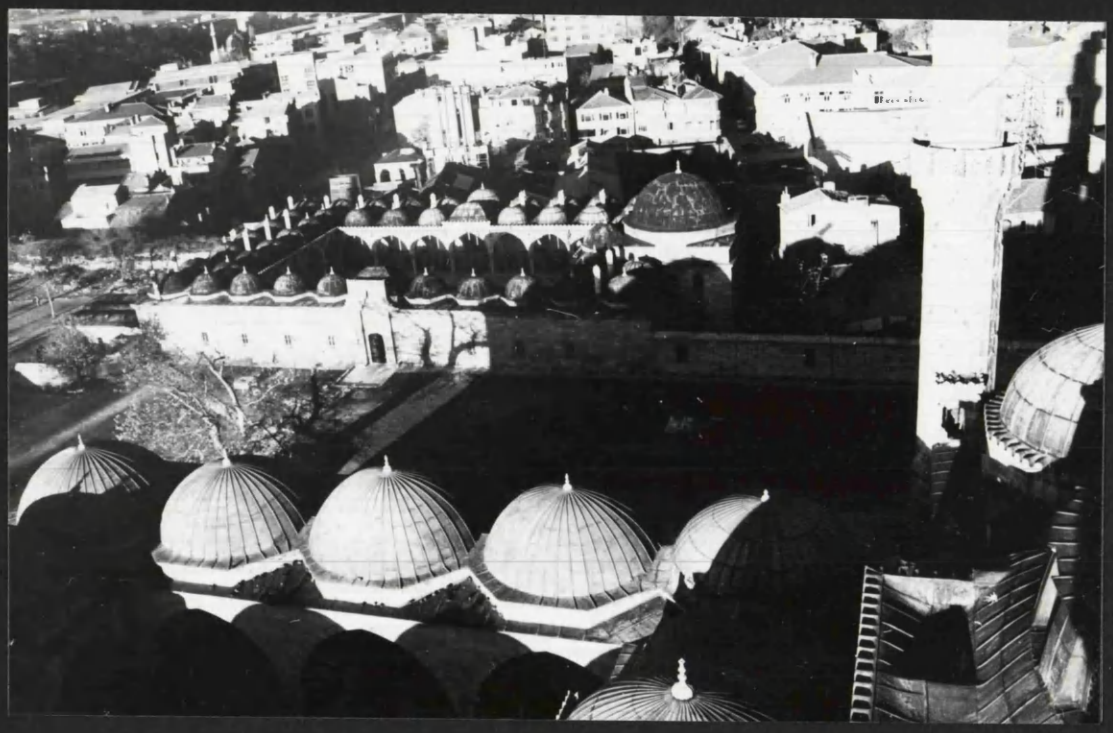


FIG. 109 THE MADRASAH

FIG. 110 THE COURTYARD OF THE MADRASAH

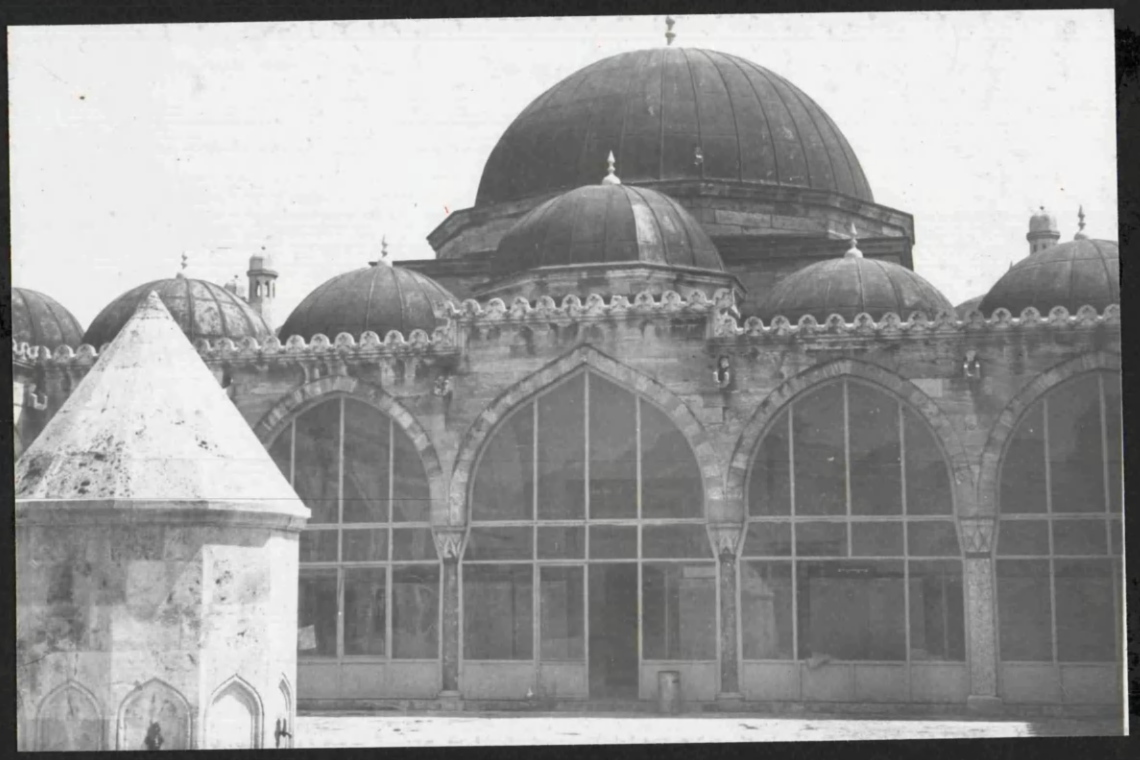


Fig. 111 THE COURTYARD OF THE MADRASAH

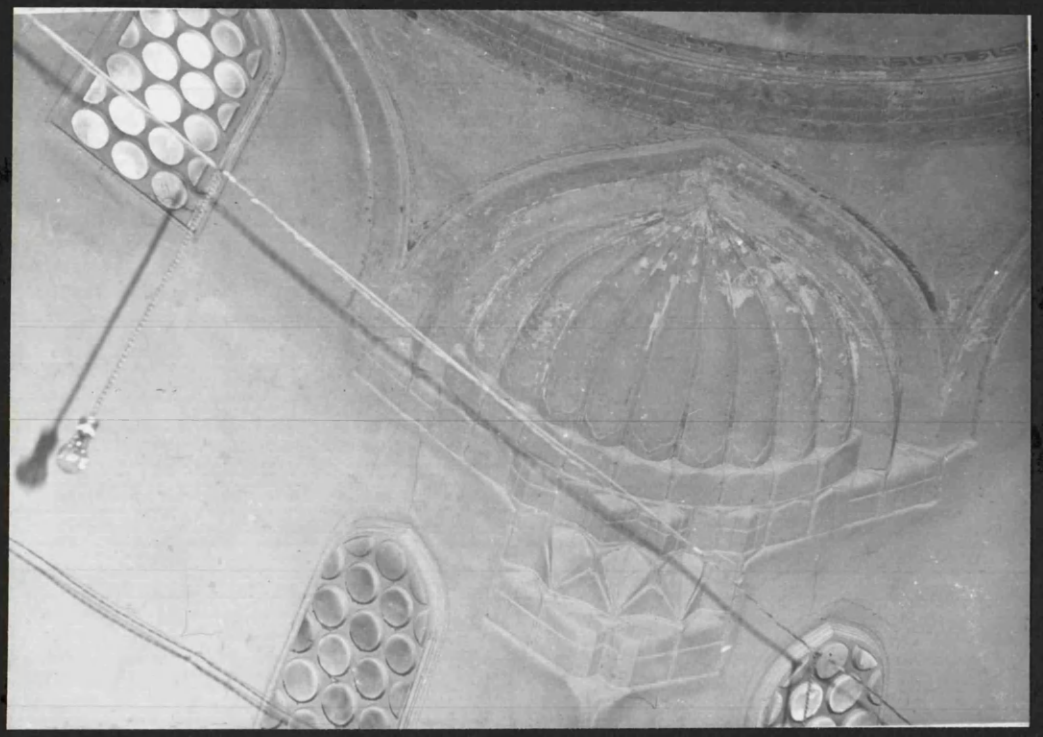


Fig. 112 THE SQUINCH OF THE READING ROOM

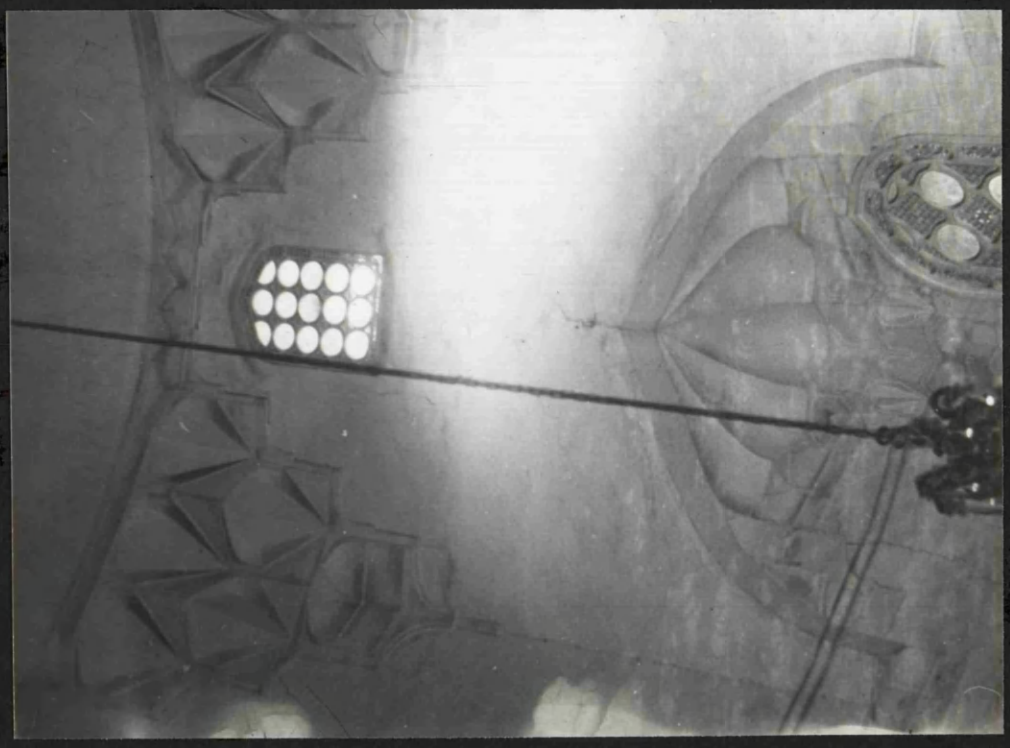


FIG. 113a. THE SQUINCH OF THE FATİH KÖŞKÜ

FIG. 114 THE FAÇADE OF THE TAPHANE

FIG. 113 THE TAPHANE AND THE HAN

FIG. 115 THE FAÇADE OF THE TAPHANE

FIG. 116 THE IMÂRET

FIG. 117 THE IMÂRET

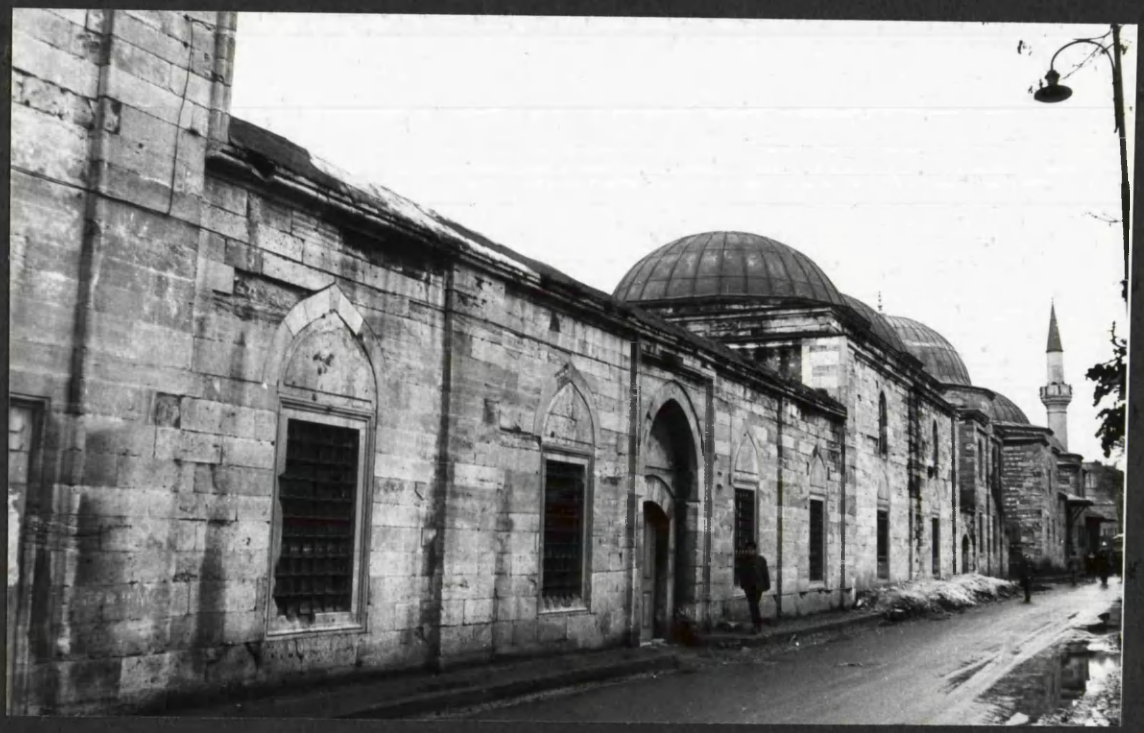


FIG. 118 THE İMARET

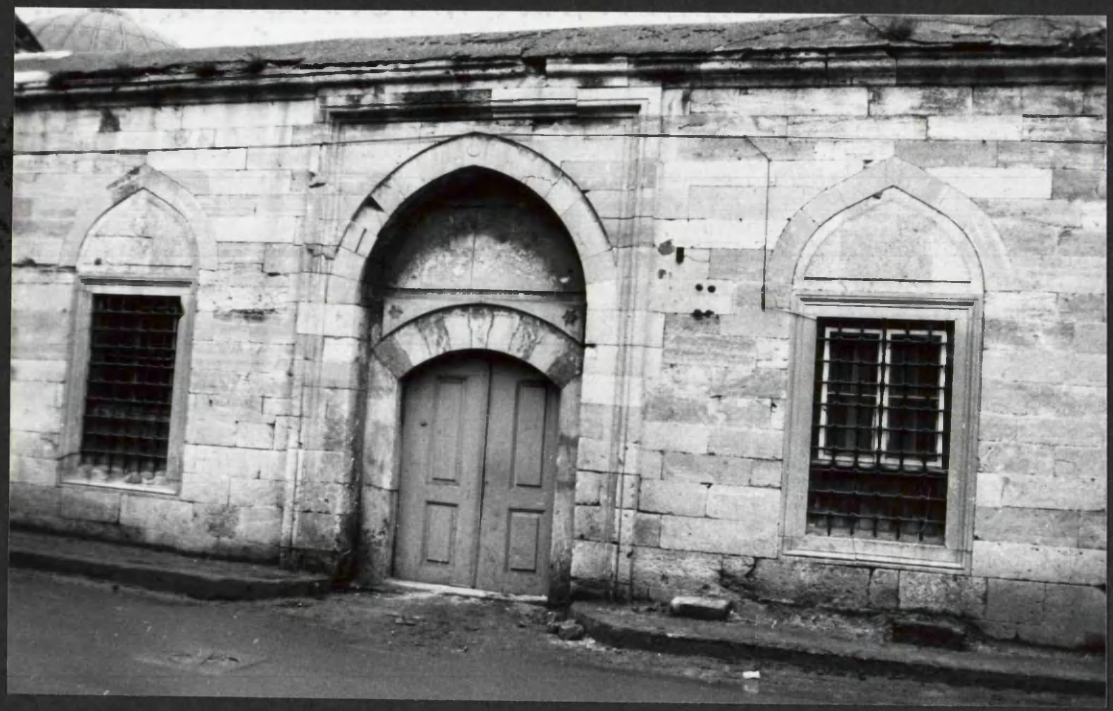


FIG. 119 THE PORTAL OF THE İMÂRET

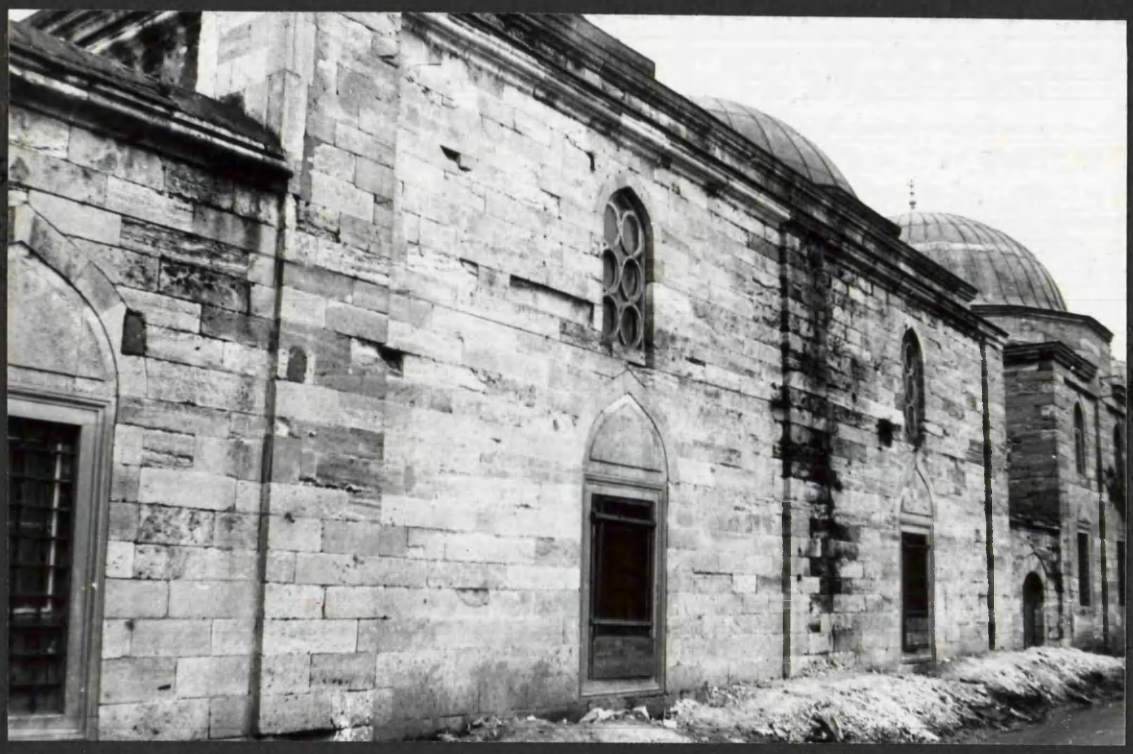


FIG. 120 THE İMARET

FIG. 121 THE "SÜBYAN MEKTEBİ"

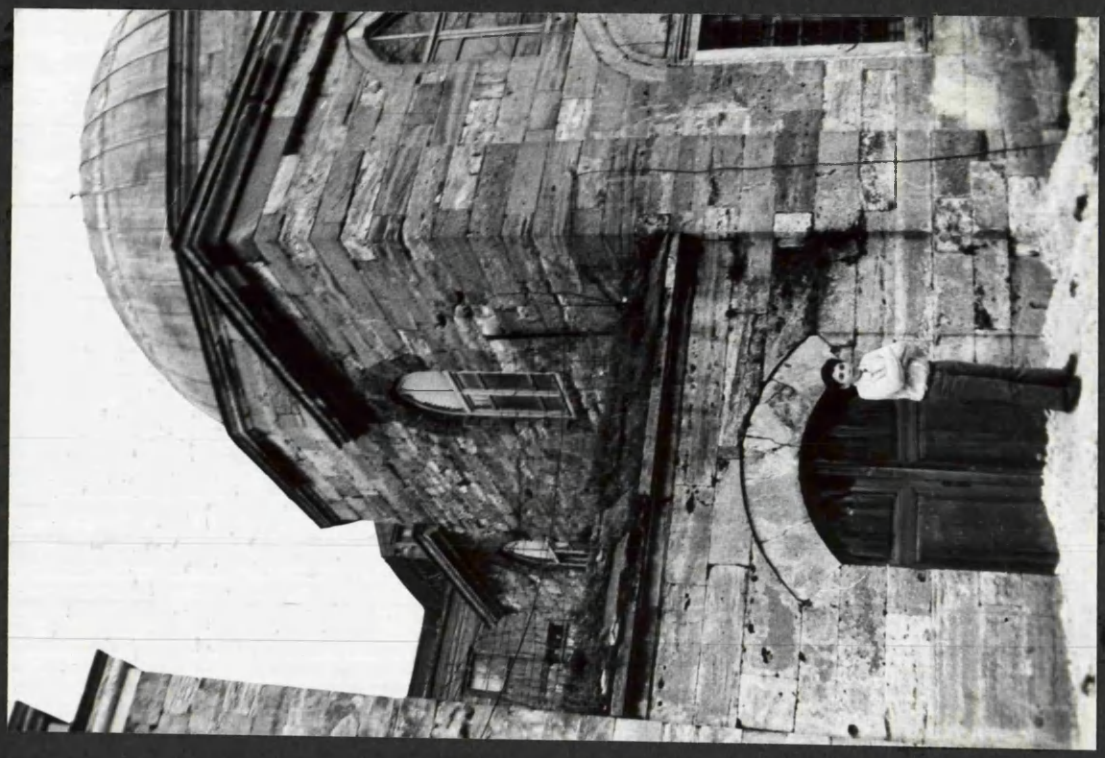


FIG. 122 THE "SÜBYAN MEKTEBI"

FIG. 123 THE "TÜRBE AND THE OUTER ENCLOSURE

FIG. 124 THE ŞEHZADE MEHMET TÜRBESİ

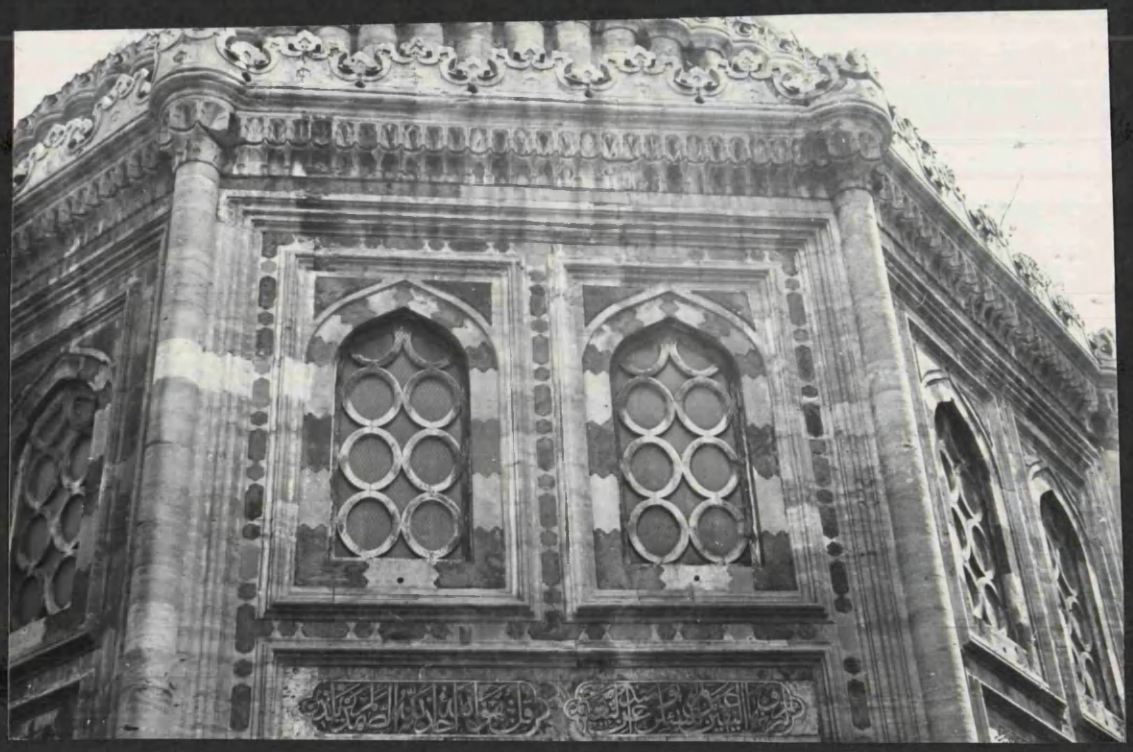
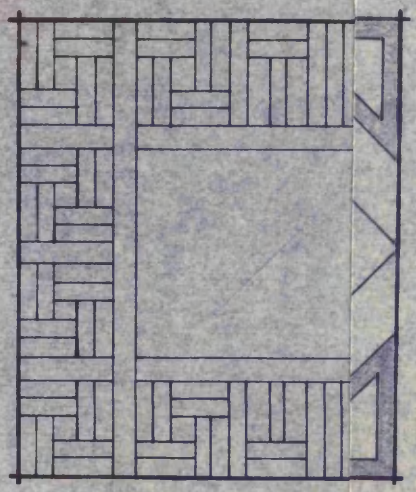


FIG. 125 THE DETAIL OF THE UPPER PART OF THE TÜRBE

FIG. 126 THE RÜSTEM PAŞA TÜRBESİ

FIG 127 THE OUTER ENCLOSURE OF THE TÜRBE GARDEN



the FLOOR DECORATION of
the TÜRBE PORTAL

FIG. 128

عاقبت در قصر عالم از خواص از عوام
کردار این کمذر شهزاده پاك اعتقاد
تاك کشت اسوده در عقبی با اجر کردکار
شد بالرحم خوی لم یزل تاریخ او
کسن غمی ماند بحق هوالله احد
در بقای جاودان رحمت کند هی و حمد
روز محمد پادشه باشد برفعت بی عدد
مرقد سلطان محمد باد فردوس ابد

۹۰ ـــ

1 – the Inscription over the TILE – PANELS
2/2,b – the TILE Inscriptions
3 – the PORTAL Inscription of the TÜRBE

the Tile from the Türbe of Şehzade Mehmet

FIG. 131 THE TILE PANEL FROM THE INSIDE OF THE ŞEHZADE MEHMET TÜRBESİ — FROM ASLANAPA

FIG. 132 THE SELSEBILS

FIG. 133 THE MARBLE WATER TANK

FIG. 134 THE GEME

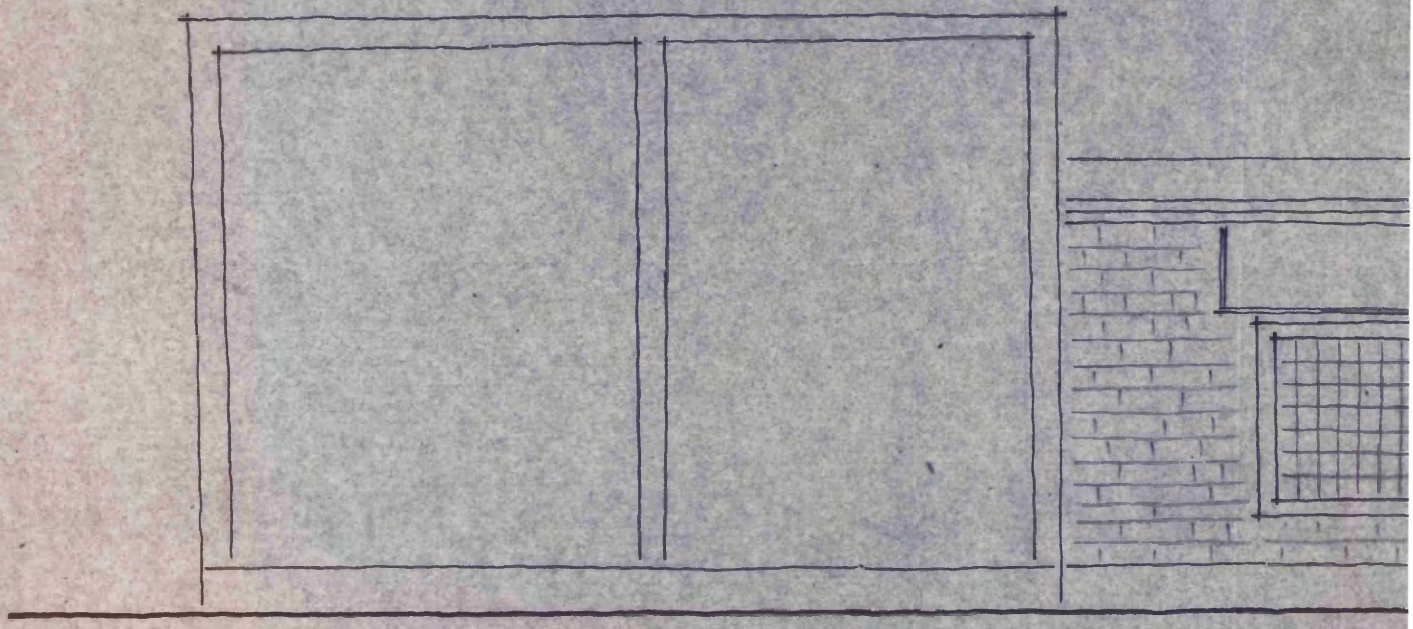
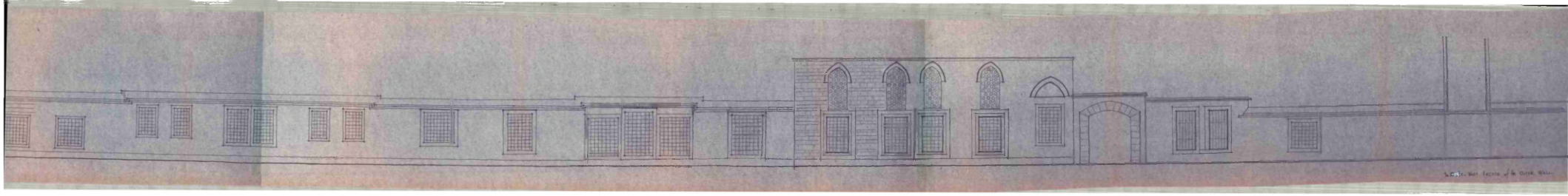


FIG. 135



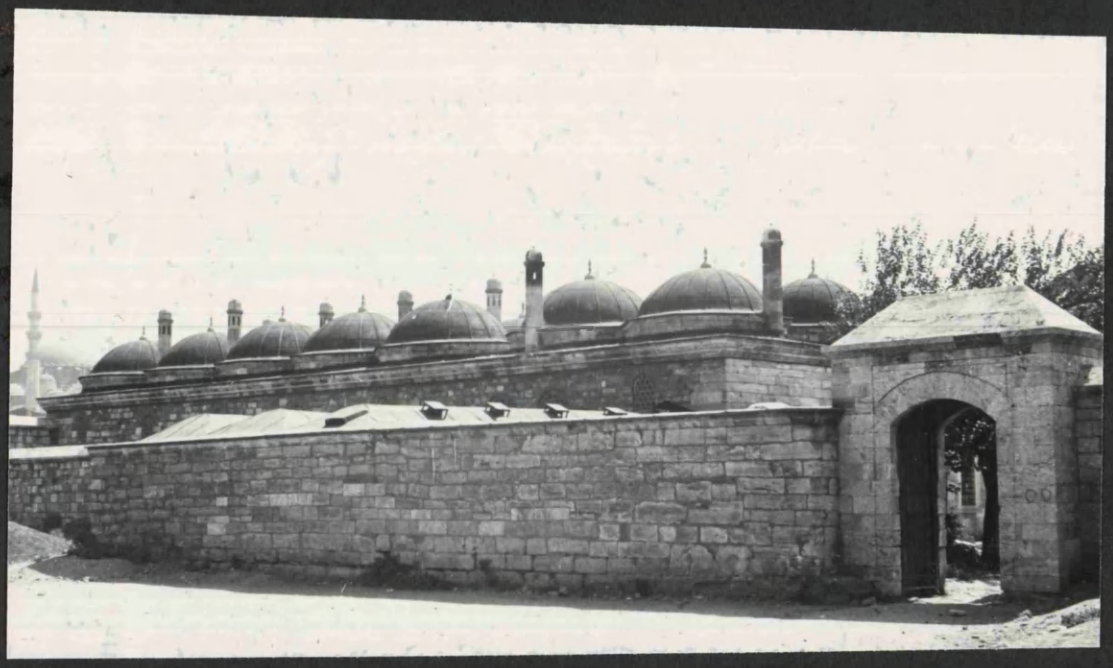


FIG. 136 THE NORTH-WEST ENCLOSURE

FIG. 137 THE PORTICO OF THE MUVAKKIT HANE

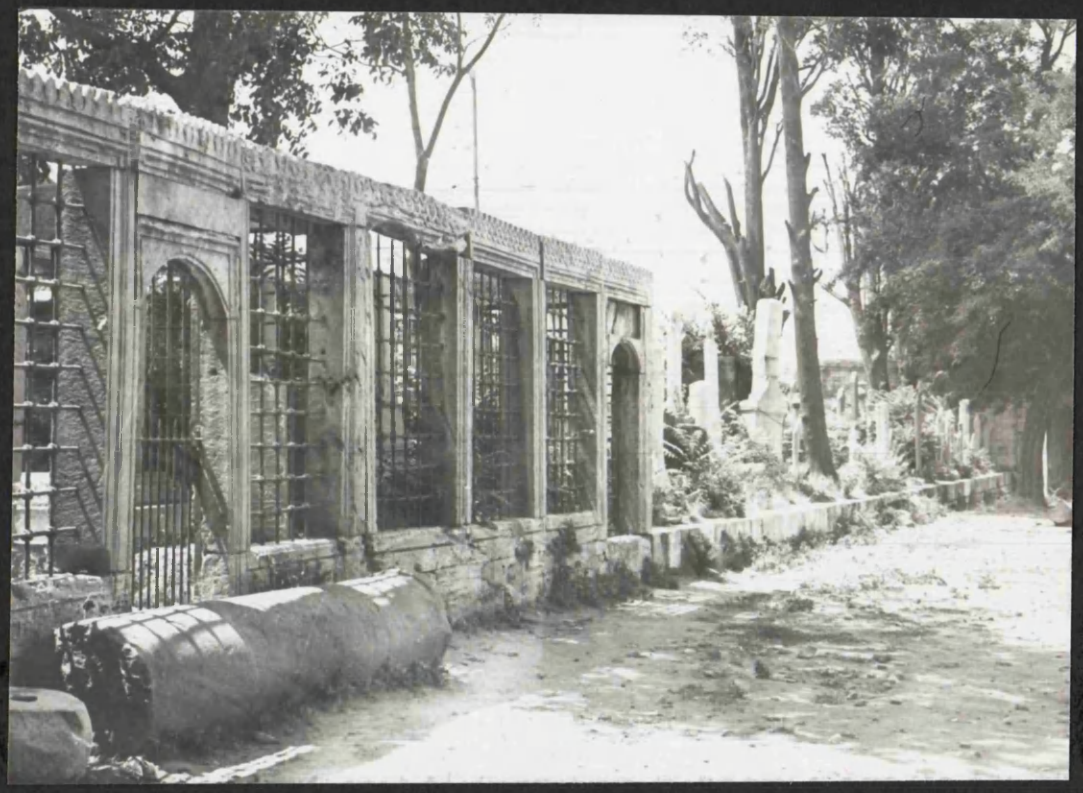


Fig. 138 THE CEMETARY