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# ISLAMIC ARCHITECTURE

Form, function and meaning

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various crafts and professions—sometimes shed light on such matters as the use and maintenance of mosques, the building of houses and shops in accordance with the need to avoid danger to life and limb and to ensure rights of way, or the regulation of the water supply. The outstanding example of this genre, so far as architecture is concerned, is the work of Ibn 'Abdun, whose information relates to Seville in the early 12th century and covers such topics as the proper size of construction materials. Finally, attention should be drawn to the very occasional technical report—such as that of an otherwise obscure author, al-Maqdisi, who despite his name hailed from Bust in Afghanistan, and has left a description of the uses of wood in predominantly mud

architecture—and to the work of those geographers who happened to have a pronounced interest in architecture. Paramount among them is another, but celebrated, al-Muqaddasi (d.c.390/1000), who sprang from a line of architects in Jerusalem and in his travels throughout the Islamic world always had an eye for fine buildings. The Spaniard Ibn Jubair (d. 614/1217) runs him close for the quality of his connoisseurship and his capacity for detailed and accurate observation. Students of Islamic architecture have good reason to be grateful to such men, for they have preserved from oblivion literally thousands of buildings which have vanished without trace.

## II The Mosque

### GENERALITIES

2.13 What makes a mosque a mosque? The answer is forbiddingly simple: a wall correctly orientated towards the *qibla*, namely the Ka'ba within the Masjid al-Haram, Mecca. No roof, no minimum size, no enclosing walls, no liturgical accessories are required. Indeed, it might very properly be argued that even the single wall is unnecessary. After all, the Prophet himself is recorded as saying, 'Wherever you pray, that place is a mosque (*masjid*)'. Accordingly, to this day and throughout the Islamic world, when the hour for prayer arrives, pious Muslims stop whatever they are doing, orientate themselves towards the *qibla* and then and there undertake the formal ritual of prayer. Technically, therefore, it could be argued that the term *masjid*, normally translated into English as 'mosque', does not necessarily connote a building of any kind.

In fact, of course, Muslims began to build mosques from the very early days of Islam, and as the number of these mosques multiplied, patterns of architecture began to develop. Nevertheless, it is salutary to remember the willed austerity of the arrangements for worship as defined and practised by Muhammad. In the centuries to come Muslims never entirely forgot the starkness of his example, and periodically the forces of revivalism and pietism attempted at least a partial return to the pristine simplicity of the earliest Islamic worship. The mosques erected in Saudi Arabia by the Wahhabis typify the attempt to reconcile early Islamic practice with the accumulated traditions of a millennium and more of mosque architecture. The polarities are virtually irreconcilable, but it is highly significant that such consistent attempts have been made over the centuries to bring them together.

2.4 The salient fact, however, is that the mosque is the Islamic building *par excellence*, and as such the key to Islamic architecture. Moreover, the medieval Muslim world, like medieval Europe, was a theocentric society, and the mosque was the natural expression of that society. To examine its functions in detail therefore affords insights into the workings of medieval Islamic culture. For historians attuned to material

culture as well as written evidence it is a primary source of the first quality.

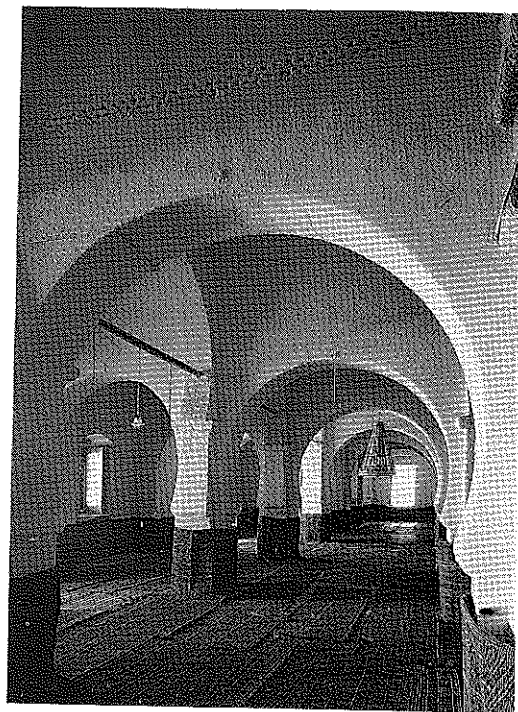
There are other and still more practical reasons for investigating the history of the mosque. This was the building type which by and large produced the finest structures in Islamic architecture; it was built to last, whereas many secular monuments tended to be richly decorated but of flimsy construction. As a result, it has survived in larger quantities than any other type of medieval building. Indeed, the early period of Islamic architecture — from c.80/700 to c.390/1000 — is documented largely by mosques. It was the mosque which embodied the first timid Arab experiments in architecture and it was in the medium of the mosque above all that Muslim builders came to grips with the pre-Islamic architectural heritage. As a result, this is the building type which most frequently reflects — just like the church in the Christian world — the impact of the many distinct local architectural traditions which together shaped Islamic architecture.

### DEFINITION

Before proceeding any further, it might be as well to attempt a definition less austere than the one proposed at the beginning of this chapter. The mosque is of course the principal religious building of Islam, and paramount among its many functions is communal prayer. In its simplest and most widespread form the medieval mosque comprised a courtyard<sup>2.4</sup> bordered by arcades and adjoining a covered hall. Yet this definition, for all its deliberate inclusiveness, gives little idea of the well-nigh endless variety of forms and uses which characterised the most quintessentially Islamic building. Nor does the limited space available here permit even a reasonably detailed inventory of the significant mosque types and of the functions which they discharged. It is imperative rather to distance oneself from this wealth of detail, however alluring, the better to identify the immanent characteristics of the mosque and to appraise its unique role within Islamic culture. Accordingly this chapter will focus less

on close analysis of individual mosques than on how this genre of building expressed the perennial concerns of Islamic religious architecture. These concerns or underlying principles governed and are reflected in the choice of component parts of mosque design, and their interaction; the functions which the mosque was called upon to perform; the role of decoration; and finally all that contributes to the visual and aesthetic impact of this building type. It would pre-empt the ensuing discussion to dilate on these principles at any length at this stage. Suffice it to say that mosque architecture is at base egalitarian, iconoclastic, inward-looking and – above all – profoundly religious in its intent.

The latter aspect deserves particular emphasis because of the much-vaunted identity of the sacred and the secular in medieval Islamic society. This theory, a favourite construction of some trends in modern scholarship, is ideally as true of Islam as of Christianity. It is, however, only a theory and a glance at common practice is enough to dispose of it. To this day no one walking from the bustle of a bazaar to the serenity of a mosque can seriously doubt that Islam clearly distinguishes between the dues of Caesar and those of God. The architecture proclaims that very distinction. The change to an orientation towards Mecca, so frequently noticeable as soon as one enters the building, is conceived in the same spirit. Finally, the believer takes off his shoes to enter a mosque and that simple homely action symbolises the transition from the secular to the spiritual realm. A saying of the Prophet reported by Abu Huraira makes the same point still more sharply: 'most favoured of God in cities are their mosques and most abhorred are their markets'. In just the same way, the physical evidence contradicts another fashionable concept: that all the mosque is equally sacred and that its architecture embodies no hierarchy of importance. In mosques provided with a courtyard – and such mosques are the predominant type throughout the Islamic world – a clear visual distinction is drawn between the courtyard with its surrounding arcades and the larger covered space containing the *mibrab*. Even the Arabic language has at times singled out this area from the rest of the mosque, calling it the *musalla* or 'place of



23 Susa, Great Mosque, original sanctuary

prayer'—though this usage is by no means universal, and indeed is distractingly ambiguous, because the same term is widely used of an enclosed open space, normally outside a town, in which communal prayer is celebrated at festivals and on other special occasions. A common term for this covered area in early texts is *al-mughatta*, a term (like *riwaq*) also used of tents. Similarly, it is in this area that the principal architectural and liturgical elements of the mosque are concentrated: the main dome, the largest continuous covered space in the building, the *mibrab*, the *maqsur* and the *minbar*. These elements will be discussed in more detail later. Finally, it is here that the most lavish ornament which the building can boast is to be found. These remarks are not intended to cast aspersions on the sanctity of the mosque as a whole. Nevertheless they do imply that one part of the mosque – the covered space containing the *mibrab*, conventionally rendered into English as 'sanctuary' – was accorded greater visual emphasis and status than the rest of the building.

So much for preliminaries. Impressionistic as such remarks may appear, they nevertheless help to delineate the background against which the evolution of the mosque over a millennium and more must be seen. Any considered analysis of this building type must, of course, go further than this. Certain crucial aspects of mosque architecture have a particular claim to extended discussion and this chapter will lay special emphasis on them. They are the origins of the mosque; its constituent parts, with their associated liturgical significance; its various functions; and its standard characteristics. Only when these matters have been sufficiently clarified will it be possible to move from the general to the particular and to flesh out the resultant rather stark generalisations with specific detail. The other section of this chapter will therefore be devoted to a discussion of the various types of mosque, illustrated by some of the major examples of the genre, and to the rôle played by the decoration of these buildings.

#### ORIGINS OF THE MOSQUE

The matter of origins is surprisingly straightforward. Islamic tradition champions the decisive impact of a single building on the evolution of the mosque: the house of the Prophet. Nor is this emphasis misplaced. The briefest acquaintance with Muslim liturgy is enough to explain why the places of worship employed by the other faiths of the time were fundamentally unsuitable for the needs of Islam. It is true that many churches, some fire temples, and on occasion even portions of classical, Hindu or Jain temples, were adapted to serve as mosques. But this was only a matter of expedience, and was never a long-term, deliberate policy. It did, however, have its uses; indeed, several motives could account for these conversions. In newly Islamised territory the pressing need for a place of worship could not always be met as quickly as might be wished. The advantages of using an already existing monument – convenience, cheapness, suitable location, the saving of time and effort and of course the less easily definable proselytising, propaganda and symbolic elements – outweighed the initial disadvantage of using an architectural form not designed to serve as a mosque. Nevertheless, these disadvantages made themselves felt in short order, and

already within the first decade of the Islamic conquests 'custom-built' mosques – if that is not too grand a term for such extremely simple structures – were being erected.

The informality of the earliest arrangements for communal worship in Islam irresistibly brings to mind the comparable situation among the early Christians. There, the first places where the nascent community foregathered for worship were the homes of the faithful, and Christ's words 'Where two or three are gathered together in my name, there shall I be among them' highlight the lack of outward forms, including architectural forms, in the early Church. The fact that much of Christ's teaching took place in synagogues is of a piece with this simplicity. Much later, when custom-built churches began to be erected in quantity, the basilicas and mausolea of the late antique world provided the models. It was only gradually that the forms of these pagan buildings were altered and refined so that they could discharge their new religious functions more effectively. Even then, there was no question of the word 'church' connoting exclusively one kind of building.

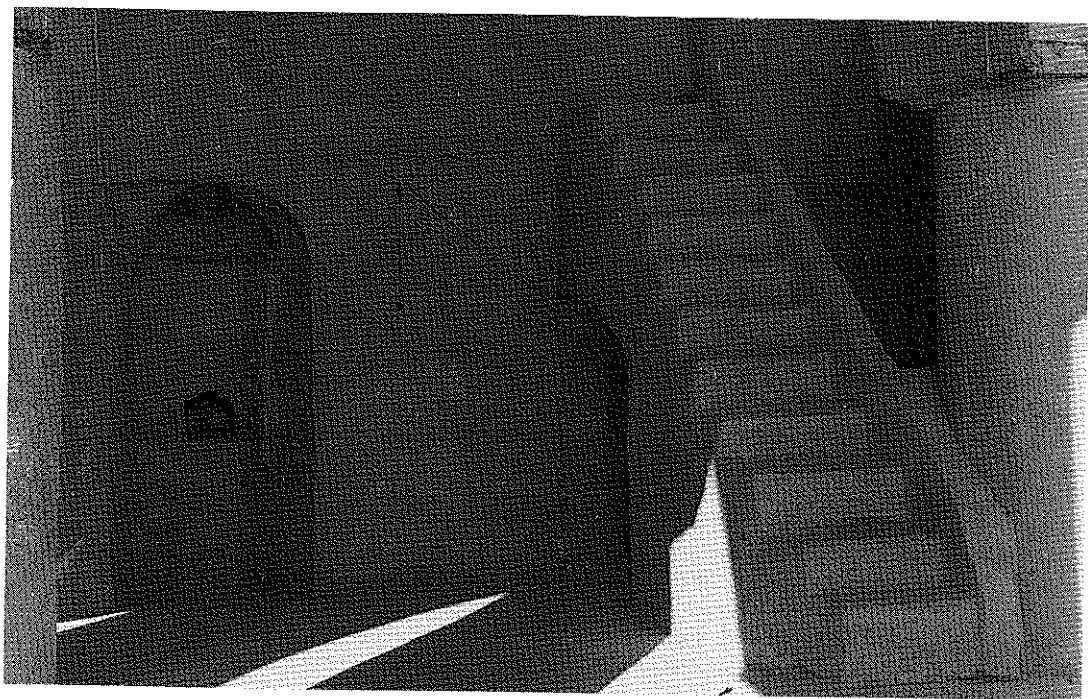
These reflections may help to clarify the early history of the mosque. In several crucial respects, however, the historical circumstances of the rise of Islam were totally different from those of early Christianity. Islam was spread by the sword, at great speed and over vast distances – from Spain to the borders of China. The consequences for the faith and for Islamic society are not relevant here, but the consequences for Islamic architecture could not be more crucial. Developments which in the Christian world proceeded in leisurely fashion over several hundred years were, in the world of Islam, telescoped into little more than half a century. Christianity began, grew and consolidated itself in the Mediterranean world, in the context of a high degree of political, cultural and even linguistic homogeneity. By contrast, the array of political, cultural, ethnic and linguistic entities which succumbed to Islam in such rapid succession is nothing short of bewildering. The range of architectural forms which the Muslims encountered was correspondingly wide. Christian architects had no such input of alien forms to absorb. Not only did the Muslims have to come to terms with the protean expres-

sions of Christian religious architecture which they encountered; Zoroastrian, Jewish, Hindu, Jain and Buddhist religious buildings also challenged them. Finally, the military nature of the Islamic expansion requires emphasis. As the conquests progressed, the major body of Muslims in each new territory was initially the army itself. The need for some serviceable gathering place for these thousands of Muslims was acute, and a simple enclosure best fitted that need. The means chosen to enclose the desired space were not necessarily monumental: a line of scattered ashes, a reed fence, a shallow ditch and the like. In this informal way there arose the ancestors of the great congregational mosques of later times. As early as the year 21/642, after the conquest of Alexandria, a mosque was laid out in a garden where the commander-in-chief, 'Amr b. al-'As, had set up his standard—and he himself lived right next door. The same arrangement was followed at Mosul in northern Iraq. In some carefully selected centres these enclosures seem to have taken on a more permanent form, even within the first century of Islam. Once again, military motives provided the initial

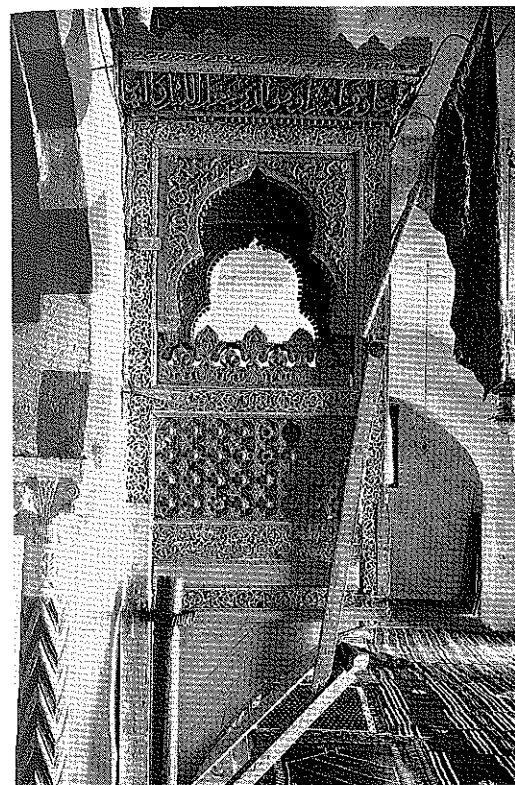
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stimulus for this development. The Muslim expansion could not be directed entirely from Mecca and Medina, or even from Damascus, and therefore intermediate headquarters were set up near the major fronts. Thus the invasion of eastern North Africa was spearheaded from Fustat (near modern Cairo), and that of western North Africa and Spain from Qairawan in Tunisia. Similarly, the campaigns against the northern and southern areas of the Iranian world were prosecuted from headquarters in Kufa and Basra respectively. Such settlements became virtual garrison cities which saw the regular coming and going of thousands of troops. The Muslim authorities soon came to feel the desirability of separating such military camps from the symbiotic town which grew up beside each of them, and a separate mosque was an effective symbol of that segregation. With ample free space on which to build, and with the need to accommodate thousands of worshippers, it is no wonder that these early mosques should have been so huge.

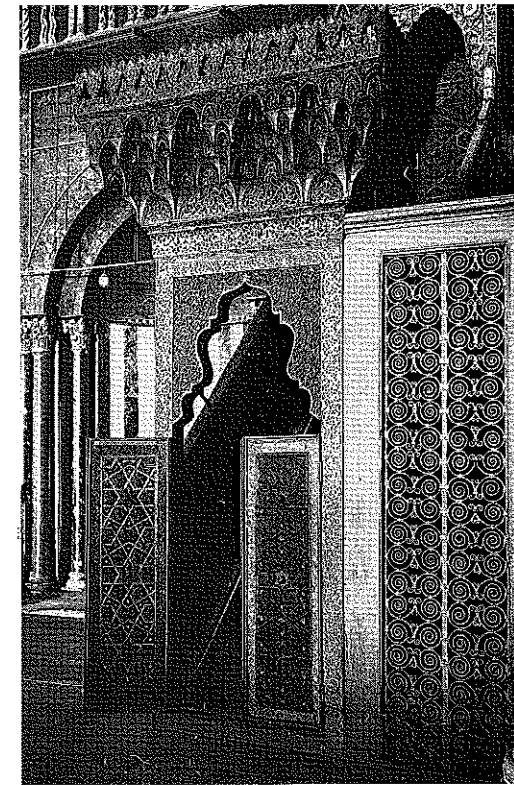
Although no mosque from these early decades survives in anything like its original



24 Damghan, Tari Khana mosque, *mihrab* and *minbar*



25 Hama, Great Mosque, *minbar* of Nur al-Din



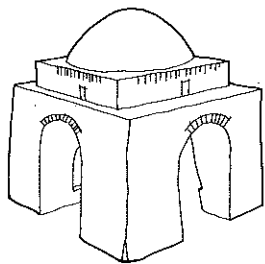
26 Jerusalem, Aqsa mosque, *minbar*, entrance

state, it is hard to exaggerate the influence of these buildings on the subsequent development of the mosque. As in so much of Islamic religion and culture, the formative experiences in mosque architecture were those of the first century. These huge early mosques established the principle that the Islamic religious building *par excellence* should be fundamentally inclusive rather than exclusive in character. For that reason its single defining feature was an enclosed and orientated space. What was built within the enclosed space differed from one mosque to the next; the key point was that the outer wall of the mosque clearly demarcated holy ground — *haram* — from the secular world outside. Even so, it is worth remembering that the enclosing walls themselves are not liturgically necessary. Pared down to its essentials, the mosque is, in short, not a building at all, but simply a space set aside for prayer. It follows that the entire history of the mosque as an architectural form takes place

within the secular domain. This may sound an extreme statement, and perhaps an offensive one too. Yet until the absolute simplicity of the Muslim requirements for communal prayer are clearly understood, the subsequent complexity of mosque architecture is liable to be misinterpreted as a response to liturgical needs. Instead, that complexity resulted principally from the adoption of non-Islamic features and their integration into the new context created by the mosque. This point deserves a little further investigation.

Islam was able to draw on a much more varied range of models for religious buildings than was Christianity, which says much for the simplicity of Islamic communal worship and its refusal to be tied down to a narrow range of architectural expression. Its austere simple liturgy meant that Islam could appropriate almost any kind of building for worship. Even so, there was — at least as far as the 7th-century

Arabs were concerned – an optimum design for mosques, and it is revealing that its roots should be in domestic rather than public architecture. This is not to say that the mosque is simply the Arab house writ large, for both Christian and Zoroastrian places of worship left their mark upon its design, as did the aulic architecture of late antiquity. These external influences took time to make an impact on mosque architecture, and even at their strongest they were only rarely the determining factor. Mature Ottoman mosques, which cannot be understood without reference to Byzantine churches of the 6th century, notably Haghia Sophia, are the exception that proves the rule. Muslim architects happily plundered, both literally and metaphorically, the religious architecture which they encountered in the Mediterranean, Arabian, Iranian and – nearly six centuries later – Indian worlds. Yet the materials and ideas which they quarried from these buildings were not enough to make the mosque an Islamised church, fire sanctuary or temple. The places of worship used by the adherents of religions which Islam supplanted were basically ill-suited to Muslim needs. Churches emphasised depth rather than breadth, if they were of basilical form, and centrality if they were a variation of the martyrrium type. The sanctuaries of fire worship in the Iranian empire were built for ceremonies in-



2.226 Naisar, fire temple

volving a few priests, not large congregations – indeed, the congregation foregathered in the open air – while the temples of Arabia and India also put no premium on housing great numbers of worshippers within a covered hall, let alone ensuring easy visibility between them. For these practical reasons the cultic centres of other religions were of limited value to early Muslim

architects, who looked elsewhere for inspiration.

#### LITURGY

The fact of the matter is that the Muslim liturgy does not demand any man-made structure for its celebration. When the early Muslims gathered for worship on their holy day – a Friday, not a Sunday – they performed ritual prayer together and listened as the *imam* ('prayer leader' is a somewhat inadequate translation) delivered the *khutba* – part sermon, part bidding prayer, but often with political content too. The various prescribed movements of prayer, involving as they did outstretched arms, kneeling and prostration, meant that each worshipper ideally required a minimum space of 1 × 2 metres. Moreover, prayer was communal. It was thus clearly desirable that its constituent movements should be synchronised. The alternative would be visually chaotic and might even suggest spiritual discord. The functions of the *imam* included the leading of communal prayer, and to this end it was important that he should be as widely visible as could be. Thus there developed the custom of disposing of the worshippers in long lines parallel to the *qibla*. In this way it was possible for hundreds, not scores, of people to follow the movements of the *imam*. By contrast, the disposition of worshippers within most Christian churches is in lines perpendicular to the altar. The consequent loss of visibility is only partially compensated for by the raising of the altar. These remarks are not intended to suggest that the *imam* was visible in a large mosque to a congregation of, say, several thousand. But the grouping of worshippers in comparatively few long and well-spaced lines, rather than in many short lines close together, did ensure the easy intervisibility of worshippers and thus facilitated precise timing in the movements prescribed for prayer. A chance remark of Ibn Hauqal *à propos* the Great Mosque of Palermo casts some light on the organisation of the communal prayer: 'I estimated the congregation, when it was full, at over 7,000 persons. Not more than 36 rows stand in prayer, with not more than 200 men in each row'.

This lateral grouping of worshippers, which might fairly be termed a liturgical convenience, but was in no sense a doctrinal imperative,



27 Jerusalem, Aqsa mosque, *minbar*, east side

proved to be the single vital factor in the layout of future mosques. At a stroke it forbade the simple transformation into Friday mosques of pre-Islamic places of worship. It forced Muslim architects desirous of making such transformations to rearrange the constituent elements of the sequestered building – lateral thinking, indeed. Such conversions of existing structures, though obviously convenient in the short term, were no adequate solution to the needs of a new, powerful and rapidly growing religious community with its own distinctive forms of worship. Thus the earliest custom-built mosques were erected at the very same time that existing non-Muslim buildings were being converted into mosques, and in them the lateral emphasis is already well-marked. From the very beginning Islamic architects rejected the basilica, and with it the standard Christian church of Western type, as a suitable source of inspiration for the mosque. Nevertheless, the idea of a central nave focused on an altar was eventually incorporated, suitably modified, into numerous mosques, and occasionally – as in the

2.28 Great Mosque of Damascus – an entire basilical form, once shorn of its telltale Christian axiality, could be integrated into a mosque. Similarly, it seems unlikely – although here the crucial archaeological evidence is still missing – that the

2.225-2.226

Zoroastrian fire temple, a domed square

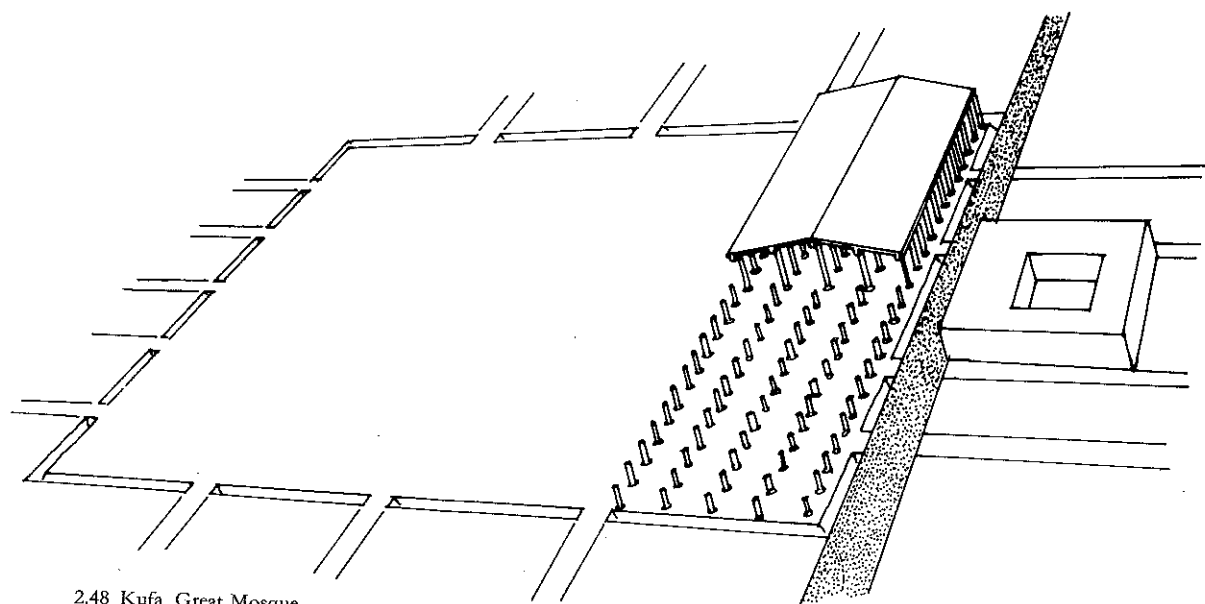
chamber with four axial openings, was ever accepted as a suitable model for a congregational mosque built from scratch and intended to consist of no other structures. Yet as in the case of the basilica, this alien form – found also in Sasanian palaces – could lend itself very adequately to mosque architecture. Sometimes, it seems, the mere addition of a courtyard was sufficient modification. The domed chamber proved to be a most striking method of singling out the sanctuary of a mosque, or even a particular area of the sanctuary. As with the basilica, it was not a necessary element in the congregational mosque but rather an optional extra.

In this respect the earliest large mosques, which have been convincingly analysed on the basis of the copious literary sources, offer telling evidence. At Basra, Kufa and Fustat the story is the same: the mosque comprises simply a large rectilinear enclosure of which one complete side, varying in scale from a quarter to a half of the entire enclosure, is taken up by a covered area, namely the sanctuary – a space thus rendered architecturally distinct from the rest of the mosque.

The decision to include a covered area in the mosque, and moreover to position it next to the *qibla* and therefore in the place of honour, was fraught with consequences for subsequent

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mosque architecture. Why was this feature included? It is clear from the discussion so far that there was no need for it from the point of view of doctrine or liturgy. It seems justified to invoke such other factors as custom, precedent and practicality – and this inevitably leads to the first mosque of all, Muhammad's house in Medina.

#### MUHAMMAD'S HOUSE

2.52-2.54

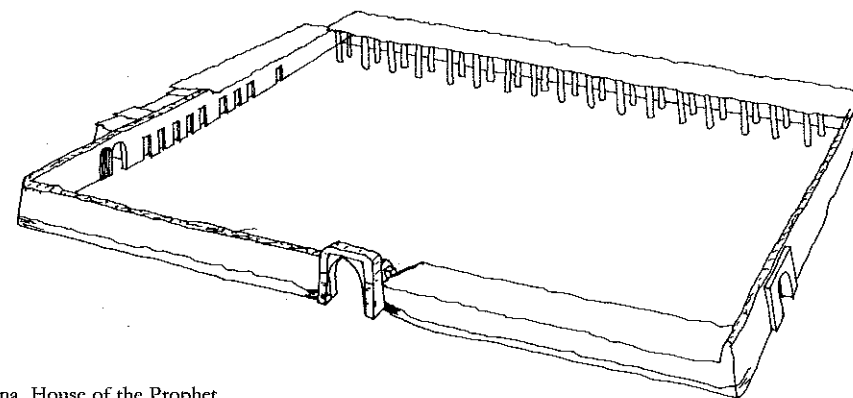
The first point to notice about this building, now entirely vanished but described in exhaustive detail in the Arabic sources, is that it was in Medina, and not in Mecca where Muhammad spent most of his life. It was only in 622, ten years before his death, that the hostility of the Meccans to his religious teaching caused him to move for safety to Medina. This emigration (*hijra*) marks the beginning of the Islamic calendar. In that same year he began to build a house for himself and his family. But he built that house not as a despised and persecuted religious outcast, which was how he was generally regarded in Mecca, but as the respected leader of a new and dynamic religious community. What could be more natural than that his new house should be designed at least in part to serve this community as well as his own family?

A second striking feature of the house is its very substantial size. It was a largely open square of some fifty-six metres per side. These dimensions speak for themselves. They were probably exceptional for that time and place. Nor did Muhammad keep the kind of state which called for a vast establishment; the *hadiths* on this subject sufficiently emphasise the sim-

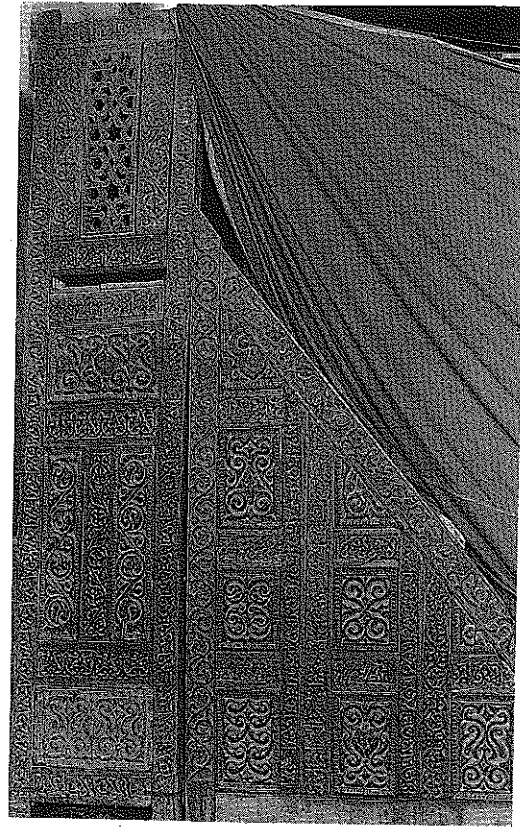
plicity, indeed austerity, of his daily life. A house on this scale was far bigger, in short, than was required for a household as modest as that of the Prophet. Indeed, its domestic accommodation comprised no more than nine small rooms built side by side on the outer side of the east wall.

This last detail is very telling, and highlights the third notable characteristic of the house, namely that it is a house only incidentally. To judge by later domestic architecture, the obvious location for rooms intended to be lived in would have been inside, not outside, the enclosure. Thus the paradox emerges of a building which, though ostensibly intended to function as a house, is apparently designed with quite other ends in view. In other words, the evidence suggests that Muhammad's 'house' was intended from the first to serve as the focal point of the new Islamic community. That definition also includes its role as a mosque. It did not become the first mosque as it were by accident. Consequently the traditional interpretation which emphasises the origin of the mosque in domestic architecture is erroneous. The mosque was custom-built from the very beginning, though it is important to remember that the precise meaning of 'mosque' in the 620s is not readily definable today. The inclusive rather than exclusive nature of the concept at this early date requires emphasis.

These remarks place Muhammad's 'house' in a new light. They indicate that the random element in the building was its domestic rather than its religious appurtenances. For this reason, purely domestic accommodation was banished outside the building. By the same token every-



2.54 Medina, House of the Prophet

28 Abyana, Friday Mosque, *minbar*

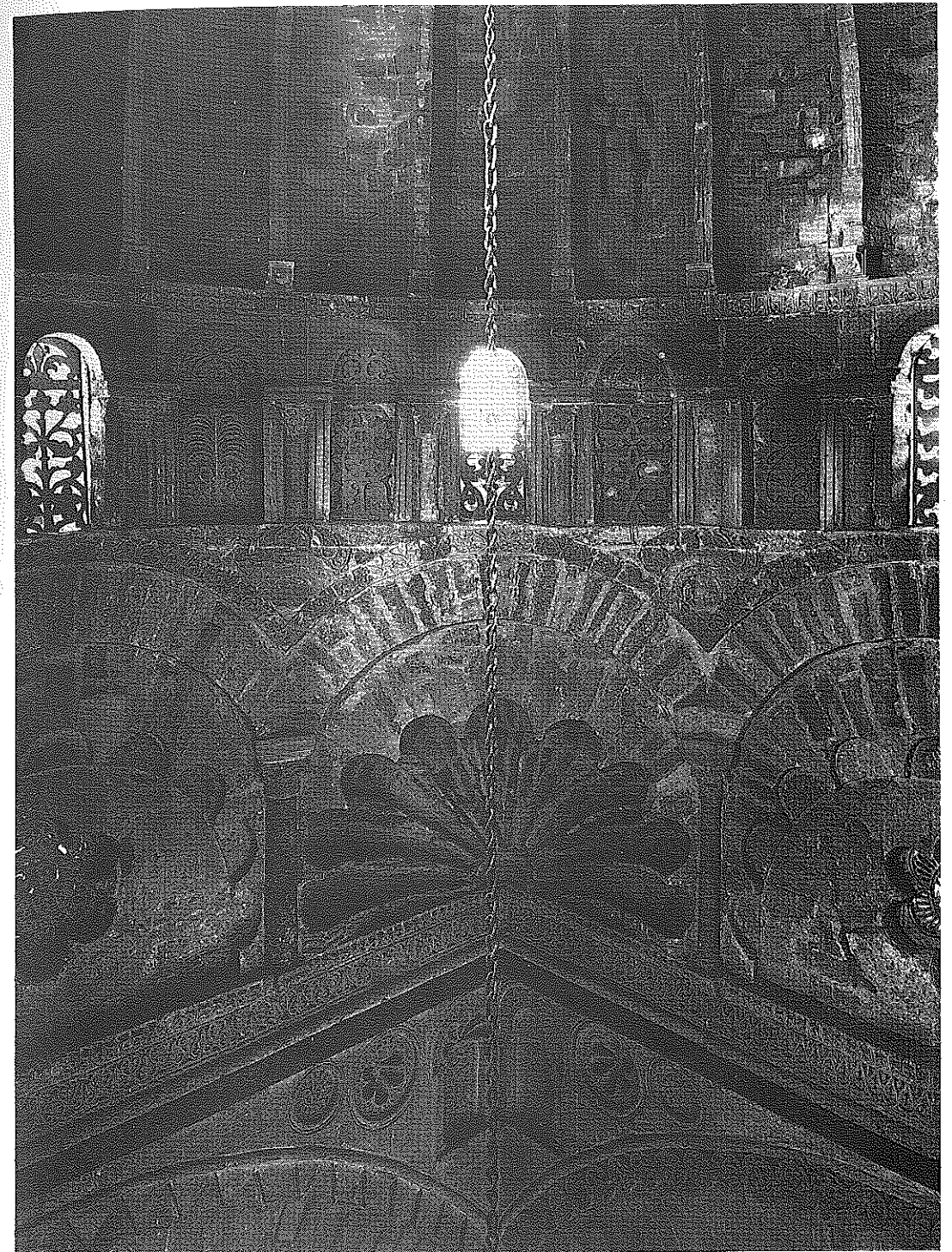
thing within the building was deliberately included because it had a function to fulfil in this primitive mosque. The evidential value of Muhammad's 'house' can scarcely be exaggerated – for here, in the very lifetime of the Prophet, were laid down the norms for the central religious building type of the new community.

The major features of the building may quickly be summarised. It was essentially a large and almost empty enclosed space. The enclosing walls were plain. Along the inner wall facing the *qibla* was the *zulla*, or shaded place, a double row of palm trunks carrying a roof of palm leaves plastered with mud. This feature was not part of the original design but was added within a year because some of the Companions (*sahaba*) of the Prophet had complained of the discomfort which the sun had caused them during prayer. When, very soon afterwards, a divine revelation caused Muhammad to change the *qibla* from

Jerusalem to the Ka'ba, the *zulla* was pulled down and re-erected alongside the new *qibla*. It was large enough to accommodate at least a hundred people. Opposite the *zulla* was another covered area, half as deep and less than half as long, which was used by the most poverty-stricken followers of the Prophet. The courtyard contained no other structures, and the three gates which gave access to it were little more than openings in the wall.

Before the implications of this layout are assessed, it is necessary to confront the arguments marshalled by Creswell and others to the effect that this building was not intended to be a mosque. The burden of these arguments is that no special sanctity attached to the building in the Prophet's lifetime and that it was indeed used like, and exclusively referred to as, an ordinary house (*dar*). Moreover, on important occasions Muhammad prayed at the *musalla* outside Medina. There is no need to try to discredit these statements, but they fail to invalidate the assertion that the building was primarily intended as the focus of the new community and only secondarily intended as Muhammad's house. The latter assertion, moreover, coincides with the Islamic tradition itself. Above all, there is no inherent contradiction between those who interpret the building as a mosque and those who see it as Muhammad's house. Clearly it served both purposes, and it was fully in the spirit of the earliest Islamic religious practice that it should.

For a full understanding of the mosque in the crucial early stages of its development it is necessary to remember its role as a community centre. It is that role which explains the apparently contradictory reports about how Muhammad's house was used. Both the spiritual and the secular life were pursued there simultaneously. This was the formative period of Islamic society, and so it is not surprising that the architecture which that society generated should also be in a state of flux. In later centuries, the development of specifically Islamic institutions removed from the mosque the functions which it had earlier, if only sporadically, performed: teaching, burial, the care of the sick, and many more. Some of these functions lingered for a long time. Thus in the 9th and 10th centuries mosques were usually open day and night, and the law permitted their

29 Qairawan, Great Mosque, interior of dome over *mibrab*

use to shelter travellers, penitents and the homeless. As the mosque grew more specialised in its functions, so it naturally developed its own specialised architecture. But in the first century of Islam all this lay in the future. The very informality of early Muslim practice militates against any dogmatic or exclusive interpretation of the mosque in the early decades of Islam. It is bad practice to apply concepts of the mosque derived from later buildings to the earliest structures of this kind, which were built at a time when the very idea of a mosque was not yet precisely defined. Thus the evidence adduced by Caetani as to spitting, sleeping, lounging, arguing, dancing and convalescing in the Prophet's house merely underlines the varied role which this building played in the early Muslim community. That same building was used for prayer on a regular basis by Muhammad and his family, by the Companions of the Prophet and by the impoverished 'People of the *suffa*'. The speedy demolition and re-erection of the *zulla* at the time of the change in *qibla* is entirely consonant with the regular use of the building for worship, and would be hard to explain otherwise.

The essentially multi-purpose nature of Muhammad's house helps to explain both its large size and its architectural design. Had Muhammad wished to live the modest and retired life of a private citizen, it seems unlikely that he would have built his *dar* in the form that he did. His mission of course dictated the public nature of his life-style and his house was a correspondingly public building. The design amply proved its worth during Muhammad's own lifetime and, so long as the mosque remained not only a place of worship but also the focal point of the Muslim community, there was no need for any fundamental reshaping of a plan already hallowed by the Prophet's use of it.

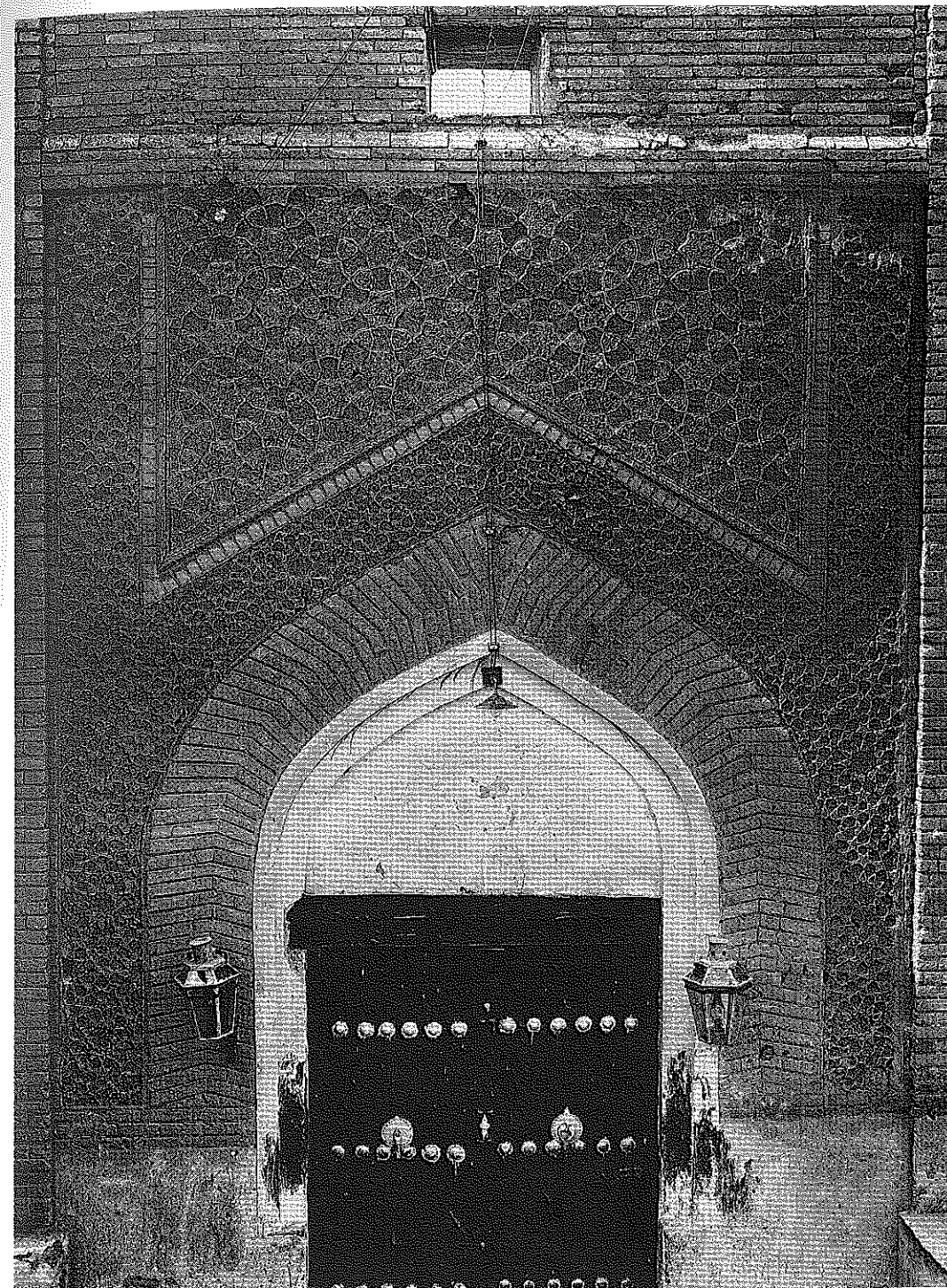
From the standpoint of design perhaps the most significant feature of Muhammad's house was the large empty courtyard. This took up some 75% of the available space even after the final expansion of the building, which involved the provision, outside the courtyard, of a total of nine dwellings for Muhammad's family. In fact, in the original design the 'house' consisted almost entirely of a vast empty courtyard. The austerity of this layout left its mark on subse-

quent mosques, while its flexibility needs no further emphasis.

The trend in subsequent centuries was towards an increasing specialisation of the mosque. The gradual shedding of many of its earlier functions opened the way for quite radical changes in design, and it became the practice to meet a specific function not directly connected to worship by adding an appropriate custom-built element to the nuclear design. This practice explains why so many later mosques seem encumbered by the multiple appendages clustered around them.

#### MASJID AND JAMI'

The foregoing remarks are intended not so much to fuel the long-standing controversy about the role of the Prophet's house as to shed some light on the prehistory of the mosque and to explain the reasons behind that simplicity which has remained its abiding characteristic. The vast courtyard sufficed to proclaim the essentially public nature of the building. It quickly became the nerve centre of the burgeoning Muslim community. Here worship was conducted, public announcements made, ambassadors lodged, meetings held, parades reviewed, cases tried, the treasury housed and councils of war convened. Like the religion of which it quickly became a potent symbol, then, it encompassed both the spiritual and the secular domain. Later mosques in theory maintained this dual allegiance, and the lack of formal urban institutions in the Muslim world, with a corresponding lack of certain types of formal public building such as town halls or law courts, put a premium on this double role. Thus by a natural process it became the community centre of the new faith. Larger mosques in particular continued throughout the medieval period to offer a more or less wide range of facilities unconnected with worship. Smaller mosques on the whole did not. This functional distinction reflects a difference in status and purpose which became established within a century of the Prophet's death, and was formalised by the adoption of two quite separate terms both meaning mosque: *masjid* and *jami'*. *Masjid*, derived from the root *sajada*, 'to prostrate oneself', is used in the Qur'an itself, though in rather a broad sense, to denote a place of worship. Its meaning was quickly refined,



30 Kufa, Great Mosque, portal



however, to indicate more specifically a mosque for daily private prayer. The simplest architecture, right down to a single unadorned room, sufficed for such oratories, though it was not rare for a splendidly embellished *masjid* to be erected at the behest of some wealthy patron. No Muslim community was without a *masjid*, even if it was no more than a small space set aside in some larger building. In towns it was common practice for each individual quarter to have its own *masjid*, and yet other *masjids* were built specifically for members of a certain tribe, sect, profession or other exclusively defined community. Finally, the growing popularity of joint foundations from the 10th century onwards meant that *masjids* were built in association with a wide range of buildings whose prime emphasis was secular, such as caravansarais, mausolea, and palaces, as well as buildings with an overt religious significance, such as *ribats* – fortified structures which housed warriors for the faith – and *madrasas* or theological colleges. This association of the *masjid* with secondary places of worship ensured that the physical form of the *masjid* became more and more varied.

The *jami'* was an altogether more ambitious kind of building, and this was entirely in keeping with its much grander function. The religious obligation imposed on every adult male and free Muslim to meet for communal worship every Friday for the public service or *salat* created a need for a building conceived on a much larger scale than the *masjid*. The very word *jami'*, which derives from the Arabic root meaning 'to assemble', recalls and perpetuates this crucial function of the building. It had to accommodate thousands instead of scores or a couple of hundred. It had in addition a public role, with undertones of symbol and propaganda denied to the *masjid*. It was in some sense a showpiece for the faith and often for the person, dynasty or area most closely associated with it. Not surprisingly, then, the crucial experiments in the evolution of the mosque, as well as the finest realisations of that type, have been reserved for the *jami'*. The Western term 'cathedral mosque', though obviously a solecism, is thus an appropriate transference of ideas. The building of a *jami'* was no more to be undertaken lightly than was that of a cathedral – indeed, until the 10th century the express

approval of the caliph himself was required before a *jami'* could be erected, and for centuries normally only one such building per city was permitted. This had much to do with the fact that possession of a Friday Mosque conferred upon a settlement the status of a town: 'How the citizens of Baikand tried and tried', notes al-Muqaddasi *à propos* this village in Central Asia, 'until they were allowed to put up a *minbar*'. The Hanafi *madhhab* allowed the Friday *salat* to be performed only in large towns, while the Shafi'ites allowed the Friday *salat* in only one mosque per town. Hence the disapproval which met al-Hajjaj, the Umayyad governor of Iraq, when he built a *jami'* for Wasit, his capital, even though the town<sup>24</sup> already had one on the other side of the river. Gradually however, the population pressure in the major cities forced a relaxation of this rule.

Despite the clear functional distinction between *masjid* and *jami'*, there was not necessarily any corresponding distinction between the two building types so far as their basic layout was concerned. The generalisations ventured at the beginning of this chapter therefore hold good for both these genres of mosque. True, the *jami'* normally had an extra dimension not only literally, by virtue of sheer size, but also metaphorically through its extra degree of embellishment. Yet often *masjids* were built which yielded nothing in decorative splendour to the finest *jami'*s of the same style.

#### INNOVATIONS

Certain types of *jami'*, especially in the early centuries of Islam, did develop certain distinctive features not encountered in *masjids*, though it must be emphasised that these features represent only minor modifications to the basic schema of open courtyard and covered sanctuary common to both *masjid* and *jami'*. Their introduction is of key importance to the history of the mosque, however, for it heralds an influx of foreign ideas, techniques and materials which decisively transformed the primitive Arabian simplicity of the mosque. Henceforward mosque architecture evolved against a backcloth of classical, Byzantine and Iranian influences. As a result, from the later Umayyad period onwards the physical form of the mosque was unmistakably rooted, at least in part, in the millennial

traditions of the Near East and the Mediterranean world. The *masjid* in its original form was well able to do without these addenda, but there is no doubt that their incorporation into mosque design substantially enriched the whole subsequent development of the genre.

These new features were five in number: the *mihrab* or prayer niche, the *minbar* or pulpit, the *maqsura* or royal box, the raised gabled transept, and the dome over the *mihrab* bay. Not all of them were to remain of equal importance, nor indeed were all five often to be encountered in one and the same building. In the context of the present general discussion it is less their individual evolution than the motive behind their introduction which is relevant. Their origins are unmistakably classical, filtered and in some measure distorted though they are through the medium of Byzantine art. This latter connection is significantly both religious and secular, whereas in classical art proper it was the secular milieu in which these features were most at home. Their final incarnation in a Muslim religious building is therefore simply the logical

fulfilment of a process begun many centuries before. The readiness with which Islam adopted these five features, and the natural way in which they acquired a liturgical *raison d'être*, speaks volumes for the powers of assimilation possessed by the new religion.

The choice of these particular alien features is interesting on quite other grounds too. All of them have a close connection with palace architecture and court ceremonial, an element which was overlaid by an ecclesiastical veneer in the Byzantine period but still retained its original potency. The evocative power of these architectural symbols was thus virtually undimmed when Islam adopted them, as a brief analysis of each will reveal.

#### The *mihrab*

The *mihrab* is perhaps the clearest case of all. The<sup>31</sup> deeply recessed arcuated niche could hold a cult statue in a Graeco-Roman temple or the emperor in person in a late antique palace. Writ large, as an apse, it contained the altar of a Christian church; correspondingly reduced in size, it did duty as a *mihrab*, or niche indicating the direction of prayer – though even in the context of a mosque some vestigial memory of its original function lingers, in that at the Friday *salat* the *imam* stands within the *mihrab* to lead the worshippers. The fact that it was part of the caliph's duties to act as *imam* vividly illustrates the capacity of the new faith to reconcile in a new synthesis the hitherto conflicting demands of church and state. The innate interchangeability of this feature is perhaps most revealingly illustrated in the late Umayyad palace of Mshatta. The triconch form of the throne room<sup>7.11</sup> which terminates the main processional axis finds its closest counterparts in a 6th-century cathedral and bishop's palace in Bosra, in southern Syria. The architectural form is the same in all three cases, even though the great central niche is put to different uses in each – to hold the altar, a bishop's and a caliph's throne respectively. In due course the same form entered the vocabulary of mosque design, with a *mihrab* set within the central niche. Lest it be thought that the *mihrab* was an absolute requirement of any functioning mosque, it should be remembered that the earliest example dates from as late as 86/705, when the rebuilt Mosque of the



31 Mosul, Nuri mosque, *mihrab* façade

265-266 Prophet at Medina was furnished with one, perhaps to commemorate the place where Muhammad himself had led prayers. There is no question of the earlier mosques which lacked *mibrabs* being regarded as somehow deficient for that reason. In a properly orientated mosque the entire wall which faces the Black Stone in Mecca – the so-called *qibla* wall – serves as a directional indicator. It thereby makes the *mibrab* superfluous. Thus it was no liturgical necessity which called the *mibrab* into being. The evidence suggests rather that a growing desire to secularise the mosque, or at any rate to bring it more into line with the highly developed architecture of the ancient Near East and of the classical and Byzantine world, was the decisive factor. Once 'invented', the *mibrab* was so obviously a signal success as a symbol and as the cynosure of worship that its future was assured. Accordingly, it soon became the focus for elaborate decoration in mosaic, marble and other costly materials. Pious Muslims regarded all this splendour with mixed feelings. The 'just' Caliph 'Umar II wanted to remove the gold mosaic from the *mibrab* of the Damascus mosque because it distracted the mind from prayer. But then the head of a Byzantine embassy visited it and praised it, saying 'whoever built this is a great king'; so 'Umar said 'Let it be left alone, since it annoys the enemy'. The various genres of *mibrab* which were ultimately developed – flat, concave, or recessed so as to form a separate chamber – are so varied as to demand a study in themselves, and therefore fall beyond the remit of this account. So too does its formal and symbolic relationship to the portal.

#### The minbar

The *minbar* never attained the well-nigh universal popularity of the *mibrab* in Islamic architecture. To begin with, its function is much more specifically concentrated on the Friday *salat*, and thus on the *jami'*, whereas the *mibrab* quickly became an essential component of even the humblest *masjid*, and is frequently to be found also in *madrasas*, mausolea, caravansarais and other buildings. An integral part of the Friday service was the *khutba*, part bidding prayer, part sermon and part formal address. This element of the service had a strong political flavour. Indeed, a ruler's claim to legitimacy depended,

*inter alia*, on the formal mention of his name in the *khutba*. Like the diptych in Byzantium, the *khutba* thus became an instrument for affirming allegiance. Clearly it was important for the *khutib* who pronounced the *khutba* to be easily visible and audible; hence the development of the *minbar*, which was customarily placed immediately to the right of the *mibrab*, though in Umayyad times its position was within the *mibrab* itself. The obvious analogy to it in Christian practice is of course the pulpit, and in fact the closest known prototype to the *minbar* is the *ambo*, a word used to describe the lectern and pulpit in early medieval churches as well as the bishop's throne in Byzantine ones. Coptic churches in particular had *ambos* with the same striking simplicity of form found in *minbars*: a primitively stepped right-angled triangle set against a wall. No *minbars* securely datable before the early 9th century have survived, however, so that the precise relationship between the Muslim form and its presumed Christian prototype is hard to determine.

This problem is compounded by the existence of alternative hypotheses on the origin of the *minbar*. One of these holds that the later *minbar* is simply a monumental version of the raised chair from which Muhammad was wont to address his followers; but no trace of this has survived. The other theory associates the *minbar* with the raised throne from which the Sasanian commander-in-chief reviewed the Persian army. Here again, the lack of physical evidence scotches any extended discussion. The irritating gap of two centuries and more between pre-Islamic Christian *ambos* and the earliest precisely datable *minbar* – generally held to be the teakwood specimen in the Great Mosque at Qairawan – may not be quite the obstacle it seems. A comparison of the example at Qairawan with the *ambo* of a typical Coptic monastery like that of Apa Jeremias at Saqqara reveals sufficient basic similarity of form to justify the analogy. The built-in *minbar* in the Tari Khana mosque at Damghan, perhaps as early as the 8th century and scarcely likely to be any later than the year 900, provides an even closer parallel to the Coptic *ambo* and is moreover of mud brick rather than wood. Since mud brick is a traditional Iranian substitute for stone, the stepped triangular form used at



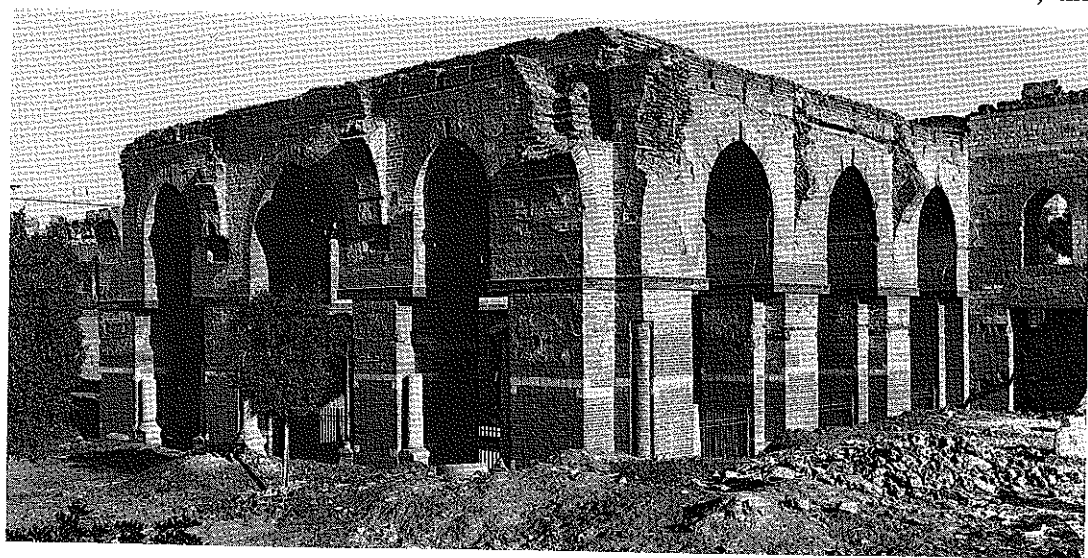
32 Jerusalem, Aqsa mosque, main arch with Fatimid mosaics

Damghan can most conveniently be interpreted as a translation of the Coptic stone *ambo* into the most closely related material available. Perhaps the simple stone, brick or mud *minbar* (still known today, for example in Libya) co-existed with a more elaborately developed version

executed in wood. The latter type was sometimes wheeled, and could therefore be brought out into the courtyard when a specially large congregation had foregathered. The link with princely life was already established in the early Umayyad period, for it is recorded that the

caliph Mu'awiya I took his *minbar* with him on his travels. It is tempting to assume that it was a *minbar* of this type which Muhammad himself had used. Certainly the *minbar* served in early Islamic times as a kind of throne from which the ruler could address his subjects or receive their allegiance, often in the form of an oath (*bay'at*). In such situations the mosque functioned essentially in a political way as an appendage to the palace.

The example at Qairawan is typical of the subsequent development of the whole genre, though of course minor modifications and improvements were introduced over the centuries. Thus in order to boost the acoustic properties required by the nature of the *minbar*, a canopy, often polyhedral in shape, capped the upper platform or landing, performing very much the same function as the tester in European pulpits. A hinged gate often gave access to the steps, again somewhat in European fashion though there is no need to postulate any direct influence in either direction. Supplementary *minbars* – and for that matter supplementary *mibrabs* – were sometimes placed elsewhere in a *jami'*, for example in the courtyard, or might be carved out of rock in an open-air mosque or in an *'idgab*, otherwise known as *musalla* – both terms usually denoting a mosque for extraordinary intercessory prayer at the time of the two great *'ids* (festivals) or in times of drought, famine and the

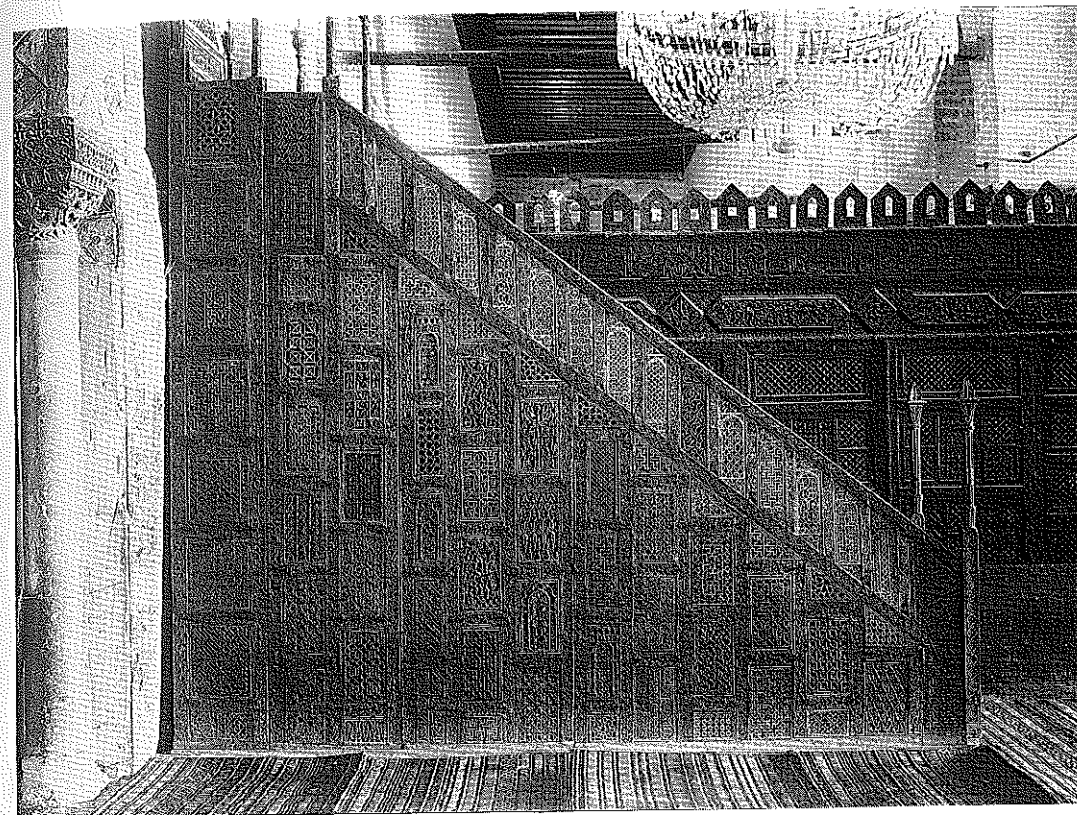


33 Cairo, mosque of Baibars, *maqsura*

like. The decoration of *minbars* was, by some quirk of tradition, remarkably stereotyped. Their wooden construction laid a premium on the use of many small modular units which on being fitted together created the overall pattern. This was nearly always of geometric type, though some of the early surviving *minbars*, such as those at Fez and Marrakesh, favour floral designs. From the 14th century onwards more varied types of *minbar* appeared. Examples sheathed in tilework were erected in Iran and increasingly in Ottoman Turkey. The latter area also favoured stone or marble *minbars* with banisters of elaborately fretted openwork tracery. *Minbars* in baked brick and iron are also known. In general the use of durable materials brought in its train a markedly simplified design; as late as the 17th century, in Safavid Isfahan, a *minbar* could be built which exactly repeated the shape of the Damghan example of a millennium earlier, but in costly marble instead of mud brick.

#### The *maqsura*

Far fewer examples of the *maqsura* survive, and it is likely that this situation reflects their relative scarcity in medieval times. The reason is not far to seek. Much more explicitly than either the *mibrab* or the *minbar*, the *maqsura* implies the presence of a ruler. By contrast, every *jami'* requires an *imam* and a *khatib*. In form, the



34 Qairawan, Great Mosque, *minbar* and *maqsura*

*maqsura* is a separate, usually square, enclosure within the mosque and close to the *mibrab*. Its walls may be of masonry but a lattice-work of wood or metal is more common. This suffices to screen the occupant from the other worshippers but allows him to see and participate in the *salat*. Several reasons may be proposed for this seclusion. One is a desire straightforwardly to adapt the Byzantine practice of housing the emperor in a royal box, the *kathisma*, and thereby to emphasise his high rank and his essential apartness. Another, related motive might have been to secure privacy of worship for the ruler. This might explain the frequent provision, as at Damascus, of a door beside the *mibrab* communicating both with the royal palace and with the *maqsura* or with a suite of rooms reserved for the caliph, as at the mosque of Abu Dulaf. At Cordoba a vaulted passage (*sabat*) serving this purpose is recorded in the texts both for the mosque as it was c.287/900 and for its enlarge-

ment in 350/961. Thus the ruler would be absolved of the need to mingle with other worshippers. Such exclusiveness would be of a piece with the growing emphasis in the Umayyad period on the remoteness of the caliph, a far cry from the unpretentious democracy of Arabian practice. A third reason might well have been a naked fear of assassination. Two of the first four caliphs, 'Umar and 'Ali, were murdered in a mosque, and a third, 'Uthman, was killed while reading the Qur'an. Behind the *maqsura* screen the caliph was visible but not vulnerable. The emphasis on openwork screens in the typical *maqsura* opens up the possibility of a formal connection with the choir screens which were so marked a feature of Byzantine architecture. These too were of course located close to the liturgical focus of the building.

Whatever the origins of the *maqsura*, its symbolic function can scarcely be in doubt. It was a visible exaltation of the ruler's rank, and

therefore an integral part of the strong secular element in the early Islamic *jami'* and of its intimate connection with royal pomp and ceremony. The subsequent history of the *maqsura* betrays a weakening of these associations. The word came to mean the detached part of a mosque set aside for communal as distinct from private prayer. As such, its form underwent a major change. From the 11th century onwards, *maqsuras* in the form of large domed chambers incorporated into the sanctuary of a mosque began to proliferate, especially in the eastern Islamic world, as in the Great Mosque of Isfahan. They were usually preceded by an emphasised central aisle. The example of the mosque of Baibars in Cairo shows that this fashion penetrated to western Islam too. As with the *minbar*, the *maqsura* appears in a variety of forms and contexts, among them mobile examples in wood (as at Qairawan) and others in multi-purpose foundations such as the complex of Sultan Qala'un in Cairo.

2.12, 2.204

2.241-2.249

2.252, 2.263

33, 2.97

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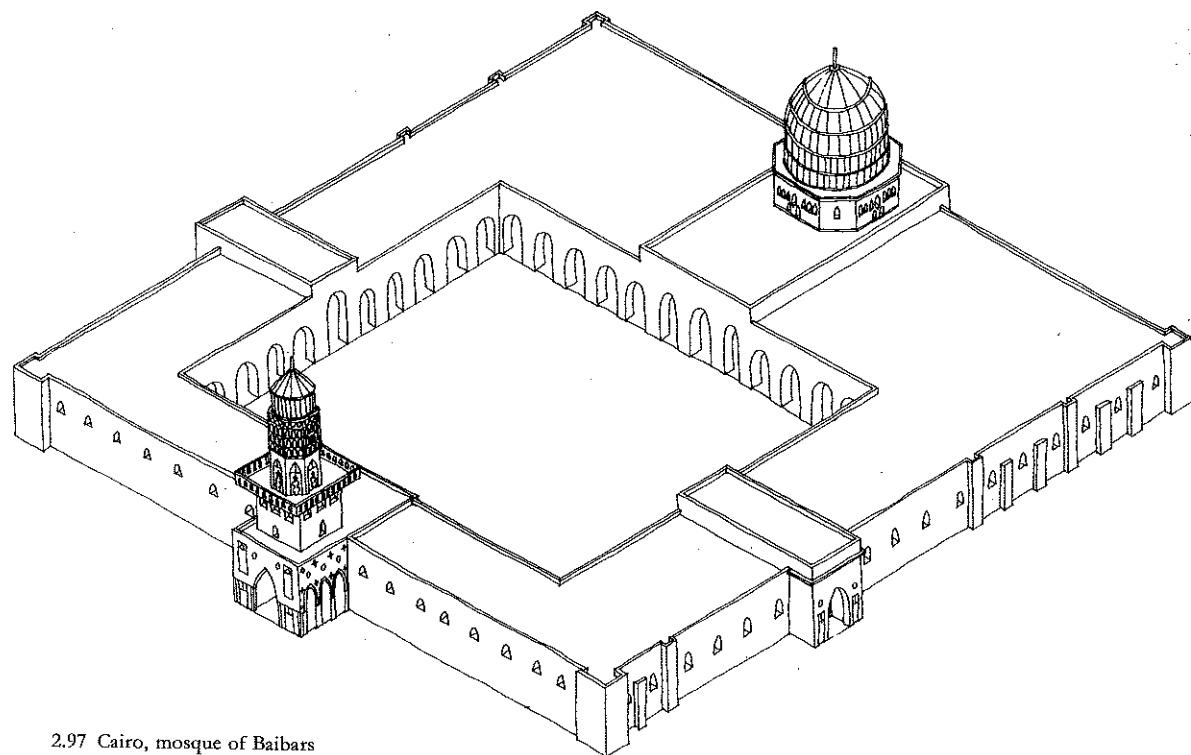
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### The raised gabled transept

For all its symbolic importance, and of course the physical impact which its sheer size guarantees, the *maqsura* cannot claim to have any significant liturgical role, even when it came to connote the domed sanctuary itself. The same applies even more strongly to the two remaining features of foreign origin which were incorporated more and more often into large urban *jami'*s: the raised gabled transept and the dome over the *mibrab*. The transept never attained any great popularity, if only because it was not a form which could be imposed on all kinds of mosque. Far from it; to make its desired effect the transept called for a sanctuary whose roofing system extended parallel to the *qibla*, not perpendicular to it. The whole purpose of the transept was to assert an axis at variance with the preponderant one in the sanctuary and thereby to emphasise the *mibrab* which terminated the gabled transept, towering above the sanctuary and

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2.97 Cairo, mosque of Baibars

driving at right angles across its roof-line, was the outward visual embodiment of this processional way.

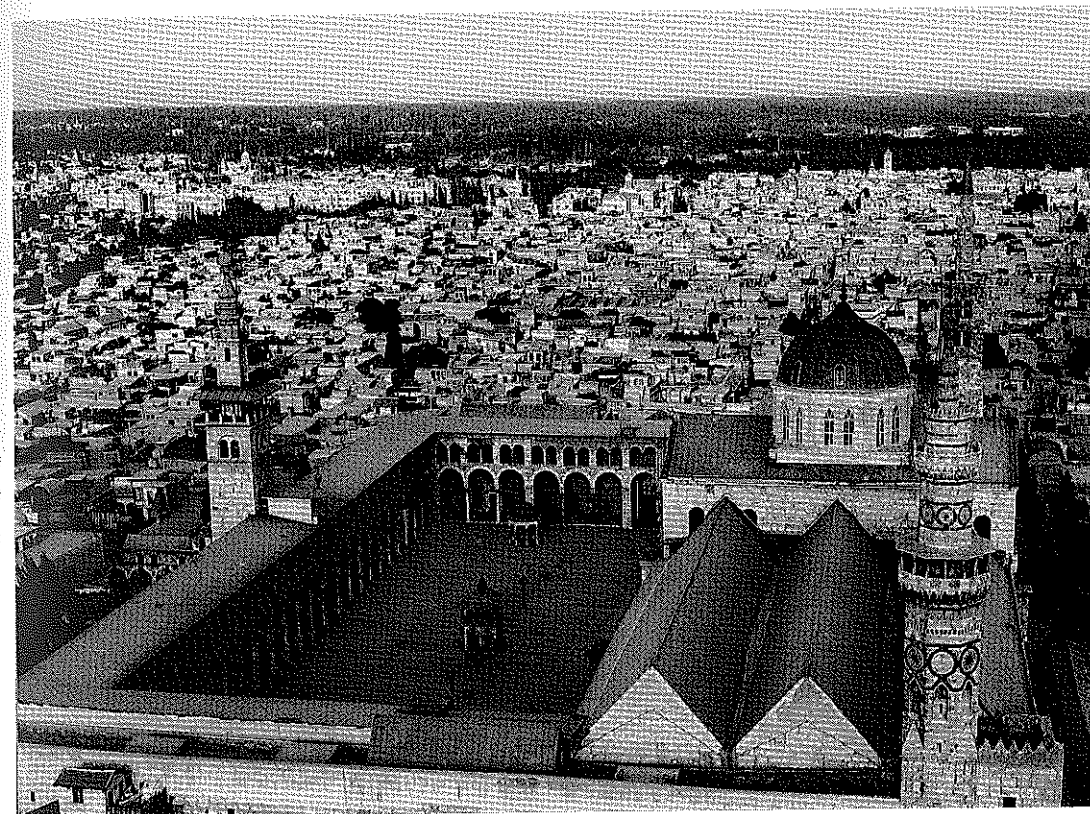
2.131-2.135

By a fortunate chance the mosque which first expressed this idea was one of the absolutely seminal buildings of Islamic architecture, the Great Mosque of Damascus. The transept was at once recognised as an integral part of the Damascus schema, and in one form or another it is reproduced in all the mosques which depend upon that prototype. By the same token, however, it has no locus in mosques which derive from other sources, and these are by far in the majority. Clearly, then, it is in no sense an obligatory or even customary part of a mosque. Accordingly the obvious question is why it was introduced in the first place. Lack of space forbids the requisitely detailed discussion here, and it must suffice to summarise in barest outline the two most likely possibilities. First, it could be argued that the wholesale transposition of the

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2.68-2.70

west front of a typical Syrian church to serve as the centrepiece for an interior mosque façade must have overtones of triumph in political and religious terms, if indeed it is not to be interpreted as outright parody. It must be admitted that such a deliberate reformulation of the components of an established style is a typically Umayyad proceeding. Even so, the second possibility – a connection with princely ceremonies – seems more likely. By that reckoning the key parallel would lie not in religious architecture at all but in palaces, whether gubernatorial as at Ravenna, episcopal as at Bosra or imperial as at Constantinople. In all these contexts the gabled façade encloses an arched entrance which gives on to a processional way. The latter customarily leads to a throne room. There is of course no throne room in a mosque, nor is there any provision in the Qur'an or in the earliest Islamic practice for formal royal receptions in the mosque. Nevertheless the processional entry of

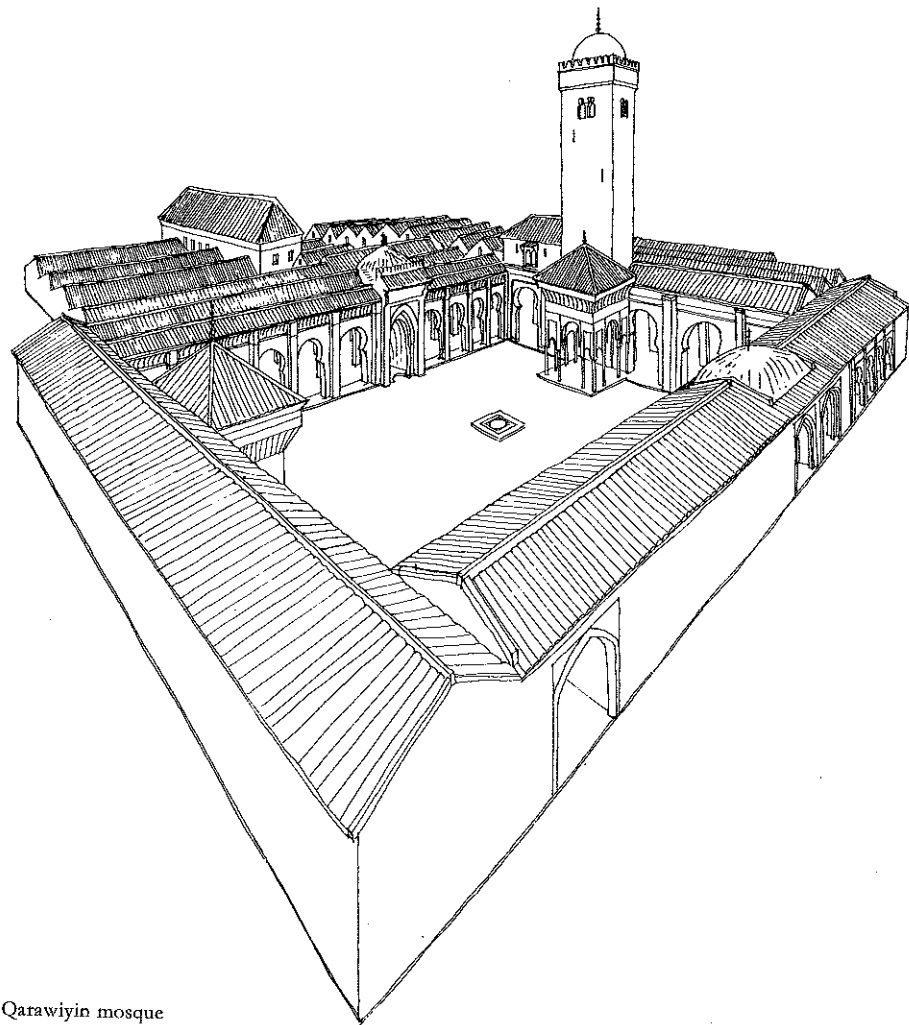


35 Damascus, Great Mosque, aerial view

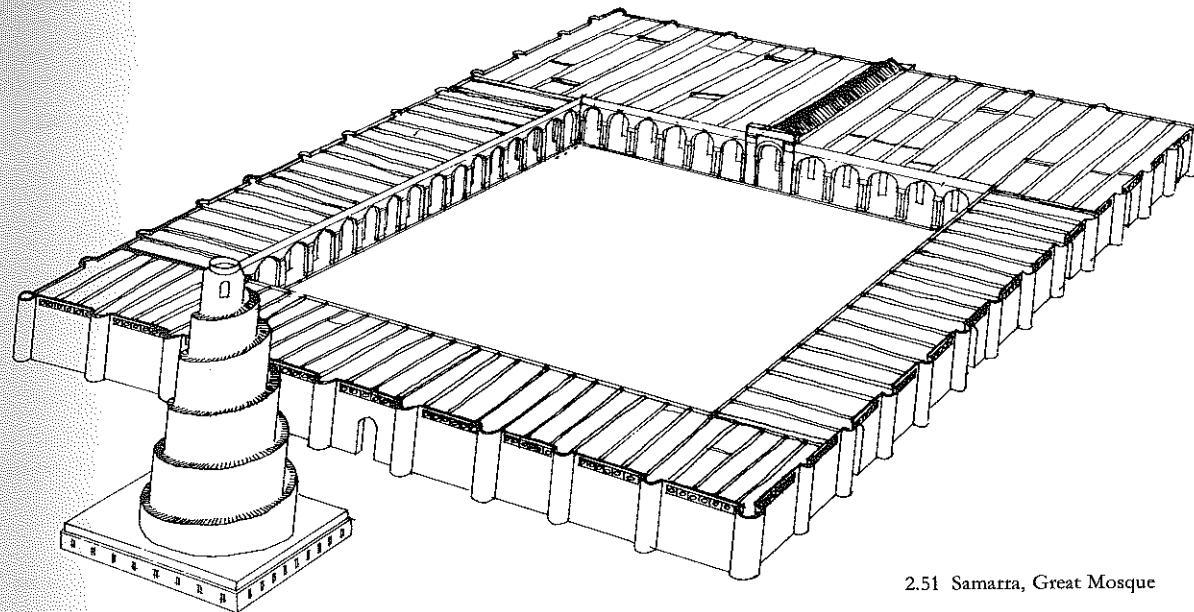
the caliph or sultan into the *jami'* for the Friday *salat* was a long-established tradition in the medieval Islamic world. The gabled raised transept, the dome over the *mibrab* and eventually over the *maqsura*, and the *mibrab*, would together create an architectural *mise-en-scène* which would be the natural corollary to such pomp and circumstance. A comparable and much better documented process may be observed in Western medieval architecture.

The significant progeny of the transept in the Great Mosque at Damascus is to be traced almost exclusively in the western Islamic world. The easternmost limit of its influence is probably the Great Mosque of Diyarbakr in

Anatolia. Interestingly enough, the mosques in Egypt which repeat the transept motif, though relatively few in number, include some of the finest mosques of their time – those of al-Azhar, al-Hakim and Baibars. This suggests that when the transept motif travelled outside the confines of Syria it retained its royal associations. In time its form became simplified so as to allow a smoother integration with the courtyard façade of which it was the cynosure. This is particularly noticeable in the major Maghribi mosques, where the greater breadth of the “transept” *vis-à-vis* the flanking aisles is maintained intact, but its external silhouette rises much less markedly above the rest of the roof-line. Most



2.112 Fez, Qarawiyyin mosque



2.51 Samarra, Great Mosque

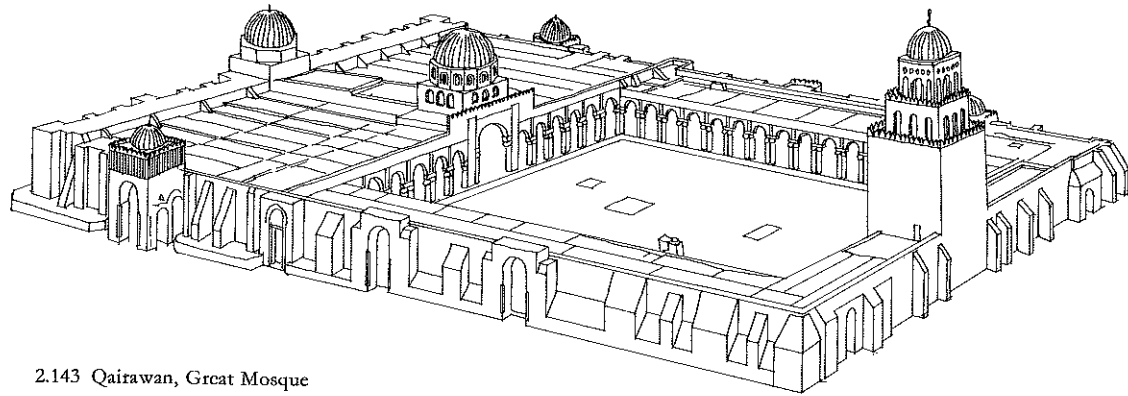
significantly of all, the basic notion of conflicting axes so crucial to the transept form is lost. It seems likely that this was already the case in the Umayyad mosque at Medina and, a little over a century later, at the Great Mosque of Samarra. In these Maghribi mosques the aisles tend to be perpendicular to the *qibla* and it is only by its greater width, height and vaulting that the central one stands out. In the long run, therefore, the concept of a transept proved to be an aberration within the context of Islamic architecture as a whole; the axial nave replaced it.

#### *The dome over the mibrab*

Finally, what of the dome over the *mibrab*—or alternatively, over the bay preceding it? Roman architecture had decisively established the honorific character of the dome by giving it pride of place in palatial architecture, and it is no accident that the greatest of all Roman religious edifices, the Pantheon, makes the dome its focal point. These lofty associations did not of course prevent the Romans from using the dome in humbler contexts, but a pattern had been set and was confirmed in Byzantine architecture by the large-scale use of the dome in churches and monasteries. It was therefore a natural transition to employ it in mosques, and incidentally in key locations within Islamic palaces. Within the

mosque the obvious place for it was near the *mibrab*, as part of the intricate nexus of royal associations established by that feature, the *minbar*, the *maqsura* and the transept. Each of these elements derives added impact from the nearness of the others. In a mosque which uses principally flat or pitched roofs or at most shallow vaulting, the presence of a full-scale dome is obviously intended to emphasise some liturgical focus if not to express some religious or political symbolism. Given the fact that the *mibrab*, even if it does on occasion project slightly beyond the rest of the external *qibla* wall, is essentially part of the interior formulation of the mosque and that its position is therefore not readily identifiable from the outside, the value of the dome as an outward sign of that spot is obvious. More than that, its very form, with its rich inbuilt secular associations, emphasises the princely role of the *mibrab*. Finally, it marks the location of the *qibla*—an important consideration in a crowded urban setting otherwise devoid of fixed directional points.

The dome over the *mibrab* proved to be one of the most durable and versatile aspects of medieval Islamic architecture. By degrees its usefulness as a distinguishing mark won such recognition that the idea was applied on a more extensive scale. Pairs or trios of domes over the



2.143 Qairawan, Great Mosque

*mibrab*, *maqsura* and transept area, or along the centre stretch of the *qibla* wall, multiplied the effect. A favourite combination was to mark the erstwhile transept, now reduced to simply a larger central aisle, by a dome at each extremity, or to assert the *qibla* wall by a dome at each end and one in the middle. Such devices show Islamic architects composing their buildings with an eye to the overall design, and using domes like grace notes to punctuate the regular beat of an articulated wall or a peristyle. This specialised architectural context, however, did not entirely divest the dome of its traditionally weighty secular and religious associations. That situation obtained even when the popularity of domical architecture was at its zenith. As late as the high Ottoman period a clear hierarchy based on gradations of size ensured that the principal domes were suitably highlighted by the diminutive scale of the surrounding ones.

2.394-2.143

These, then, are the five features of the *jami'* for which a foreign origin of at least partially royal character may be claimed. As mentioned earlier, however, none of them are to be regarded as vital to the proper functioning of a mosque. Since both *mibrab* and *minbar* have the sanction of an unbroken tradition stretching back some thirteen hundred years, it might well be argued that they are now indissolubly part of the *jami'*. It would indeed be pedantic to discount the force of custom entirely in these

two cases, whatever a strict interpretation of Muslim liturgy might suggest. The other three features obviously lacked this direct appeal to Muslim taste, and by degrees fell into disuse, or at best maintained their popularity in a few areas only. This decline from their earlier importance is almost certainly attributable to the gradual divorce between the caliph and the conduct of the Friday *salat*. As the caliph delegated those of his functions which bore directly on the Friday service to the *imam* and the *khatib*, the motive for singling out those parts of the mosque specially connected with the royal presence disappeared. But the close connection between politics and the mosque was perennial. When Ikhshid, the 10th-century ruler of Egypt, was confirmed in his position by the caliph, the doors of the chief mosque in Cairo were covered with gold-embroidered brocade. Reverence for the ruler went further still in Fatimid times, for the mere mention of any of the Fatimid rulers in the Azhar mosque resulted in the people prostrating themselves.

## OTHER COMPONENTS OF THE MOSQUE

The five princely components of the mosque are far from exhausting the tally of its constituent parts, some of which are of equal or even greater importance. The minaret (which forms the subject of the next chapter), the courtyard, the covered sanctuary, facilities for ablution — all

play a significant role in the overall design of a mosque, to say nothing of such lesser facilities as a *dikka* (a raised platform), carpets or other floor coverings, latrines and even doorknockers.

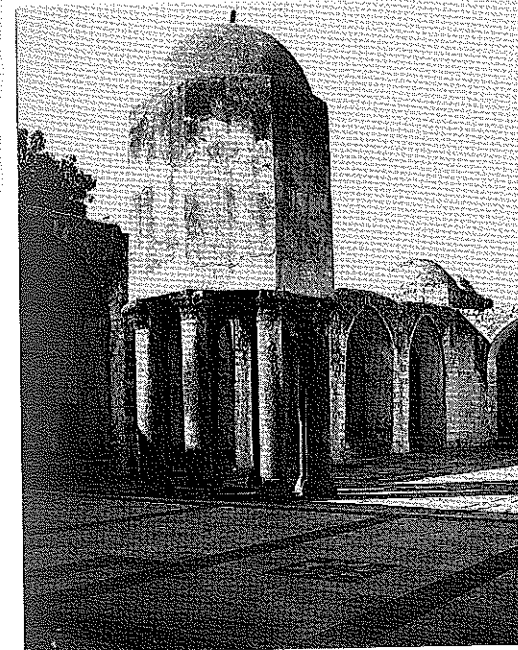
2.35

There is little to be said about the courtyard, although paradoxically this is in some ways the most striking aspect of mosque design for the casual observer. Its impact is largely due to its size: the huge empty space gives the visitor pause and serves notice that he has left the workaday world behind him. Like the *atrium* of an early Christian church, it heralds the sanctuary proper and defines an area which is holy even if it is not regularly used for worship. There was no set form for the courtyard, but the rectangle dominates, whether the emphasis lies on depth or on width. Arcades or a flat-roofed portico customarily articulate its inner façades, while the open space itself may be punctuated by a small domed treasury as at Damascus, Hama and San'a', a shrine or other aedicule and perhaps a *minbar*, a pool or a *dikka*. These additional elements, however, are not suffered to impinge too strongly on, or to detract from, the sense of unbroken space which the courtyard creates. In the larger towns the courtyard held the overflow of worshippers from the sanctuary

2.55-2.64

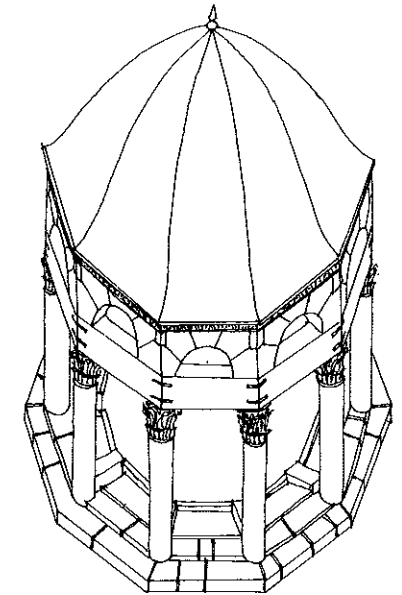
2.46; 36

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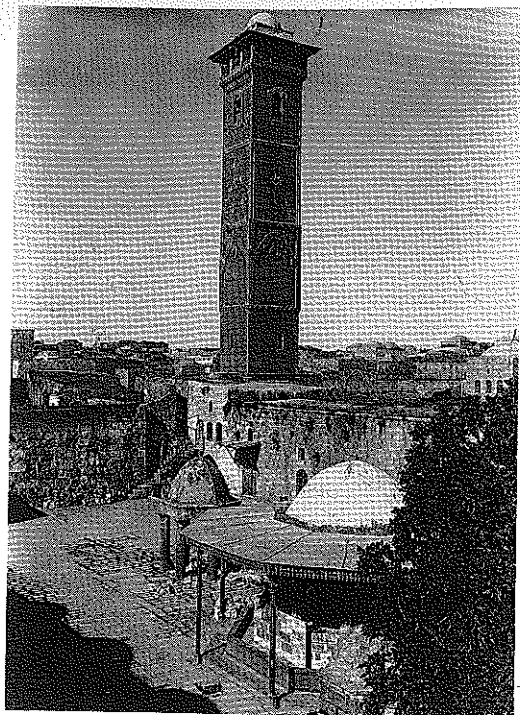
36 Hama, Great Mosque, *bait al-mal*

at the Friday *salat*, and even in smaller centres its capacity might be required on the occasion of the 'ids or extraordinary prayers. It was never a dead space.

Islamic worship demanded ritual ablution (*wudu'*) as a necessary preliminary to prayer.

2.15 Ma'arrat al-Nu'man, fountain in *jami'*

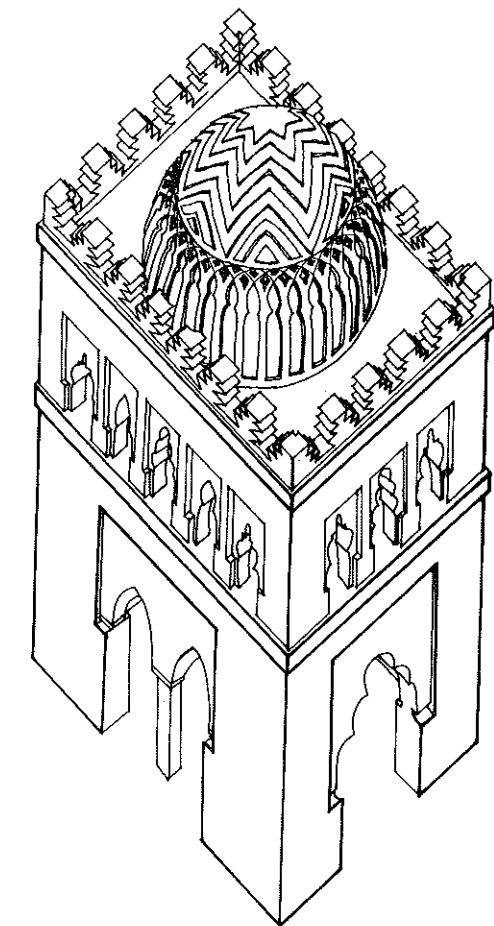
Facilities for washing are therefore standard in most mosques. They take various forms. Sometimes they comprise a domed or open fountain within the mosque, intended for washing only. When Ibn Tulun was ruler of Egypt he was criticised for adding a fountain (now long gone) to the courtyard of his mosque. Ten marble columns supported a dome, beneath which was a marble basin some four metres in diameter. In the centre of this basin a fountain played, its waters bordered by trellises. Perhaps all this was too close for comfort to the life of the court — indeed, one such fountain, the Qubbat al-Barudiyin in Marrakesh, has been interpreted by some as a palace pavilion. An alternative tradition is for ritual ablution to be carried out near the latrines outside the mosque, in which case drinking water may be provided by a fountain in the courtyard. The influence of the classical house with its *impluvium* in the



37 Ma'arrat al-Nu'man, Great Mosque, courtyard, fountain and minaret

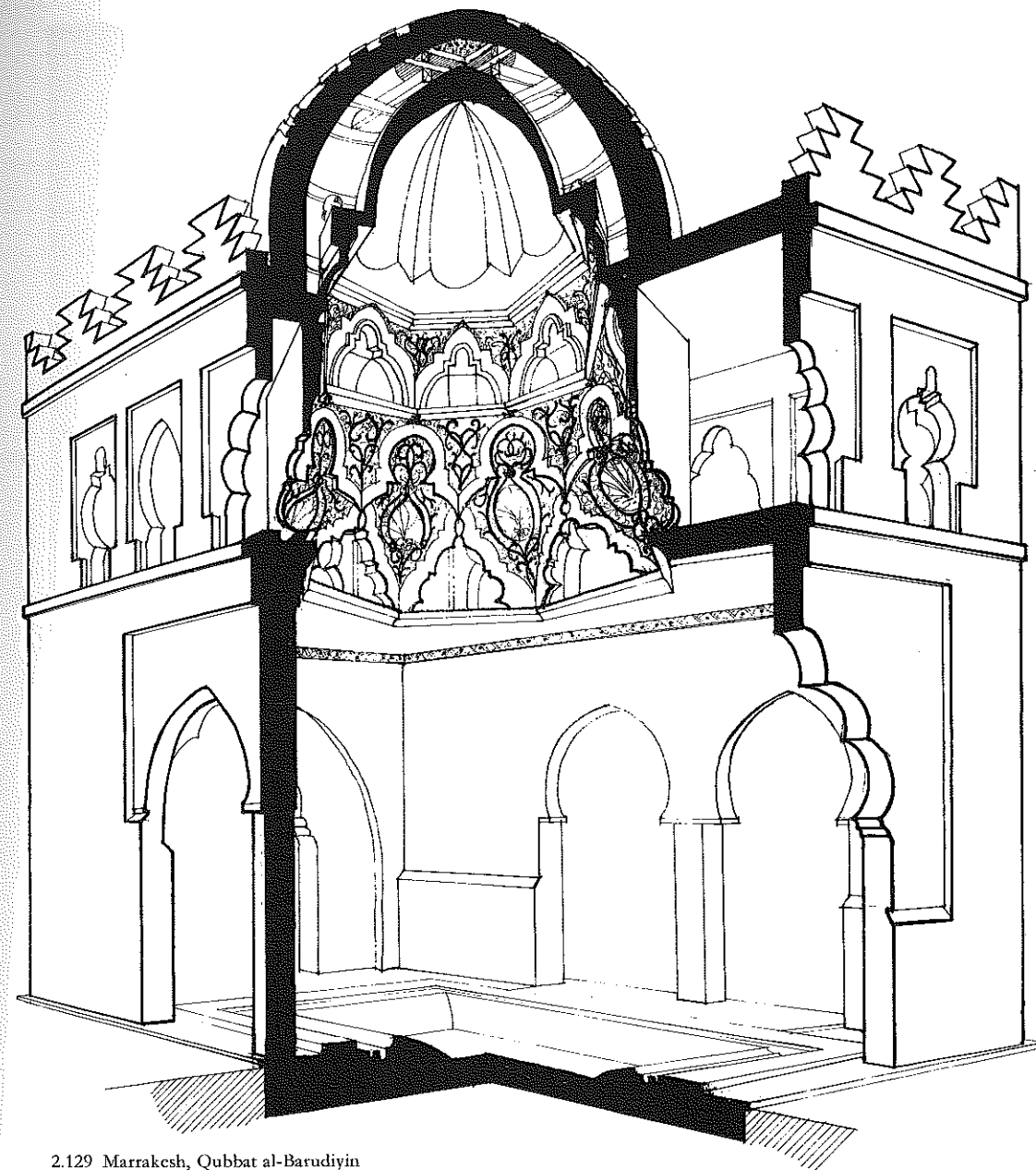
*atrium* may perhaps be detected in those mosques (such as some of Ottoman date at Bursa) where the ablutions facility is placed below a skylight in the sanctuary itself. In Iran and India especially, much of the courtyard is taken up by a large pool, which acts also as a landscaping feature, alleviating the bare expanse of the courtyard and introducing a broad band of contrasting colour. Elsewhere, in areas where the dominant *madhhab* or law school was Hanbali, this was not permitted on the grounds that ablution had to be performed with running water. Water in Hanbali mosques is therefore provided by taps. None of these practices, incidentally, excludes the possibility of performing ablutions by means of sand where water is scarce.

In the larger mosques the burgeoning size of congregations gradually highlighted a problem not previously encountered: the press of people tended to make it hard to see the *imam* leading the worship. The solution adopted in such mosques, from about the 9th century onwards, was to build a raised platform or *dikka* on which



2.128 Marrakesh, Qubbat al-Barudiyyin

groups of muezzins would perform the movements of prayer in time with the *imam* and in full view of the worshippers further back. Not surprisingly, this became distracting and the practice was largely discontinued, except in mosques whose layout made it imperative. Although Baghdad reputedly had some 27,000 places of worship in the year 300/912, and according to some reports even more, the Friday *salat* was held exclusively in three mosques. These were quite insufficient to hold the vast numbers of people that had gathered, so the rows of worshippers spilled out week after week beyond the mosque portals, lining the streets all the way to the Tigris – and latecomers arrived in canoes to join the congregation. In such circum-

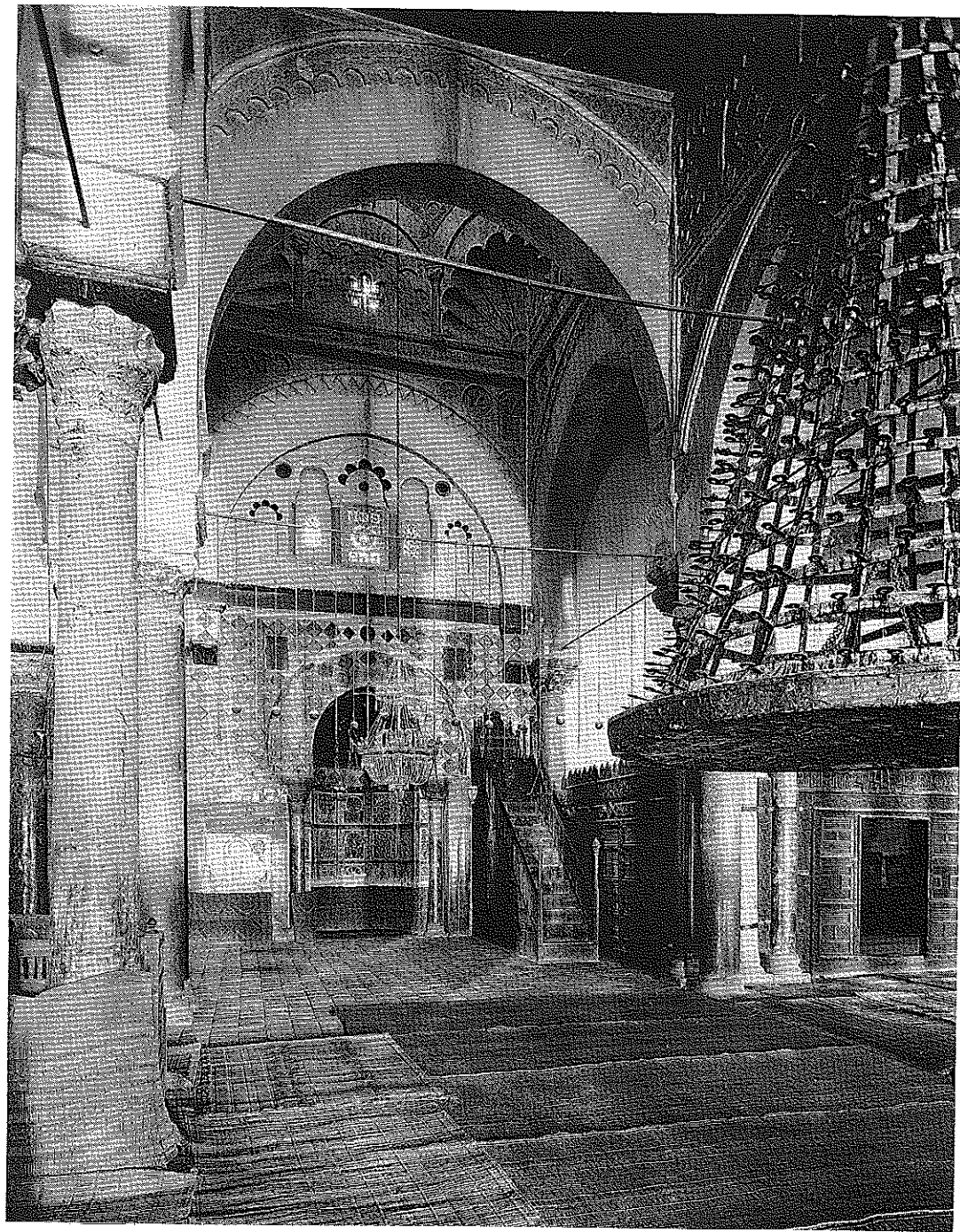


2.129 Marrakesh, Qubbat al-Barudiyyin

stances supplementary *imams* posted at intervals were required to synchronise the actions of worship. Sometimes, of course, mosques would outlive their purpose; thus the Spanish traveller Ibn Jubair, visiting Baghdad in the late 12th century, found eleven Friday mosques even

though 'almost nothing was left of Baghdad except its famous name'.

This virtually exhausts the tally of items which together constitute a typical mosque. It will be abundantly clear that Islamic tradition had no place for the furnishings which are so



38 Qairawan, Great Mosque, *mibrab* area with *minbar*, *maqsura*, dome and polycandelon

regular a feature of Christian churches – pews, fonts, monuments, altars, and various kinds of ecclesiastical sculpture such as the retable, reredos, tester, choir screen and the like. Provision could sometimes be made for music; al-Muqaddasi notes that in Khurasan it was the custom for a choir to sit on a bench opposite the *minbar* and sing music ‘with skill and melody’. Stained glass – abstract rather than figural, of course – seems to have been used more frequently than is generally supposed, but virtually the only objects to break the puritanically bare expanse of the average sanctuary are lamps. In the larger mosques these lamps, in form like a triangular candelabra, were hung in their hundreds or even thousands, suspended on long chains to just above the height of a man. The symbolic value of such lighting as a metaphor for spiritual illumination is made explicit by the habit of depicting a simple lamp (*qandil*) on *mibrabs* and enclosing it by a quotation from the Sura of Light (Qur’an 24:35): ‘God is the light of the heavens and the earth; the likeness of his light is as a niche wherein is a lamp, the lamp in a glass, the glass as it were a glittering star.’ On special occasions *mibrabs* and minarets were decked with lights. According to al-Baihaqi it was the ‘Abbasid caliph al-Ma’mun who ordered that mosques should be illuminated in a more costly fashion than had been the practice earlier. By the 10th century, huge oven-shaped lamps (appropriately called *tanur*) had come into fashion for this purpose. One such object, made of silver and donated by the Fatimid caliph al-Hakim, weighed 100,000 drachms and the doors of the ‘Amr mosque in Cairo had to be removed to let it in.

Apart from mosque lamps the only other furnishing commonly found in mosques was some kind of floor covering. Mats of woven reeds were the most popular solution in much of the Arab world; the particular type of matting varied from sect to sect. The custom no doubt evolved from the religious requirement that all must enter the mosque unshod. Muhammad himself sometimes used a carpet when he was praying and it is therefore not surprising that in Iran and Turkey especially – countries with an immemorial tradition of carpet weaving – mosque floors were bedecked with rugs, whether these were of pile or flat-weave (e.g.

*kilims* or *zilus*). Luxury carpets were reserved for the great feasts, a custom which ensured that they suffered much less wear and that helps to explain why some of the finest and oldest carpets have been found in mosques. The puritan lobby naturally rejected such luxury as being unIslamic. The use of sweet-smelling spices in the mosque was also frowned on in some quarters. Nevertheless, in the 10th century the Azhar mosque had Indian aloe, camphor and musk available to perfume the building during Ramadan and on other festive occasions.

#### SUBSIDIARY FUNCTIONS OF THE MOSQUE

Such are the component parts of a typical mosque in medieval times. Most of them bear on the essential *raison d’être* of the building, namely communal worship, but they are susceptible of other uses too. Moreover, still other features might be added to serve additional purposes of a less explicitly religious nature. In the case of the great urban *jami*s a host of such satellite functions had to be catered for, thereby greatly extending the surface area of the complex. The ancillary buildings thus called into being might themselves serve dual or even multiple functions. There is no space in this chapter to investigate such subsidiary structures in any detail, and it must suffice to list them somewhat baldly, with only a passing comment here and there.

#### *Education and scholarship*

Education was perhaps the principal secondary function of the mosque, especially in the first four centuries of Islam. The term connoted a wide range of religious activities: the study of Islamic law and of the so-called ‘religious sciences’ such as *tafsir* and *fiqh*; the memorisation of the Qur’an, often carried out in a building known as *dar al-qur’an* or *dar al-buffaz*; and the study of *hadith*, or sayings of the Prophet, for which a *dar al-hadith* was sometimes provided. The *kuttab* – schools with a very strong emphasis on religious teaching – were also sometimes sited within the precincts of the mosque. Teaching customarily took place in the sanctuary; the lecturer would seat himself against a pillar and the class would squat around him. The geographer al-Muqaddasi noted 120 such ‘circles’ (*khalqas*) in the chief mosque of



Cairo in the 10th century. Lecturers in jurisprudence could have an audience of as many as 500 people. The popularity of the different *madhhabs* could be gauged by the number of students they attracted in the mosque. Ibn Sa'id says that in 326/938 the Shafi'ites and Malikites each had 15 circles of students in the chief mosque of al-Fustat, while the Hanafites had only three. Al-Suyuti notes that at this time the audience which formed around the Maliki *imam* al-Na'ali extended to 17 pillars of the mosque. In time, purpose-built *madrasas* took over the role of teaching institutions which mosques had formerly discharged, though even these *madrasas* might on occasion be located next to or within a mosque. To this day, of course, certain outstanding mosques are more famous for their roles as universities than as places of worship: <sup>2.91</sup> al-Azhar in Egypt, founded in 361/970 and beyond doubt the oldest continuously functioning university in the world; the Qarawiyn mosque in Fez, an educational institution without peer in the western Maghrib; and the <sup>2.111-2.112</sup> Zaituna in Tunis, its equivalent in the eastern <sup>2.107</sup> Maghrib.

The mosque maintained, throughout the Middle Ages and in some cases right up to modern times, close links with a particular facet of education: the world of scholars, scholarship and books. It was in the mosque above all that scholars foregathered for discussion, lectures and to hear the latest works being read. Publication before the advent of the printing press meant a public reading of the work in question, validated by the presence of the author himself or by someone authorised by him in writing to do so. Everyone thus authorised could in turn authorise others by the same process, for which the mosque was the obvious public forum. Every mosque of importance had a library, and books were often bequeathed to them. They could also act as the venue for sales; it is recorded that when the *qadi* Abu'l-Mutrif died in Cordoba in 420/1029 his library was sold in his mosque for an entire year, fetching a total of 400,000 *dinars*. Wandering scholars, who were as much a feature of medieval Islam as of medieval western Christendom, were accustomed to seeking shelter in mosques. These effectively took over the functions of hostels and might have additional features such as soup kitchens, hospi-

als and even morgues. That inveterate scholar-traveller Ibn Battuta travelled the length and breadth of the Muslim world in the 14th century expecting – and finding – free board and lodging at a wide range of religious institutions, foremost among them being the mosque. By a natural extension of usage the mosque was an obvious early port of call for foreigners – that is, Muslims from another part of the Islamic world.

#### *Additional religious functions*

While worship was of course the primary function of the mosque, it was the natural setting for a series of related activities. These included sermons or theological lectures, retreats – especially popular in the last third of Ramadan and taking the form of nocturnal vigils – the systematic teaching of Qur'an recitation, the practice of *dhikr*, namely the ritual repetition of stock formulae, especially of praise and adoration of God; and finally the offering of special prayers – in cases of barrenness, for instance – the sealing of oaths or covenants and the celebration of rites of passage: birth, circumcision, marriage, divorce and burial. A form of higher piety was to live in the mosque; the caliph al-Qadir (d.422/1031) daily distributed to those living in mosques one-third of the food provided for his own table.

Mosques were also the obvious places in which to preserve relics: a shoe of the Prophet at Hebron, and numerous copies of Qur'ans which had passed through the hands of 'Uthman. In the State treasury in the mosque of Cordoba, for instance, there was a Qur'an which contained four folios of that caliph's own copy. They even bore his bloodstains. It was so heavy that two men were required to carry it – a detail which perhaps casts a certain doubt on the authenticity of this relic. It was fetched out early on Fridays by two servants of the mosque while a third preceded it with a candle. It had a finely embroidered cover and used to be placed on a stool in the sanctuary.

Foremost among these 'lesser' religious or semi-religious purposes was the use of the mosque as a place of pilgrimage. This special distinction applied only to certain mosques, usually those associated in some particular way with Muhammad or with some notable saint. Naturally such mosques are more numerous in

the Levant and Saudi Arabia than in the rest of the Muslim world; the most important are those of Mecca, Medina and Jerusalem. *Hadiths* averred that prayers offered in 'pilgrimage' mosques were much more meritorious than those offered in other mosques, while prayer offered in an ordinary mosque was itself worth twenty times as much as that offered elsewhere. By degrees such special sanctity was extended to mosques somewhat further removed from the heartlands of Islam, such as those of Qairawan in Tunisia and Konya in Turkey. To this day <sup>2.142</sup> large numbers of Shi'ites from Iran, Iraq and the Arabian peninsula make pilgrimages to the Great Mosque of Damascus.

#### *Justice*

There is a long and honourable connection between the mosque and the administration of justice; Muhammad himself had used the mosque for this purpose. The use of the mosque as a venue for the taking and registration of oaths and notarial acts is only one aspect of this association. Much more important in the medieval period was the custom of turning over a part of the mosque for use as a law court on set days, with the *qadi* presiding. According to the *Kitab al-Aghani*, it was originally the custom for the *qadi* to sit in the chief mosque leaning against a pillar, since this was a public place open to entire community. Later attempts (in the 9th century) to stop this practice on the grounds that it desecrated God's house failed, though a century later it is recorded that a crowd of Egyptians, indignant at a *qadi*'s injustice, flung his prayer mat out of the mosque into the street. During the Fatimid period the chief *qadi* of Cairo sat on Tuesdays and Saturdays in the wing of the mosque of 'Amr ibn al-'As. He occupied a dais and had a silken cushion. To the left and right of him sat his assessors, in order of seniority. In front of him sat five court servants and four court clerks, facing each other in twos. A silver inkpot from the citadel treasury was placed before him. That the mosque was not the only place where cases were tried is revealed by the report that the 'Abbasid caliph al-Muhtadi built a special domed hall with four doors where he administered justice, as was the caliph's duty in early Islamic times. It was called 'The Dome of Justice' (*qubbat al-mazalim*) and was erected in

255–6/868–9. The caliph even arranged, so al-Baihaqi says, for coal-pans to heat it on cold days 'so that the suitors may not be turned into stone by cold together with His Majesty's presence'. The fact that caliph and *qadi* alike used a *minbar* like that of the *khatib* is an eloquent testimony, as indeed is the use of the mosque for so many different purposes, of the underlying unity of so much of Islamic civilisation. Equally revealing is the fact that while cases concerning Muslims were heard in the mosque, these concerning Christians were held on the steps leading up to it.

#### *Politics*

Due emphasis should be laid on the political dimension within which the mosque evolved and functioned. This aspect finds manifold expression in the mosque: the five alien elements mentioned earlier as being incorporated into its schema are far from exhausting the range of relevant connections. One might point, for example, to the location of many early mosques in the middle of the camp where the Arab soldiery lodged, and right next to the dwelling-place of the commander-in-chief, ultimately the palace of the ruler. The *kutba* was one of several ways whereby this close relationship was expressed. It functioned as a mark of legitimacy, and participation in it was equivalent to a collective oath of allegiance. In times of civil strife or other kinds of political instability there was no quicker way of informing the populace of who the true ruler and his accredited deputy might be than the *kutba*. Hence the high feelings which, despite the sanctity of the mosque, vented themselves on occasion in the stoning or even murder of the *khatib*, or conversely in the ritual cursing from the pulpit of enemies of the régime. Just as in later times the captain of a British warship had to read himself in before his authority had official confirmation, so too in medieval Islam a governor's first task on taking up office was to mount the *minbar*, glorify God, and read out the Caliph's letter of appointment, or simply announce the fact that he had been invested with that dignity. That same *minbar* was also the scene for political announcements and harangues of all kinds. When it was announced from the pulpit that the *de facto* ruler of Baghdad, the Buyid 'Adud al-Daula, had assumed the ancient

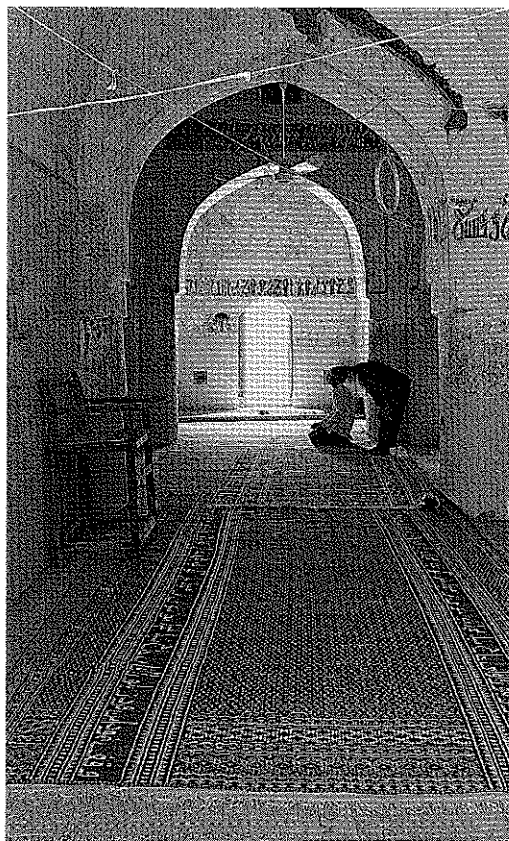
Persian title of Shahanshah, the people rebelled and pelted the preacher with stones. The mosque was frequently the forum for sectarian disputes, which of course often had a political edge. The Buyid ruler Mu'izz al-Daula decorated the mosques of Baghdad with the usual Shi'ite inscriptions of curses and imprecations, but these were blotted out overnight. Similarly, in 395/1005 the Fatimid caliph al-Hakim enjoined curses on Abu Bakr, 'Uthman, Mu'awiya and the 'Abbasids to be inscribed on the exteriors of mosques. Sometimes the curses inscribed on mosques had nothing to do with sectarian disputes; in Baghdad in 425/1034 the repeal of the unpopular but lucrative tax on salt was announced in a sermon in the mosque, and curses were inscribed on the door of the mosque on anyone who imposed this tax again. The tradition that the mosque was a place of political asylum, like the church in western Europe, was deeply ingrained in Islam. In some cases provision was even made to employ the mosque as a military building, with fortifications behind which the faithful could take refuge in times of uprising or war. Such bastions were apt to become a traditional feature of mosque architecture even when Muslim society had long outgrown the need for them. Sometimes the mosque discharged a policing function, for example at the time of the rebellion of Zaid b. 'Ali in 123/741, when the people of Kufa were ordered to proceed to the Great Mosque, with the clear implication that anyone who did not turn up would be treated as a rebel. Once they were safely inside, the gates of the mosque were locked. In another episode during Zaid's rebellion, the role of the mosque moved from the defensive to the offensive; al-Tabari relates that 'the Syrian troops looked down on them [the rebels] and they began throwing stones at them from the top of the mosque'. Finally, in yet another uprising during this period, the successful one led by Yazid b. al-Walid, it was the Great Mosque of Damascus which was chosen as a meeting place by the conspirators, perhaps not least because they knew that many weapons were stored there.

#### Mosques with special functions

These wider and in large part secular functions could in theory be discharged by *masjids* and

*jami's* alike, though in practice they tended to bulk larger in the latter. There was, however, a further category of mosques (usually *masjids*) which responded to the needs of particular groups of people. Among these were mosques reserved for certain tribes, which flourished especially in Arabia in the first century of Islam and were a potent force for disunity; and mosques for separate quarters in a town or, as a logical extension of this, for certain crafts or occupations. Sometimes mosques reflected theological differences – not only the obvious schism between Sunni and Shi'i, but also the relatively minor distinctions between the various *madhhabs*. These mosques, like the tribal ones, also fostered dissension and their legality was open to question on these grounds.

Finally there was a category of mosque which could broadly be termed memorial. This type



39 Muhammadiya, Masjid-i Sar-i Kucha

included mosques built on sites sanctified by certain events in the life of the Prophet – including places where he had prayed as well as locations where some seminal event had taken place, like the Aqsa mosque in Jerusalem which commemorated his *miraj*, namely his night journey to Hell and the Seven Heavens. Also in this category were mosques with specific Biblical associations, such as the mosque of Abraham at Hebron; both types recall (functionally though not architecturally) the Christian martyrrium. With them may be classed funerary mosques, a type denounced in numerous *hadiths* but which drew its vitality from pre-Islamic tradition in which the graves of ancestors often became sanctuaries. Muhammad's own tomb at Medina, around which there developed the Mosque of the Prophet, is an example of this. By a natural transition mosques were built over the tombs of some of the great men of early Islam, such as the Companions of the Prophet, and pilgrimages – admittedly unorthodox – were made to them. In time a whole complex of buildings might evolve around the tomb of the notable in question. The case of the Masjid-i Sar-i Kucha at Muhammadiya near Na'in in central Iran (469/1077), with its monumental Kufic inscription listing Companions of the Prophet, shows that commemorative as well as funerary mosques were built in their honour.

It was of course appropriate that a building which ministered to the community as a whole should be a financial charge on that community; hence the practice (recorded at Isfahan for example) of enlarging a mosque by means of public subscription. Ibn Hauqal, in the course of his account of Sicily, notes as a prodigy that 'in Palermo and Khalisa, together with the quarters outside the walls, there are more than 300 mosques, most of them in good condition, with their roofs, walls and doors intact . . . I have never seen so many mosques in any place or great city, even in cities double the size, nor have I heard anyone claim such a number, except for the claim of the Cordovans that their city has 500 mosques. I was not able to verify this in Cordova and mentioned it in its place with some expression of doubt, but I can confirm it for Sicily because I personally saw the greater part. One day I was standing near the house of . . . al-Qafsi, a jurist and notary. From

his mosque I could see, at the distance of a bowshot, about ten mosques, all within view, some of them facing one another and separated only by the breadth of the street. I inquired about this and was informed that these people are so puffed up with pride that each one of them wants to have his own mosque, reserved to him and shared by no-one apart from his own family and retinue. It even happened that two brothers, whose houses were adjoining with party walls, each built a mosque for himself in which to sit alone.'

#### GROWING SANCTITY OF THE MOSQUE

These remarks are far from exhausting the subject of how the mosque functioned in medieval times. Nevertheless, they at least hint at the variety of functions which characterised the medieval mosque and which explains the popularity of a nuclear plan onto which extra elements could easily be grafted. This innate flexibility can be traced to the very origins of the mosque; for it cannot be emphasised too strongly that the mosque did not begin life as a primarily religious centre. Muhammad's house was more of a political headquarters than a place of worship; people camped, argued and even fought there. It was only by degrees that the sanctity of the mosque asserted itself. Under the Umayyads, for example, it was still permissible for Christians to enter mosques. For a long time only specified parts of the mosque were held to be fully sacred – the *mihrab*, the *minbar* and the tomb of a saint who might be buried there, which would be venerated for the holiness (*baraka*) emanating from it. Rules of behaviour gradually imposed themselves: the removal of shoes became obligatory, and worshippers were enjoined not to spit (or to spit only to the left), to preserve silence and decent conduct – a provision aimed at the unruly Bedouin – to ensure their ritual cleanliness, to wear best clothes on a Friday and to observe a host of similar prescriptions. By the 9th century booksellers were forbidden to trade in mosques, but such practices (like preaching for money) were hard to eradicate. So too was the practice, noted by the 10th-century geographer Ibn Hauqal at Fustat, of eating meals in mosques. Hence, no doubt, arose the practice whereby bread- and water-sellers freely plied their trade in the mosque

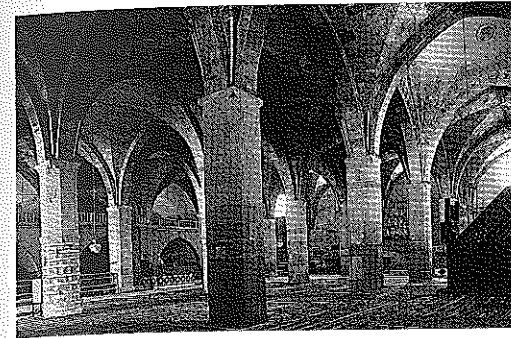
precincts. The *Maqamat* of al-Hariri, written in the 12th century, shows how swindlers proliferated in mosques. The 10th-century geographer al-Muqaddasi speaks disparagingly of Ahwaz in south-west Iran: 'there is no sanctity in its mosque. I mean thereby that it is full of swindlers, low and ignorant people who arrange to meet there. Thus the mosque is never free of people who sit there while others are engaged in prayer. It is the gathering-place of importunate beggars and a home of sinners'. The role of women in the mosque became more sharply defined. They were to sit apart from the men, to leave before them, not to wear perfume and not to enter the mosque during menstruation. Often a specific part of the mosque, such as the upper galleries around the courtyard or an area at the back of the sanctuary, was reserved for them. Announcements in mosques about lost property were forbidden on the grounds that the Prophet had said of such conduct 'May Allah not return it to you; mosques are not built for this'. In the same vein, a *hadith* transmitted by al-Tirmidhi records Muhammad as saying 'when you find someone selling and buying in the mosque, say 'May Allah not allow you profit in this trade'. Other *hadiths* forbade the use of the mosque for purposes as various as the administration of punishment, the reciting of poetry, the unsheathing of swords and the treatment of wounds – though in the latter case another *hadith* states that the Prophet made provision for a tent to be pitched within the mosque at Medina for the treatment of the sick, and a nurse named Rufaida was appointed to look after them.

#### PROBLEMS OF CLASSIFICATION

The necessary pendant to the foregoing generalities is a detailed survey of the major schools of medieval mosque architecture. Shortage of space imposes a broad-brush approach in this account. Hence it is necessary to gloss over the particular genres of mosque which became associated with specific dynasties or provinces and to force an inordinate variety of types on to the Procrustean bed of three 'ethnic' architectural traditions: Arab, Turkish and Persian. If this proceeding were applied to all mosques in the Islamic world it would involve such gross simplifications as treating the

mosques of the Indo-Pakistan subcontinent, which account for perhaps half of those preserved from medieval times in the entire Muslim world, as offshoots of the Arab or Persian types insofar as they are mentioned at all. It would also entail ignoring the many vigorous if quasi-vernacular sub-schools of Islamic architecture, such as those of Africa south of the Maghrib; China; and south-east Asia. As it happens, these areas fall outside the purview of this book; what follows is therefore intended to encompass the significant basic types of medieval mosque in the central Islamic lands. This material does lend itself tolerably well to analysis within the framework of the three 'ethnic' traditions.

One solution to this problem of misrepresentation, although it is admittedly a compromise, is to select a few of the most celebrated mosques, to imply in more or less arbitrary fashion that they are typical, and to base the requisite generalisations on them. This approach has at least the merit of clarity, and it could indeed be argued that it is in the finest mosques of a given period and region that local peculiarities are apt to find their fullest expression. Nevertheless, such a broad-brush approach, for all its superficial attractions, is simply not specific enough. Another approach, which might be termed typological, cuts across regional and temporal boundaries in order to isolate the significant variants of mosque design and trace their development. Yet, precisely because it ignores such boundaries, this approach tends to minimise the significance of regional schools and fashions. The categories and sub-species which it proposes tend to have a somewhat academic flavour; while technically defensible, they somehow miss the point. A third approach might be to rely on statistics and, by chronicling all known mosques of pre-modern date, to discover the types and distribution of the most popular varieties. The picture to emerge from such a study might indeed be literally accurate, but it would not distinguish between the *jami'* and the *masjid*, that is, between the major religious building of a town or city and the neighbourhood mosque. Since virtually all the mosques under discussion here fall into the category of *jami'*, such a study would be of limited value in this context, and would



40 Aksaray, Ulu Cami, interior

assuredly blur the sharp outlines of regional peculiarities of mosque design. After all, the simplest types of mosques not only vastly outnumber the more complex ones but are also to be found throughout the Muslim world. It is such mosques, therefore, which make up the standard distribution of this building type. They dominate by sheer weight of numbers, but – by the same token – they distort the overall picture, suggesting a uniformity that actually exists only at the level of the most primitive buildings. Only when a statistical survey of this kind is relieved of the effectively dead weight of such buildings can regional and temporal distinctions stand out in their full clarity.

Such are the difficulties attendant on venturing a *tour d'horizon* of formal developments in the pre-modern mosque. What, then, is the best way of tackling this problem? The most promising line of approach is probably to identify those mosque types which are most distinctive of a given area and period, describing their constituent features but avoiding a detailed analysis of individual buildings. It should be emphasised that the overriding aim of highlighting significant regional developments entails the suppression of much corroborative detail and, more importantly, of those periods when a given region was simply continuing to build mosques in a style already well established. Admittedly the lulls in innovation have their own part to play in the history of mosque architecture; but that part is too modest to rate any extended discussion here.

For that same reason, areas in which the pace of change was sluggish are allotted less attention

in the following account than those which were consistently in the forefront of experiment. The Maghrib, for example, receives less space than Iran, while Iraq and the Levant take second place to Egypt and Anatolia. These emphases, moreover, reflect the basic truth that the design of a mosque was often less liable to take on a distinctively local colouring than were its decoration, its structural techniques or even specific components of that design, such as the minaret. One final caveat should be sounded: the ensuing generalisations deliberately exclude the "peripheral" areas of the Islamic world, not least because nearly all the mosques in these areas are of post-medieval date, and therefore lie in the shadow of developments in the Islamic heartlands. There is, moreover, a strong vernacular element in these regional traditions, for often they draw very heavily on a reservoir of ideas, practices and forms which owe very little to Islam. Thus for reasons which are as much historical and cultural as geographical they do not belong in the mainstream of mosque architecture.

This survey, then, will cover the central Islamic lands from Andalusia to Afghanistan. The very nature of the material, however, makes it undesirable to embark directly on a series of regional summaries: the sheer lack of surviving monuments would require each summary to start at a different date. In most areas of the Islamic world it is not until the 11th century that mosques survive in sufficient quantities for the lineaments of a local style to emerge. To explain that style would in most cases entail reference to earlier mosques in other regions, with consequent repetition and overlap. The crucial decisions which dictated the subsequent formal development of the mosque were taken in the early centuries of Islam, and the buildings which embodied those decisions are themselves thinly scattered over the entire area bounded by Andalusia and Afghanistan. Yet the inter-connections between these buildings are such as to make light of their geographical remoteness from each other.

It will be clear from what has been said so far that to give a sufficiently full account of the subsequent development of the mosque in its various regional guises without obscuring or falsifying the major issues is no easy task. The mosque is, after all, the most frequently encoun-

tered of Islamic buildings, and the one which over the centuries has attracted the most attention from travellers, historians and scholars. Not surprisingly, it is the building type which has experienced the widest range of variations in Islamic architecture. Within the compass of the present study it is impossible to describe these variations at length while at the same time remaining alert to their basic kinship, and thus it would be impossible to see the wood for the trees. Perhaps the most convenient solution, then (despite the attendant difficulties noted above) is to identify the three major categories of mosque architecture – Arab, Iranian and Turkish – and to attempt to accommodate all regional and formal variations within one or other of them. It would of course be possible to propose other kinds of category, such as those based more precisely on building types, on chronology, on more detailed regional sub-divisions or on function. All these categories have much to recommend them, but they would all tend to obscure the one salient fact that in mosques, as in no other type of Islamic architecture, an extraordinarily consistent distinction was maintained between the developed Arab, Persian and Turkish types. Naturally there are numerous buildings in which these distinctions are somewhat blurred, and there are examples where one ethnic tradition adopted a feature characteristic of another. Examples may also be cited of mosques being built in a foreign style quite different from the prevalent local one – ‘Arab’ mosques in India, or ‘Turkish’ ones in Algeria. Moreover, in the early stages of Persian and Turkish mosque architecture it was inevitable that strong Arab influences should make themselves felt, since it was of course in the Arab lands that the first mosques were built. Then there are those mosques – comparatively few in number as it happens – which obstinately refuse to fit into any ethnic, political or geographical pigeon-hole and which were built in response to specific functions or occasions, or owed their form to the personal inspiration of the architect. Nevertheless, to accept all these qualifications is not to deny the validity of the three categories proposed. *Faute de mieux*, they will provide the framework for an account of the manifold development of the one building central to the Islamic faith.

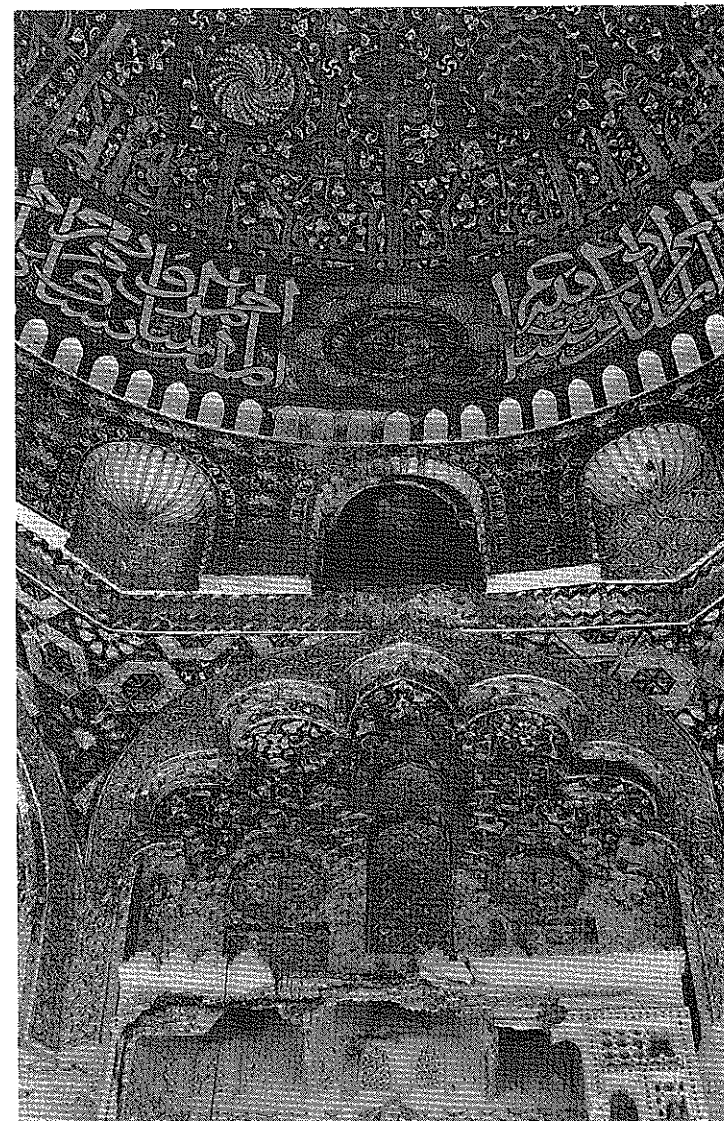
## ARAB MOSQUES

Since all the really early mosques to survive, namely those securely datable to the seventh and eighth centuries, are of Arab plan, no matter where they were built, it will be convenient to tackle that category first. Such a procedure recommends itself on other grounds too. The Arab concept of the mosque was decisive in determining its architectural form, and the changes wrought on the mosque in Turkish and Persian territory were grafted on to that pre-existing form. Broadly speaking, no fundamental re-thinking of mosque forms occurred in either the Turkish or the Persian tradition. Thus the Arab form of the mosque may fairly claim not only chronological precedence but also an absolute pre-eminence in that most subsequent mosques were derived more or less closely from it. Besides, the Arab mosque plan not only had the widest diffusion but also covers the longest chronological span. Next in length will be the survey of the Persian tradition, almost as ancient as that of the Arab plan but more restricted in geographical scope. Shortest of all will be the discussion of the Turkish mosque type, whose creative development is confined in time to the 14th–17th centuries and in space to Anatolia.

The term ‘Arab plan’ will be used frequently in the discussion which follows and a close definition of it is therefore desirable. The irreducible minimum which the term connotes is a walled rectilinear enclosure comprising an open courtyard and a covered area near the *qibla*. The sanctuary comprises either multiple columns supporting a flat roof, or arcades supporting a pitched roof. The emphasis on regularly spaced supports fairly close together has led to this type of mosque being called ‘hypostyle’. All three elements – enclosing walls, courtyard and sanctuary – were to undergo changes later; but those changes were inconsistent and spasmodic, and both the pace and the degree of change differed from one element to another.

*The earliest Arab mosques*

Not surprisingly, the constituent elements of the Arab mosque plan are found at their starkest in the earliest mosques built in the generation after the death of the Prophet. The best-known examples are the mosques of Fustat, Qairawan,



41 Ta'izz, Ashrafiya mosque, dome

2.45  
2.47–2.48

30

Kufa and Basra. But it is highly significant that their austerity of plan and elevation ran increasingly counter to contemporary taste. Thus it was that the mosques of both Kufa and Basra were rebuilt on a much larger scale within a generation. Some of the changes introduced in the course of these and still later rebuildings were clearly improvements and were thus incorporated into the normal vocabulary of the mosque. Thus it seems that the simple juxtaposi-

tion of empty courtyard and enclosing walls found little favour, and a columned arcade or portico was set around the courtyard, at once articulating the space in a more directed way than hitherto and providing worshippers with extra protection from the weather. Thereafter it was a natural step gradually to increase the amount of covered space within the mosque. This was done by increasing the number and depth of the arcades (*riwaq*) both around the

three sides of the courtyard – for the open courtyard remained a standard element of the design – and within the sanctuary. Thus by easy degrees the mosque acquired extra articulation, and new relationships between open and covered space emerged. Unfortunately, no mosque datable before the early eighth century has survived in largely unaltered form, and it is therefore not possible to state definitively what forms such extra articulation took. But there are a few clues. In the time of Ziyad b. Abihi, for example, who as the Umayyad viceroy of Iraq (d.53/673) had the task of delivering the *kbutba* in the Friday service, the congregation in the great mosque at Kufa customarily expressed its disapproval at his announcements by gathering up handfuls of pebbles and throwing them at him. Accordingly he gave orders for the floor of the mosque to be paved throughout. The same governor introduced brick-built piers into mosque architecture, and crowned them with capitals of ‘Persian’ type, namely those with <sup>2.19</sup> *protomai* of addorsed bulls or other creatures. This argues an indifference to iconoclastic ideas which casts an interesting sidelight on the alleged Islamic interdiction of the portrayal of living creatures within religious architecture, although it must be admitted that this fashion did not catch on. It was Ziyad b. Abihi, too, who according to Ibn al-Faqih briefly experimented with circular mosques in Basra. Clearly there was ample scope for variety in this first century of the faith. Even so, the adoption of each new feature meant reduced room for manoeuvre, and it is therefore not surprising that within a hundred years of the Prophet’s death the guidelines for the future development of the Arab mosque plan had been laid down. Much of the credit for this speedy development belongs to the Umayyad caliph al-Walid I, who was responsible for a trio of strategically sited mosques which consolidated earlier experiments and introduced several features which were quickly to become canonical—though numerous other mosques founded in the Umayyad period (e.g. Busra, Jarash, Ramla and Aleppo) were of significantly different character.

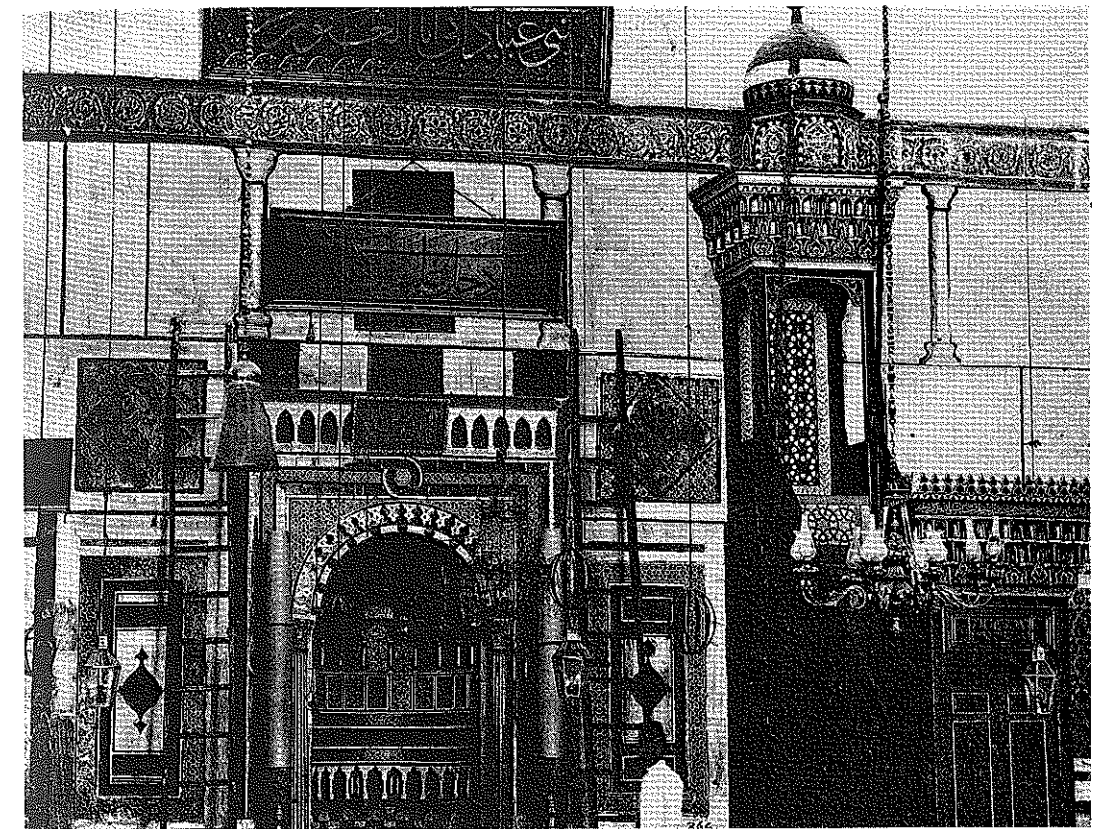
#### *The major Umayyad mosques*

On the basis of the literary evidence it seems justified to draw a clear distinction between

these three consciously imperial mosques and all others produced in the later Umayyad period, that is from the death of al-Walid I in 96/715. <sup>2.55-2.60</sup> Such a distinction is not intended to minimise the role of the major mosques erected (and often enlarged) between 11/632 and 81/700. Their role was even more crucial in that they roughed out the general principles of Arab mosque design; but it fell to the mosques of al-Walid I to demonstrate that these principles need not necessarily produce utilitarian structures, but could inspire buildings splendid enough to vie with the best of Christian architecture. Thus al-Walid’s building programme had significant political and symbolic implications, and this importance is underlined by the expense of the programme, the speed with which it was carried out, and the precise location of each mosque within the city in which it was built. This achievement stamps him as the major patron of the Umayyad dynasty.

The three mosques in question were sited in Jerusalem, Damascus and Medina. Damascus, as the caliphal capital, was the political nerve-centre of the empire. Medina had sacrosanct status because of its close association with the Prophet, its pivotal role in early Islamic history and its continuing function in the Pilgrimage. Jerusalem ranked as the third holiest city in the Islamic world, after Mecca and Medina, and had indeed been the *qibla* at one stage of Muhammad’s ministry. After Mecca, then, whose sanctuary had been rebuilt within the previous century, these were the three most important centres of the Muslim world. To underline that importance by means of splendid buildings expressed a new dimension of commitment to architecture. That commitment transcended purely practical motives and pointed the way for the mosque to function more fully and more subtly both within the Islamic community and *vis-à-vis* the outside world.

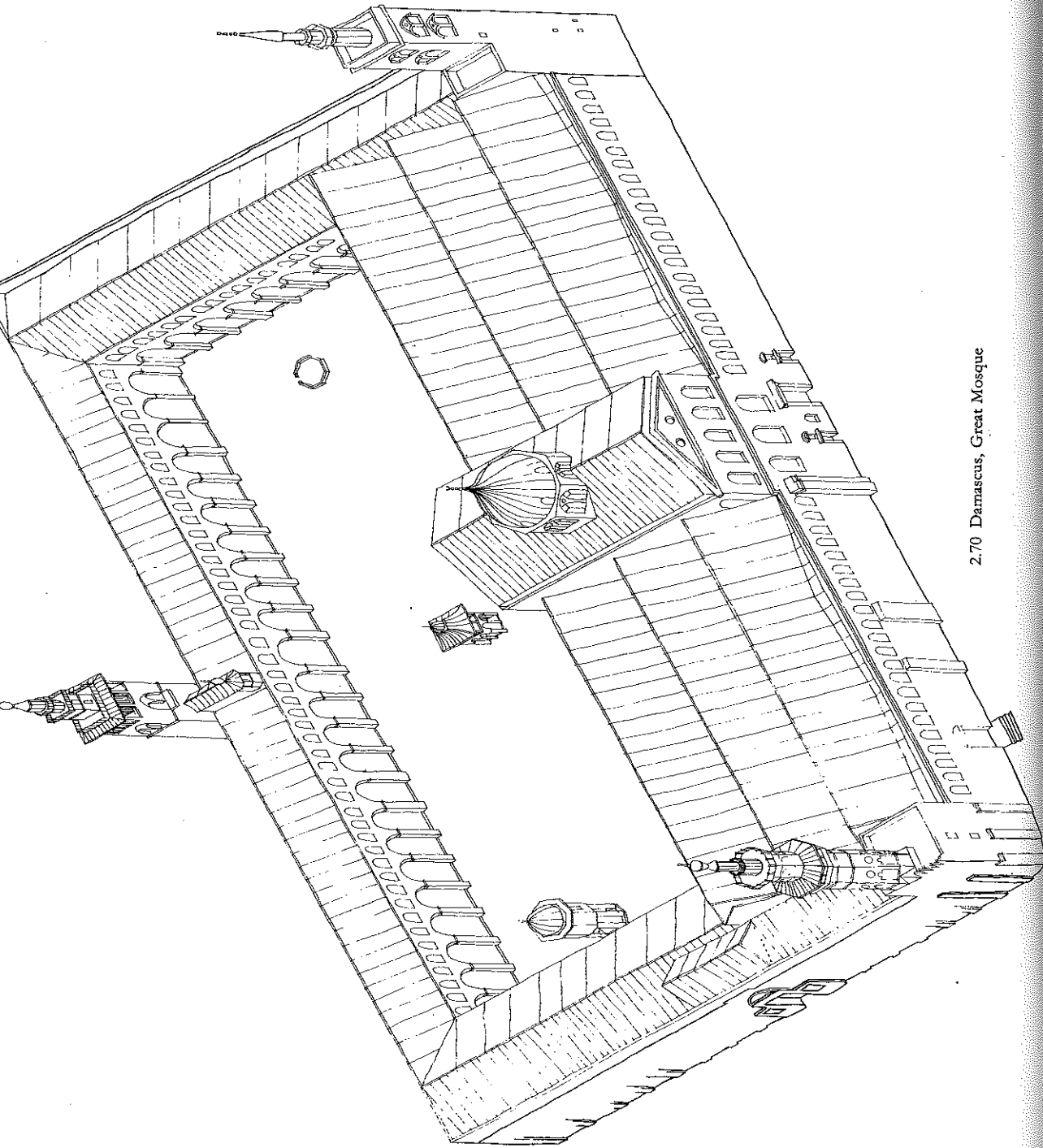
It is of a piece with this new role of architecture that the choice of site for these special mosques should be carefully considered. In the case of the two Syrian monuments, the sites had religious, symbolic and political resonances, while at Medina the mosque was built over the very spot where the Prophet’s house had stood. It is worth examining this general issue in more



42 Damascus, Great Mosque, interior before the fire of 1893

<sup>35, 42</sup> detail. For the mosque at Damascus the option of selecting a hitherto unexploited site, presumably on the outskirts of the built-up area, was not taken up. Instead, the caliph set his heart on the prime site in the whole city: the huge enclosure (*temenos*) which had earlier been the emplacement of the Temple of Hadad and then—many centuries later—of Jupiter Damascenus and which currently contained the church of St. John the Baptist, and in which the Muslims too had a temporary place of prayer. The terms of the peace treaty which had been signed with the Christians some seventy years earlier denied him the options of compulsory purchase or confiscation, so he was compelled to apply to the Christian community in order to buy the whole site. <sup>2.69</sup> Perhaps he made them an offer they could not refuse; at all events, having bought the site lock, stock and barrel, he promptly demolished the

Christian church. He was thus left with a huge empty space, markedly oblong (157 m. by 100 m.) and bounded by the Roman walls of the *temenos*, which were broken to the west by the Roman monumental entrance or *propylaeum* and to the east by a lesser entrance. These elements could be incorporated readily enough into the new mosque, but not so the west-east progression which they implied. Indeed, by insisting on an oblong site which was already defined by extant walls, and which incorporated an axiality at odds with the *qibla*, al-Walid had surrendered most of his freedom of manoeuvre. That the mosque built with these inconvenient pre-conditions in mind should nevertheless have become a seminal influence in Islamic architecture is perhaps incidental. It is hard to believe that the Damascus mosque would have taken the form it did if the architect had been presented

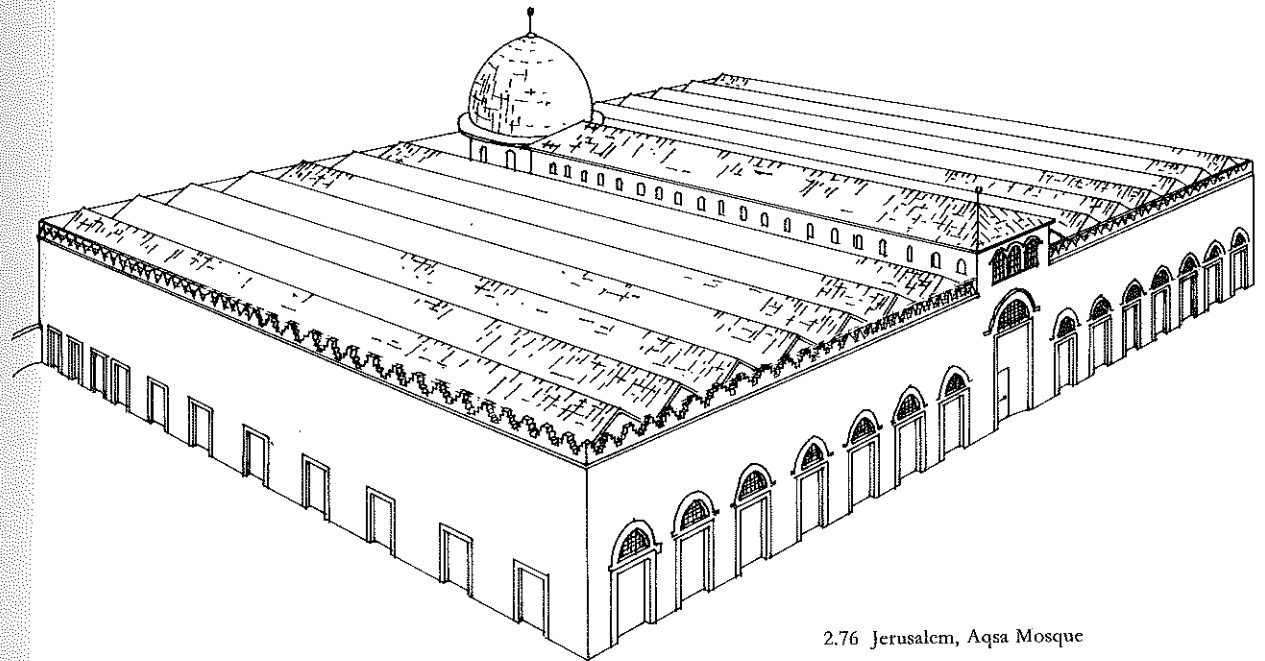


2.70 Damascus, Great Mosque

with an unencumbered site. Certainly the mosques at Jerusalem and Medina, where the architects had a free hand, were much more traditional in their design than was the Damascus mosque. Presumably, then, the latter would have followed suit if the site chosen for it had been entirely clear. It is worth noting that the sequence of events at Damascus was it seems repeated with very little change half a century later at Cordoba, perhaps in a deliberate attempt to evoke the vanished glories of Umayyad Syria.

Thus it seems clear that the innovations incorporated into the design of the Damascus mosque were a response to the challenge offered by its unprecedented and in some ways unsuitable site. By triumphantly overcoming these inherent difficulties the architect showed that mosque design could be much more flexible than earlier buildings might suggest, and forestalled the danger of a premature conservatism. The success of the design and its numerous interesting features should not be allowed to obscure the fundamental question of why this particular site was chosen, and what that choice reveals about the role of this mosque in its historical context. Al-Walid, like his father 'Abd

al-Malik before him and the 'Abbasid caliph al-Mansur after him, was fully alive to the propaganda role of impressive architecture. By physically superimposing his mosque on the ruins of a pagan temple and a Christian church – both structures having symbolised their respective faiths in the centre of Damascus – he was asserting that Islam had superseded earlier religions. In short, the Damascus mosque was a victory monument, and that victory was proclaimed five times a day from the corner towers of the *temenos*, which served as minarets for the call to prayer. The splendour of its embellishments in marble, glass mosaics and cut stone rammmed home the message. Al-Muqaddasi describes them in glowing terms: 'The whole area is paved with white marble. The walls of the mosque for twice the height of a man are faced with variegated marble; and above this, even to the ceiling, are mosaics of various colours and in gold, showing figures of trees and towns and beautiful inscriptions, all most exquisitely and finely worked. And rare are the trees and few the well-known towns that will not be found figured on these walls.' No medieval Christian building of east or west could rival the sheer

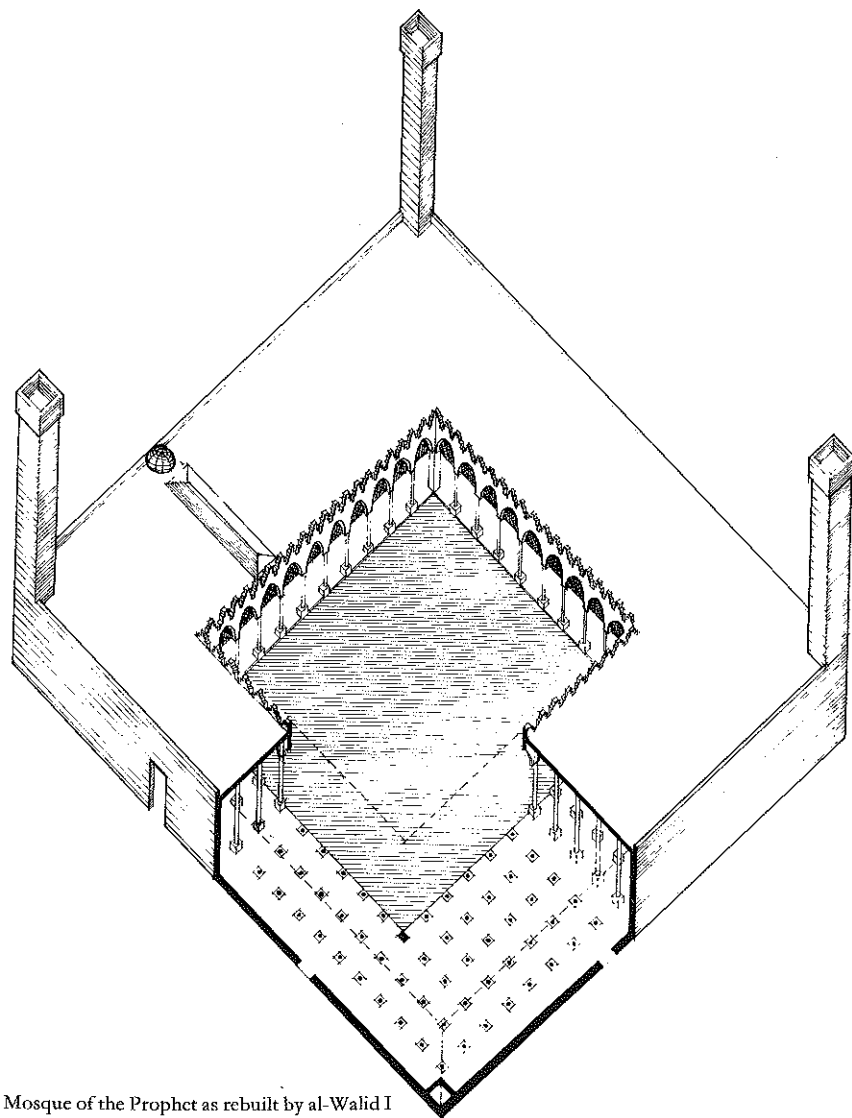


2.76 Jerusalem, Aqsa Mosque

expanse of the wall mosaics in the Damascus mosque. The Arab historians report that al-Walid lavished on this mosque the entire tax revenue for Syria – almost the richest of all the Umayyad provinces – over a period of seven years. Such expenditure could be regarded as wanton extravagance if it were not for the political dimension of the mosque. It was a visible statement of Muslim supremacy and permanence. It was in the middle of the city, with the caliphal palace right next to it, and it simply could not be ignored.

Similar motives help in part to explain the

siting of the Aqsa mosque. Placed not far from the Dome of the Rock and on the same axis as that building – a physical and typological juxtaposition which invites comparison with the Constantinian basilica and the adjoining Rotunda of the Holy Sepulchre in the same city – it too enjoys a central site of unrivalled topographical importance. As at Damascus, that site was already hallowed by many centuries of worship – here Abraham had prepared to sacrifice Isaac, here Solomon's Temple had stood, and of course Christians as well as Jews venerated these associations. But a new and distinctive-



2.66 Medina, Mosque of the Prophet as rebuilt by al-Walid I

ly Muslim factor brought added sanctity to the spot – for this was the ‘furthest’ (*aqsa*) place which Muhammad had visited in the course of his miraculous Night Journey (*mirraj*) from Mecca. The Aqsa mosque is therefore as much a commemoration of this specific episode in Muhammad's life as (in common with the Dome of the Rock) it is an acknowledgement of the continuity of Islam with Christianity and Judaism, an assertion of its superiority over them as a religion, and an expression of its political supremacy.

The mosque of Medina constitutes a very different but also unique case. It was built on the site of Muhammad's house and derived much added prestige from this, especially as the Prophet had also been buried there. Interestingly enough there was strong local opposition to the proposed total demolition of the simple primitive buildings, but this was disregarded on the explicit orders of the caliph. As at Damascus, there was much emphasis on splendid decoration, and here too corvée labour was widely employed, for the decoration was the work of Greek and Coptic craftsmen. As al-Tabari recounts:

‘We began to pull down the Mosque of the Prophet in Safar 88 (January 707). Al-Walid had sent to inform the Lord of the Romans (the Byzantine Emperor) that he had ordered the demolition of the mosque of the Prophet, and that he should aid him in this work. The latter sent him 100,000 *mithqals* of gold, and sent also 100 workmen, and sent him 40 loads of mosaic cubes; he gave orders also to search for mosaic cubes in ruined cities and sent them to al-Walid’. A similar tale is told by al-Muqaddasi about the building of the Great Mosque of Damascus:

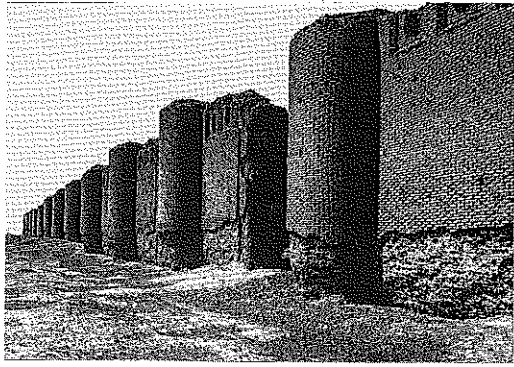
‘And it is said that for building it al-Walid gathered the skilled workmen of Persia, India, al-Maghrib and Byzantium and spent on it the tax revenue of Syria for seven years as well as the gold and silver load of eighteen ships that had called from Cyprus, let alone the implements and the mosaic cubes which the King of the Romans had sent him as a gift.’ Thus the very heartland of the faith received a mosque which could bear comparison with those concurrently being built in Jerusalem and Damascus. The transfer of the seat of power from the Hijaz to Syria had long rankled with the Medinese, and

the desire to appease them may have been a contributory factor in al-Walid's decision to build the mosque there.

Thus it could be argued that these imperial foundations established once and for all the principle that the mosque was potentially more than a place of worship or a focus of communal life—it could be used as an instrument of policy too. These three key buildings publicly expressed al-Walid's piety. They were also an acknowledgment of his own roots and those of Islam itself in the Hijaz, and specifically in the city which had witnessed Muhammad's later ministry. By singling out Jerusalem and Damascus as especially favoured sites, al-Walid could broadcast the commitment of his dynasty to Syria, the nerve centre of his empire and the linchpin of his military power. Finally, these Syrian buildings, erected in a pervasively Christian environment, were a statement of intent: Islam had come to stay, it was superior to the religions which it replaced, and its mosques could challenge the finest churches that the Christians might boast. Perhaps the foundations of al-Walid could even be interpreted as documenting the emancipation of the Muslims from Christian cultural tutelage, a process begun in the sphere of architecture by the Dome of the Rock and expressed almost simultaneously in other spheres, for example by the substitution of Arabic for Greek as the language of chancery administration, or by the minting of a spectacular new coinage in which Arabic inscriptions replaced the royal image. This is the wider background to the creation of mosque forms which were later to become canonical. Yet the essential components of these three great mosques were not, after all, so very different from those of Muhammad's house at Madina—an enclosed square or rectangular space with a courtyard and a covered area for prayer on the *qibla* side. The essential fact is that these elements could be varied at will so as to transform the aspect of the building.

#### ‘Abbasid mosques

The changes undergone by the courtyard and its articulation help to bear out these remarks. The sunny climate of the southern Mediterranean and the Near East allowed the courtyard to accommodate the huge numbers of extra wor-

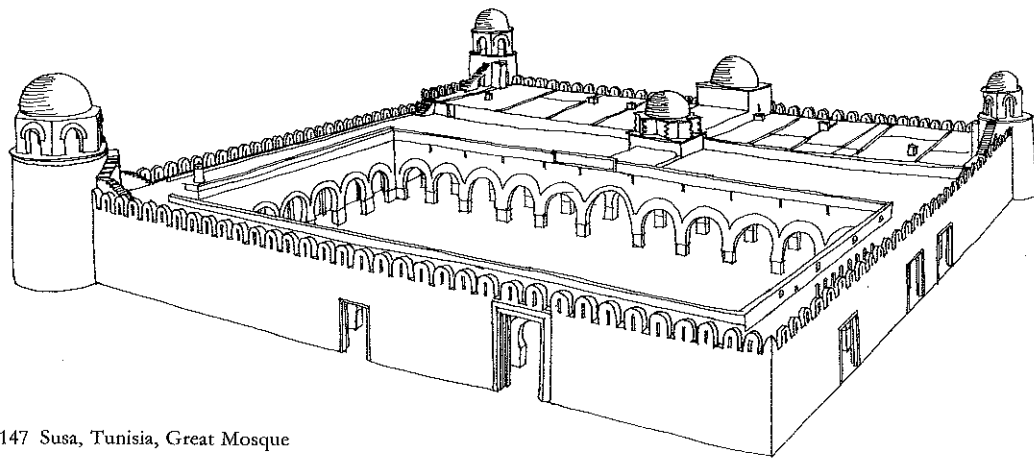


43 Samarra, Great Mosque, outer wall

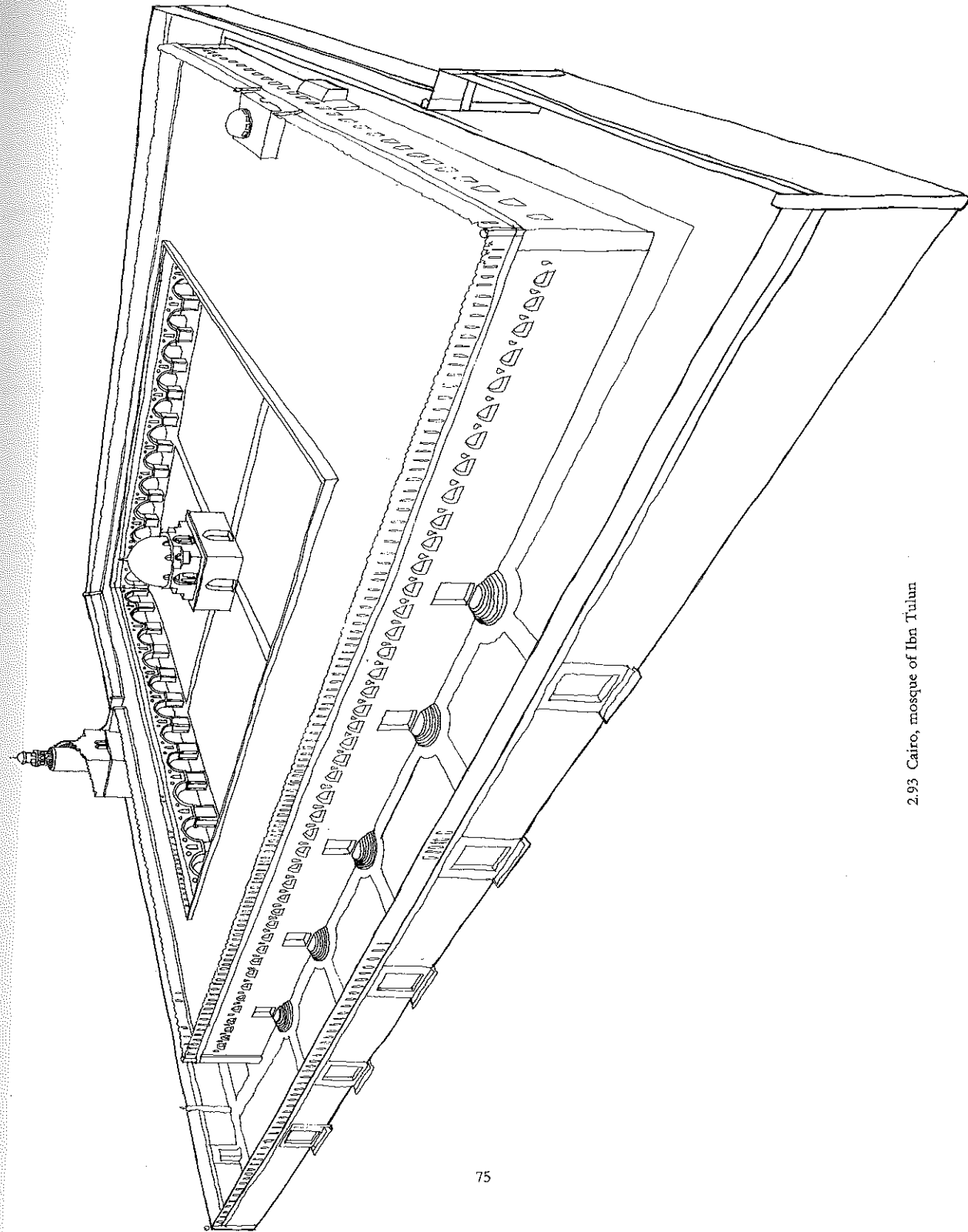
danger of monotony; so too did variations in the depth or number of the arcades (the second 'Amr mosque in Cairo). As the surface area of the covered sanctuary was increased, so did new spatial refinements suggest themselves, such as the progressive unfolding of seemingly endless vistas in all directions. Rows of supports (often *spolia*) with fixed intercolumniations created hundreds of repetitive modular units, perhaps deliberately mirroring the long files of worshippers at prayer.

Externally, the accent was on simplicity, with regular buttresses giving the structure a warlike air. At the Great Mosque of Samarra (completed 238/852) there are a dozen of these on each long side, not counting the corners, with doorways after every second buttress. At Susa the exterior dispenses with buttresses in favour of rounded corner bastions, while in the mosque of al-Hakim in Cairo (381/991 onwards) the minarets at the corner of the façade rise from two gigantic square salients. The emplacement of the *mibrab* was marked by a corresponding rectangular projection on the exterior wall. Entrances were commonly allotted a measure of extra decoration – as in the series of shallow porches along the flank of the Cordoba mosque – but massive portals on the scale of those in Western cathedrals found no favour in the early mosques of Arab plan. The absolute scale of some mosques (the mosque of Samarra, for instance, could have accommodated 100,000 people) encouraged the adoption of fixed proportional

shippers attending the Friday service. This was when its large expanse justified itself. For the rest of the week it was largely empty, and the heat and light emitted by this expanse could cause discomfort. This was especially likely if there were no provision for shade on three of the four sides, as in the early versions of the Great Mosques of Cordoba (170/786), Qairawan (221/836) and Tunis (250/864). Hence there arose the practice of adding arcades along the three subsidiary sides, so that people could walk around the mosque in cool shade. In time these arcades could be doubled, tripled or even quadrupled. A change in the alignment of their vaulting from one side of the mosque to another brought welcome visual relief and excluded the



2.147 Susa, Tunisia, Great Mosque



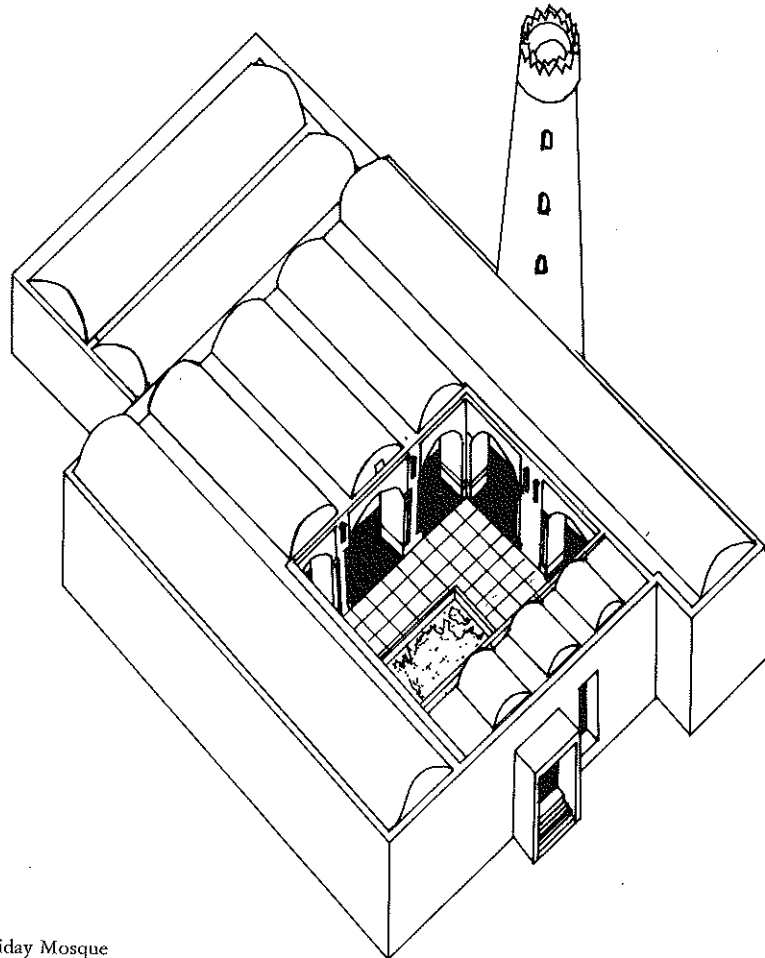
2.93 Cairo, mosque of Ibn Tulun



ratios such as 3:2, which contributed in large measure to the impression of satisfying harmony which these mosques produced. The Qarakhanid mosque of Samarqand (11th century) illustrates the continuing use of such ratios. Sometimes the scale of the mosque was illusionistically increased by the addition of a broad open enclosure (*ziyada*) on three of the four sides (mosque of Ibn Tulun, Cairo, finished 264/877, presumably copying the mosques of Samarra). In comparison with later mosques of similar scale, which catered for multiple subsidiary functions by adding appropriate purpose-built structures to the central core, these early mosques maintain simple and symmetrical lines,

especially for their outer walls (mosque of Abu Dulaf).

The architectural vocabulary of these early mosques brought further scope for diversity. In the first half-century of Islamic architecture, the system of roofing was still primitive, and even when columns and roof-beams had replaced palm-trunks and thatching, the basic scheme remained trabeate (Basra; Kufa; and Wasit, 83/702) whether the roof was flat or pitched, and even so seminal a monument as the Great Mosque of Samarra continued this system, though probably not for its courtyard façade. Thus the post-and-lintel system long familiar from Graeco-Roman buildings was perpetuated,



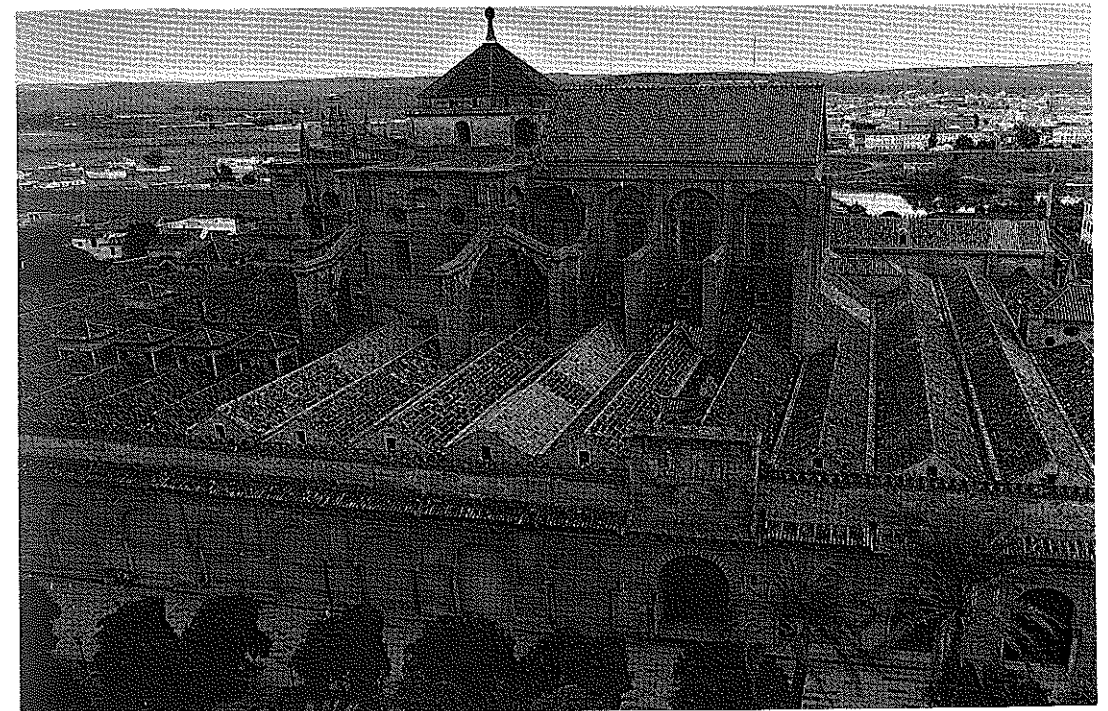
2.224 Fahraj, Friday Mosque

and the pervasive classical flavour was strengthened by the lavish use of *spolia*. Sometimes, however, as in the bull-headed capitals of the Istakhr mosque, these were of Achaemenid origin.

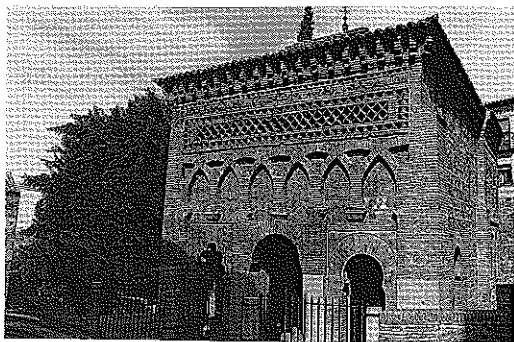
By degrees, wooden roofs resting on arcades gained popularity, and this was the prelude to full-scale vaulting in durable materials (especially in Iran: Tari Khana mosque, Damghan, and Fahraj *jami'*, both perhaps 9th century; Na'in *jami'*, perhaps 10th century). The earliest mosques all use columns, and were thereby restricted to relatively low roofs. By the 9th century the pier had ousted the column as the principal bearing member, though it occurs as early as the mosques of Damascus, Ba'labakk and Harran, and though the column was still used for some mosques (Qairawan; al-Azhar, Cairo, 362/973). This change made it possible to raise the height of the roof, an important development given the oppressive sensation produced by a low roof extending over a large surface area. At the Cordoba mosque the column shafts bore piers braced by strainer

arches; but this device, for all its ingenuity, could not rival the popularity of superposed arcades in the fashion of Roman aqueducts (Damascus mosque, finished 96/715).

The apparently minor detail of whether the arcades ran parallel to the *qibla* or at right angles to it was sufficient to transform the visual impact of the roof. In the latter case, it focused attention on the *qibla*, and this was the solution that recommended itself to Maghribi architects (mosques of Cordoba, Tunis and Qairawan). Syrian architects, on the other hand, with only one major exception (Aqsa mosque, Jerusalem), preferred arcades parallel to the *qibla* (Damascus; Qasr al-Hair East, c.109/728; Ba'labakk, c.12th century; Harran, c.133/750; and Raqqa, c.9th century), possibly reflecting in this the influence of the Christian basilica ubiquitous in that region; several Egyptian mosques followed suit, including those of Ibn Tulun, al-Azhar and al-Hakim. It was a natural development to build mosques with arcades running in both directions (Great Mosques of Sfax and Susa, both finished 236/850), but with



44 Cordoba, Great Mosque, sanctuary showing Christian chapel



45 Toledo, mosque at Bab Mardum, façade

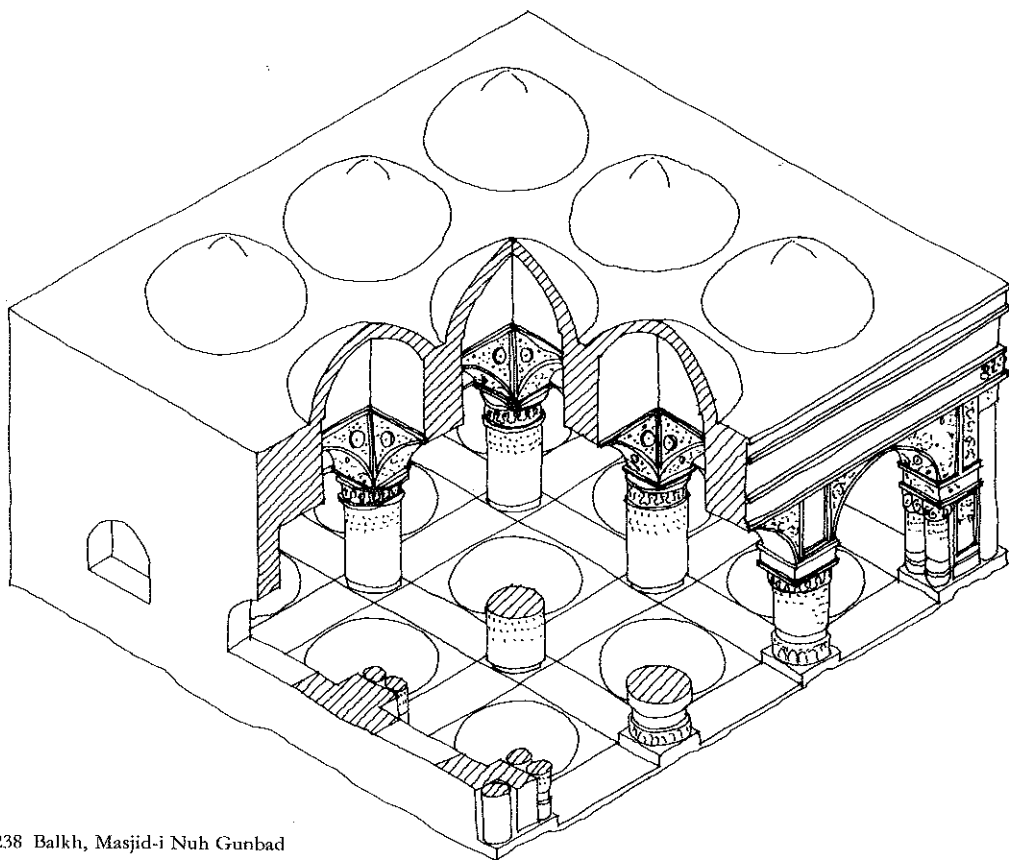
10th century. These buildings inaugurate the much more ambitious use of vaults in later mosques. No such solutions are to be found in the larger mosques built before the 11th century. This early Islamic vaulting drew its ideas impartially from the Romano-Byzantine tradition and from Sasanian Iran, and quickly developed its own distinctive styles, in which the pointed vault soon dominated.

In some mosques, the desire to emphasise the covered sanctuary was achieved simply by adding extra bays and thus increasing its depth. In other mosques, especially those with royal associations, the requisite emphasis was achieved by some striking visual accentuation of the sanctuary: a more elaborate façade (as at Mahdiya), a higher and wider central aisle, a gable or a dome. Once this idea of glorifying the sanctuary had taken root it was enthusiastically exploited, for example by furnishing this area with several carefully placed domes as at the

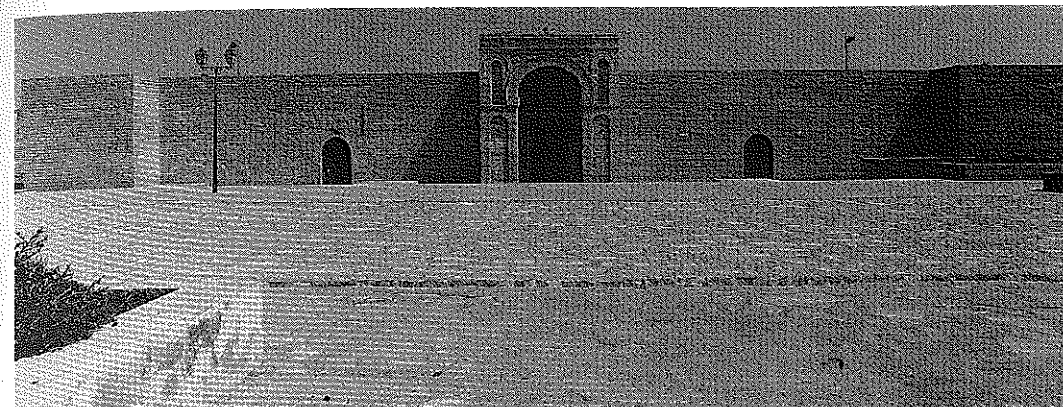
55  
2.95  
2.137-2.138

these exceptions the early experiments with this idea are all on a relatively modest scale which betrays some uncertainty of purpose. They comprise a small group of 9-bayed mosques with a dome over each bay and no courtyard: a type represented in Toledo, Susa, Qairawan, Cairo and Balkh and dating mainly from the

45  
2.85-2.87,  
2.145, 2.149  
2.237-2.238



2.238 Balkh, Masjid-i Nuh Gunbad



46 Mahdiya, Great Mosque, façade

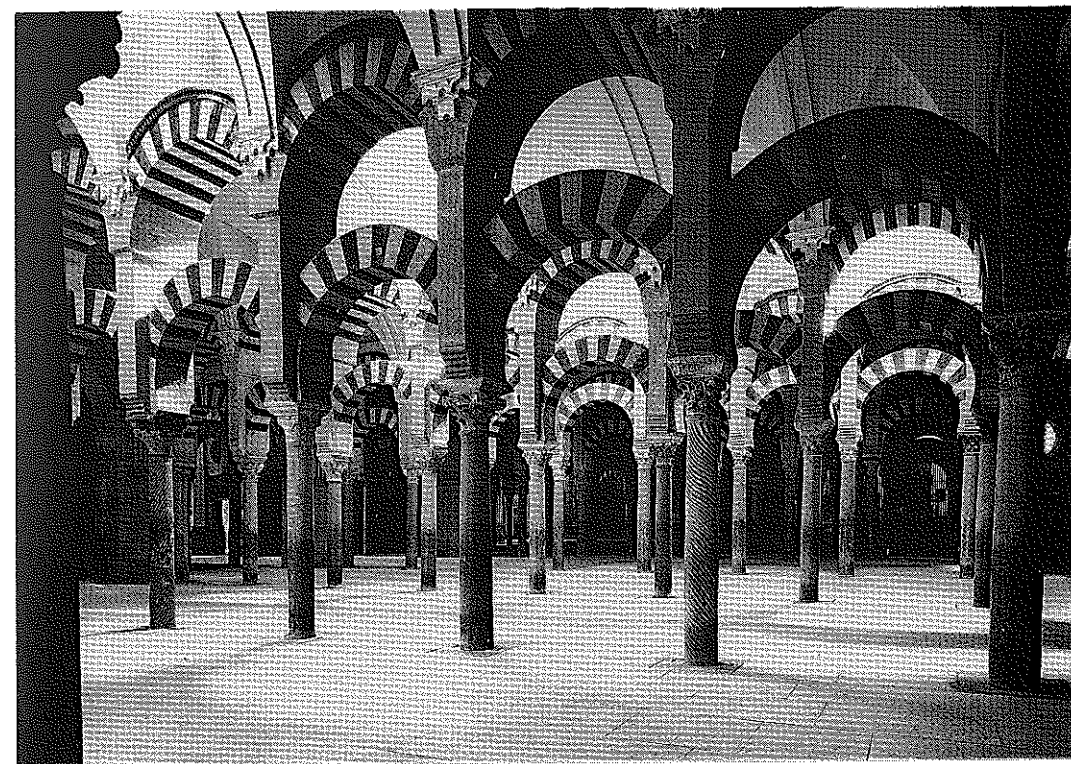
2.74, 2.77,  
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2.91-2.92

mosques of Cordoba and al-Azhar. On occasion, indeed, the sanctuary – complete with such distinguishing features as wider central aisle, dome in front of the *mibrab* and transversely vaulted bays adjoining the *qibla* – could itself become the

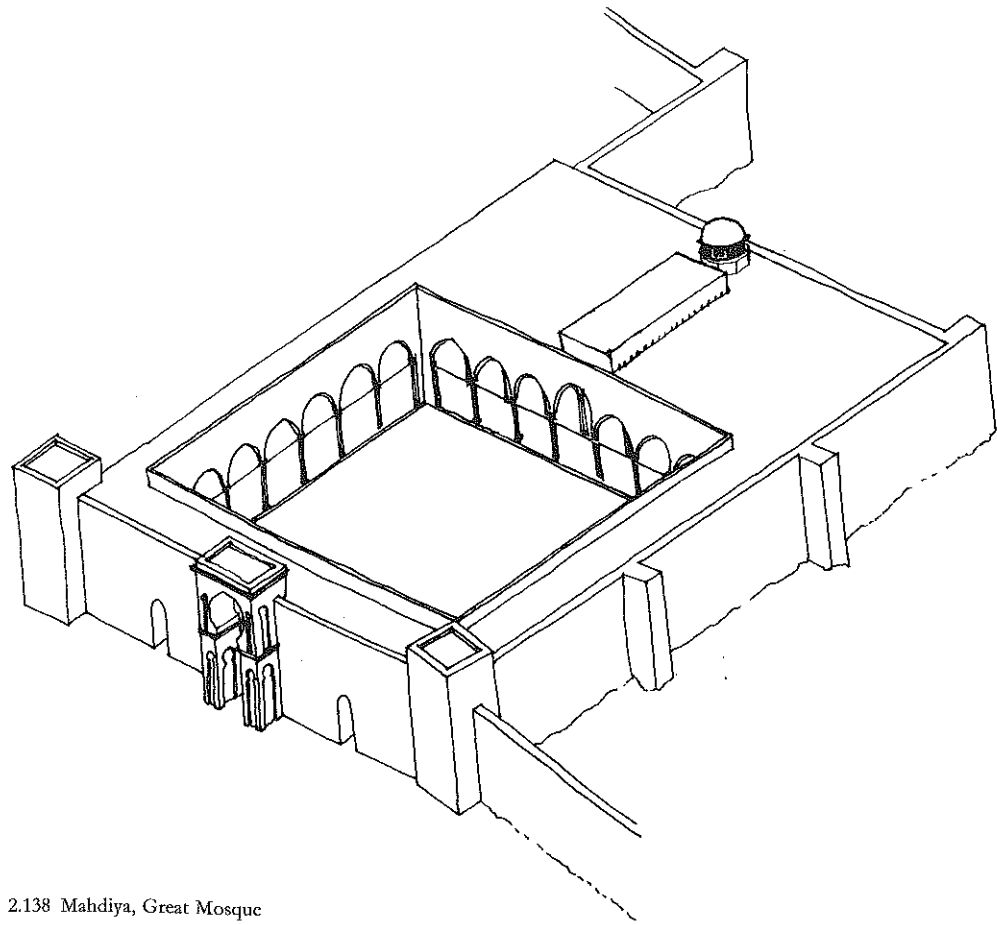
mosque, with no attached courtyard, as at the Aqsa Mosque.

*The transformation of the sanctuary*

The effect of singling out the sanctuary by these



47 Cordoba, Great Mosque, interior

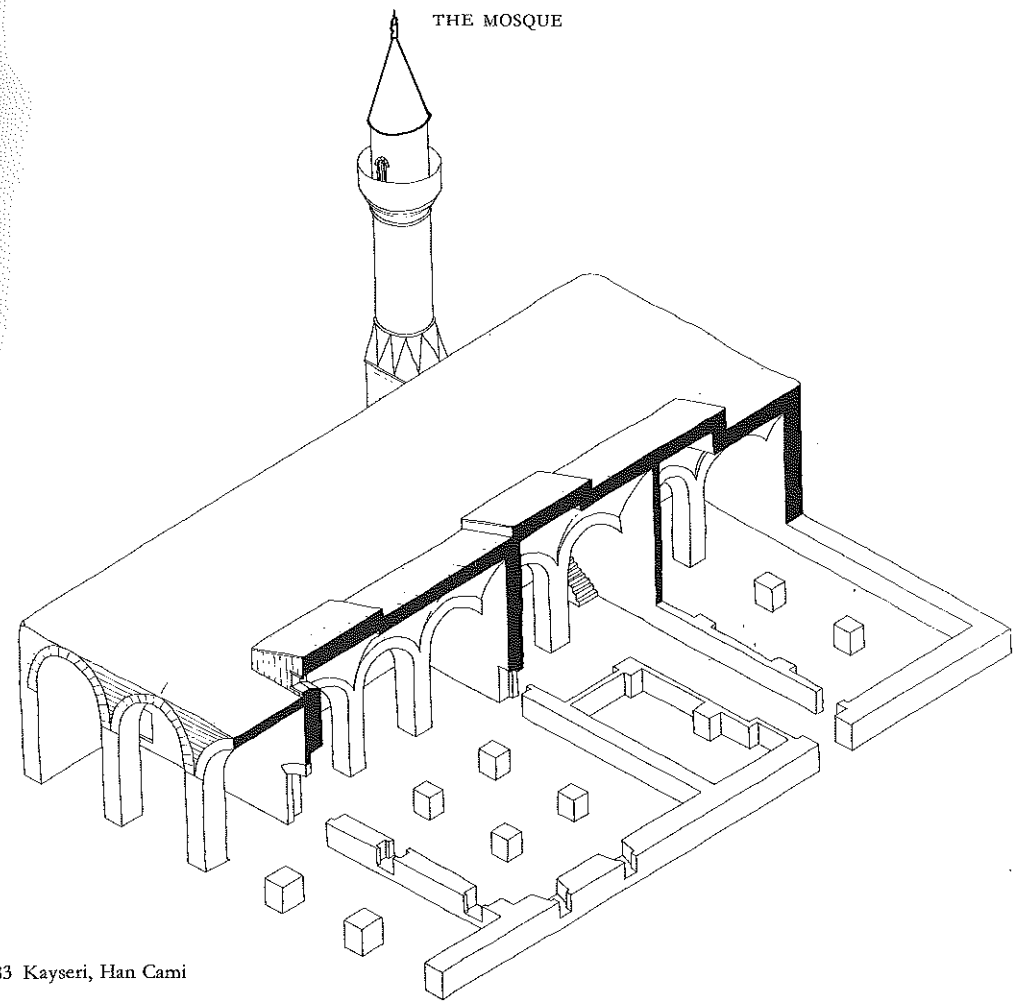


2.138 Mahdiya, Great Mosque

various means is to emphasise that this area is more important than any other in the mosque. Since this latter notion runs counter to the widely-expressed belief that all parts of the mosque are equally sacred, and that gradations of sanctity within it run counter to the spirit of Islam, its origins are worth investigating. This will involve a brief recapitulation of material presented in much greater detail earlier in this chapter, but that material will now be examined from a slightly different angle. It should be stressed at the outset that these various articulating devices cannot all be explained as attempts to draw attention to the *qibla*. Some measure of emphasis for this purpose was certainly required. Hence, no doubt, the greater depth of arcade on that side and the provision of an

elaborate façade for the sanctuary alone. Similarly, the use of a different alignment or type of vaulting for the bays immediately in front of the *qibla* would make sense as a means of signposting this crucial area. Yet the addition of a dome or gable, or both, along the central aisle of the sanctuary, and the greater width and height of that aisle, cannot be explained – as is so often the case – simply as a means of highlighting the *mibrab*. After all, the entire *qibla* wall served to mark the correct orientation for prayer, so that the *mibrab* was technically redundant. The relatively late appearance of the *mibrab* further suggests that it was not devised to meet some liturgical imperative.

The evidence points rather to the desire to assert, in as public a way as the dictates of

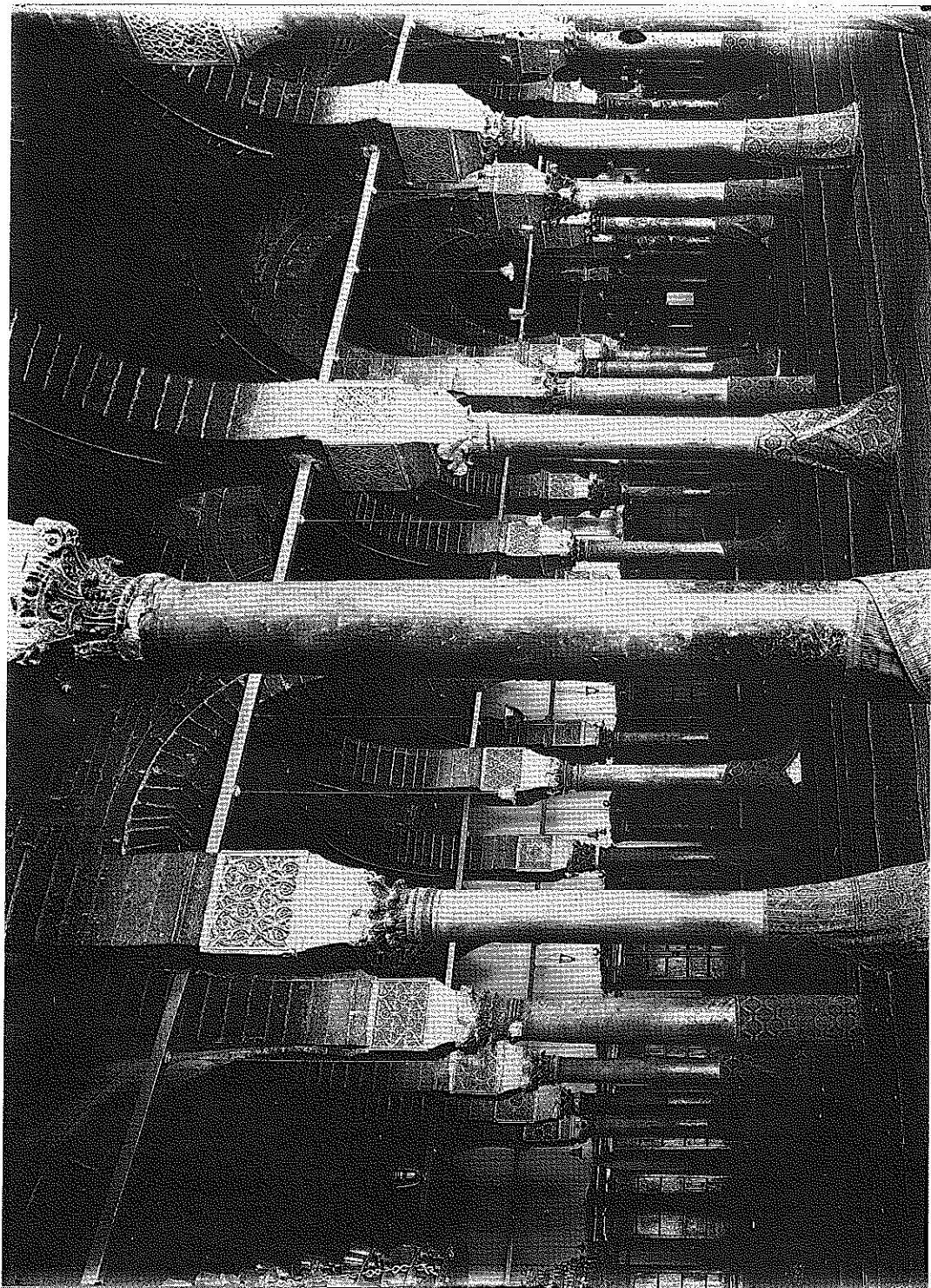


2.183 Kayseri, Han Cami

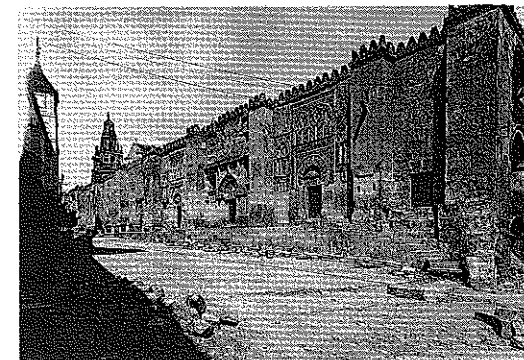
religious architecture would permit, the importance of the ruler in religious ceremonies. It was the duty of the caliph or of his representative to lead his people in prayer and to pronounce the *kbutba*. The political overtones of this ritual, which proclaimed allegiance to the ruler, in large part explain the physical form of the *minbar* from which the *kbutba* was pronounced. Similarly, the *mibrab*, another latecomer to mosque architecture, can be interpreted in secular terms, most conveniently as a throne apse transposed into a religious setting. These royal connotations could only be intensified by the addition of a dome over the bay directly in front of the *mibrab*. Underneath that same dome was the preferred location for the *maqsura*, usually a square enclosure of wood or stone reserved for the ruler, and ensuring both his privacy and his

physical safety. Each of these elements in the mosque – *mibrab*, *minbar*, *maqsura*, dome – drew added power from the proximity of the others, and together they stamped a secular and princely significance on this particular area of the mosque.

The earliest surviving mosque which illustrates this emphasis, the Great Mosque of Damascus, adds – as noted earlier – a further refinement: a high transverse gable with a pitched roof cuts across the lateral emphasis of the sanctuary and thus highlights not just the *mibrab* area but also the way to it. The extra height of the gable and the way it cleaves across the grain of the mosque underscore its proclamatory role. Sometimes, as in the *jami*'s of Tunis and Qairawan, another dome over the central archway of the sanctuary façade sufficed to



48 Tunis, Zaituna mosque, interior



49 Cordoba, Great Mosque, exterior façade

2.50-2.51  
2.95, 2.94  
2.76

create an axis focused on the *mibrab*. As at Damascus, this axis asserted itself both inside the sanctuary and – by virtue of its greater width and the consequent break in the even tenor of the roofing – externally, at roof level. The Great Mosque at Samarra probably had some such device, to judge by the extra width of the central aisle in its sanctuary. In later mosques, such as those of al-Azhar and al-Hakim (which possibly derive in this from al-Aqsa) the notion of the external gable is toned down to a broad flat strip projecting only modestly above roof level; but internally, the emphasis on the broader central nave terminating in the dome over the *mibrab* remains unchanged. It seems likely that these articulating devices were intended to mark out a processional way, presumably the formal route by which the ruler approached the *mibrab*.

2.45  
of 2.49  
2.81-2.82  
7.67

So much, then, for the various elements in mosque design for which princely associations have been proposed. Yet their mere enumeration does not tell the full story. For it is above all the occurrence of these features in mosques located next to the residence of the ruler that places their political associations beyond doubt. This close juxtaposition of the secular and the religious may well have had its roots in the Prophet's house. Be that as it may, at Basra, Kufa, Fustat, Damascus, to name only a few very early examples, the principal mosque and the private residence of the ruler adjoined each other, and the viceroy Ziyad b. Abihi said of this arrangement 'it is not fitting that the *imam* should pass through the people' – a sentiment, incidentally, not shared by many later Islamic rulers and indeed contradicted by the development outlined in the previous paragraph. The analogy with the palatine chapel in Byzantium and medieval Europe – at Constantinople and Ravenna, Aachen and Palermo – is striking. Perhaps the most public expression of the idea in the medieval Islamic world was in the Round City of Baghdad, where the huge and largely empty space at the heart of the city held only two buildings: the palace and the mosque, next door to each other. It would be hard to find the concept of Caesaropapism expressed more explicitly, or on a more gargantuan scale, than this.

#### *The rôle of structure and ornament*

The local expression of the articulating features

2.69, 2.46, 2.67

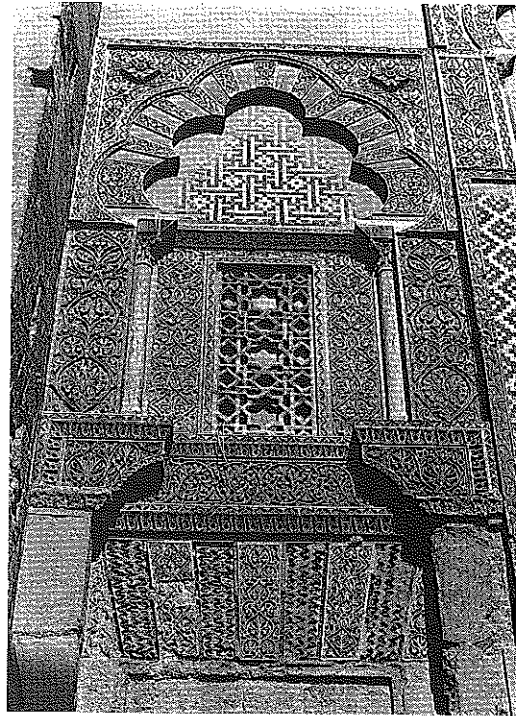
under discussion varied from one part of the Islamic world to another, but they had come to stay. Henceforth, the *jami'* of Arab plan only rarely returned to the simplicity of the 7th century. Such, however, was the strength of the traditions formed at that time that the basic nature of the earliest mosques remained substantially unchanged. They were proof, for example, against immense increases in size and against a growing interest in embellishment by means of structural innovations and applied ornament. Even the conversion into mosques of pre-Islamic places of worship, as at Damascus and Hama, was powerless to affect their essential nature. The component parts of the Arab mosque could be redistributed and re-arranged almost at will without impairing their functional effectiveness.

2.71  
2.32, 59  
2.270  
49, 50, 51  
2.136  
2.27

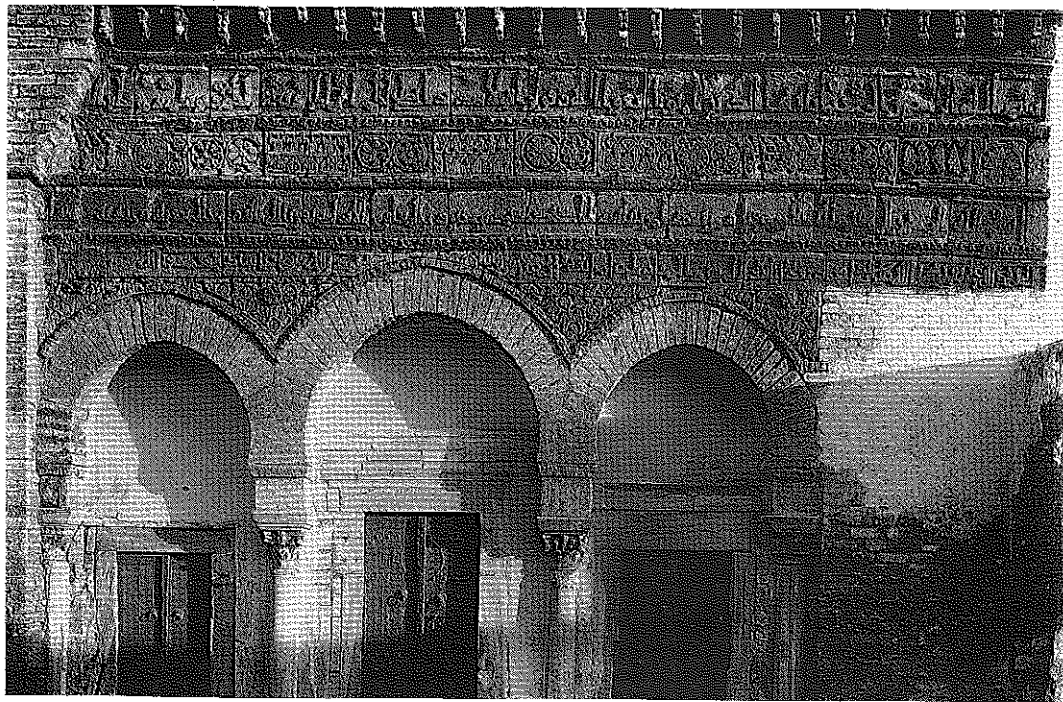
In much the same way, their idiosyncrasies of structure and decoration were purely cosmetic. The range of options in these areas was gratifyingly wide. Windows and lunettes bore *ajouré* grilles in stone or plaster with geometric and vegetal designs (Damascus mosque); wooden ceilings were painted or carved and coffered (San'a' mosque, 7th century onwards); a wide range of capitals, at first loosely based on classical models but in time becoming almost unrecognisably debased (Samarra) was developed; and piers with engaged corner colonnettes (Ibn Tulun mosque, Cairo; Great Mosque of Isfahan) rang the changes on the traditional classical column. A few mosques (e.g. Cordoba and the Three Doors mosque at Qairawan) had elaborately articulated façades or portals. Finally, the aspect of these early mosques could be varied still further by the type of flooring employed –

stamped earth, brick, stone or even marble flags – by applied decoration in carved stone or stucco, fresco, painted glass, embossed metal-work or mosaic, and even by finials on domes.

2.33 The essentially simple components of the Arab plan set a limit to the degree of diversity that could be achieved within these specifications. Most of the room for manoeuvre had been exhausted within the first four centuries of Islamic architecture. Thus the subsequent history of the Arab plan cannot match the early period for variety and boldness; the later mosques, moreover, lie very much in the shadow of their predecessors, to such an extent that it is hard to single out significant new departures in these later buildings. It can scarcely be doubted that the presence of the great Umayyad and 'Abbasid mosques, built at the peak of its material prosperity, acted as a signal deterrent to later architects with substantially



50 Cordoba, Great Mosque, window



51 Qairawan, Mosque of Muhammad b. Khairun, façade

less money, men and materials at their disposal. In these early centuries the caliphal permission, not readily granted, had been required for the construction of a *jami'*, making it a major undertaking and correspondingly hard to emulate. By the 11th century, moreover, most of the major Muslim cities had their own *jami'*, so that the need for huge mosques had much declined.

Although mosques of Arab plan have continued to be built throughout the Islamic world until the present day, in the medieval period there were only two areas where they achieved dominance: in the Western Islamic lands before they fell under Ottoman rule, and in pre-Ottoman Anatolia. These areas will therefore provide the material for most of the discussion which follows. Nevertheless, sporadic references will be made to mosques elsewhere, for instance in Egypt and the Yemen.

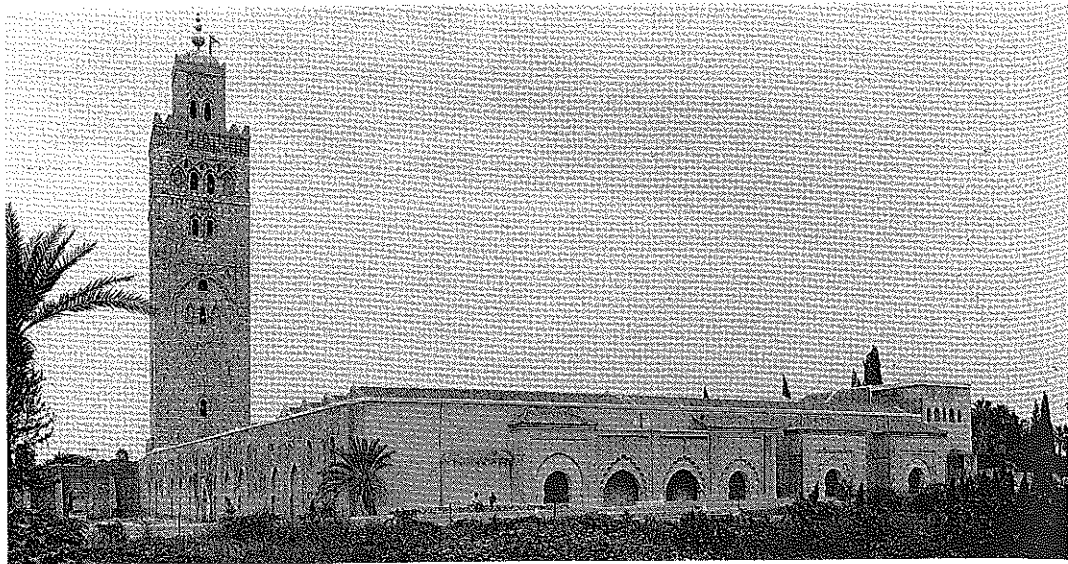
#### *Maghribi mosques*

The Maghrib rightfully takes pride of place in this account because for almost a millennium

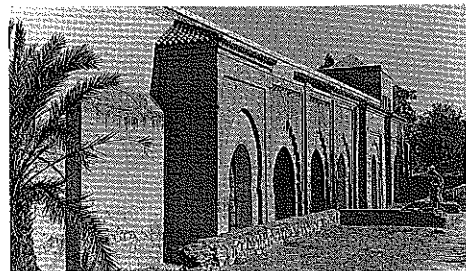
virtually no mosque that was not of Arab type was built there. Here, then, is to be found the most homogeneous and consistent development of that type. Its sources lie, like so much of Maghribi art, in Syria, and specifically in the Great Mosque of Damascus. Its transverse gable becomes a leitmotif in Maghribi mosques, and in some cases (such as the Qarawiyyin Mosque, Fez, founded 226/841 but largely of the 12th century) is associated with the same proportions as the Syrian building, including the relatively shallow oblong courtyard imposed on the Damascus mosque by the classical *temenos* but copied thereafter in other mosques as a deliberate feature. In the Mosque of the Andalusians at Fez (600-4/1203-7) the Damascus schema is retained despite a jaggedly irregular perimeter and trapezoidal courtyard; and, as at the Qarawiyyin mosque, the main entrance to the mosque is aligned to it, a refinement not found at Damascus. The length of the gable has also increased considerably, though its height is modest.



52 Fez, Qarawiyyin mosque, façade of sanctuary



53 Marrakesh, Kutubiya mosque, general view



54 Marrakesh, Kutubiya mosque, lateral façade

In later Maghribi mosques especially, the emphasis shifted from the exterior elevation of the gable to its impact from within the building. It attracts unusually intricate vaulting, often of *muqarnas* type, as in the Qarawiyyin mosque, or may be marked by domes ranging in number from two (Tlemcen, 531/1136) to six (second Kutubiya, Marrakesh, mid-12th century). The latter mosque has a further five cupolas placed three bays apart along the transverse *qibla* aisle. Thus by means of vaulting alone is created a T-shape which combines the secular and religious emphases of the *jami*. Fewer vaults or domes, more strategically placed – for example at the *mibrab*, the sanctuary entrance and the corners of the *qibla* wall – could suffice to carry the T-shape into the elevation, but the form

could be created at ground level alone by means of a wider central nave and by ensuring that the vaults stopped one bay short of the *qibla*, thus opening up dramatically the space immediately in front of it. The T-shape can indeed claim to be the principal Maghribi contribution to the development of mosque form, though horseshoe arches and square minarets were equally characteristic of the style. This T-shape also made its way, presumably via Libya (e.g. the mosques of Ajdabiya and Madinat Sultan) to Egypt.

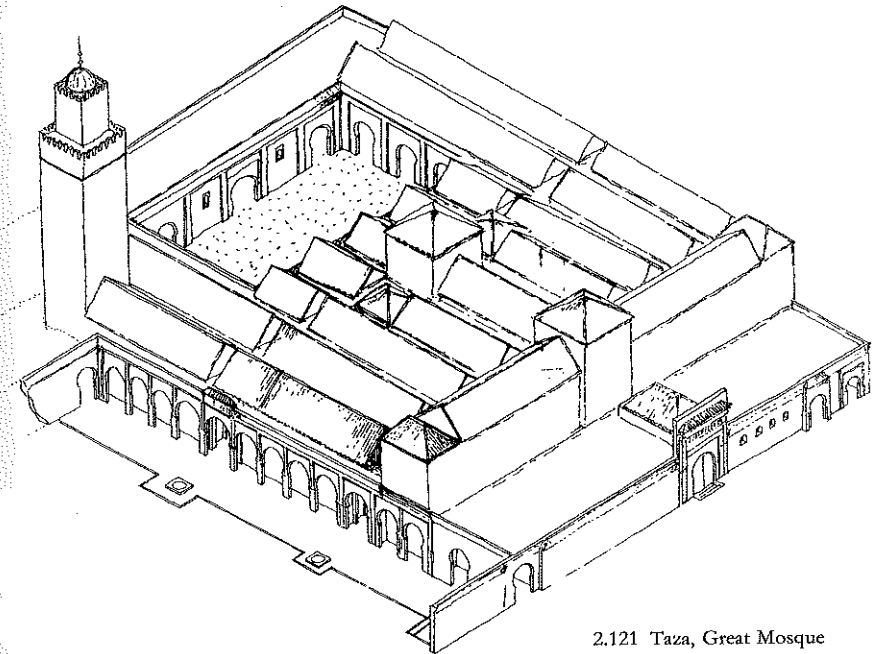
Three other features distinguish Maghribi mosques from those found elsewhere in the Islamic world, though all have their origins in al-Andalus: the use of pierced, ribbed or fluted domes, especially over the *mibrab*; the manipulation of arch forms to create hierarchical distinctions by means of gradual enrichment; and a readiness to alter the size, shape and location of the courtyard in response to the imperatives of a specific design. The ribbed domes (e.g. *jami*'s of Taza, 537/1142 and 691/1291–2, and Algiers, c.490/1097) derive from those of the Cordoba mosque, but elaborate on them by cramming them with vegetal designs in carved stucco or by increasing the number of ribs from the usual eight to twelve (Tlemcen *jami*) or even sixteen

(Taza *jami*). This practice gives free rein to the characteristically Maghribi obsession with non-structural arched forms, here used as a lace-like infill between the ribs; the overall effect is one of feathery lightness and grace. The light filtered through these domes suffuses the area of the *mibrab* with radiance, perhaps as a deliberate metaphor of spiritual illumination, an idea rendered still more potent when, as is often the case, that *mibrab* bears the popular text of Sura 24:35, 'God is the light of the heavens and the earth; the likeness of His light is as a niche wherein is a lamp . . .'

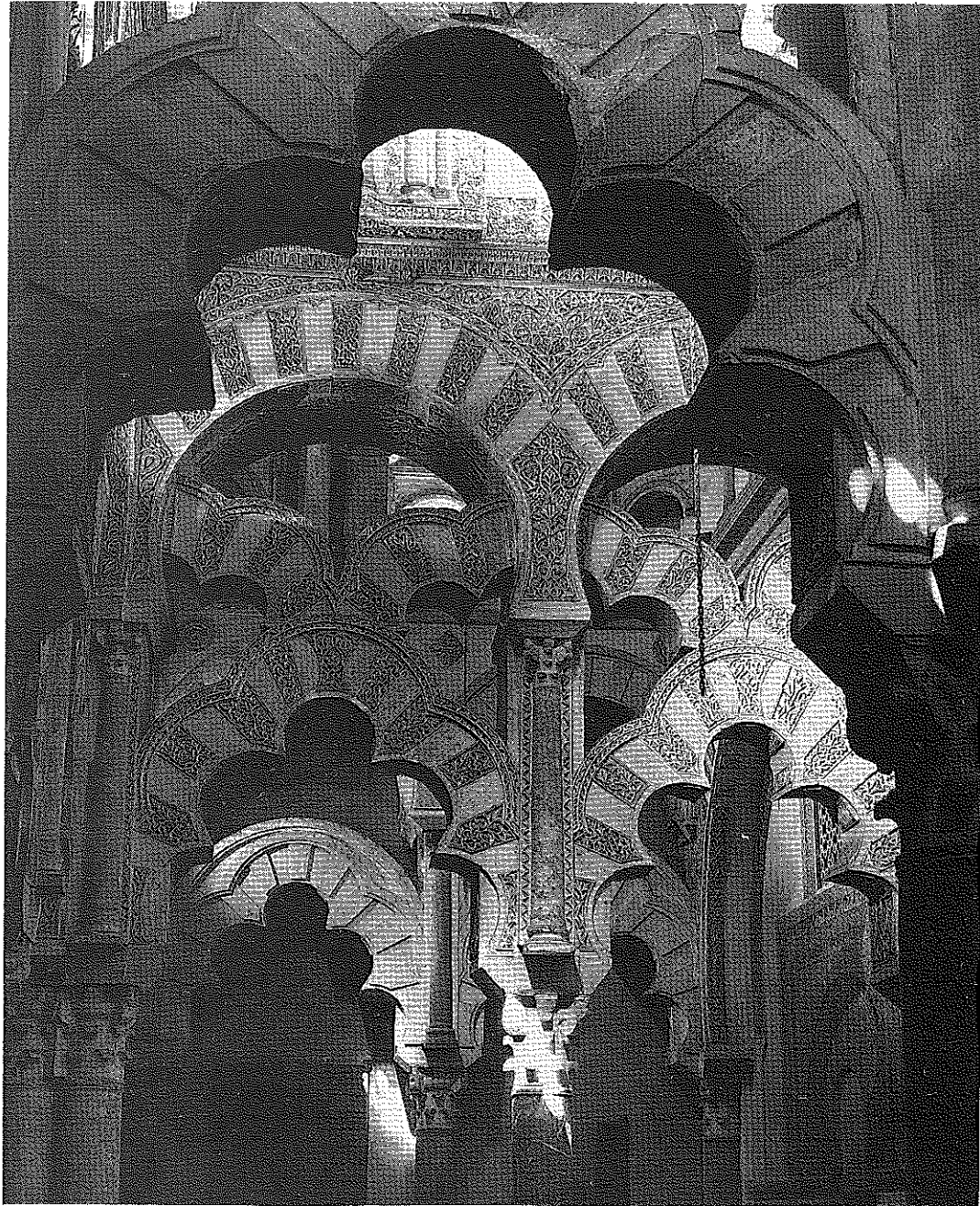
Long files of arcaded columns stretching in multiple directions and generating apparently endless vistas are a particular feature of Maghribi mosques. The distinctive 'forest space' thereby created finds its fullest expression in the fourth major rebuilding of the Cordoba mosque, the unchallenged masterpiece of Western Islamic architecture, and the major Almoravid and Almohad mosques are best interpreted as reflections of this great original. Where the Cordoba mosque, however, employed systems of intersecting arches and carefully differentiated types of capital to establish hierarchical distinctions, later Maghribi *jami*'s typically use a wide range of arch profiles

to the same end. These include, besides the ubiquitous horseshoe type already noted, lobed, multifoil, interlaced, cusped, trefoil, lambrequin and other varieties. They spring from piers, not columns, and this, coupled with the low roof, dim lighting and the general absence of ornament unconnected with vaulting, lends these interiors a ponderous austerity. Against this general background of parsimonious simplicity, the sudden switch from plain arch profiles for most of the sanctuary to elaborate ones for the axial nave alone constitutes a dramatic enrichment of the interior. Sometimes the transverse aisle in front of the *qibla* wall attests a third type of arch profile, and thus a further gradation of importance is emphasised.

In most western Islamic mosques the courtyard is something of an appendage. It is almost always very much smaller than the covered space. Custom decreed that it was isolated at the opposite end of the mosque from the *mibrab*, and that it should either be contiguous to the outer wall or be separated from it by no more than a single aisle. By contrast, the sanctuary tended to be of disproportionate depth and extent. This meant that the courtyard was never able to function as the heart of the mosque. Only when



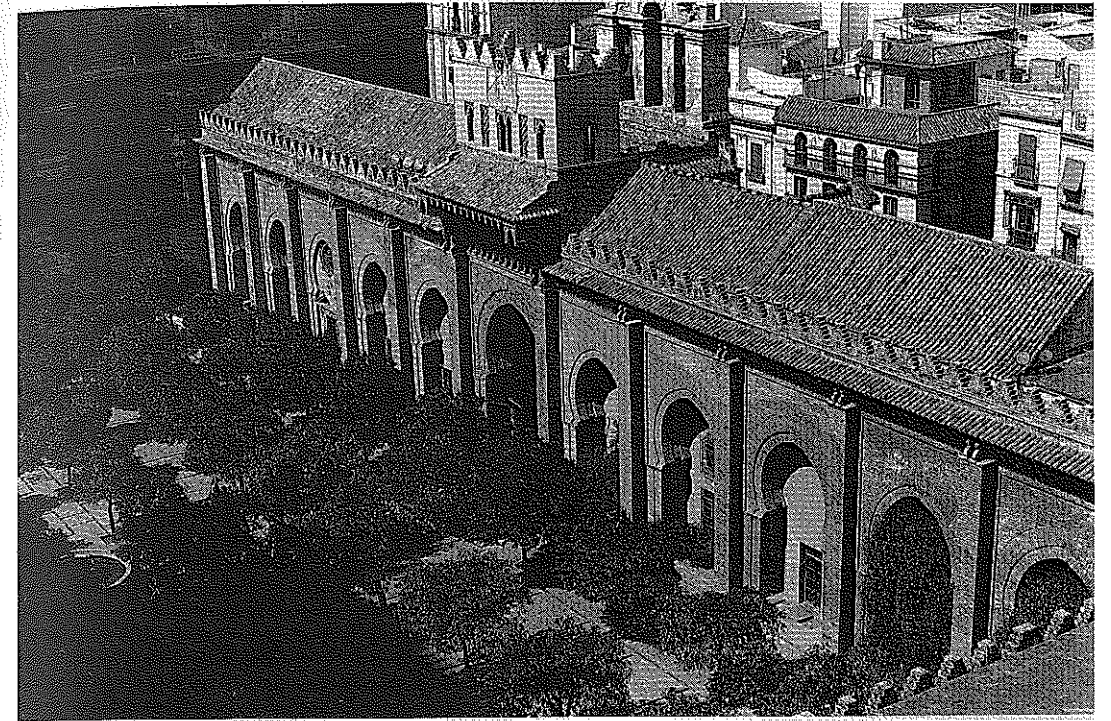
2.121 Taza, Great Mosque



55 Cordoba, Great Mosque, Capilla de Vilaviciosa, interlacing arches

2.106 the sanctuary was reduced, as in the Qasba mosque in Marrakesh (581–6/1185–90), with its pronounced cruciform emphasis, was the court-

yard able to play a more central role, both literally and figuratively. In narrow rectangular plans it can be a diminutive square box hemmed

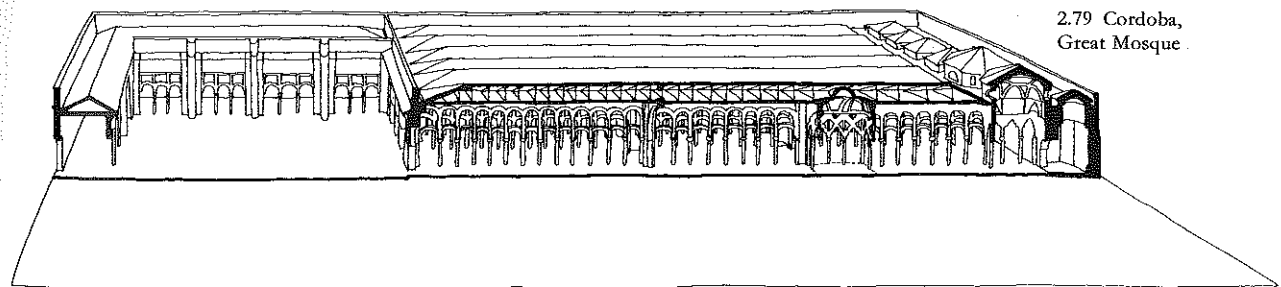


56 Seville, Great Mosque, façade of sanctuary

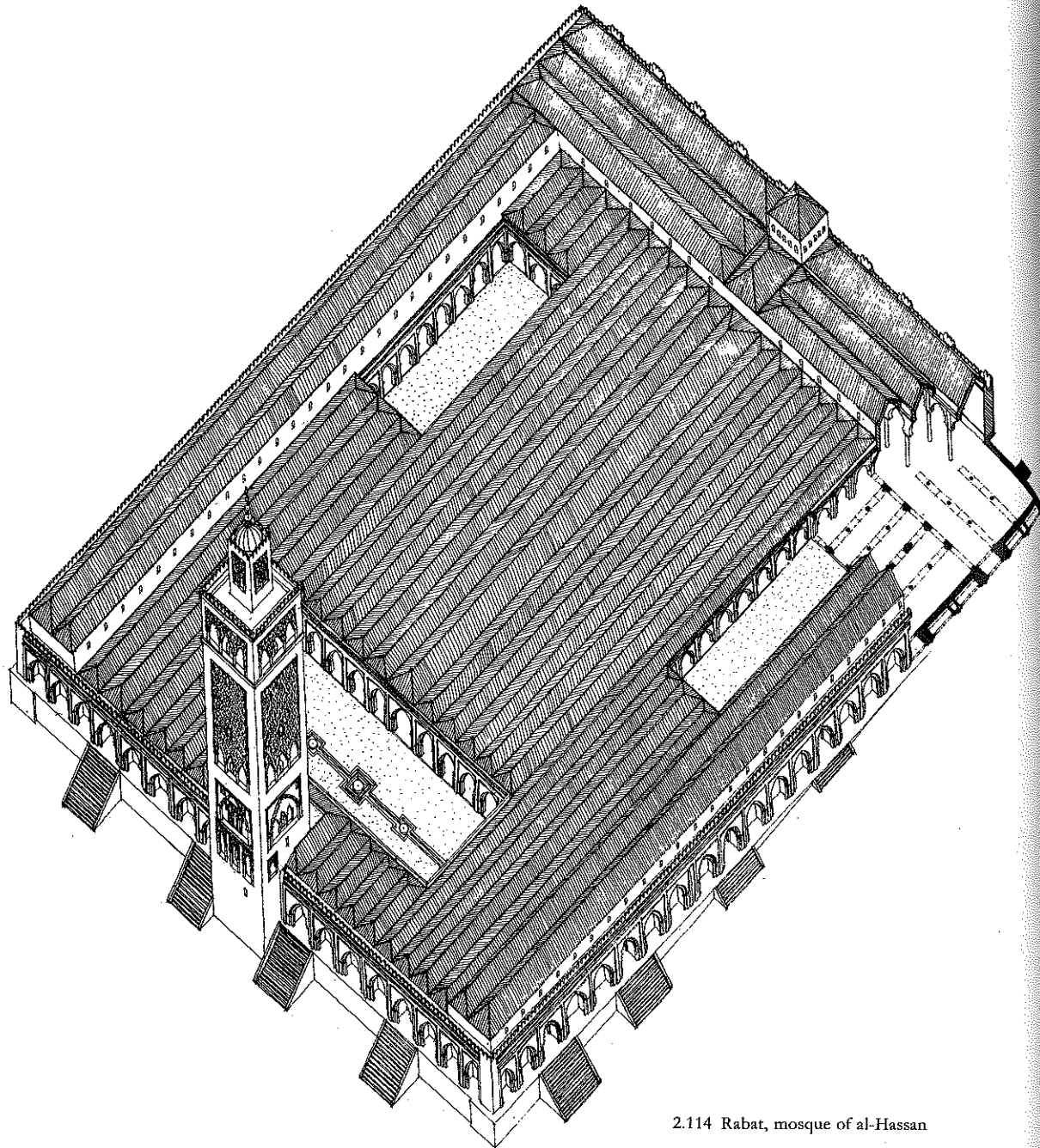
2.101 in by deep lateral aisles (mosque of al-Mansura, 704–45/1304–44), or an extended shallow oblong (mosque of Seville, c.571/1175). In oblong plans it faithfully mirrored that emphasis on a diminutive scale (Tinmal, 548/1153; second Kutubiya, Marrakesh, c.555/1160). Exceptional on all counts is the gigantic but unfinished mosque of Hassan, Rabat (c.591/1195), whose scale of 180 × 139 m. makes it the second largest medieval mosque in the world, after the Great Mosque of Samarra. Here the typical shallow

oblong courtyard is supplemented by two lesser and narrow courtyards perpendicular to the *qibla* and along the lateral walls. These were, it seems, intended for men and women respectively, but they would also have served for ventilation and lighting, besides offering visual relief to the endless march of columns. Later medieval Maghribi mosques decisively rejected such gargantuan scale in favour of a more domestic atmosphere, as shown by numerous examples at Fez and Tlemcen.

2.139–2.141, 2.122–2.123 2.141



2.79 Cordoba, Great Mosque

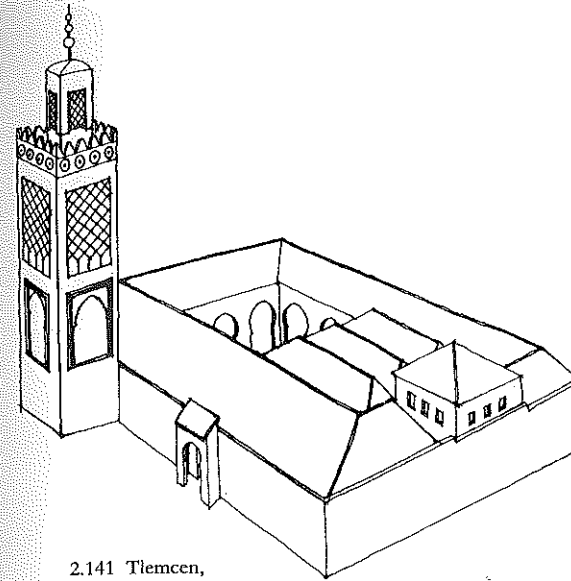


2.114 Rabat, mosque of al-Hassan

*Yemeni mosques*

Apart from the Maghrib, it was principally in the Yemen that the large hypostyle mosque maintained its popularity throughout the medieval period. Inadequate publication has

meant that these buildings are less well known than they deserve, and without excavation the dating of many of them will remain problematic. This is particularly regrettable because several of them were built on the sites of pre-Islamic

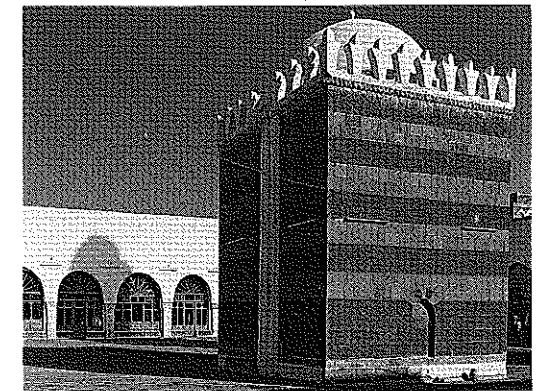


2.141 Tlemcen, mosque of Sidi al-Halwi

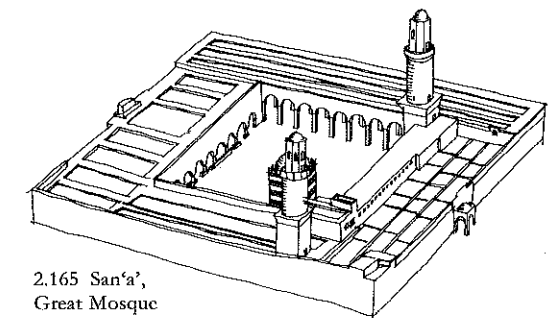
2.162 temples (e.g. mosque of Sulaiman ibn Da'ud, Marib), churches or synagogues (e.g. al-Jila mosque, San'a'), and *spolia* from these earlier buildings – such as columns, capitals, inscriptions and even sculptures of birds – are used very widely. Persistent local tradition attributes the *jami's* of San'a' and al-Janad to the time of the Prophet; both were probably rebuilt by al-Walid I. The former has preserved much more of its original appearance: perimeter walls of finely cut stone in stepped courses enclose a roughly square shape with a central courtyard, with the sanctuary only slightly deeper than the other sides. The Sa'da mosque, another early foundation, has had its similar original layout transformed by a domed transept and numerous subsidiary buildings. This gradual transformation by the addition of prayer halls, mausolea, ablutions facilities and the like is a recurrent pattern in the Yemen (*jami's* of Zabid, Thula and Ibb).

Small hypostyle mosques of square form (Asnaf, 13th century), or of rectangular shape, whether broad and shallow oblongs (Tithid, 13th century) or narrow and deep (Tamur, 11th century or earlier), are common, and a few larger mosques of this kind, still without a courtyard, are known (Dhibin, after 648/1250).

The commonest form, however, comprises a structure that is rectangular or trapezoidal (Masjid al-Saumi'a, Huth, 13th century) with a central courtyard and extensive covered *riwaqs* on all sides (Rauda *jami'*, 13th century; Asnaf). Often this formula is enriched by a lavishly carved or painted wooden ceiling over the sanctuary area alone (Shibam *jami'*, 10th century; Asnaf) or by the incorporation of mausolea (Zafar Dhibin, 13th century; funerary mosque of the Imam al-Hadi Yahya, Sa'da, 10th century and later) or of minarets (Jibla, 480/1087; Dhu Ashraq, 410/1019). Influences from the central Islamic lands explain the use of wider central aisles in the sanctuary (Zafar Dhibin, Ibb, Jibla, Dhu Ashraq) and a concentration of domes along the *qibla* wall (enlargement of Ibb *jami'*; mosque-*madrasas* of al-Muzaffariya and al-Ashrafiya, both 13th century, Ta'izz). The glory of these Yemeni mosques as a group lies in their decoration: exceptionally long bands of stucco inscriptions (mosques of Dhamar and Rada',

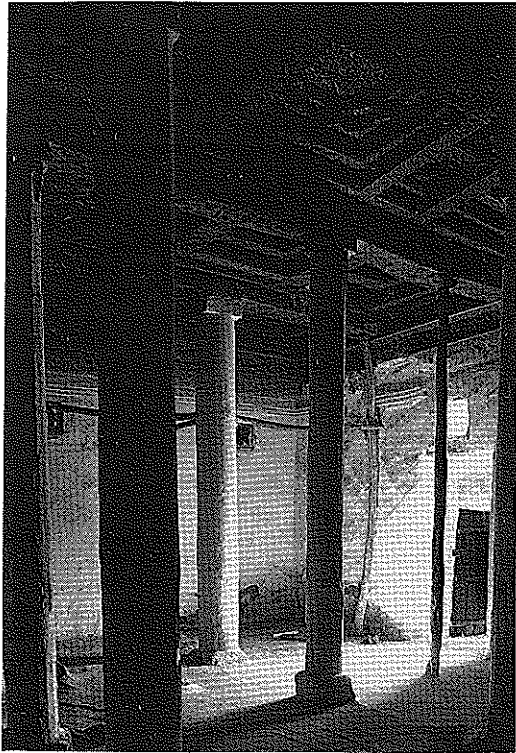


57 San'a', Great Mosque, courtyard

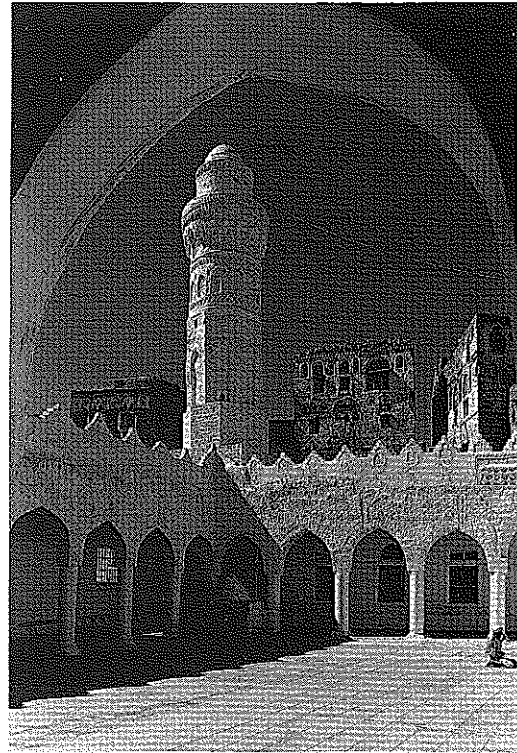


2.165 San'a', Great Mosque

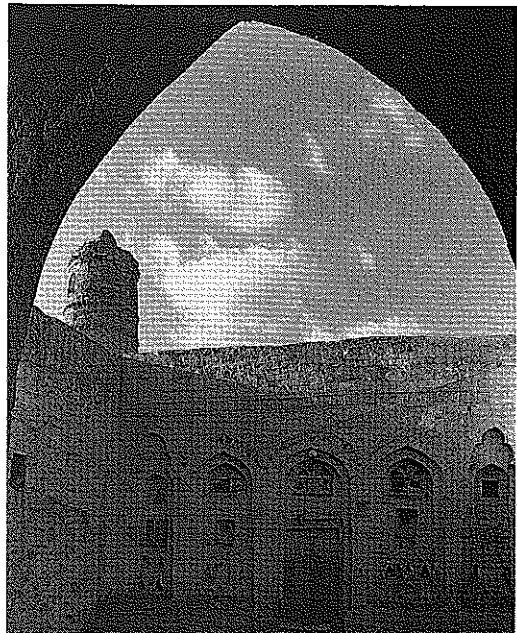




58 Asnaf, Masjid al-'Abbas, interior



59 Ibb, Great Mosque, courtyard



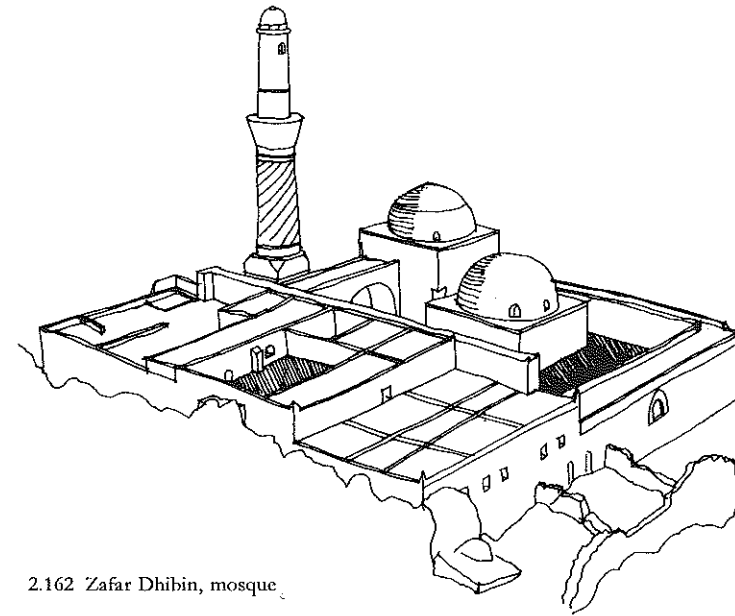
60 Dhu Ashraq, mosque, courtyard

13th century and later), frescoes with epigraphic, floral and geometric designs (Rasulid mosques of Ta'izz), and a matchless series of carved and painted wooden ceilings (Zafar Dhibin, Asnaf, Sarha, Dhibin, Shibam, San'a' and others). Their minarets, too (Zabid; Zafar Dhibin; al-Mahjam) are some of the most varied in the Islamic world.

*Anatolian hypostyle mosques*

For all that pre-Ottoman Anatolia was a fertile field for innovation in later medieval experiment with the hypostyle mosque, its contribution cannot seriously match that of the Maghrib and al-Andalus, not least because of the much shorter time span, a mere three centuries; discussion of it will accordingly be brief. The earliest surviving mosques well illustrate the dependence of local builders on more developed traditions of Arab and Persian origin. The Great Mosque of Diyarbakr (484/1091) follows the transept schema of Damascus, while those of Mayyafariqin (550/1155), Dunaysir (601/1204)

11, 17, 2204, 2.192-2.193

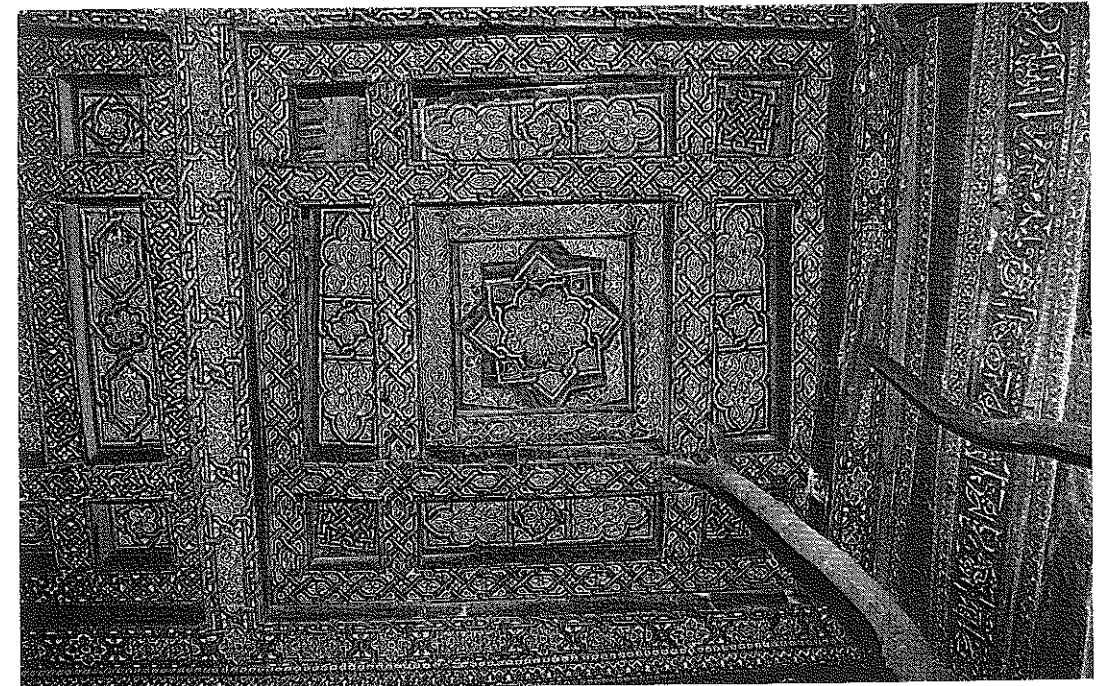


2.162 Zafar Dhibin, mosque

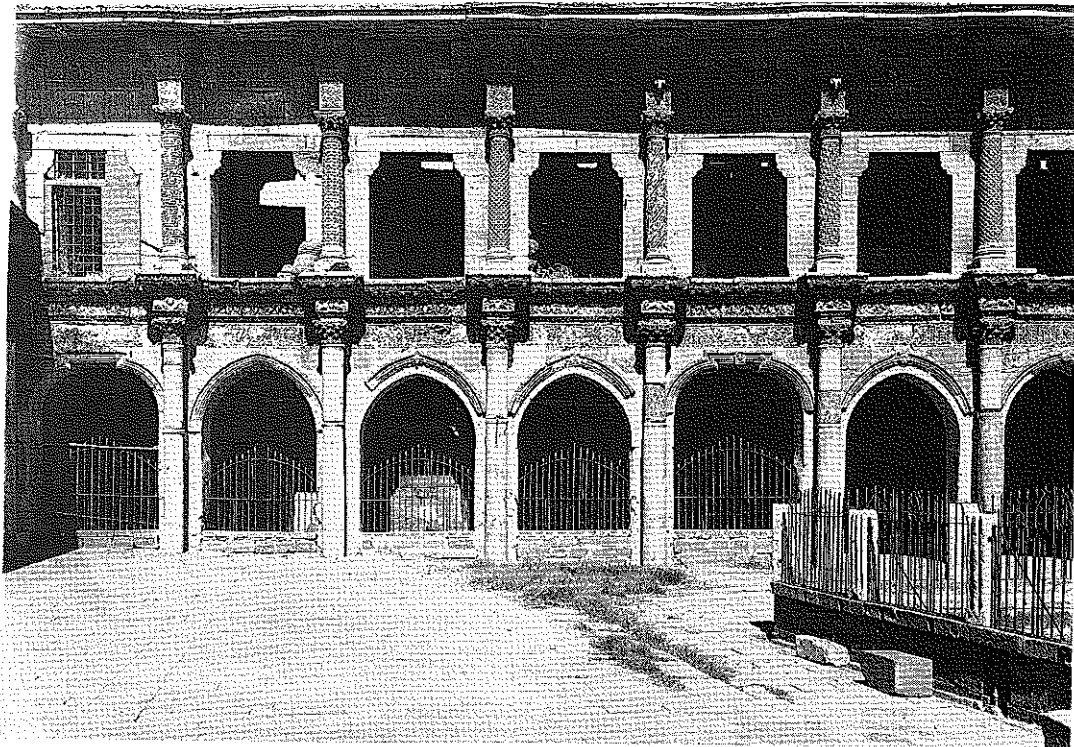
and Mardin (largely 12th century) follow Iranian precedent in their emphasis on a monumental dome rearing up out of the low roofing of the sanctuary and set squarely in front of the *mibrab* bay. Their foreshortened courtyards,

2.194  
2.168, 2.205

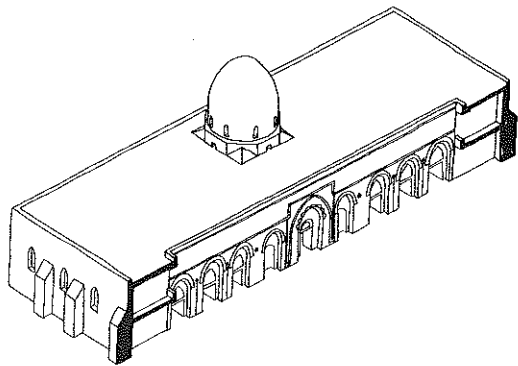
however, owe nothing to Iranian precedent and instead presage later developments. So too did the increasing tendency to use domical forms rather than modular trabeate units as the principal means of defining space.



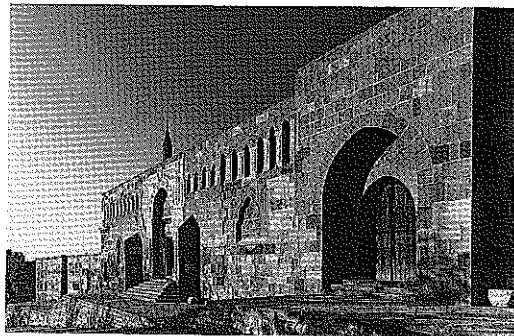
61 Asnaf, Masjid al-'Abbas, ceiling



62 Diyarbakır, Great Mosque, sanctuary façade

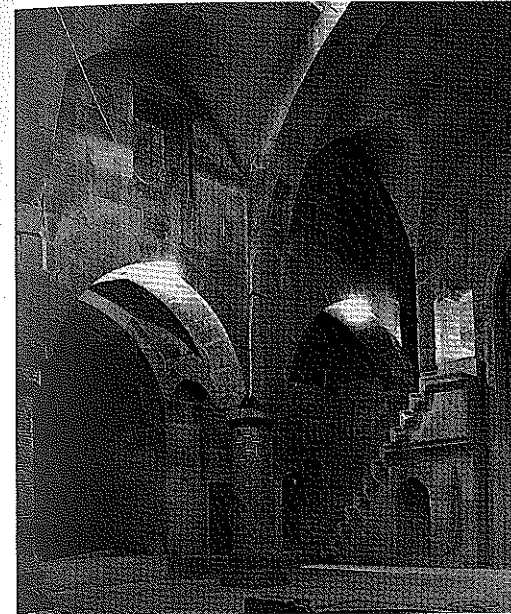


2.193 Dunaysir, Great Mosque



63 Konya, 'Ala' al-Din mosque, main façade

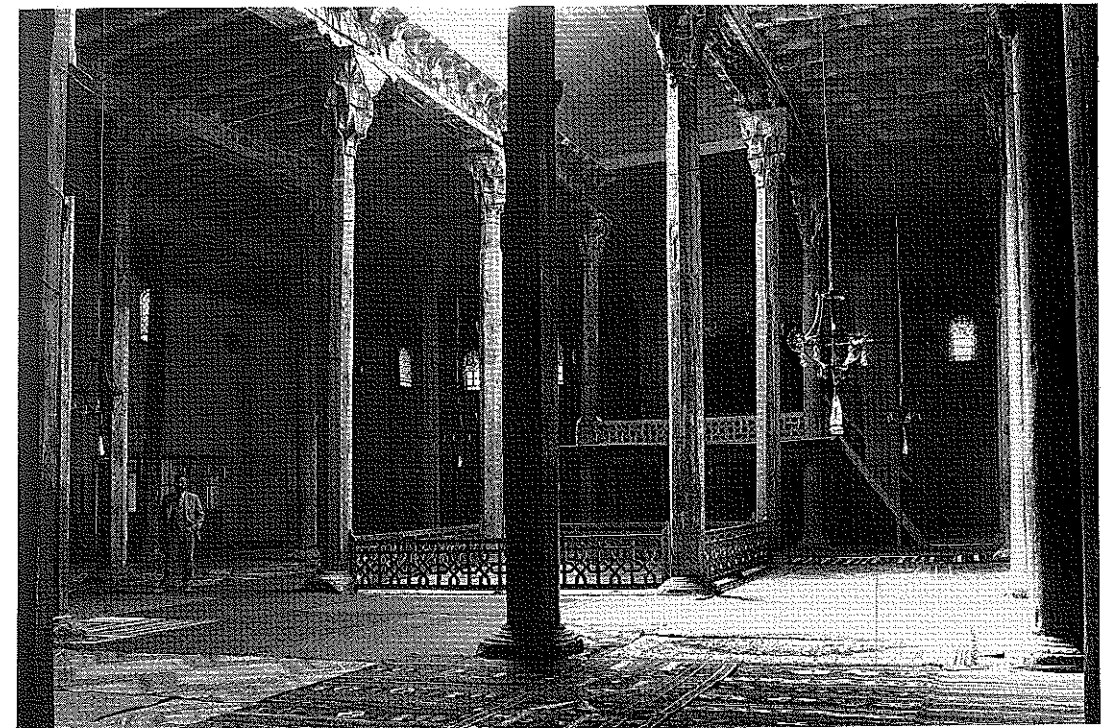
The buildings of the 12th and 13th centuries sufficiently demonstrate the embryonic state of mosque design in Anatolia, for the variety of plans is bewildering and defies easy categorisation. The absence of direct copies of the classical Arab type of plan is striking, though modifications of it were legion. A common solution was to do without the courtyard altogether – perhaps a response to the severe Anatolian



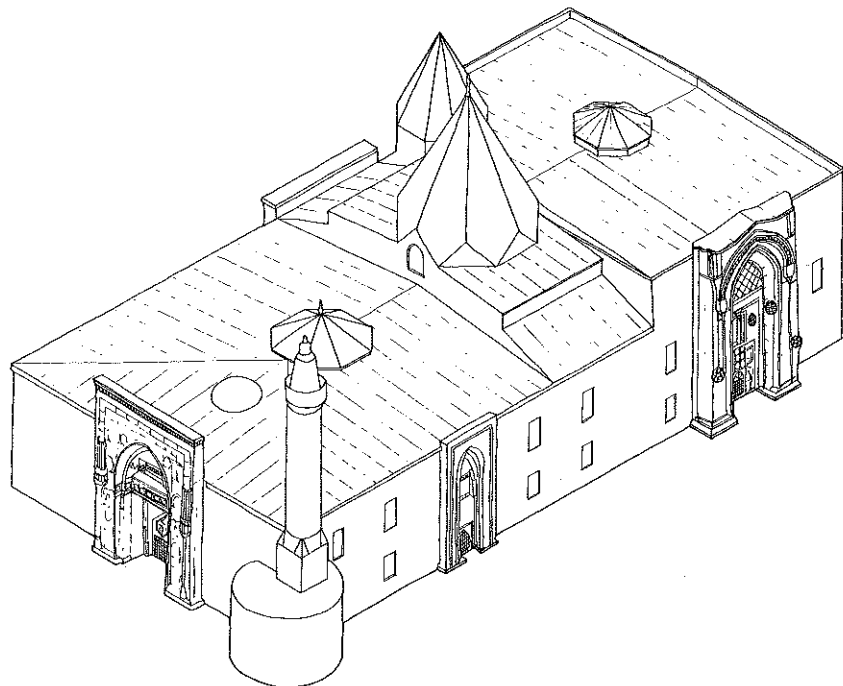
65 Divriği, mosque and hospital, interior of hospital

winter – and reduce the mosque to a wooden-roofed hall resting on a multitude of columns or pillars ('Ala' al-Din mosque, Konya, 530/1135 to 617/1220; Sivas, c.494/1100; Afyon Karahisar, 672/1273; Beyşehir, 696/1296). Usually the minaret was outside the mosque and therefore not integrated into the layout. Sometimes a similar design was executed in multiple small vaults (Divriği, castle mosque, 576/1180; Niksar, 540/1145; Urfa, 12th century), and indeed the preference for vaulted as distinct from trabeated construction is well marked even at this experimental stage. Whatever the roofing system adopted in these enclosed mosques, the scope for development in either direction was small, while poor lighting, a sense of cramped space and inadequate ventilation were virtually inevitable. Huge piers and low vaults gave many of these mosques a crypt-like appearance ('Ala' al-Din mosque, Niğde, 620/1223; Sivas, Ulu Cami).

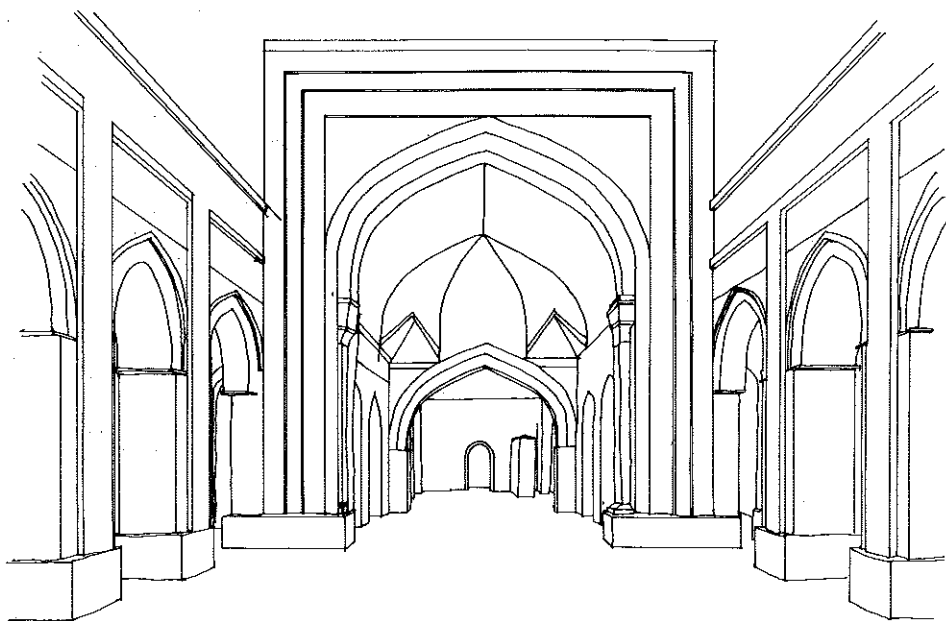
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2.170, 2.191  
64, 2.198  
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2.185, 2.171  
2.212-2.213  
2.170



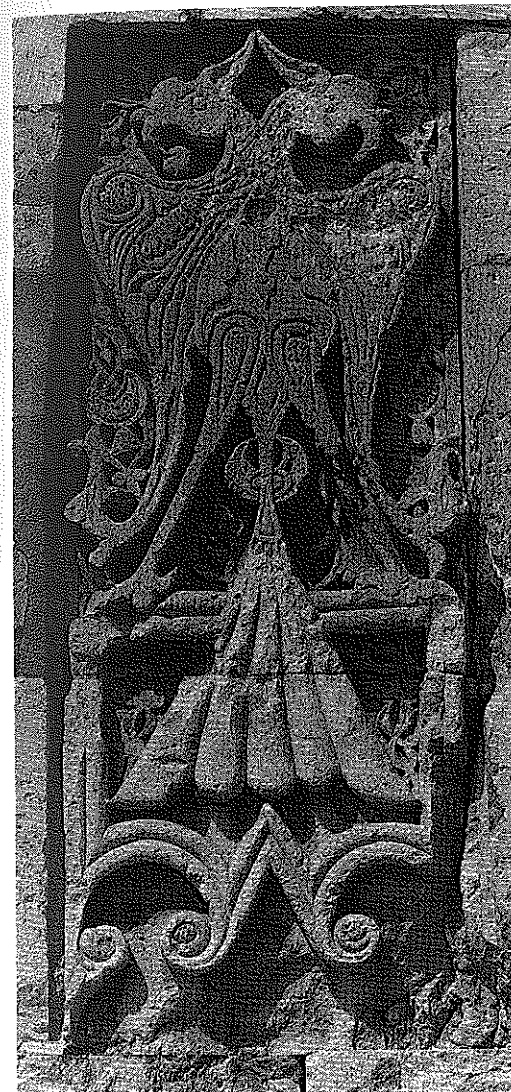
64 Beyşehir, Eşrefoghlu Süleyman Bey Cami, interior



2.210 Divriği, Great Mosque and hospital



2.203 Malatya, Great Mosque, qibla ivan



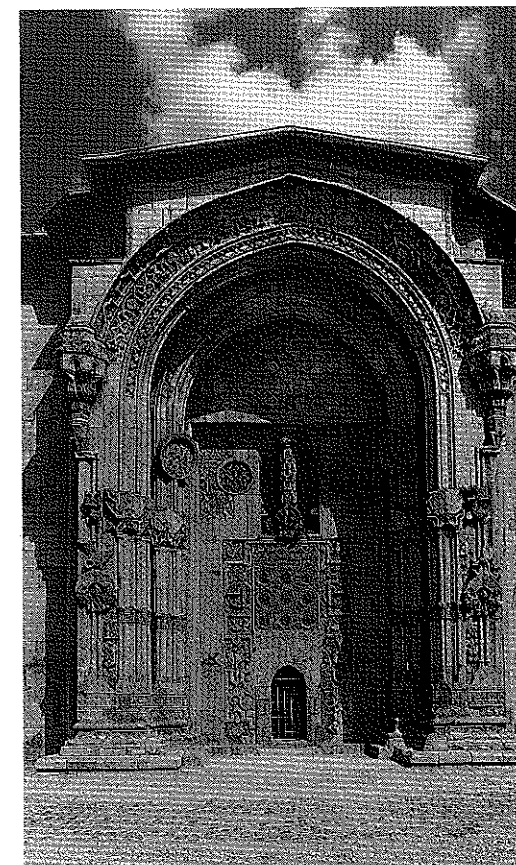
66 Divriği, mosque and hospital, exterior sculpture

The obvious way forward was to allot a more significant role to the dome, a decision made at an early stage (Great Mosque of Erzurum, 530/1135; Kayseri, 535/1140; and Divriği, 626/1229), but by no means universally accepted. In such mosques the domed bay is invariably the largest of all and is placed along the axis of the *mibrab*. This emphasis on the totally enclosed covered mosque, sometimes – as in the Konya region – reduced to a single domed chamber, occasionally with a porch, was to remain the principal

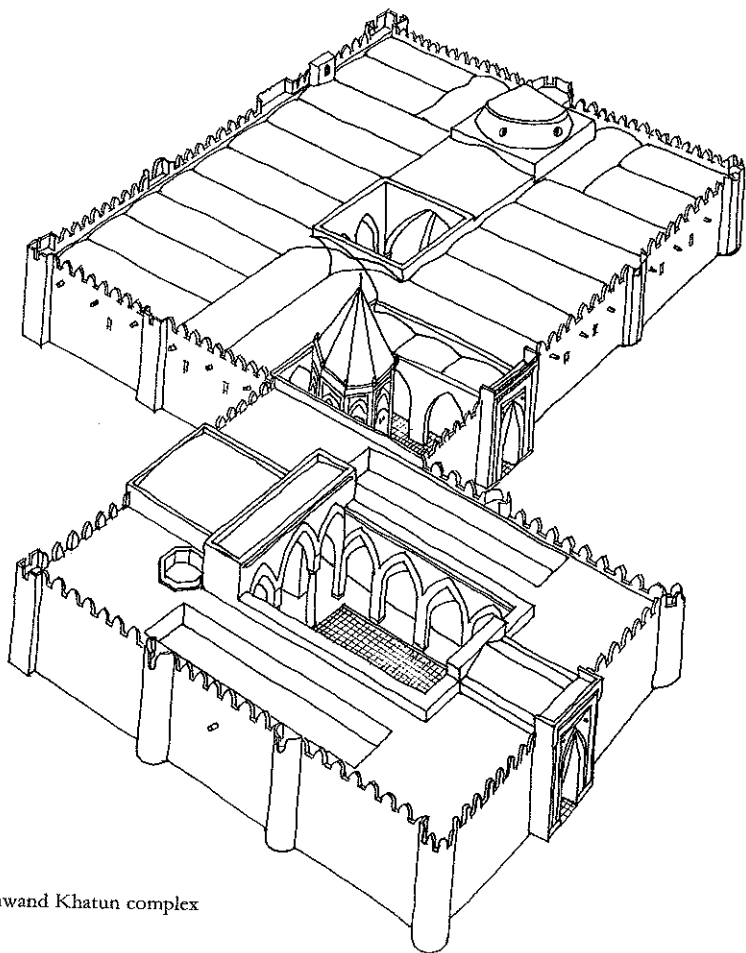
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2.209-2.210  
  
2.173-2.175

feature of Turkish mosque architecture, and as a natural corollary fostered a compact and integrated style. Sometimes a small courtyard is squeezed into this design (Malatya, 635/1237; Kayseri, Mosque of Khwand Khatun, 635/1237; Harput, 560/1165). By degrees, however, the courtyard was relegated to one of two functions: as a forecourt, akin to the atrium of Byzantine churches and thus heralding the mosque proper, instead of being co-equal to the sanctuary; and as a bay within the sanctuary, furnished with a skylight and a fountain as a symbolic reminder of the world outside. Sometimes these two uses coincided. The skylight bay (*shadirvan*) was normally placed along the axis of the *mibrab* and thus served as a secondary accent for it, in much the same manner as a central dome.

The 14th century saw no major developments in hypostyle plans. Flat-roofed prayer halls –



67 Divriği, mosque and hospital, south-west portal



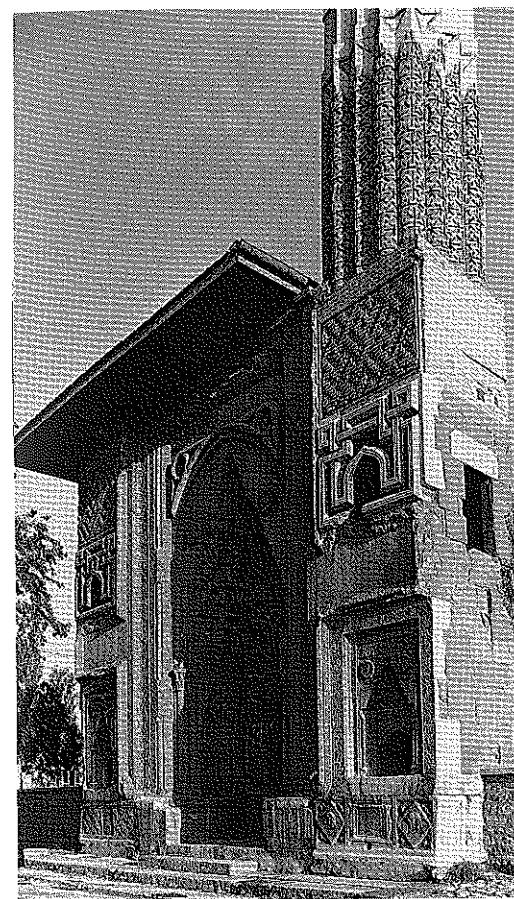
2.180 Kayseri, Khwand Khatun complex

some with wooden-roofed porches (Meram mosque, Konya, 804-27/1402-24), others, especially in the Qaraman region, without them – continued to be built. So too did hypostyle mosques with vaulted domical bays (Yivli Minare mosque, Antalya, 775/1373; the type recurs both in eastern Anatolia and Ottoman territory in Bursa and Edirne). Variations on the Damascus schema, with the transept replaced by one or more domes, a raised and wider central aisle, a skylight bay, or any combination of these, were frequent (‘Isa Beg mosque, Selcuk, 776/1374; Ulu Cami, Birge, 712/1312; mosque of Akhi Elvand, Ankara, c.780/1378). Finally, mosques with an enlarged domed bay in front of

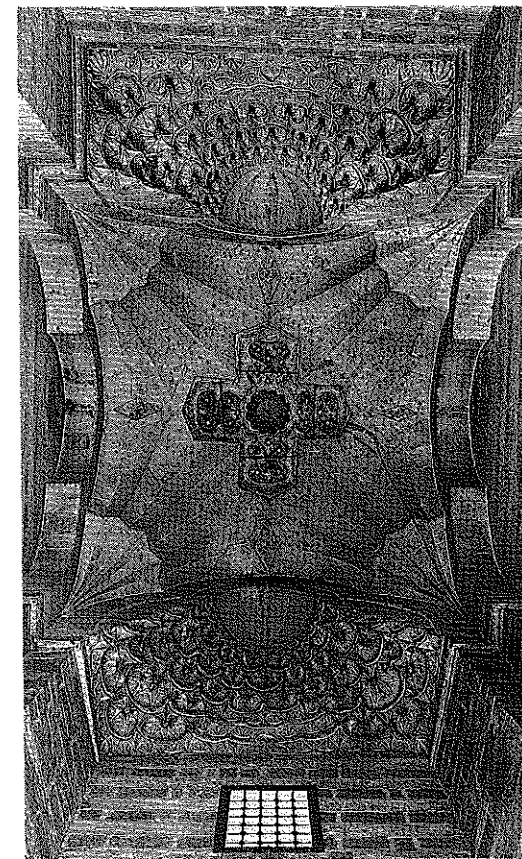
the *mibrab* spread from their earlier base in south-eastern Anatolia, an area bounded to the east by the Ulu Cami in Van (791-803/1389-1400?) and to the west by that of Manisa (778/1376). In the latter mosque the *qibla* side is dominated by the dome and takes up almost half the mosque; a large arcaded courtyard with a portico accounts for the rest. With such buildings the stage is set for Ottoman architecture and Arab prototypes are left far behind.

These Anatolian mosques depart still further from the norm of the hypostyle type in their predilection for elaborate integrated façades. While earlier mosques of Arab type frequently singled out the principal entrance by a mon-

umental archway, often with a dome behind it, the tendency was to keep the façade relatively plain. Only in the highly built-up areas of the major cities of the Near East, such as Cairo, Jerusalem, Damascus and Aleppo, did the extreme shortage of space, and often the small scale of the mosques themselves, oblige architects to draw attention to them (e.g. the Aqmar mosque, Cairo, 519/1125). Portals were especially favoured for this purpose (e.g. mosque of al-Mu’ayyad, Cairo). In Anatolia the tenacious Armenian tradition, which favoured extensive external sculpture and articulation, may well have predisposed Muslim architects in this area to develop integrated decorative schemes for the main façades of their mosques. A monumental



68 Konya, Sahib ‘Ata’ mosque, portal

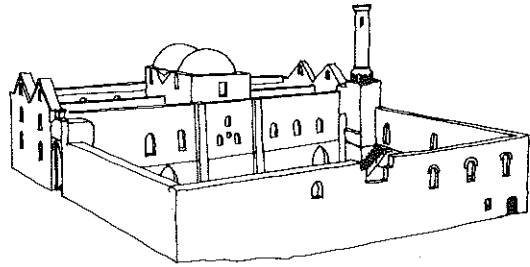


69 Cairo, Mosque of al-Mu’ayyad, vault in portal

stone portal or *pishtaq*, often an *iwān*, was the standard centrepiece for such designs. It could be strongly salient and tower well above the roof-line (Divriği Cami). Further articulation was provided by ranges of recessed arches with decorative surrounds (Dunaysir), open or blind arcades along the upper section of the façade (Mayyafariqin and ‘Ala’ al-Din mosque, Konya), and windows with densely carved frames (‘Isa Beg mosque, Selcuk).

#### Egypt

It seems possible that some of the more elaborate Mamluk mosque façades in Cairo, such as those of Baibars (660/1262) and Sultan Hasan (757/1356) may derive, if at several removes, from Anatolian prototypes of the kind discussed above. It is noteworthy, however, that in general the mosques of the Ayyubid and



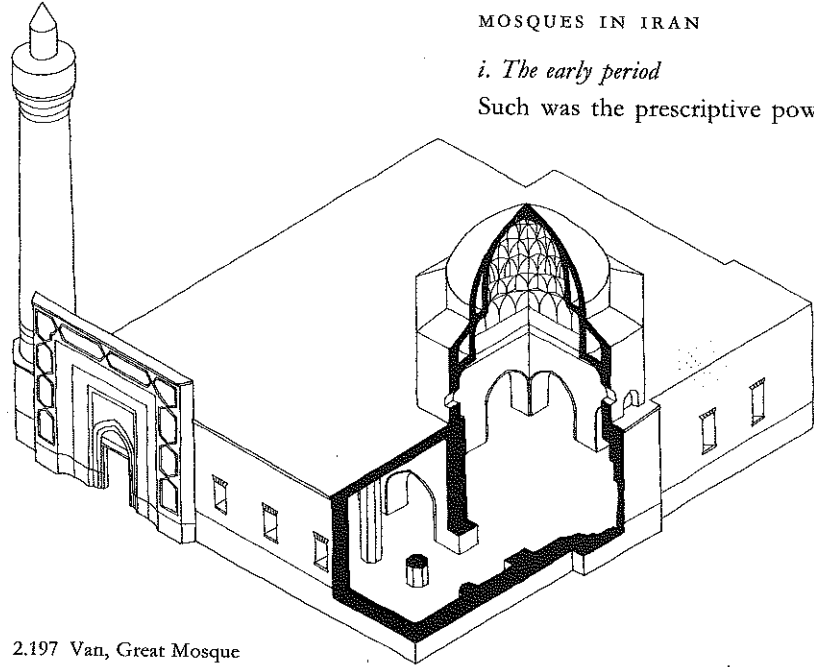
2.200 Selcuk (Ephesus), mosque of 'Isa Beg

time, not surprisingly, joint foundations became the norm, in which the mosque was a mere oratory, a component in some larger complex, a development foreshadowed in Fatimid times by the mosque (or *zawiya*?) of al-Juyushi. Eventually, too, the forms of mosques came to reflect those of contemporary *madrasas* more than the hypostyle plans of earlier periods. Hence the dominance of small domed mosques such as the 14th-century Mamluk *jami*'s of Tripoli. Such buildings have no bearing on the history of the Arab mosque plan.

MOSQUES IN IRAN

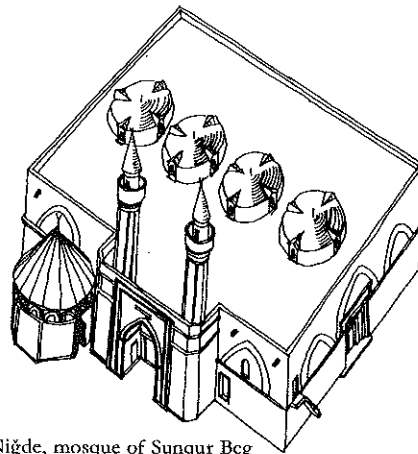
i. The early period

Such was the prescriptive power of the 'Arab

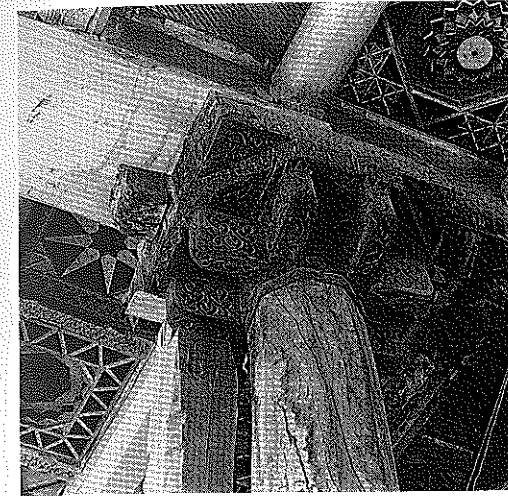


2.197 Van, Great Mosque

Mamluk period offer little scope for large-scale reworking of the hypostyle plan, since they were too small. The mosque of Baibars and that of al-Nasir Muhammad b. Qala'un in the Cairo citadel (718/1318), which is a free copy of it, provide exceptions to this rule; in both cases a monumental dome over the *mibrab* bay is the principal accent of an extensive covered space. The relative scarcity of major mosques in this period not only reflects the primacy of the great early *jami*'s still in use, which made further such buildings redundant; it also marks a shift in patronage away from mosques towards mausolea, *madrasas*, *kbanqabs* and the like. In



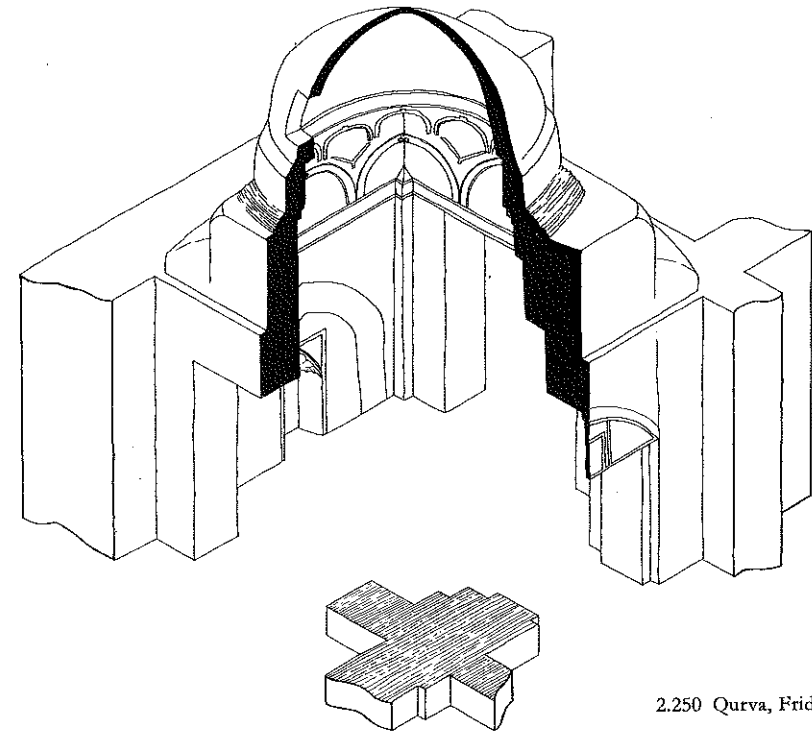
2.178 Niğde, mosque of Sunqur Beg



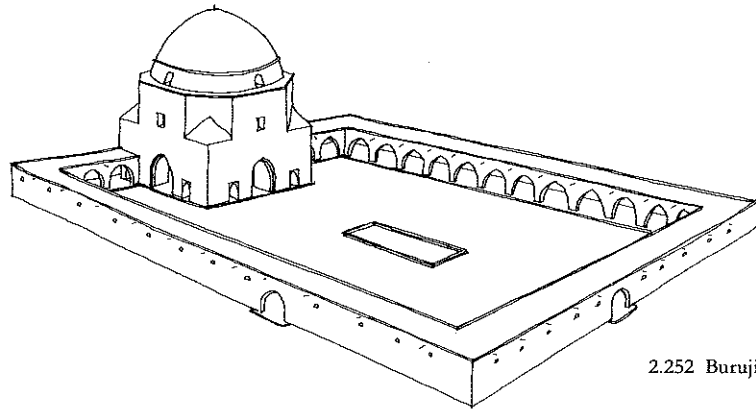
70 Abyana, Friday Mosque, ceiling

plan' that its influence permeated mosque architecture in the non-Arab lands too. It would therefore be an artificial exercise to consider the development of the Iranian mosque in isolation, the more so as many early mosques in Iran

(Bishapur, Abyana, Istakhr, Siraf, Susa, Yazd) were of Arab plan. Some also had the square minarets which were an early feature of that plan (Damghan; Siraf). Rather did the Iranian mosque acquire its distinctive character by enriching the hypostyle form by two elements deeply rooted in pre-Islamic Iranian architecture: the domed chamber and the *ivan*, a vaulted open hall with a rectangular arched façade. The domed chamber derived either from Sasanian palace architecture or from the much more widespread and mostly diminutive Sasanian fire temple with four axial arched openings, the so-called *chabar taq*. Set in the midst of a large open space, it served to house the sacred fire. This layout obviously lent itself to Muslim prayer, and literary sources recount how such temples were taken over and converted into mosques (e.g. at Bukhara) by the simple expedient of blocking up the arch nearest the *qibla* and replacing it with a *mibrab*; but conclusive archaeological evidence of this practice is still lacking, though the mosques of Yazd-i Khast and Qurva may be examples of it. Such domed chambers, whether converted fire temples or



2.250 Qurva, Friday Mosque



2.252 Burujird, Friday Mosque

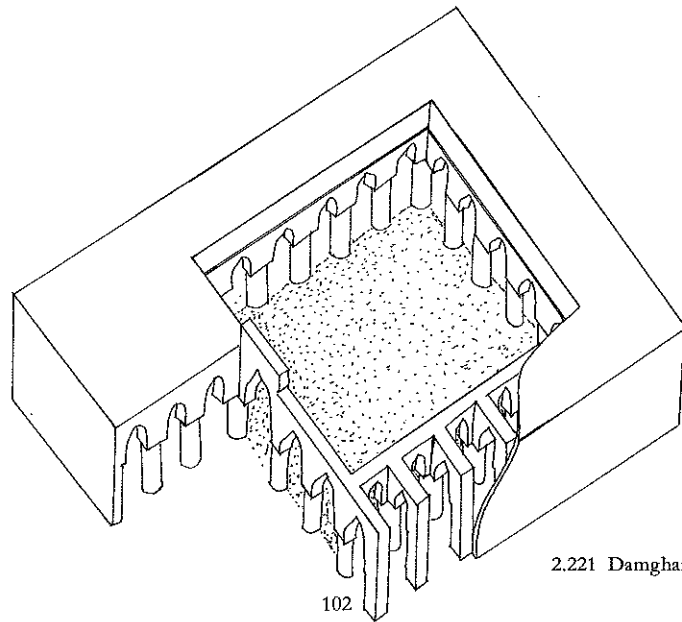
purpose-built Muslim structures, may conceivably have served as self-contained mosques, with or without an attached courtyard (Burujird); certainly the earliest part of many medieval Iranian mosques (e.g. Sujas) is precisely the domed chamber. Only excavation will solve this perennial problem.

The associations of the *ivan*, by contrast, were markedly more secular than religious; its honorific and ceremonial purpose in Sasanian palaces is epitomised by the great vault at Ctesiphon, where it announced the audience chamber of the Shah. The *ivan* form was therefore well fitted to serve as a monumental entrance to the mosque, to mark the central entrance to the sanctuary (Tari Khana at Damghan; Na'in) or, indeed, itself to serve as the sanctuary (as at

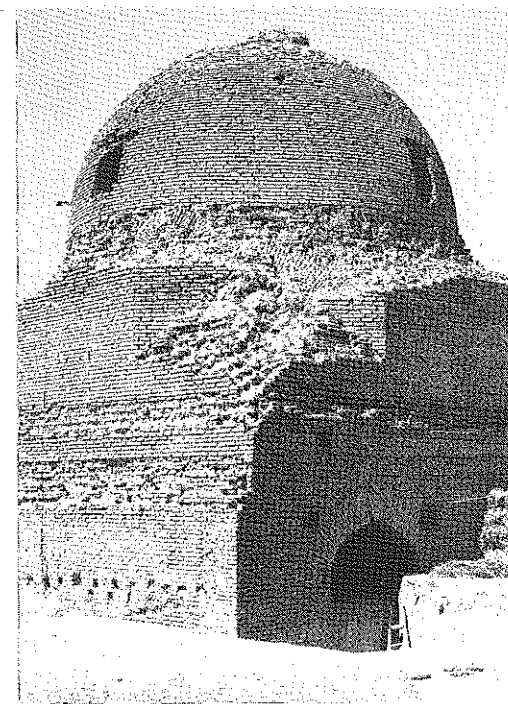
Niriz, perhaps 363/973 onwards). Thus both the domed chamber and the *ivan* quickly found their way into the vocabulary of Iranian mosque architecture, and by their articulating power gave it a wider range of expression than the Arab mosque plan could command. It was in the interrelationships between the domed chamber, the *ivan* and the hypostyle hall that the future of the Iranian mosque was to lie, though much simpler *masjids*, as at Siraf, were no doubt the norm.

#### ii. Saljuq mosques

The tentative experiments of early Iranian mosque architecture crystallised in the Saljuq period, especially between c. 473/1080 and c. 555/1160. The major mosques built or enlarged



2.221 Damghan, Tari Khana mosque

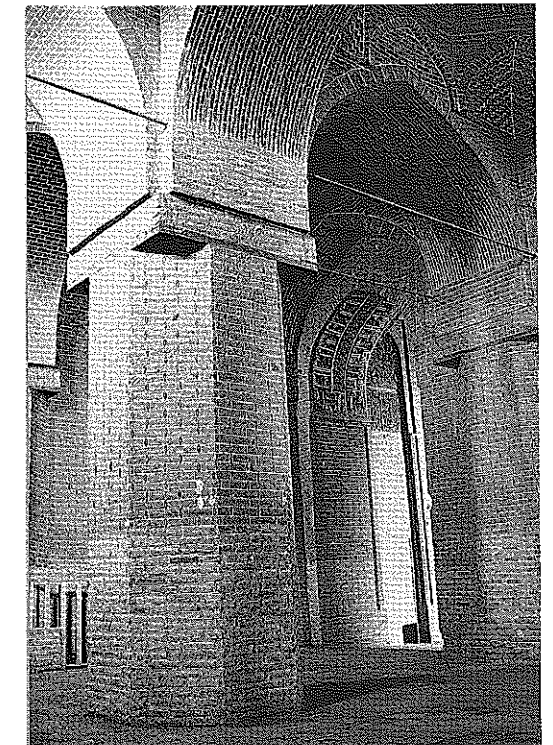


71 Sujas, Friday Mosque, dome chamber

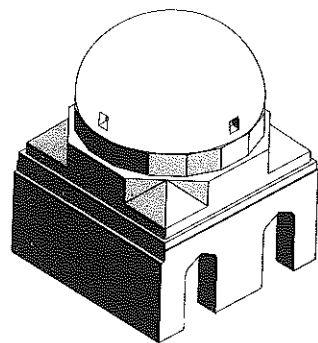
at this time (such as the Isfahan and Ardistan *jami's*) have as their focus a monumental domed chamber enclosing the *mibrab* and preceded by a lofty *ivan*. This double unit is commonly flanked by arcaded and vaulted prayer halls. This arrangement represents the final transformation of the sanctuary in Iranian mosques, using the vocabulary of Sasanian religious and palatial architecture for new ends. The sanctuary *ivan* opens on to a courtyard with an *ivan* at the centre of each axis punctuating the regular sequence of *riwaqs*. These arcades attain a new importance as *façade* architecture by their arrangement in double tiers. Yet the focus of attention is undoubtedly the great domed chamber, as at Barsiyan. The simplicity of the prototypical *chahar taq* is scarcely to be recognised in these massive Saljuq *maqsura* domes, with their multiple openings in the lower walls and their complex zones of transition. They are frequently the result of princely patronage, and perhaps connoted political authority. This concentration on the domed chamber was often achieved at the expense of the rest of the mosque

combination of old forms created the classical, definitive version of the already ancient four-*ivan* courtyard plan that was to dominate Iranian architecture for centuries to come, infiltrating not only other building types such as *madrasas* and caravansarais, but also spreading as far west as Egypt and Anatolia and eastwards to Central Asia and India. The four-*ivan* mosque thus became in time the dominant mosque type of the eastern Islamic world.

Up to the end of the Saljuq period, however, the way was still open for numerous other combinations of hypostyle hall, domed chamber and *ivan*. Bashan, for example (10th century) has a square layout with courtyard, hypostyle hall, domed sanctuary and sanctuary *ivan*, but lacks any further articulation of the courtyard *façade* by *ivan*. Among many others, the mosques of Dandanqan and Mashhad-i Misriyan (both 11th century) are typologically related to it. At Urmia/Rida'ia (13th century) the mosque is an extensive shallow oblong with the domed



72 Ardistan, Friday Mosque, bays leading to dome chamber

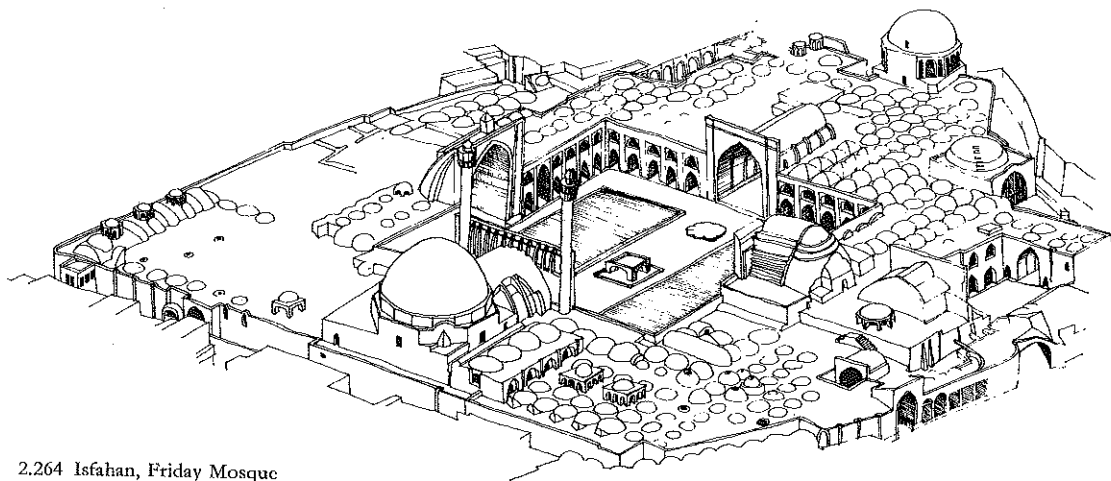


2.251 Sujas, Friday Mosque

Firdaus *jami*' (597/1200) is dominated by its single *ivan* which heralds a low vaulted sanctuary. The *jami*'s of Farumad (13th century?) and Gunabad (606/1209) have only two *iwans* facing each other across a narrow courtyard, and no domed chamber. Other mosques in Khurasan are simpler still, comprising only the domed chamber itself (Sangan-i Pa'in, 535/1140; Birrabad and 'Abdallahabad, both possibly Saljuq) or with insignificant bays adjoining it (Talkhatan Baba, 12th century). Often too, the various elements were added in an unpredictable sequence, for instance at Simnan where a probably 11th-century columned hall had a complete mosque 'unit' comprising a domed chamber, *ivan* and courtyard tacked on to its side. Even within the classical four-*ivan* model, considerable diversity could be attained by varying the scale of the components: from long narrow courtyards (Simnan) or small square ones of domestic scale (Zavara, 530/1135) to huge open expanses broken up by trees (Shiraz *jami*', mainly 16th century), pools or fountains.

The principal emphasis on the internal façade was, however, unchanging. The exterior, by contrast, was unadorned and unarticulated to the point of austerity, through portal *iwans* were a common exception to this rule, as at Herat. Variations in the height or breadth of *iwans* reinforced axial or hierarchical distinctions. By common consent the sanctuary *ivan* was the largest and deepest; the opposite *ivan* was next in size, though often very shallow, while the two lateral *iwans* were usually the smallest. Minarets

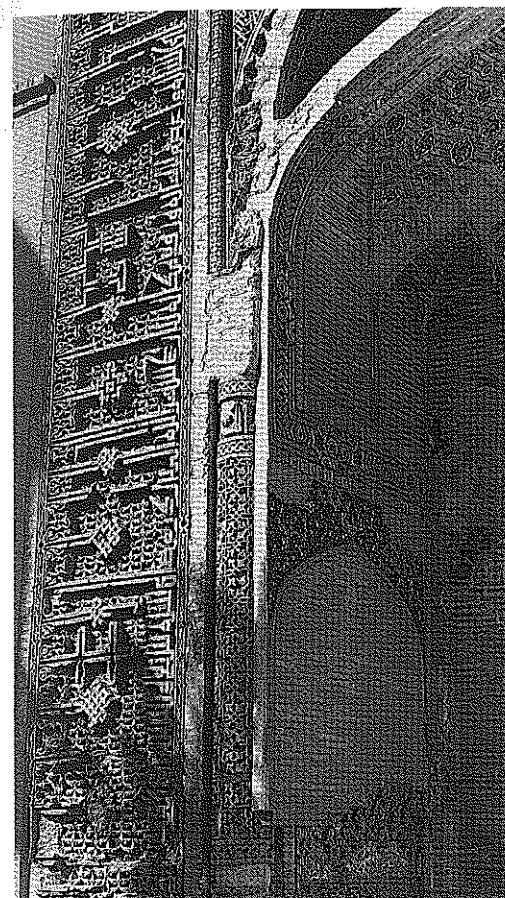
chamber at one end of a hypostyle hall, and no *ivan*. Sometimes the mosque is entirely covered by five (Masjid-i Diggarun, Hazara, 11th century) or nine domed bays (Char Sutun mosque, Tirmidh, 10th century; Balkh, Masjid-i Nuh Gunbad, 9th century; Masjid-i Kucha Mir, Natanz, 12th century). In its Saljuq form the mosque at Ardabil comprised a domed chamber with an *ivan* in front of it, while at Sin (528/1133) the sanctuary, comprising a deep *ivan* with *muqarnas* vaulting, engulfs one side of the diminutive courtyard. The huge courtyard of the



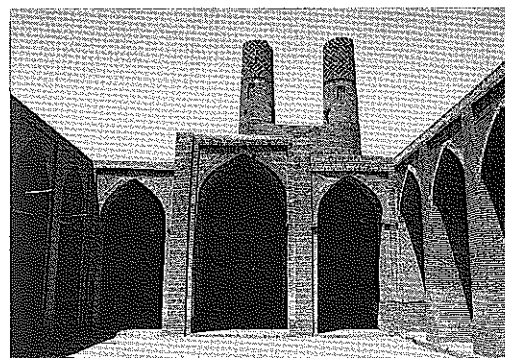
2.264 Isfahan, Friday Mosque

at the corners of the sanctuary *ivan* underlined its importance, while the twin-minaret portal *ivan* first encountered in the Saljuq period

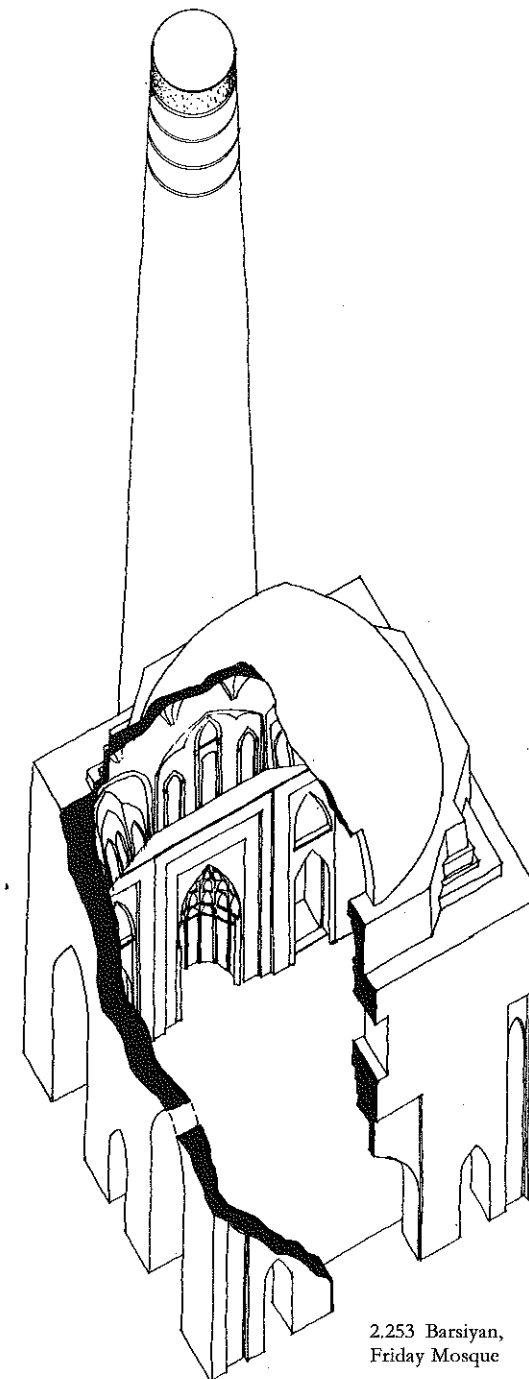
(Nakhchivan, 582/1186; Ardistan, Masjid-i Imam Hasan, 553/1158) became increasingly monumental and elaborate in later centuries



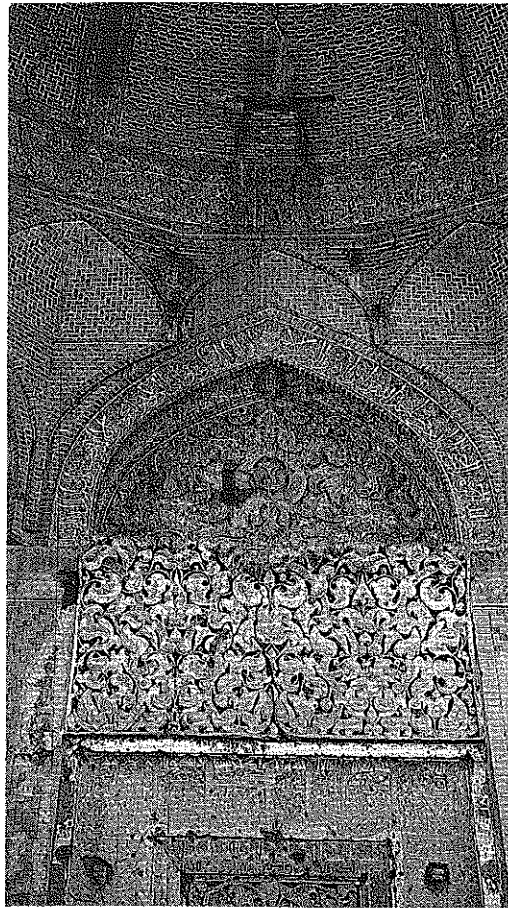
73 Herat, Friday Mosque, *ivan*



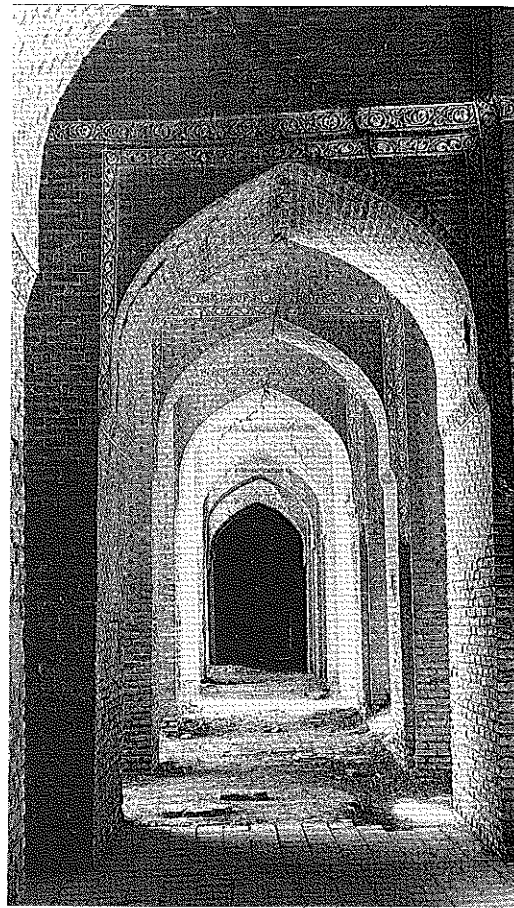
74 Ashtarjan, Friday Mosque, courtyard façade looking north-east



2.253 Barsiyan, Friday Mosque



75 Ashtarjan, Friday Mosque, *Mihrab* and zone of transition

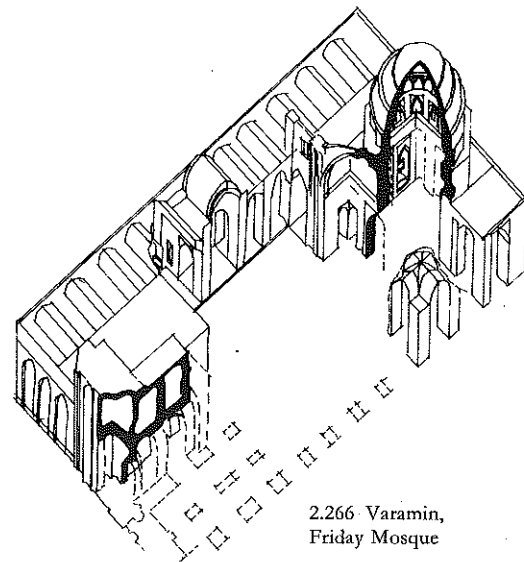


76 Varamin, Friday Mosque, courtyard arcade

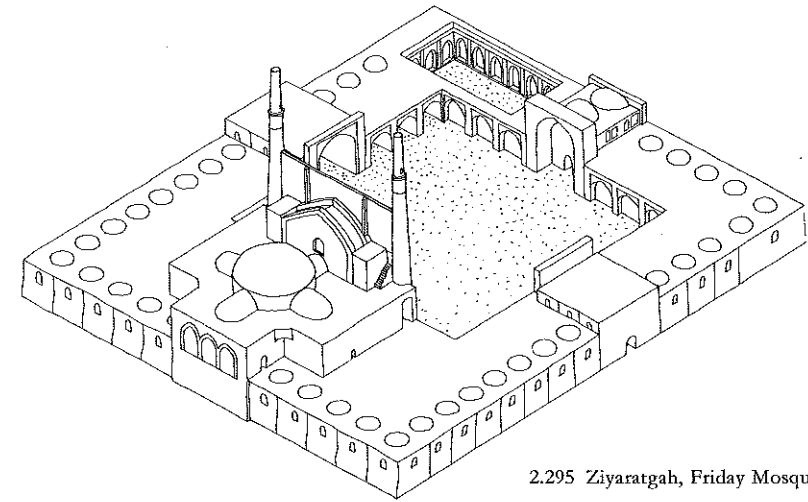
75 (*jami*'s of Ashtarjan, 715/1315, and Yazd, 846/1442). *Iwan* minarets of this kind gradually replaced the freestanding cylindrical minarets so popular in the Saljuq period.

iii. Ilkhanid mosques

As in Mamluk Egypt, so too in Iran the later medieval history of the mosque is sometimes hard to disentangle from that of the *madrassa*-, tomb- or shrine-complex. Prayer and communal worship were, after all, integral to the operation of such 'little cities of God' as the shrines of Ardabil, Natanz, Turbat-i Jam, Bastam and Linjan – all of them the scene of much building activity in the 14th century – to say nothing of the great shrines of Qumm and Mashhad. Such



2.266 Varamin, Friday Mosque



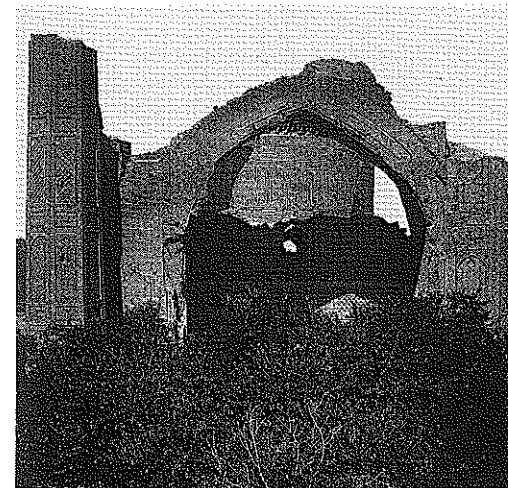
2.295 Ziyaratgah, Friday Mosque

new foundations as there were simply perpetuated Saljuq models (Hafshuya, early 14th century), though these were subtly altered by having their proportions attenuated or otherwise modified. At Ashtarjan everything is subordinated to the principal axis announced by the double-minaret façade, an emphasis which is taken up and intensified by the single great *iwan* which takes up the full width of the courtyard and leads into the domed sanctuary. At Varamin, too (722/1322 onwards), which is of standard four-*iwan* type, the sense of axial pro-

gression is strong, and is made rather more effective than at Ashtarjan by the absolute length of the mosque and the extended vestibule. The *jami*' of 'Ali Shah in Tabriz, by contrast (c. 710-20/1310-20) seems a deliberate return to much earlier models, for it comprised essentially a huge cliff-like *iwan* preceded by a courtyard with a central pool and clumps of trees in the corners – perhaps a deliberate reference to the Taq-i Kisra itself. For smaller mosques, Saljuq models were again at hand; hence, for example, the trio of domed chamber mosques with *iwan* at Aziran, Kaj and Dashti, all datable c. 725/1325. Yet another compliment to earlier masters was the Ilkhanid tendency to add new structures to existing mosques: a *madrassa* to the Isfahan *jami*' (776-8/1374-7), an *iwan* to the mosque at Gaz (715/1315), and so on.

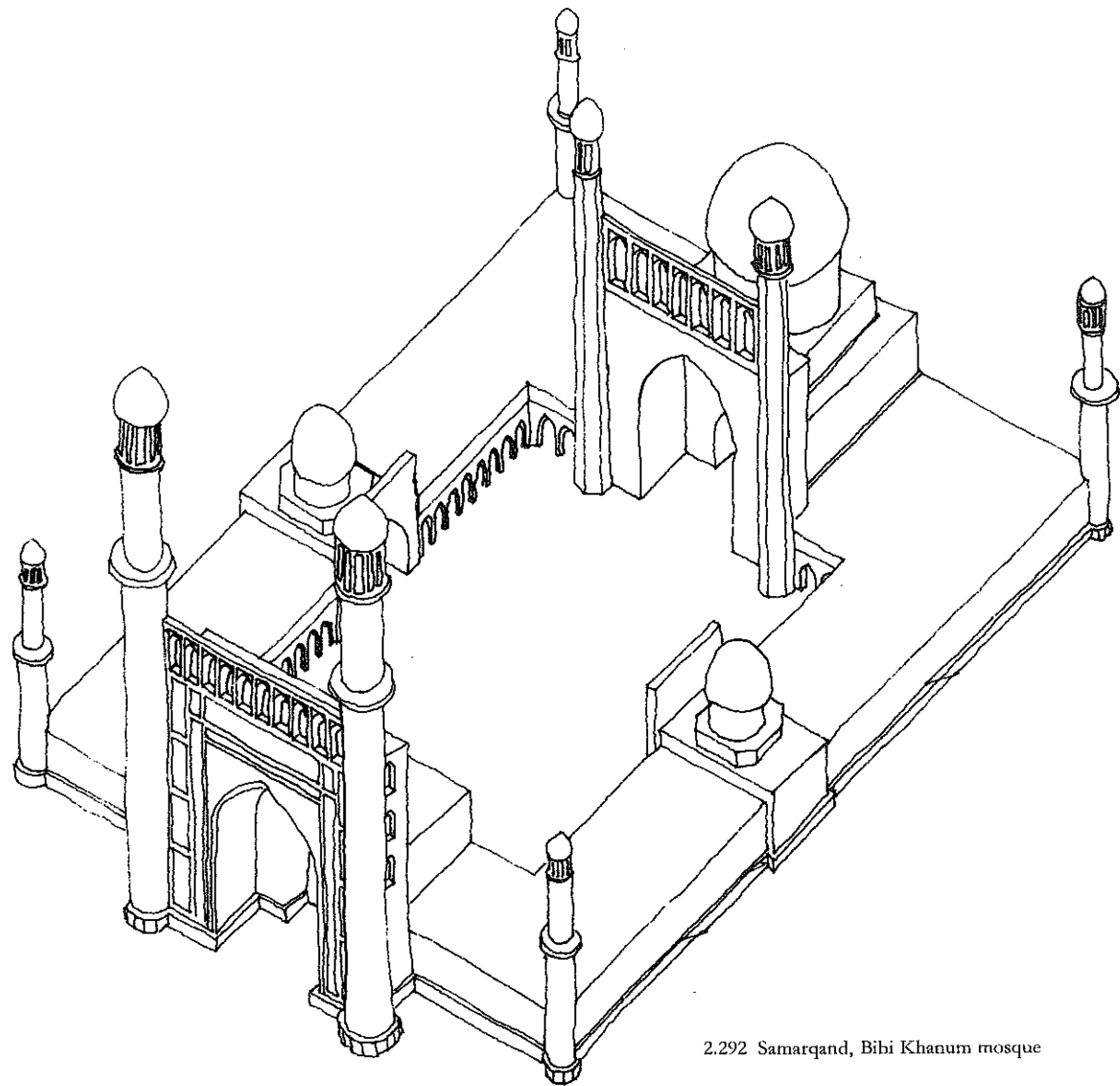
iv. Timurid mosques

The Timurid period took still further ideas which had been no more than latent in earlier centuries. While some mosques of traditional form were built – such as the Mosque of Gauhar Shad, in Mashhad, of standard four-*iwan* type (821/1418) – attention focused particularly on the portal and *qibla iwan*, which soared to new heights. Turrets at the corners magnified these proportions still further. This trend towards gigantism is exposed at its emptiest in the four-*iwan jami*' of Ziyaratgah, near Herat (887/1482), where the absence of decoration accentuates the



77 Samarqand, Bibi Khanum mosque, sanctuary *iwan*





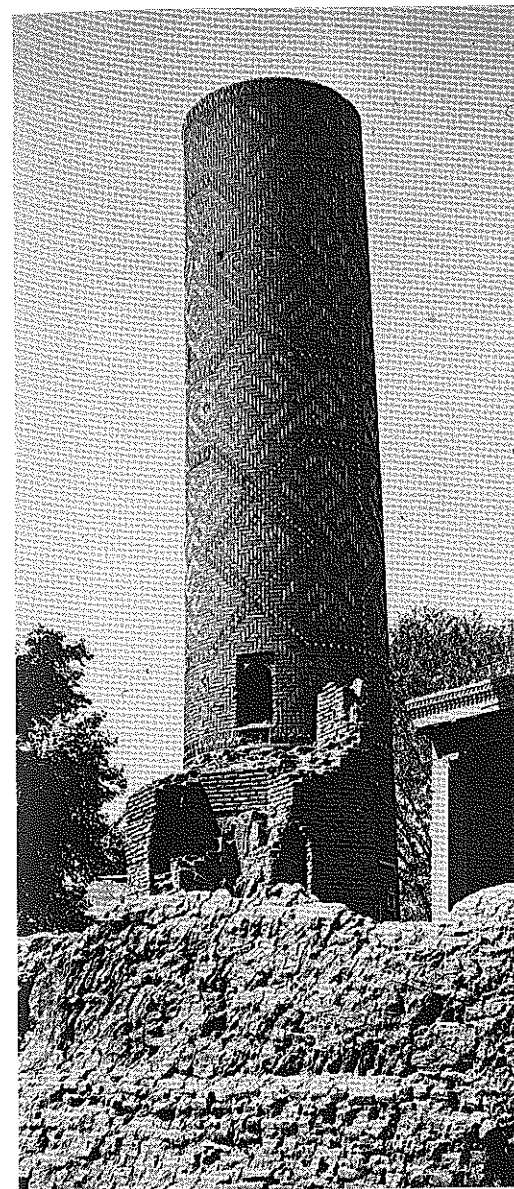
2.292 Samarkand, Bibi Khanum mosque

sheer mass of the sanctuary *iwān* looming over the courtyard. At its best, however, as in the mosque of Bibi Khanum, Samarkand (801/1399), where these exceptional proportions are consistently carried through to virtually every part of the mosque, the effect is overwhelming. Here the four-*iwān* plan is transformed by the use of a domed chamber behind each lateral *iwān*; by the profusion of minarets – at the exterior corners and flanking both portal and

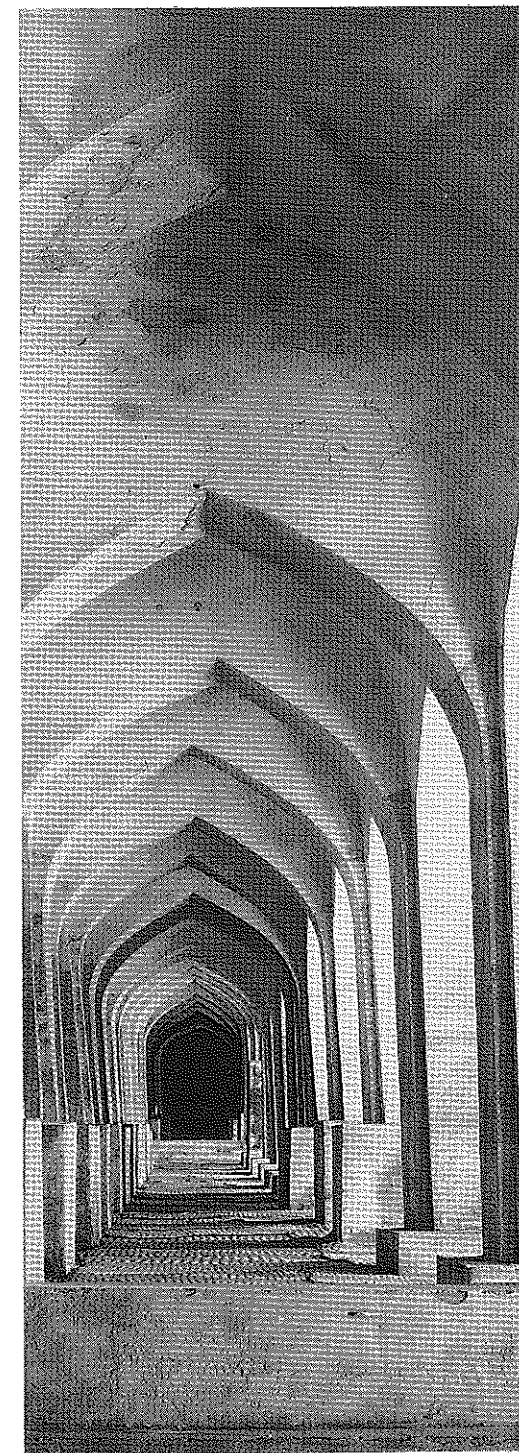
sanctuary *iwān* – and by the four hundred-odd domes which cover the individual bays. The slightly later Masjid-i Kalan at Bukhara is clearly in its thrall.

As in the Mongol period, however, the fashion for building *khangabs*, *madrasas* and funerary monuments, all of them capable of serving as places of worship (shrine of Ahmad Yasavi, Turkistan, begun 797/1394; the Rigistan complex, Samarkand, begun in its

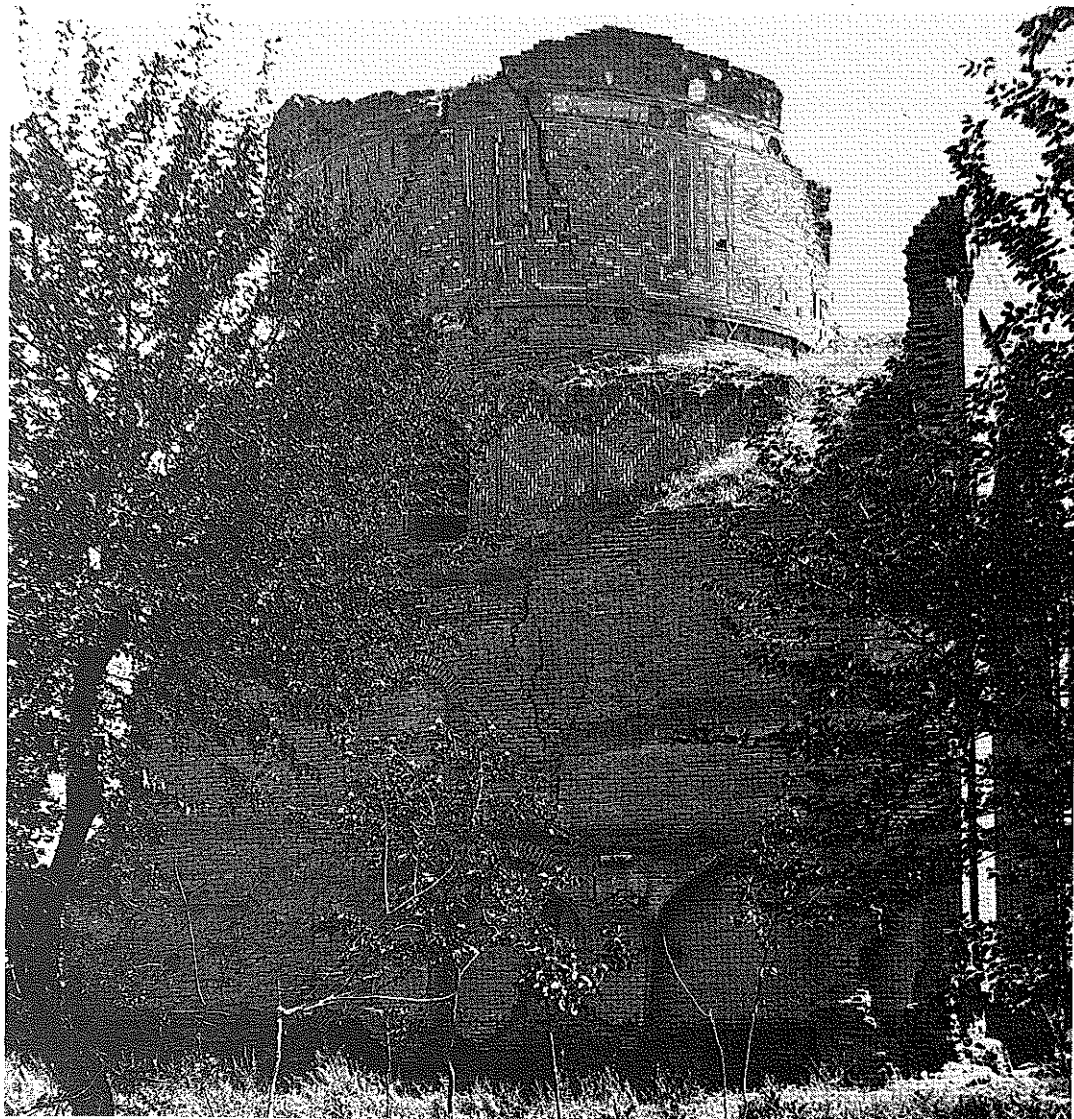
Timurid form in 820/1417; Gauhar Shad complex, Herat (821/1418), excluded an equal emphasis on mosque architecture. This may explain the continued popularity of so many standard mosque types – the domed hypostyle (*Ziyaratgah*, Masjid-i Chihil Sutun, c.890/1485) and the two-*iwān* type so long familiar in



78 Samarkand, Bibi Khanum mosque, corner minaret



79 Bukhara, Masjid-i Kalan, arcade



80 Samarqand, Bibi Khanum mosque, lateral dome chamber

2.269 Khurasan (Bajistan and Nishapur *jami*'s, both  
2.286 later 15th century) – to say nothing of the  
2.286 emphasis on refurbishing earlier mosques (*jami*'s  
of Isfahan, 880/1475 and Herat, 903–5/1497–9),  
which, in accordance with the Timurid predilec-  
tion for innovative vaulting, often took the  
form of adding transversely vaulted halls (*jami*'s  
of Abarquh, 818/1415; Yazd, 819/1416; Shiraz, c.  
820/1417; Maibud, 867/1462; Kashan, 867–8/

1462–3; and the mosques of Sar-i Rik, 828/1425  
and Mir Chaqmaq, 840–1/1436–7, at Yazd).  
There was still ample room for surprises. The  
winter prayer hall added to the Isfahan *jami*' in  
851/1447 has multiple aisles of huge pointed  
arches springing directly from the ground and  
lit by ochre alabaster slabs let into the vaults and  
diffusing a golden radiance. The hoary four-*iwān*  
formula was given a new twist by the addition



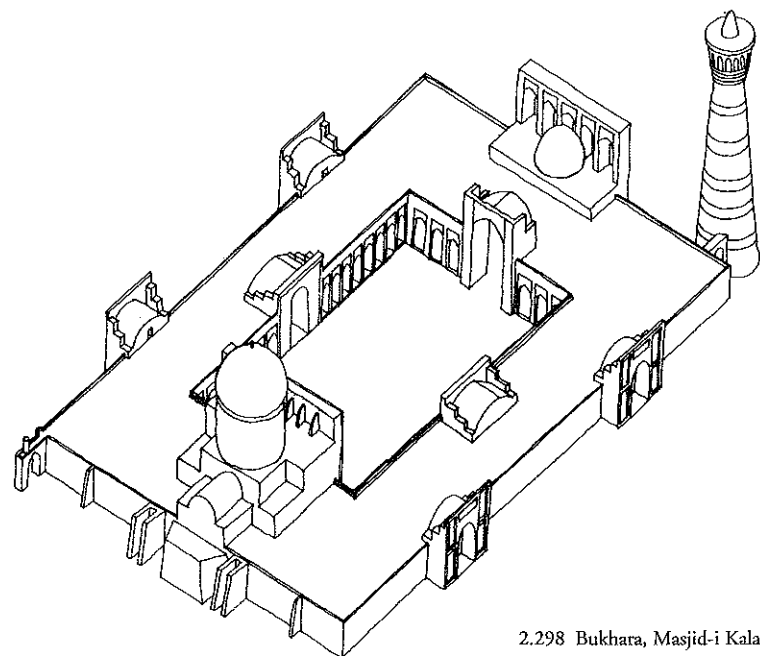
81 Anau, mosque, east side

81, 82, 2.293, 2.299

of separate major units, domed or otherwise,  
flanking the sanctuary *iwān*, as at the Anau  
mosque (perhaps a *madrassa* and *khanqah*) or the  
Rushkhar *jami*'; 859/1455. At Jajarm (late 15th  
century?) the central axis marked by the domed  
chamber and the courtyard is flanked on each  
side by a trio of vaulted bays.

Yet perhaps the most original mosque  
designs of the period were those which focused

on the single dome and thus echoed, if only  
distantly, the preoccupations of contemporary  
Ottoman architects. This concept manifested  
itself in several different ways. In the Masjid-i  
Gunbad, Ziyaratgah (c. 887–912/1483–1506) a  
square exterior encloses small corner chambers  
and a cruciform domed central area, a layout  
more reminiscent of a palace pavilion than a  
mosque. The core of the Masjid-i Shah,



2.298 Bukhara, Masjid-i Kalan

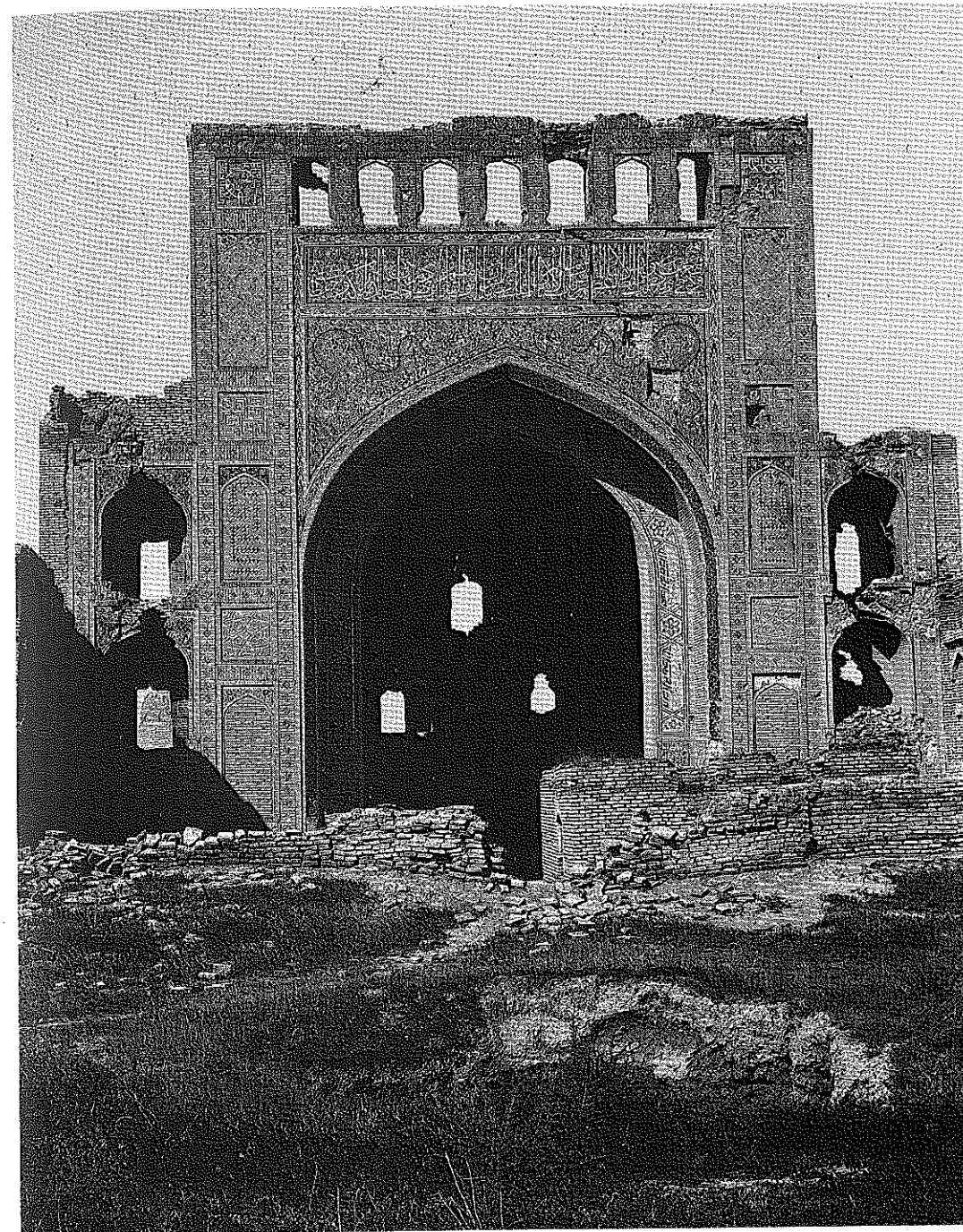
2.279-2.280 Mashhad (855/1451) is again a large domed chamber, but this is enclosed by a vaulted ambulatory and preceded by a long façade with corner minarets and a portal *iwān*. Most ambitious of all is the Blue Mosque in Tabriz (870/1465), in which a similar idea is given much more integrated expression by virtue of the open-plan arrangement of the central space. The dome springs from eight massive piers, but this octagon has further piers in the corners, making it a square with twelve openings, and thus offering easy access to the multi-domed ambulatory. A similar openness characterises the gallery area and ensured that this mosque, though entirely covered, was airy, spacious and flooded with light. The range and subtlety of its polychrome tilework makes this mosque an apt coda for a period which exploited to an unprecedented degree the rôle of colour in architecture.

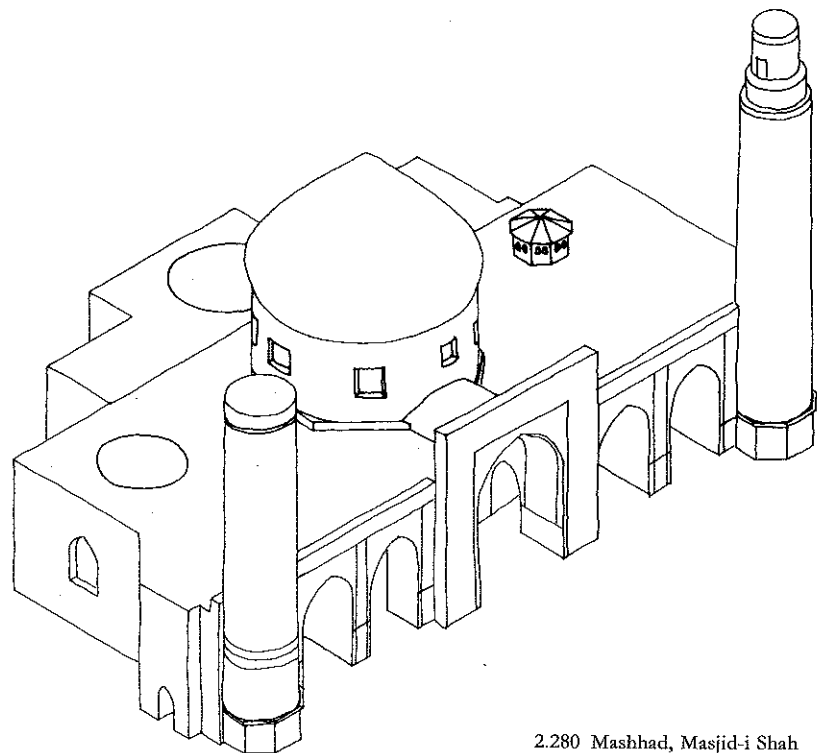
#### v. Safavid mosques

The restoration and enlargement of existing mosques, a trend already noted in Timurid

times, continued apace in the Safavid period, and involved over a score of mosques in the 16th century alone. Yet not one new mosque of the first importance survives from this century, though the Masjid-i 'Ali in Isfahan (929/1522), a classic four-*iwān* structure, has a sanctuary whose open-plan dome on pendentives provides a bridge between the Blue Mosque in Tabriz and the Lutfallah mosque in Isfahan (1011-28/1602-19). The latter, a private oratory for Shah 'Abbas I, makes a very public break with tradition, for it is simply a huge square chamber. Its lofty dome rests on eight arches via an intermediary zone of 32 niches. The whole interior is sheathed in glittering tilework, whose smooth surfaces simplify all structural subtleties. Though the mosque is correctly oriented towards Mecca, it is set at an angle to the great square (*maidan*) from which it is entered, an angle dissimulated by the portal *iwān* which instead obeys the orientation of the *maidan* towards the cardinal points of the compass. A low vaulted passage linking *iwān* and dome chamber, but invisible from either, resolves

2.284-2.285  
2.290

82 Anau, mosque, sanctuary *iwān*



2.280 Mashhad, Masjid-i Shah

these conflicting axes. It also draws attention to a discrepancy which could easily have been avoided and is therefore deliberate.

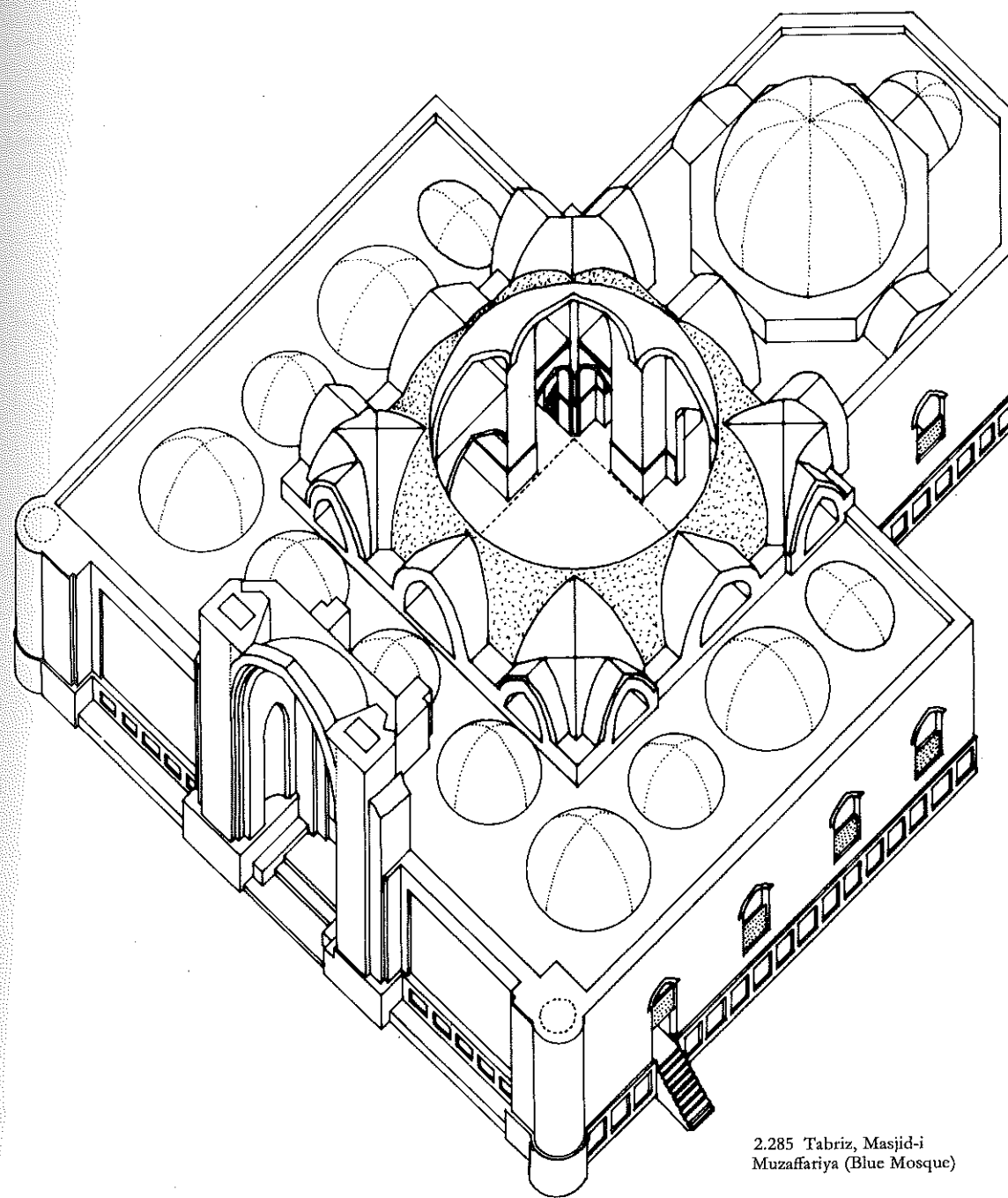
In the nearby Masjid-i Shah (1021–40/1612–30), which also fronts the *maidan*, the problem of discordant axes is solved with sovereign ease, for the portal leads into a diagonal vestibule which in turn opens into a four-*ivan* courtyard, now correctly orientated. Both portal and *qibla ivan* have paired minarets to assert their importance. The scale is vast, but the entire mosque is conceived in due proportion to it. As at the comparably large mosque of Bibi Khanum, dome chambers behind the lateral *ivan* give extra space for prayer, while two *madrasas* with courtyards flank the main courtyard to the south. Thus even at the height of its popularity the four-*ivan* mosque could accommodate quite major innovations without impairing its essential character. Later Safavid mosques, such as the *jami*'s of Sarm and Chashum, the Masjid-i Vazir in Kashan and that of 'Ali Quli Agha in Isfahan, serve by their very modesty to highlight

the altogether exceptional status of the two mosques on the Isfahan *maidan*. Even such a spacious and handsome version of the traditional four-*ivan* schema as the Masjid-i Hakim, Isfahan (1067/1656) could not fail to be an anticlimax in their wake.

#### THE TURKISH TRADITION

##### *Early domed mosques*

The earliest Anatolian mosques follow Arab prototypes, and by degrees some of them take on an Iranian colouring, especially in their free use of *iwans* for portals and for sanctuary entrances. By the 13th century, however, an emphasis on the isolated domed chamber as a mosque type began to make itself felt. This idea too might have had Iranian origins, but it soon developed in ways that owed nothing to Iran, since the contemporary preference for entirely covered mosques with no courtyard was itself enough to encourage experiments in the articulation of interior space (e.g. mosques in

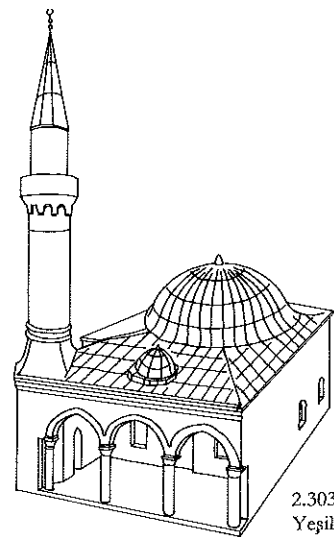


2.285 Tabriz, Masjid-i Muzaffariya (Blue Mosque)

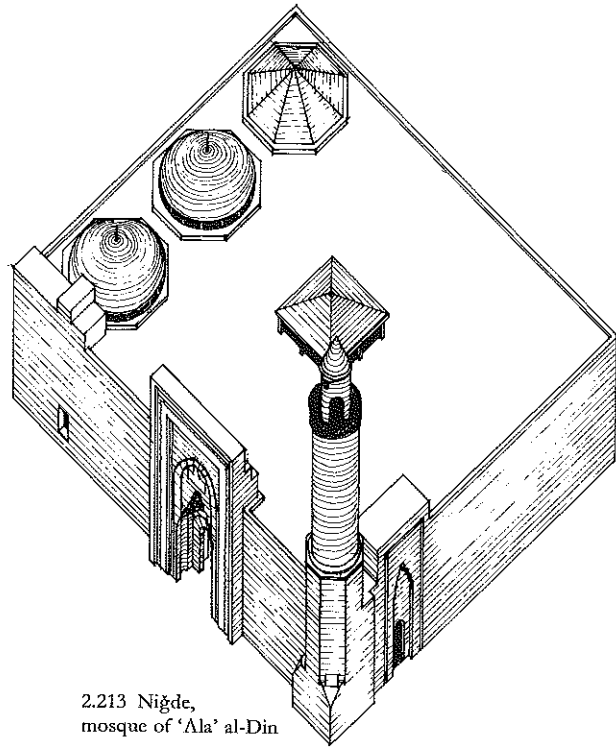
Ottoman architecture before 857/1453

The sequence begins very modestly with a series of mosques comprising a simple domed cube with a lateral vestibule ('Ala' al-Din mosque, Bursa, 736/1335, a structure typical of well over a score of such Ottoman mosques built in the course of the 14th century); and minor variants of this schema, such as the mosque of Orhan Ghazi, Bilecik, and the Yeşil Cami, Iznik, 780/1378, abound. Such structures have a natural affinity with larger mausolea throughout the Islamic world, and with the simplest forms of Iranian mosques. It is only with hindsight that their significance for later developments, in which the theme of the single, and (above all) central, dominant dome of ever-increasing size becomes steadily more important, can be appreciated. This, then, is the main line of evolution in Ottoman mosque architecture, and the discussion will return to it shortly.

Meanwhile two other types of mosque, in which the dome also loomed large, deserve brief investigation, especially as they bade fair in the formative early years to oust the domed, centrally planned mosque as the favoured Ottoman type, and also because they had their own part to play in the final synthesis of the 16th century. The presence of three major types of domed mosque in the same century is a reminder that the pace of change was uneven. Several mosques conceived on an altogether larger scale rejuv-

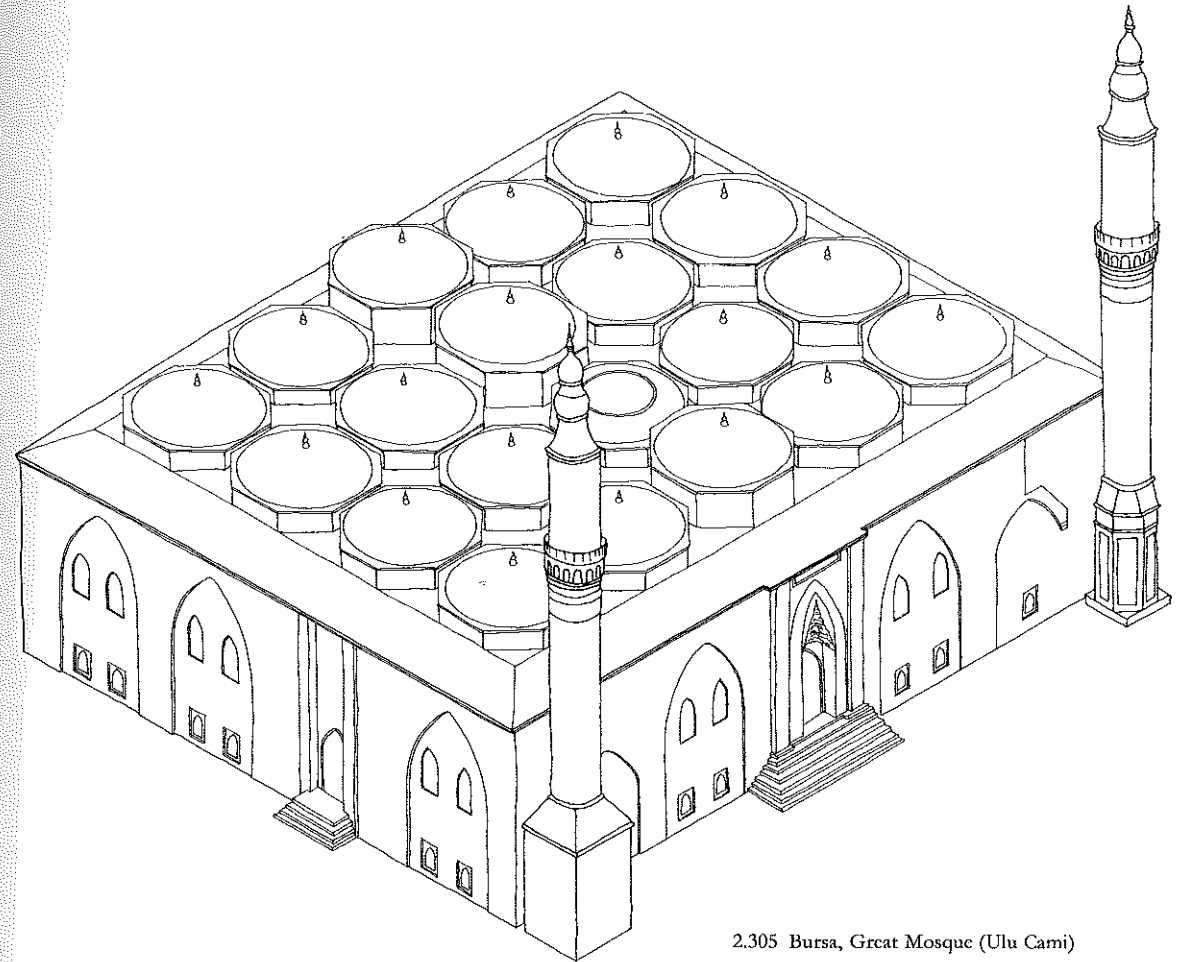


2.303 Iznik, Yeşil Cami



2.213 Niğde, mosque of 'Ala' al-Din

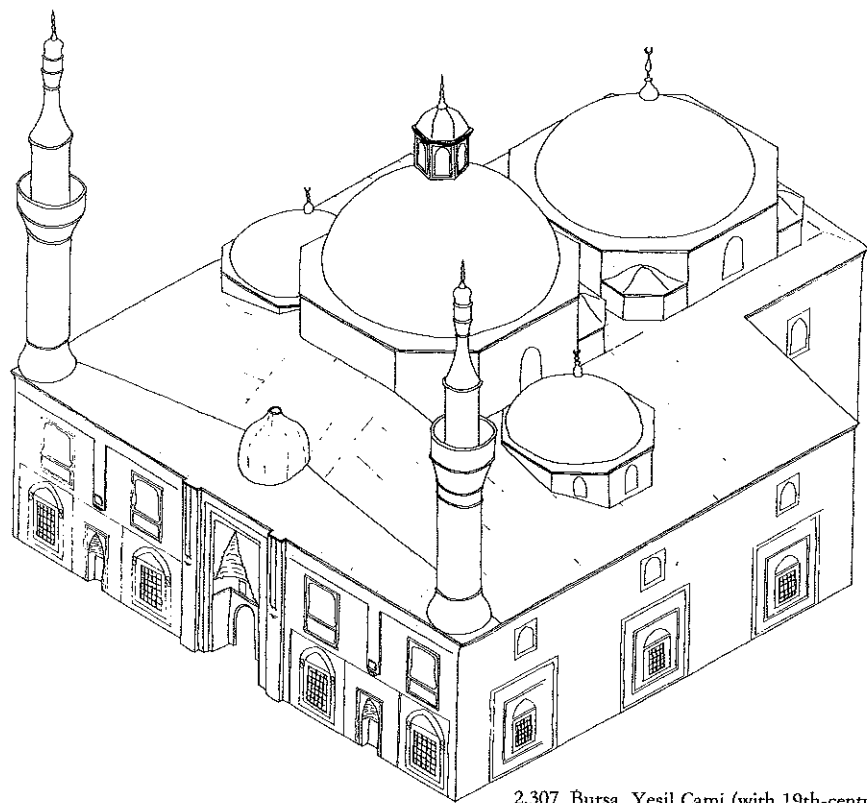
Erzurum, Kayseri, Niğde and Sivrihisar). The dome quickly became the most favoured device to this end. In Iran, by and large, the domed chamber behind the *qibla iwan* remained spatially isolated from the rest of the mosque. In Anatolia, by contrast, architects were always seeking new ways of integrating the main domed space with the area around it (e.g. Nebi mosque, Diyarbakr). A consistent emphasis on domical forms created the necessary visual unity to achieve this. Already in the Saljuq period tentative experiments in this direction may be noted, for example the 'Ala' al-Din mosque, Niğde (620/1223), whose *qibla* is marked by three domed and cross-vaulted bays with further parallel aisles behind. In the Ulu Cami of Bitlis (545/1150), a single great dome replaces these smaller bays, while in the Gök mosque and *madrasa*, Amasya (665/1266), the *masjid* comprises a series of triple-domed aisles. Experiment with domical forms was therefore deeply rooted in Anatolian architecture from the beginning. It is above all the hallmark of mosques erected by the Ottomans, and can be traced to the very earliest years of that dynasty.



2.305 Bursa, Great Mosque (Ulu Cami)

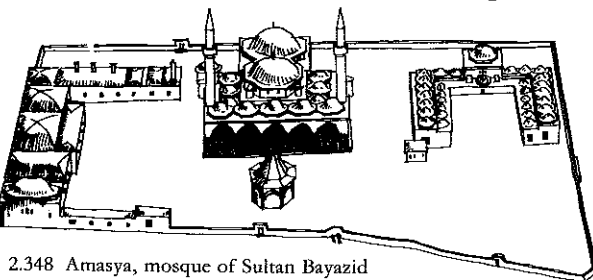
enated the hypostyle form by investigating the impact of multiple adjoining domes. In some cases, like the Ulu Cami, Bursa, of 797/1395, a simple square subdivided into twenty domed bays of equal width though of varying height—the choice of the dome as the agent of vaulting is a diagnostic Ottoman feature—the effect was distinctly old-fashioned. At ground level this is an Arab mosque, even if its elevation is Anatolian. Contemporary with this, but marking a very different attitude to interior space, are two other mosques in Bursa, that of Yildirim Bayazid, 794/1392, and the Yeşil Cami of 816/1413, which use the dome motif on various scales and thus far more imaginatively. They represent a second preparatory stage on the way to the mature Ottoman mosque, and their

spacious layout is by turn cruciform, stepped or of inverted T-type. Their distinguishing feature is the use of several domes of different sizes. In the two cases under discussion, or at the mosque of Sultan Bayazid at Amasya, the inverted T-plan highlights the *mihrab* aisle by two adjoining domes along the central axis flanked by a trio of domed or vaulted bays on each side, all this knit together laterally by a five-domed portico. Sandwiched between these two buildings in date is the Ulu Cami of Edirne, 806/1403, where the square is subdivided into nine equal bays, eight of them domed, with a domed and vaulted portico tacked on. At the mosque of Chelebi Sultan Mehmed, Dimetoka, this arrangement is refined by an increased concentration on the central dome, which is enveloped by vaults on



2.307 Bursa, Yeşil Cami (with 19th-century minarets)

the main axes and diagonals, the whole preceded by a three-domed portico. Such a combination cannot fail to recall the standard quincunx plan, complete with narthex, of mid-Byzantine churches, and it was of course these buildings which dominated the Anatolian countryside in the early centuries of Turkish occupation. Steady Byzantine influence can be seen to have affected the evolution of Ottoman architecture, even before the capture of Istanbul brought Turkish architects face to face with Hagia Sophia. Yet it would be grossly mistaken to regard mature Ottoman mosques as mere derivatives of Hagia Sophia. The Üç Şerefeli mosque, Edirne, of 851/1447, with its huge central dome on a hexagonal base flanked on either side by a pair of much smaller domes and preceded by a lateral courtyard enclosed by twenty-two domed bays, makes excellent sense within a purely Ottoman perspective as a key stage in the evolution which terminated in the great masterpieces of Sinan. The divergence between the great dome and the lesser ones



2.348 Atmasya, mosque of Sultan Bayazid

flanking it has already become acute and was to end in their total suppression.

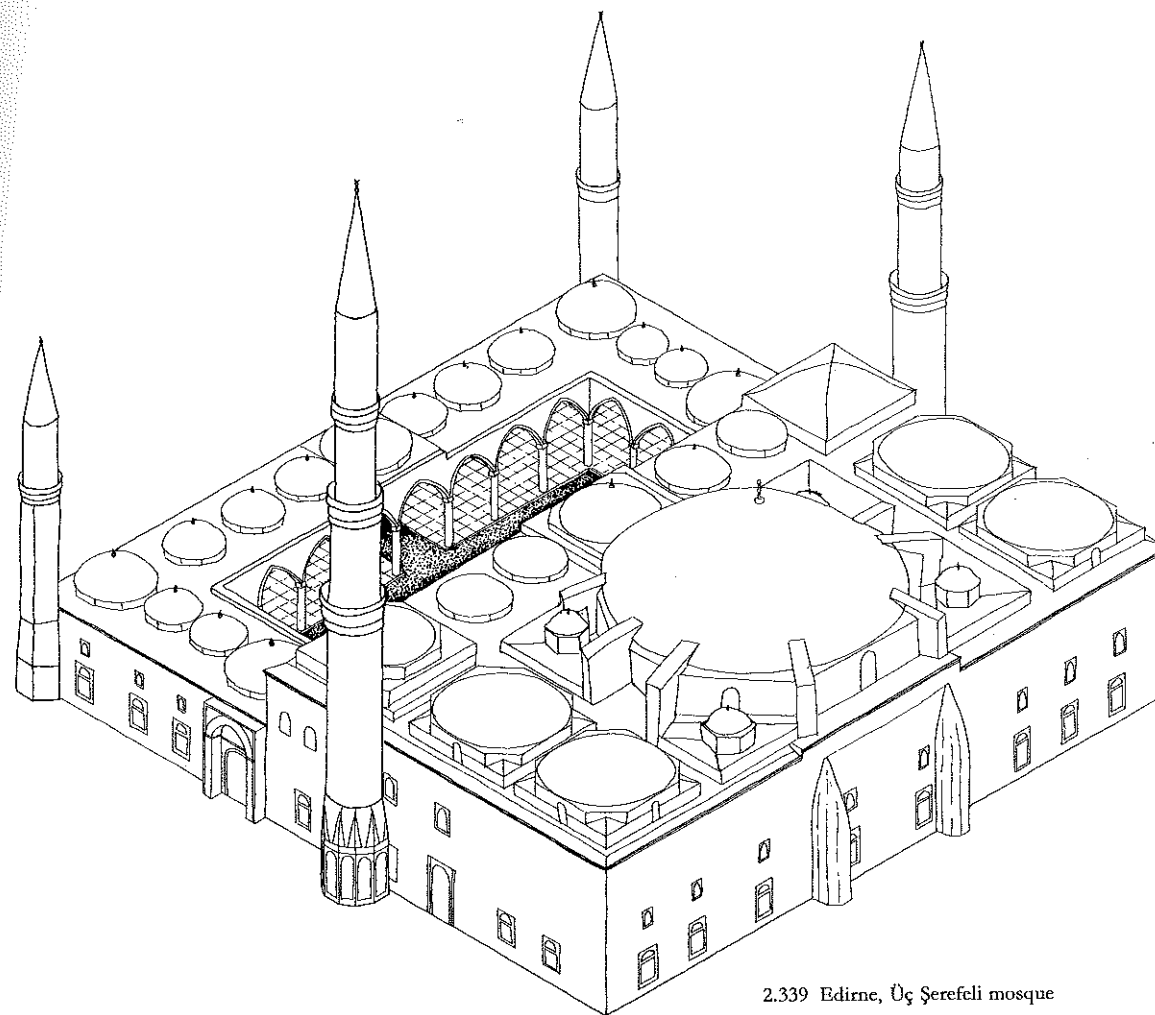
Yet one significant element, crucial to Hagia Sophia and a cliché of Ottoman architecture after 857/1453, had not yet entered the architectural vocabulary of the Turkish mosque before that date. This was the use of two full semi-domes along the *mibrab* axis to buttress the main dome. The long-rooted Islamic custom of marking the *mibrab* bay by a great dome rendered such a feature otiose. Once the decision had been taken to make the largest dome the central feature of a much larger

square, the way was open for the adoption of this Byzantine feature, and then the transformation and enrichment of interior space was a foregone conclusion. Otherwise, most of the architectural vocabulary used in mature Ottoman mosques was already to hand by 857/1453: flying buttresses, the undulating exterior profile created by multiple domes, tall pencil-shaped minarets and a certain parsimony of exterior ornament allied to exquisite stereotomy. It has to be admitted that these features had yet to find their full potential, notably in the failure to develop a suitably imposing exterior to match the spatial splendours within. That

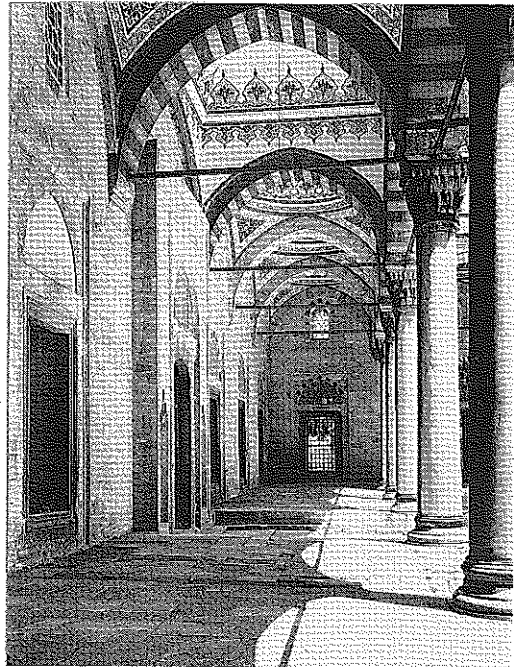
potential could be realised only when these features were used in association with each other by masters seeking to express a newly-won confidence and bent on creating an integrated style for that purpose. The mosque was, moreover, their chosen instrument; indeed, Ottoman architecture is, first and foremost, an architecture of mosques.

#### *The mature Ottoman style*

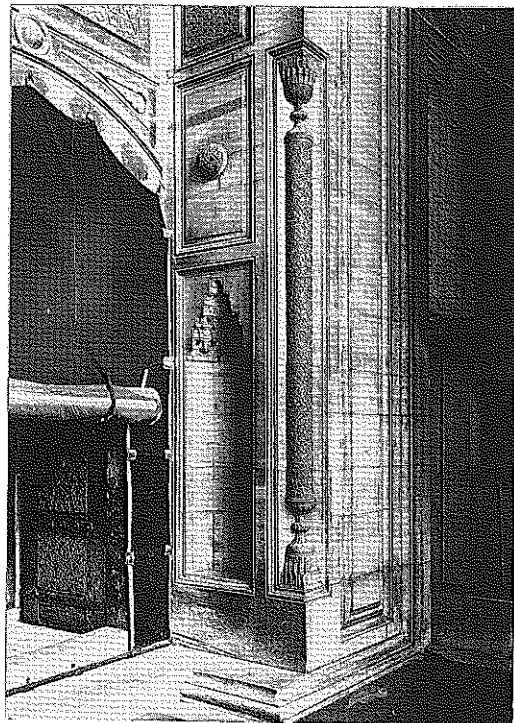
The capture of Constantinople in 857/1453 provided both a terminus and an impetus to a radical rethinking of mosque design. Appropriately enough, the first building to express the



2.339 Edirne, Üç Şerefeli mosque

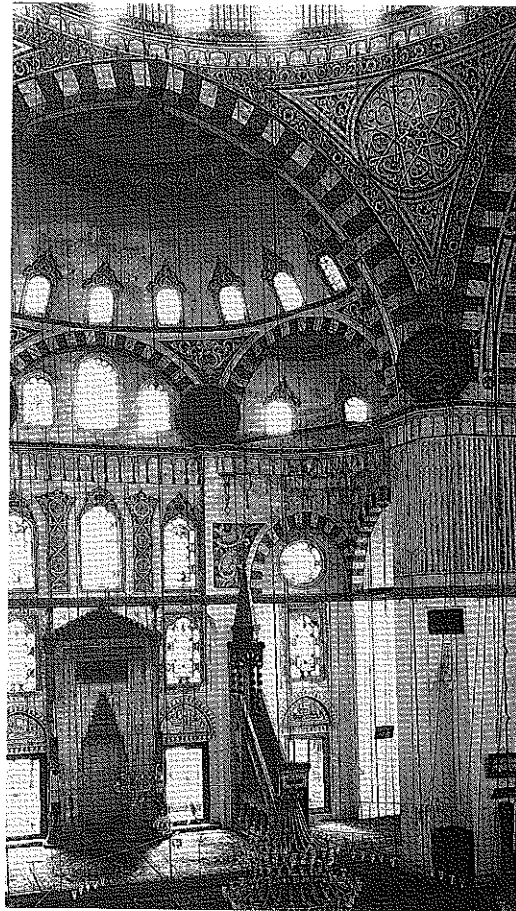


83 Istanbul, Selimiye mosque, arcade



84 Istanbul, Sultan Bayazid mosque, pier

new mood was a victory monument, as its name indicates: the Fatih Mosque (867-75/1463-70).<sup>2.319, 2.341, 2.346</sup> This has a single huge semi-dome buttressing the main one but also displacing it off the main axis; clearly, the spatial, aesthetic and structural implications of such a semi-dome had not yet been fully grasped. Within a generation, this anomaly at least had been rectified; the mosque



85 Istanbul, Şehzade mosque, interior

of Bayazid II (completed 913/1507) has two such semi-domes on the *mibrab* axis, with four lesser domes flanking this central corridor on each side. On the other hand, the projecting portico sandwiched between dome chamber and courtyard is a clumsy and lopsided expedient with little functional justification. Yet the resultant emphasis on the portico is wholly typical of a period in which this feature re-appeared under<sup>84 2.314, 2.351</sup>



86 Istanbul, Mihrimah mosque, general view

numerous guises, especially in doubled form (Mihrimah mosque, completed c. 973/1565).<sup>2.332, 2.350</sup> The Şehzade mosque (955/1548) presents a much more streamlined appearance, with dome chamber and courtyard of approximately equal proportions. Within the sanctuary, the great central dome opens into semi-domes on all four sides, with small diagonal semi-domes opening off the main ones and with smaller domes. It is instructive thus to see Ottoman architects developing the possibilities of the centralised plan like the builders of Christian churches and martyria a millennium before, and coming to very similar conclusions. Smaller mosques with domes on hexagonal (Ahmed Pasha, completed c. 970/1562) or octagonal bases (Mihrimah mosque) were scarcely less popular than domed squares. A small number of wooden-roofed mosques perpetuating earlier modes, especially in Anatolia and Iran (e.g. Abyana), and with their roots in the Arab tradition, survive (e.g. Ramazan Efendi in Kocamustafapasha, 994/<sup>2.323, 2.326, 2.328-2.331, 2.335, 2.332, 2.350</sup>

1586, and Takkeci Ibrahim Aga, 999/1591) as reminders of a very widespread type of Ottoman mosque now almost entirely eclipsed by more durable structures.

In the ferment of experiment which marks 16th - century Ottoman architecture, the key figure was undoubtedly Sinan, an Islamic equivalent of Sir Christopher Wren, who transformed the face of the capital city as of the provinces with some 334 buildings (mostly mosques) erected in his own lifetime. His pivotal role as chief court architect (effectively Master of Works) allowed him to stamp his ideas on public architecture from Algeria to Iraq and from Thrace to Arabia in the course of a phenomenally long career which spanned virtually the entire century. His finest mosques are nearly all in Istanbul, scattered prodigally throughout the city; they are his epitaph, which might fittingly read *si monumentum requiris, circumspice*. The Süleymaniye mosque in Istanbul (963/1556) is by common consent the masterpiece of his middle<sup>2.336, 2.356</sup>

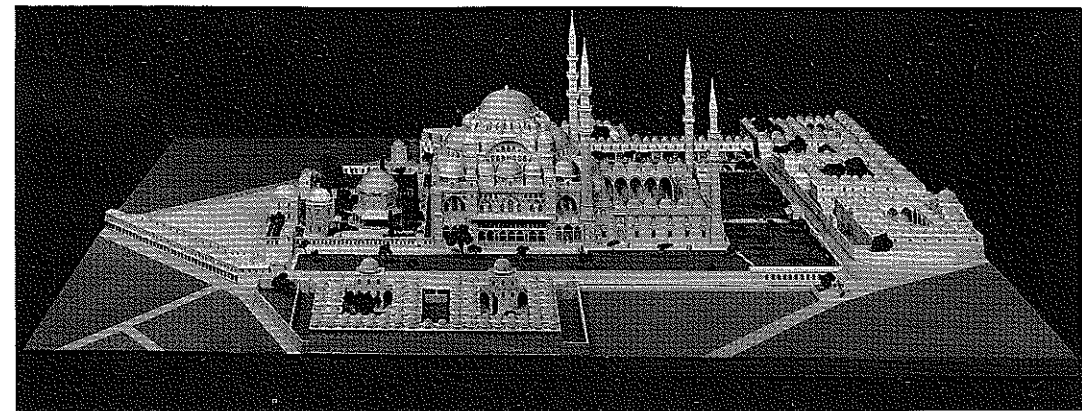
age. It takes up and refines the model of the Bayazid II mosque by adding ideas taken from the Şehzade mosque, like the succession of semi-domed spaces billowing out from the main dome, though only along the principal axis.

Huge arches serve to compartmentalise the spatial volumes.

All these mosques are preceded by an open courtyard whose cloister is roofed by long files of adjoining domes. This standard feature typifies the new emphasis on subsidiary structures – mausolea, *imarets*, *madrasas* and the like – and the consistent attempt to integrate them visually with the sanctuary itself, for example by subordinating them to the principal axes of the design. All this implies a marked increase in scale and a new sensitivity to the landscaping of the ensemble (*küllüye* of Bayazid II, Edirne). Hence the recurrent choice of dramatic sites for these mosques, especially in Istanbul with its built-in vistas along the Bosphorus. This awareness of topography as a feature of mosque design is evident as early as the Fatih mosque; its three parallel axes are grouped around and

While the increase in the absolute height and breadth of these great domed chambers is striking, the amount of articulation and detail crammed into these spaces is scarcely less impressive. All is subordinated to a formidable concentration of purpose – for example, the carefully considered fenestration, surely a legacy from Hagia Sophia, with its superposed groupings of eights and sixes or of sevens, fives and threes. In the interests of creating the maximum untrammelled space, thrusts are concentrated on to a few huge piers with spherical pendentives between them, and thus the layout is a model of clarity and logic. Flooded with light, their volumetric sub-divisions apparent at a glance, these interiors are at the opposite pole from the dim mysteries of Hagia Sophia. Frescoes reminiscent of manuscript illumination and of carpet designs vie with Iznik tiles to decorate the interior surfaces, and often (as in the case of fluted piers) to deny their sheer mass.

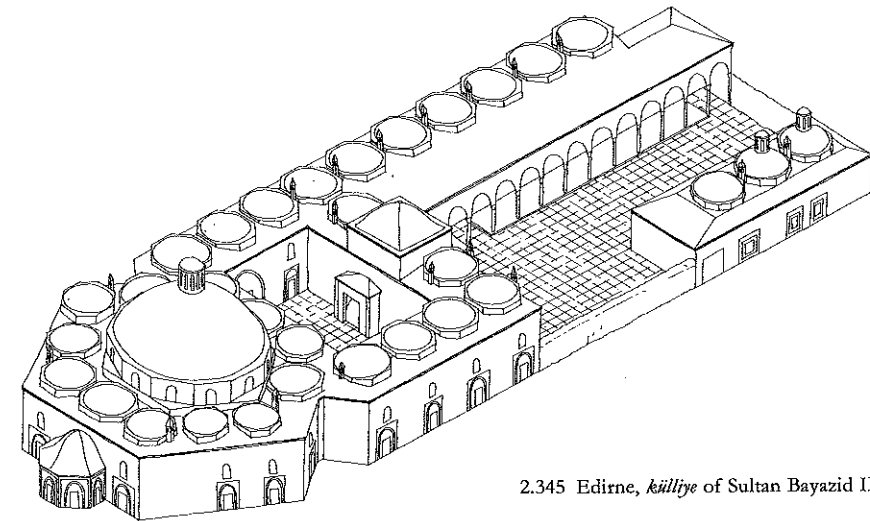
Externally, these mosques demonstrate a well-nigh fugal complexity by virtue of their obsessive concentration on a very few articulat-



87 Istanbul, Süleymaniye complex, model

within an enclosed open piazza measuring some 210 m. per side. The climax of mature Ottoman architecture is reached with Sinan's final masterpiece, the Selimiye at Edirne (982/1574), in which the largest of Ottoman central domes (31.38 m. in diameter), hedged externally by the loftiest quartet of Ottoman minarets (70.89 m. high) rests on eight piers pushed as close to the walls as safety will allow so as to create the largest possible open space.

ing devices like windows, arches and domes. The repetition of the same forms on varying scales intensifies the sense of unity. Even the minarets which mark the outer limits of the mosque's surface area are brought into play; for example, those of the Sultan Ahmed Mosque (completed 1025/1616) have the bases of their balconies so calibrated as to coincide with the top of the main dome, its collar and the collar of the main subsidiary half-domes, while their



2.345 Edirne, külliye of Sultan Bayazid II

location at the corners of the building binds it together and defines the sacred space from afar. Detailing is sparse and crisp, with a strong linear emphasis, a flawless sense of interval and a pronounced attenuation of features like wall-niches and engaged columns (Süleymaniye mosque). Nothing is allowed to impair the primary aesthetic impact of cliff-like expanses of smooth grey stone. Most notable of all is a dramatic but ordered stacking of units, culminating in the great dome which crowns and envelops the entire ensemble. These individual units are each locked into place within a gently sloping pyramidal structure whose inevitable climax is the central dome. From this peak the subsidiary domes, semi-domes and domed buttresses cascade downwards to form a rippling but tightly interlocked silhouette. These highly articulated exteriors are a triumphant reversal of the standard Islamic preference in mosque architecture for stressing the interior at the expense of the exterior. As the viewpoint changes, so too does the profile of these mosques, from a continuous smoothly undulating line to a series of sharp angular projections formed by stepped buttresses and roof-turrets. The preference for saucer domes rather than pointed domes with a high stilt fosters the sense of immovable, rock-like stability, with the topmost dome clamped

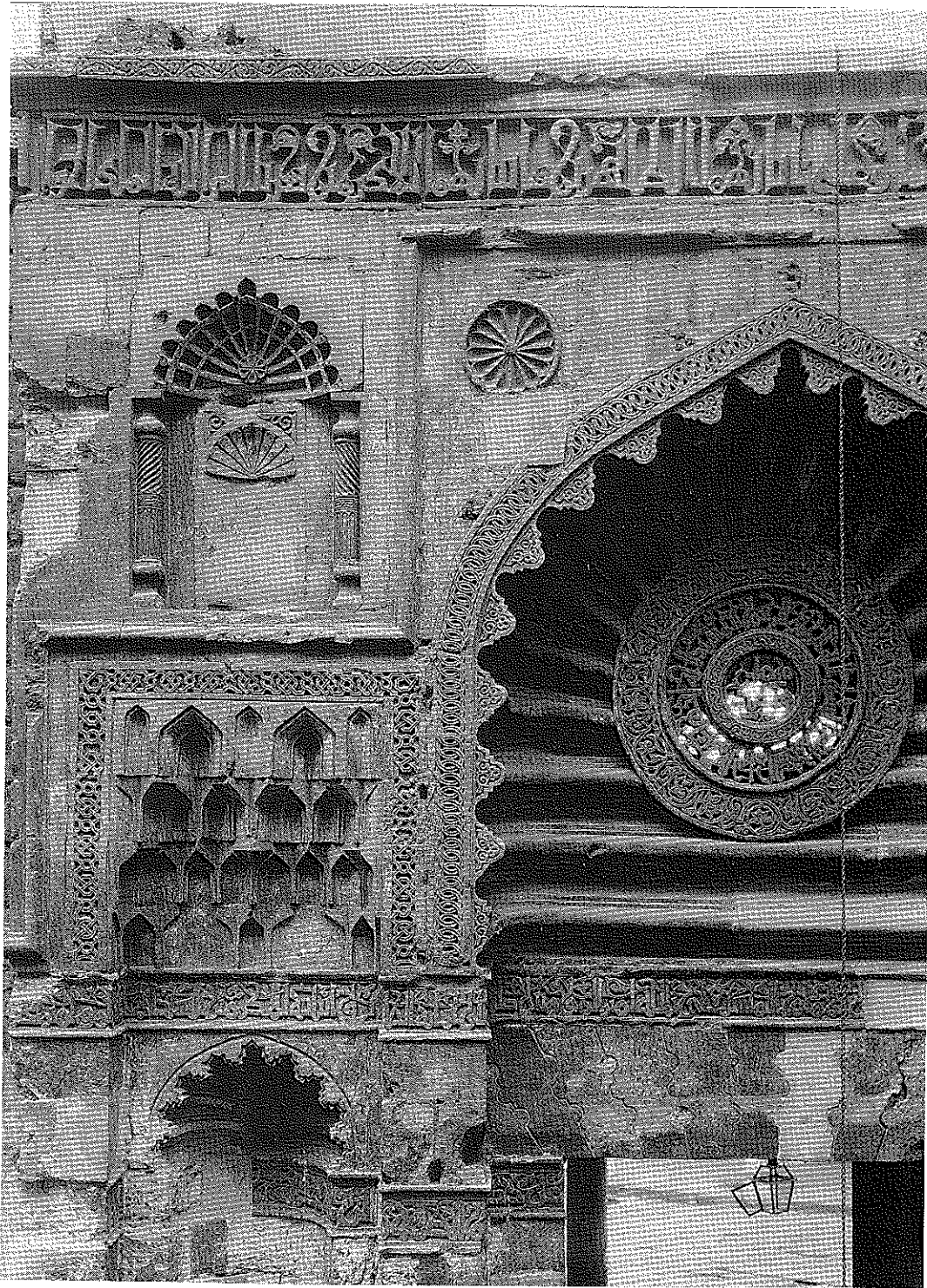
like a lid on to the mobile, agitated roof-lines beneath it.

This, then, can justly claim to be architects' architecture. It merits that term by virtue of its unbroken concentration on the single germinal idea of the domed centralised mosque. It is against that consistent unity of vision that the role of the Hagia Sophia must be assessed. Of course Turkish architects were not blind to its many subtleties, and they freely quarried it for ideas. But it was as much a challenge that inspired them to emulation as it was a source for technical expertise. Finally, it was the Ottomans who succeeded where the Byzantines had failed: in devising for these great domed places of worship an exterior profile worthy of the splendours within. The triumphant issue of their labours to that end can be read along the Istanbul skyline to this day.

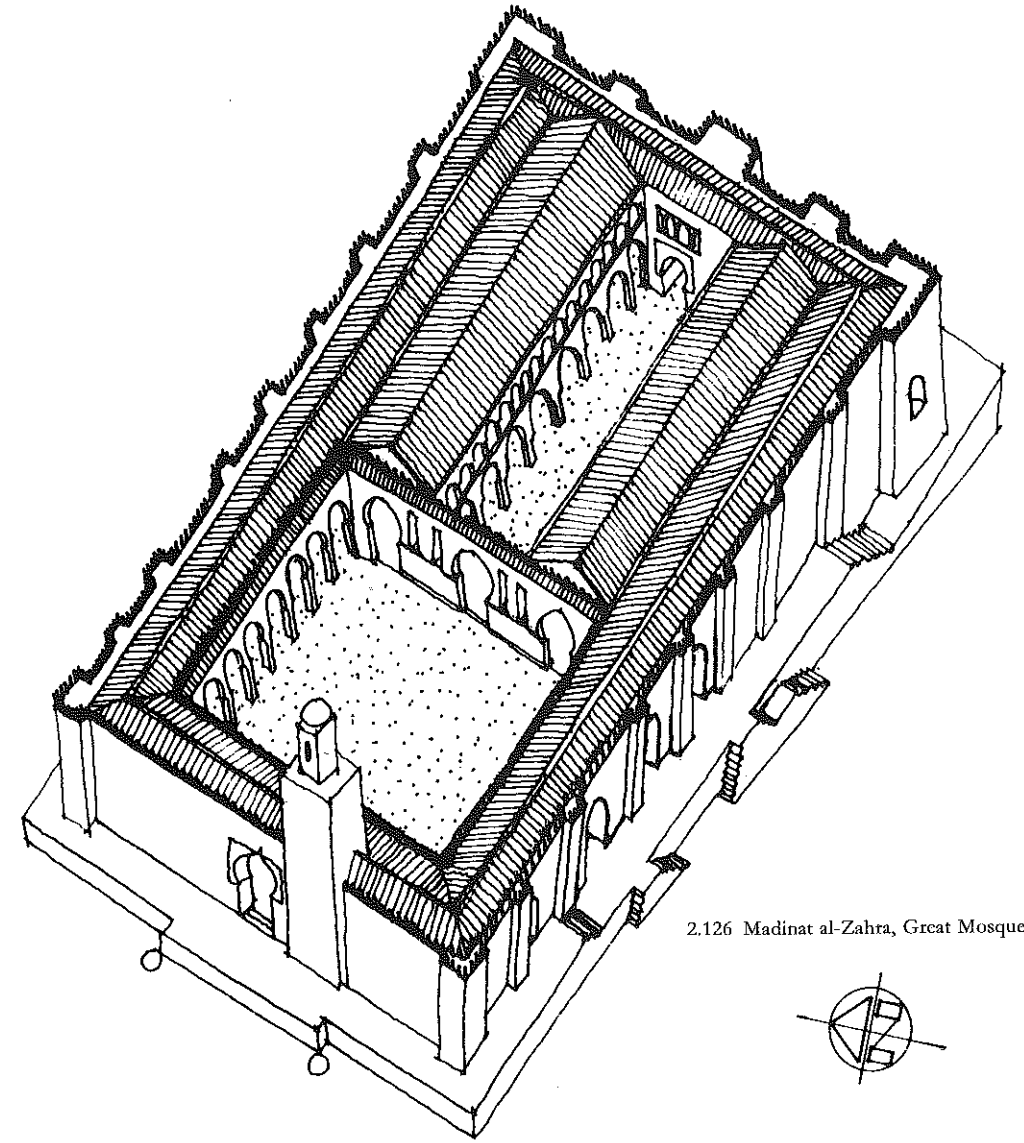
#### CHARACTERISTICS OF MOSQUE DESIGN

The analysis given above has attempted to outline and explain the major components of mosque design, the various functions which the building served in medieval times and – admittedly in a very cursory fashion – to identify and describe the principal schools of mosque architecture. It is now time to relinquish the specific in favour of the general and to try to pinpoint





88 Cairo, Aqmar mosque, façade



2.126 Madinat al-Zahra, Great Mosque



the abiding characteristics of mosque design throughout the Islamic world and over almost a millennium. Four trends may perhaps be singled out: an innate flexibility; an indifference to exterior façades; a corresponding emphasis on

the interior; and a natural bent for applied ornament.

#### *Flexibility*

Mosque architecture owes its flexibility – which

is so pronounced a feature that it is not always possible to recognise the building as a mosque at first glance – to several distinct factors. Perhaps the most important of these is the lack of sacraments and formal ceremonies in Muslim worship, which means that there are few ritual requirements to be met. This has made it possible for a very wide variety of buildings to serve as mosques. The lack of a well-developed architectural tradition in Arabia meant that Muslims encountered the cultic buildings of other faiths with remarkably open minds, if only in the sense that they had no clearly defined notion of what constituted an appropriate kind of sanctuary. From this sprang a willingness to adopt alien traditions of architecture and to adapt them freely, indeed ruthlessly, to suit Muslim needs. This was equally true whether the mosque was a free variation on themes borrowed from pre-Islamic tradition, or whether its very structure was that of a pre-Islamic place of worship taken over by the Muslims for use as a mosque and subsequently modified. The net result of all this was to present Islamic architects, at least in theory, with a remarkably wide range of options in designing a mosque. In practice, of course, they tended to work within the limits of their own local school.

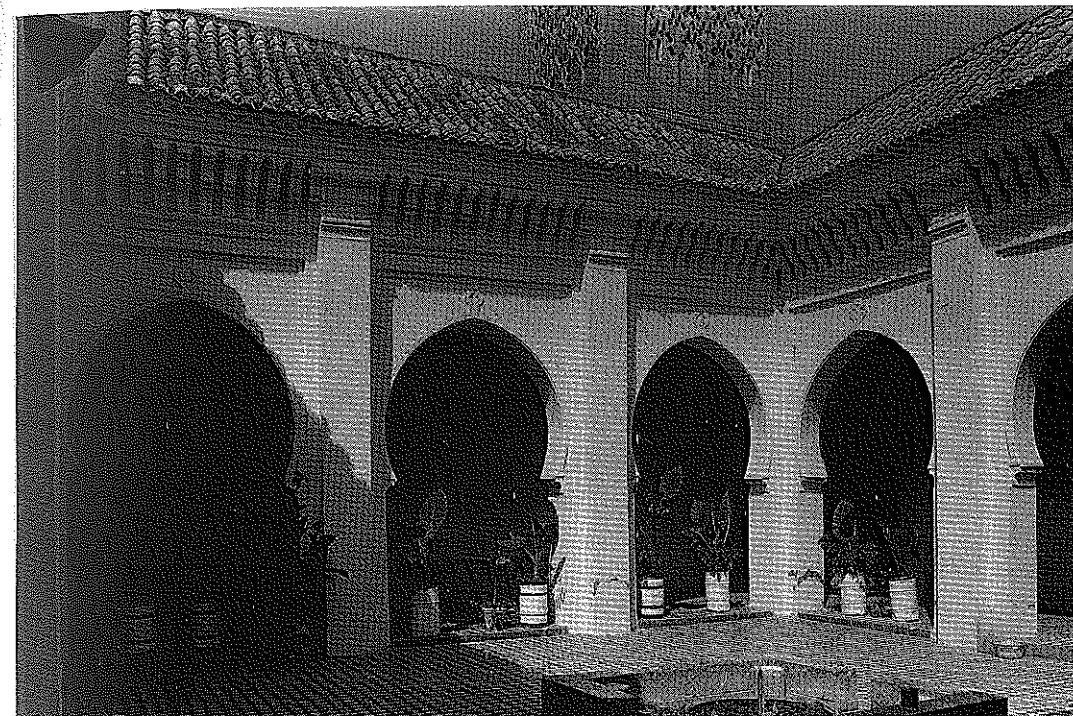
#### *Indifference to exterior façades*

Several reasons might be cited for the indifference which Muslim architects customarily display to the notion of a highly articulated exterior façade in mosque design. They might, for example, have been influenced by the stubborn insistence of orthodox opinion that the Prophet would himself have disallowed elaborate display in architecture. This attitude found expression in numerous *hadiths*. Alternatively one might cite the ingrained custom in Islamic lands whereby domestic and much public architecture presents an unyielding blank face to the world and thus preserves the privacy of those within. An even more practical consideration is the layout of most towns in the Islamic world. The absence of wheeled traffic meant that most streets were narrow. Moreover Islamic law safeguarded private property rights; and this, together with the absence of municipal corporations of European type, discouraged town planning on a spacious scale. The opera-

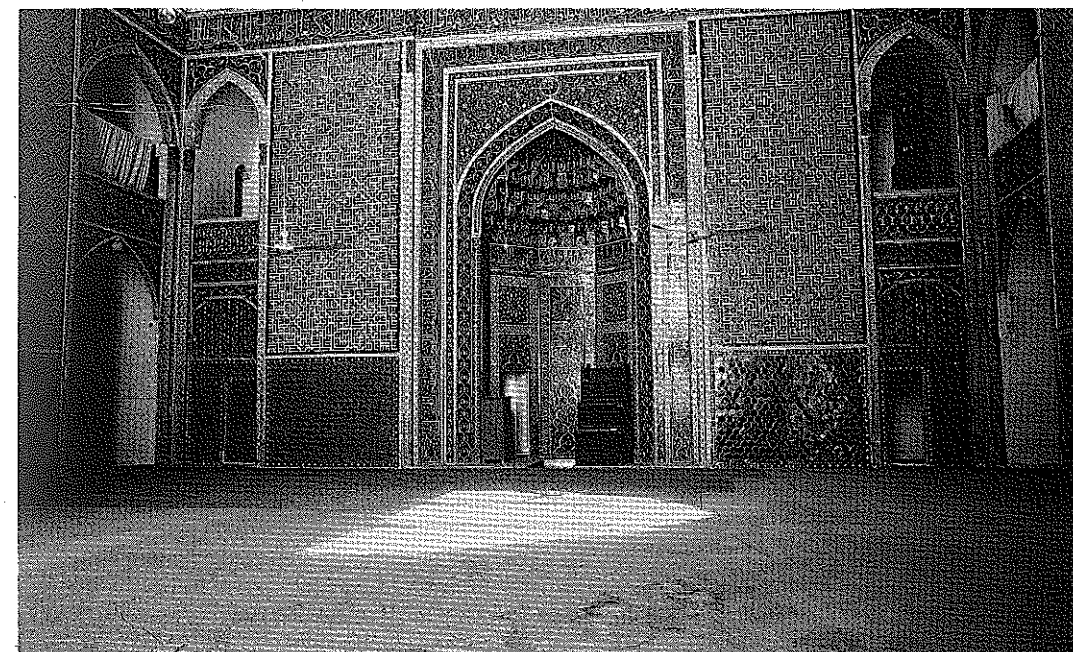
tion of these various factors ensured that the average medieval Islamic city was too labyrinthine in layout to contain much in the way of long straight avenues, crescents, piazzas or other similar features which might foster the development of elaborate façades. Thus the concept of the mosque as a major feature of the cityscape never took root in the Islamic world. Despite a few major exceptions, then, which include mosques built in open country as well as urban mosques like the Aqmar mosque in Cairo, it was standard practice for medieval mosques to have unpretentious exteriors. Very often they were located in the thick of bazaars and domestic housing, thus literally and metaphorically at the level of everyday life. So modest might the various entrances be that it would be quite possible to enter a mosque without immediately realising it – though elaborate porches are not rare. In addition to all this the exterior perimeter of a mosque might well have grafted on to it, by a process of gradual accretion, whole clusters of subsidiary buildings – treasuries, latrines, mausolea, halls for prayer in winter, *madrāsas* and even palaces. All would conspire to block any integrated exterior view of the mosque.

#### *Emphasis on the interior*

The relative neglect of the exterior façade brought in its train, by a pleasingly exact reciprocity, a consistent emphasis on the symmetrical planning of the interior. The façade, in short, moved inside the mosque. The role of the courtyard was crucial in all this, and significantly it is nearly always large enough to permit a full view of the sanctuary façade. *Iwans*, arcades, gables and domes are the most popular methods of articulation, while the use of alternately projecting and recessed masses was also known. Islamic architects, in short, knew how to manipulate the masses of a building on the grand scale. The interaction of courtyard, *riwaqs* (covered arcades or cloisters) and enclosed sanctuary allowed them to experiment with various combinations of open, half-covered and enclosed space, and to exploit multiple contrasts between light and shade. Broad uncluttered surfaces helped to instil a peaceful atmosphere and prepared the worshipper to enter the cool, dark ambience of the sanctuary. The device of turning the mosque



89 Tlemcen, Sidi al-Halwi mosque, courtyard



90 Yazd, Friday Mosque, interior of dome chamber

outside in, as it were, has an appealing simplicity; but more than that, it allows the architect a freedom of manoeuvre which would be denied to him in the world outside the mosque. He can plan every detail of the façade, including the vital aspect of its interaction with its immediate surroundings, liberated from the constraints imposed by the secular architecture engulfing the exterior of the mosque on all sides.

#### Decoration

No account of mosque architecture would be complete without reference to the decoration which embellishes it. In the religious sphere, the unwavering Muslim hostility to figural decoration, with its accompanying overtones of idolatry, encouraged an intense focus on abstract ornament. This was soon valued in its own right as an aid to contemplation, which is why such care is lavished on panels just above floor level and therefore at the right height to be comfortably taken in by someone sitting on the ground. Whether the ornament is architectural or applied, its purpose is the same: to dissolve matter, to deny substantial masses and substitute for them a less palpable reality, whose forms change even as they are examined. This is done by repeating individual units indefinitely – columns, arcades, the cells of a honeycomb vault (*mugarnas*) and especially the various forms of applied decoration: floral, geometric and epigraphic. That the craftsmen who produced this ornament experienced a sensuous delight in the mingling of colours, materials, textures and

design motifs is scarcely to be questioned. But there is much more to Islamic decoration than this. Each of the three categories noted above – floral, geometric and epigraphic – has a deeper dimension. The endless variations which Islamic craftsmen were able to conjure forth on the theme of floral motifs, and which brought the word ‘arabesque’ into European languages, of themselves suggest the inexhaustible richness of God’s creation, and are frequently interpreted in a symbolic religious sense as references to paradise and Allah himself. Geometrical ornament makes much play of multiple superimposed levels and of patterns which continue beyond the frame which encloses them; in both cases there are obvious suggestions of infinity. Finally, the epigraphic mode as encountered in mosques is overwhelmingly and explicitly religious in content, comprising quotations from the Qur’an and the *hadith*, with historical matter coming a poor second. These inscriptions are, quite simply, the Muslim answer (not equivalent) to icons. Their text, whether the mosque is in Spain or China, is in Arabic, a tribute to the potent unifying force of that language in the Muslim world.

Such, then, are the basic principles of medieval Islamic mosque architecture. So faithfully were they observed across vast gulfs of space and time that almost any medieval mosque is instantly recognisable as such, whether it be in 7th-century Iraq, 10th-century Cordoba or 17th-century Delhi. Here, if anywhere, is the ocular proof that Islam is one.

### III The Minaret

#### INTRODUCTION

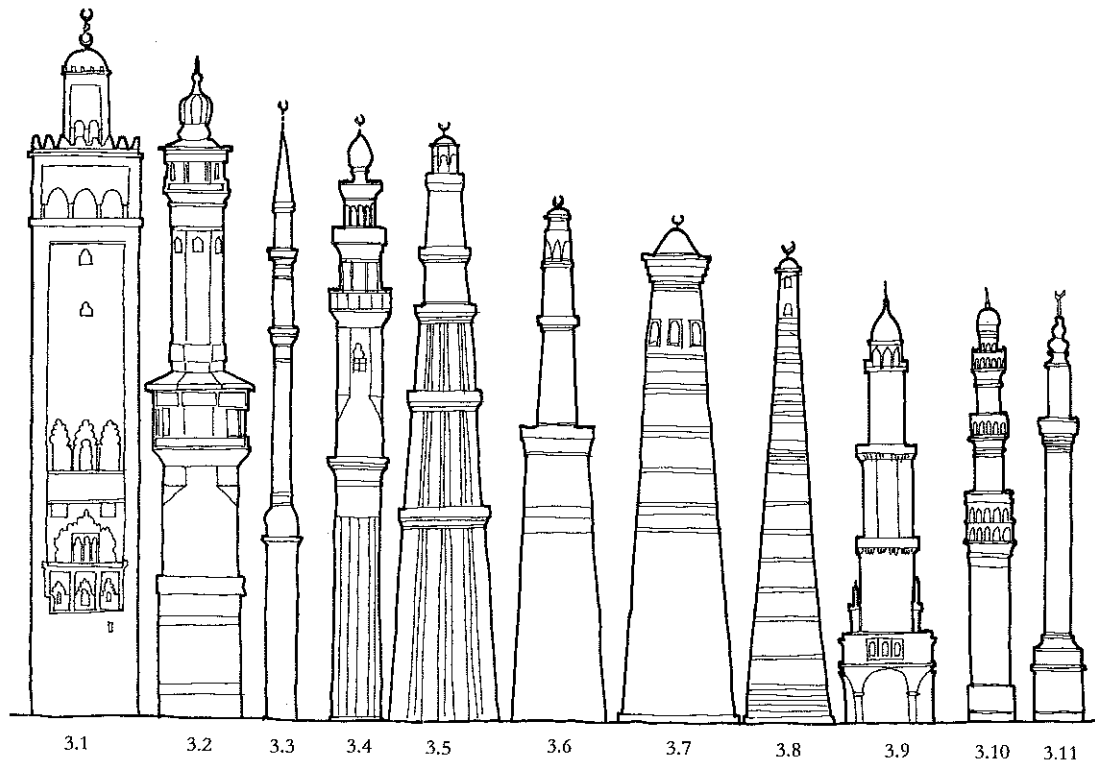
3.1-3.25 Unlike the other types of Islamic religious building, such as the mosque and the *madrassa*, the minaret is immediately and unambiguously recognisable for what it is. The reasons for this are worth investigating. They seem on the whole unrelated to its function of *adhan* (calling the faithful to prayer). The call to prayer can be made quite adequately from the roof of the mosque or even from a house-top. During the lifetime of the Prophet, his Abyssinian slave Bilal, whose stentorian voice became the stuff of legend, was responsible for making the call to prayer in this way. As the tale is told in the *hadith*, this happened in the most natural way: “When the Muslims came to Madina they used to gather for prayer without any given summons to it; a lack which they discussed one day, and some argued ‘Let us have a bell like the Christians’ and some said ‘Let it be a trumpet like the horn of the Jews’. ‘Umar said: ‘Why not appoint a man to call the people to prayer?’ And the Prophet said ‘Rise, Bilal, and call people to prayer.’” The practice continued for another generation, a fact which demonstrates that the minaret is not an essential part of Islamic ritual. To this day certain Islamic communities from Kashmir to the Sudan, especially the most orthodox ones like the Wahhabis in Arabia, avoid building minarets on the grounds that they are ostentatious and unnecessary. Others are content with the so-called ‘staircase’ minarets, which consist simply of a few broad external steps leading to a diminutive kiosk a little above roof level. These perpetuate a practice common in the first century of Islam. While such structures are obviously functional, it is very doubtful whether the same can be said for any minaret much more than fifty feet high. Without mechanical amplification the human voice simply cannot make itself heard, especially in a noisy urban setting, from the top of such celebrated minarets as the Giralda in Seville or the Qutb Minar in Delhi.

If, then, the ostensible function of the minaret is somewhat misleading, what other purposes might it have served? If the investigation

confines itself in the first instance to the early minarets of the Islamic world – i.e. those predating 1000 A.D. – three possible approaches may be suggested, following in this van Berchem’s lucid analysis of the genre. One is to examine the role of the very earliest minarets in their particular historical setting, on the theory that these examples laid down guidelines for the further development of the form. Another is to see what clues lie in the Arabic words used for minaret, and in their etymology. A third approach would focus on the forms of these early minarets and on their immediate sources, and would thus involve the assumption that at least traces of the earlier functions associated with these forms survived into the Islamic period. Yet each of these approaches is flawed, for each is riddled with inconsistencies, especially in the crucial early centuries when the very notion of the minaret was undergoing a complex evolution. Indeed, the early history of the minaret is particularly fraught with difficulties, exacerbated by a marked tendency to assess the early evidence in the light of later developments rather than in its contemporary context. Happily, a recent monograph on this subject by Jonathan Bloom revises many current misconceptions and puts scholarship in this field on to an entirely new footing.

#### THE CONTEXT OF THE EARLIEST MINARETS OR TOWERS

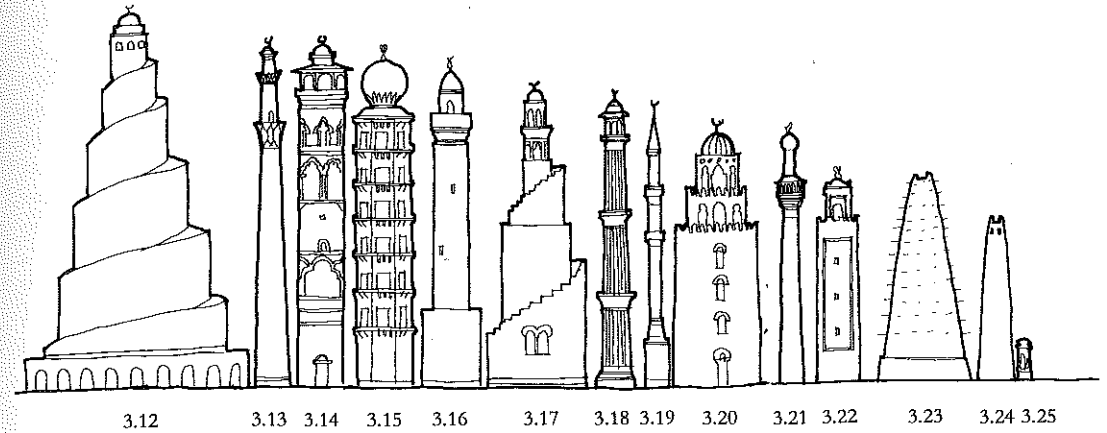
It will be convenient to begin by studying the circumstances in which the earliest minarets were built. According to the literary evidence, the first minaret was erected under the caliph Mu’awiya in c.45/665 at the instance of his governor in Iraq, Ziyad b. Abihi. A stone tower was accordingly added to the mosque at Basra – and if indeed it was a tower, it would certainly have been the most monumental feature of that mosque. Soon after, in 53/673, at the behest of the governor of Egypt, the mosque of ‘Amr at Fustat was given a quartet of minarets, while minarets were also added to other mosques in Egypt. Although nothing remains of any of these structures, this literary evidence – for all



that it must be treated with some caution, since it is largely of 15th-century origin – is most revealing. The evidence indicates that the impetus to build minarets came from the highest power in the land. It may even have derived from the caliph himself, though this is admittedly speculation. Clearly this is not convincingly explicable as a matter of local initiative, nor was such a major innovation generated by some unique concatenation of local circumstances. The idea, found as it is well-nigh simultaneously in Iraq and Egypt, may well have come from Syria, a province equidistant from both of them and – more to the point – the centre of the Umayyad dynasty which was then newly in power and concerned to establish its position. The key to this momentous innovation seems to lie less in functional imperatives than in political ones. Mu'awiya's conception of his role as caliph is very relevant here. It was Mu'awiya who outraged orthodox opinion by minting coins depicting himself as an armed monarch, by using a *minbar* when still only governor of Syria, by arrogating to himself much of the panoply of

Byzantine royal ceremonial. His justification for these and similar actions never varied: the local population had to be conciliated, and their tradition demanded that rulers should hold state in splendour. And it was precisely in Mu'awiya's caliphate that his governor, Maslama, ordered the four "minarets" (*sawami*) for the Fustat mosque; though perhaps not for the *adban*.

Against this background the introduction of the minaret acquires an unmistakably political colouring. Christian Syria, within which the Muslims formed a few small enclaves, was lavishly endowed with fine stone churches whose most striking external feature was a tall tower. At the top of these towers was struck the *simantron* – the Orthodox equivalent of the church bell – to summon worshippers for divine service. Mu'awiya, sensitively attuned to the discrepancies between Christian and Muslim culture, and to the need to reconcile them wherever possible, can scarcely have failed to compare this Christian practice with its much simpler Islamic equivalent. It would have been wholly in character for him to have decided to



secure for the *adban* a dignity and formality it had not hitherto possessed by giving it monumental expression. Typically, too, that expression borrowed a Christian form but imbued it with a new Muslim meaning. The slightly later case of the Dome of the Rock leaps to mind as the obvious parallel. The intrusion of political concerns into the forms of early Islamic religious architecture was to be a hallmark of the Umayyad period.

These arguments are susceptible to more than one interpretation. They could support the theory that these early, essentially redundant, minarets were intended simply to demonstrate to the local non-Muslims that the new faith was no less capable than its rivals of devising monumental architecture for its own glory. More simply, they could be seen as evidence of the gradually crystallising intention of the Muslims to find worthy outward expressions of their faith, directed primarily if not exclusively at the Muslim community itself. However, they could also imply the conclusion that from its very beginning the minaret was intended to function

as an outward sign of Islam. After all, the Near East was still overwhelmingly non-Muslim in these early years of the new faith. A usage formulated in response to a hostile environment would then gradually have become canonical and would have persisted even when circumstances had overtaken the need for it. These two interpretations will be considered in more detail below, in the context of the form of the earliest minarets. For the moment, it is worth remembering that in all probability these early minarets were too small to carry much of a propaganda charge, irrespective of whether that charge were directed at the Muslims or the Christians, or both at once. They are therefore better interpreted as early and hesitant essays at an unfamiliar form, a form which Islam was later triumphantly to make its own.

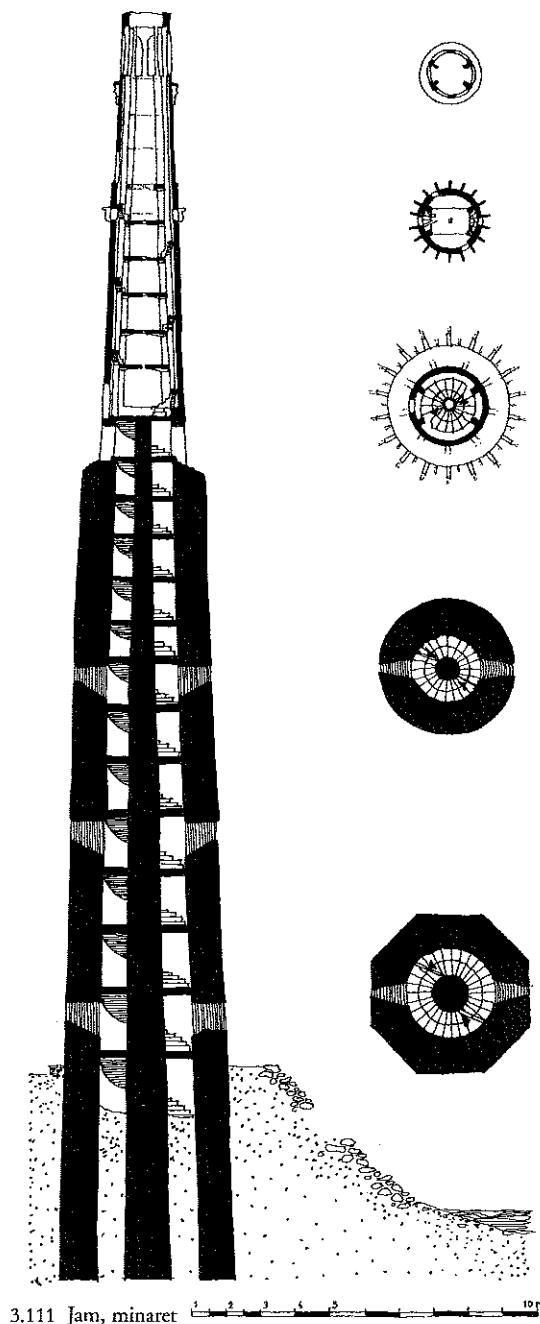
#### ETYMOLOGY

The second possible approach to the original function of the minaret is through the etymology of the words used in Arabic to describe this kind of building. It is perhaps significant that

the three words most commonly used – *manara*, *sauma'a* and *mi'dhana* – all seem to refer, so far as their etymology is concerned, to quite separate functional aspects of the building. Thus the notion that the minaret served multiple functions is embedded in the Arabic language itself. These functions quite naturally generated appropriate terms for themselves. Whether the prevalence of a given term in a given geographical area reflects the predominance of one function over another is, however, doubtful.

By far the commonest of the three terms is *manara* or *manar*, which is appropriately enough the source – via the Turkish version of the term – for the English word 'minaret'. It needs to be emphasised at the outset that the word carries no connotation of the call to prayer. Its basic meaning is a place of light or fire (*nur* or *nar* in Arabic). It is in no sense surprising that these two shades of meaning should converge in actual linguistic usage – though the evidence of the various verbs connected with the root *n.w.r.* suggests that the primary meaning is light. The word was used in pre-Islamic Arabia to designate high places from which signals of fire or smoke were made. For this reason the minaret has often been equated with a lighthouse, especially since such structures were widely used for military purposes by the Byzantines in North Africa and Syria well into Islamic times. The Pharos of Alexandria, which was of course one of the Seven Wonders of the ancient world, and which was damaged by the Arabs in 21/642, had this function among others and has remained the exemplar of all subsequent lighthouses. It has repeatedly been cited as the inspiration for certain types of minaret, a theory which will be discussed shortly. Moreover, the cylindrical towers attached to Islamic fortresses along parts of the North African coast (e.g. Tunisia) not only served as lighthouses and beacons but were actually called *manaras*. It need therefore occasion no surprise that *manara* has been etymologically derived from the Arabic word for light (*nur*). This connection with light has been used as the basis for a symbolic interpretation of the minaret as an emanation of divine light or as an image of spiritual illumination. More generally – and this point will be taken up later – the term *manara* was applied, by a familiar process of semantic depreciation, to sign-posts, boundary

stones and watch-towers even when no particular association with light or fire was intended. Conversely, the connection with fire and light is especially emphasised in the use of *manara* to mean oil-lamp or lampstand. One



3.111 Jam, minaret

might summarise the discussion of *manara* by noting that the term combines two distinct concepts: the notion of light or fire and that of a marker. Neither meaning has any locus in Islamic ritual. However, while the lighting of a fire on the minaret of a mosque was an event of the utmost rarity in the early period (it is recorded to have occurred in the case of the Manarat al-'Arus in the Damascus mosque), and is difficult to reconcile with any regular function of the mosque, the value of the minaret as a marker of the principal building of the Islamic community is self-evident. It may safely be conceded, therefore, that in the context of religious architecture the association between the minaret and light or fire is (in practical terms) an irrelevance. It will be necessary, however, to return to this association in the context of secular architecture.

The second term frequently used to designate the minaret – indeed, it is the standard usage in North Africa – is *sauma'a*. The word means a cell in which a Christian (usually a monk) secludes himself (with the particular gloss that the cell has a slender pointed apex). It is worth remembering in this context that when the greatest of medieval Islamic theologians, al-Ghazali, was undergoing his spiritual crisis he turned, like many a Christian anchorite before him, to seclusion in a building – though he calls it a *manara*. In his own words: 'for a period I confined myself in the mosque of Damascus, and stayed on the minaret all day long with the door barred'. This concept of shutting oneself off seems to be derived from the *sauma'as* or cells which were a regular feature of pre-Islamic Byzantine architecture; they were incorporated into the tall rectangular towers with which churches, monasteries and houses were furnished. Once again, however, as in case of *manara*, the etymology is apt to mislead – for while the basic meaning of *sauma'a* is indeed 'hermitage', the word has come to designate, by a process of *pars pro toto*, the entire structure of which the cell was a small part. It might also be noted that, as with *manara*, which is often used of the lamp of a Christian monk, the connection with Christianity – a connection which is a recurrent feature of the history of the minaret – may simply reflect the Christian context of many of the early usages of the term. In other words, *sauma'a* may well

have been used to mean 'cell' rather than specifically 'a Christian's cell', which is the primary definition given by Lane. Among the meanings for the verb *sami'a* is to have an ear which is tapering or slender at the extremity. At all events, the specific connotation of *sauma'a* in the present context seems to be a tall rectangular minaret, rather than the minaret genre itself. Perhaps it developed its association with height not by the *pars pro toto* process but because – as the case of Fustat suggests – it originally connoted small rectangular box-like projections above the roof-line at the corners of the mosque. As time passed, such 'sentry-box' minarets, as Schacht has felicitously termed them, became taller and thus more prominent, and a free-standing minaret was the obvious climax to such an evolution. Be that as it may, *sauma'a* seems to be an entirely appropriate term for the minarets of North Africa. Moreover, unlike the word *manara*, and its Jewish cognate *menorah*, its connotations are religious, albeit with a Christian tinge. Possibly as a result of its association with the minaret, the word was also used more generally to mean 'a high place' or even 'a high building', and in the less specific sense its connection with *manara* in the sense of signal tower or marker is plain. In North Africa, however, a distinction clearly exists, for *manara* is used for signal towers and lighthouses. Appropriately enough in view of its Christian connotations, *sauma'a* has found a lodging in Europe, in the Spanish word *zoma* meaning 'minaret'.

It is a challenging reflection that the two Arabic words most frequently used to designate the minaret give no clue to the ritual function which for centuries has commonly been associated with the building. Instead they evoke respectively pre-Islamic and Christian associations. The term that does accurately render the ritual function of the building – *mi'dhana* – is, ironically enough, much rarer than the other two. It derives from *adban*, 'the call to prayer', and means a place from which that call is made. The same root yields *mu'adbin* (more familiar as 'muezzin'), meaning 'he who makes the call to prayer'. Pre-Islamic traditions infiltrate even this word, for in those days the herald who made important proclamations was known as the *mu'adbin*. It must be admitted that the rarity of the term *mi'dhana* is pregnant with meaning, for

if the etymologically obvious term is not used, a justifiable logical deduction would be that the early minaret, later tradition notwithstanding, did not serve primarily (or perhaps at all) as a place for making the call to prayer. That is indeed a momentous concept, and it leaves the way open for a thorough-going reassessment of the genre as a whole. By this reasoning, then, some connection with the ruler, presumably with his role as *imam*, would seem possible (a view most cogently proposed in recent years by Jonathan Bloom) – though the close interplay of secular and religious elements in the caliphal office should caution against a too narrowly political or secular interpretation of the minaret, as should its widespread popularity, from at least the tenth century onwards, in provincial contexts outside the orbit of the court and the major centres of power. The evidence of these later centuries unambiguously points to the use of the *manara/saumda* for the call to prayer, and that evidence cannot lightly be set aside. For the time being it must suffice merely to draw attention to these inconsistencies; for it cannot be denied that the persistent equation of the minaret with the proclamation of power is hard to reconcile with its widely assumed role as a tower for the *adhan*.

Before leaving the problem of etymology, it may be worth noting that several other words occur sporadically in literary or epigraphic texts as synonyms for at least some of the meanings of *manara*: *'alam'*/*alama* ('signpost', 'boundary marker', 'standing stone', 'flag'), *mil* (possibly derived from the Greek *miliarion*, 'milestone') and *asas*, 'a place of watching', a term especially popular in the Maghrib. The mere mention of these words in the context of the foregoing discussion is enough to emphasise yet again that etymology is a somewhat treacherous guide in determining the function of the minaret. Certainly these rarer words suggest that the minaret had other functions besides the call to prayer; but here too caution is required, since still more words are used for 'mausoleum' and are applied to structures which do contain a body and therefore incontestably function as mausolea. It can safely be asserted, however, that a review of Arabic terminology establishes that the minaret performed not one function but several in the medieval Islamic world. While the rarer Arabic

words used for 'minaret' may well reflect the function of the building in the particular context concerned, the most commonly employed word, *manara*, was obviously a blanket term which does not readily lend itself to precise elucidation, unless the context offers further, more specific, clues.

#### THE FORM OF THE EARLIEST MINARETS

The third possible approach to determining the function of the minaret in the early centuries of Islam is by way of morphology. The briefest survey of the formal characteristics of medieval minarets is enough to yield one very significant result: that virtually the whole body of surviving minarets belongs in one of two categories. One category comprises minarets with ample interior space; the other, minarets in which the interior space is reduced to the bare minimum required for a spiral staircase to ascend the structure. Minarets with external staircases obviously belong in neither category. Useful as this division is, it cannot shed light on the crucial first century of Islam. Any attempt to explain the function of the minaret by means of its form has to take some account of the earliest recorded minarets, even though none of these has survived. The interpretation placed on the tantalisingly brief literary accounts which refer to the earliest minarets is therefore crucial.

These accounts are unfortunately either ambivalent or too short to throw any light on the problem. For example, the historian al-Baladhuri refers to the minaret at Basra as being of stone. Since stone is specified, and the rest of the mosque was of mud brick, it seems legitimate to conclude that the minaret was important enough to have special care taken over its construction. This, then, seems to be a fairly straightforward case. The same cannot be said for the minarets of the mosque of Amr at Fustat. The source here is the 15th-century historian al-Maqrizi, who states – in a text that draws on several different sources and which for that reason may not be a true reflection of his own vocabulary – that Mu'awiya ordered the building of four *sawami'* (pl. of *saumda*) for the call to prayer, and that Maslama placed four *sawami'* in the corners of the mosque. Since this is not, in all probability, the first word for minaret that would have come naturally to al-



91 Uzgend, minaret

Maqrizi's mind, its use in this passage calls for some discussion, even if it is not possible to arrive at a totally convincing explanation. Perhaps the most straightforward explanation is that the choice of word is not al-Maqrizi's but that of the particular source he was quoting. In that case, one must reckon with the changes of meaning to which this particular word was subjected over the medieval period. Put plainly, the word could mean 'rectangular box' if the source were of 7th- or 8th-century date and 'tall minaret' if it were half a millennium later. It is also possible, of course, as suggested earlier, that al-Maqrizi himself used the word deliberately because to him it connoted tall, rectangular minarets of the Syrian or Maghribi type (very unlike those which he saw all around him in Egypt). His choice of word would in that case have reflected either his own or his source's belief (perhaps even precise knowledge) of the form which these early Umayyad minarets took. Alternatively, he may have used the word *sawami* with one of its other meanings in mind, such as a high place. In that case the sense of the passage might be more accurately rendered by translating the key passage as 'Maslama heightened the four corners of the Friday Mosque'. Such an interpretation would find further support in the literary accounts dealing with the construction of the Damascus mosque. Yet the difficulties attending any of these interpretations are legion.

The key point to bear in mind in a discussion of the Damascus minarets in their present form is that there is no evidence that they were the work of any early Muslim patron. Indeed the geographer Ibn al-Faqih, writing in 903, states specifically that the minarets (*mawadbin*) in the Damascus mosque 'were originally watch towers in the Greek days, and belonged to the Church of John. When al-Walid turned the whole area into a mosque, he left these in their old condition'. Similarly, his contemporary al-Mas'udi writes that in this rebuilding 'the *sawami* were not changed, they serve for the *adhan* at the present day'. Thus strictly speaking there is no clear evidence even that these pre-Islamic towers were used for the call to prayer in Umayyad times, and one may especially doubt that they served this function before the reign of al-Walid, when the Muslims shared the site of the future Great Mosque with the Christians.

Nevertheless, the use of the word *sawami* by the Iraqi al-Mas'udi, while it could mean simply that the Greek watch-towers contained chambers and happened in *that* sense to be like the *sawami* at Fustat, could perhaps yield the meaning that, at Damascus as at Fustat, the *sawami* – whatever their form – were indeed used for the *adhan*.

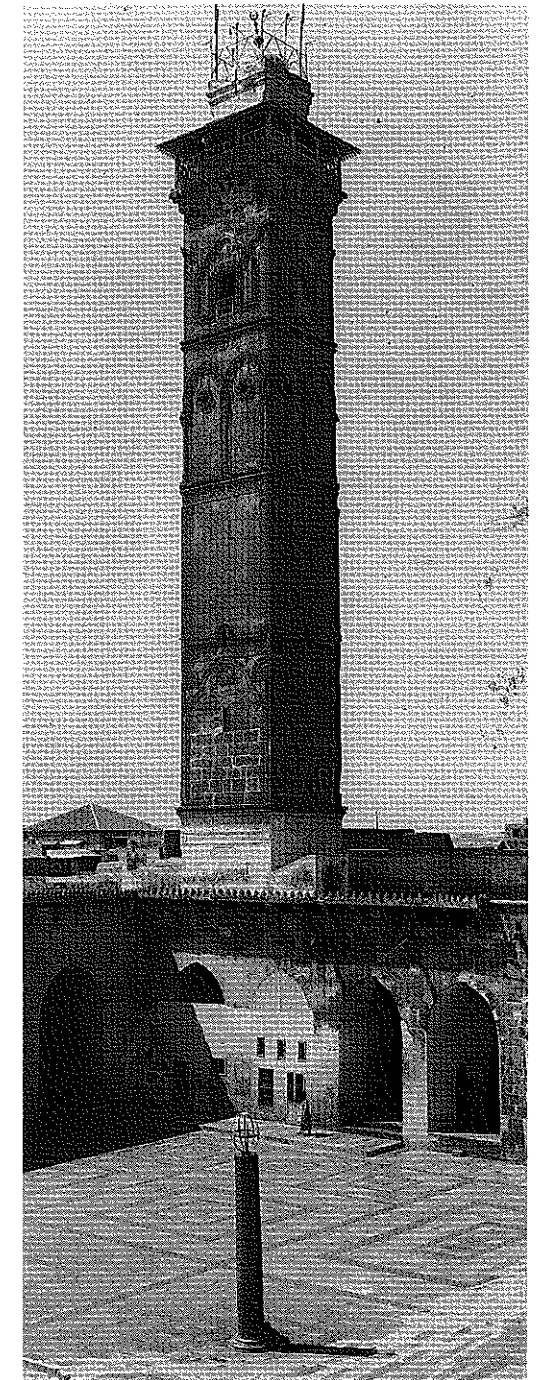
Reasonable grounds therefore exist for assuming that the corners of the mosque of 'Amr at Fustat were typologically very like those of the Damascus *temenos*, even though they would have been much smaller. Such *sawami* would be no more than abrupt excrescences at roof level, possibly articulated a little further by crenellations. They would indeed resemble Christian towers, but only in a somewhat stunted fashion. They could not aspire to dominate the skyline or indeed make any marked physical impact on the urban landscape. If this motive had loomed large in the mind of al-Walid at the time that he was building the Damascus mosque it would have been a simple process to heighten the existing corner towers accordingly. That he chose not to do so is clear evidence that the symbolic role of the minaret was not yet generally accepted. Indeed, the mosques of Basra and Fustat are more prophetic of later developments even though they were built earlier. At Basra the minaret, whatever its form may have been, was clearly distinguished by its different material of construction, while at Fustat the *sawami* were solid up to roof level, necessitating access by ladders. While this detail reflects the early Islamic practice of delivering the *adhan* from the roof, it also suggests that these corner *sawami*, by virtue of the strength conferred by their solid walls and by virtue of their position at the corners of the mosque, also had an architectural function as buttresses for the whole building. Their location and strength in turn invites a symbolic interpretation of their function as cornerstones of the faith, although it has to be admitted that their modest projection above the roof-line would scarcely proclaim this. Even so, the impact of their placing can be gauged from the statement of al-Maqrizi that at the time of the dawn prayer a muezzin was stationed at each *saumda* and that their combined *adhan* resounded like thunder through the silent city. It might fairly be said, then, that despite the probably rather truncated nature of

2.65-2.66 their resemblance to Christian towers, the *sawami* of the Mosque of 'Amr – like those of the mosque of Medina as rebuilt by al-Walid I – did operate as markers for the mosque. This function was certainly performed more effectively and elegantly by later minarets, but the crucial point is that it is already implicit in the earliest buildings of this genre.

The discussion so far has repeatedly assumed a close relationship between the Christian towers of Syria and the early minaret, but so far no physical evidence of this relationship has been adduced. Unhappily, the earliest surviving minaret of wholly Islamic construction, that of the so-called Mosque of 'Umar at Busra in southern Syria, dated by inscription to 102/720–1, does nothing to remedy this deficiency. It fits quite naturally into place alongside the long-since-vanished *sawami* just discussed, with a staircase giving access to its summit. Attached to the same mosque is a tower boldly projecting from the otherwise regular perimeter wall of the mosque, which boasts a twin window with a columnar dividing shaft; this is of Mamluk date rather than Umayyad, as was formerly believed. Its presence raises pressing questions as to its own function if the 'sentry-box' minaret was still operative at that time. At all events, the Umayyad minaret was here unassumingly grafted into the body of the mosque, exactly as had been done in the Damascus mosque and probably also at Fustat.

#### The Damascus minaret

It will be clear from the evidence presented so far that in the first century of Islam the role of the minaret within the religious – let alone the secular – domain had not yet been defined in its essentials. Later centuries were to bring major changes, notably variations in form and new secular functions. The minaret in tower form was still to come, unless indeed one were to assume, as is legitimate enough, that the minaret covered with external glass mosaic at the north entrance of the Damascus mosque was erected by al-Walid I. This tower was unfortunately destroyed in 570/1174, and replaced soon thereafter by the present minaret on that site. Such a building could readily be paralleled by a long series of similar towers (though without the mosaic revetment) erected as part of pre-Islamic



92 Aleppo, Great Mosque, minaret

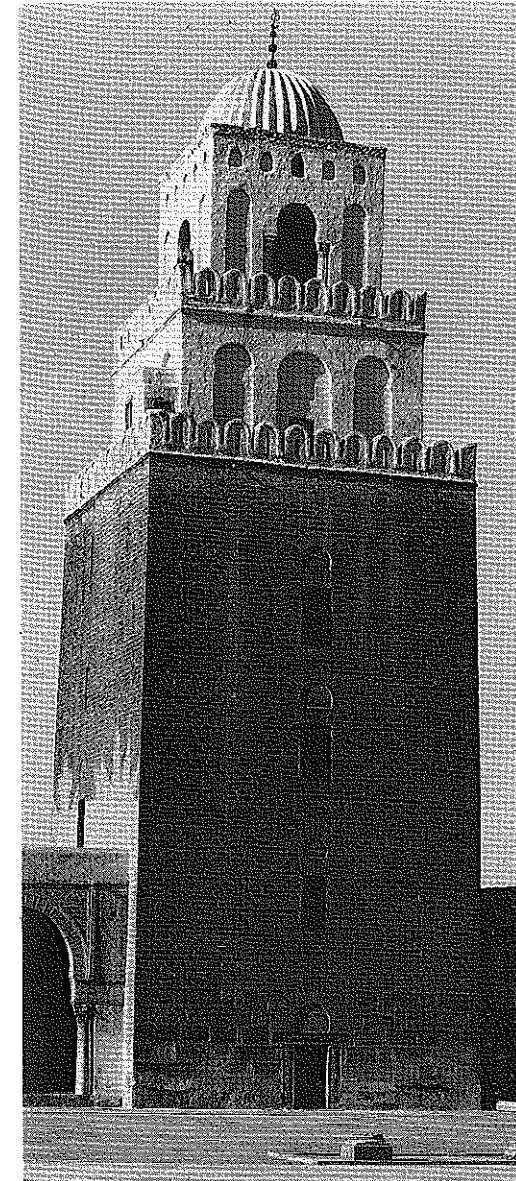
Christian churches, monasteries and houses in Syria – such as the examples of Sameh, Umm al-Rasas, Umm al-Surab and Qasr al-Banat. Before too much is made of this long-vanished tower at Damascus, however, it is only fair to point out that despite the evidence of four texts asserting that al-Walid I was responsible for it, its Umayyad date has been questioned. That said, the evidence of the external wall mosaic points unambiguously to the Umayyad period. Firstly, it was under that dynasty that glass mosaic reached its apogee in Islamic times. Secondly, the minaret of the Umayyad mosque in Cordoba, a mosque which embodied a thoroughly conscious recreation of Umayyad Syrian modes, was modelled on it. Thirdly, it is hard to imagine the 'Abbasid government of Syria embellishing, or allowing others to embellish, the Umayyad mosque in a style so expensively reminiscent of their hated predecessors. It may seriously be doubted, too, whether the skills required to execute wall mosaics on a large scale were available in the 10th century, which is the date which some scholars have proposed for this tower.

The mosaics of that tower ensured that attention was specifically drawn to it, perhaps already at street level, and certainly in the upper part of the elevation. It would not be going too far, perhaps, to suggest that the germ of the concept that the minaret is a symbol of the faith is already to be found in this tower at Damascus. For good measure that tower may also express the idea – particularly relevant in a predominantly Christian urban setting – of the mosque as a refuge for the faithful, with the minaret as its bulwark. In that case the defensive connotations of such towers in pre-Islamic Christian Syria – for example, the tower which is all that survives of the monastery on whose site the Umayyad palace of Qasr al-Hair al-Gharbi was built – would have been adopted and re-interpreted in a profounder sense by the new faith. The fact that such towers were a feature not only of Christian churches, but also of the larger pre-Islamic houses in Syria, may have helped to clinch the Muslim adoption of a similar form for their minarets, since the earliest mosque was of course the Prophet's house and the practice of using a house as a mosque is enshrined in Islamic tradition and practice to this day.

### The Qairawan minaret

An early surviving example of the square form of minaret, probably established in Syria as a result of the evolution outlined above – though the surviving examples, including three at Aleppo and one in the mosque of al-Khidr in Busra, dated 528/1134, are much later – is to be found in Tunisia. Recent excavations have confirmed that the square substructure of the minaret of the Mosque of Sidi 'Uqba at Qairawan can be associated with a rebuilding of the mosque undertaken in 221/836, though the upper parts are later. The latter detail weakens a once popular theory – to which there will be occasion to return later – that this minaret reflects the influence of the Pharos of Alexandria, which had a three-tier elevation, each tier smaller than the previous one. However, it is quite possible that in its original form the minaret looked very much like it does now. Even if that were not so, the adoption of a three-tier elevation at a later period would still require explanation and would certainly not exclude the possibility that the influence of the Pharos was decisive. The stepped three-tier form is not known in the towers of pre-Islamic Syria. Moreover, it is quite plausible that the Arab conquerors of Tunisia, who began their campaign in Egypt, should have used the most celebrated tower of that country as a model for the minaret of the first mosque built in this newly Islamised territory. The prime function of the Pharos as a lighthouse would have dovetailed quite naturally with the pre-Islamic associations of the *manara* in pagan Arabia, and would therefore have rendered it an unusually appropriate model for a minaret. The distinctive triply-stepped silhouette of the Qairawan minaret, however, was, to remain something of a dead end in the later history of the minaret. Even if the specific link with the Pharos is difficult to sustain, a connection with the lighthouse genre (as already suggested by the etymology of *manara*) seems assured, for the researches undertaken by Lézine have identified as a likely model for the Qairawan minaret the Roman lighthouse of Salakta (the ancient Sullethum), conveniently sited nearby on the Tunisian coast.

The principal impact of the Qairawan minaret, whatever its ancestry, was local, as the Susa *manar* and the minarets of the Great



93 Qairawan, Great Mosque, minaret

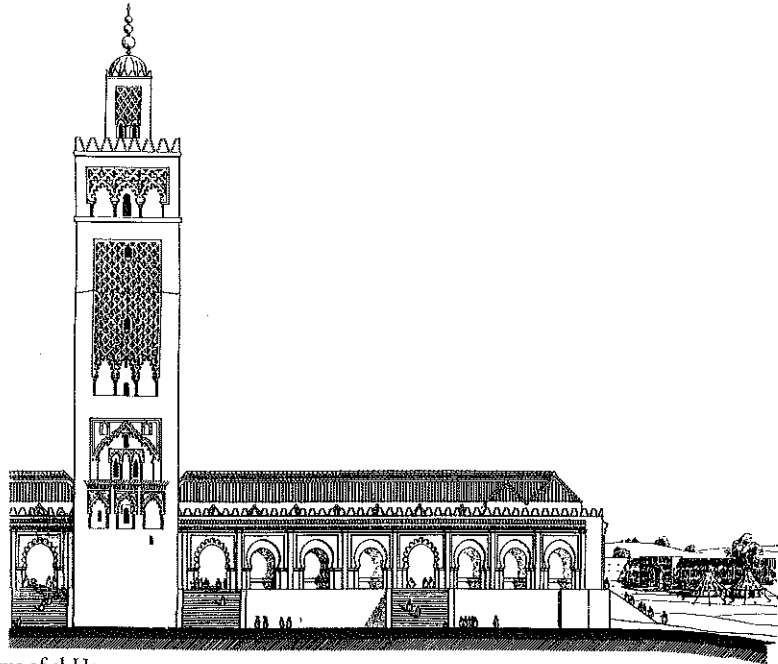
Mosques of Sfax and, to a lesser extent, Tunis testify. In other respects, however, this building anticipates later developments. It serves notice of the increasingly important rôle which the minaret had come to acquire in the 9th century. Its enormous bulk (perhaps the result of inexperience and hence timidity on the part of the architect) was underlined in the original layout

of the mosque by setting the minaret at the opposite end of the courtyard to the sanctuary. The emptiness of that great rectangular courtyard threw into stark relief the sheer mass of the minaret and confirmed its vital role in the building. Moreover, the placing of the minaret broadly though not exactly on the axis of the *mibrab* announced, more clearly than ever before, a ceremonial and liturgical connection between them. Besides, since the two features are at opposite ends of the building, this positioning helps to knit the mosque together and puts all the interior space to work, energising what was previously inert.

The disposition of minarets at the corners of the mosque, as at Fustat, Medina and Damascus, had already established their use as an articulating device. Qairawan developed that function still further. It was only a matter of time before the last refinement was added and the minaret was exactly aligned with the *mibrab*. The Great Mosque of Samarra is the earliest and best example of this culmination; the minaret at Madinat al-Zahra, near Cordoba, runs it close. The minaret at Qairawan, as at Samarra, is notable for its bold projection from the otherwise regular perimeter wall of the mosque. There is no evidence to suggest that some local peculiarity of the site, or for that matter any structural consideration, dictated such an arrangement, and this arresting departure from the otherwise unbroken continuity of the wall enclosing the mosque therefore invites explanation. No longer is the minaret unassumingly incorporated into the body of the mosque, as at Damascus and probably Fustat. Attention is specifically drawn to it in the ground plan – that is, effectively at street level – in the upper part of the elevation, and by its great height.

One might have thought that the substantial enclosed space of the Qairawan minaret (the base is some 10 m. square and the height is c.35m.) would have encouraged the provision of chambers within the minaret itself. For some reason this was not done, and the minaret therefore has inordinately thick walls. Self-contained rooms in superposed storeys had long been characteristic of Syrian church towers, and it was only to be expected that this idea should eventually take root in Islamic architecture, whether as an independent invention or as an





3.53 Rabat, mosque of al-Hassan

imitation of pre-Islamic prototypes. In the Syrian Christian tradition the floor of each storey was of wood, a practice also recorded in the corner towers of the Damascus mosque. Later Maghribi and Andalusian minarets not only revive the practice of furnishing the building – such as the minaret at the Qal'a of the Banu Hammad and the Almohad examples in Seville, Rabat and Marrakesh – with chambers, but also give them decorative vaults in stone or brick.

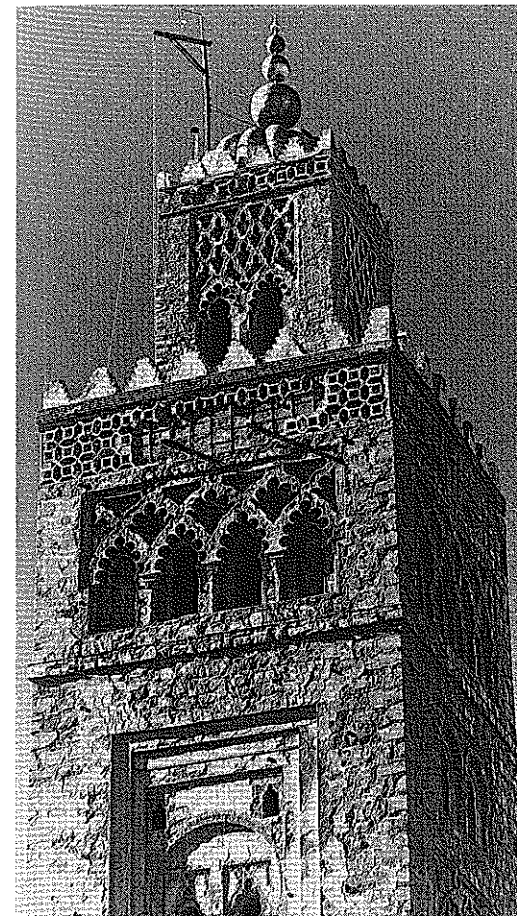
ALMOHAD MINARETS

This trio of minarets, all dated to the end of the 12th century, unquestionably registers the high-water mark of this genre in western Islam. Obedient to the strong undertow of conservatism in Maghribi architecture, they perpetuate the outer shell of pre-Islamic Syrian towers, of which the minarets of the mosques of Aleppo and Ma'arrat al-Nu'man preserve a distant memory. Given the geographical remoteness of these Maghribi minarets from Syria, and the fact that by the 12th century Syria was definitively sundered from the Maghrib in the political sphere, it is in the highest degree unlikely that

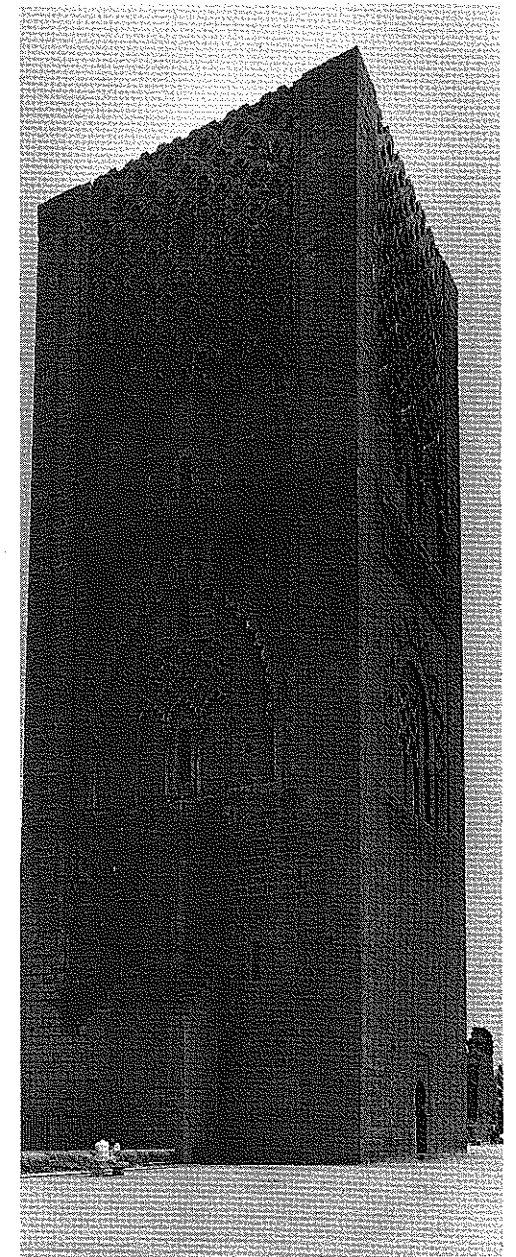
this postulated Syrian influence reached the far west of the Muslim world directly. Rather was it mediated through the filter of Umayyad Spain, which early established cultural dominance in the Maghrib. The archaizing tendencies of Moorish architecture predisposed Spanish Muslim craftsmen to perpetuate Syrian archetypes. In the domain of architecture the Great Mosque of Cordoba was undoubtedly the centre from which such Syrian influences, re-interpreted in sometimes bizarre forms, radiated throughout the Maghrib.

The internal arrangements of the great Almohad minarets are significantly different from those of their distant Syrian ancestors, as in the vaulting of the chambers or the use of a ramp as the means of ascent; the 10th-century minaret (encased in later masonry) of the Cordoba mosque even had two separate staircases. They are also very much larger than their Syrian models, approaching 65 m. (200 feet) in height, and – again unlike their prototypes – they display lavish decoration on all four sides. This is executed in a typically Maghribi idiom of cusped, horseshoe or multifoil arches, often generating a latticework design or enclosing yet

further variants on the arched form. Single or paired windows on each storey are a standard feature. Carved vegetal ornament is used to provide secondary accents in the spandrels and elsewhere. The few slightly earlier minarets in the Maghrib are mostly plain and crowned with a crenellated balustrade. The two in Fez obey a 1:4 proportional ratio of width to height; this is changed to 1:5 in some of the greater Almohad minarets (e.g. Mansura). A small pavilion, often a diminutive replica of the main shaft of the minaret, and crowned with a dome sometimes bearing a finial or standard, completes the upper elevation. Apart from a new emphasis on lavish external tilework, this formula remains essentially unchanged in the later medieval period



94 Marrakesh, Kutubiya mosque, upper part of minaret



95 Rabat, Mosque of Hassan, minaret

throughout Spain and the Maghrib (e.g. Fas al-Jadid, Great Mosque, 674/1275). Indeed, by an ironic quirk of history the minarets of Andalusia exerted a decisive influence on the campaniles of Spanish churches in this period. Thus the wheel came full circle.

So strong was the tradition of the tall square-shafted Maghribi minaret that it even survived the advent of the Ottomans. Possibly under their influence, the minarets of Algeria and Tunisia erected under Turkish rule occasionally recaptured the grand scale of the Almohad minarets, though falling far short of the finesse of earlier decoration. A novel type of octagonal minaret, each face richly tiled and the whole crowned by a projecting balcony and steepled pavilion, enjoyed special popularity in Ottoman Tunis. It represents a somewhat awkward blend of the local tradition with the slender pencil-shaped Turkish minaret, and manages to forfeit the distinctive qualities of both.

3.70-3.71

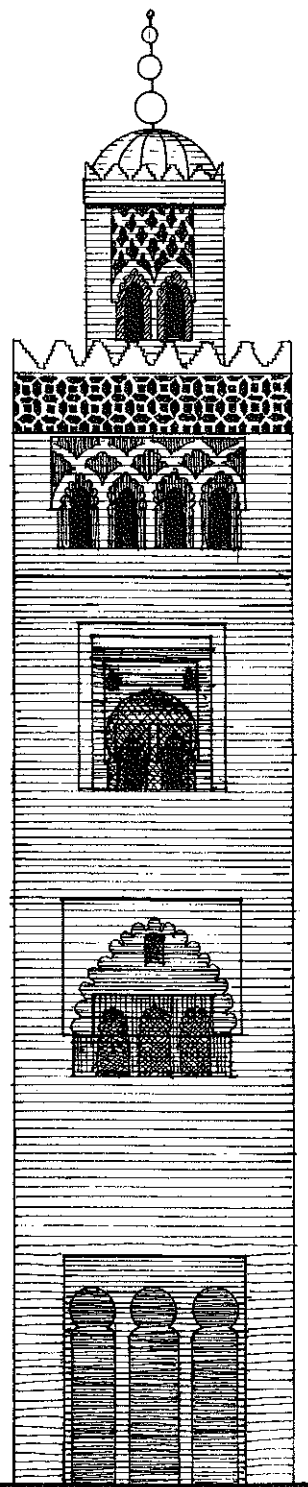
WEST AFRICAN MINARETS

An unexpected and distant by-product of the Syrian tradition is the Saharan or West African minaret. The Saharan type, often very high (e.g. the fairly recent example of Walad Jalal at Zibane) has a marked batter to its walls – a feature which had occurred at Qairawan but had not been exploited subsequently in the medieval period – and is crowned by an open-plan kiosk. Given the pre-eminent religious status of Qairawan throughout North and Western Africa as a centre for pilgrimage and learning, it is not surprising that the celebrated mosque of that city should make its presence felt thousands of miles away. But that influence, if indeed it can be proved to exist, became steadily more attenuated over the centuries and overlaid by local ideas. Thus in West African minarets, most of which date from the last four centuries (e.g. Timbuktu and Agadez), the batter is so pronounced that the minaret resembles a truncated cone, studded with projecting palm beams. These facilitate the constant repairs that such mud-brick structures require. Similar minarets are found as far north as the Mزاب region in Algeria (e.g. Ghardaya). They leave far behind the putative model furnished by the Qairawan minaret.

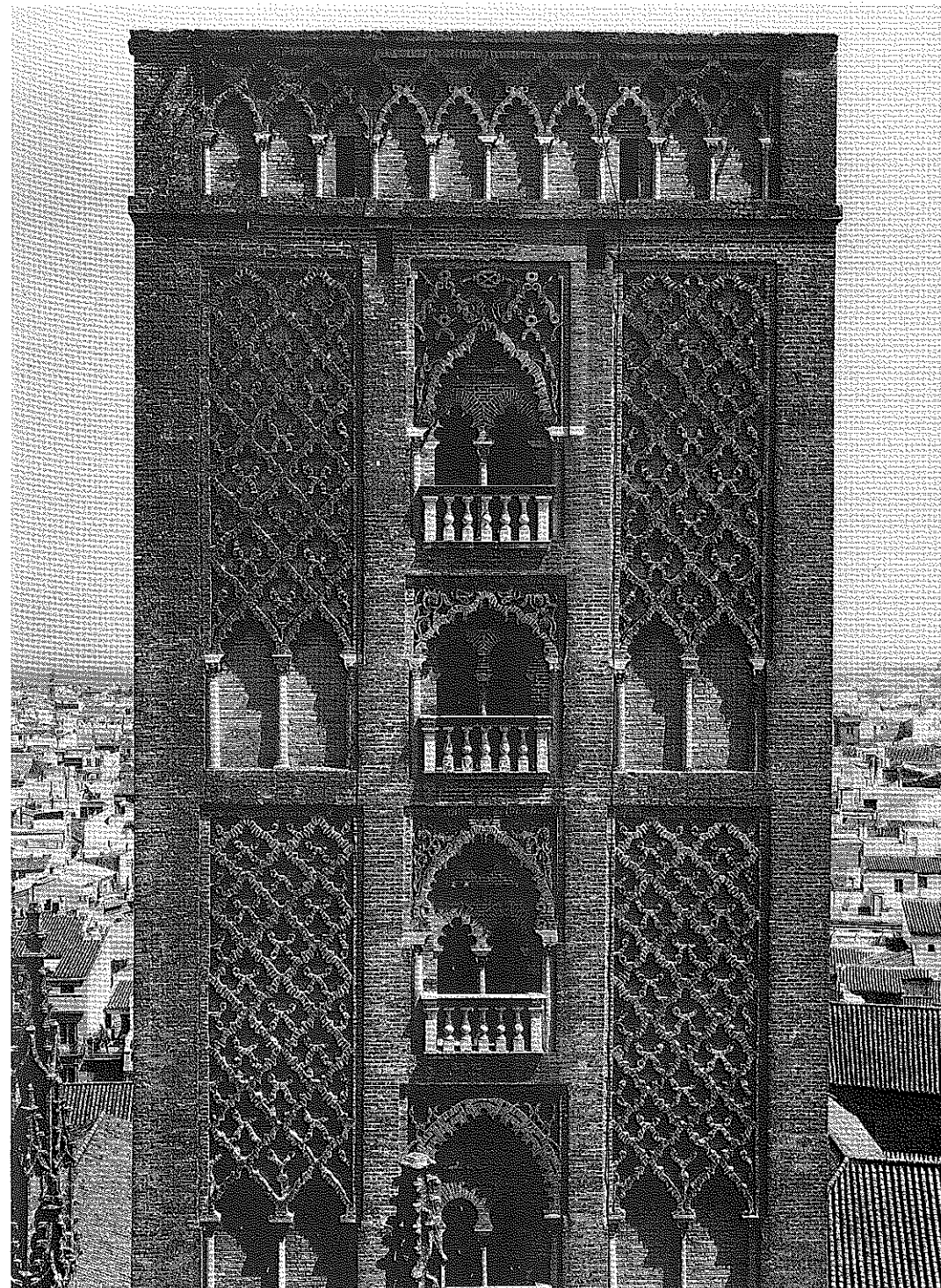
3.23

3.24, 3.35

The minarets of the Maghrib and Andalusia form a school unique in the Islamic world for its fidelity to an imported model and for its innate conservatism, which maintained a broadly consistent form throughout a vast area for over a millennium. The history of the minaret in the rest of the Islamic world, that is in Egypt and



3.55 Marrakesh, Kutubiya mosque



96 Seville, Great Mosque, Giralda minaret

Turkey and in the area to the east of them, is somewhat more varied. It embraces a very wide range of forms, of alien influences, and of functions both secular and religious.

## MINARETS IN IRAQ

This wider canvas is immediately apparent in the immediately post-Umayyad minarets which survive in the eastern Islamic world. These are principally to be found in Iraq. Possibly the earliest among them is the so-called Manarat Mujda – though there is some dispute as to when it was built, and even a pre-Islamic dating has been canvassed. This undeservedly neglected building opens a new chapter in the history of the minaret. Both in form and function it departs decisively from the norms established in the previous century. It is a slender cylindrical structure of baked brick, with a diameter just large enough to accommodate a winding interior stair and with sparing external geometric decoration executed in baked brick. It is thus in all its essentials prophetic of the matchless series of minarets erected in Iran during the Saljuq period. Its location is even more revolutionary, for it is entirely freestanding and there is no evidence that there was ever any building adjoining it. Its *raison d'être* – like its date – may be established with reasonable confidence by virtue of its strategic location midway between two 'Abbasid palaces: the great princely residence of al-Ukhaidir (c.159/775–6?) and its lesser satellite 'Atshan. The direct route between Ukhaidir and Kufa, the nearest city with a Friday mosque, cut straight across the desert and the most likely function of this minaret was to mark the way. The non-classical form could conceivably be derived from the watch-towers that, according to Yaqut and al-Baladhuri, studded the Sasanian *limes* nearby, which faced Bedouin Arab territory in southern Iraq. An extension of that line of reasoning might suggest that this tower is part of the system of watch-towers which was erected in early 'Abbasid times to mark major desert routes, in particular the Darb Zubaida or pilgrim route from Kufa to the Holy Cities of the Hijaz.

The most celebrated of early 'Abbasid minarets are of course the helicoidal towers attached to the Great Mosque of Samarra (234–7/848–52) and the mosque of Abu Dulaf nearby

(245–7/859–61). Although their precise origin is a matter of dispute, the question of a classical or Christian source does not arise. Their forms are deeply rooted in ancient Near Eastern architecture. In both cases a square base carries an external ramp which spirals upwards, at first gently but then with increasing steepness, around a solid central cylinder. In the case of the minaret at Samarra (the *malwiya*) the ramp ends after five complete revolutions at an arcaded kiosk. A similar aedicule probably crowned the minaret of the Abu Dulaf mosque after the ramp had completed four revolutions. The Samarra minaret is therefore substantially larger, and at a height of 53 m. (174 feet) is indeed one of the highest minarets in the Islamic world. As befits its importance, the minaret has a new and imposing location. It is placed some 30 m. outside the mosque and is precisely on the axis of the *mibrab*. By this means its integration with the mosque and its liturgical function in relationship to the rest of the building is adequately stressed, while its isolation is sufficiently marked for the minaret to invite attention as a separate structure. It boosts the mosque visually too. The practice of placing the minaret on the *mibrab* axis was copied throughout the Islamic world, and in time the idea was still further developed, perhaps as an original local invention, by making the minaret abut the exterior wall of the mosque and incorporating into its base the major entrance to the mosque itself (Mosque of al-Mansura near Tlemcen, 703–6/1303–6).

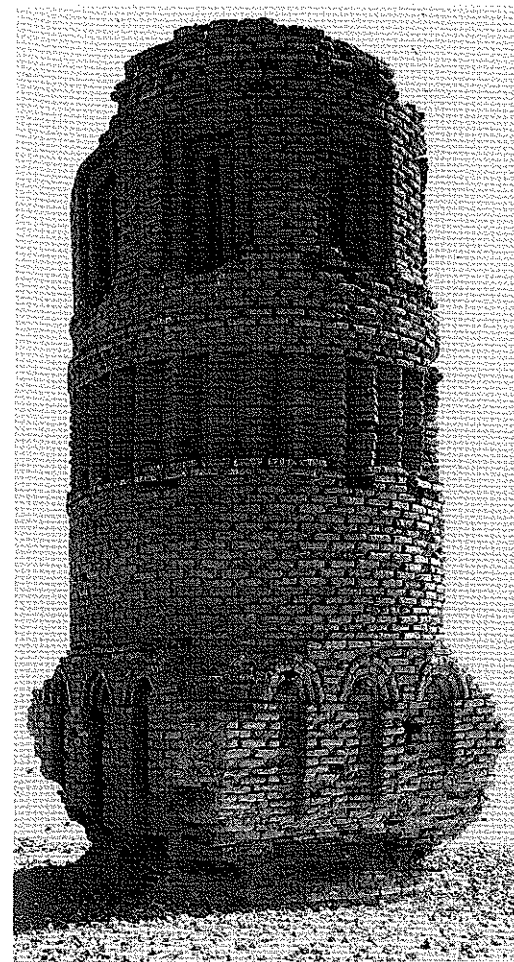
How and why did this bizarre helicoidal form come to be chosen for a minaret? If the *malwiya* is considered in the context of other early 'Abbasid architecture in Mesopotamia, such as al-Ukhaidir, or the round city of Baghdad, the possibility of its dependence on Persian models will be readily apparent. There still survives, at Firuzabad in southern Iran – the first capital of the Sasanians – a square-shafted tower with the remains of an external ramp winding around it. This monument, known to the early Arabs by the obscure term *tirbal*, has been interpreted as a Zoroastrian monument, with a fire burning at its summit. The readiness of the early Muslims to take over for Islamic religious purposes the architectural forms sanctified by earlier religions makes it entirely plausible that the sacred function of the tower and its connection with

fire rendered it (or others like it) an especially suitable model for a minaret. The anti-Umayyad bias of the early 'Abbasids would have disposed them against copying architectural forms that had strong Syrian associations, and might conversely have predisposed them in favour of Persian models.

The other possible source for the two minarets of *malwiya* form is the ancient Mesopotamian ziggurat or tower-temple. While most such buildings had stepped elevations comprising superposed squares of decreasing size, a few were characterised by a square base which carried a huge central cylinder encircled

by a rising ramp. A four-storeyed building of this type, which probably once had seven stories in all, has been excavated at Khorsabad in northern Iraq, and medieval Arabic accounts indicate that a similar tower existed at the ancient site of Babylon until at least the 12th century. To have adopted this model would also have accorded well with the anti-Syrian tendencies of the time. If this kind of building provided the inspiration for the *malwiyas* of Samarra and Abu Dulaf, this would be a very rare case of Islamic architects deliberately drawing their ideas from the very distant, as distinct from the immediate, past. For this reason, and bearing in mind the pervasive Persian flavour of the early 'Abbasid court, there is a case for suggesting that the Persian rather than the ancient Mesopotamian model was the source of their inspiration. Even so, the Persian tower itself was in all probability dependent on the ziggurat form. Thus the *malwiya* stands revealed as the classic case in Islamic architecture of the continued sanctity of a given form, which maintained itself with remarkably little change over a period of millennia and through two changes of religion. However, subsequent generations seem to have regarded the *malwiya* as too bizarre to serve satisfactorily as a minaret, and it remained virtually without progeny. Nevertheless Islamic tradition cherishes the very secular memory of the caliph 'Ali Muktafi taking his constitutional and simultaneously enjoying the view over his domains by riding up to the top of a similar tower in Baghdad, on a donkey specially trained to amble.

The sole important descendant of the Mesopotamian *malwiya* – derived specifically from the example at Abu Dulaf rather than the grander version at Samarra – was, significantly enough, the minaret of the mosque built in Cairo by Ibn Tulun (263–5/876–9), a man brought up at the 'Abbasid court in Mesopotamia. In Egypt too the minaret was perceived as a curiosity, and tradition – which disdains art history – relates that the genesis of the minaret's unusual shape lay in the patron demanding that his architect monumentalise the spiral shape he had casually created by twisting a piece of paper round his finger. Unfortunately the present minaret is a reconstruction of the late 13th – early 14th century, but earlier medieval his-



97 Mujda, minaret

7.65–7.66

7.62–7.63

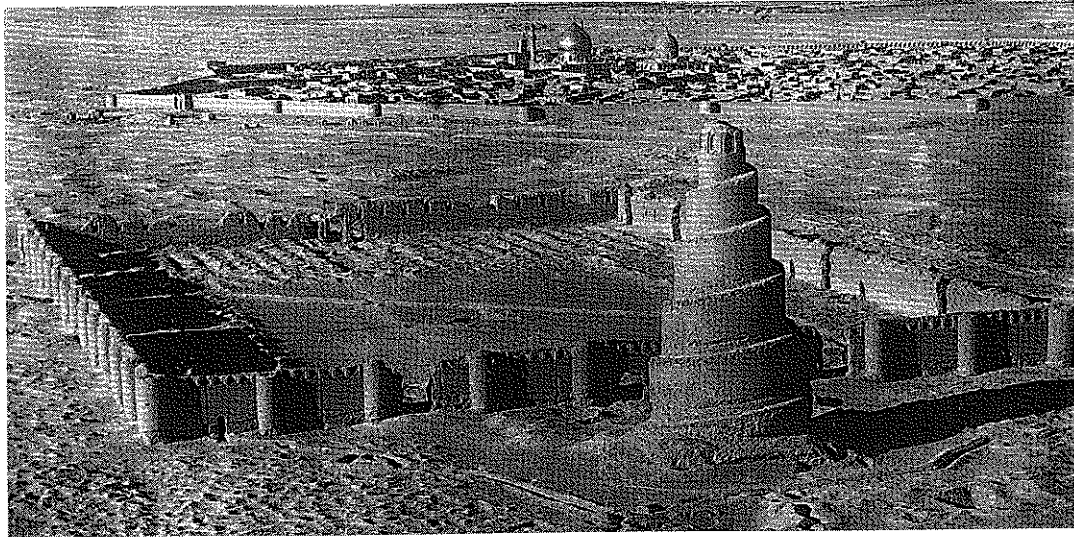
2.101

7.61

7.65–7.67

2.50–2.51,  
3.28, 98

2.108, 99



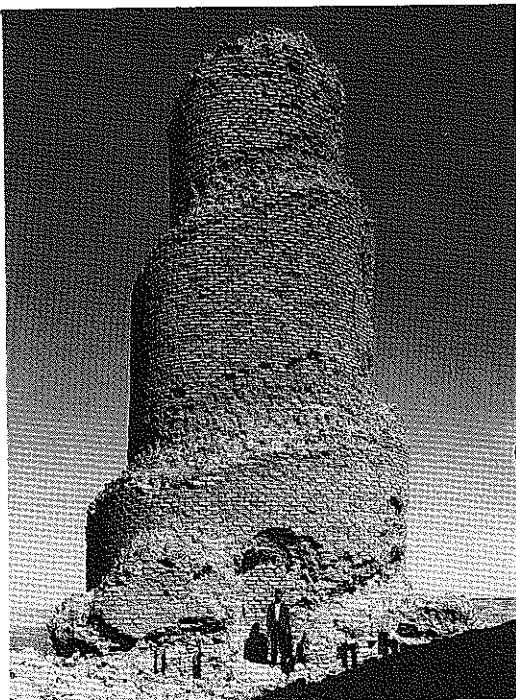
98 Samarra, Great Mosque and minaret

torians agree that its original form was spiral, and an 11th-century historian even mentions its similarity to the Samarra minaret. Thus the spirit if not the letter of the Mesopotamian model is sufficiently well captured by the present Mamluk structure.

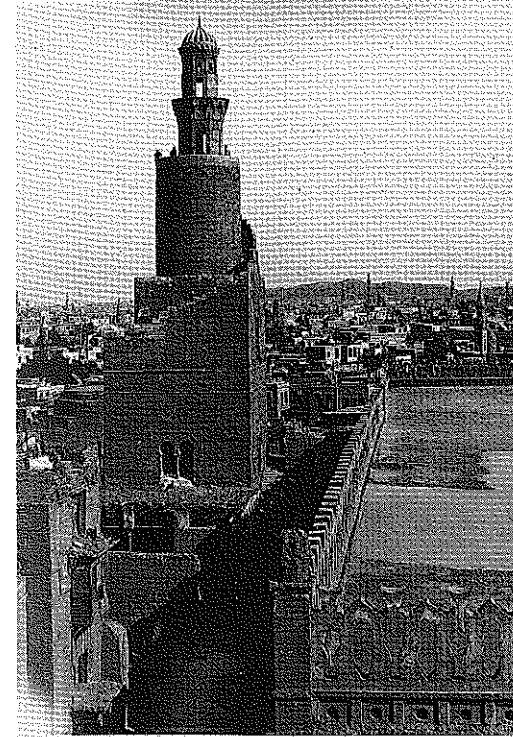
## MINARETS IN IRAN

*The origins*

These spiral minarets, then, however fascinating in themselves, represent a by-way in the history of the minaret. In the eastern Islamic world the focus of attention in the following centuries was Iran, where an entirely different form of minaret developed, namely the lofty, slender, cylindrical type. The origins of this form have yet to be established satisfactorily, and widely divergent theories have been aired. Perhaps the most speculative of all was that advanced by Schroeder, in which he linked the Iranian minaret, in association with the mosque, to some of the ancient religious structures of mankind – Mycenaean, pre-Buddhist Indian, pre-Achaemenid Iranian – and drew attention to suggestive similarities between modern shamanistic proto-architectural forms and the essentials of mosque architecture. Beneath the contingent differences of these various forms he traces an underlying unity: the pillar form is an immemorial symbol of 'the axis of the universe, and the direct way to Heaven.'



99 Samarra, Mosque of Abu Dulaf, minaret



100 Cairo, Mosque of Ibn Tulun, minaret

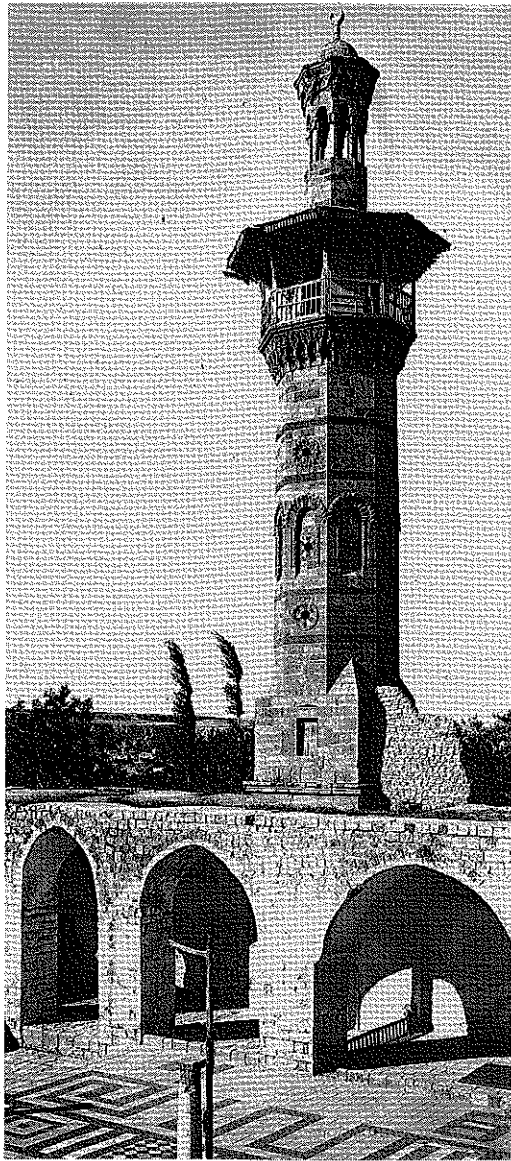
This somewhat mythopoeic and anthropological approach, larded with nebulous ethnic and religious associations – an approach of which Strzygowski was the high priest in the first half of this century – may seem too fanciful for some tastes. Yet even a sober art-historical enquiry concentrating on the form alone points to some startling correspondences in pre-Islamic traditions. The crucial point to establish is that the tall cylindrical minaret owes nothing to the Syrian and western Islamic tradition, whereas the areas to the north and east of Iran offer a plethora of possible sources for that form. In China, for example, multi-storeyed eight- or twelve-sided pagodas were built in substantial numbers from the 5th century onwards, and the towers built by the Buddhist Kushans in Central Asia (e.g. the famous tower of King Kanishka near Peshawar) may have introduced these or very similar forms to an area that was soon to become Islamic territory. A second possible source is greater India, which is of course con-

tiguous with Central Asia. The lofty pillars raised for commemorative and political purposes by Asoka in the 3rd century B.C. immediately come to mind. Recent research suggests that these pillars perpetuated an earlier tree cult and intensified the deliberate cosmological symbolism associated with that cult. In short, they were intended to represent the axis of the universe. Nor was this the only relevant Indian form, for one kind of Buddhist *stupa*, especially popular in northern India and Central Asia, elongated the standard domical type to produce a domed cylinder on a high square base. The resemblance of such a form (indeed of the Buddhist *lat* or *stambha* form generally) to an Iranian minaret like that of Khusraugird is self-evident; its relevance is perhaps another matter. 3.91

Finally, the indigenous tradition of the Turkic peoples of Central Asia and beyond must be considered. The term *idhiz eb*, 'sacred house', was used by the eastern Huns among others to denote high towers placed at the corners of temples or cities, marking the site of the Iokapala shrines. Significantly enough, height was a major desideratum for these towers so that their auspicious influence, represented by their shadows, could extend as far as possible. Such apotropaic concepts are also found in Islamic architecture, though they are not specifically associated with minarets. One further relevant form, recorded in the 8th-9th centuries in Minya Konka and Chotski, both in eastern Tibet, is a stellate watch-tower some 18-19 m. high, which reproduces the form of the otherwise virtually unparalleled 12th-century minarets of Ghazna. 3.103, 3.105-3.110

Thus the border regions of the eastern Islamic world provided a fertile source of inspiration for the builders of the early Iranian cylindrical minarets. At the very least, these areas on the periphery of Islamic territory provided ideas for the forms themselves; whether those forms travelled into the Islamic world with an accompanying set of ideas and beliefs is quite another matter. Yet it is a reasonable hypothesis that at least some of the many different functions and associations – religious, symbolic, political, commemorative and military – of these pre-Islamic towers survived the advent of Islam and in time infiltrated the Iranian minaret.

Even so, such fragmentary evidence as



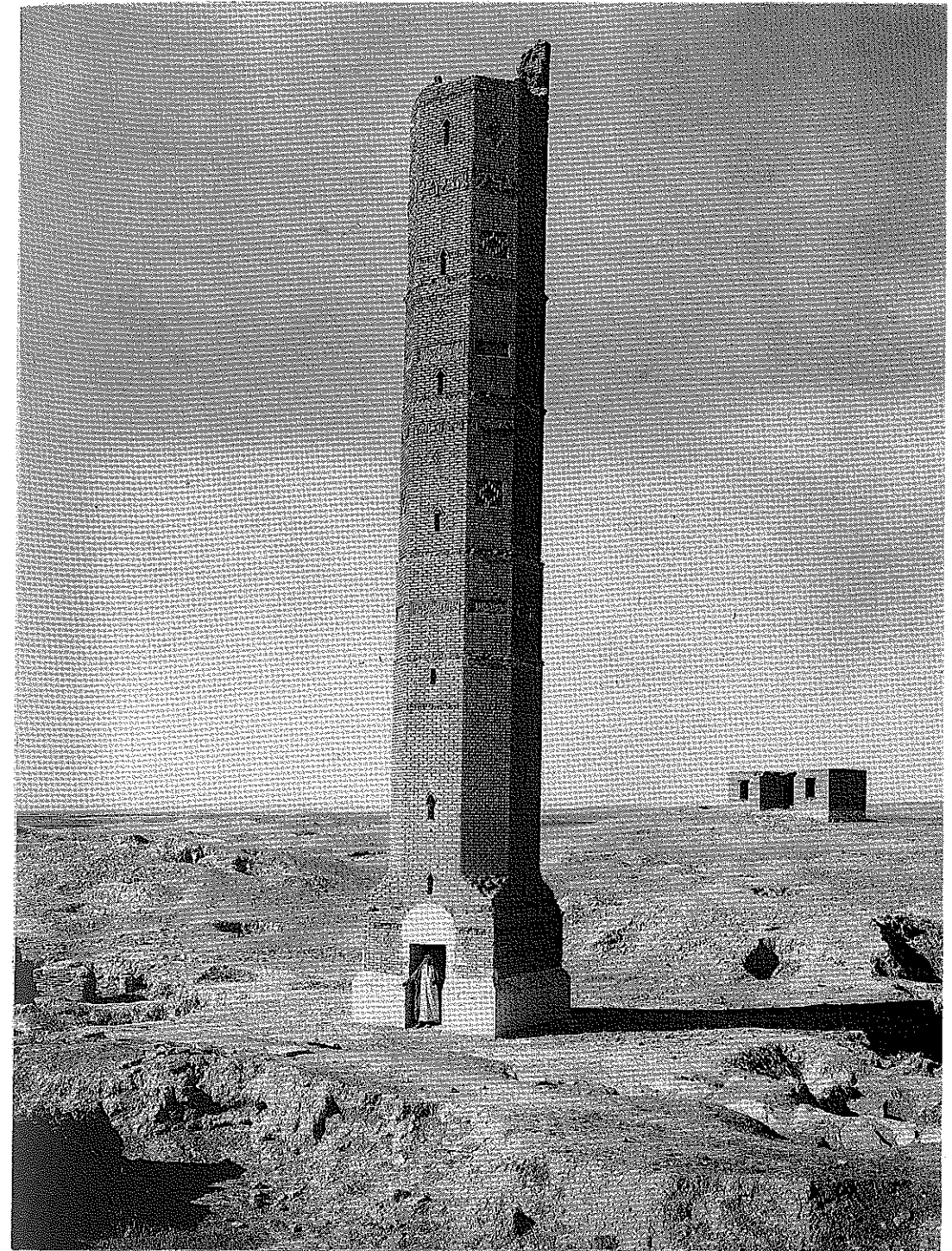
101 Hama, Great Mosque, minaret

ses with it in elevation, setting an octagonal shaft on the square plinth – a form frequently found somewhat later in Syria (Hama; Miskina).<sup>101, 102</sup> Two-thirds of the elevation is taken up by this shaft, which thereafter becomes a tapering cylinder. The transition from octagon to circle is so muted as to be scarcely noticeable. A cavetto cornice carries a substantial trellised balcony and a small, cylindrical, domed shaft pierced by multiple apertures adds the finishing touch. Apart from a double chevron band near the top of the octagonal shaft, and palmette designs (probably executed in stucco) on the cornice, the minaret is devoid of ornament. This feature alone suggests that the minaret is pre-Saljuq, like the oldest part of the mosque, and the obviously transitional form offers further support for such a theory. Ample literary evidence indicates that extremely tall minarets were a familiar feature in Iranian towns by the 10th century, but it gives little specific information about their form.

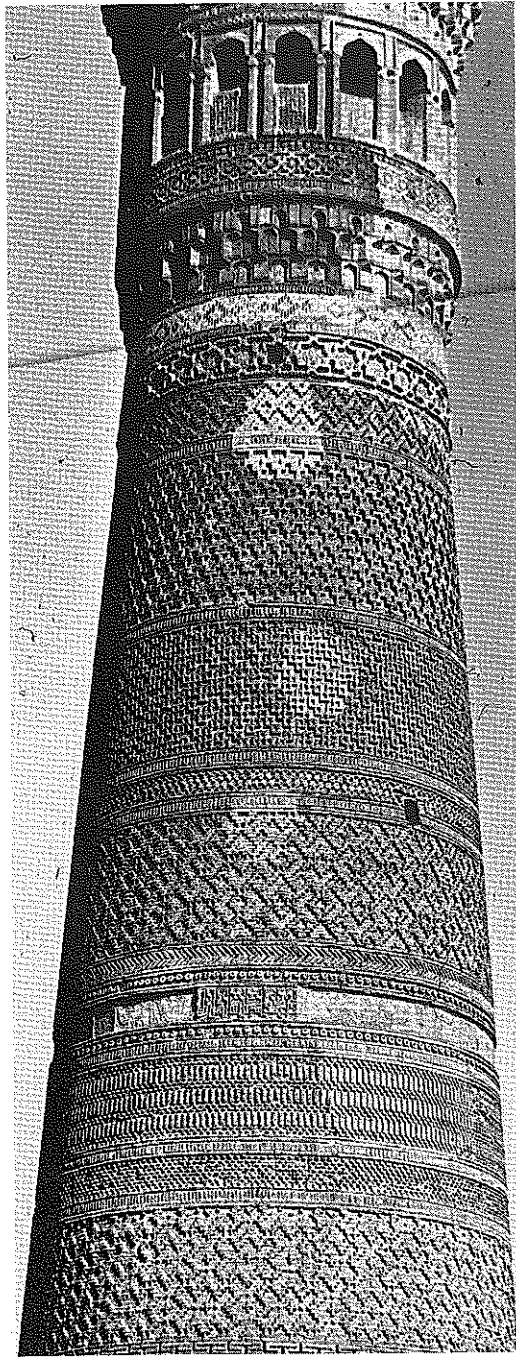
#### *Saljuq minarets*

The 11th century, however, sees the opening of the great series of Iranian cylindrical minarets, and they are of such finished assurance in their formal and decorative qualities that a lengthy prior development of this type must be postulated. Some of the finest examples are in the towns of Damghan and Simnan on the western borders of Khurasan. These soaring minarets – they are all about 100 feet high – have a pronounced taper which further accentuates their height (a feature developed even more strongly in Central Asian minarets such as the 12th-century examples at Bukhara, Jar Kurgan, Uzgend and Vabkent).<sup>103</sup> Their internal stairways wind around a central column. The Simnan minaret has preserved the original cornice, a precociously developed three-tier *muqarnas*, which presumably carried some kind of balcony; this part has not survived in the two minarets at Damghan. All three minarets are entirely covered with brick decoration, principally broad bands of geometric designs (such as lozenges or interlaced octagons) or inscriptions. Thin guard bands, themselves comprising rhomboids, inclined stretchers, discs or the like, separate the major bands (Kirman).<sup>104</sup> This lavish overall decoration is the hallmark of the

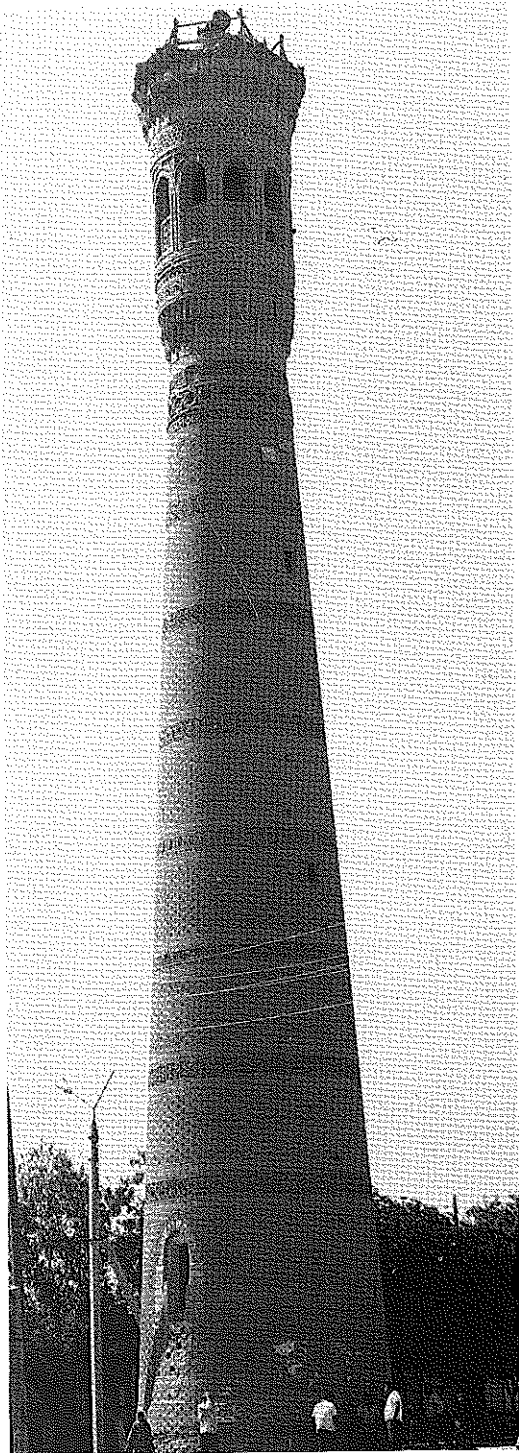
survives suggests that the very earliest minarets in Iran, such as those at Damghan and Siraf, followed the square tower format which was standard under the Umayyads. To judge by the minaret of the Na'in mosque, it was not long before this form underwent substantial modification. The Na'in minaret maintains the traditional square format in ground plan but dispen-



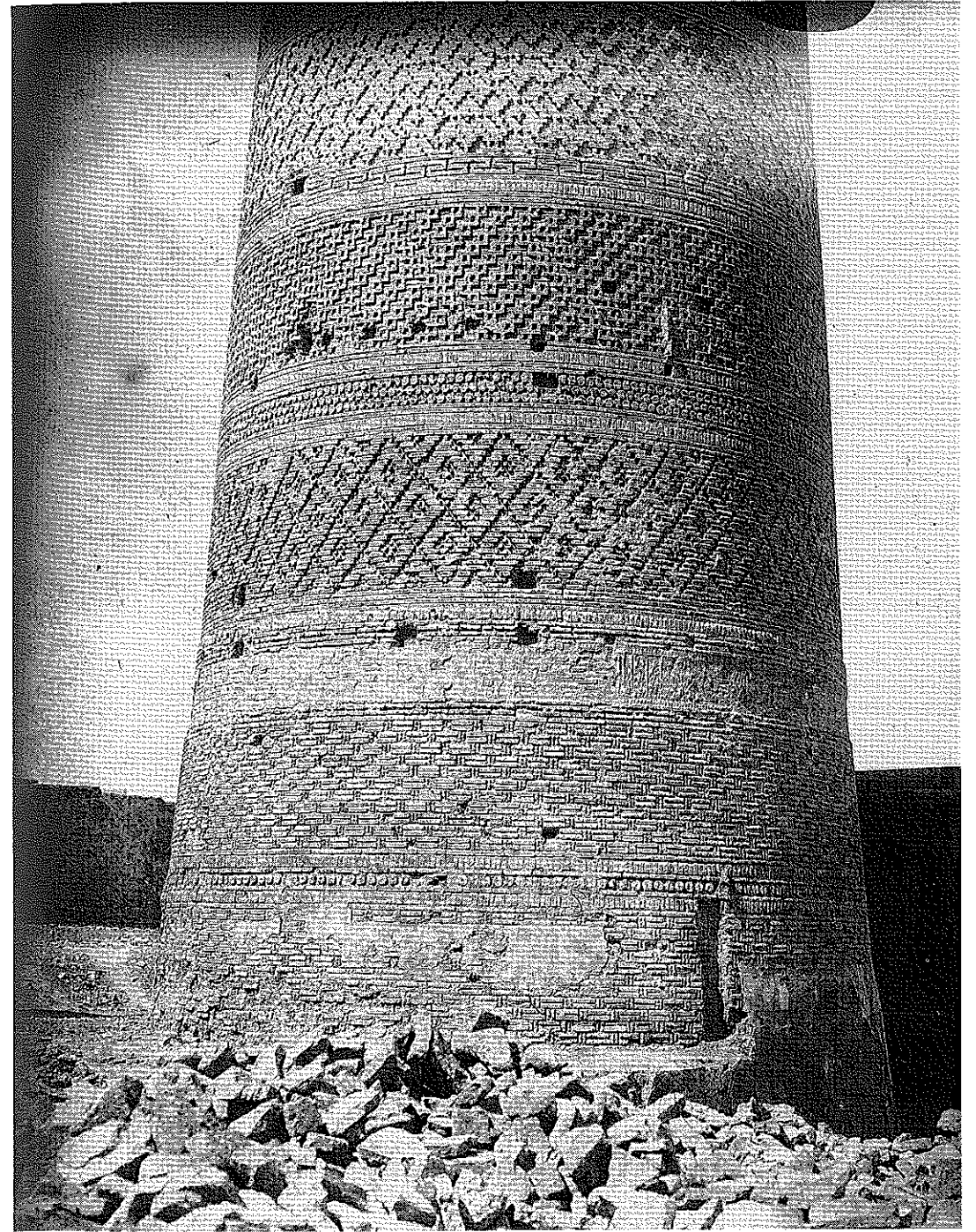
102 Miskina, minaret



103 Bukhara, Masjid-i Kalan, minaret, upper part



104 Vabkent, minaret



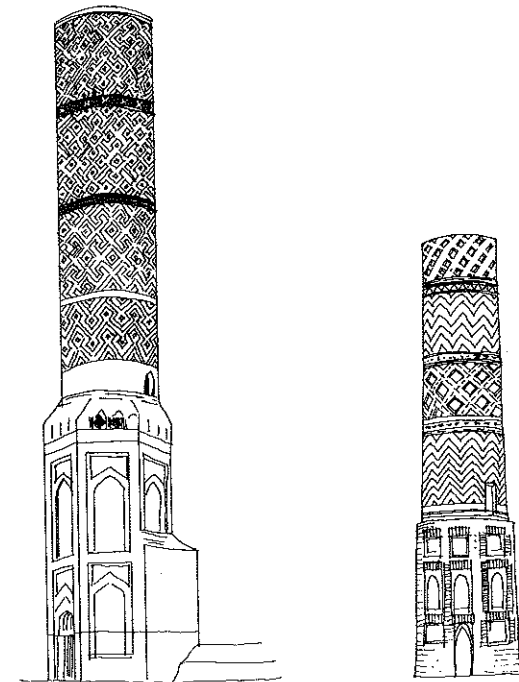
105 Bukhara, Masjid-i Kalan, minaret, lower part

medieval Iranian minaret, though a few plain mud-brick examples survive. It stamps the building as a vehicle for external display. Moreover, this lavish decoration was not extended to the exterior walls of the mosques to which such minarets belonged. While the range and type of decoration is itself an absorbing topic, the principal questions raised by these monuments – and the related minarets of

3.91 Bastam, Khusraugird, Sava, and the Isfahan area, to name only a few among the forty-odd which survive in Saljuq Iran – bear on the reason which prompted such decoration, and thus on the function of these buildings. It might be argued that the efflorescence of these elaborately ornamented minarets in the Saljuq period could be seen as the result of a particular, indeed unique, combination of circumstances.

The tally of surviving 11th- and 12th-century buildings in Iran indicates that this was a time of unprecedented building activity. This phenomenon has often been connected with the irruption of the Saljuq Turks into the eastern Islamic world. The Saljuq rulers, and their governing class, were celebrated for their Sunni orthodoxy. This orthodoxy is traditionally regarded as the prime impetus behind the official programme of building *madrasas* throughout their empire. That same orthodoxy could equally have been the motivating force behind the building of other religious structures. What better method of proclaiming allegiance to the true faith than financing the construction of a place of worship? Mosques were the most obvious expressions of such official patronage, and indeed there is ample evidence of a major programme of mosque building and – more significantly – mosque extension in this period. Some of the major *amirs* of the Saljuq court were associated with such projects, as the mosques of Qazvin and Burujird show. The remarkably large number of such foundations in the Saljuq period attests the popular fashion for building monuments of religious function – even the mausolea of the time frequently contain *mibrabs*.

2.246, 2.252 It is into this context that the typical Saljuq minaret seems to fit: a singularly appropriate means of publicly expressing allegiance to the faith. As such, of course, it would recommend itself equally well to Shi'ites, and indeed the city of Kashan (which was solidly Shi'ite at this

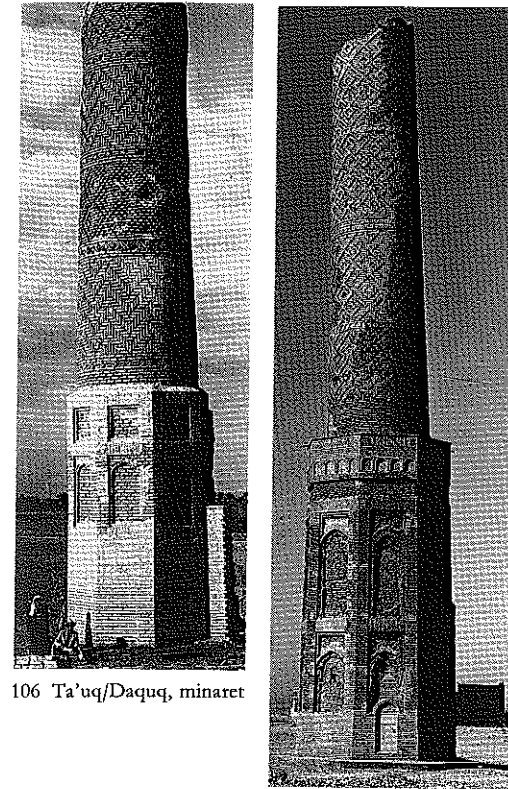


3.100 Irbil, minaret

3.101 Ta'uq/Daquq, minaret

period) still has two lofty minarets dating from Saljuq times. But the bulk of Iran was Sunni, and it is therefore not surprising that minarets from Sunni areas far outnumber those from Shi'ite ones. Within the heated, disputatious religious atmosphere of the times the minaret readily lent itself to serve as a statement of faith. It was beyond question the prime architectural symbol of Islam. It was gratifyingly visible. Its rich decoration would testify to its patron's munificence. That same decoration could make doctrinal capital out of its inscriptions, whether these were Shi'ite in tenor or, as was much more frequently the case, Sunni. Some of them – for example the Saraban and Rahrun minarets in the

3.96, cf. 3.97  
108, 3.13



106 Ta'uq/Daquq, minaret

107 Irbil, minaret

Friday mosque that according to custom (not dogma) requires a minaret, it is remarkable to note that this city, one of the Saljuq capitals of Iran, had over a score of minarets in this period. In nearly every case, the mosque for which the minaret was originally intended has vanished. It is tempting to speculate that these mosques were very much simpler and humbler structures which in earlier times, before the fashion changed, would not have been furnished with minarets. One may justifiably assume that some evidence besides the minarets themselves would have remained if these minarets had been built contemporaneously with their adjoining mosques as integrated building projects.

109 According to this interpretation, then, many of the more elaborate Saljuq minarets are expressions alike of conspicuous consumption and conspicuous piety. Their historical and religious inscriptions tell the same story. No city of the period could have required for liturgical purposes the thickly clustered and extraordinari-

ly lofty minarets which are still such a feature of the townscape of Isfahan.

These considerations also have a bearing on the lavish decoration of so many Saljuq minarets – a feature found also on the Iraqi examples (Ta'uq/Daquq, Sinjar, Mosul and Irbil). This feature would naturally recommend itself to patrons who wished their buildings to make the maximum impact. The relatively restricted surface area of these narrow cylindrical minarets, especially in comparison with the surface area of the Syrian and Maghribi type of minaret, was a further advantage; it obviously kept the cost of decoration down. If an explanation be sought for the use of such all-over brick decoration on a minaret, the case of the Samanid mausoleum at Bukhara may be cited. This shows that by the early 10th century, the effectiveness of brick decoration as a mantle for a building of relatively small surface area had been discovered. It would have been quite natural to transpose this newly fashionable technique to the minaret. Considerations of time, expense and aesthetic judgement seem to have combined to ensure that the technique was rarely used on a much larger scale than this. The case of contemporary tomb towers, with their much larger diameter, is illuminating; overall brick decoration occurs only on the smaller buildings of that genre. Similarly, the exteriors of the great domed chambers of contemporary mosques are notably austere.

The cylindrical Iranian minaret – also found in Iraq, as at Ta'uq, Irbil and Dhu'l-Kifl – proved capable of generating a surprising variety of forms, most of which were developed in the 12th century. They include low plinths that are flanged or lobed or a combination of both (Nigar; Zarand); others that are octagonal with elaborate blind arcading (Gulpayagan), or that are square in ground-plan but pylon-like in elevation (Khusraugird). Sometimes a very plain square plinth carries an intermediate octagon on which the circular shaft rests (Chihil Dukhtaran, Isfahan). Frequently the plinth is quite plain, thereby contrasting with the richly textured upper elevation. In some cases the plinth extends to such a height that it rivals the cylindrical shaft in importance (Kirat). In the case of the two minarets at Ghazna, where a low circular plinth carries a dramatic and lofty



108 Isfahan, Saraban minaret

canyons of rock, it nevertheless manages to dominate the narrow secluded valley in which it is placed. Setting and monument mutually enhance each other, as was earlier the case with Achaemenid rock tombs or Sasanian reliefs.

It was probably the Saljuq period that saw the introduction of paired minarets, though pre-war excavations at the Sasanian city of Bishapur, unfortunately not fully published, revealed two massive drums with slots which might have been intended for a lintel. The idea seems not to have been further developed until the 12th century, when paired minarets established themselves as a means of lending extra importance to the entrance gate of a building (Nakhchivan; Ardistan). This articulating function further distanced the minaret from any liturgical purpose, but it allowed the minaret's long-traditional role as a marker to develop in new directions. Accordingly it was not long before paired minarets were brought into the mosque proper to flank the entrance to the sanctuary. Thus they were used as indicators of direction as well as of importance. There seems to have been no consistent practice governing the location of single minarets within the mosque. When the minaret was erected as an integral component of the mosque, provision was often made for it to be entered not at ground level but from the roof of the mosque. The otherwise puzzling existence of such doorways comparatively high up the shaft of minarets which are now freestanding are clear evidence that they were originally intended to be part of a mosque.

Two forms of staircase are commonly encountered in Saljuq minarets: those revolving around a central column and those built into the thickness of the exterior wall and carried on small vaults. The two techniques are even recorded as being used successively in a single minaret (Mil-i Qasimabad). Double spiral staircases, in which those ascending never meet those descending, are occasionally encountered (Jam; Samiran).

A few minarets of this period raise searching problems of function. Some are located along major routes or at the edge of the desert (Khus-raugird; Ziyar; Mil-i Nadiri), which would lend support to the theory that they served, no doubt *inter alia*, as signposts. Since much caravan travel was by night, a lamp at the top of a minaret

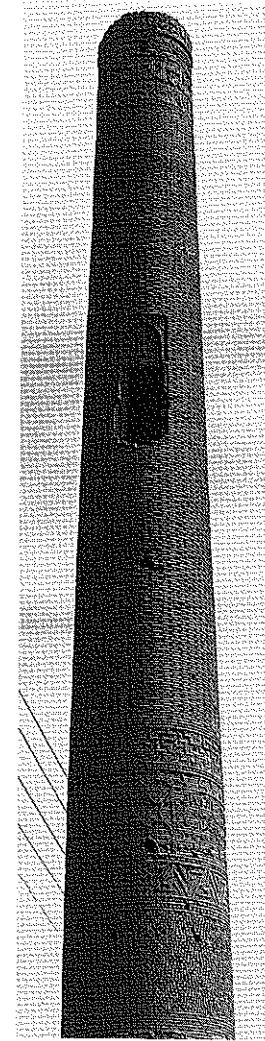
would allow the building to serve as a land-locked lighthouse. A chance literary reference establishes that in 582/1186 the practice of placing a lamp at the top of a minaret was sufficiently familiar in Khurasan to occasion no comment. In a few cases the minaret is located on top of a hill where there is no room for an adjoining mosque (Kirat). Such a siting can only emphasise the role of the minaret as a signal-tower or watch-tower; in a small settlement like Kirat there would be little enough call for a minaret in any case, and therefore even less need to site the minaret well away from the mosque

in the interests of making the *adban* more audible.

Perhaps the most enigmatic as well as the most splendid minaret of the period is the minaret of Jam, mentioned earlier. Its height (c. 60 m.) is unprecedented among Iranian minarets. The main lower shaft is unique in that its principal decoration is an entire *sura* of the Qur'an – Surat Maryam, comprising ninety-seven verses. The other major inscriptions are all historical. They laud the achievements and proclaim the resounding (and self-appointed) titles of the Ghurid sultan of the time, who had emerged victorious from a protracted struggle with the declining Ghaznavids. A generation earlier, captive citizens of Ghazna had trekked to the mountain fastness of Firuzkuh, the Ghurid capital and site of the Jam minaret, to build the citadel by forced labour; they were then slaughtered and their blood mixed with mortar to build towers there. The sultan Muhammad b. Sam, the builder of the minaret, delivered the *coup de grâce* to his dynasty's ancestral enemy and it is hard not to see his gigantic and wholly impractical minaret as a symbol of that victory, a *fatbname* memorialised in brick. The mountainous territory of Ghur had moreover only recently been Islamised, and it may therefore be suggested that the presence of a long Qur'anic *sura* on the minaret emphasised the equally important role of the building as a witness to the faith in potentially hostile territory.

#### Ilkhanid minarets

In later periods the Iranian minaret never recovered the importance it had enjoyed under the Saljuqs. Even so, new uses and new types of decoration were found for it. At the mausoleum of Öljeitü in Sultaniya, for reasons still not adequately explained, eight minarets encircle the dome at roof level – the germ of an idea later to be exploited intensively in Ottoman architecture. In Ilkhanid times, too, the device of paired minarets flanking an important *ivan* – usually the entrance to the building – was enthusiastically employed (Abarquh, Ashtarjan, Karabaghlar, Sultaniya and two buildings in Isfahan). The scale of these minarets was, it seems, substantially larger than that of the tentative experiments with this feature made in the previous



109 Isfahan, Chihil Dukhtaran minaret

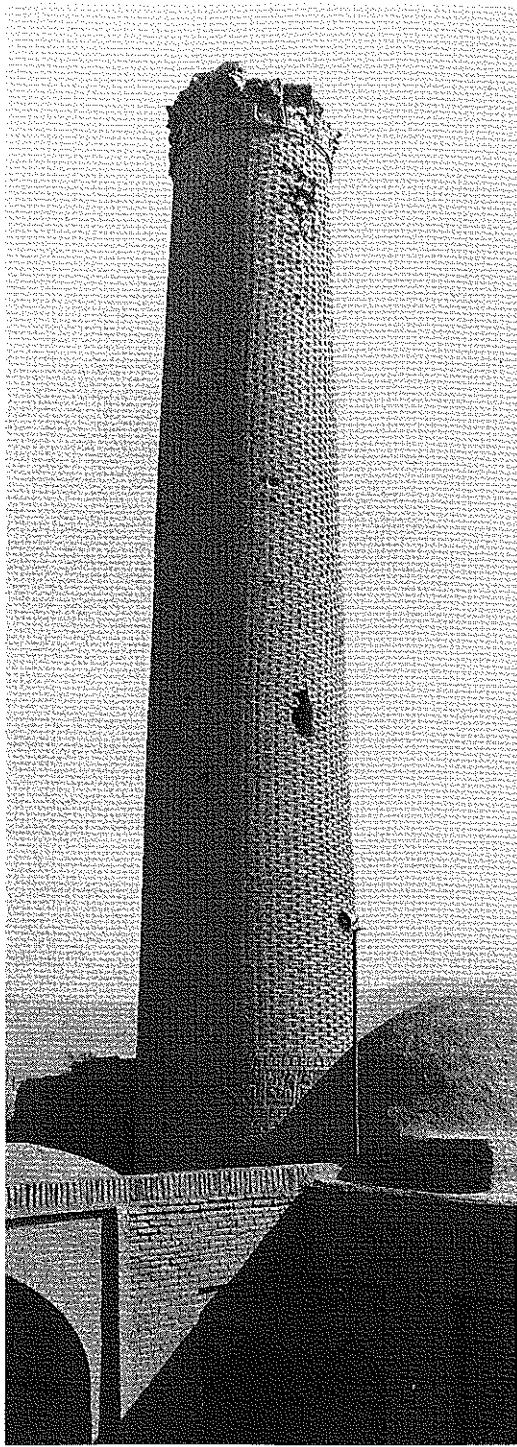
3.108 flanged shaft bearing unusually elaborate ornament, which in turn originally gave way to a cylindrical shaft, the eight-pointed middle tier is undoubtedly the cynosure of the monument. Such minarets emphasise the scope for experiment in this period; clearly there was no canon governing the respective proportions of plinth and cylinder. Similarly, in minarets consisting essentially of two or three tiers of tapering cylinders, the proportional relationship between one tier and the next could vary quite markedly (Manar-i 'Ali and Manar-i Saraban, both in Isfahan). The most ambitious of these multi-tier minarets are the examples at Ziyar, outside Isfahan, and of Jam in central Afghanistan, the latter probably the masterpiece of the period. Substantial balconies divide the three tiers and an open-plan arched aedicule perches at the summit of the building. Surrounded by sheer



two centuries. Moreover, the attenuated proportions of their parent portals serve to increase their apparent size still further. Quite often the minarets and portal are smoothly integrated so that the upper shafts of the minarets shoot up directly from the *iwān* roof; their lower portions are not separately emphasised (Ashtarjan; Natanz; Du Minar Dardasht, Isfahan). The newly fashionable emphasis on large-scale glazed ornament caused such minarets to stand out with extra vividness against a somewhat drab urban setting of mostly mud-brick architecture.

The lower stages of the minaret were now deliberately highlighted, a feature only sporadically found in the Saljuq period, as at Gulpayagan, Kirat, and Jam. The advent of lavishly applied tilework was a crucial factor in this change of emphasis, as two examples in Isfahan clearly demonstrate. The Manar-i Bagh-i Qushkhana has its two-tier cylinder borne, via an insignificant octagonal plinth, on a square mass of brickwork some 10 m. high and boldly ornamented with square Kufic inscriptions spelling out Allah and other sacred names. Even if this block served a double purpose as part of an entrance portal, presumably with a second flanking minaret on the other side, its ornament was, it seems, intended to articulate precisely the area beneath the minaret. Symbolically it is of course wholly appropriate that the minaret should in a literal, visual sense be founded upon the name of God. Such symbolism is of a piece with the use of the *shabada*, the very text proclaimed by the muezzin, in the inscription band encircling the upper part of such Saljuq minarets as the Manar-i Saraban in this same city of Isfahan. Particularly appropriate inscriptions of this kind can easily be cited in other periods – thus the minarets of the Masjid-i Shah, Mashhad (probably 855/1451) bear *hadiths* in praise of muezzins. Others bear the Sura of Light.

Quite different in form was the lower part of the Manar-i Khwaja 'Alam, probably also of the 14th century, which collapsed in 1934. By a novel conceit the cantilevered *muqarnas* cornice normally found just below the topmost tier of post-Saljuq Iranian minarets is here used not only in the customary location, but also as the culmination of the lower shaft immediately above the plinth. This shaft, which rests on a tall



110 Zavara, Masjid-i Pa Minar, minaret

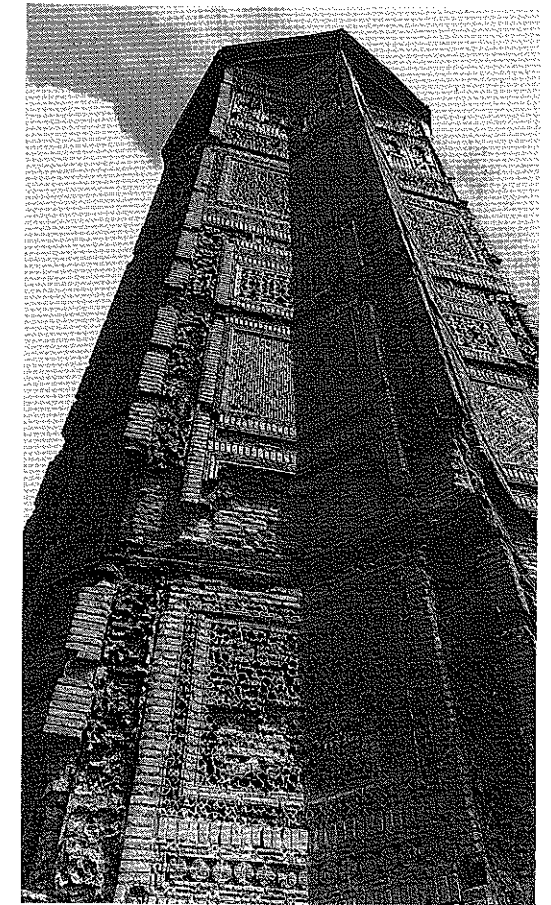
square socle again decorated with Kufic epigraphy bearing the name of Allah, is in the form of a twelve-pointed star, and its body is entirely covered with strapwork in high relief. The elevation of the Khwaja 'Alam minaret was thus in four distinct stages, and while this is exceptional, the distinctive emphasis on the plinth or lower elevation in Ilkhanid minarets does frequently result in a three-tiered form. Arched openings in the topmost storey are standard, and encourage the theory that these minarets could have been used for signals.

#### Timurid and Safavid minarets

The 15th century brings nothing remarkably new in its train so far as minarets are concerned. Form and function alike faithfully follow established precedent. *Muqarnas* cornices, often five- or six-tiered, are perhaps denser than before (as various minarets in Herat show) or developed bolder contrasts of solid and void than their predecessors (minarets of the Gauhar Shad mosque, Mashhad). Possibly the form of the balcony also changed slightly in this period, developing a distinctive overhanging canopy above the railing; but this is the feature above all others which is an obvious target for restoration, and a specific study would be needed to establish the authentic date of these constructions. The surviving minaret of the Friday Mosque of Gauhar Shad at Herat (completed 841/1437–8) has an unusual ten-sided base, complete with an engaged marble column at each angle, bearing the customary cylindrical shaft. Perhaps the most significant of these minor innovations is a slight change in the rôle of the minarets flanking an *iwān*. As the examples of the mosques of Gauhar Shad, Mashhad, and the Ziyaratgah *jami'*, near Herat, show, the common Saljuq and Mongol practice of masking the lower sections of the minaret by the façade of the building which it adjoined was rejected. Instead the minaret maintained its elevation unbroken throughout, and was therefore able to play its full role in articulating the interior façades. Safavid architects continued to use this device, though somewhat less boldly (as in the Masjid-i-Shah, Isfahan). The separateness of the minaret could be further underlined by decorative means, since the types of ornament used on its cylindrical body were necessarily

different from those which were appropriate to a flat façade. Indeed, it is in their decoration that Timurid minarets assert their independence from their precursors. The favoured technique was to envelop the shaft with a lozenge grid in brick whose interstices were each filled with a medallion of high-quality tilework (e.g. the minarets of the Masjid-i Shah and the mosque of Gauhar Shad, both in Mashhad). Occasionally the topmost storey of the minaret would bear a similar grid, but of square plan, with square, rectangular or L-shaped cartouches (as on the minaret of the *madrasa* of Gauhar Shad, Herat, completed 836/1432–3).

Subsequent centuries added even less of significance to the development of the Persian



111 Ghazna, minaret of Mas'ud III

minaret. From the 16th century onwards the corkscrew moulding already in frequent use for arch profiles was on occasion adopted for flanking minarets (e.g. the shrine of Khwaja Abu Nasr Parsa, Balkh), though there is no evidence that this novel form was continued beyond the top of the *pishtaq*. In Safavid times, too, the topmost storey of the minaret was standardised in the form of a tapering shallow-domed cylinder which, like the rest of the minaret, was entirely sheathed in glazed tilework. Occasionally – in the great shrines of Qumm and Mashhad – much of the shaft was tapering and gilded. By Qajar times minarets had come to sprout substantial tiled and arcaded balconies with a corona of miniature domed pinnacles (e.g. the shrine at Mahan). Qajar architects signalled the increasingly secular function of the minaret by using it to punctuate entrance portals to bazaars (Yazd), towns (Qazvin, Simnan) and palaces (Tehran). In earlier times minarets had normally been built singly or in pairs, but now they proliferated and thus became trivial. A typical 19th-century shrine, the Shahzada Husain at Qazvin, with its cluster of five slender three-tier minarets – at once absurd and charming – may serve as the sorry epitaph of a distinguished tradition.

#### THE MINARETS OF INDIA AND PAKISTAN

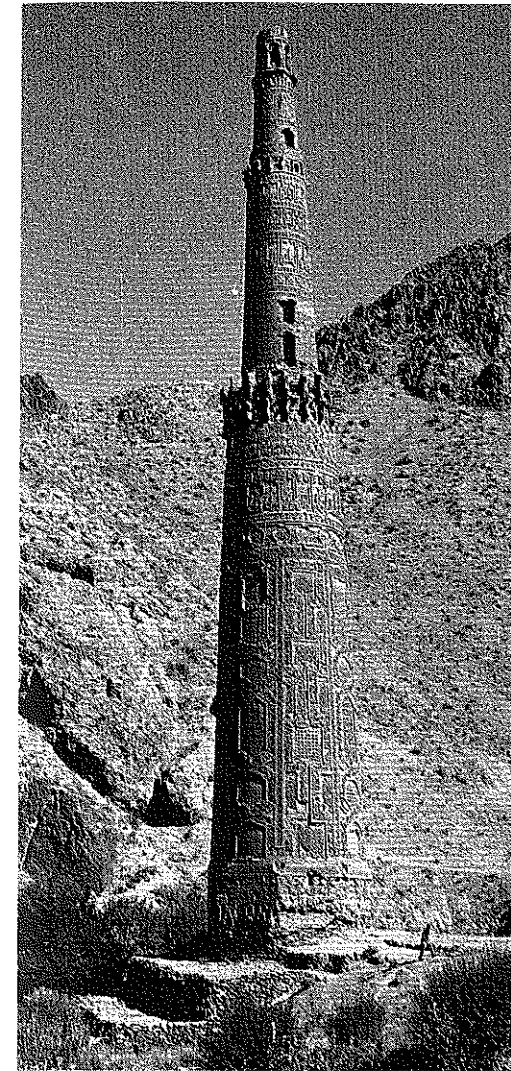
It is generally accepted that the Saljuq minarets of Iran included the greatest masterpieces in that tradition. It is not surprising, therefore, to encounter traces of their influence far beyond the borders of Iran proper. Indeed, the tallest minaret in the Islamic world – and to many the supreme monument of its genre – is unmistakably an offshoot of that same eastern Iranian culture which produced the minarets of Khurasan, Ghazna and – most significantly – Jam.

#### *Qutb Minar, Delhi*

The Qutb Minar in Delhi was in fact the work of Qutb al-Din Aybak, a Turkish general who was the protégé of the self-same Ghurid sultan, Muhammad b. Sam, who had built the Jam minaret. Built in the same generation as the minaret of Jam (587–94/1191–8), similarly multi-tiered and surpassingly high, similarly

located in territory only recently claimed for Islam, and – to clinch matters – containing panegyrics of Muhammad b. Sam in its epigraphy, it offers such a close parallel to the minaret of Jam that the direct influence of the latter upon the Qutb Minar can scarcely be denied. The most striking element of comparison between the two monuments, however, is their association with victory. Whereas the minaret of Jam celebrates the victorious outcome of a conflict which, against the wider canvas of Islamic history, must be regarded as a minor local squabble, the Qutb Minar is a worthy memorial of a great theme: the Islamisation of northern India. The mosque which it serves is appropriately called Quwwat al-Islam ('*Might of Islam*') and the inscriptions on the minaret are executed not only in Arabic but also in Sanskrit. Indeed, a Nagari inscription on the minaret (admittedly added somewhat later) calls it the victory column (*vijaya-stambha*) of 'Ala' al-Din (reigned 639–44/1241–7). The theme of victory is taken up implicitly in the use of building material from some twenty-seven Indian temples in the construction of the mosque and minaret, and explicitly in the setting up of an iron column from a 4th-century Vishnu temple in the very courtyard of the mosque. The ten-fold contrast in size and majesty between these two towers (7.2 m. as against 72.5 m.) would have told its own story. The later additions, both structural and epigraphic, made to the minaret served of course to make the contrast even more pointed; but even in its original, slightly shorter, form the Qutb Minar must have been a very speaking symbol.

In the details of that form, too, the Qutb Minar acknowledges the influence of eastern Iranian minarets. Each of the three original storeys (the three upper ones were added according to a different plan, and for each plan Persian prototypes can be cited. The lowest storey features an elevation of alternating flanges and engaged columns; the second an elevation of engaged columns; the third a flanged elevation). The continuity of vertical emphasis is maintained throughout all three storeys, which lends the elevation a formidable impetus.



112 Jam, minaret

#### *Later minarets in India*

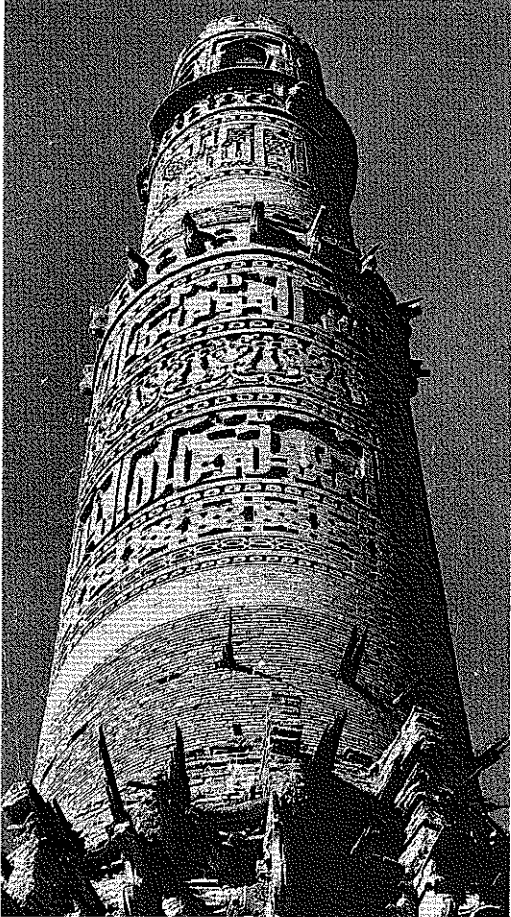
Although a later sultan of Delhi, 'Ala' al-Din Khalji (695–715/1296–1316), conceived the megalomaniac ambition of building a minaret twice the size and height of the Qutb Minar, the project foundered after the building had risen to no more than seventy feet. No subsequent attempts to rival the Qutb Minar were made by Indian architects. Indeed, the importance of the minaret declined sharply in the Indian subcon-

continent in later centuries. This is reflected above all in the functions assigned to it. These are so tied to the needs of articulation that it is more a matter of convenience than of strict accuracy to call them minarets, and on occasion that term may be positively misleading. It is of course hard to prove in any specific case that a mosque tower with an interior staircase was never used as a minaret – even if, as so often in Iran, there is also a *guldasta* perched on one of the *iwans* – and for that reason alone the conventional term is used in this chapter. Nevertheless, it is well to remember that in the subcontinent in particular, where many areas never adopted the custom of building true minarets, the term 'minaret' may often be no more than a courtesy title.

Following Persian precedent, minarets were often used to flank entrances, though the fairly standard proportional relationship between entrance and minarets in Iran was frequently flouted in India. Staged tapering cylinders on polygonal plinths flank the entrances to the Begampuri and Khirkhi mosques in Delhi (both 14th century). Yet at Burhanpur the Bibi-ki-Masjid of c.998/1590 has its entrance overwhelmed by the sheer bulk and height of the mountainous domed minarets flanking it, whose elevation is by turns octagonal, hexadecagonal, cylindrical and domed, with balconies on brackets separating the various stages. In some imperial Mughal mosques (Jum'a Masjid, Delhi, 1054–68/1644–58; Badshahi Mosque, Lahore, 1085/1674), minarets are used unexpectedly to stress the four corners of the sanctuary, whose northern façade projects into the courtyard; this is a logical extension of their function as markers.

In such cases a hierarchy of size may make itself felt; at the Badshahi mosque, for example, further and larger minarets, tapering tiered octagons, establish the outer corners of the mosque. Alternatively, parts of the mosque that were traditionally somewhat neglected, such as the courtyard (e.g. Wazir Khan mosque, Lahore, 1044/1634), could be brought into prominence by using minarets to demarcate their boundaries. At the Abu Amjad mosque, Khairpur (899/1494), huge tapering minarets, their shafts displaying an alternation of flanged and gadrooned articulation, mark the angles of the *qibla* wall and the sides of the *mibrab*. In

- 3.83 mausolea such as the famous Gol Gumbaz, Bijapur (c.1060/1650), massive minarets provide a fitting culmination for the corners of the building, and they serve a similar purpose in gatehouses used as entrances to the gardens in which a mausoleum is set (tomb of Akbar at Sikandra, Agra, 1016/1607) or as tetrapylons marking the intersection of major roads as in the classical world (Char Minar, Hyderabad, 999/1591).



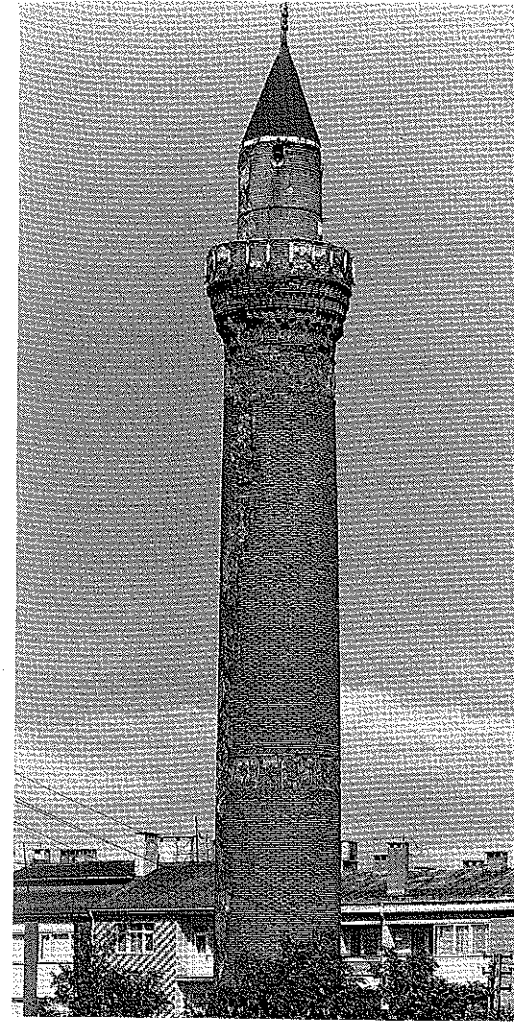
113 Jam, minaret, upper section

It must be admitted, however, that almost from the beginning of Indo-Muslim architecture the minaret had been allotted a particular function as an articulating feature at roof level which effectively stunted its further growth.

The mausoleum of Rukn-i 'Alam at Multan (c.720/1320) is illuminating as a transitional monument in this respect. The angles of its battered lower octagon are brought into bold relief by cylindrical buttress-minarets whose domical terminations project well above the coping of the first storey. Thus both the shaft of the minaret and its crowning dome have an important part to play. The second storey is also octagonal but incorporates a significant change: the domical terminations recur above the coping, but the parent shaft is absent. It is hard not to see this as a crucial devaluation of the minaret. It was precisely the independence of the minaret in the rest of the Islamic world which had allowed it to play such a variegated role in Islamic architecture. No similar locus existed for the Indian minaret, and this accounts for the rarity of the freestanding minaret in that country, apart from the area of Gujarat.

Other exceptions are the minaret or pillar in the fort at Fathabad (14th century) which records the lineage of Firuz Shah Tughluq, a cylindrical minaret at Daulatabad of c.840/1436, and the five-tiered twelve-sided tower known as the Firuz Minar, built in Gaur in Bengal c.893/1488, possibly as a tower of victory. This special function might explain the exceptional form and location of the monument. The isolated Hiran Minar at Shaikhupura near Lahore was also the product of special circumstances: it was built at the order of the Mughal emperor Jahangir over the grave of an antelope. The association of minarets with the skulls of game animals was an ancient tradition in Iran, and a minaret festooned with the horns and skulls of game has survived to this day at Khuy in Azerbaijan. A small octagonal room set in the third storey of the Hiran Minar suggests that the building had a largely recreational function, as indeed its setting amidst gardens, lakes and pavilions would tend to confirm.

Perhaps the commonest form of minaret in the Indian subcontinent, which occurs in numerous guises throughout the northern part of the area, comprises a stocky cylinder resting on a high polygonal plinth and horizontally articulated by a farrago of annular mouldings (the latter feature possibly derived from pre-Islamic commemorative columns), balconies and niches (examples at Ahmadabad – where the



114 Sivas, Great Mosque, minaret

minarets are usually placed centrally, flanking the sanctuary or the *qibla iwan* – at Hyderabad and at Bijapur). In the case of minarets used to mark the corners of a building, a wide range of practices developed. Sometimes the essential nature of the minaret was retained in that it projected from the building which it adjoined and was made to seem higher still by the low roof-line of the tomb proper (tomb of Jahangir at Shahdara near Lahore). More often the minaret comprised a massive polygonal lower storey, serving also as a buttress, and would be crowned by a slender, insubstantial shaft (Chota

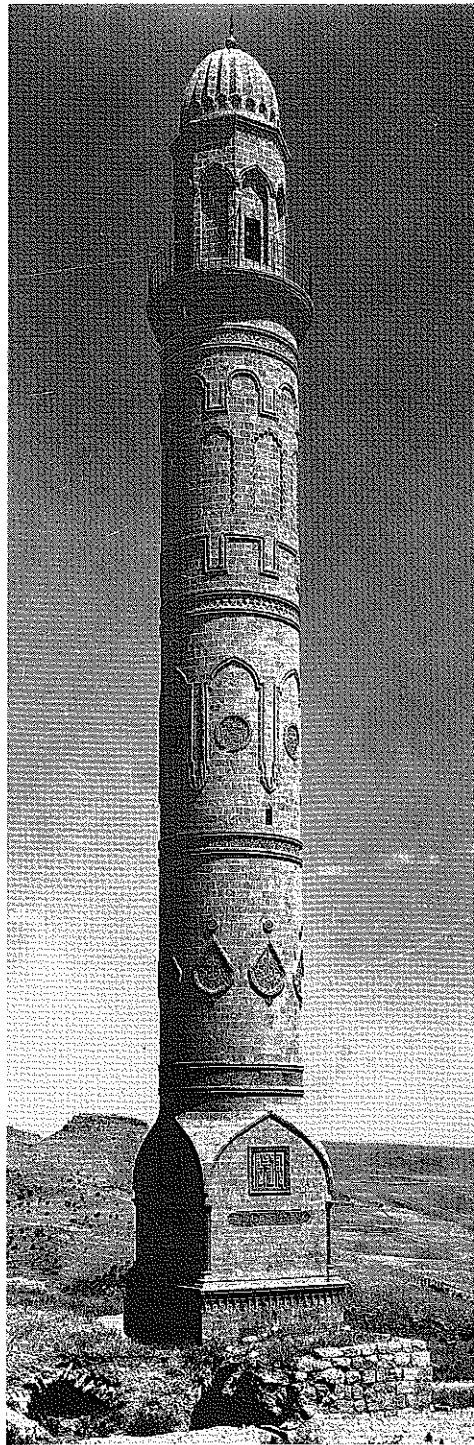
Sona Masjid, Gaur) or – in the later stages of this development – by an open turret, dome or kiosk (tomb of I'timad al-Daula, Agra, 1037/1628, among numerous other Mughal buildings). In such cases the minaret, while perhaps retaining a residue of religious significance, was used primarily as an articulating element. Moreover, these pinnacles are usually called *guldasta* rather than *manara*. Frequently they are solid, which of course excuses them from any religious function. Their use in mausolea such as the tomb of Humayun in Delhi could cause little disturbance.

In the Taj Mahal the major minarets defining the extent of the funerary complex are supplemented by a series of extremely slender minarets integrated into the façades of the tomb and barely breaking the roof-line; these show how the minaret could shrink to a symbolic presence only. Perhaps the ultimate degeneration of the Indian minaret, in form and function alike, is marked by the funerary architecture of 17th-century Bijapur, where one tomb after another is festooned by a dozen or more tiny, bulbous-headed towers applied like candles to a birthday cake. These trivial constructions scarcely deserve the name of minaret. In its Indian form, indeed, the minaret was apt to be confused with the *chbatri* – the open-plan, domed, arcaded pavilion used as a means of animating the roof-line of a building. The similarity of function can readily be gauged by comparing a mausoleum which uses the *chbatri* form (e.g. the tomb of Muhammad Chaus, Gwalior, c.971/1564) with a roughly contemporary one which uses the minaret form in just the same way (tomb of Adham Khan, Delhi, c.968/1561). Curiously enough these *chbatri*s, though originally local, non-Islamic forms, irresistibly evoke the earliest corner minarets in Islamic architecture.

#### MINARETS IN TURKEY

##### *The Seljuq and Beylik periods*

The minaret genre enjoyed particular popularity in two areas of the Islamic world which have yet to be discussed in this context – Egypt and Turkey. The latter area has a tradition of minaret construction not only as distinguished and individual as that of Egypt, but also much



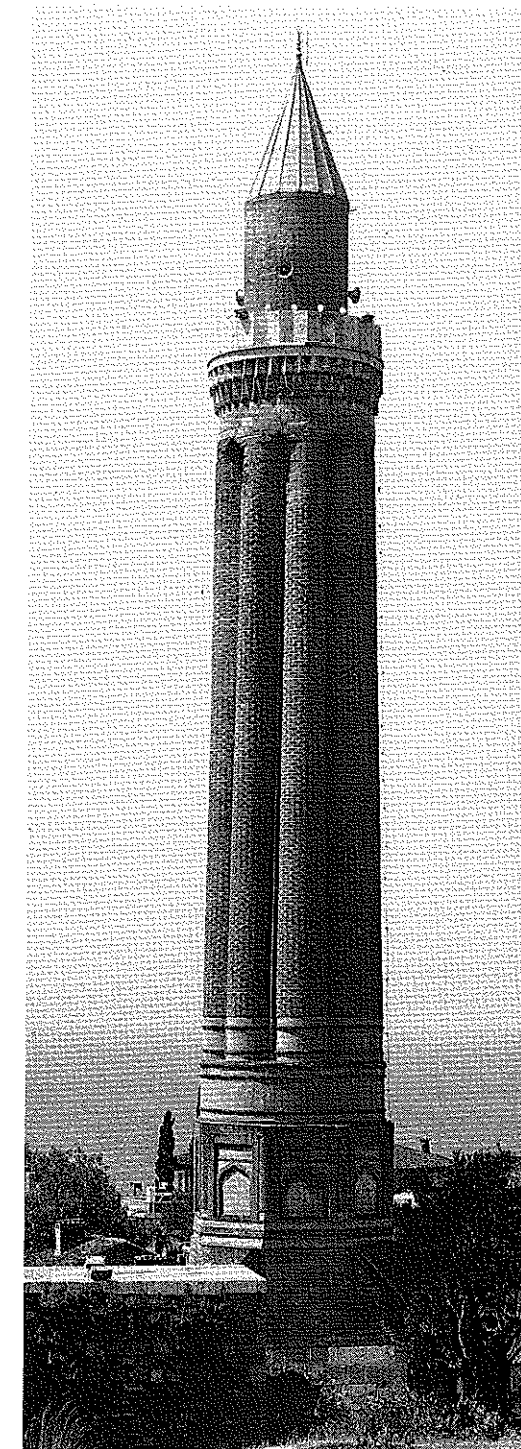
115 Mardin, Great Mosque, minaret

longer lived. The sequence begins in somewhat derivative vein with the minarets built in their scores by the Saljuqs of Rum in the thirteenth century. Following the practice of the Great Saljuqs in Iran, they placed minarets at the sides of portals to mosques, and expanded the use of this feature to *madrasas*. The wider spread of paired portal minarets *vis-à-vis* the situation in Saljuq Iran makes it natural that the motif should have experienced substantial changes in Anatolia. The most striking of these changes is the emphasis on massive strength in these portal minarets. Their lower structure, while incorporated into the portal proper, does project from it in plan and elevation and is also singled out by decorative means. The upper elevation, too, offers novel features: fluted shafts, bowl-shaped balconies and slender conical terminations to the shaft (e.g. Çifte Minare Medrese, Erzurum, possibly c.640/1242; and the less well preserved Sahib 'Ata' mosque, Konya, 656/1258). At the Gök Medrese, Sivas (c.668/1270), the shafts are notably short, even stumpy, with a concomitant stress on stability; slender widely-spaced colonnettes articulate them. In this building, as in the Çifte Minare Medrese in the same town, the balconies are carried on corbelled tiers of faceted brickwork, a variation on the theme of the so-called Turkish triangle. In their upper sections all these minarets are of brick, which makes for a powerful contrast with the ashlar stone façade below. The material of these minarets betrays their ultimately Iranian origin.

Rather more individual, perhaps, was the Anatolian interpretation of what had long been a standard device of Islamic architects, namely employing a single minaret as an integral part of a mosque deserving special attention in its own right. The novelty lay in reducing the surface area of the mosque and thereby giving the minaret much more prominence. Nowhere in the Islamic world is the familiar silhouette of a compact mosque with a low dome and cylindrical minaret encountered as regularly as in Turkey. This is a schema which has attained well-nigh symbolic status, and was in Anatolia extended to *madrasas* and *imarets*. Their sturdiness and their location at a corner of the building – a common practice in Anatolia – lends these minarets the air of a bastion, well exemplified in the 'Ala' al-Din

mosques at Konya and Niğde (both 13th century) and, in the following century or so, in the mosques of 'Isa Bey at Selcuk (777/1375) or İlyas Bey at Miletus (806/1404). Such buildings kept the tradition alive, and ensured that it became canonical under the Ottomans from the time of their earliest buildings at Iznik (Yeşil Cami) and Bursa (Yeşil Cami and the Hudavendigar mosque among others). In the mature Ottoman masterpieces of Istanbul two or more minarets are standard equipment for mosque complexes, but in the provinces the old tradition continued unchanged, as mosques in Elbistan, Diyarbakır, Gebze and elsewhere testify.

Under the Saljuqs in Iran the concept of the minaret as a monument in its own right had been developed to perhaps a greater degree than in any other area of the Islamic world. This concept continued to operate, though on a lesser scale, in the architecture of the Rum Saljuqs. Completely free-standing minarets are rare (e.g. the Yivli Minare at Antalya, though its parent mosque is only a few metres away, or the isolated Artuqid minaret at Dunaysir), but numerous cases may be cited in which the minaret effectively achieves independence by virtue of its extreme height (e.g. the minaret of the Rizq mosque in Hisn Kaifa, the very similar minaret of the Mardin Friday Mosque, or the case of the Ince Minare Medrese, where the building is popularly named after its minaret, a common feature in Anatolia) or of its decoration (minaret of the Yaqutiye Medrese, Erzurum, whose shaft is enveloped by boldly three-dimensional lozenge interlace in brick). In their decoration, indeed, the minarets of Saljuq Anatolia clung to Iranian precedent, with much emphasis on patterned brickwork and inscription bands, often glazed. However, their use of two bowl-shaped balconies to articulate the elevation, and of a crowning stage comprising a slender cylinder with candle-snuffer roof (e.g. Taş Medrese, Akşehir) departs from Iranian models and foreshadows the mature Ottoman minaret. Among variant forms may be cited square bases with blind arcades or with chamfered upper corners (Bayburt, Ulu Cami), intermediate octagonal drums with blind arcades (Ereğli, Ulu Cami), and various types of gadrooning applied to the main shaft. The latter feature is best



116 Antalya, Yivli mosque, minaret

5, 3.66 illustrated by the Yivli Minate at Antalya (early  
116 13th century), where a cannular flange divides  
3.94 the engaged columns from each other; the result  
is remarkably similar to the Jar Kurgan minaret  
2.175 built a century earlier in Central Asia. Perhaps  
the most curious version of the theme is the  
minaret of the Hoca Hasan mosque in Konya,  
whose square shaft has a semi-circular buttress  
at the centre of each side, and similarly placed  
buttresses on the octagon above. High oct-  
agonal drums (Sirçali mosque, Konya) and oct-  
agonal shafts (Zemburi mosque, Konya) are  
also encountered occasionally, as are stalactite  
cornices carrying a balcony (Zemburi mosque,  
Konya). The motif of Turkish triangles so  
widely used in zones of transition in this period  
sometimes finds its way onto the drum of  
5.129 mausolea which are visually very close to  
minarets (Güdük Minare, Sivas).

#### Ottoman minarets

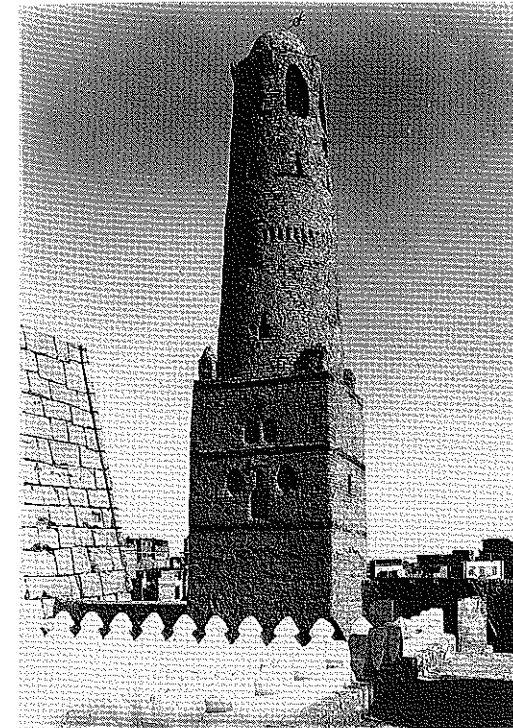
The discussion so far has emphasised the variety  
of forms and decoration which characterise the  
pre-Ottoman minarets of Anatolia. It must be  
admitted, however, that these minarets give  
little hint of the unique role which the minaret  
3.11, 3.19 came to play in Ottoman architecture. It is es-  
pecially striking that, apart from some minor  
tinkering with form and decoration in the pro-  
vinces (notably in the use of striped masonry),  
86 the form of the minaret – for all the world like  
a long, meticulously sharpened pencil – became  
virtually fossilized after the Ottoman conquest  
of Istanbul. Since much the same can be said for  
the basic components of mosque design, if not  
indeed for the form of the mosque in general,  
2.317–2.337 the formal interest of these structures lies in  
quite small variations from a generally accepted  
norm. It might indeed be argued that such varia-  
tions were not needed, for in its mature form the  
standard Ottoman minaret has a slender  
elegance which is rarely rivalled in the Islamic  
2.323 world (Selimiye, Istanbul). Rising from a square  
or polygonal base, its main cylindrical shaft is  
punctuated by one, two or even three circular  
balconies carried on *muqarnas* vaulting. Elong-  
ated conical roofs, sheathed in lead and ending  
in finials, capped the shafts. Muezzins stationed  
at each balcony would deliver the call to prayer  
in the form of a canon. The acoustic impact of  
these many voices would of course be intensified

significantly in a mosque with multiple  
minarets, the voices interweaving in different  
sonorities depending on the height and distance  
separating the muezzins. Perhaps the sheer  
quantity of voices involved, which would natu-  
rally generate a greater volume of sound (espe-  
cially if the muezzins were stationed in pairs or  
even groups), explains why the call to prayer in  
the case of Ottoman minarets could be given  
from a greater height than usual. It is still notice-  
able, however, that even the topmost balcony is  
still far below the summit of the minaret.

Within this architectural formula there was  
little room for manoeuvre. Sometimes the shaft  
would carry extremely long and slender arcades  
functioning as flutes, leading the eye upwards  
and thus emphasising the height of the minaret.  
Often the shaft is not a true cylinder at all but a  
polygon, though the angles are so obtuse that  
the visual effect is that of a cylinder. In a few  
cases a diminutive arcade encircles the base of  
the roof. Such variations are largely cosmetic.  
More significant are the changes in the propor-  
tions of the shaft itself. Many Ottoman archi-  
tects preferred a stumpy, even massive, minaret  
to a very tall and slender one, and certainly that  
solution, with the addition of a squat adjoining  
dome chamber, ensures a more integrated sil-  
houette. It would be hard to devise an apter  
symbol, at once sturdy and simple, of the quint-  
essential Islamic religious building. In minarets  
of all kinds Ottoman architects were apt to lay  
stress on the plinth. This was commonly square  
in plan but in elevation its walls sloped sharply  
inwards, as if to stack extra volume against the  
shaft. This buttressing role was especially  
appropriate if the minaret were located at a  
corner of a building. In fact the standard  
location of single Ottoman minarets was at the  
north-west corner of the mosque, though many  
are sited at the north-east corner. Possibly the  
corner location was chosen because experience  
had shown it to be the safest in the event of an  
earthquake, or as a means of buttressing the  
corner, always a vulnerable area.

Perhaps the most celebrated feature of  
Ottoman minarets was not their outward form  
but their use in pairs, quartets or sextets as a  
device to proclaim the royal status of the  
building – for only a reigning sultan could erect  
more than one minaret per mosque. There can

be little doubt that such mosques represent the  
most sustained attempt in all of Islamic architec-  
ture to reconcile the divergent aims of royal and  
religious iconography. Planted as they are like  
lances in the sacred precinct, these minarets may  
be said to consummate a tradition stretching far  
back in time to the Prophet's long spear (*'anaza*)  
which he would thrust into the ground to  
indicate the direction of prayer. The wheel has  
turned full circle and the original form has  
become splendidly monumentalised. Whether  
or not this was a deliberate echo is an open  
question. At all events, it is hard to overlook the  
aggressive and ceremonial implications of these



117 Luxor, Mosque of Abu'l-Hajj, minaret

2.354 gigantic needle-sharp lances clustered protec-  
3.70 tively, like a guard of honour, around the royal  
dome. Their impact depends to a large extent on  
their proportions, which are almost un-  
precedented; the pair of minarets flanking the  
87, 3.71 Süleymaniye dome are each some seventy  
metres high. Such minarets function simul-  
taneously to enrich the exterior silhouette of the

mosque – in the case just cited, for instance, the  
outer minarets flanking the principal façade of  
the building are shorter than those flanking the  
dome. Thus a pyramidal effect is achieved which  
is still further emphasised by the choice of a  
sloping site. The gently rolling skyline of  
Istanbul, with its extensive natural views, was  
ideally suited to this kind of display, and the  
political significance of the city as the Ottoman  
capital may partly have motivated this new use  
of the minaret as a component of urban design  
on a mammoth scale. Such minarets were also  
used in a more symbolic way as markers of the  
courtyard, of the sanctuary, or of the entire  
mosque, staking out the boundaries of the reli-  
gious domain within a secular environment.  
Dome chamber and minaret alike thus acquire  
extra significance as symbols of the faith. This  
development was not new, but only in Ottoman  
architecture is it pursued with such singlemind-  
edness. It is therefore entirely appropriate that  
these minarets, like the domes over the *mibrab*,  
should bear the emblem of the crescent, sup-  
ported on a series of superposed orbs.

#### MINARETS IN EGYPT

If conservatism may be termed the hallmark of  
the Ottoman minaret, its Egyptian counterpart 3.3  
is above all varied. This variety is all the more  
remarkable because the Egyptian school is to all 3.116, 3.117,  
intents and purposes concentrated on the 3.121  
buildings of Cairo, though it is represented in  
Egypt and in the architecture of the Mamluks in  
Syria and the Levant. Unfortunately very few  
surviving pre-Mamluk minarets have escaped  
extensive alteration. Moreover, the most impor-  
tant examples to fall within this category are not  
metropolitan work at all but are found in  
various provincial towns: Isna, Luxor, Aswan 117, 3.115  
and nearby Shellal. All date from the late 11th  
century. They already display the characteristic  
Egyptian division of the minaret into separately  
conceived superposed tiers. The Asna minaret 3.115  
(474/1081–2) illustrates the type in its classic  
form. From a square base some thirty-five feet  
high, generously articulated by windows, rises a  
plain tapering truncated cylinder capped by an  
open pavilion whose eight concave sides bear a  
diminutive hexagonal domed aedicule, also of  
open plan. Inside the structure is a square newel

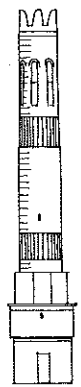
staircase with a series of short, sharp ascents. Other minarets of this group maintain the three-fold division of the elevation but change the proportions (for example reducing the crowning pavilion, as at Luxor), the decoration or the material (thus the Luxor minaret is of mud brick). Their material, and certain structural features, such as the lantern on free-standing columns and the tapered cylindrical shaft above a lofty square base, have been persuasively linked by Jonathan Bloom to contemporary architecture just across the Red Sea in the Hijaz. Yemeni minarets perpetuate some of these features.

Interesting as these minarets are stylistically, they are insignificant in comparison with the great corner towers marking the main façade of the mosque of al-Hakim in Cairo, built between 380/990 and 401/1010. With their massive, embattled – but later – square bases, whose taper, like that of an ancient Egyptian pylon, is so pronounced that it is almost a slope, they have all the appearance of bastions. In its original layout the Hakim mosque maintained a powerful consonance between minarets and portal. Very soon, however – by 401/1010 – each minaret was enclosed by a huge salient some 1.7 m. square, which allotted it a portentous, indeed revolutionary, role. Finally, in 480/1087, Badr al-Jamali enlarged the northern salient to gigantic proportions (some 25 m.

square) and thereby gave that minaret a military function. In so doing he also incorporated the principal façade of the mosque into the expanded fortifications of the city and gave it a quasi-military aspect; but he managed to make the minarets play a major part in this process without noticeable strain or incongruity.

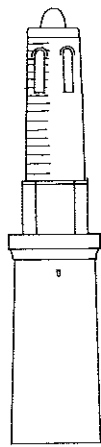
Even so, it must be admitted that the bastions constitute brutal, unadorned masses of masonry; the minaret shafts above are not only dwarfed by the bulk of their substructure, but also by contrast loaded with architectural and applied ornament. The northern minaret observes the multiple division of parts so typical of the Egyptian style. Its lowest part is a cylinder resting on a cube. Then comes an octagonal shaft with a blind arch and windows on each side, which gives way to a heavy band of *muqarnas* decoration in three distinct tiers. A fluted keel-shaped dome crowns the whole; within is a spiral staircase. In the western minaret the octagonal *muqarnas* zone is reduced in size and the square lower shaft is pierced by a double tier of arched windows. But its ornament, featuring two bands of epigraphy and two of arabesque, with numerous additional geometrical panels and cartouches, is significantly richer.

Since the minarets of the Hakim mosque survive in such an altered state, it is not easy to see where they belong in the corpus of Egyptian



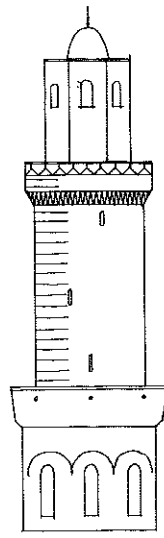
3.59

San'a', Masjid al-Abhar



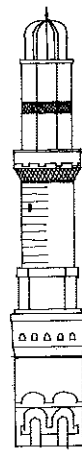
3.60

San'a', Great Mosque



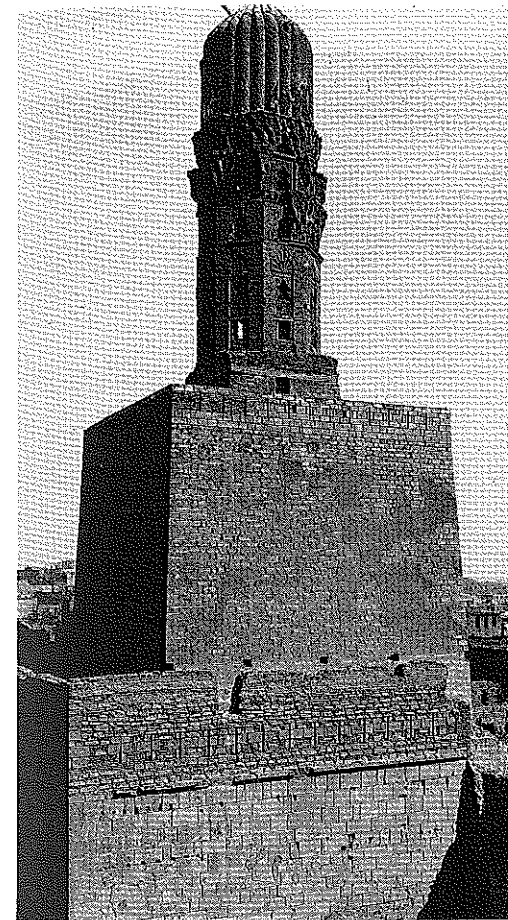
3.61

Sa'da, Masjid al-Shamri



3.62

Sa'da, Masjid 'Ulayyan



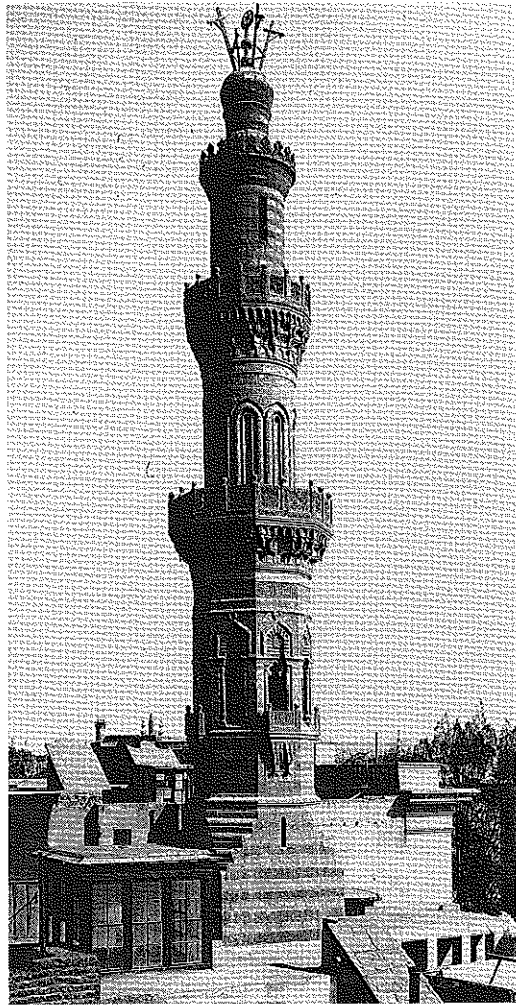
118 Cairo, Mosque of al-Hakim, northern salient and minaret, from the west

minarets. This is all the more serious a lacuna in view of the once-vigorous controversy over the role of the Pharos of Alexandria, which stood well-nigh intact until it was partially ruined by an earthquake in 180/796–7, in the evolution of the Egyptian minaret. *Pace* Creswell, who argued against any connection between the two building types, it can scarcely be overlooked that the surviving Egyptian minarets which date before 493/1100 all attest a pronounced multipartite division of the elevation.

Since this feature – though present in the minarets of Mecca and Medina, very possibly as a result of Egyptian influence – is absent alike in the Syrian, Iranian and Maghribi traditions (with two significant exceptions), some rationale

for such an unusual division must be proposed. Interestingly enough, the two major Maghribi minarets with three superposed stories are those of Qairawan and Sfax. In the early Islamic period these sites were the first major Muslim settlements on the road west from Alexandria. Moreover, it was precisely in Tunisia, a maritime frontier area in the war against the Byzantines in southern Italy and Sicily, that the building of lighthouses is copiously recorded in the early Muslim sources. As noted above, the form of the Qairawan minaret has itself recently been linked with that of a Roman lighthouse nearby. Thus the idea of an association between lighthouses and minarets, which so mesmerised scholars earlier this century, has not entirely lost its relevance. Quite aside from this, the reasons adduced by Creswell for rejecting any link between the Pharos and Egyptian minarets are themselves not entirely sound. His narrowly chronological approach is superficially attractive because of its methodological rigour. Yet not all types of architectural evolution are entirely chronological. The case of the Holy Sepulchre indicates that the idea of a seminal building may find extremely varied expression at the hands of subsequent architects, and that references to it include copies both very faithful and very distant. Creswell's proposed evolution effectively ignores the likelihood that a monument as world-famous and as physically memorable as the Pharos would have exerted a continuing influence on Egyptian architecture long after its destruction.

If the Pharos can be proposed – though with all due reserve – as a possible source for certain three-staged minarets outside Egypt, its influence within that country is still more likely. This is not to say that any surviving Egyptian minaret is intended even as a reasonably close copy of the Pharos. Instead they might well be regarded as very free variations on the Pharos theme. The principal points of contact would then be the multiple (usually triple) division of the elevation, with superposed storeys of successively reduced diameter and size, and the provision of a crowning open-plan lantern. In conclusion, it is perhaps worth remembering that the Pharos was repeatedly rebuilt by the Muslims until its final disappearance some time between the early 13th and the mid-14th



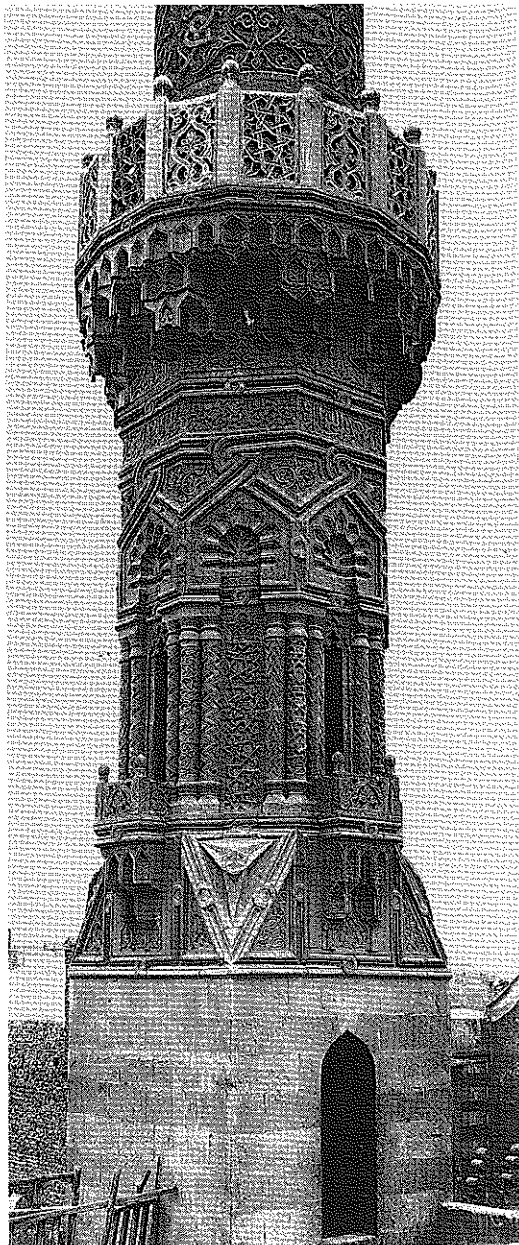
119 Cairo, minaret of Bashtak

century. Indeed, as Butler noted, the account of 'Abd al-Latif indicates that in c.597/1200 the Pharos comprised successively square, octagonal and round storeys and was crowned by a lantern or small cupola. It may well be, therefore, that this semi-Islamic Pharos rather than the original building was the means of establishing the tradition of the multi-staged minaret in Egypt.

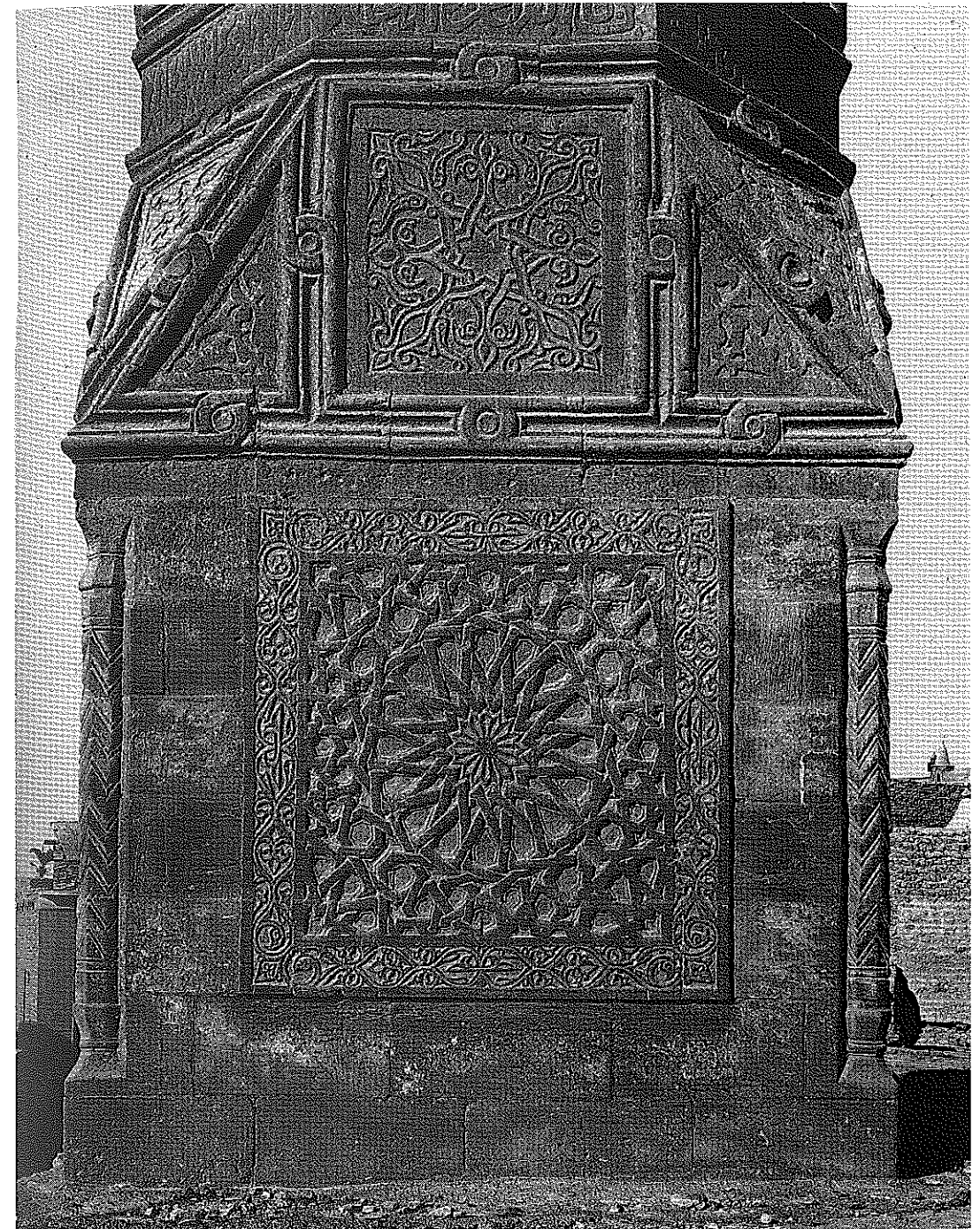
If, then, it is possible that the Pharos, whether in its original guise or in one of its later transformations, exerted decisive influence on at least some early Egyptian minarets, such as the four-

tier example adjoining the mosque of al-Juyushi (478/1085), does it follow that this influence was continuous? The evidence of a host of minarets beginning with that of the mausoleum of Abu'l-

5.175-6.176



120 Cairo, Ghanim al-Bahlawan mosque, minaret



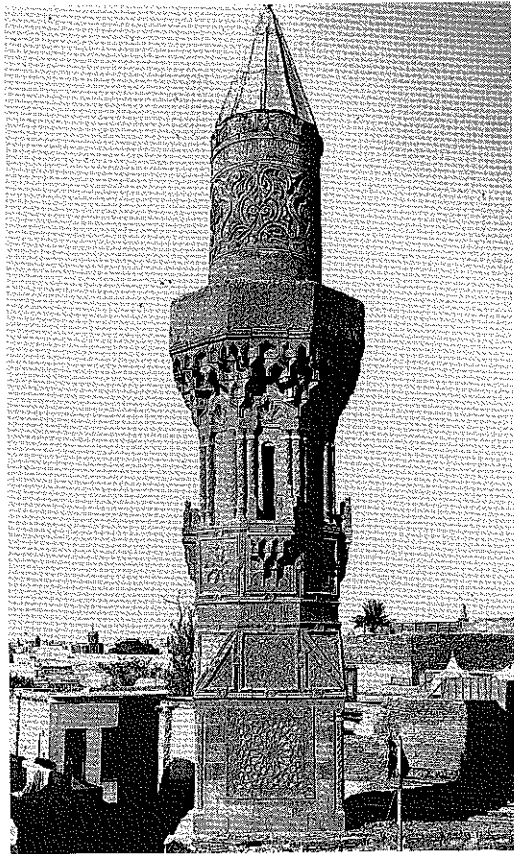
121 Cairo, Mughalbay Taz mosque, base of minaret

Ghadanfar (552/1157) suggests that this is not the case. In the early versions of such towers the emphasis is on a tall square shaft of Syrian type, which may be very plain (mausolea of Abu'l-Ghadanfar and Fatima Khatun) or richly decorated (minaret in *madrasa* of Sultan al-Nasir Muhammad). Crowning this shaft is the so-called *mabkbara*, a two-storey octagonal pavilion whose dome above a heavy *muqarnas* cornice is usually fluted and whose lower walls are broken by decoratively profiled arches (examples attached to the *ḥawiya* of al-Hunad and the *madrasa* of Sultan Salih).

Such buildings, which are mostly of the 13th century, do seem to be independent of the Pharos tradition. It is with their immediate successors that the problem becomes acute. Now the *mabkbara* is accorded much more emphasis than hitherto, with a consequent downgrading of the main shaft, and the internal divisions of the *mabkbara* are much more marked. In effect it becomes two separate storeys, whose formal and decorative independence from each other is underlined by the use of different ground-plans: an octagonal storey giving way to a circular one which bears the crowning dome and finial. Thus the Pharos pattern – of tiers which are in turn square, octagonal and circular and are capped by a roof with a crowning device – reappears. But does it issue from the Pharos itself, via such transitional monuments as the Juyushi minaret, or is it a natural development of the Abu'l-Ghadanfar type? The minaret attached to the Sultan Qala'un complex suggests the first alternative, while the almost contemporary minaret of the *madrasa*-mausoleum of Salar and Sanjar al-Jauli suggests the second. Yet for all that, the differences between them are slight. If these were indeed two separate strands in the evolution of the Egyptian minaret, these strands fused in the early 14th century in the minarets of the *madrasa*-cum-mausoleum of the Amir Sunqur Sa'di or of the *khanqah* of the Amir Qusun. By that time (735/1335) the tripartite division was standard.

The principle of altering the ratio of one tier *vis-à-vis* the other continued in later Cairene minarets. Its most striking expression may be seen in the continued reduction of the main shaft, which finally diminishes to the point where it is lost in the surrounding walls of the

mosque. Thus the visible part of the minaret is an octagonal shaft with a cylindrical superstructure (minarets of Shaikhun and Sarghitmish, both of the mid-14th century). The future course of the Egyptian minaret was now clear. With the rejection of the tall square shaft as the essential defining feature of the minaret, the way was open for quite radical changes in the proportional relationships between the various parts of the minaret (minaret of *khanqah* of Faraj b. Barquq). Sometimes the elevation was dominated by a series of diminishing octagons. Multiple balconies on *muqarnas* corbelling mask these and other transitions. Such balconies inevitably recall those of Ottoman minarets, and indeed were used to secure the same antiphonal effects in the chanting of the *adhan* as in Turkey. Built into the crowning cupola were a series of projecting poles from which lamps were sus-



122 Cairo, Mughalbay Taz mosque, minaret

118 depended on the occasion of the great festivals (minaret of Bashtak, 737/1336). Thus the ancient associations built into the very name of the structure were perpetuated.

A new emphasis on absolute height may be discerned in the minarets of the later Mamluk period, such as that placed at the south-east corner of the Sultan Hasan mosque (757–60/1356–9), which soars to 280 feet, and is the tallest in Cairo. This example is also typical of the later period in that the crowning dome is carried on an open circular colonnade – a *tholos*, in fact, allotted a new and quite unexpected function (minaret of Aqsunqur, 748/1347). Sometimes these columns are doubled. The crowning element of the minaret also changes definitively under the rule of the Burji Mamluks, though the first examples of the new form date from the early 14th century. Earlier, the crowning feature was the diminutive two-storey *mabkbara* – so called because it resembled the top of an incense-burner, though they are also locally known as pepper-pots. Now this was replaced by the *qulla*, which owed its name to its resemblance to the upper half of the typical Egyptian water-container. The pear-shaped *qulla* usually bears at least two bronze finials whose crescents are orientated towards the *qibla*. In the final decades of Mamluk rule a playful variation on this theme makes its appearance: the minaret is crowned by a pair of pavilions, square in plan and crowned by a whole cluster of *qullas* (funerary complex of al-Ghuri; one might compare the minaret of al-Ghuri in the Azhar mosque and the minaret of the Qani Bay mosque). It is entirely fitting that the evolution of the medieval Egyptian minaret should end on this fanciful note, for the previous five centuries had shown lavish decoration to be the keynote of this tradition. The changing succession of geometrical forms – principally cube, rectangle, octagon and cylinder – allowed free rein to this

decorative emphasis, which is unmatched in any other group of minarets.

Finally, the popularity of the minaret in Mamluk architecture invites explanation. In the 14th and 15th centuries the main building type in Cairo appears to have been the composite ensemble. Its constituent parts could vary from one ensemble to another, but their main functional elements were the mosque, *madrasa*, *khanqah* and mausoleum. Similar complexes had already become popular in Saljuq Anatolia. In Egypt, however, unlike Anatolia, the minaret was from the first regarded as an integral part of such complexes. Whether this was entirely for functional reasons may be doubted. In the dense urban fabric of Cairo nothing could more appropriately designate such a complex from afar than a minaret. In this sense it could be regarded as a public affirmation of its patron's munificence, and thus served a personal, quasi-totemic function. Their placing varied. Sometimes they were located at the two corners of the principal façade, or flanking a gateway (e.g. Bab Zuwaila); these were traditional locations. But many of the locations were unusual or even unprecedented. The *madrasa* of al-Salih has a single minaret above the central porch of the façade, and the two minarets in the mosque of al-Nasir Muhammad on the citadel are at one corner of the *qibla* wall and to one side of the main entrance. The latter location recurs in the funerary complex of Qa'it Bay. In this unpredictable positioning of the minaret one may recognise concerns similar to those of Ottoman architects. Now the minaret was, it seems, valued less for its actual or symbolic religious function and more for its rôle as a marker or articulating feature, both within the complex to which it belonged and, more broadly, within the cityscape itself. Once again, the flexibility of the forms developed by Islamic architects had asserted itself.