

Mosque of Al Zahra, Cairo, Egypt

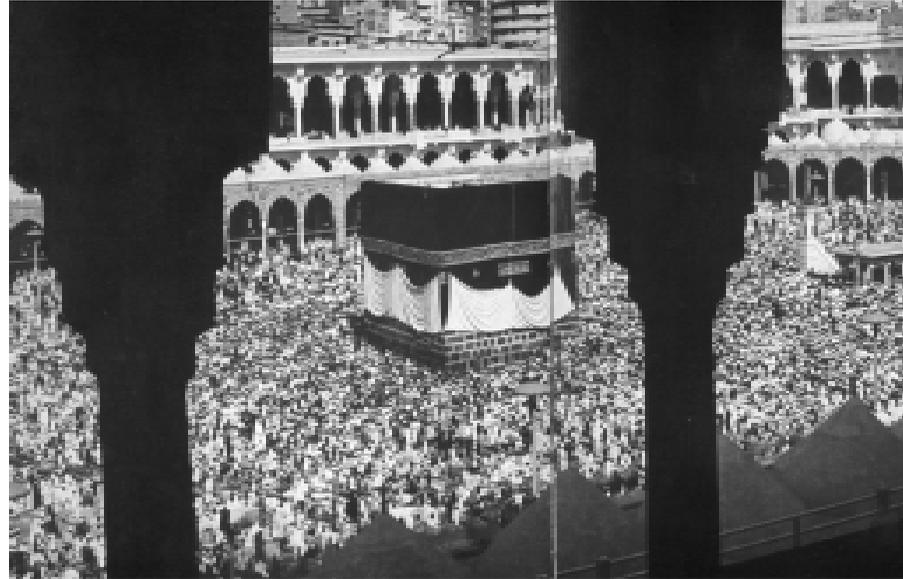


Mosque and Islamic cultural center, Regent's Park, London



Prophet's Holy mosque, Madinah, Saudi Arabia

# ***THE MOSQUE***



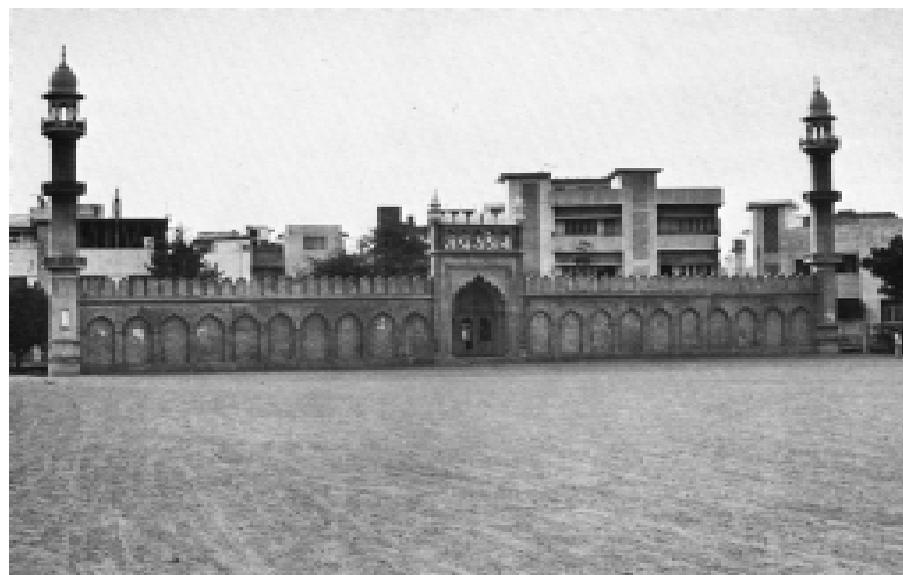
The Ka'ba, where the mihrab of every mosque is aligned with it, where the qibla terminates

1



The Khalwa, Tuti, Khartoum

2



Al Saha

3

The mosque is a building erected around a single horizontal axis, the *qibla*, which passes invisibly down the middle of the floor and, issuing from the far wall, terminates eventually in Mecca, in Saudi Arabia. Essentially, a mosque is no more than a wall at a right angles to the *qibla* axis and behind, or rather before that wall there could be anything. In other words, it is an expanse of ground with a wall at the end, a wall with inserted niche and engaged pulpit.

The Prophet's mosque in Medinah, in Saudi Arabia, formed the prototype to which subsequent Islamic religious buildings adhered-establishing the division in the mosque as well as the principal of axial planning.

In all Muslim societies the mosque is the most important building in the community and probably in the town scape, providing sense of identity and place. However, it is just one of four building types which dominate the Muslim townscape-the others being the market, the palace or the citadel and the residential buildings. In order to understand its role in the city, it is important to understand the mosque's position in the overall Urban fabric.

Prayers are established at four levels: the individual, the congregation, the total population of a town and the entire Muslim world. The first is the *Khalwa or Musalla* (mini-mosque), fig (2), which is a mosque used for the daily prayer by individuals or small groups, but not for the Friday worship. It may have a *mihrab* (prayer niche) but no *minbar* (pulpit), it may not have a minaret. The second is the congregation or Friday mosque, whose central role in the city is synonymous to that of the cathedral in Christian societies. It is used for daily prayers but mainly for the weekly service. It is much larger, provided with *minbar* (pulpit), *mihrab* (prayer niche) and minaret, it is used as a landmark building. It is usually surrounded by densely packed buildings, so as the approach through narrow streets leads to a sense of discovery.

Stylistically, architectural expression varied by region and period, though the key features such as the minaret and the gateway (entrance) remained universal.

The third is *Al Saha*, fig (3), a place for community prayer, it is a mosque reduced to its bare essentials- a great open praying space with nothing but a *qibla* wall, here the whole population of the city can assemble for the two major festivals, the breaking of the fast and the sacrifice of Abraham.

The mosque is frequently found near an economic activity center, the market, which explains that the mosque is never removed from the center of daily life activity. However, it also necessitated a transitional architectural symbolism to effect the move from the common place of the street to the spiritual space of the mosque.

The basic elements of the mosque are: a prayer space, part covered (*haram*) and part open to sky (*sahan* fig (1)), (p.47), where the worshippers can face Mecca, whose orientation is defined by a niche (*mihrab*) in the *qibla* wall. The pulpit (*minbar*) from which the leader of the prayers (*imam*) can deliver the sermon (*khutba*), is placed to the right of the *mihrab*. The space for prayers could be surrounded by colonnades or arcades. The wall oriented to Mecca (*qibla* wall) is normally larger than the other walls.

This colonnade surrounds an open central courtyard that usually accommodates the ablution fountain (the washing area), where the worshippers wash before entering the prayer hall. This space is accessed through a gateway that differs in design. In some countries, the gateway has to acquire a great architectural and symbolic value. Historically, the development of mosque architecture has changed little over the years. Starting with the house of the Prophet in Medinah, in Saudi Arabia, the prayer space was the courtyard. The first muezzin used to call to prayer from the roof top, since there were no minarets.

A two-step plate form was provided for the Prophet to address the congregation. Thus becoming the first *minbar*. This simple design was a direct response to the functional needs of the community of worshippers. It did not attribute any complicated mystical significance to the structure or the layout, and underlined the simplicity of the radical monotheism of Islam, where the bond between god the creator and



The *Sahan*

1

The *Sahan* of the *Jami'* Masjid in Delhi, India



An example of a *Sahan* with Ablution fountain

New mosque and Islamic cultural center in Rome



An internal Ablution fountain

King Hassan II mosque, Casablanca, Morocco

his submissive subjects is direct and without intermediation. Thus any space is suitable for prayer, provided that it is clean and functional. In the mosque there is a functional and artistic dimension to be considered. For instance, the prayer hall must naturally be suitable for worship in accordance with the liturgy of Islam. The mosque itself must speak to the worshippers, providing both uplifting spiritual experience and an anchor for the identity of the community. The way which the building communicates with the community is through a particular code depending on the society of that specific region.

The mosque played the role of an organizer in most of Muslim environments. It is also the definer of the society's identity and the provider of a point of reference for citizens and passers by the powerful symbolism of the mosque's traditional architectural vocabulary is unique to the Muslim culture and is uniquely identified with it, to the extent of being almost a short hand for designating Muslims.

The mosque is mainly composed of : prayer hall, minaret, the ablution fountain and the *Sahan* ( the mosque courtyard), fig (1). The mosque is an example of a simple construction based on the traditional prototype. Specific liturgy and functional requirements of the mosque do not dictate any particular architectural and physical layout, thus the architects are bound by their imagination in what they can propose.

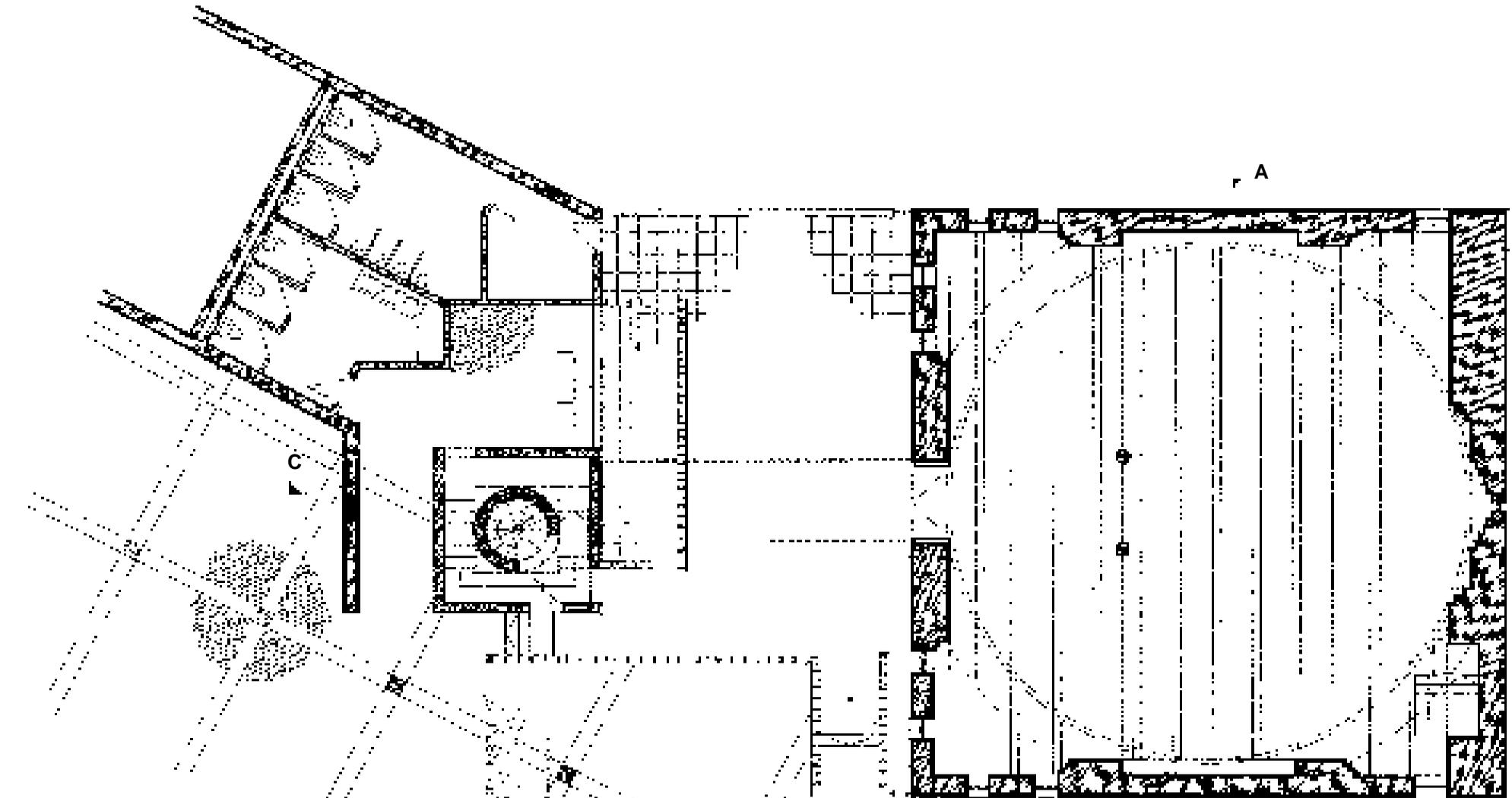
The mosque prayer hall is formed as square and placed on a right angle to the *qibla* axis. This situation created a break in the courtyard grid, that helped to emphasize the importance of the mosque. It accommodate two levels, the first level- the men's level, and the mezzanine- the women's level. The worshippers should align them selves in rows facing the *qibla* wall which determines the shape of the mosque. The longer parameter is the *qibla* wall in order to have as large a number of people as possible in the first row.

## LITURGICAL BASIS OF THE ISLAM PRAYER

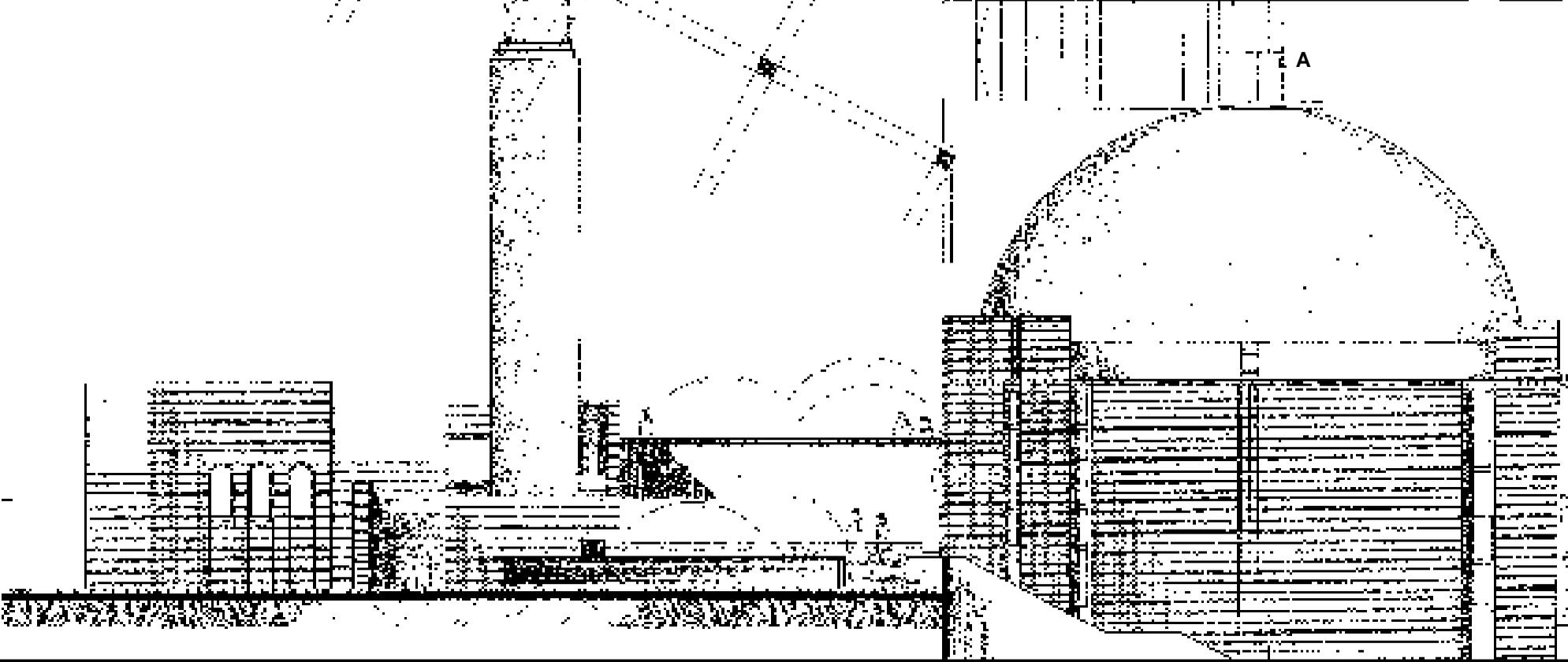
Formal prayer in Islam consist of repeated sequences of standing, bowing, prostration and genuflection. Prayer is thus not only mental and verbal but also physical, thereby involving the whole being. Behind this practice lies the central Islamic concept of God's overlordship; and the physical postures represent progressive degree of acknowledgment of this fact, culminating in the total abasement of prostration.

Prayer is established on four levels, as we mentioned before. First, the daily prayers, second, the congregation prayer on friday afternoon, third, community prayer on the two major festival, *Id al-Fitar* (feast of the breaking of the fast) and *Id al-Adha* (feast of the sacrifice of Abraham). Fourth, the annual ritual of the pilgrimage, which is a congregation of all the Muslims of the world.

The Second and the Fourth Pillars of Islam interact to produce a convergence on one day in the year, which is the climax of the liturgical calendar: The climax of the pilgrimage rites in the Plain of Arafat outside Mecca coincides with the *`Id* prayers being said through out the Islamic world. Congregation corresponding to them interlock to form the liturgy. The morphology of the liturgical action determines what categories are embraced within a typology of mosques according to two criteria: the functional, as for collegiate, memorial, etc. and the geographic or cultural (e.g. not just Iranian but Seljuq, Mongol or Timurid). The directionality of prayers is fundamental to the liturgical principals around which a mosque is constructed. To compare the mosque and a church which is designed as long, narrow buildings equipped with aisles as a result to cope with a processional liturgy, whereas the mosque evolved as a square or rectangular building because it had to cope with radial liturgy. Designing a mosque involved two contradictory principles, one of them stems from the insistence of Prophetic tradition on the priority of the first row. The first row of worshippers enjoy greater proximity to the source of blessing because it confronts the wall nearest to Mecca. Secondly, extending the mosque laterally to accommodate as many as possible in the first row. While the middle row gets invisible and inaudible. As a result, the two axes appears to be in conflict, the liturgical axis of the *qibla* and the transversal axis, since the first row is always the priority. The success in designing a mosque, is measured by the degree of reconciliation of the conflicting axes and by producing an equilibrium between the mass and volume.

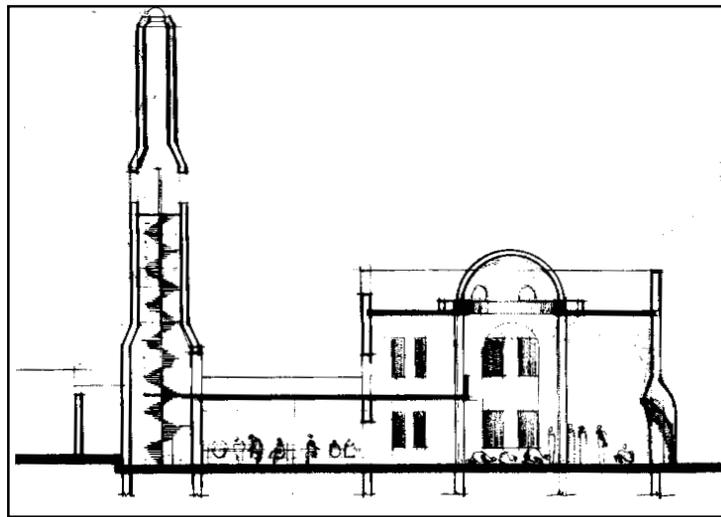


FIRST FLOOR PLAN



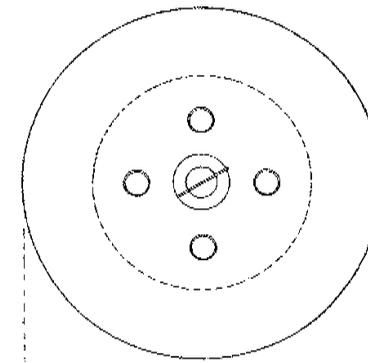
SOUTH ELEVATION

0 100 200 300

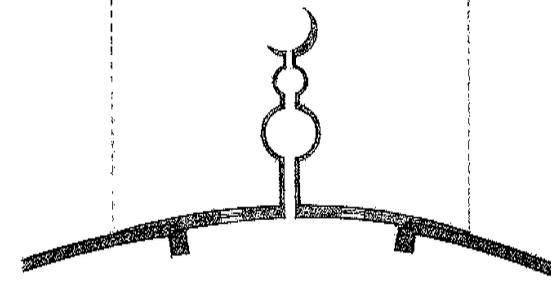


Early section for the prayer hall and the minaret

2.00 m

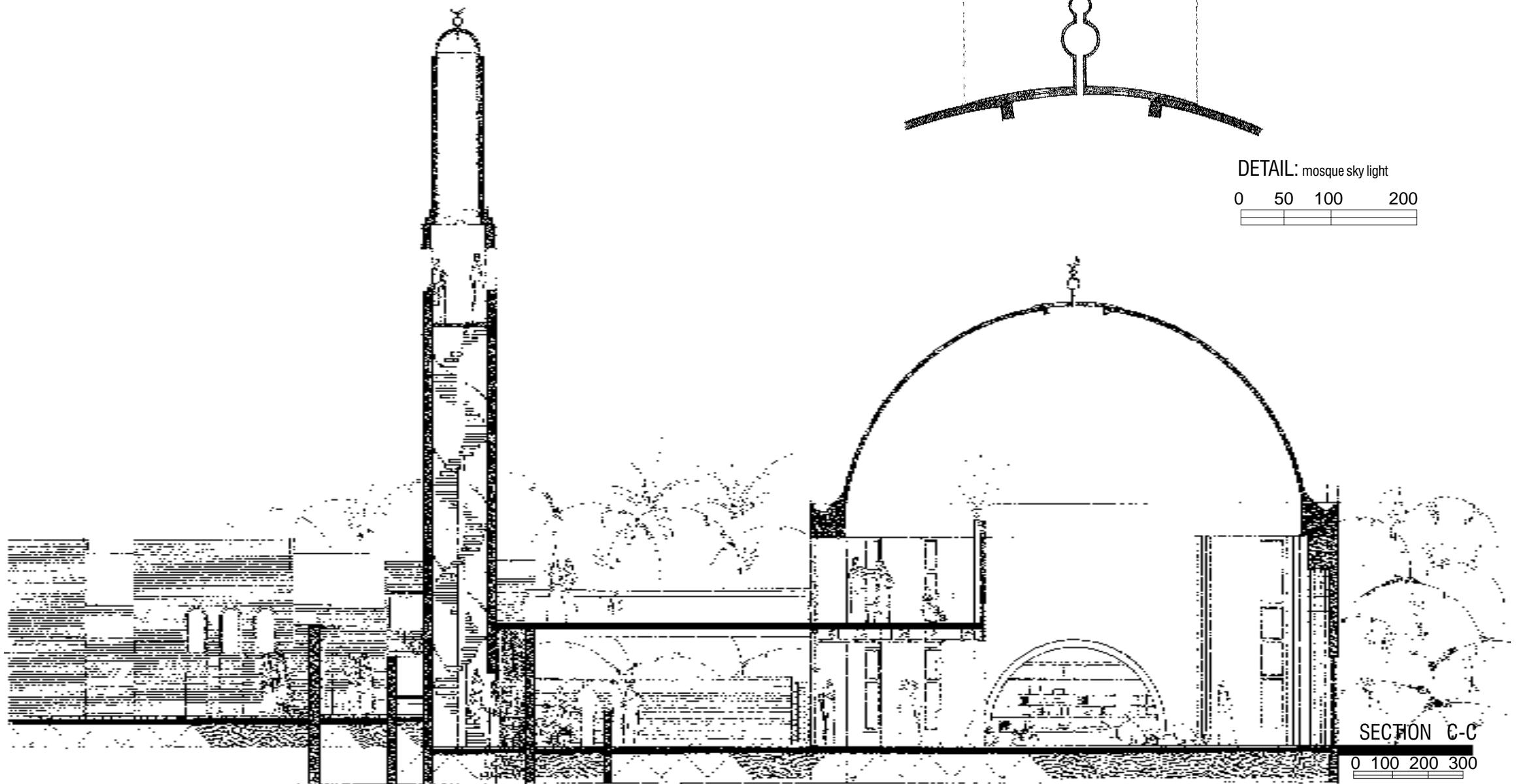


2.00 m



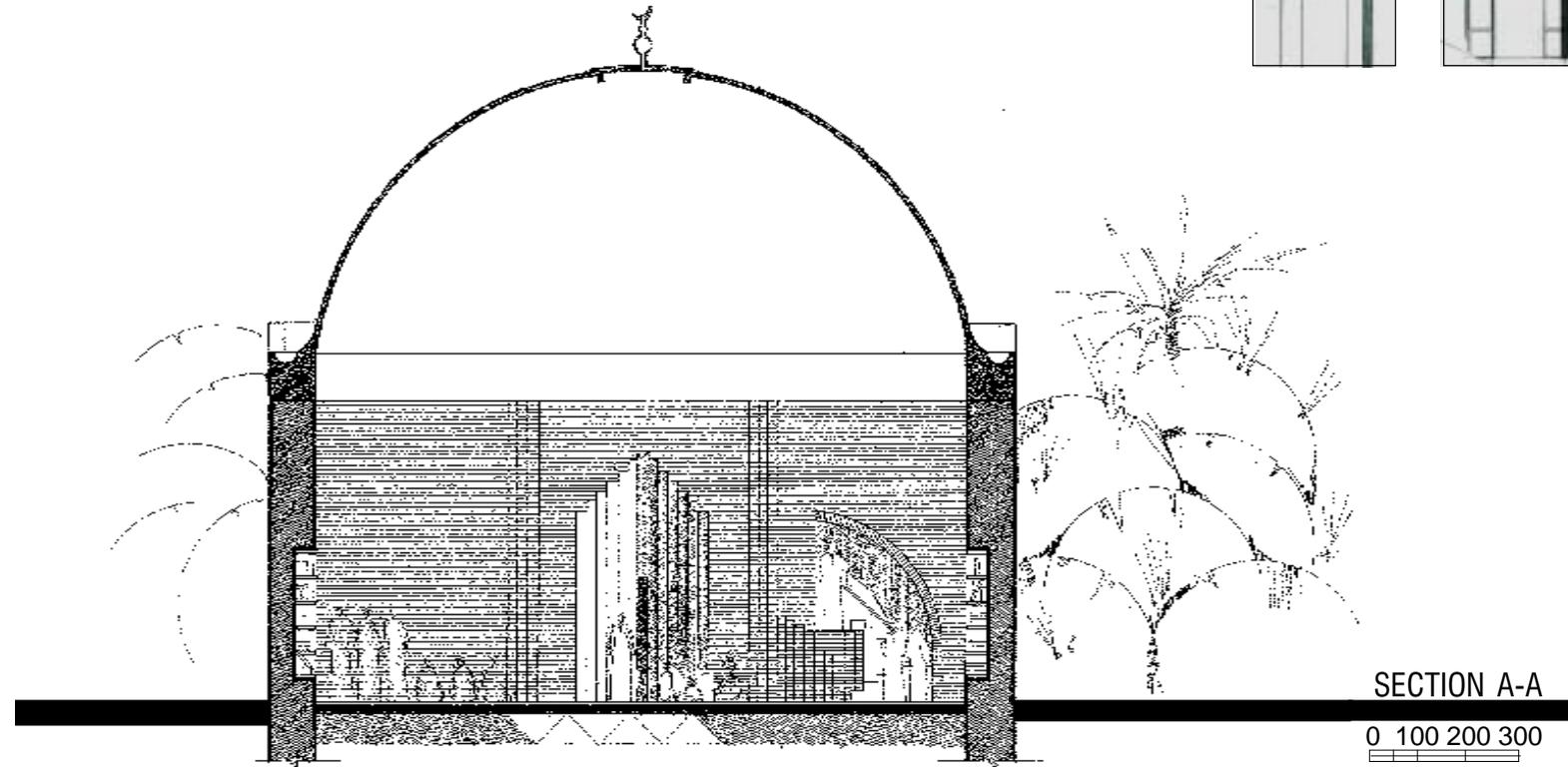
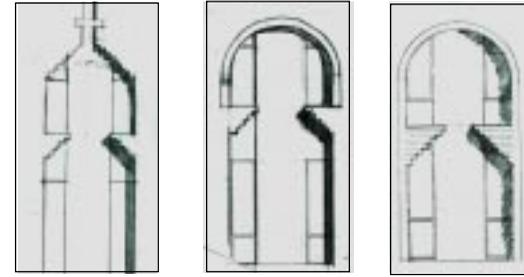
DETAIL: mosque sky light

0 50 100 200



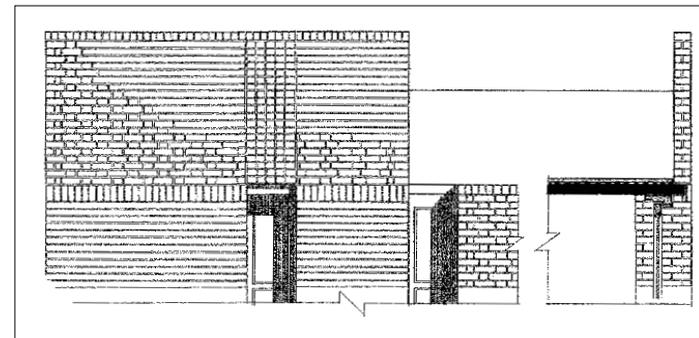
SECTION C-C

0 100 200 300

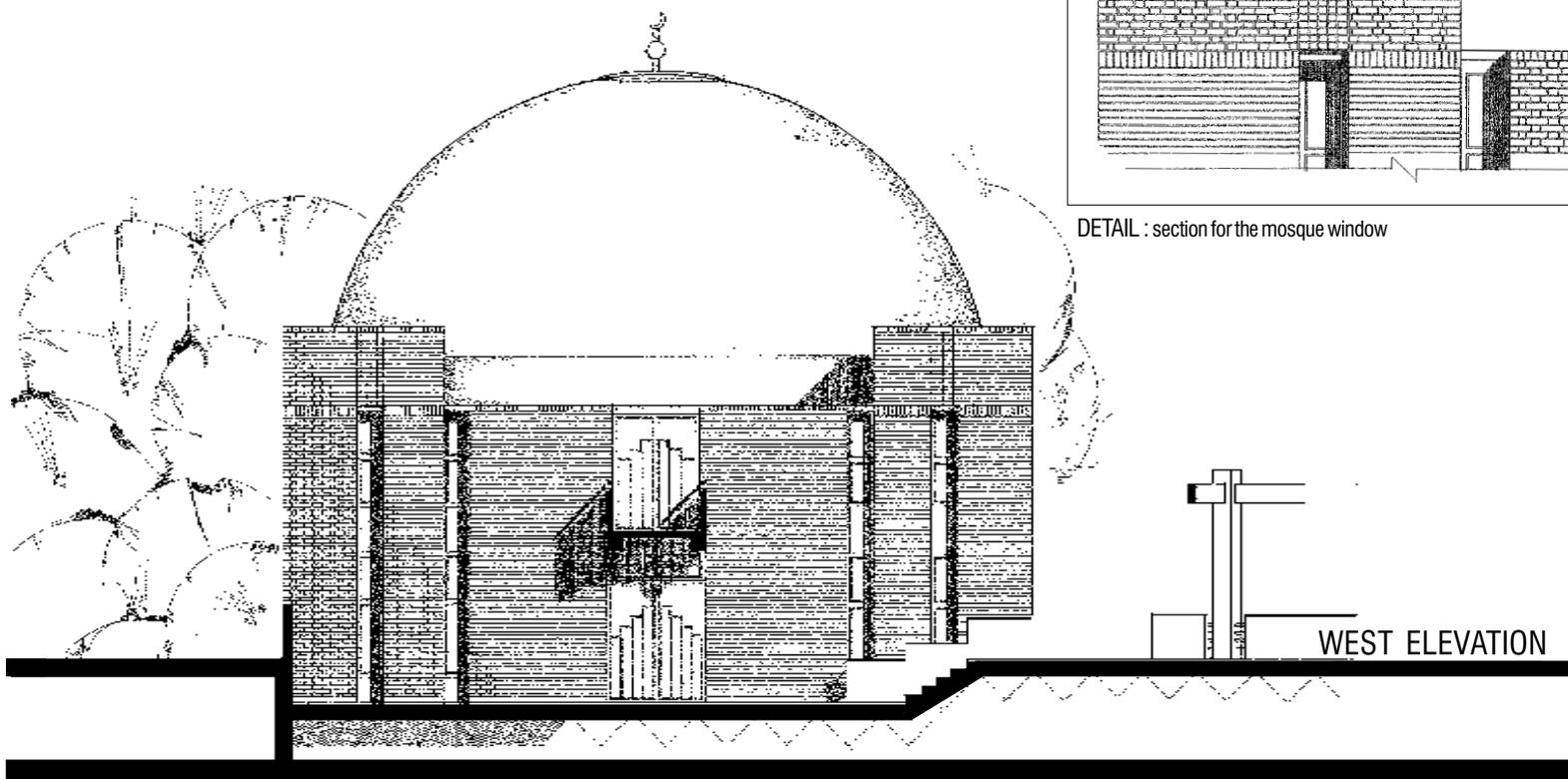


SECTION A-A

0 100 200 300



DETAIL : section for the mosque window



WEST ELEVATION

The prayer hall is 15 x 15 m by 8 m high, covered by a concrete dome of 15 m in diameter. The walls are 1 m thick load bearing brick walls. The thickness of the wall will help to minimize the amount of heat that could penetrate to the prayer hall during the day time, and to reserve the cool air that penetrated at nights.

The thickness of the wall made it possible to cut into the wall and place, for instance, book shelves and light features instead of having them projecting out of the wall.

The *qibla* load bearing brick wall is of 1.50 m and 8 m high. The walls are finished internally with a coat of red plaster, while the *qibla* wall maintains its texture, that is to differentiate between the *qibla* wall and the other walls. It embodies the *minbar* (the pulpit) and the *mihrab* (the prayer niche), that emphasizes the *qibla* axis.

The prayer hall mezzanine, that usually covers third part of the hall, is normally for women who are supposed to be behind the men or on another level to avoid distraction, the separation between the sexes being a requirement in Islam, especially during worship. The mezzanine is 3.5 m high, 4 m deep and 15 m wide, supported by two cylindrical concrete columns of 30 cm in diameter and finished with a slight coat of rough cement.

They are also used as a lighting pole, they carry light features in their top end to illuminate the dome. They are placed in an axis with the mosque entry and the niche.

They play an important role in supporting the mezzanine floor and the screen, which is used as a means of privacy and obstruction.

