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FACULTY OF ENGINEERING & ARCHITECTURE  
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FINAL PROJECT PROGRAM & REFERENCES**

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## 5. CONCEPTS

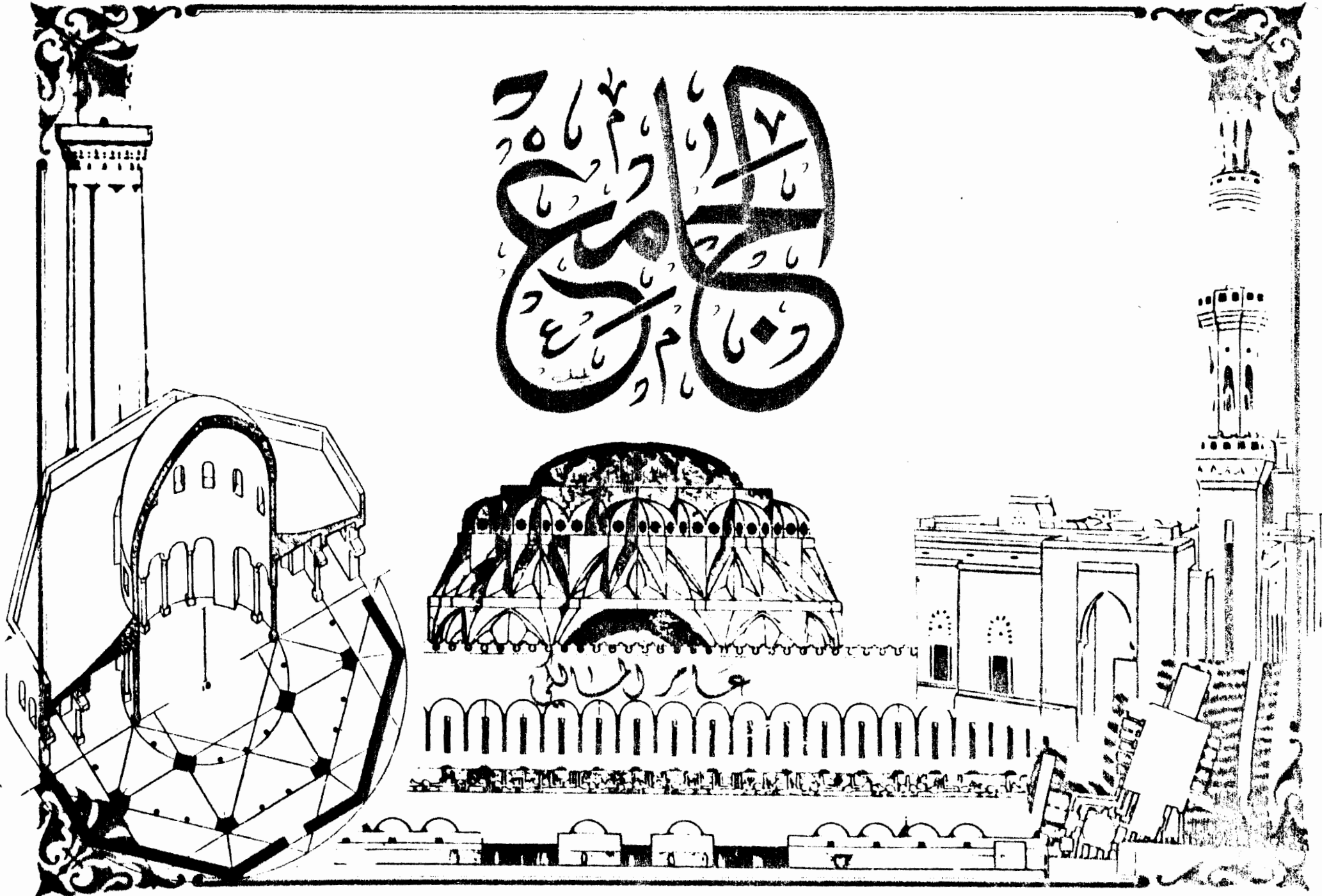
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introduction...

عَمَّ يَتَسَاءَلُونَ  
عَنِ الْجَنَّةِ كَمْ مَدْخَلًا  
يَدْخُلُهَا أَوْ يَتَسَاءَلُونَ  
عَنِ الْجَنَّةِ كَمْ مَدْخَلًا



عَمَّ يَتَسَاءَلُونَ

INTRODUCTION:

o Objectives:

Modernization and Islam

Most Muslims share the belief that Islam is not just a religion; it is an entire way of life that includes codes of behavior and a legal system. It governs, and disciplines daily behavior. It dictates the acquisition of material wealth, marriage contracts, inheritance laws, zoning and land tenure, community rights versus private rights, ownership, and so on. We care about Islam, and we want it to continue. We do not want to experience the kind of break that occurred between fourteenth-century Europe, and twentieth-century Europe, which can not occur as long as proper respect and treatment is given to the rules of Islam which governs the community. This does not limit the use of imagination and technology.

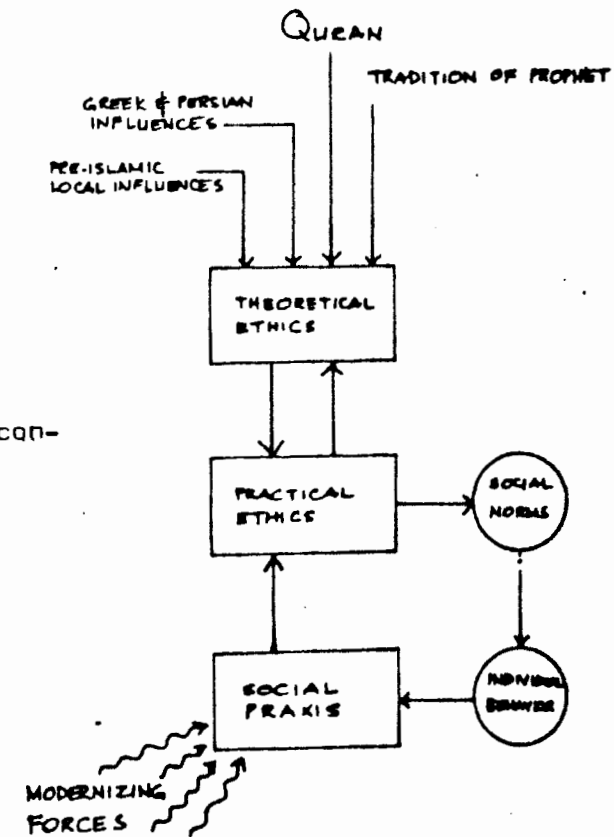
Role of Education

The function educational system

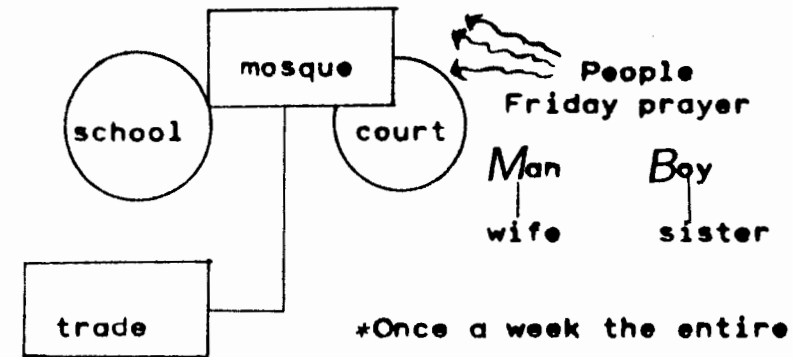
The religious institutions paralleling the formal school system capped by the colleges of dawa, which produces people trained to enunciate a way of life and a form for religion, and to affect the behavior of people. The result is a dual system, whose two parts are different in their basic structure.

In theory there is a linkage between the two systems whereby a graduate from one can cross over to the other and vice versa. In practice, however, it never happens, and the two systems are separate. If we look at what each one of them deals with, we will find a dichotomy between the traditional religious school system and the modern formal one.

This dichotomy in the system means that education has not been able to fulfill its lofty goals of providing simultaneously practical skills, social homogenization, and a basis for cultural identity in a proper fashion, and that failure has led to efforts in Muslim countries to redefine the purposes and types of education they offer.



Three-tiered model showing relation between theoretical and practical ethics



\*Once a week the entire family benefits.

\*Existing situation



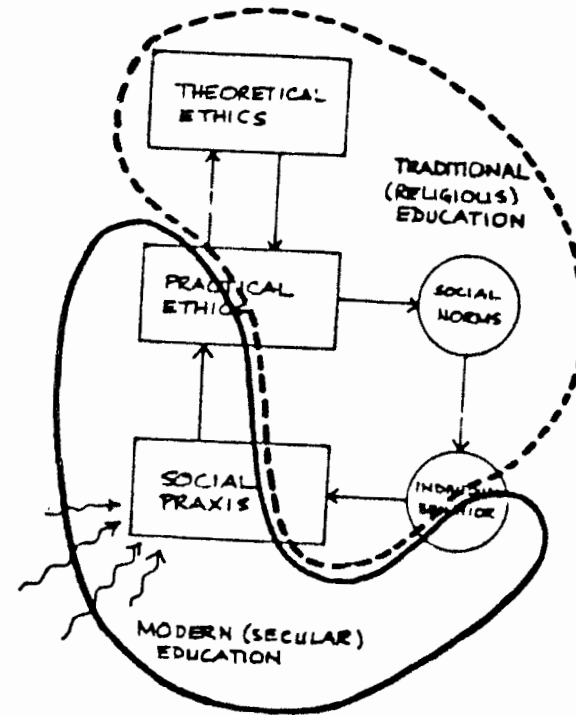
The first educational institutions in Islam that we know of were, of course, mosques. Any large congregational mosque performed that function, as it still does today in many places. Modernization has a rolling date: in many places the basic educational function of teaching children to read and write is still carried on in mosques. The secondary educational function, transferring certain kinds of information, such as Islamic law also went on and still goes on in mosques.

Mosques as places for education have a very powerful tradition. The most famous of all such mosques is the mosque of al-Azhar in Cairo, which began its function as a mosque academy in the tenth century. Subsequently so many different accretions were built onto it that one can no longer even call it a single building. It is a complex of covered spaces and open spaces functioning as one large educational center. In subsequent centuries and up to the present day, al-Azhar has remained a functioning, albeit changing, institution. As other buildings were added to it, it assumed something of the aspect of a contemporary university.

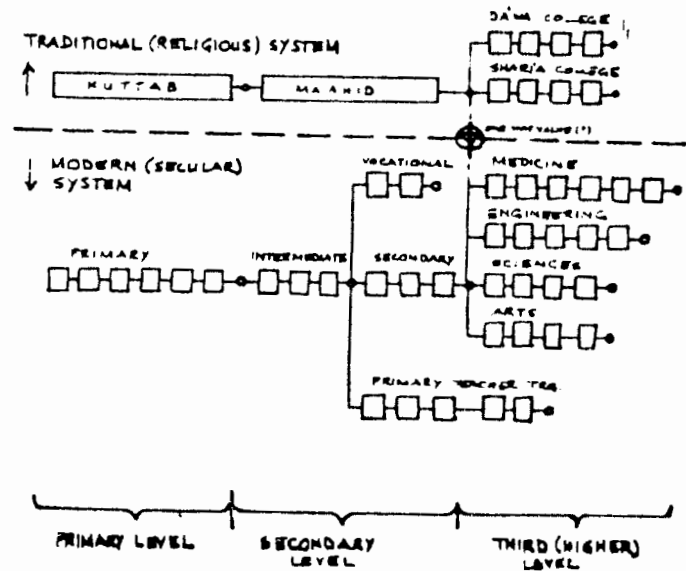
Every congregational mosque was a community center and as such took upon itself the very important role of providing a place for learning and transmitting the very basis of Islam: the study of laws, the study of the Koran, and so forth. This is something that one ought to remember when one thinks about how mosques functioned and why they functioned that way.

The mosque, can house all kinds of activities, one of those activities was always tutorial. When we talk here about transmission of information, we are still talking about a system of close, small groups gathering in spaces which could be multifunctional.

There are, however, other buildings that can be closely identified with educational activities but were not based on the hypostyle form. They existed perhaps by the end of the eleventh, certainly by the beginning of the twelfth. This is the form that housed the madrasa, or law school, which trained lawyers and others in Islamic law. A particular institution came into being to support, house, and feed teachers and students. It was essentially the beginning of the residential college as we know it today.



*Dichotomy between the traditional school system and the modern formal one*



*Relation between religious and modern educational system*

Part of the teaching system was "Formalized Informality". The professor of law in each particular madrasa, or in several, got his diploma to teach from another professor-it was a one-to-one relationship. A collegium did not gather together to give license to teach. Although it was a vast cosmopolitan world, the process of licensing, finding a place to teach, and being supported in it were all governed through personal relationships.

The choices made for assigning a place for the mosque, the teaching area, and the housing zone were based on a very different understanding of what a courtyard is and how it functions.

At some point in the fourteenth century, it was no longer enough to have informal, or let us say "Physicalit unbound", educational activities, particularly legal instruction, housed in a large mosque. By then there was a correct way to house them, and that was to build a madrasa, a separate building. There are any number of these mosque-madrasa combinations in Iran coming down to us in the archaeological record from the fourteenth century onward, but almost none from much earlier. It was at that point that madrasas became part of complexes.

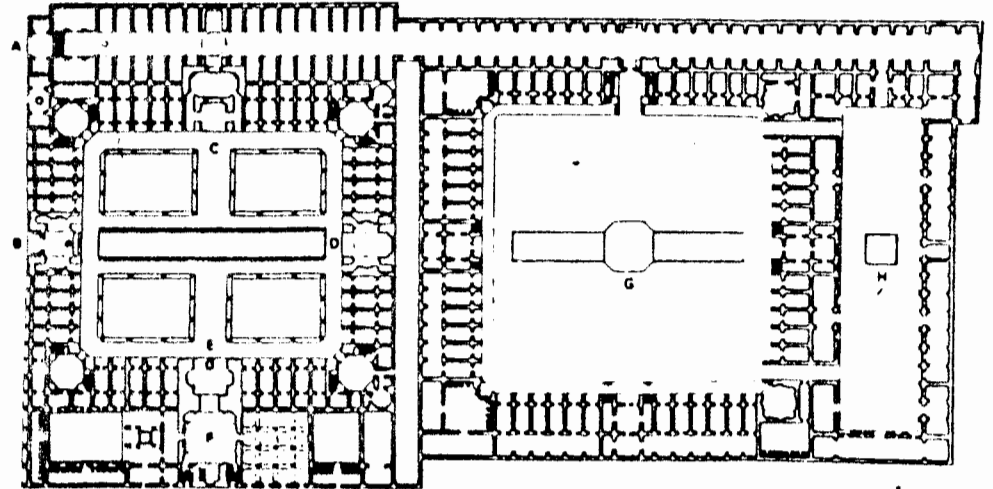
\* Scope of the project

"What is the nature of problem that is to take place there?"

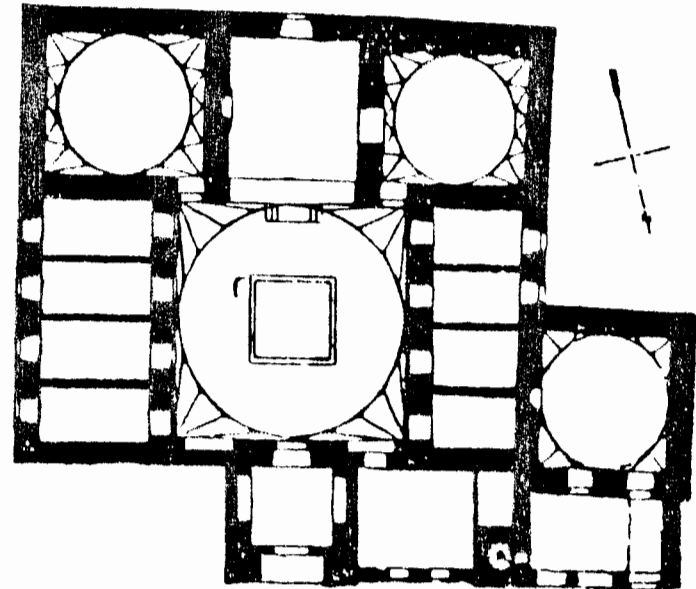
Size, Density, Dispersion, Compactness, Location of Different elements, nature of students life, <sup>student</sup> stand-teacher (Interaction) surrounding community.

Interaction : "Essence of Islam is in the Interaction"

Community : "To capture the spirit of Islam"  
 "Choice of appropriate technology"  
 "Respect of environment".



Madrasa of Sultan Husayn, Isfahan



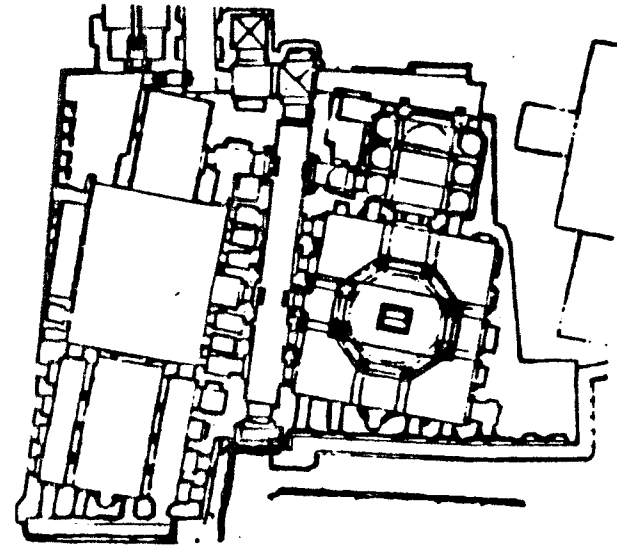
Ince Minare Madrasa, Konya, Turkey, c. 1260-65

## LIMITS

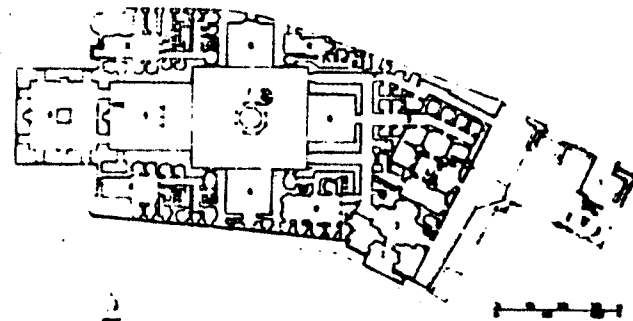
1. The inefficiency of the existing road network and the absence of parking spaces.
2. A loss of character due to unplanned building in concrete in an area built formerly in stone.
3. The lack of organization. Until now it has remained a purely residential zone. With the addition of public facilities and the integration of more cultural activities, the mosque and Souk has a potential to become a folklore attracting both clients and visitors.
4. The scheme should presume the shopping habits and social network of the population.

The plan is constituted of the following:

1. An organized vehicular and pedestrian circulation network.
2. A large congregational mosque as a center of activity
3. A provision for ~~existing~~ specialized shopping areas that cater for crafts.
4. Some missing functions would be integrated to enliven the mosque and souk:
  - Administration
  - Madrasa
  - Clinic-
  - Exhibition Halls(M.P.H.)
  - Library
  - Cafeteria
  -
5. A flow circulation and servicing facilities for the market



*Madrasa and mausoleum of Qala'un, Cairo, 1284-85*



*Madrasa of Sultan Hasan, Cairo, 1356-59 (after Rogers)*

\* PURPOSE:

Architecturally, socially, and economically.

... The purpose behind this project is to be able to translate the architectural vocabulary of a mosque-madrasa into the present date with a contemporary image and expression of the functional analysis, distribution, and interrelationships among each other as well as with the community character and surrounding.

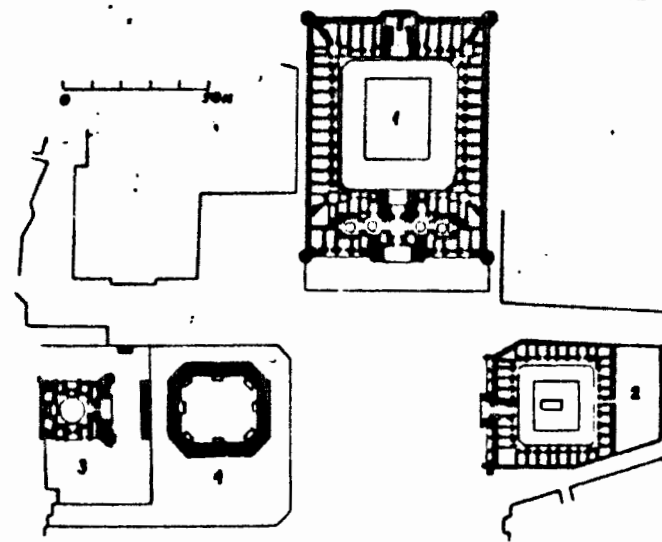
It has to respond to the social needs of the environment whether educational, medical, financial or leisure not to mention the organizational pattern from and to the community.

... The projects lavish is weighting on the scale of the economical response of "who will sponsor such a project"? The government, an individual, or a group of individuals Its intricacy of mass and complexity is an element of how far is it, he, or they are willing to forsee.

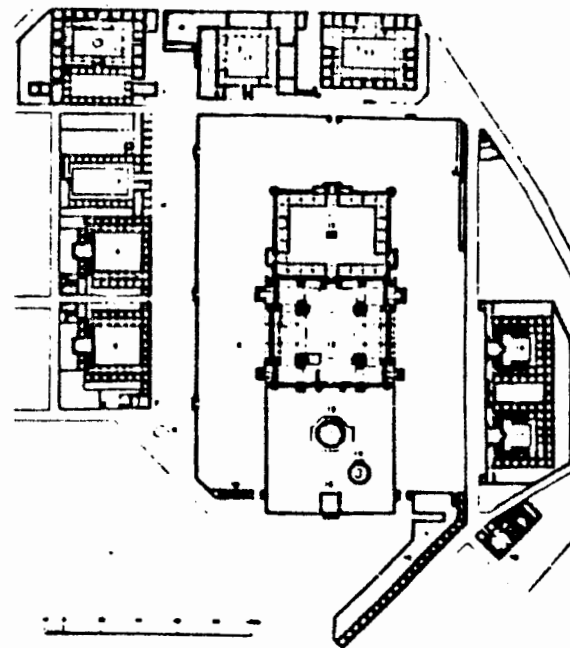
\* Salient Factors

How does one catch the essence of Islam when it is appropriate to do so? It is not just a set of physical attributes or an architectural vocabulary which any designer can learn and should use. The spirit of Islam is a process, and it changes. Its components are both physical and nonphysical.

Its nonphysical dimensions are three:(1) The law and the institutions of power that govern any set of activities, including zoning laws, land-tenure laws, and subdivision regulations, and the way in which decisions are reached through the legal system.(2) The socio-economic institutions that govern the way activities exist and operate in Muslim societies. Finally (3) thought, or fikr, which draws upon religion, arts, and the sciences. This fikr, this thought, is defined by the elite, who are also the people who make the decisions in building projects. It is circumscribed by the nature of the perception that they have of themselves, and the perception that they have of the buildings they would like to see built.

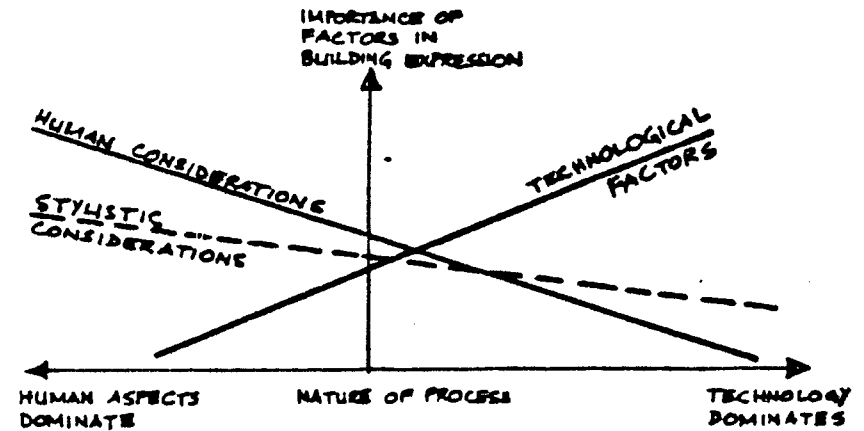


*Lab-i Hauz Square, Bukhara, 17th c. (after Architectural Monuments of Middle Asia)*

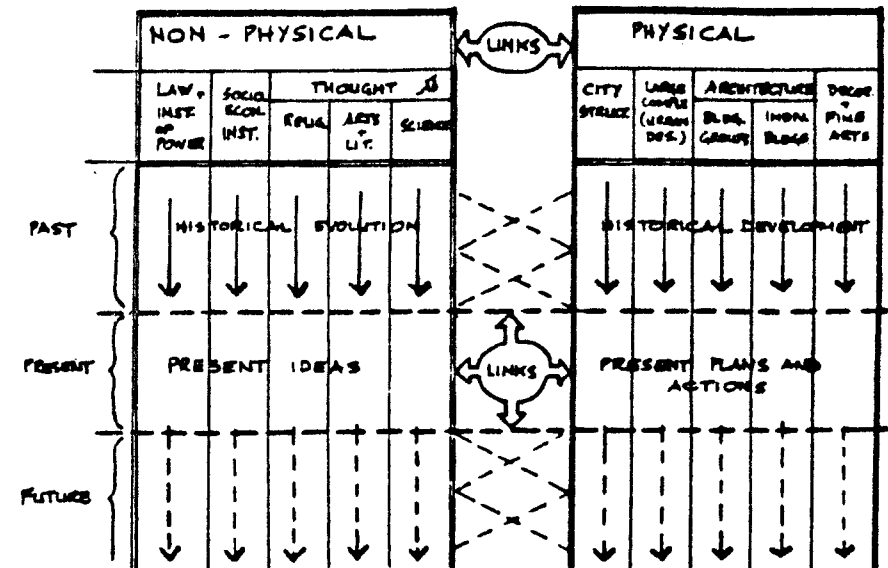


*Süleymaniye, Istanbul, 1550-57 (after Goodwin)*

On the physical side, we have the structure itself, the organic dimensions that exist within the streets, from the urban structure and urban design of large complexes to the architecture of individual buildings, to decoration and fine arts. Each of these has its own tradition and heritage. The nonphysical heritage is as important as the physical heritage not only in understanding the physical heritage and interpreting it in a meaningful fashion but also in understanding the concept of cultural continuity that exists in a society which refuses to reject its Islamic identity. If this comes from the past it has lines of development that can be tracked and historians do spend a lot of time tracking the development of each of these streams through time to the present and even extrapolating into the future. But the key job of capturing the spirit of Islamic society in a building lies in being able to link the two types of activities.

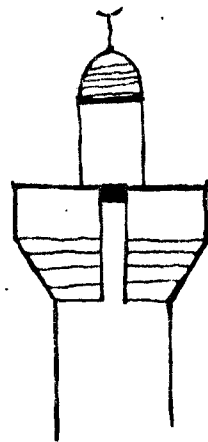
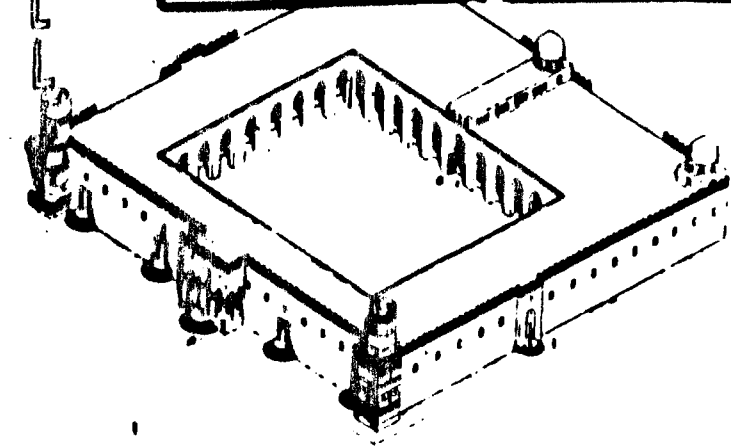
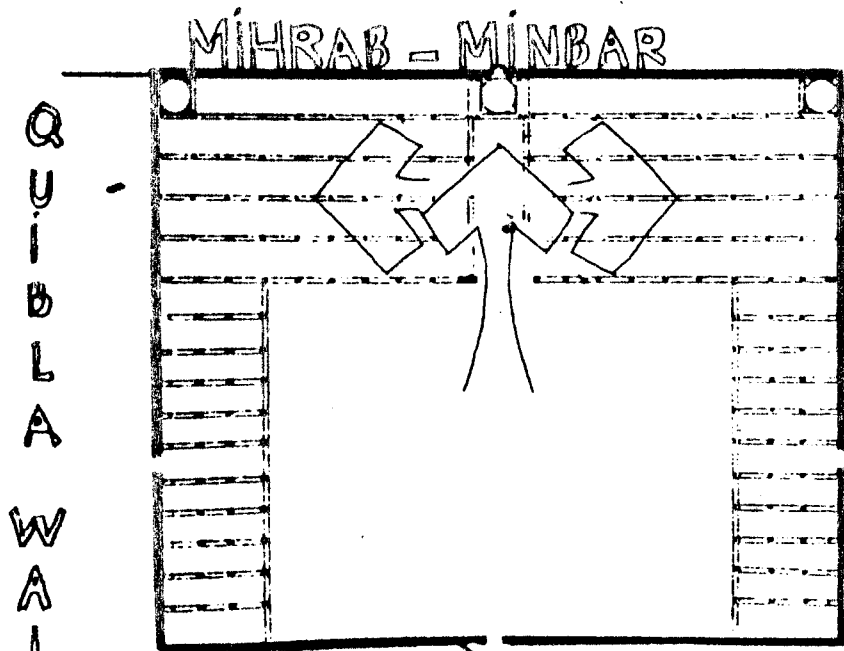


Degree to which human or technical factors control the nature of the design



Physical and non-physical components of design

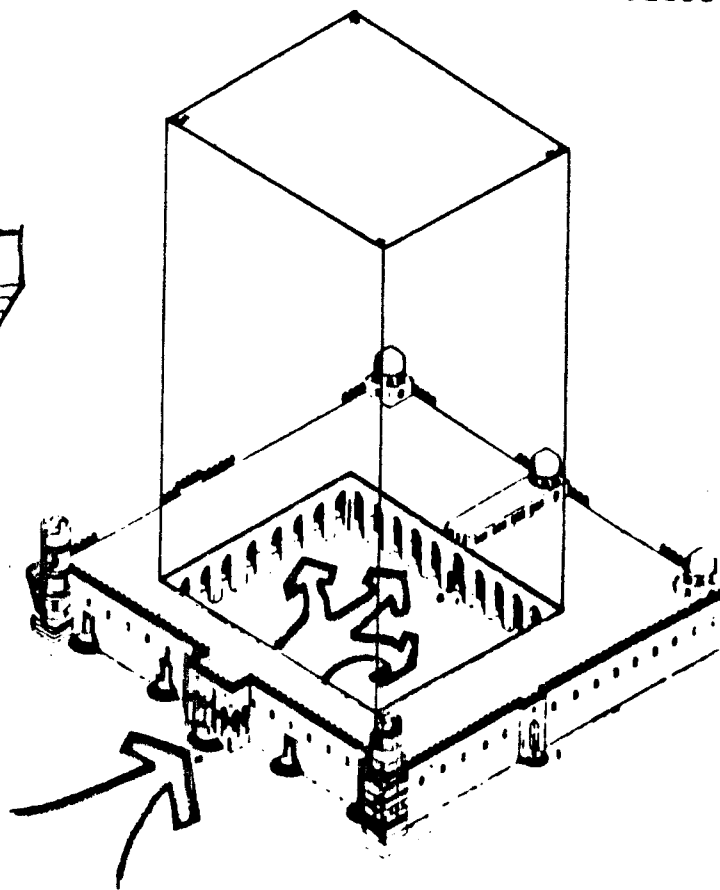
# MOSQUE HISTORICAL DEVELOPEMENT



MINARET

COURT

Buffer zone  
 entrance zone  
 open space (uncovered)  
 arcaded from sides

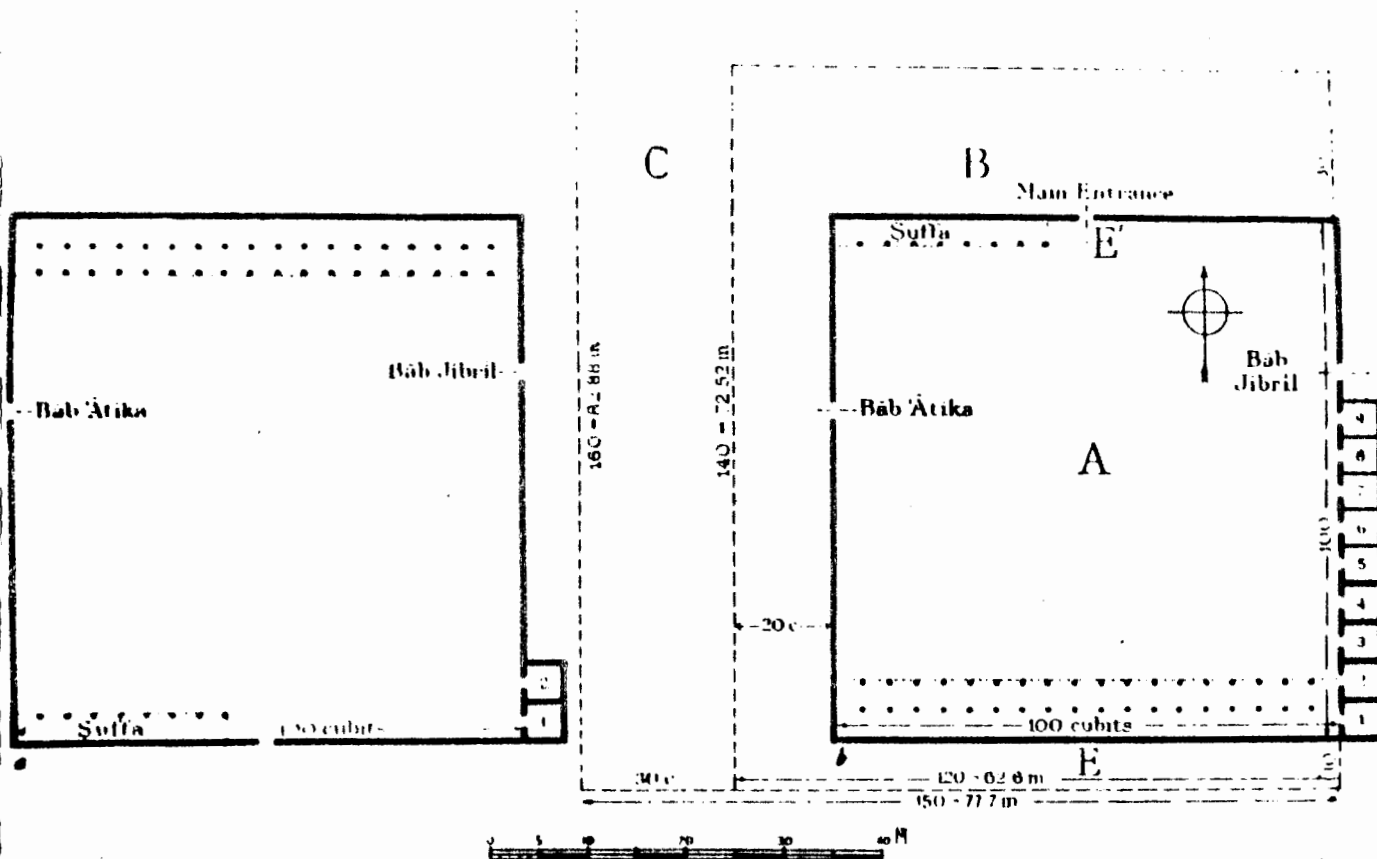


MOSQUE PROPER

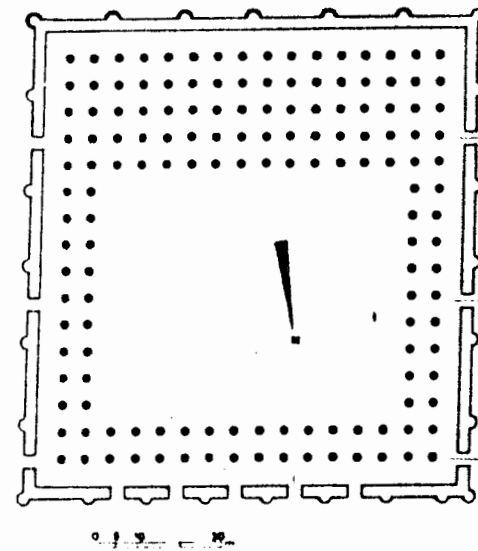
MOSQUE

sheltered  
 oriented (quibla wall)  
 preferably rectangular  
 with the quibla wall as  
 the longer side.

Early Islamic



لوحة ٢ - منزل الرسول والمسجد - المقيط (CRESWELL)



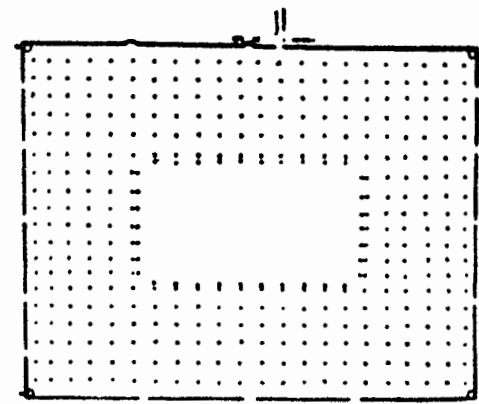
Kufa, Great Mosque as rebuilt by Ziyadh ibn Abihi in 670

the first *mihrab* in all Islam had been introduced into al-Walid's rebuilding of the mosque at Medina in 706,

Umayyad, 661-749

*The Great Mosque and Dar al-Imara at Kufa*

Soon after his appointment to Basra, Ziyadh was made Governor of Kufa as well. There in 670 he rebuilt the congregational mosque on stone columns 51 feet tall and supporting a flat roof of teak. The prayer hall had five rows of columns and, probably for the first time, the other three walls were provided with porticoes or *riwaqs*

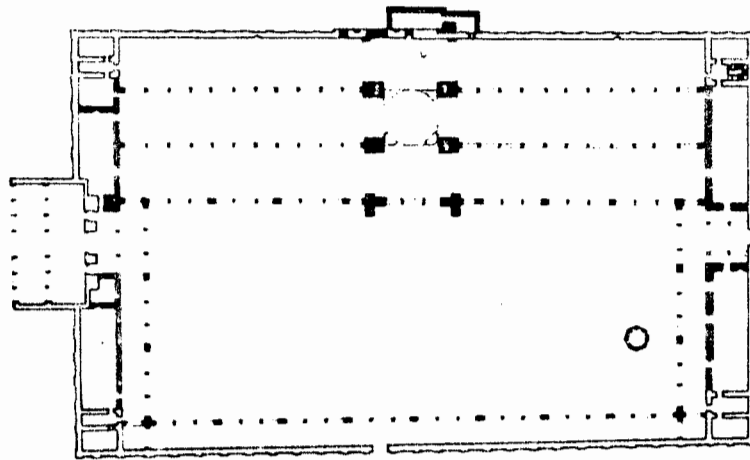


لوحة ٣ - جامع عمرو بن العاص - المقيط (BRANDENBURG Credit CORBETT)

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Damascus, Great Mosque, plan in the time of al-Walid

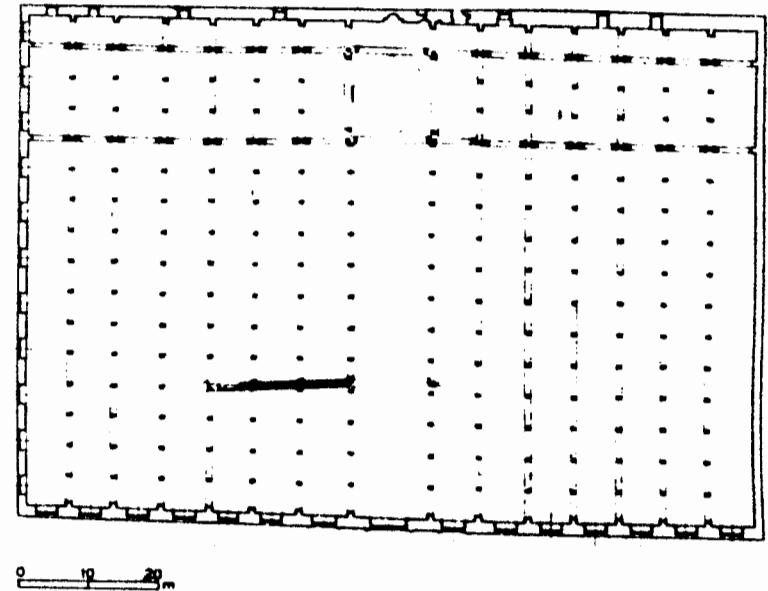


Long walls to east and west negated the inner projection of the towers. The *sahn* was then surrounded on all four sides by a two-story arcade not corresponding to any inner horizontal division. The lower arcade alternated two columns and a pier like the atrium of Hagia Sophia and perhaps of Constantinopolitan palaces as well.

The prayer hall was divided into three broad aisles with gabled roofs parallel to the south wall of the old temenos, the *qibla*. This arrangement may well have evolved from the frequent habit of converting Syrian basilicas to mosques: because Mecca was due south, the Muslim had only to pray across the aisles of a structure that normally pointed east. The theory, however, that the present prayer hall is actually the old church of St. John has long been discarded.

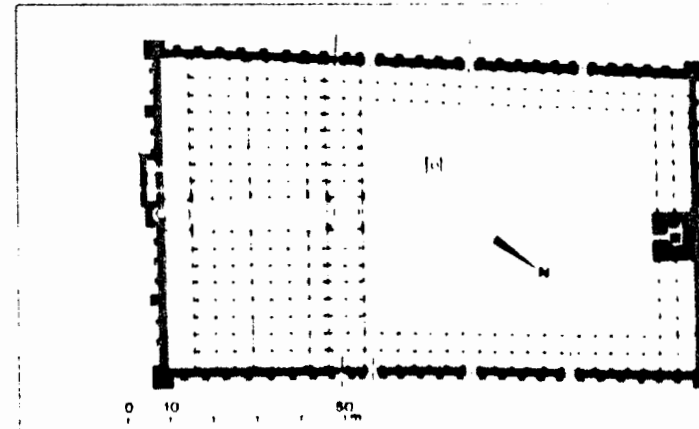
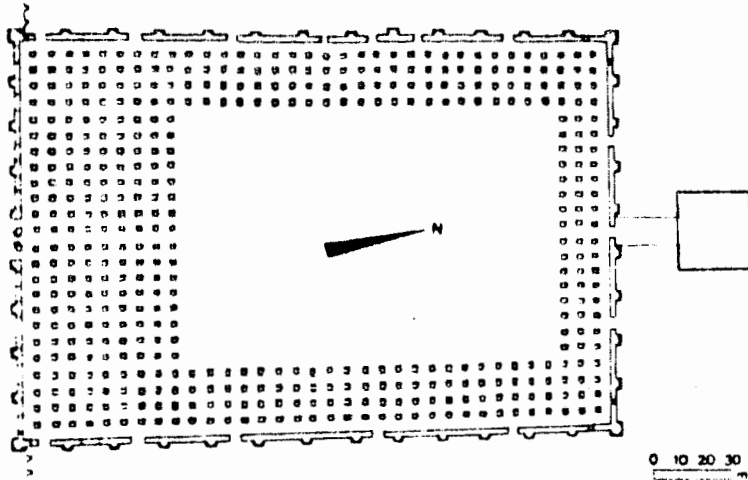


Jerusalem, Mosque of al-Aqsa as completed by al-Mahdi c. 780, reconstruction of plan

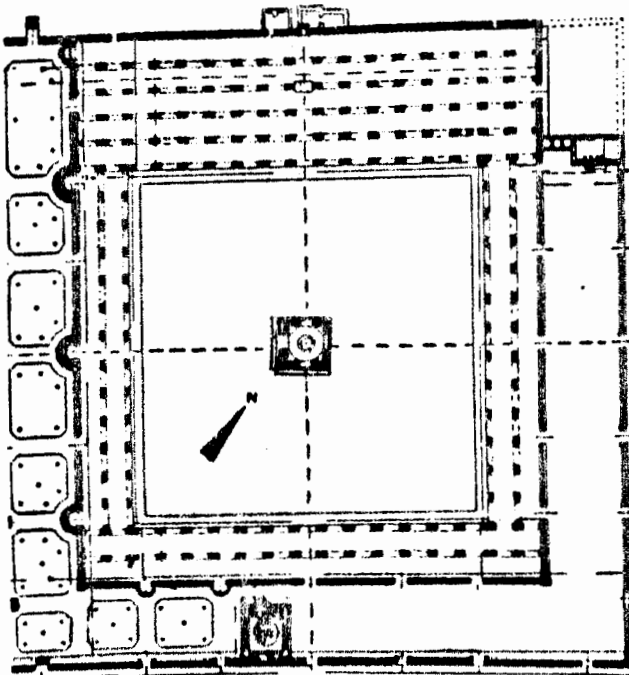


this is the earliest to deploy its arcades at right angles rather than parallel to the *qibla* wall. The intent must have been to orient the *mihrab* aisle upon the south entrance of the Dome of the Rock, as is that of the present mosque. Al-Walid thus reinforced the sanctity of the site by equating the mosque not only with Constantine's basilica (which had a similar relation to the Anastasis) but with the Church of the Nativity at Bethlehem, which has the same orientation toward Christ's birthplace.

Samarra, Great Mosque of al-Mutawakkil, 848/49-852, plan



Tulunids, 868-904



Mosque of Ibn Tulun, 876/77-879, plan

According to recent studies by the late Alexandre Lézine, Ziyadat Allah's new mosque, finished in 836, consisted of a prayer hall about 236 feet wide, with sixteen aisles of seven bays each flanking a much wider *mihrab* aisle leading to a dome over the *mihrab*. The support for the latter here generated the typical T-shaped plan of so many later North African mosques and goes back, if not to al-Walid's mosque at Medina, certainly to al-Mahdi's al-Aqsa of 780. It is most unlikely that there were *riwaqs*. Of the two doors that are today blocked off, that to the west by Ziyadat must have led directly into the now much larger *sahn*, whose north-west boundary is marked by Ziyadat's minaret. The latter is built off axis, perhaps as a miscalculation (the whole plan is irregular), but also perhaps deliberately to leave room for a portal on the *mihrab* axis. Since the entire northeast wall was rebuilt after 1300, only excavation would provide the answer.

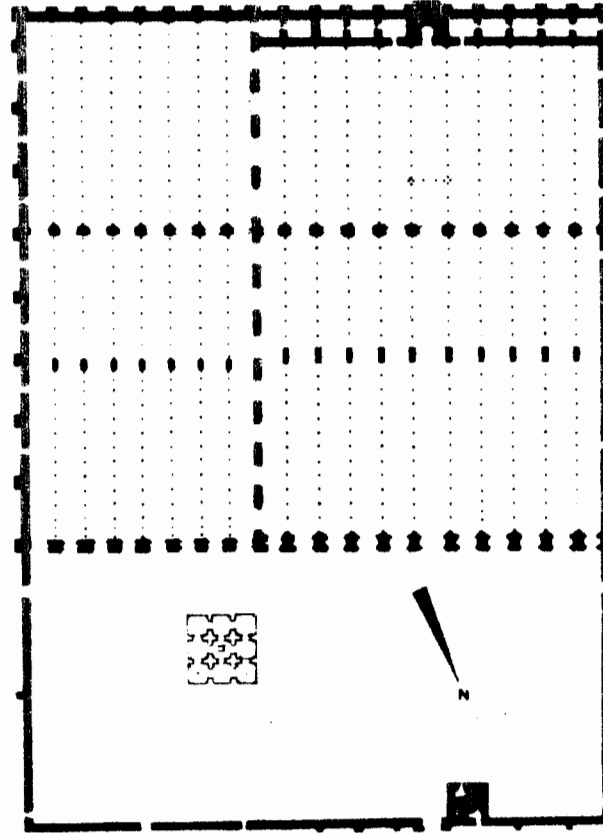
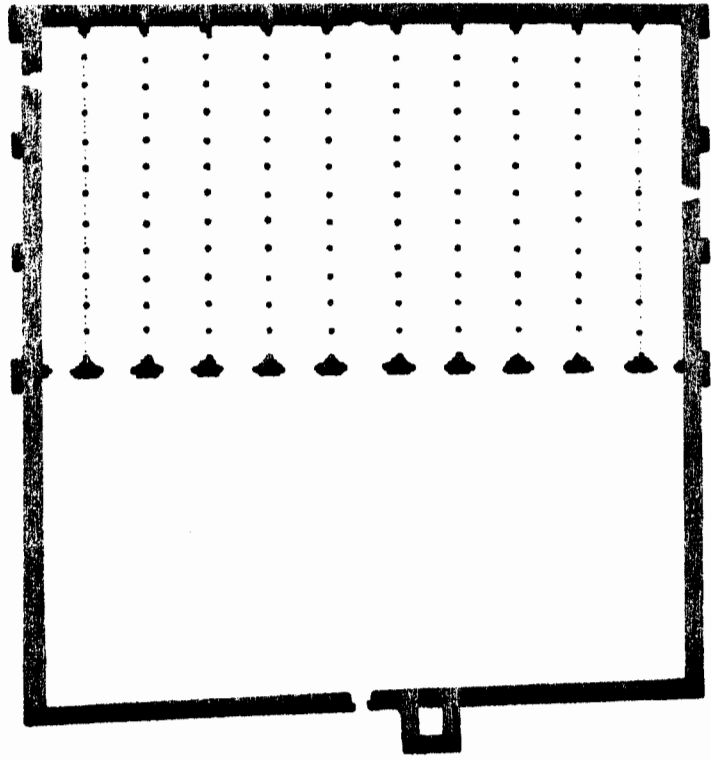
Ibn Tulun's structure recalls the earlier Iraqi tradition of Kufa and Wasit, although without the semicircular buttresses found there and in Samarra. The *sahn* is about 990 square feet and, although the walls of the mosque proper form a rectangle about 400 by 459 feet

Umayyad Spain, 710-961

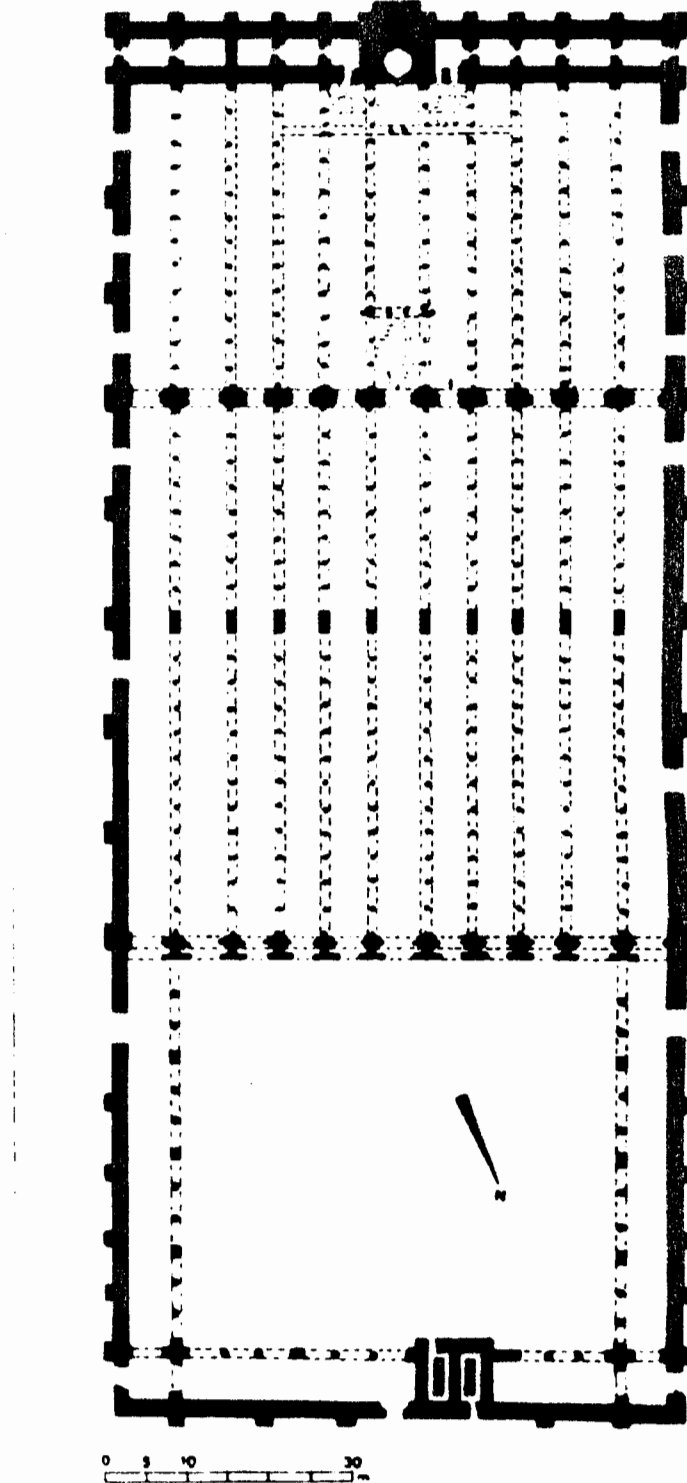
the fact that the *mihrab* functions as an indicator of the direction of Mecca cannot be the only reason for its existence. At Medina the first *mihrab* (the word had royal connotations in pre-Islamic Arabic) marked the site from which the Prophet had led his people in prayer. Here at Cordoba the niche has become an octagonal chamber — perhaps suggesting that through the arch divine grace comes to the faithful. At any rate, nearly all later Spanish and North African *mihrabs* assume this form.

The Great Mosque of Cordoba: Later Stages

The Great Mosque of Cordoba: First Stages

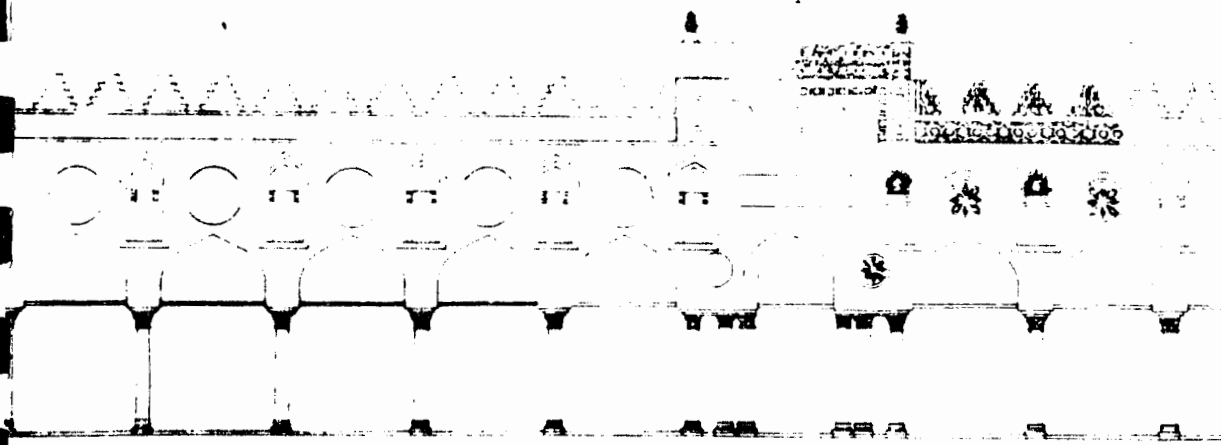


Cordoba, Great Mosque as enlarged in 987, plan



Abd er-Rahman's stone-walled Friday mosque of 786/87 took only a year to build. It had a prayer hall with eleven aisles of twelve bays each, perpendicular to the *qibla* wall — in the manner of al-Mahdi's mosque in Jerusalem and probably of its Umayyad predecessor, but without a dome over the *mihrab*. The *sahn* had no *riwaqs* and communicated with the prayer hall through doors set between heavy T-shaped piers to counter the thrusts of the unique double arcades of horseshoe arches below and round ones above

Fatimids, 969-1171

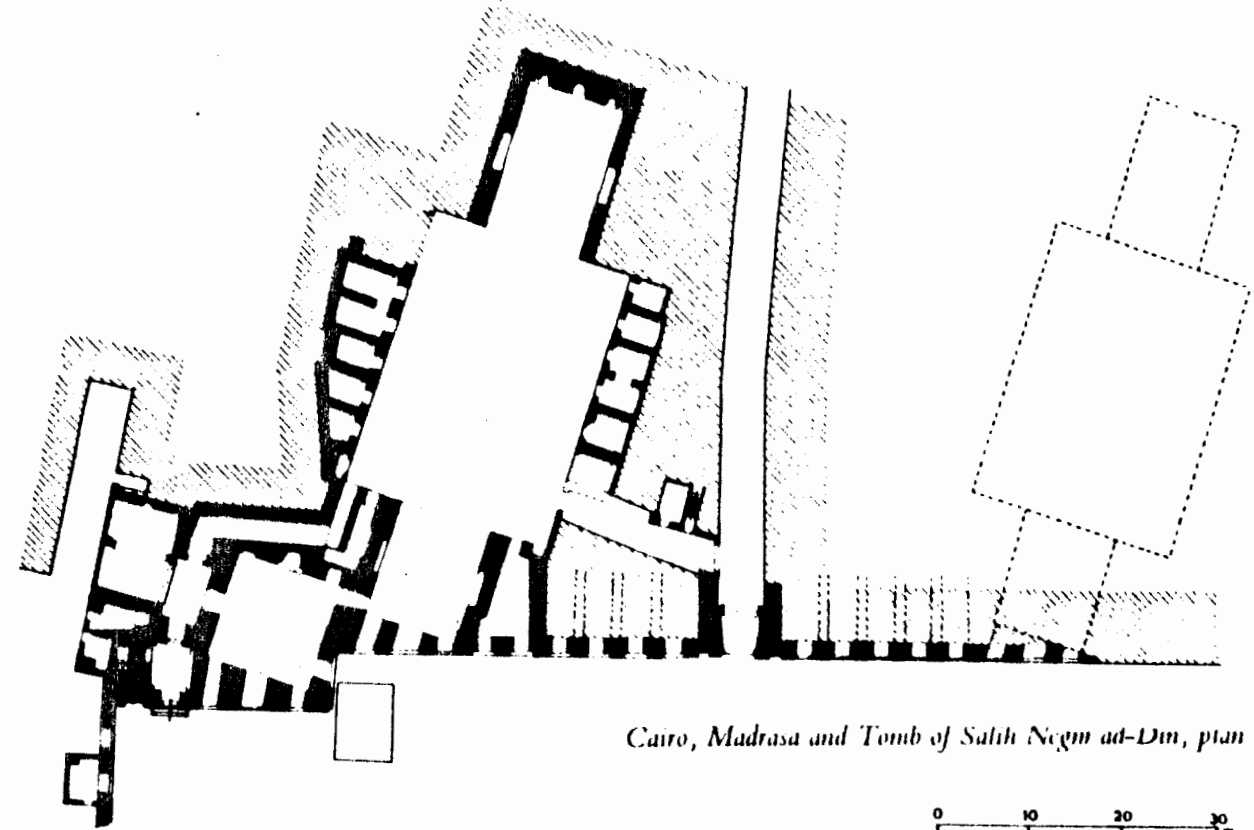
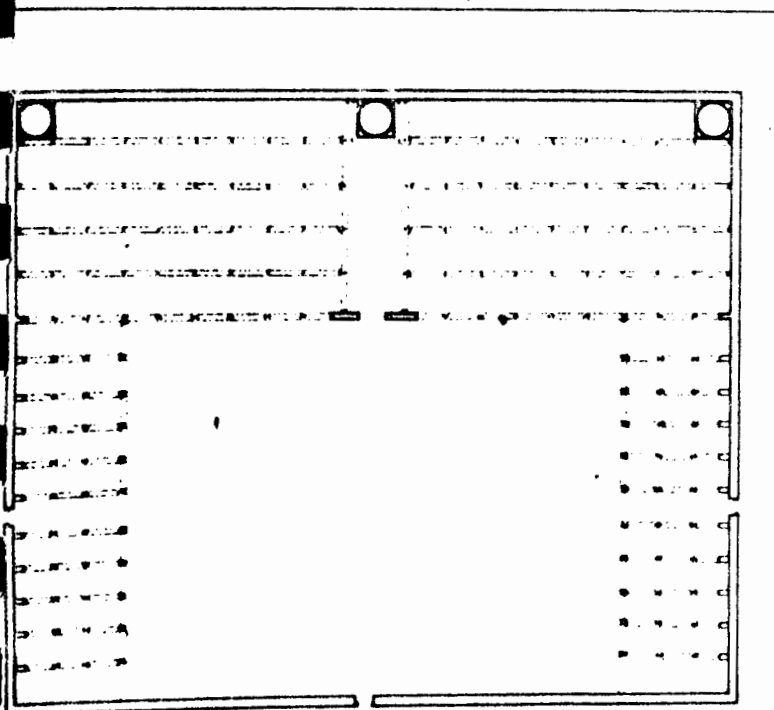


Ayyubids, 1169-1250

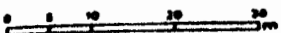
*The Madrasa of Sultan Salih*

Few monuments of Salah ad-Din's immediate successors survive, but the last Ayyubid, Sultan Salih Nigm ad-Din (1240-49), despite his brief reign, was a great builder. The now vanished remains of a palace in his citadel on Rhoda Island will be discussed later. His *madrasa* of 1241-1243/44 on the east side of the Fatimid Bayn al-Kasrayn, today the Suq al-Nahassin, was the first in Egypt to be dedicated to all four branches of Sunni law. It consisted of two complexes divided by a narrow street, the Haret al-Salihiya, from which both were originally entered.

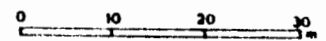
The Malikite and Shafeyite *iwans* stood to the north adjacent to the later tomb. Enough survives to show that the *sahn* between them was lined north and south with arcades and had three tiers of rooms for students. South of the Haret al-Salihiya stood the *iwans* of the Hanafites and the Hanbalites, now almost totally destroyed.

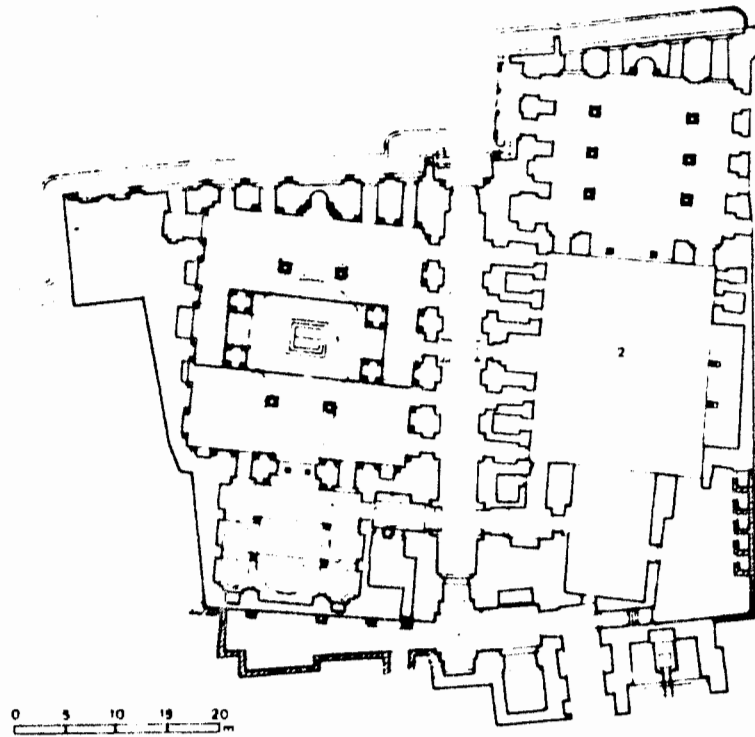


Cairo, Madrasa and Tomb of Salih Nigm ad-Din, plan



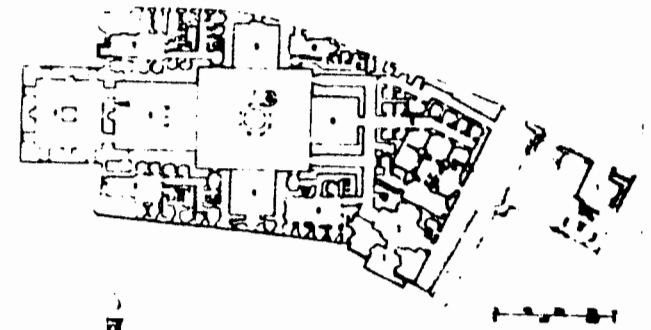
Cairo, Mosque of al-Azhar, 970-72, plan as reconstructed by Creswell





Cairo, Tomb (1) and Madrasa (2) of Sultan Qala'un, 1283-85, plan

Islamic architecture acquired in the early twelfth century if not in the later eleventh that total integration of inscriptions and decoration which remained in the future one of its most important stylistic elements. Far too few studies have yet been made of the content of the inscriptions in relation to the parts of the building to which they were applied. One such study of the inscriptions of Sultan Hasan's madrasa has recently been made by Erica Cruikshank Dodd. In the great portal Surah XXIV, verses 36 and 37, of the Koran is quoted, equating the niche itself with a *mihrab* lighted by a lamp which is the Word of God. This quotation often appears in a *mihrab* proper or is symbolized, as on the facade of the Mosque of al-Aqmar of 1125, by the image of a lamp. It is probably not the first time that the *muqarnas* ornament is itself associated with light. The *mihrab* quotes verse 139 from Surah II, which refers to the Light of Heaven and not to that in the *mihrab* alone. Miss Dodd suggests that the portal's ref-



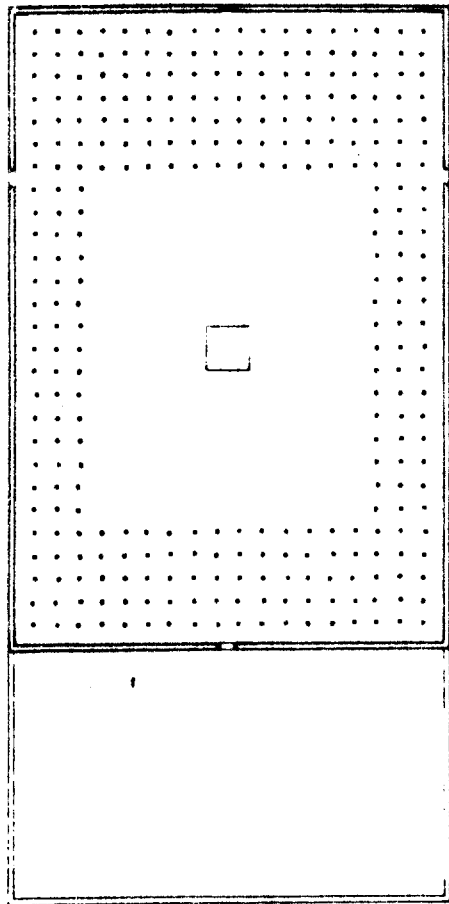
Madrasa of Sultan Hasan, Cairo, 1356-59 (after Rogers)

erence to the light of the *mihrab* prepared the believer for the *mihrab* inscription, which describes the mosque as the *mihrab* of the world.

The intricate plan provides a separate and distinct madrasa complex for the four rites. Each, entered individually from the *sahn*, has its own modest court and vaulted *iwān*. This may explain the planned four minarets, unique for an Egyptian building. These complexes cluster around the four immense *iwāns* opening from the *sahn*. Accessible mainly from the *sahn*, the east and west *iwāns* were much smaller than the other two. Given the widespread use of the four-*iwān* plan for all types of buildings in Islam, the considerable literature on its application to madrasas seems superfluous. Since the plan existed long before the madrasa—let alone the four-rite madrasa—was invented, it would seem inevitable that the two should be combined occasionally.

**Seljuks, 1077-1327**

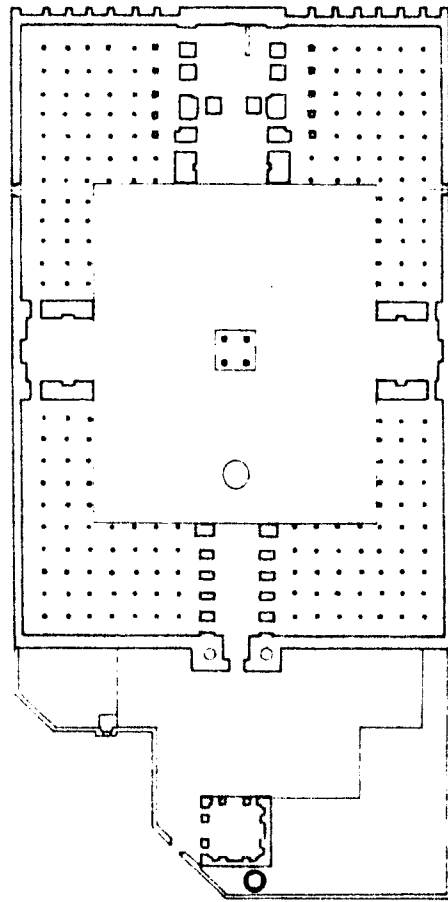
*Masjid-i-Jami, plan of the Abbasid mosque, ninth and tenth*



0 10 20 30 m

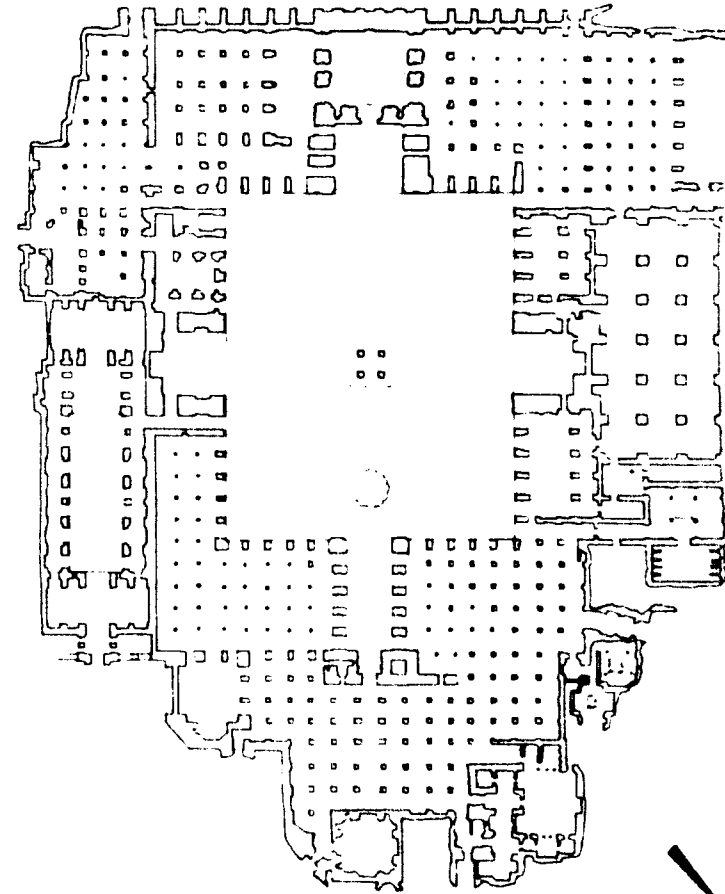
The next additions to the original mosque, probably made in the early twelfth century were the four *iwans* and the north portal flanked by paired minarets, producing, perhaps for the first time, the typical Persian four-*iwan* mosque of which the earliest dated example now known is that of Zaware of 1135-36.

*Isfahan, Masjid-i-Jami, plan of the Seljuk mosque, twelfth century*



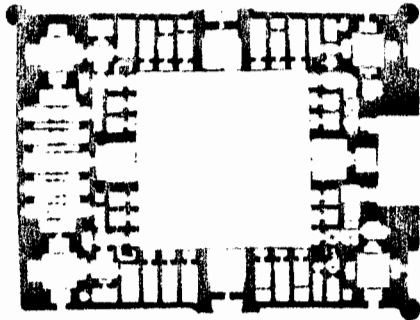
0 10 20 30 m

*Isfahan, Masjid-i-Jami, plan of the present-day mosque*



0 10 20 30 m

Il-Khanid, 1256-1353

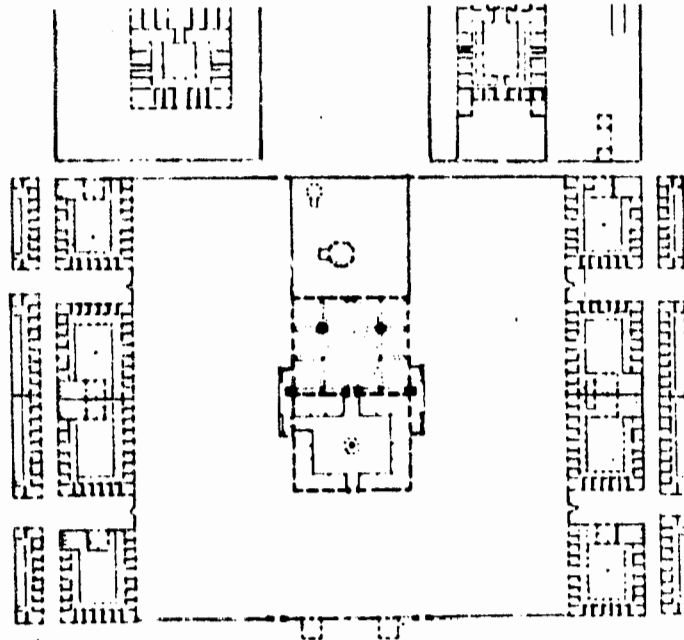


0 20 30

Samarkand, Madrasa of Ulugh Beg, 1417-20, plan

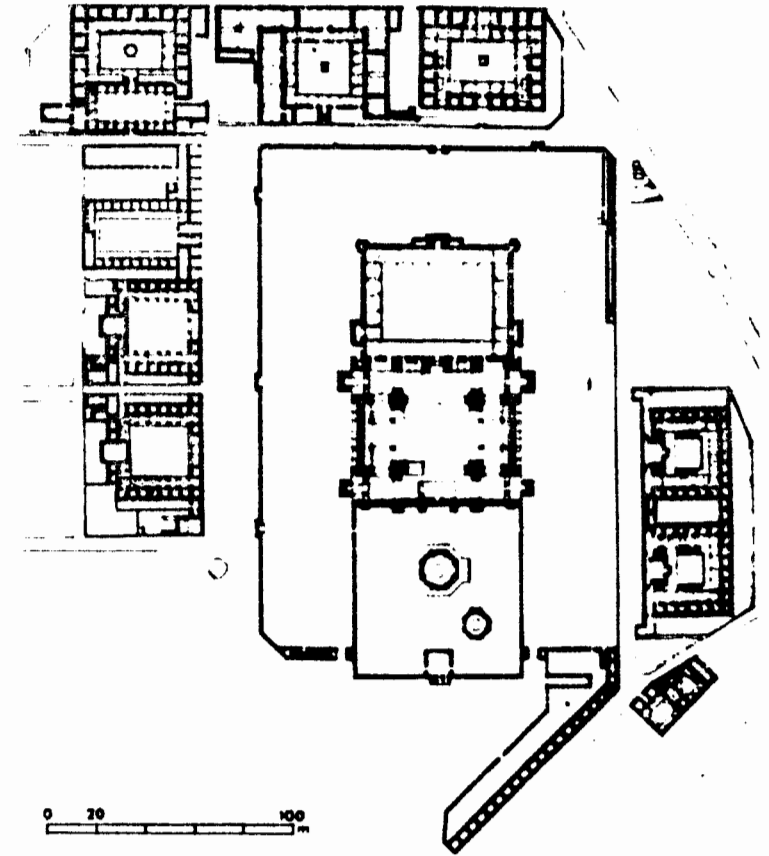
The plan though now showing some variation in detail, was once probably totally symmetrical. An immense *ivan* in a facade flanked by two of four intended corner minarets gives access to a cruciform court 355 feet square surrounded by two tiers of students' cells. In its corners passages lead to four cruciform domed chambers, which may have been intended for tombs. The axial *ivan* leads to a transverse cross-vaulted mosque, which also has access to the corner chambers.

Ottoman Turks, 1300-1924



Istanbul, Fatih Cami, 1463-70, plan

Istanbul, Kulliye of Sulayman, 1550-57, plan



0 20 100 m

As in the Fatih Cami, the prayer hall of the mosque stands between a tomb enclosure to the south and a *sahn* to the north. Unlike it, however, this central unit is separated from the surrounding *madrasas* and other charitable foundations by a windowed wall

The vast, rigidly symmetrical outer court—with multidomed *madrasas*, dervish hostels, and other charitable foundations—is imperial in scale and Roman in the immensity of the vaulted founda-

the souk



## THE SOUK

Being Located in a highly commercial zone, the Souk will constitute the major part of my project. It will constitute a lively conglomeration of specialized and mixed shopping areas offering variety. Its character should integrate harmoniously with its surrounding and help preserve the clientelles shopping habits.

This souk requires a high degree of cleanliness due to exposure, therefore it is more convenient to treat it as a separate entity.

Total Nos: of trade shops = 50 shops.

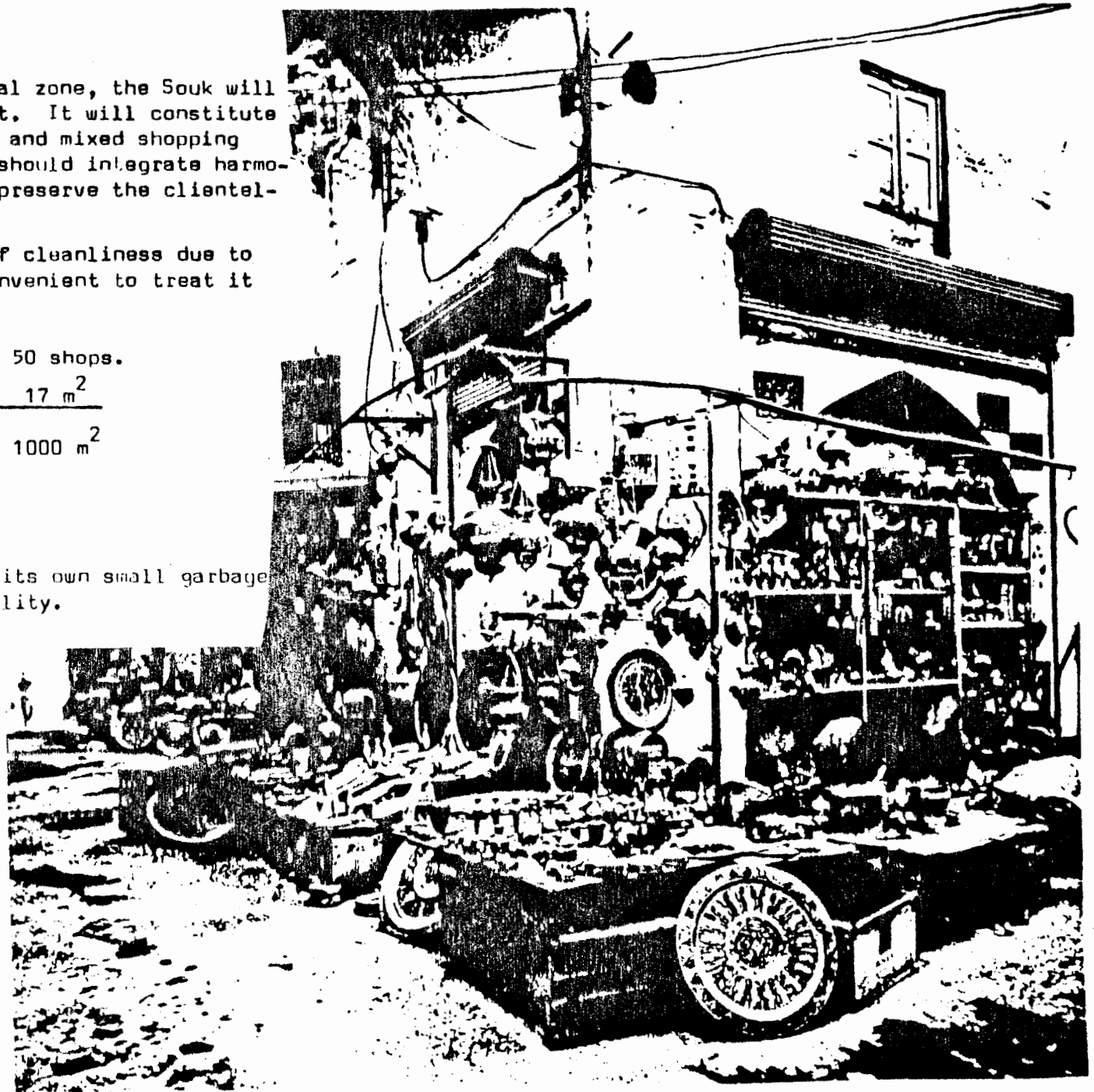
Average area of each =  $\frac{17 \text{ m}^2}{}$

Total =  $1000 \text{ m}^2$

Cleanliness Conditions: each shop has its own small garbage basket which is accessible to municipality.

## A Bazar in Iran

A lively atmosphere is <sup>later</sup> ~~created~~ <sup>made</sup> by the use of every available space to display merchandise. This style of display gives the souk a rich appearance and increases sales potential as well as marks the speciality of the souk.



This souk's purpose is to help reviving the dying Islamic and traditional crafts . It consists of 50 shops of 17 m2 floor area. Visually accessible to clients to expose the actual production process. The Souk's location in the down town, attracts clients and offers the necessary marketing. Distribution of crafts is =

|           |           |                   |                  |
|-----------|-----------|-------------------|------------------|
| - pottery | = 8 shops | <u>trade</u><br>4 | <u>work</u><br>4 |
| - nawl    | = 6 shops | 5                 | 1                |
| - metal   | = 7 shops | 6                 | 1                |
| - Books   | = 6 shops | 6                 |                  |
| - wood    | = 8 shops | 7                 | 1                |
| - glass   | = 9 shops | 9                 |                  |

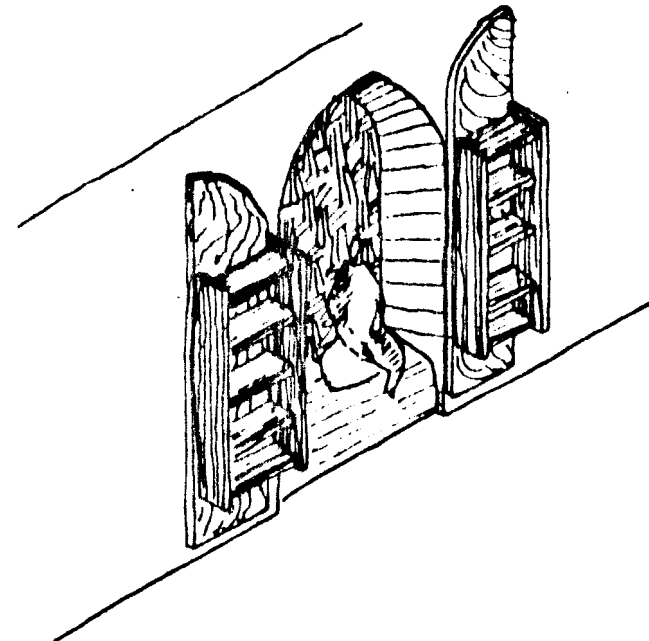
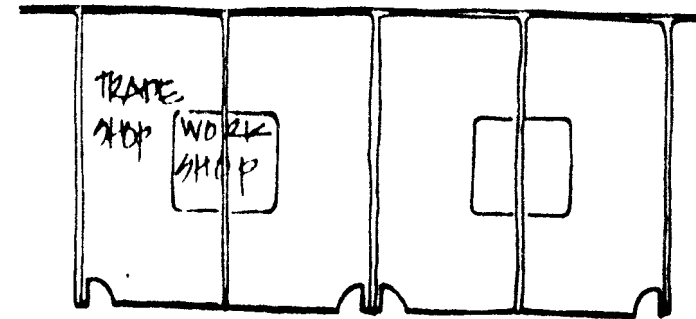
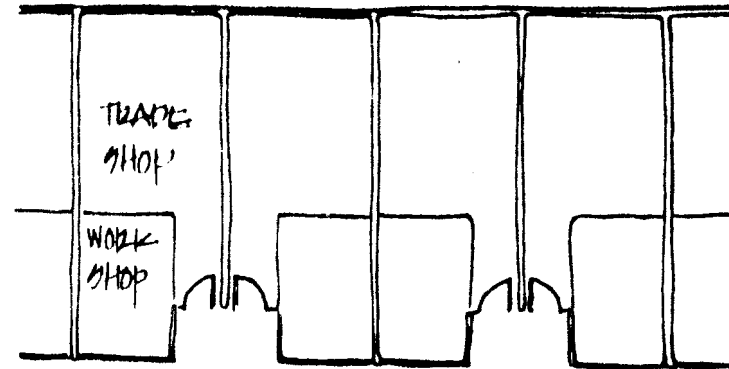
This Souk is run by an administration who's functions are =

- 1- Make sure that shops are rented to artisans only.
- 2- Supply raw material.
- 3- Help marketing the products.
- 4- Invite foreign artisans to exhibit in exhibition hall and outside exhibition spaces included in souk.

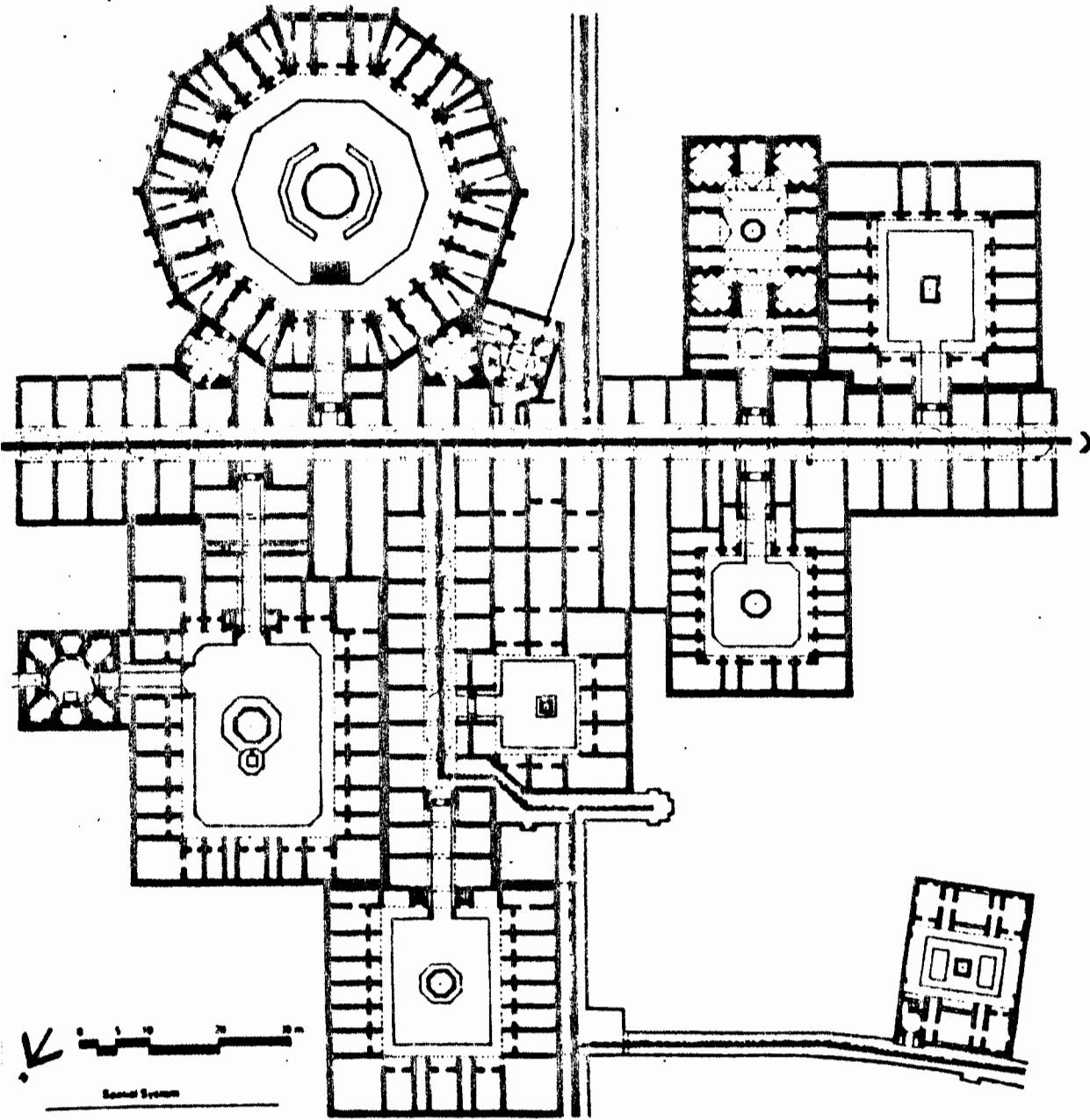
The administration may see it fit to change the above ratio of crafts. Thus the administration controls the raw material.

Storage rooms distributed along the souk. These are:

- Wood storage
- Metal storage
- Glass storage
- Pottery storage
- Nawl storage




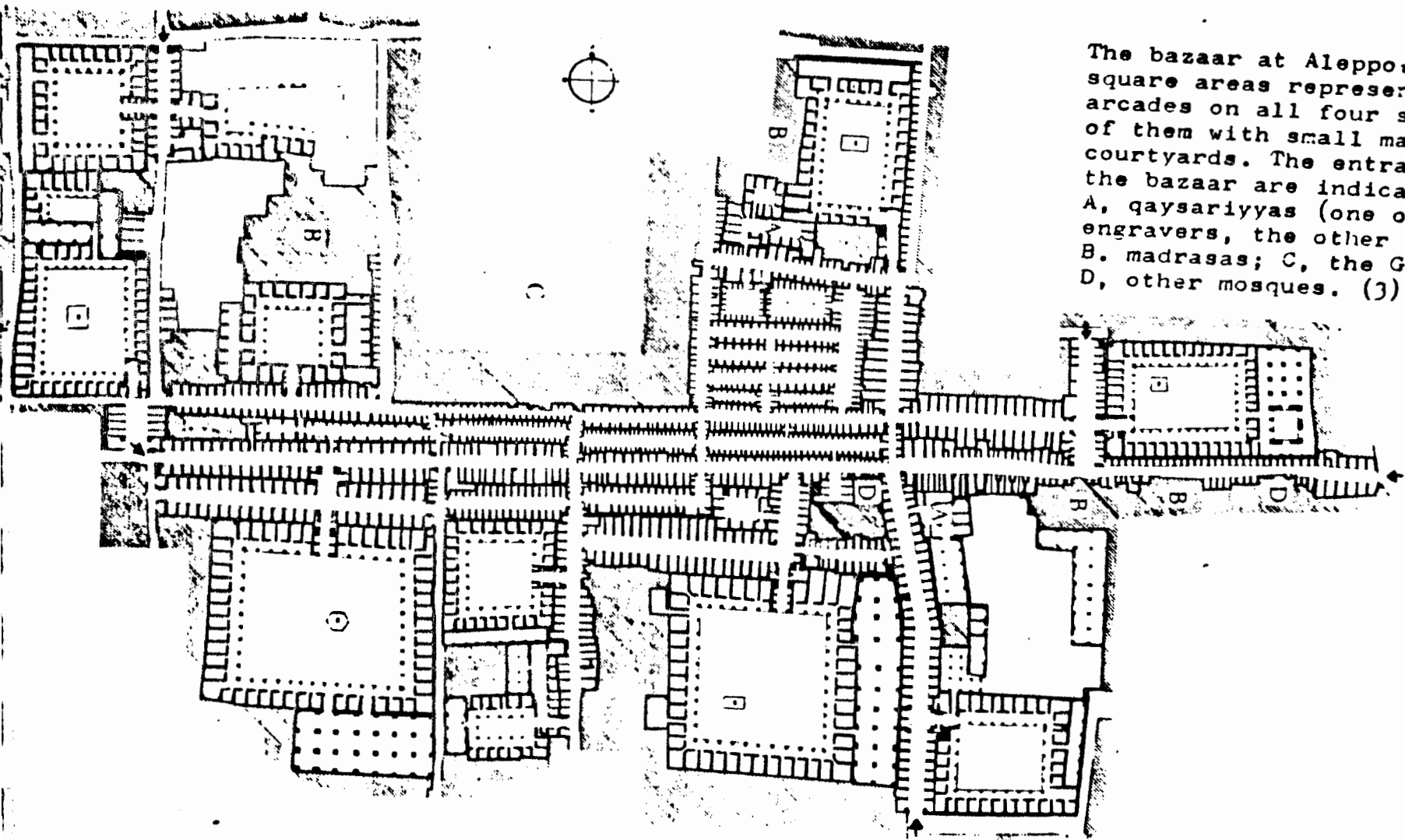
HISTORICAL AND CONTEMPORARY EXAMPLES



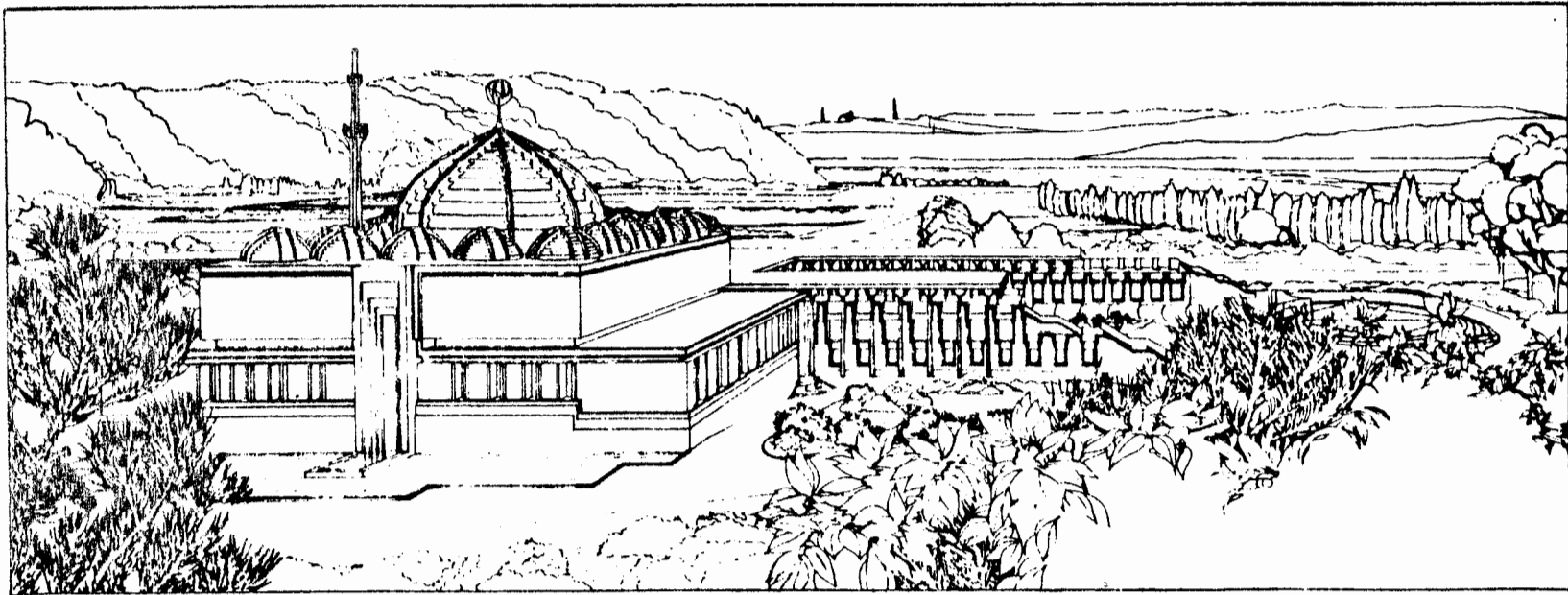
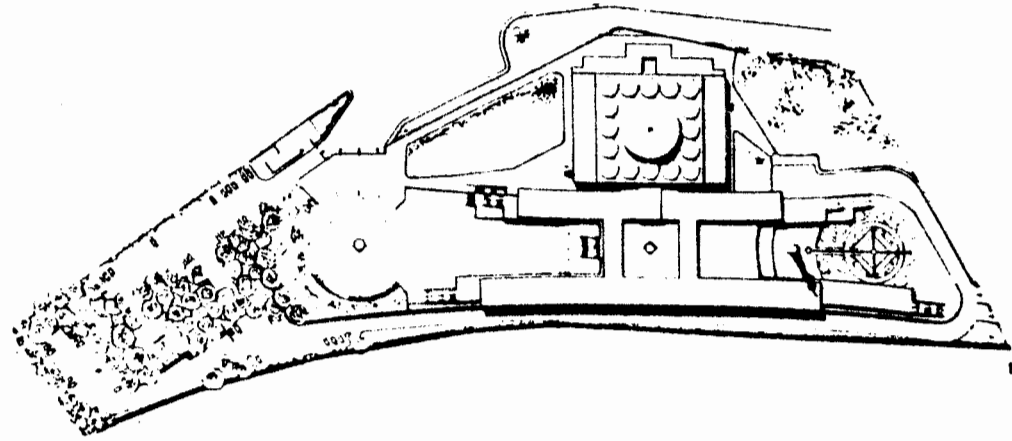
The system of positive space continuity ~~creates~~ <sup>makes</sup> a hierarchy of movement systems, linkages, and spatial relations that allows for growth and change within a superconscious sense of order. A segment of the bazaar plan of the city of Kashan is shown.

Primary Bazaar Route 

Secondary Bazaar Route 



The bazaar at Aleppo. The blank square areas represent khans, with arcades on all four sides, several of them with small masjids in the courtyards. The entrance gates to the bazaar are indicated by arrows. A, qaysariyyas (one of the seal-engravers, the other of the furriers); B. madrasas; C, the Great Mosque; D, other mosques. (3)

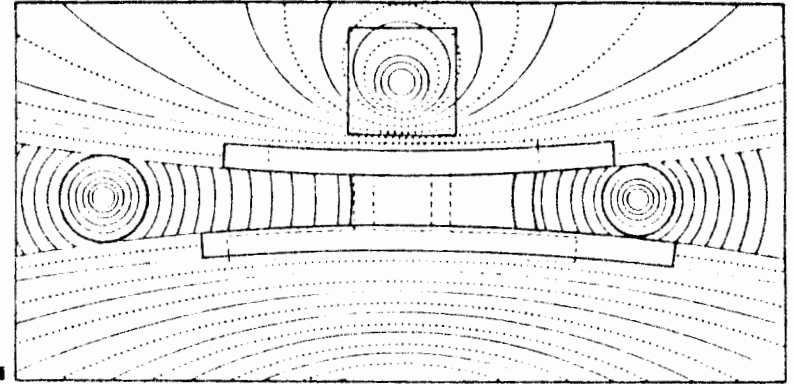
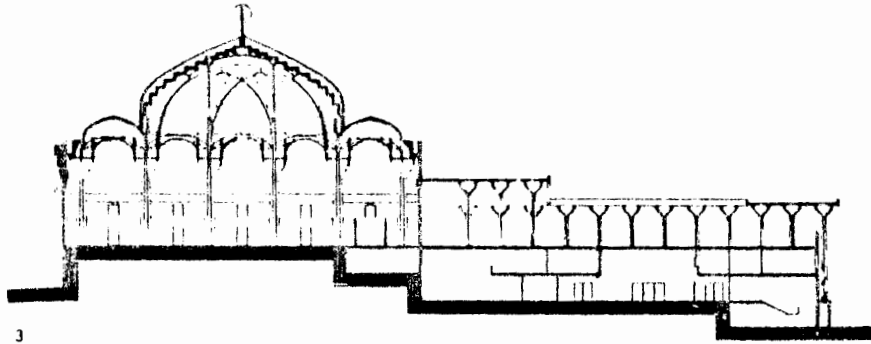


Portoghesi PAOLO

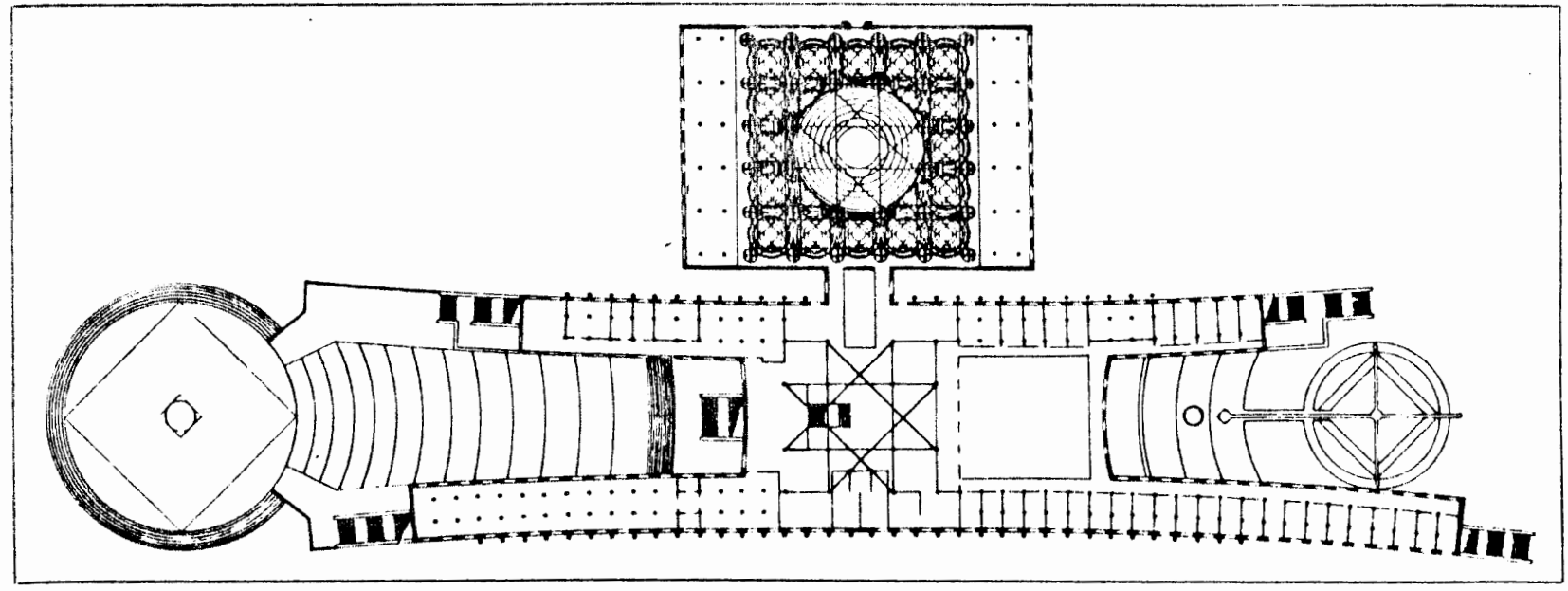
ISLAMIC CULTURAL CENTER ROME

"The fact that the muslim religion doesn't conceive the mosque as a temple, but as a hall of prayer (having other functions) → produces what? This is an incomplete statement"

The whole is made of two distinctive parts (but indivisible): The hall of prayer and the avenue of arcades. The relation between the avenue (constitutes the access) and the principal entry is a circular piazza that the visitor uses to arrive to different places. The curvilinear buildings all along the road constitute the transition between the mosque, the city and the natural environment. The prayer hall has a square shape directly related to the court. Its roof is held up by columns dividing the space in cells. In the center of the structure a wide cupola would encircle the space.



3





# venturi ROBERT COMPETITION (BAGDAD)

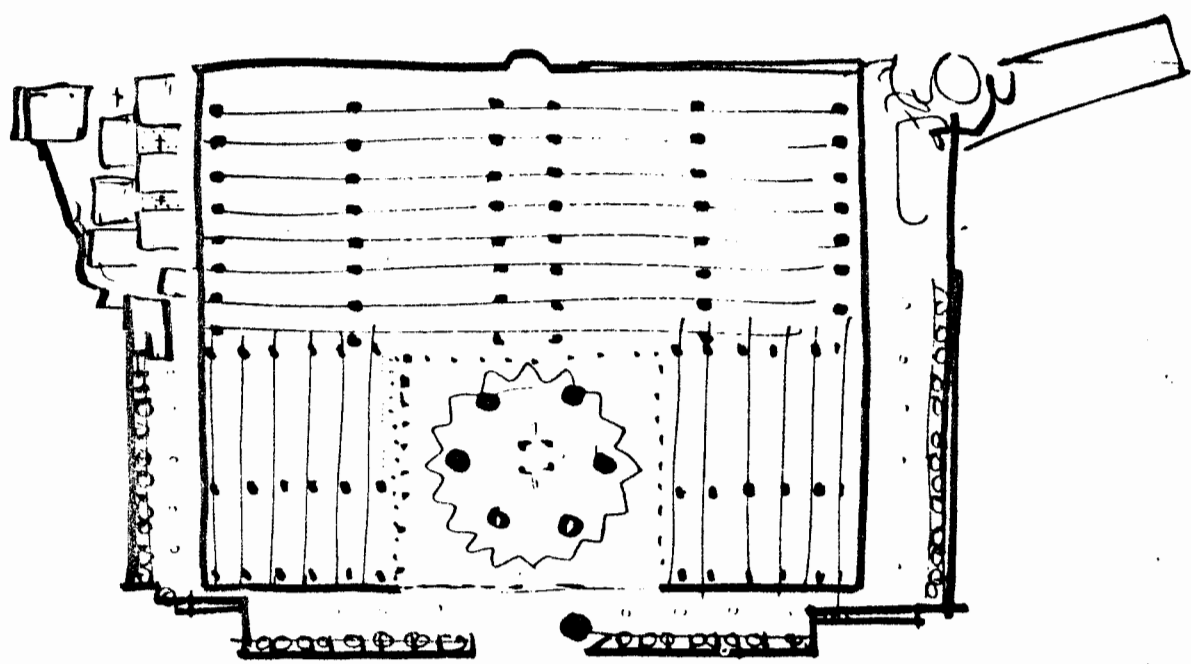
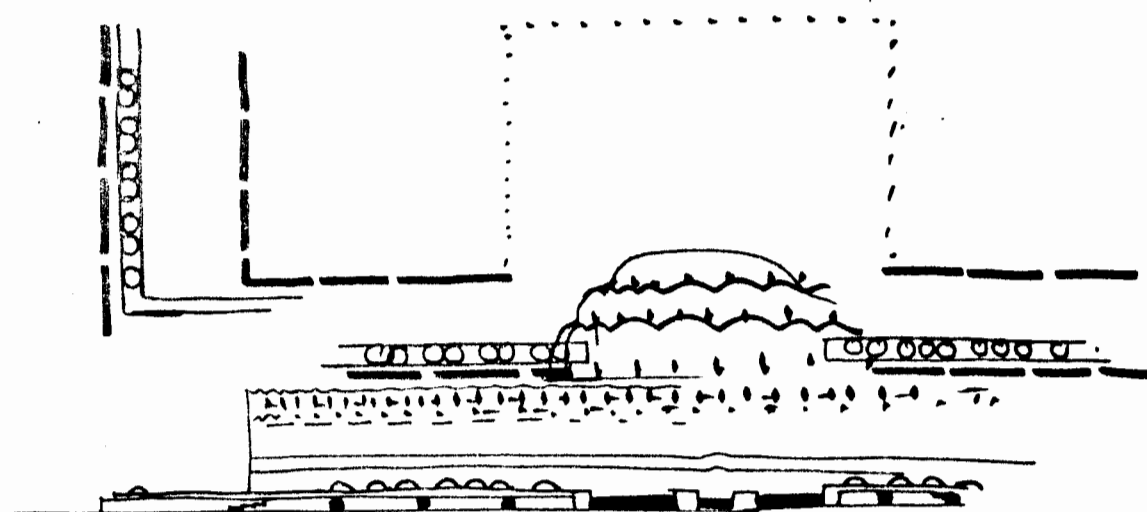
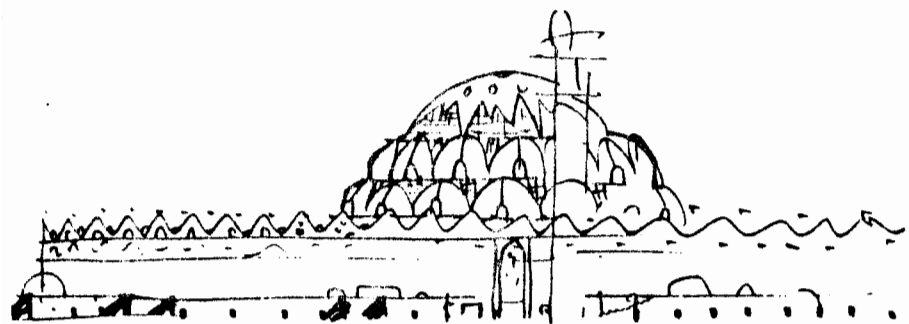
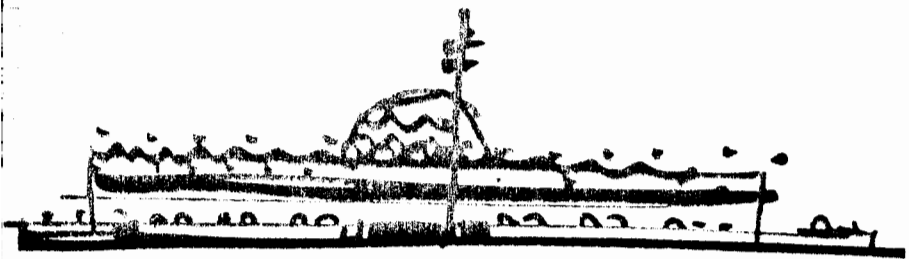
*what advantage?*

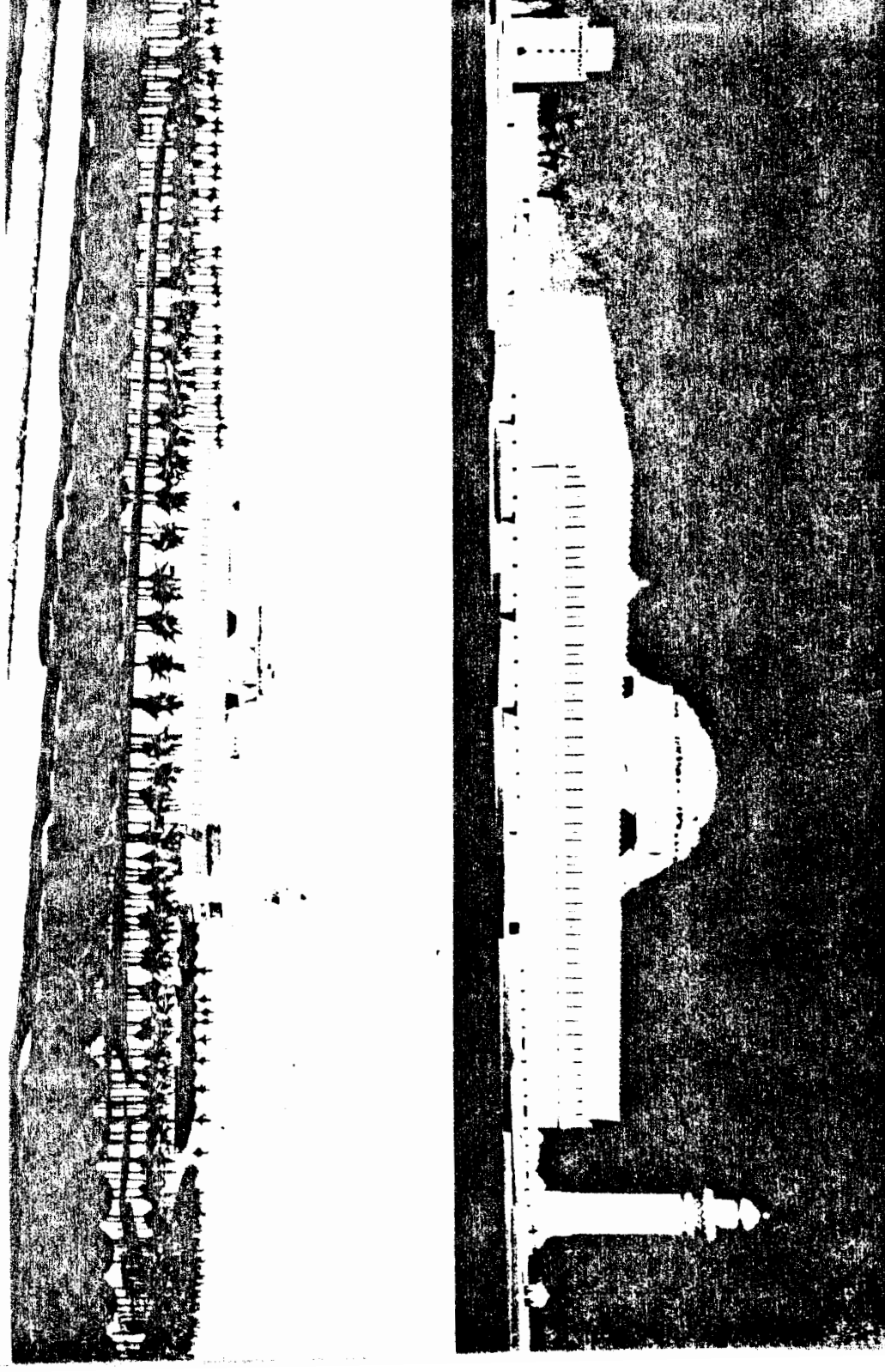
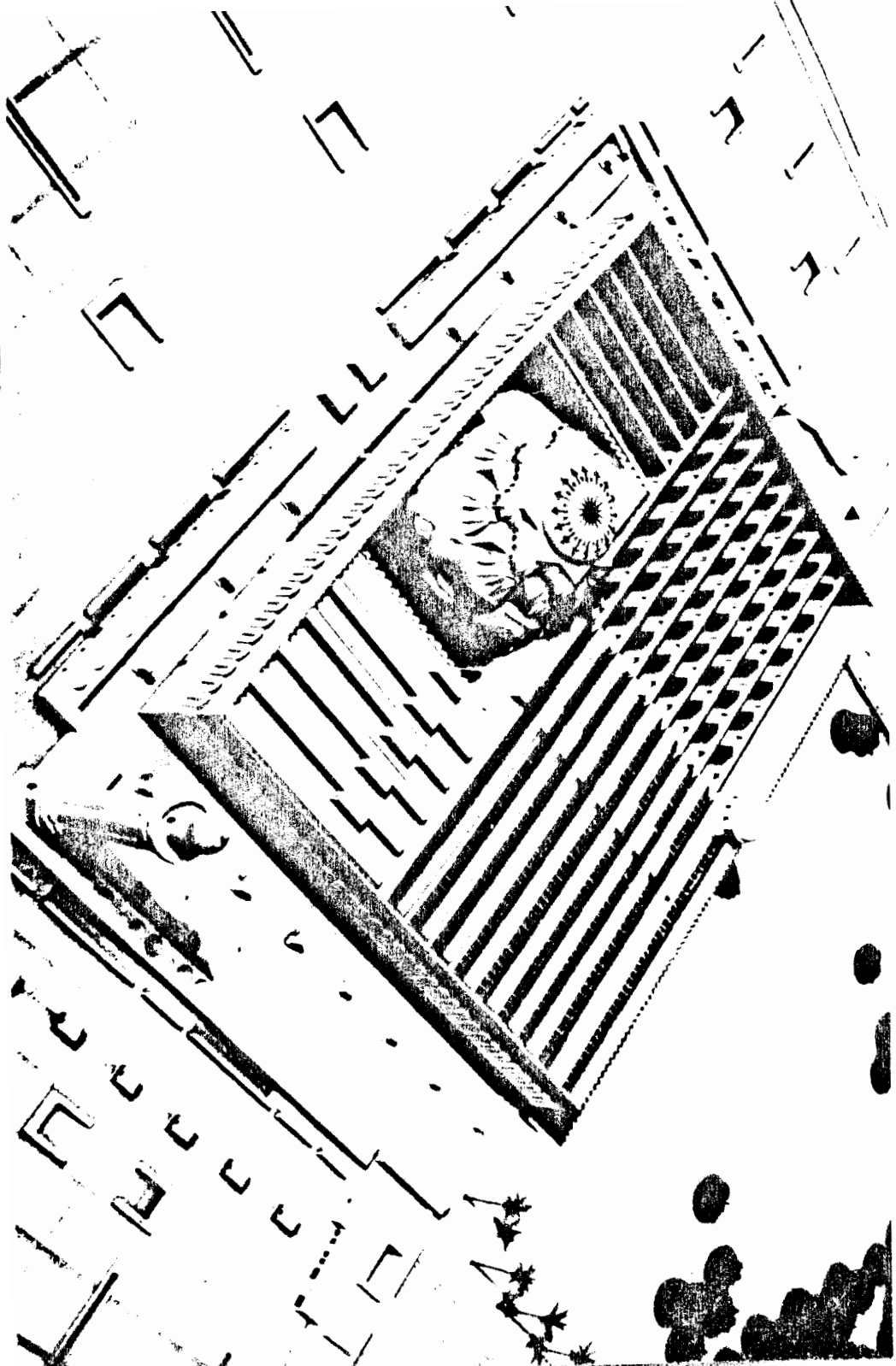
"The advantage of combining monumentation with the play of big and small scales, at the same time allowing the faithful believes<sup>r</sup> to situate and orient themselves".

A series of juxtaposed arcades, over-elevated and supported at regular intervals by columns, define the space and form of the sanctuary, stressing also the orientation towards the Quibla. The small number of columns constitute an open and unconstrained perspectives, visions in continuous rows that enhances the spirituality of the place through decorations and ambient natural lighting. The system of columns and arcades (ex. Ibn-Tulun, Al-Mutawakil) expresses the technological modernism used in this project.

The dome used is a signal of completion to the urban landscape of Bagdad whose shape isn't traditional and what appears to be a monumental dome from far is in fact formed by two superposed domes fitted one in the other and formed of muqarnas which are of different sizes and it lets through them diffused and shiny light.

The traditional forms and the symbolic elements used in this project (arcades, ornamentations, cupolas, muqarnas, crenellations, minarets) are as many uncontested reflexions coming from different sources and they have juxtaposed them without taking their scale, their context nor the materials necessary for their construction to their true literal historical meaning.





site...

SITE:

MY SITE IS LOCATED AT THE NORTHERN BOUNDARY OF THE GOVERNMENTAL SERAI IN A LOGITUDINAL STRIP OF LAND BOUNDED BY TWO ROADS: THE NORTHERN IS WADI ABU-JIMIL AND THE SOUTHERN IS FRANCE ROAD.

THE SITE IS SITUATED IN SUCH A WAY THAT IT IS A PART OF THE CONTINUATION OF THE BUFFER ZONE THAT SEPERATES "HAMRA AREA" AND THE NORTHERN PART OF WESTERN BEIRUT FROM THE DOWN TOWN AREA.

\* SOCIOECONOMIC ENVIROMENT AND DEVELOPMENT TENDENSIES:

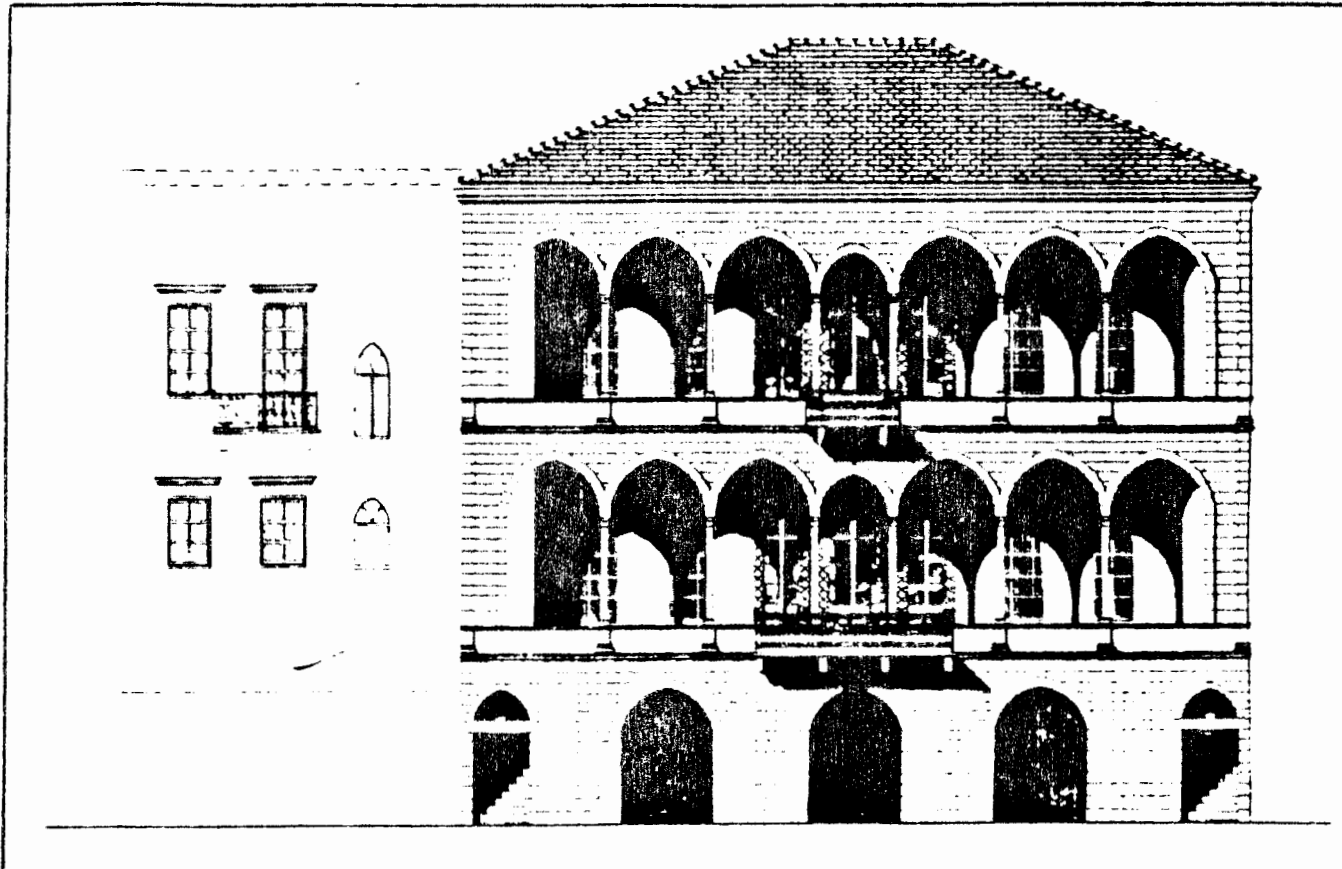
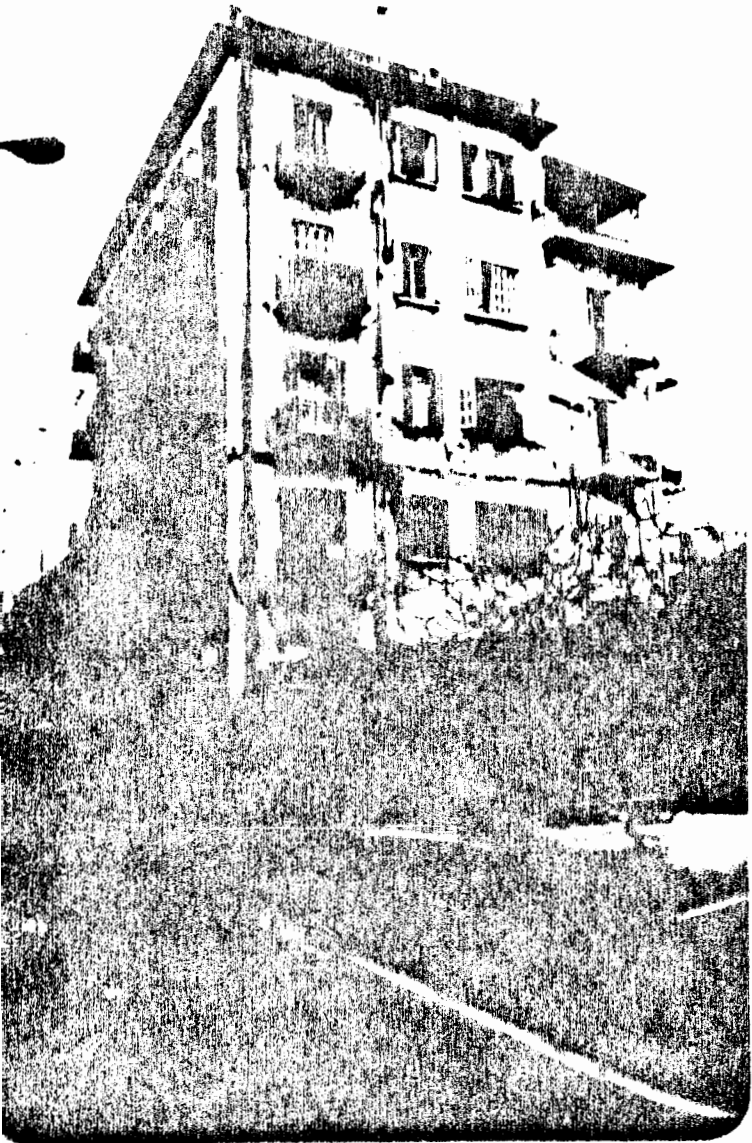
THE SITE IS CURRENTLY OCCUPIED BY A MUSLIM (COMMUNITY) REFUGEE OF A VERY POOR SOCIOECONOMIC STATUS. THIS COMMUNITY IS LACKING SERVICES WHETHER MEDICALIY OR RELIGIOUSLY AND THERE IS ALSO A NEGLIGENCE TOWARDS THE ENVIROMENTAL RESPONSBILITY SUCH AS :

- CLEANLINESS
- ORGANIZATIONAL
- CONGREGATIONAL

\* ARCITECTURAL CHARACTER AND HISTORY:

THE SITE WAS A QUIET BYPASS TO THE DOWNTOWN AREA FEATURING A CALM MIXED COMMUNITY OF JEWISH AND CHRITIAN ARMENIAN INHABITING DWELLINGS, DATING BACK TO THE EARLY 20<sup>th</sup> CENTURY, POST WAR CHARACTER OTHER THAN THE TRADITIONAL LEBANESE HOUSE IN ITS MANY FORMS

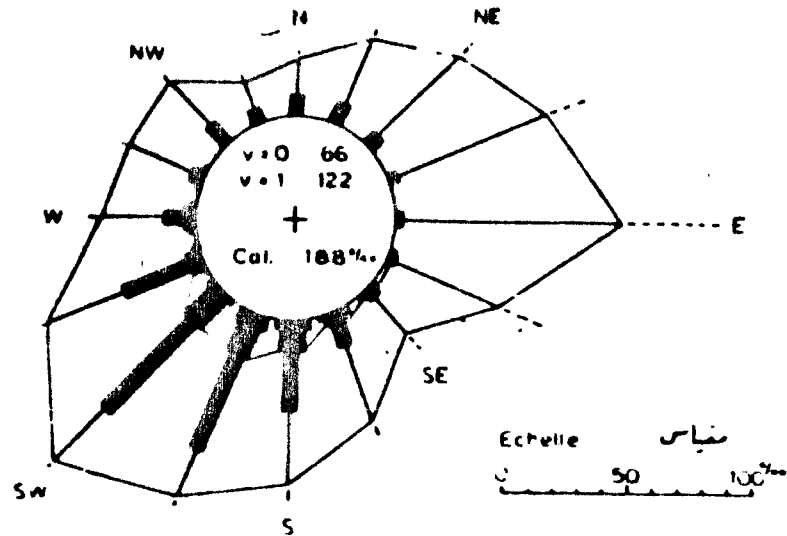




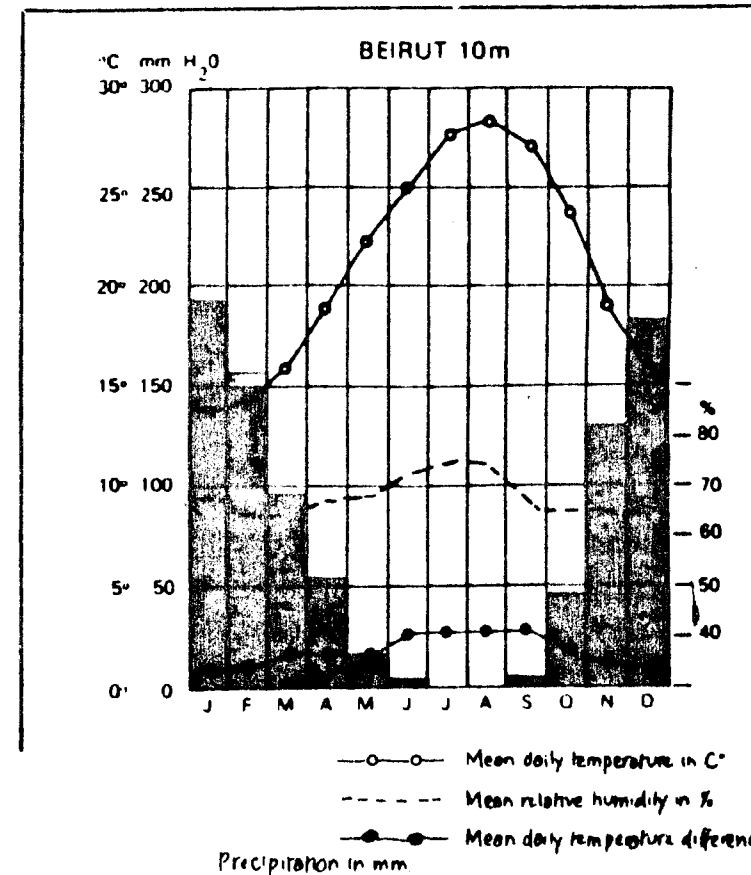
architectural  
character

# Climate

Daily maximum temperatures surpass the comfort limit from May onwards, and reach the work limit in August. Mean daily temperature surpass the comfort limit from June till the end of September.

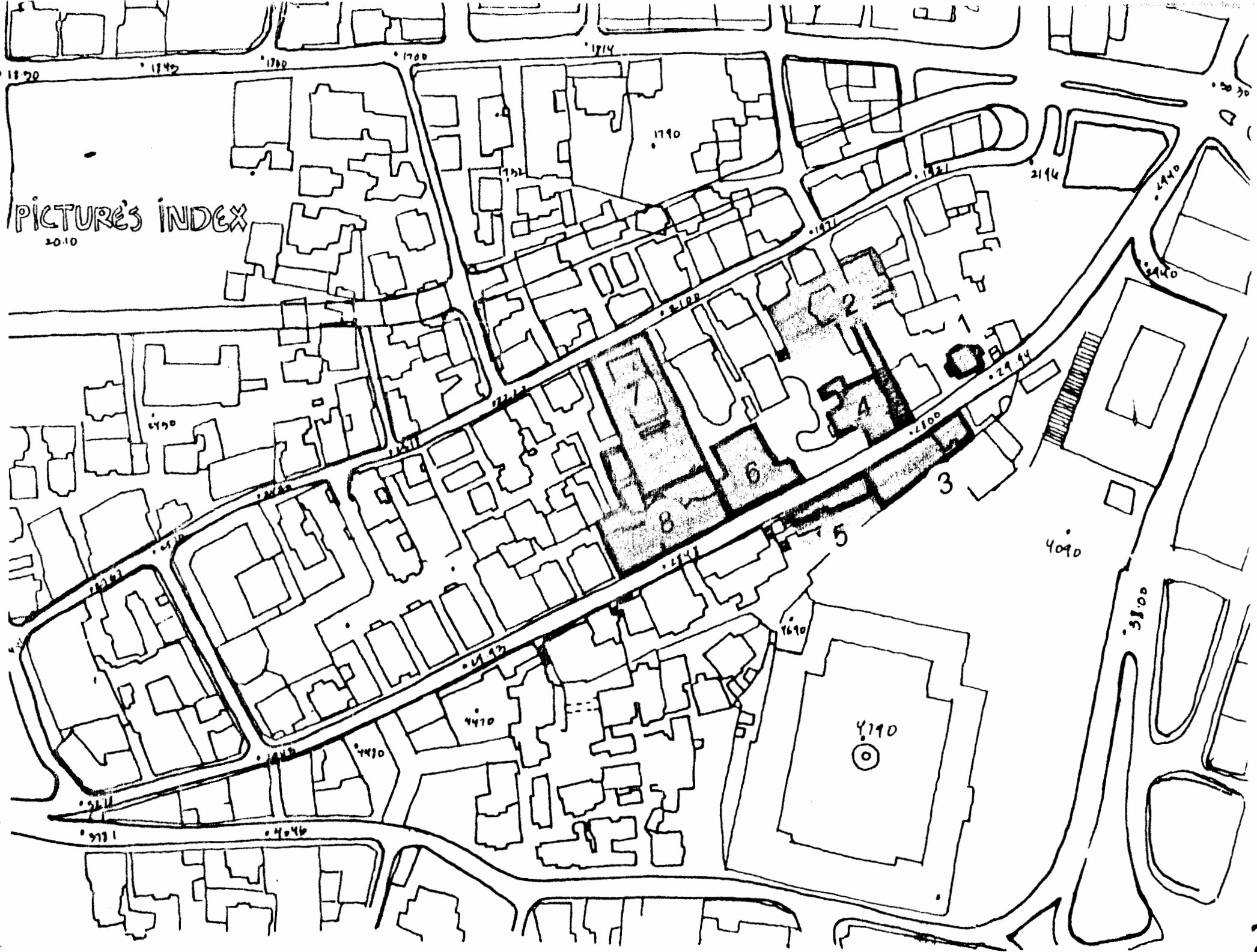


WIND ROSE DIAGRAM



Because of high humidity, cross ventilation is the only natural means of climatization. It is necessary to open buildings to the summer breeze from the southwest, to provide sun protection and sufficient thermal insulation. Heating becomes necessary in the winter during stormy period without sunshine.

PICTURE'S INDEX  
20.10

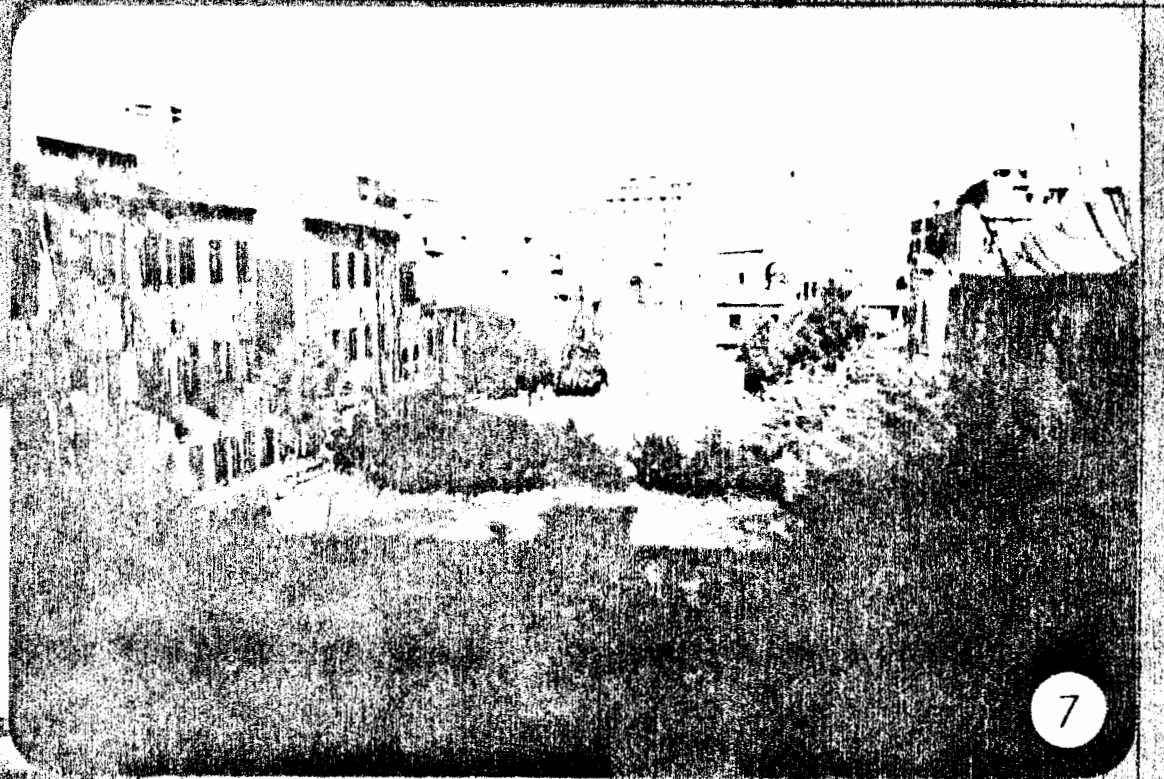
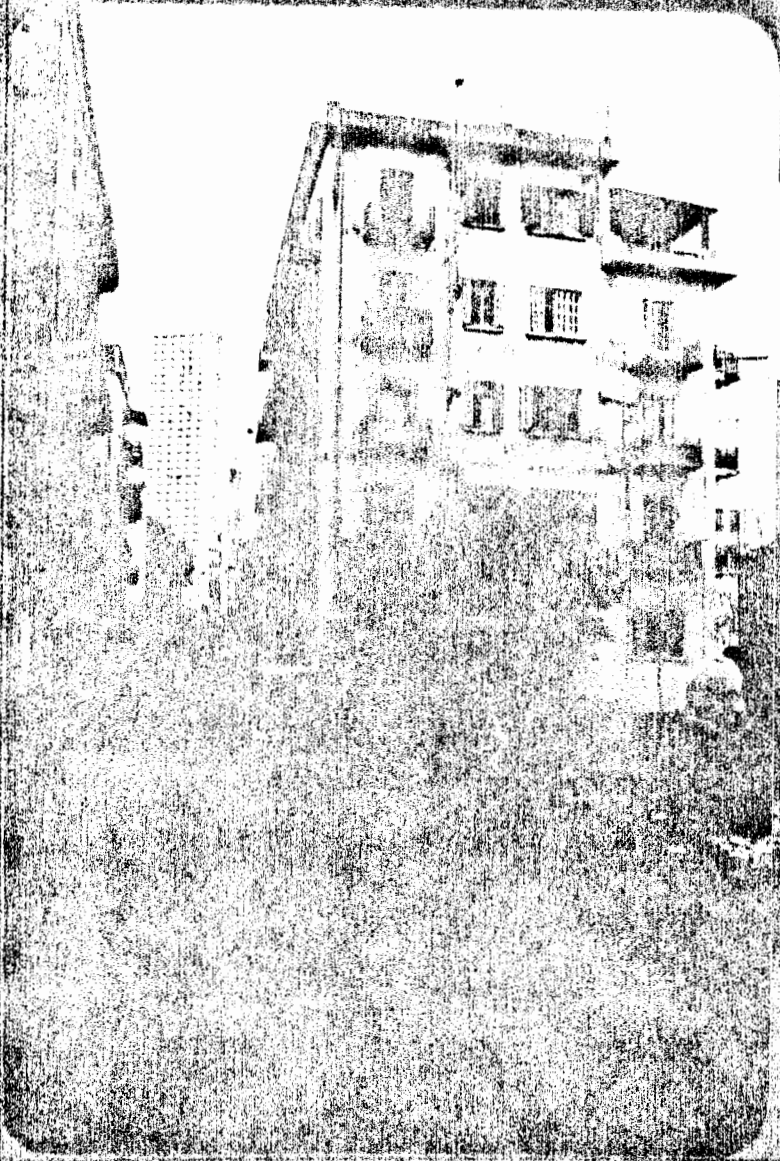








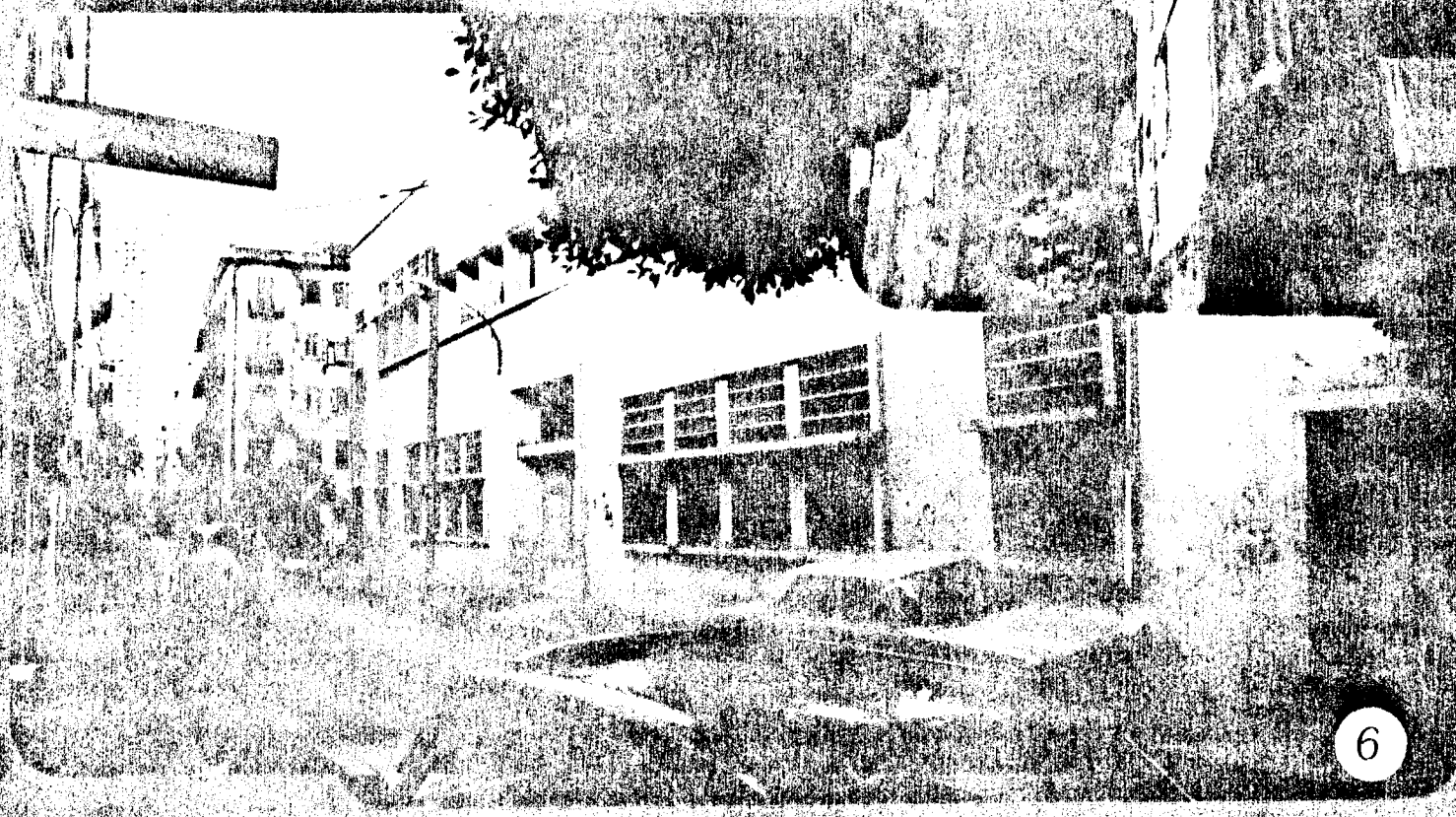
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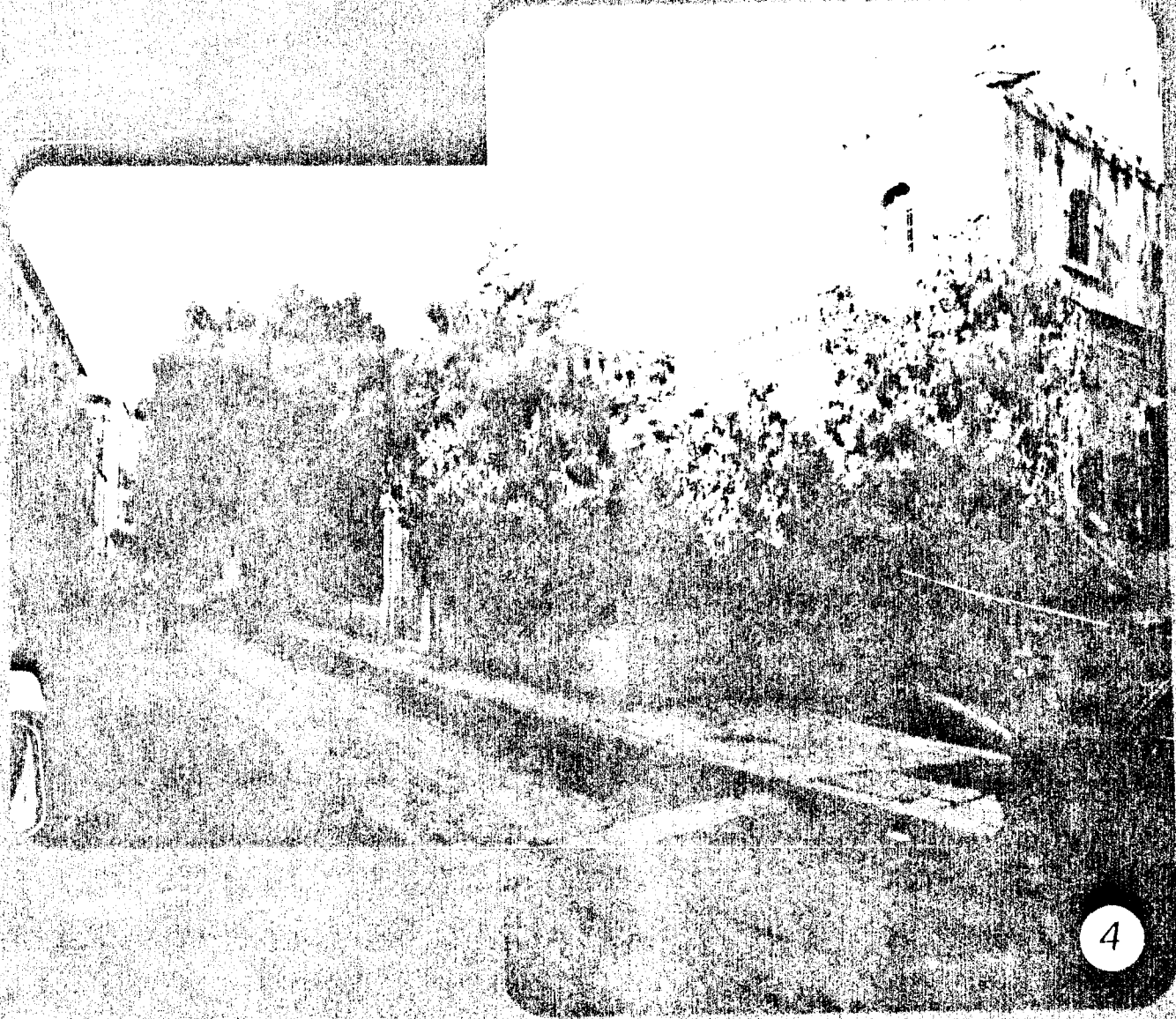


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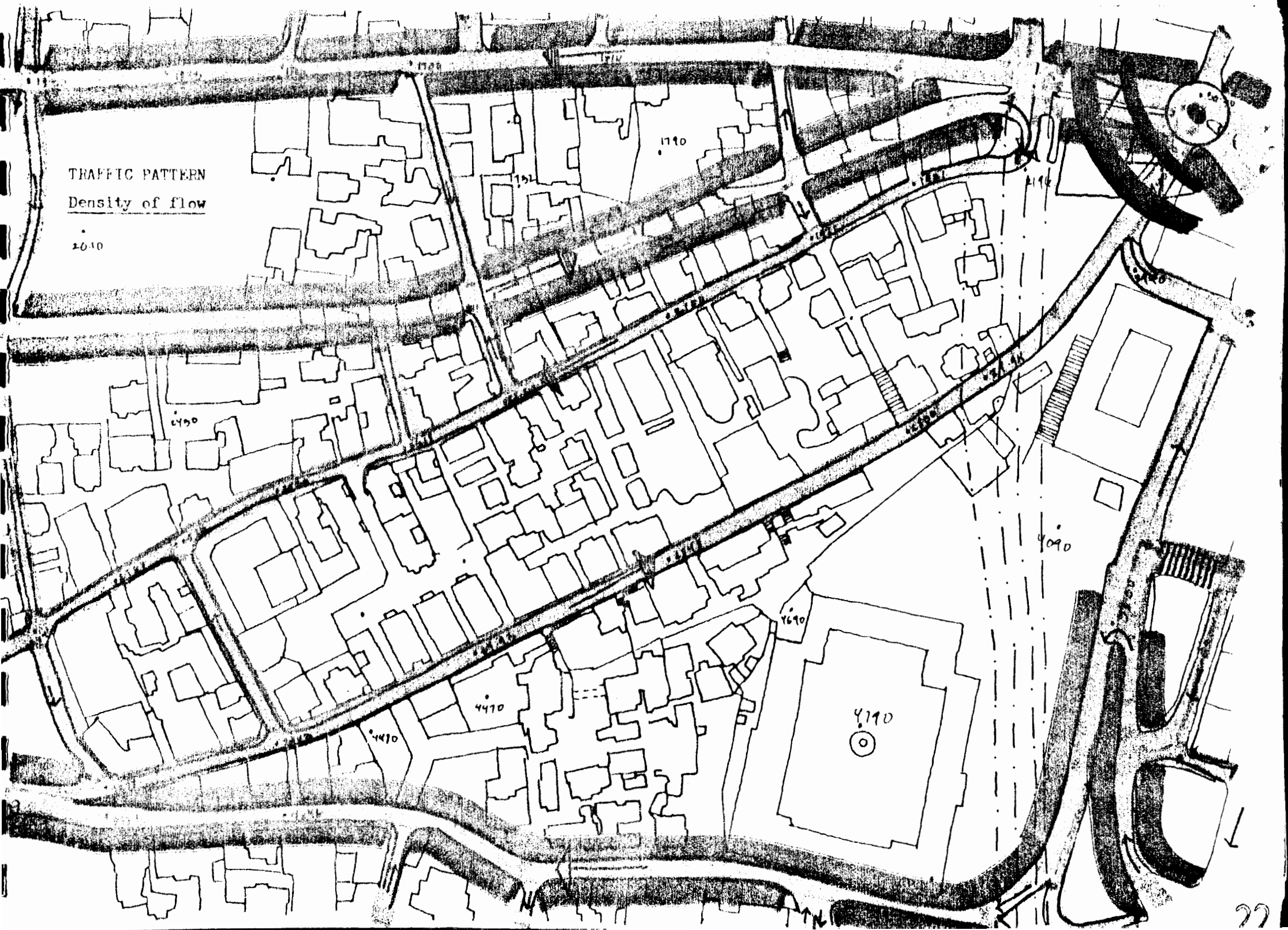
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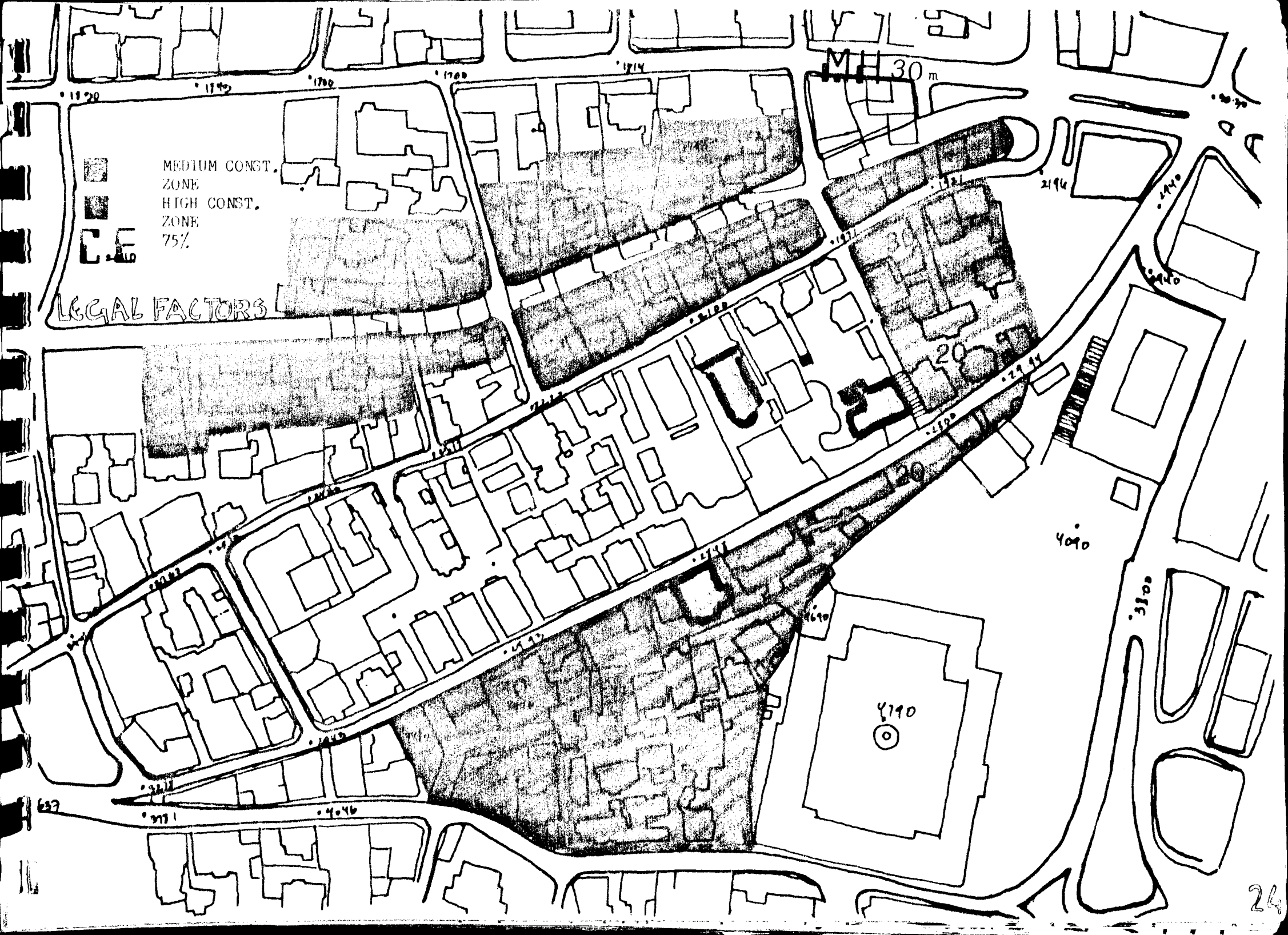


TRAFFIC PATTERN  
Density of flow

10-10







MEDIUM CONST.  
ZONE  
HIGH CONST.  
ZONE  
75%

LEGAL FACTORS

MH 30 m

20

1120 1170 1700 1700 1714

2194 2194

4090

4190

3100

4046 4046




## SUMMARY OF THE SITE ANALYSIS


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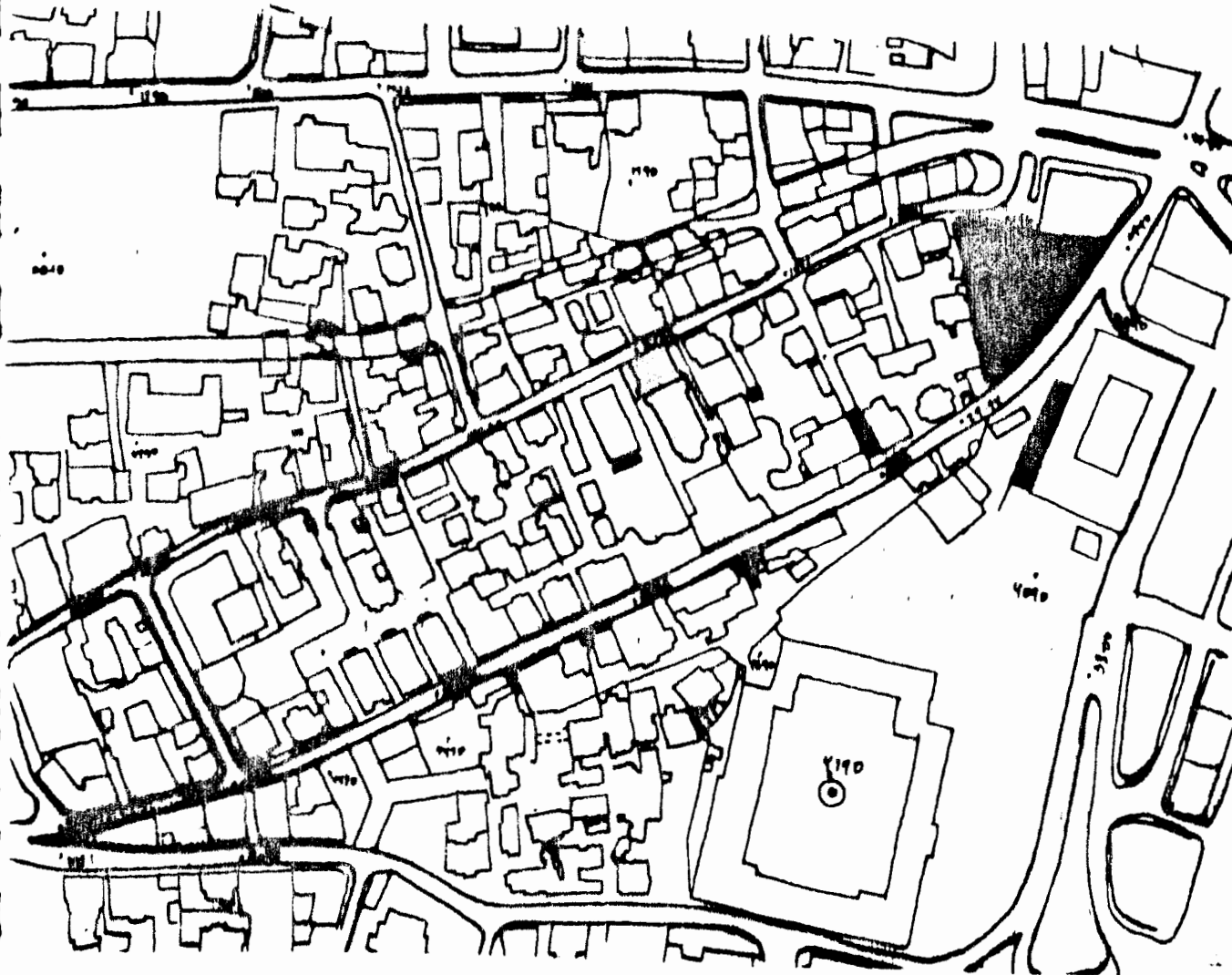
### - Restrictions

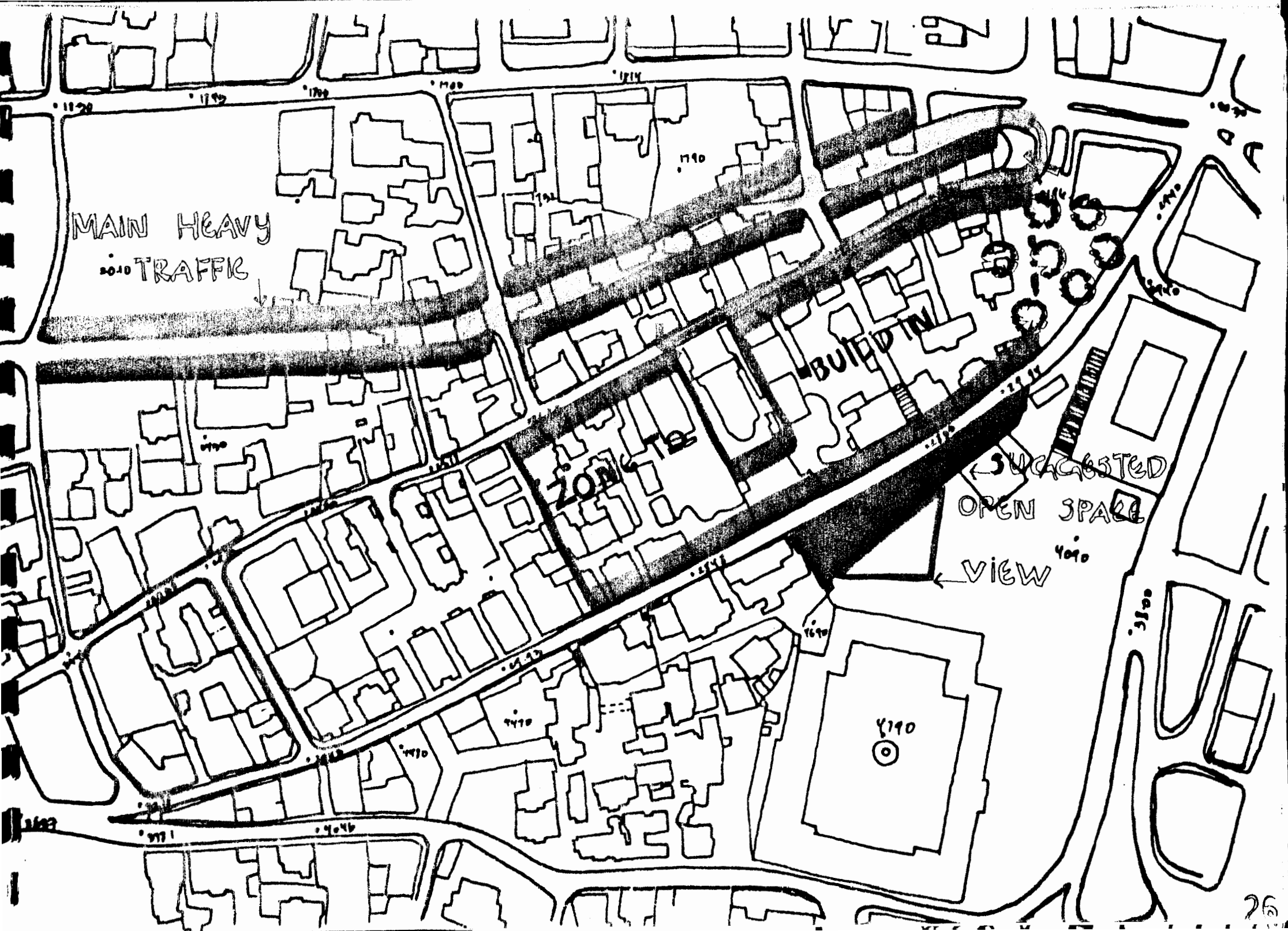
Existing buildings:

... A Synagogue 

Landscape:

... A green zone proposed by the government can be included in the design as a side access to the site( pedestrian ) 

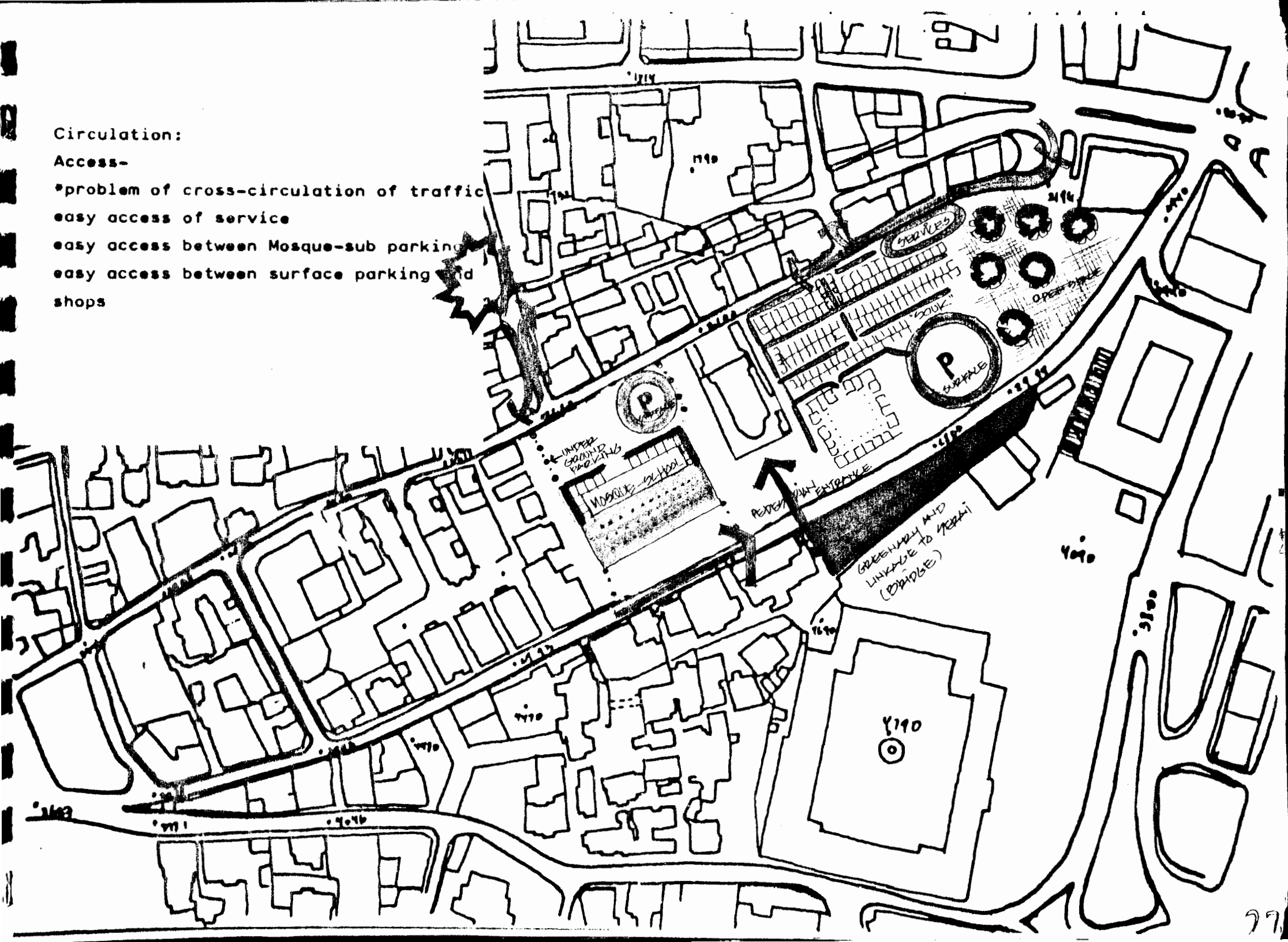




Circulation:

Access-

- problem of cross-circulation of traffic
- easy access of service
- easy access between Mosque-sub parking
- easy access between surface parking and shops



Circulation:

Access-

easy access In and Out to the site

Environmental:

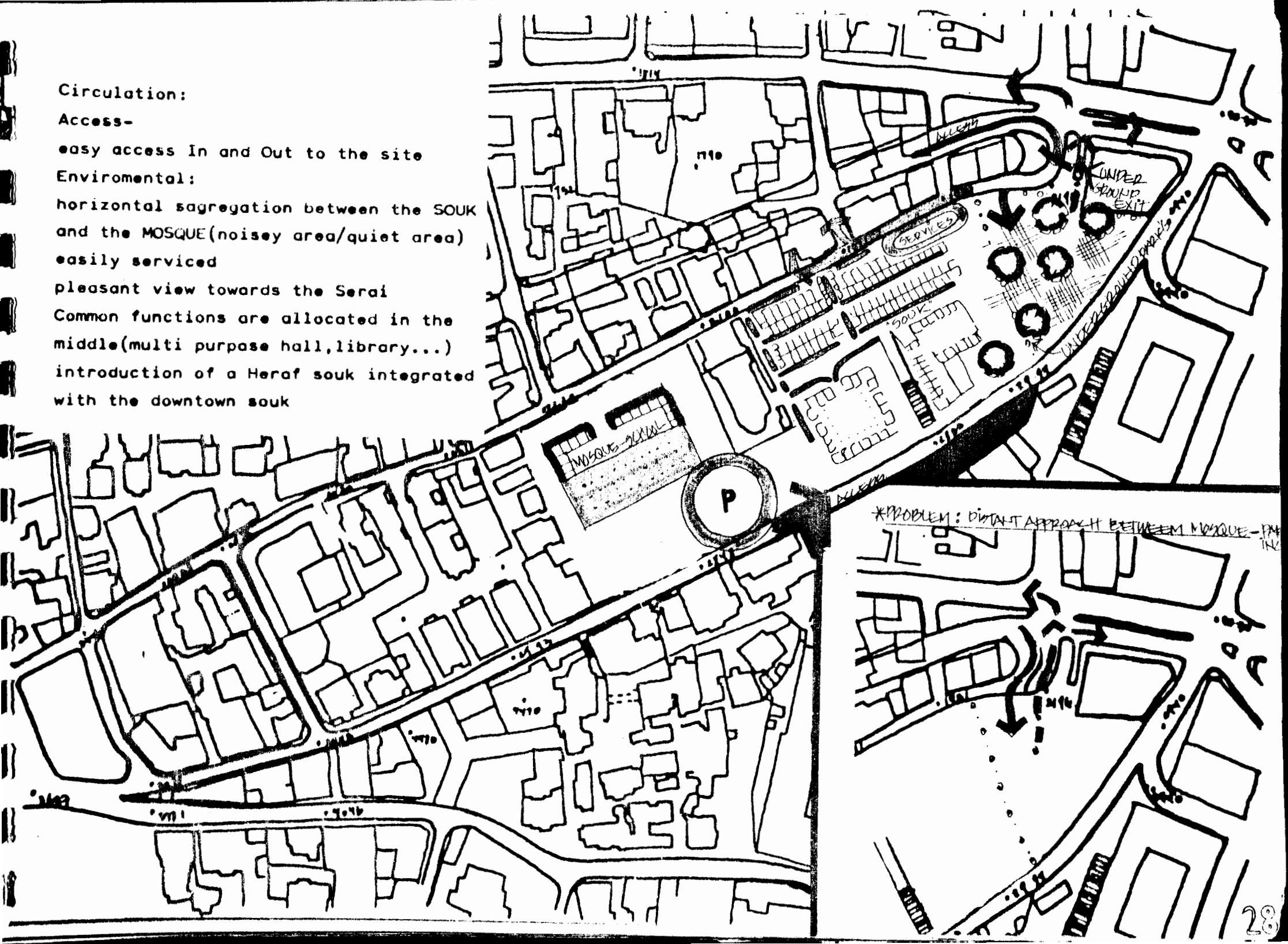
horizontal segregation between the SOUK and the MOSQUE (noisy area/quiet area)

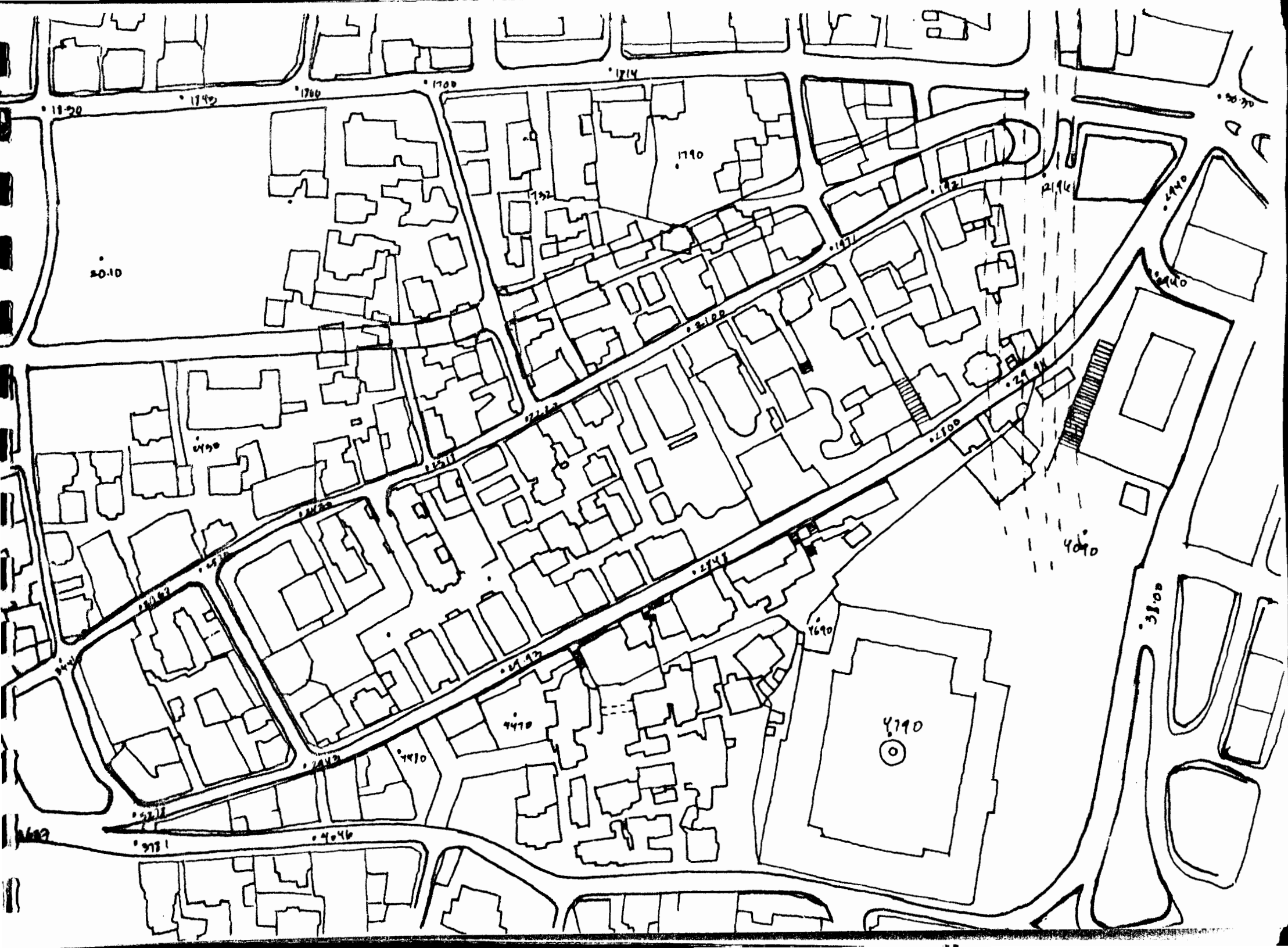
easily serviced

pleasant view towards the Serai

Common functions are allocated in the middle (multi purpose hall, library...)

introduction of a Heraf souk integrated with the downtown souk





20-10

18-20

17-50

1700

1700

1714

1710

1752

1821

2196

2940

20-70

2940

2100

2131

2100

2150

2111

2150

20-27

20-27

2145

21-27

1690

4040

3100

4470

4790

4470

4181

4040

space requirements

# Program

Mosque ... Court

Shops

WORKSHOP  
TRADESHOP

Facilities

HOUSING  
CAFETERIA  
CLINIC

Academic

CLASSES  
ADMINISTRATION  
FACULTY

descriptions . . . .



| NAME           | DESCRIPTION  | AREA | NUMBER | TOTAL |
|----------------|--|------|--------|-------|
| MOSQUE         | A LARGE CONGREGATIONAL COVERED PRAYER HALL PROPERLY ORIENTED TOWARDS THE QUIBLA WALL. IT IS DOMINATING BOTH THE INSIDE AND OUTSIDE SURROUND'G  | 2500 | 1      | 2500  |
| COURT          | AN OPEN SPACE PRAYER HALL. THE ONLY ACCESS TO THE MOSQUE AND A BUFFER ZONE TO THE SURROUNDING SPACES.  | 1200 | 1      | 1200  |
| ABLUTION SPACE | A SANITARY FACILITY FOR WASHING LOCATED NEAR THE MOSQUE AND THE PARKING ZONE   | 60   | 1      | 60    |
| SHOPS          | TRADE AND WORK SHOPS USED TO SELL AND INCOURAGE THE CRAFTSMENSHIP OF BOTH ISLAMIC AND TRADITIONAL ORIGIN. IT IS USED ALSO TO SELL BOOKS RELATED TO ISLAM. THERE IS A NEED FOR A WOOD SHOP , KNITTING etc.... | 16   | 50     | 1000  |
| GARDEN         | A LANDSCAPED AREA WITH A PEDESTRIAN PATH, USED AS A RELAXING SPACE AND FURNISHED WITH SEATING ARRANGEMENTS. SEPERATES NOISY AREAS FROM QUIET   |      |        |       |
| PARKING        | A SURFACE PARKING FOR 50 CARS LOCATED NEAR THE MOSQUE.   | 1100 | 1      | 1100  |
|                | SUB-PARKING (ONE OR TWO LEVELS) FOR 200 CARS ALSO LOCATED NEAR THE MOSQUE-COURT AREA . IT MUST BE EASILY ACCESSABLE FROM THE STREET.   | 4000 | 1      | 4000  |

| NAME               | DESCRIPTION  | AREA   | NUMBER | TOTAL  |
|--------------------|--|--------|--------|--------|
| CLASSES            | TYPICAL CLASSROOMS COMPOSED OF 30 STUDENTS EACH. THEY ARE USED TO TEACH FUKER, KURAN, TAWHEAD AND FUKER.   | 40     | 9      | 420    |
| LECTURE HALL       | A SMALL ASSEMBLY HALL TO GATHER TWO OR MORE CLASSES OR TO BE USED FOR PROJECTIONS AND FILMS. IT MUST HAVE A DIRECTIONAL SEATING ARRANGEMENT AND PROVIDED WITH APPROPRIATE ACOUSTICAL TREATEMENT  | 80     | 1      | 80     |
| MULTI-PURPOSE HALL | A BIG ASSEMBLY HALL USED FOR MULTI-ACTIVITIES. IT IS TO BE EQUIPPED WITH PROPER MECHANICAL AND ACOUSTICAL FACILITIES.  | 300    | 1      | 300    |
| COMMITTEE ROOM     | A GATHERING ZONE USED FOR ENTERTAINMENT ACTIVITIES AND COMPOSED OF DIFFERENT SEATING ARRANGEMENTS. IT IS LOCATED ADJOINING THE HOUSING   | 80-100 | 1      | 80-100 |
| HOUSING            | A SLEEPING FACILITY FOR STUDENTS AND STAFF WHO LIVE ABROAD OR FAR FROM HOME . IT CONSTITUTES OF IDENTICAL BEDROOMS, SINGLE, DOUBLE, TRIPLE, AND/OR QUADRIPL. IT WILL PROVIDE PROPER SANITATIONAL FACILITIES.   | 14     | 50     | 1000   |
| CAFETERIA          | A FOOD SERVICE AND PREPARATION ZONE COMPOSED OF DIFFERENT SEATING ARRANGEMENTS. IT IS TO ACCOMODATE STUDENTS AND STAFF AND USED OCCASSIONALLY TO PROVIDE FREE FOOD FOR THE POOR. IT MIGHT BE OPEN TO THE PUBLIC. A DELIVERY ACCESS IS TO BE ACCOUNTED FOR. | 350    | 1      | 350    |

| NAME              | DESCRIPTION  | AREA   | NUMBER | TOTAL  |
|-------------------|--|--------|--------|--------|
|                   |  | 2<br>m |        | 2<br>m |
| DIRECTOR          | HIGH STANDARD OFFICE WITH A SMALL CONFERENCE SPACE   | 30     | 1      | 30     |
| ASST.<br>DIRECTOR | SAME AS ABOVE  | 20-25  | 1      | 20-25  |
| SECRETARY         | A SMALL OFFICE, A WAITING ZONE AND A SMALL KITCHENETTE   | 25     | 1      | 25     |
| FACULTY           | HIGH STANDARD OFFICE   | 15     | 5      | 75     |
| CLINIC            | A SMALL FREE MEDICAL CLINIC HAVING STANDARD EQUIPMENT WITH A FULL-TIME NURSE. IT IS COMPOSED OF A RECEPTION AND AN EXAMINING-RESTING SPACE.  | 100    | 1      | 100    |
| LIBRARY           | A PUBLIC STUDYING AND RESEARCH ZONE COMPOSED OF A CLOSED AND OPEN STACK AREA, A PERIODICAL AREA AND A PRIVATE STUDYING ZONE. ALL ARE CONTROLLED BY A SUPERVISOR. A DELIVERY ACCESS IS TO BE ACCOUNTED FOR. | 350    | 1      | 350    |

|                       |          |
|-----------------------|----------|
| MOSQUE                | C        |
| LIBRARY               | FF       |
| SHOPS                 | FFC      |
| HOUSING               | IFI      |
| *ADMINISTRATION       | FFIFI    |
| FACULTY               | CFIFFC   |
| LECTURE HALL          | CFIFIFF  |
| MULTIPURPOSE HALL     | FFFFFCCI |
| BASKET COURT          | FIFFFI   |
| CAFETERIA/KIT/STORAGE | IFFFFC   |
| GARDEN                | FFFFC    |
| ABLUTION SPACE        | FFFFI    |
| COMMITTEE ROOM        | FFIFI    |
| CLINIC                | FCI      |
| PARKING               | FI       |
| CLASSROOMS            | F        |

PROXIMITY DUE TO DISTANCE

- CLOSE: C
- INBETWEEN: I
- FAR: F

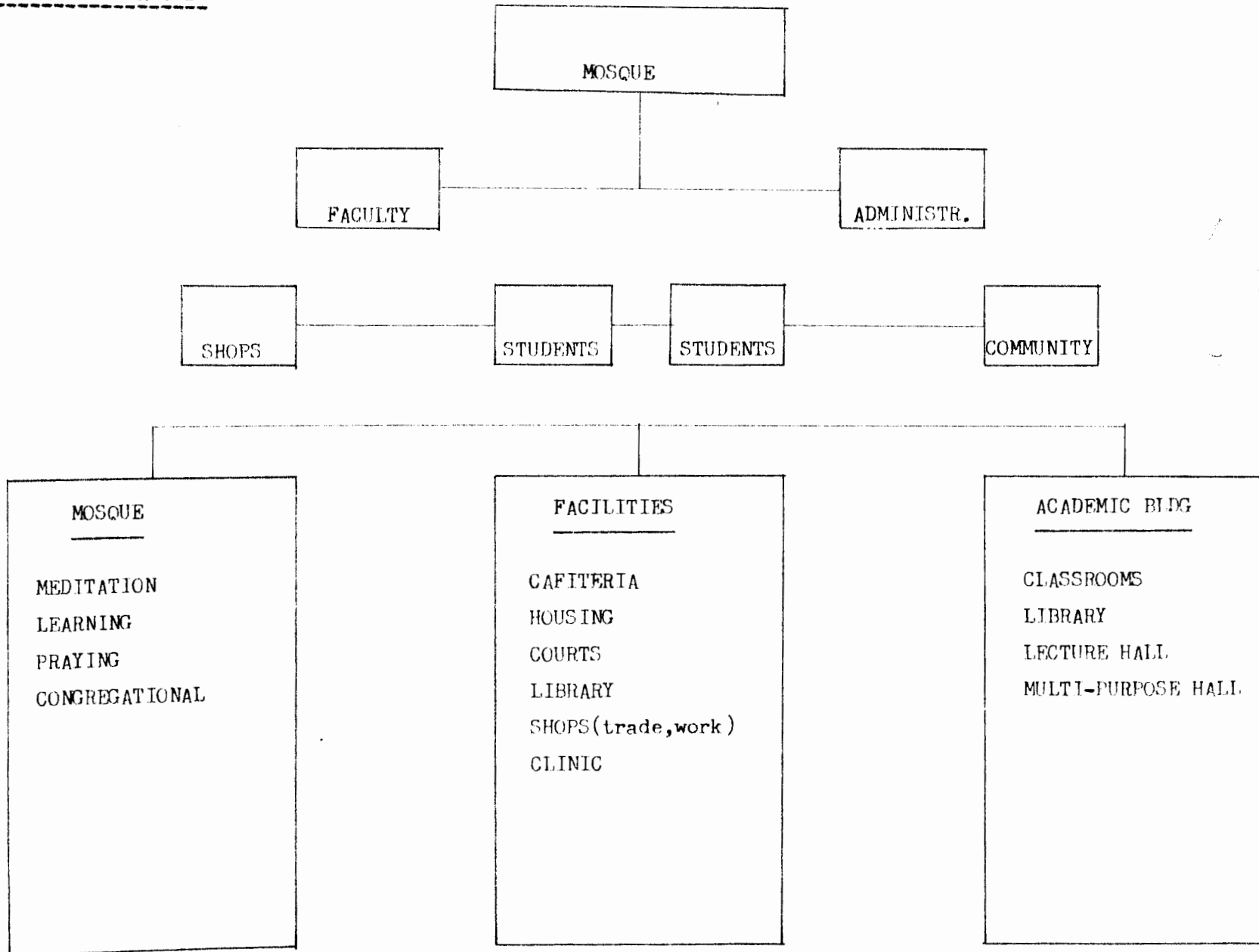
|                        |             |
|------------------------|-------------|
| MOSQUE                 | 2           |
| LIBRARY                | 33          |
| SHOPS                  | 3322        |
| HOUSING                | 332233      |
| *ADMINISTRATION        | 2331233     |
| FACULTY                | 1233331     |
| LECTURE HALL           | 123222113   |
| MULTIPURPOSE HALL      | 23322333312 |
| BASKET COURT           | 3222332231  |
| *CAFETERIA/KIT/STORAGE | 31333312    |
| GARDEN                 | 3333211     |
| ABLUTION SPACE         | 3333221     |
| COMMITTEE ROOM         | 333223      |
| CLINIC                 | 33122       |
| PARKING                | 2332        |
| CLASSROOM              | 33          |

FREQUENCY OF INTERACTION

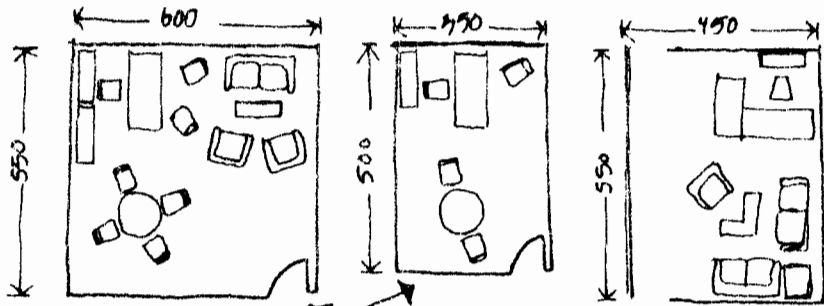
- FREQUENT: 1
- SEMI FREQUENT: 2
- NON FREQUENT: 3

\* = ?

SPATIAL HIERARCHY:

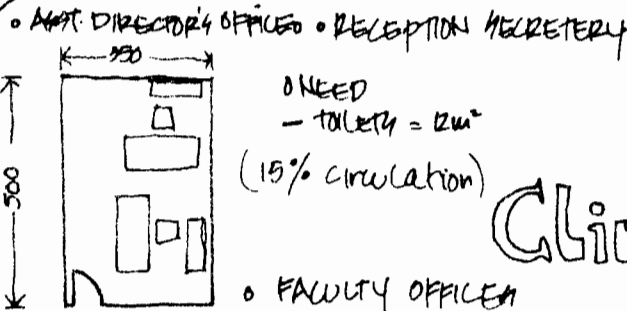


space analysis and  
standard



# Administration

- DIRECTOR'S OFFICE
- ROLE OF THESE FUNCTIONS IS TO CONTROL BOTH THE SCHOOL AND BOOK
- ANOTHER FUNCTION IS THE PUBLIC RELATIONS
- SUPERVISION ORGANIZATION OF THE ENVIRONMENT



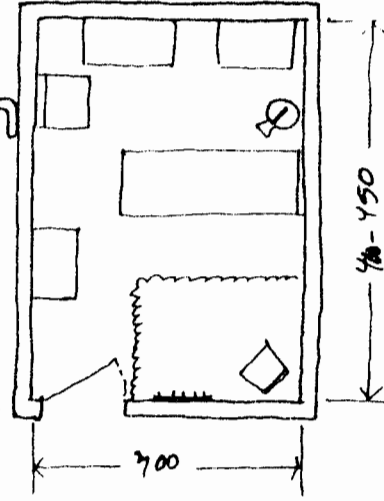
• NEED  
- TOILETS = 2m<sup>2</sup>  
(15% circulation)

- FACULTY OFFICES
- SINGLE OR IN PAIR

# Clinic

## NEEDS:

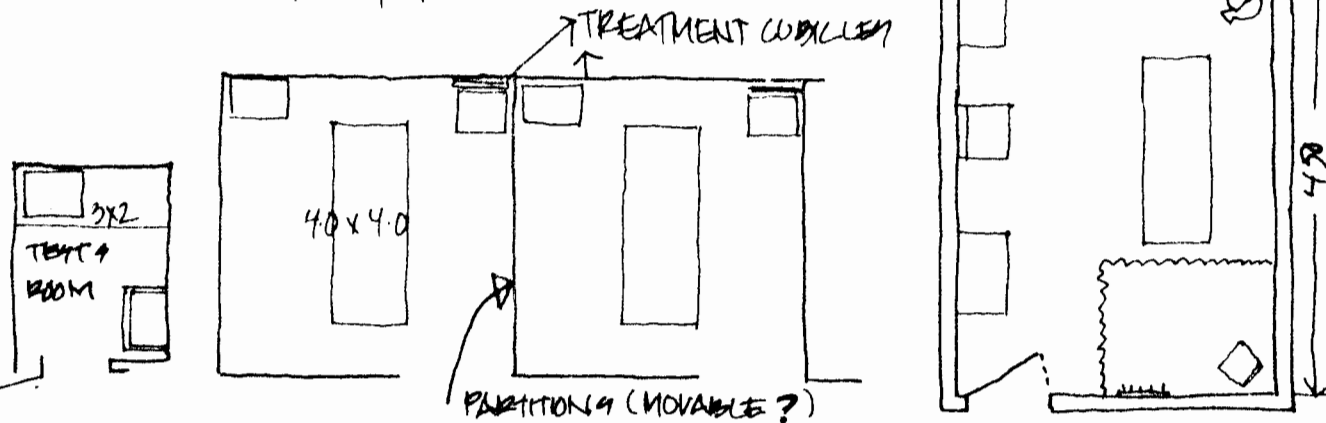
- TREATMENT CAB.
- TEST ROOMS
- DOCTOR UNITS
- NURSE
- WAITING AREA



NEEDS:  
TOILETS  
NOISE TREAT.  
FLOOR FINISH  
WHICH IS  
RESILIENT

## NEEDS:

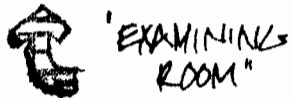
- FREE MEDICAL CLINIC
- FULL TIME NURSE
- PART TIME DOCTOR



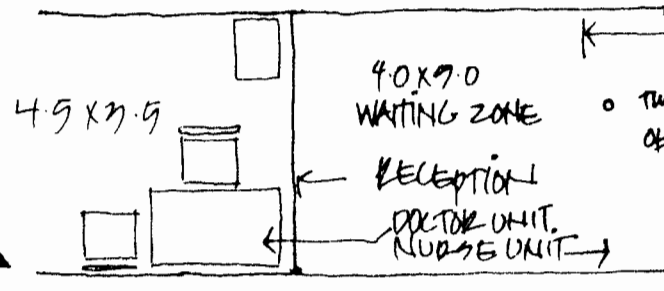
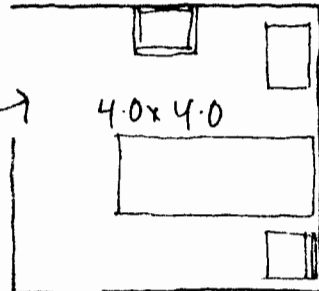
• CAN BE  
DIVIDED  
INTO TWO  
PARTS

- NURSE
- ADULT

- EXAMINING TABLE
- LAVATORY
- SCALE FOR WEIGHING



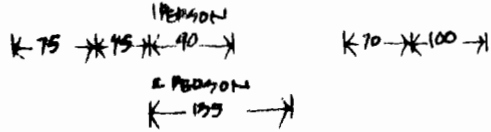
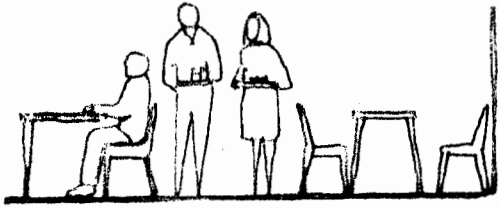
UTILITY



4.0x4.0  
WAITING ZONE

- TWO DIFFERENT ARRANGEMENTS OF AN EXAMINING ROOM

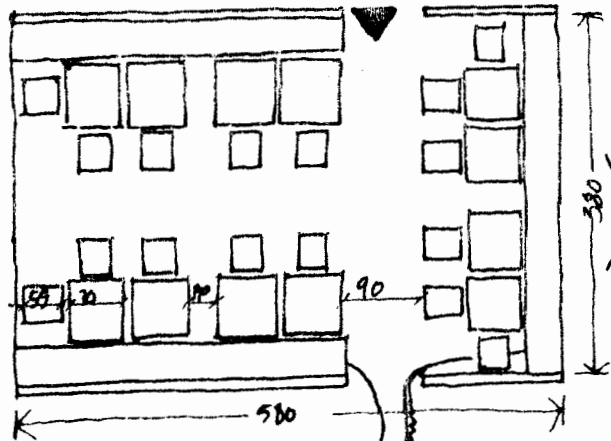
# Cafeteria



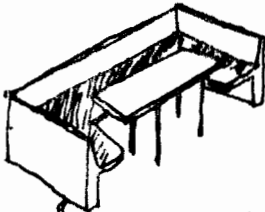
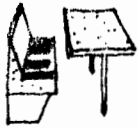
3 poles:

- KITCHEN
- SERVICE (LINK)
- EATING.

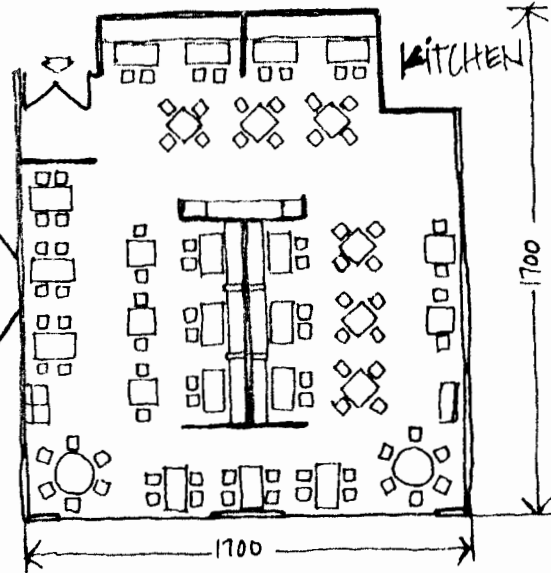
• "USED MOSTLY BY THE HOLYED STUDENTS"



• LAYOUT FOR HIGH DENSITY



- SERVICE FOR 100 PERSON
- EASILY SERVED
- MIGHT BE OPEN TO THE PUBLIC "FREE FOOD FOR POOR"
- TYPE OF FOOD SERVED • FAST FOOD • COOKING
- LOCATED ALONG THE DIRECTION OF THE WIND?

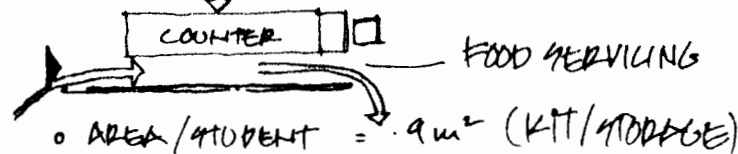
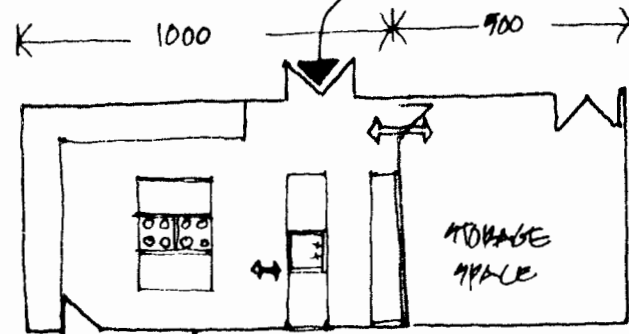


NEEDS:

- STORAGE
- COOKING & PREPARATION
- WASHING
- SERVICE
- SEATING
- TOILETS

AREA/PERSON = 4.0 m<sup>2</sup>

• A 100 PERSON CAFETERIA SERVICE ENTRANCE





# Library

## 4. FUNCTIONS

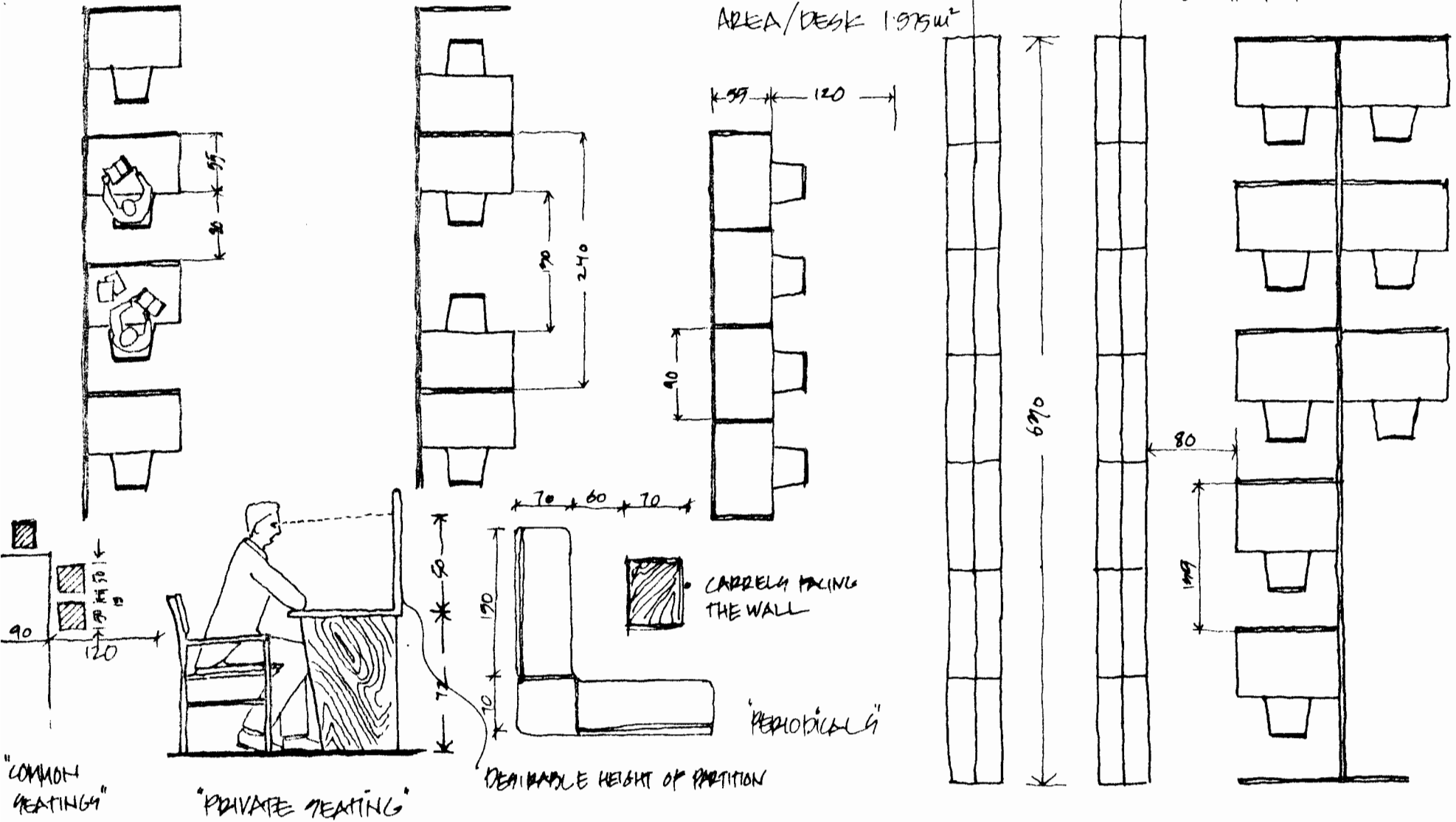
- CARRELS ALONG A WALL ALL FACING THE SAME WAY

- CARRELS ALONG A WALL IN PAIRS

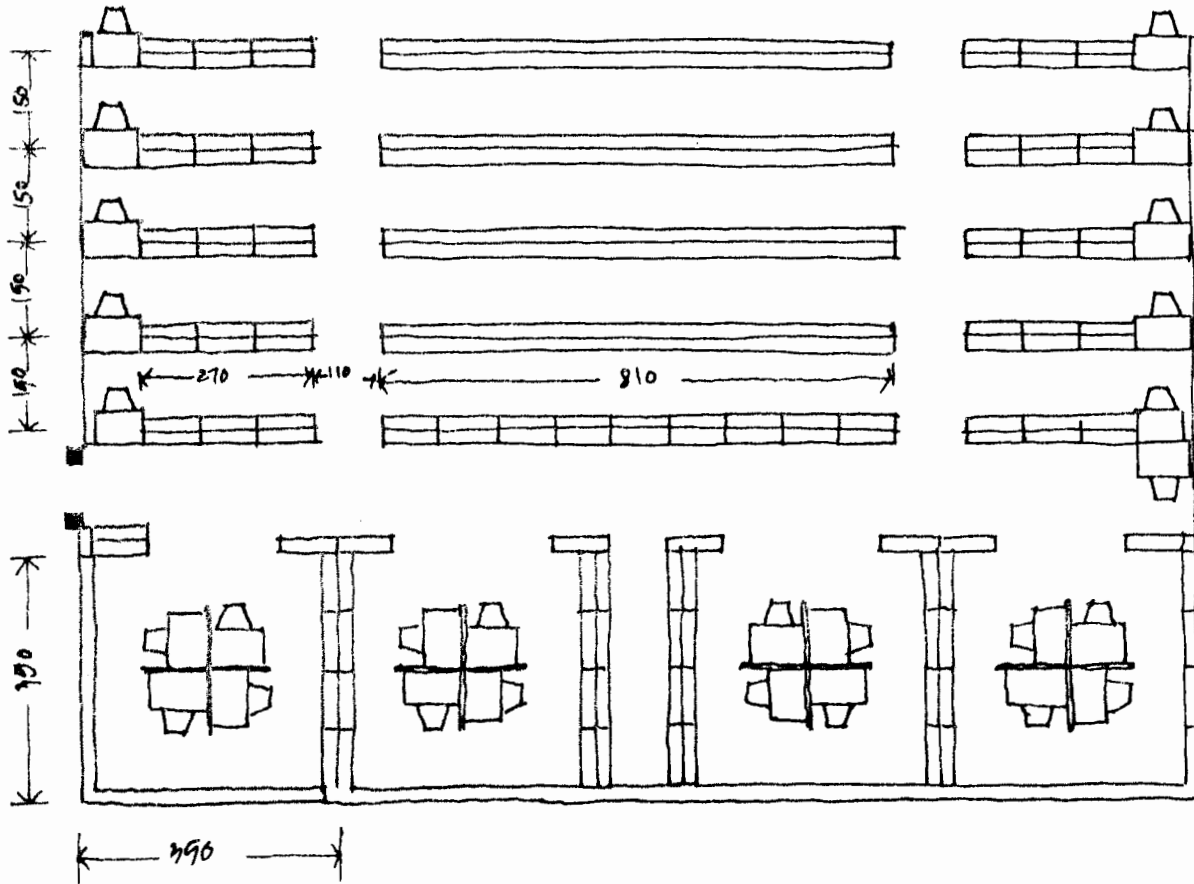
### "SEATING ARRANGEMENT"

- PERIODICALS
- COMMON READING ZONE
- PRIVATE READING ZONE
- STACKS

AREA/DESK 1.975m<sup>2</sup>

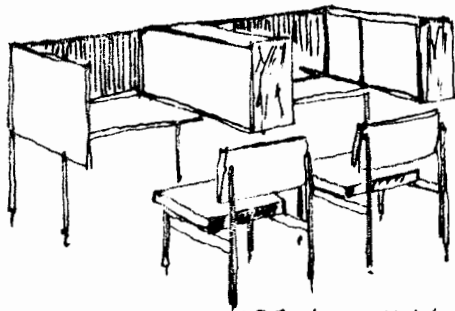


# Library



o STACKS COMBINED WITH STACK ALLOVES (TOTAL AREA = 180 m<sup>2</sup>)

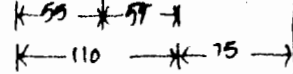
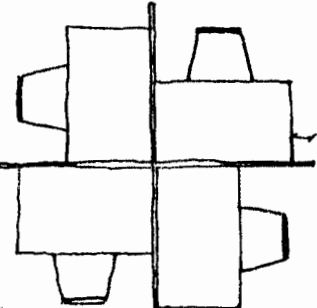
AREA / PERSON = 2 m<sup>2</sup>



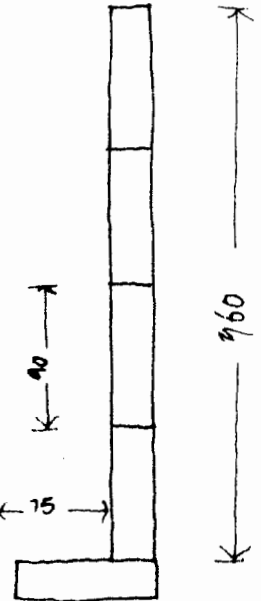
o LIBRARY TABLES WITH STORAGE UNITS AND DIVIDERS

## BOOKS:

- o KORAN
- o FIQH
- o HADITH
- o FIKR
- o HISTORICAL
- o SCIENTIFIC (ISLAMIC)
- o VARIETY OF ISLAMIC PERIODICALS



o TABLES IN PINWHEEL FORM TO GIVE ADDITIONAL PRIVACY



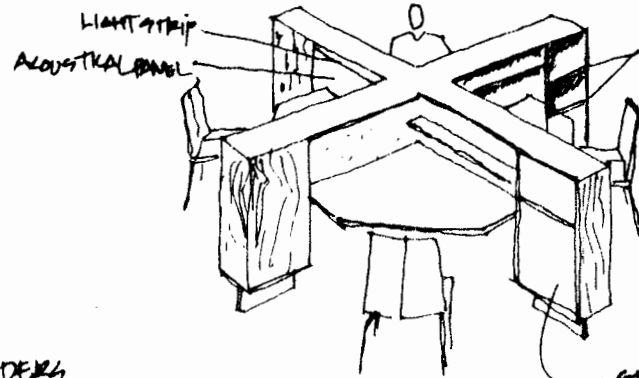
## NEEDS:

o ENVIRONMENTAL NEEDS

- QUIET ZONE
- NATURAL LIGHT
- EASILY SERVED

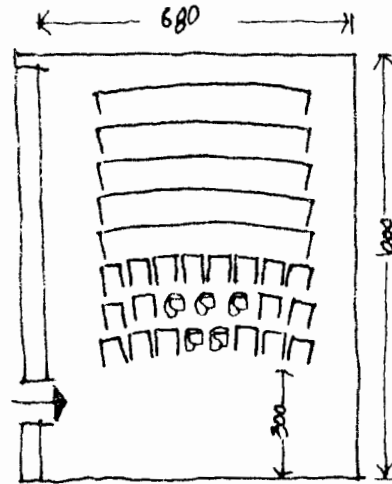
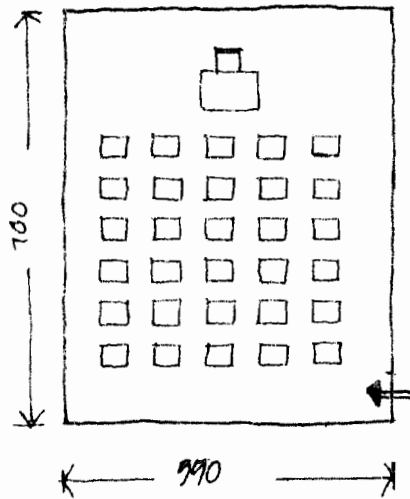
o FUNCTIONAL

- SUPERVISOR (2-3)



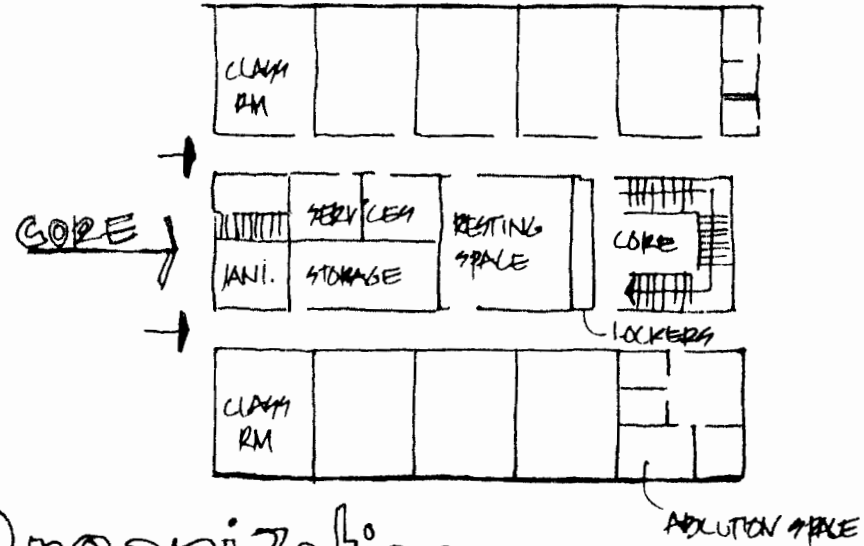
o CHAIRS FOR FOUR STUDENTS USING OCTAGONAL TABLE

# School

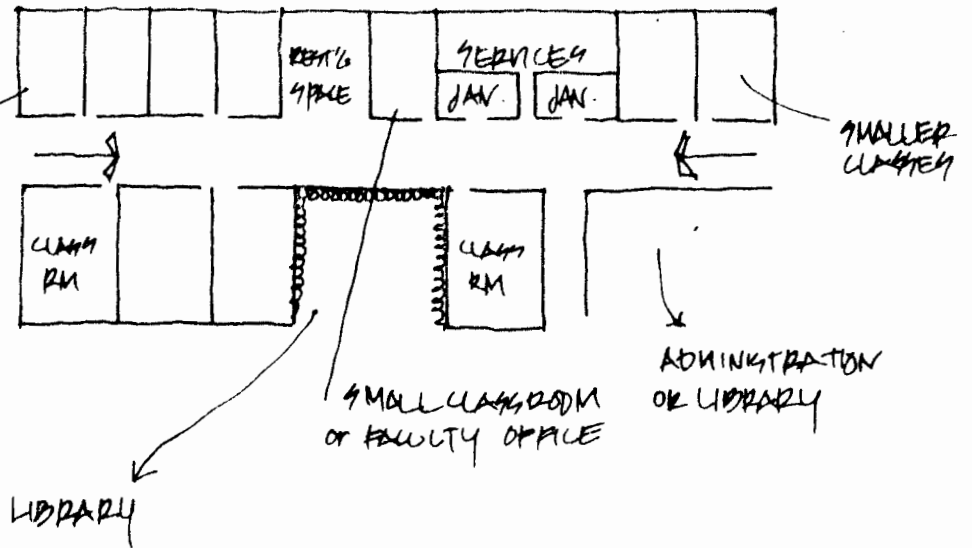


- CLASSROOM FOR 30 STUDENTS
- RECTANGULAR PREPARED
- FLEXIBILITY OF DIVIDING CLASSROOMS INTO TWO BY PARTITION.

- LECTURE HALL
- 8 STUDENTS / ROW



# Organization



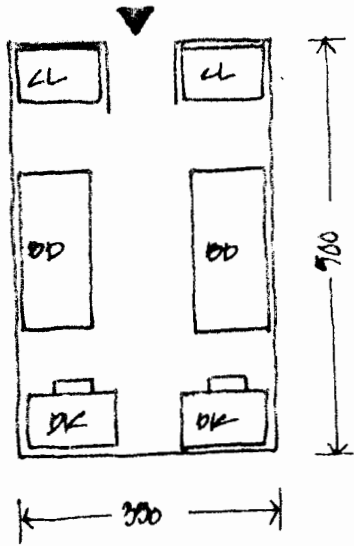
## NEEDS:

- NATURAL LIGHT
- VENTILATION
- EARLY SERVICES
- PROXIMITY TO FACULTY QUARTERS (OFFICES)
- LOCATION IN A NON ACTIVE (NOISY) ZONE.

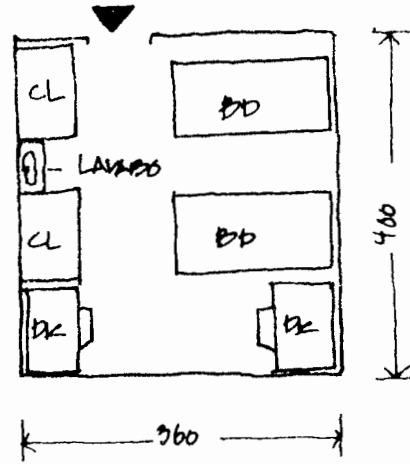
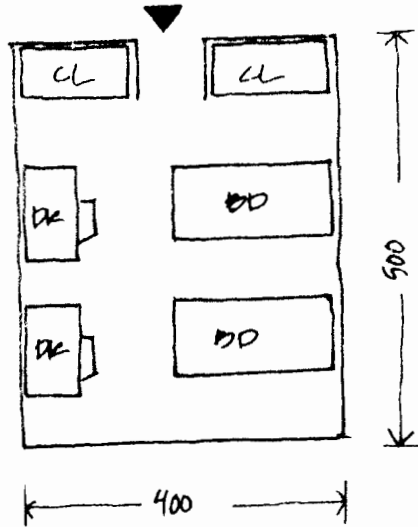


ENVIRONMENTAL

AREA / PERSON: 1.5 m<sup>2</sup>



DOUBLE BED ARRANGEMENT



- NEEDS
- COMMON ROOM
- KITCHENETTE
- SUPERVISOR
- WALKING SPACE: 9m<sup>2</sup>
- MECHANICAL SPACE: 12m<sup>2</sup>
- BATHROOM FACILITIES

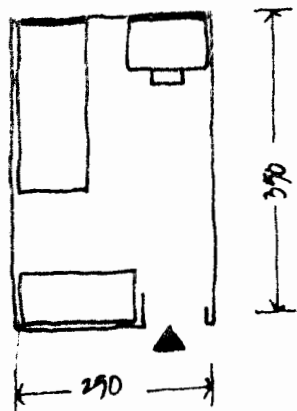
- ENVIRONMENTAL

- LIGHT
- VIEW
- VENTILATION
- PRIVACY

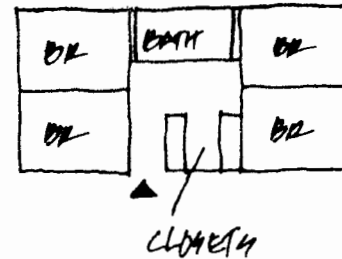
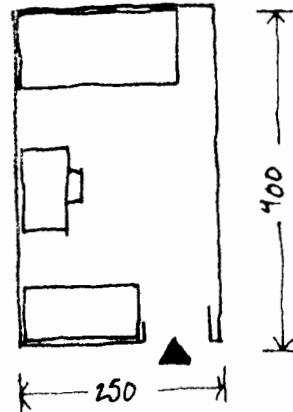
- TRIPLE BEDROOM

- POPULAR
- MORE ECONOMIC
- PSYCHOLOGICALLY BETTER

# Housing



SINGLE BED ARRANGEMENT

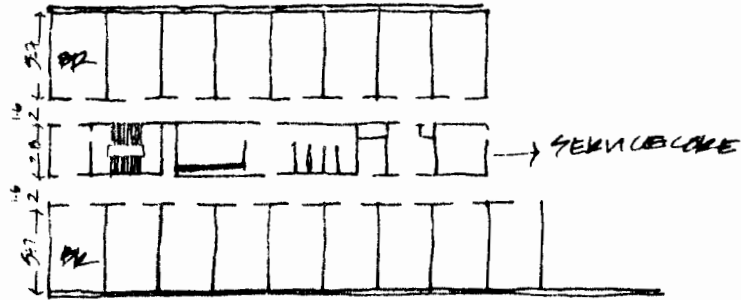
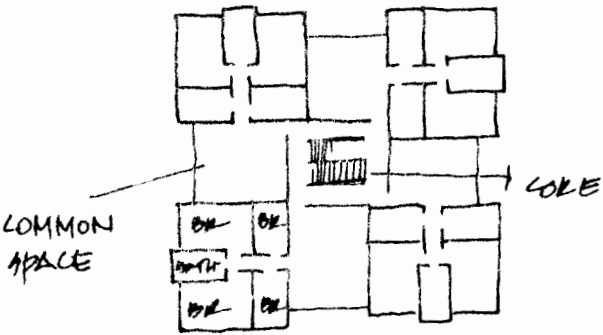


ACCESS TO STUDENT'S ROOMS THROUGH COMMON SPACE

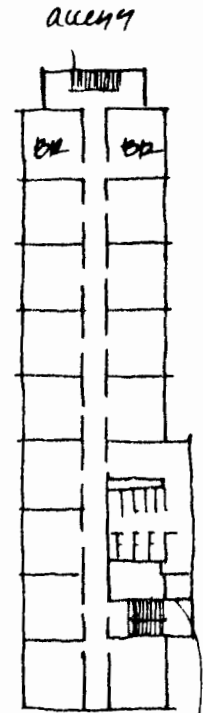
# Housing

o NUMBER OF STUDENTS HOUSED '100' (ALONG WITH SOME FACULTY AND STAFF MEMBERS.)

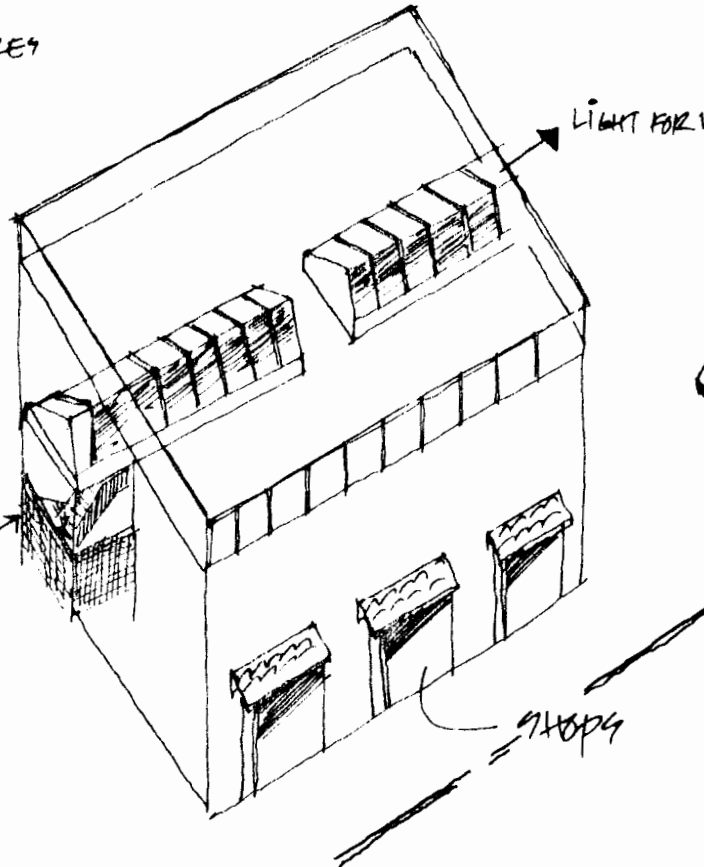
- o VARIETY OF ROOM SIZES
- o CLUSTERING OF DIFFERENT SIZES



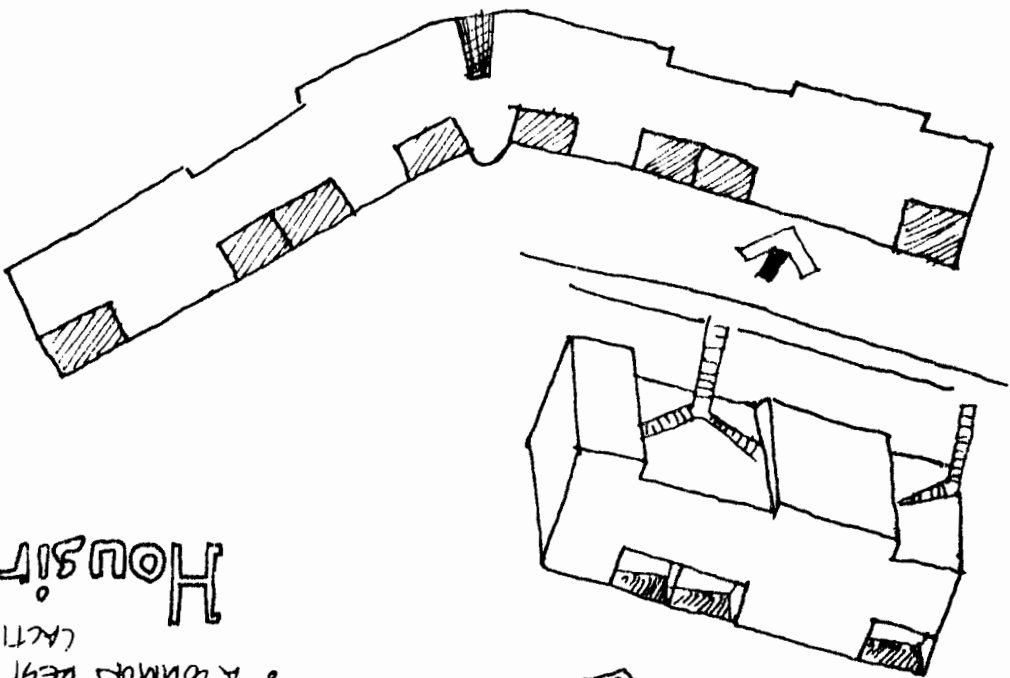
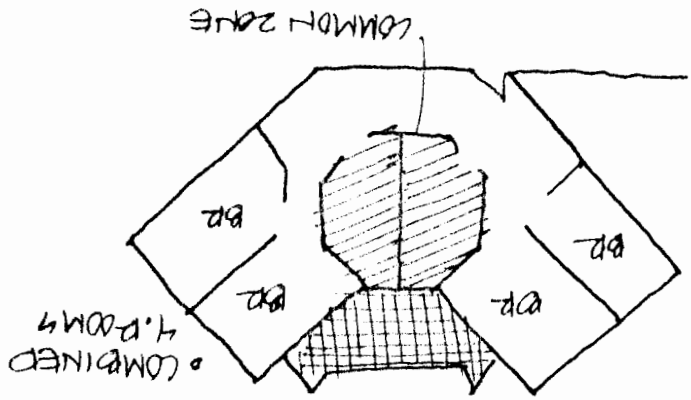
o LINEAR DOUBLE LOADED ARRANGMENT



VERTICAL ALIGNMENT

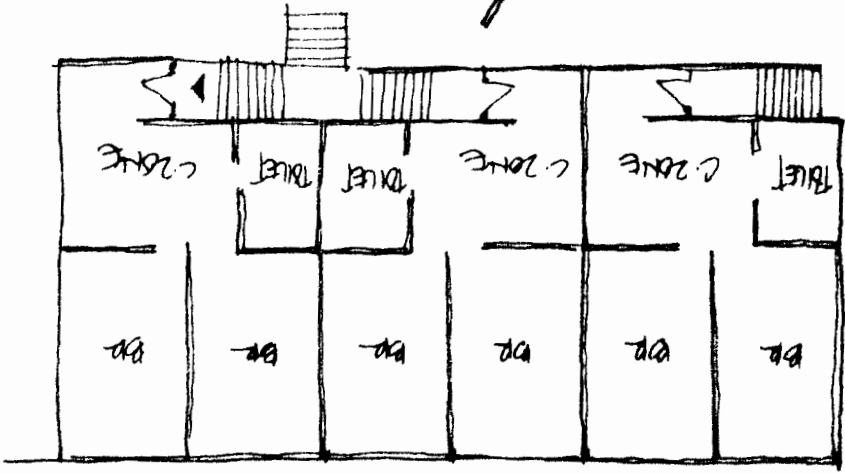
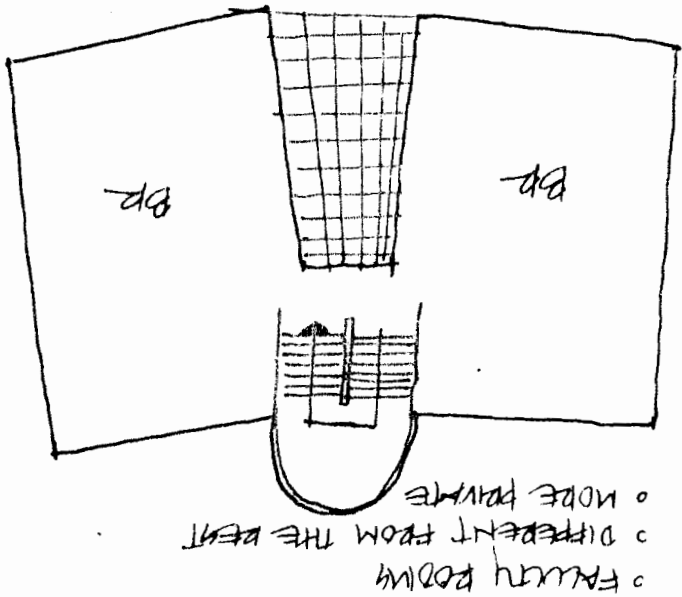


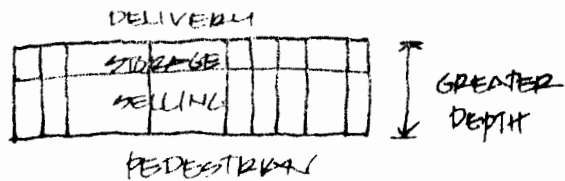
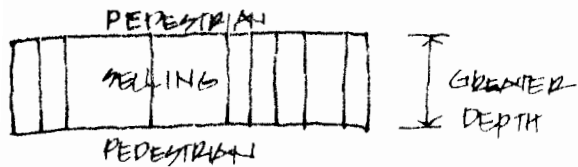
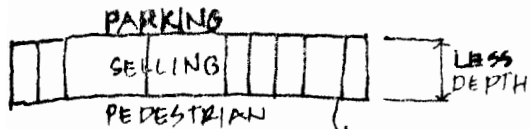
o A COMMUNITY ROOM CAN BE ALLOCATED BETWEEN THE ROOMS OR UNDERNEATH AT THE RECEPTION HALL.



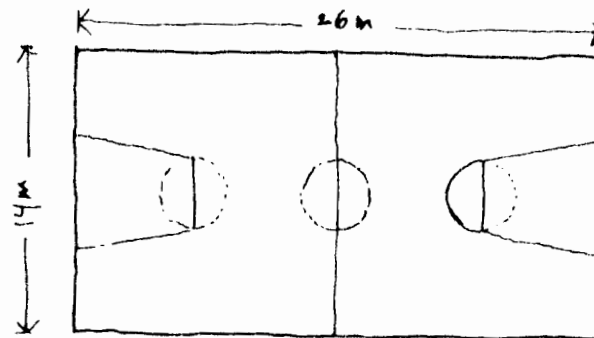
# Housing

- COMBINATION OF 2 ROOMS
- A COMMON REST ZONE (ACTIVITY)



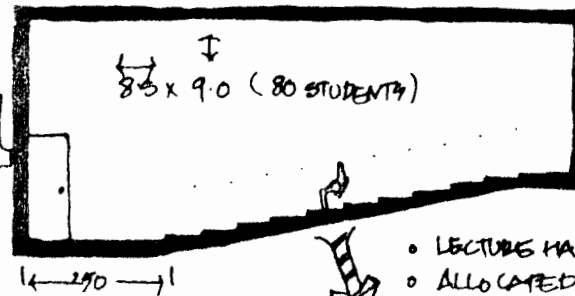


shops



Basket ball court

Lecture hall

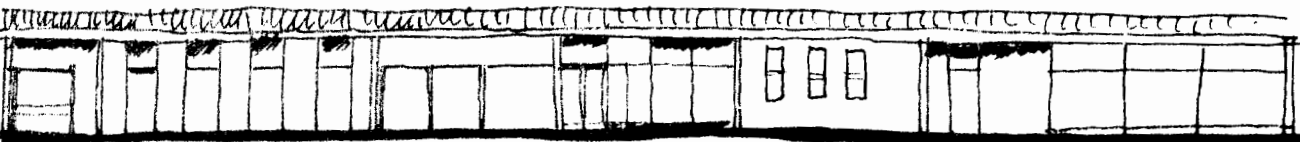


- LECTURE HALL FOR 80 STUDENTS
- ALLOCATED HEAD CLASH

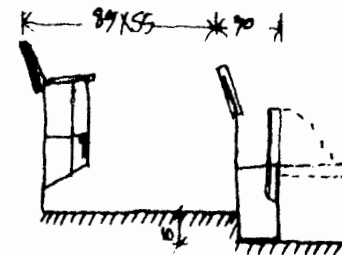
The Market



◦ "TRADITIONAL" ELEVATION OF A MARKET ? (ARCHITECTURE)

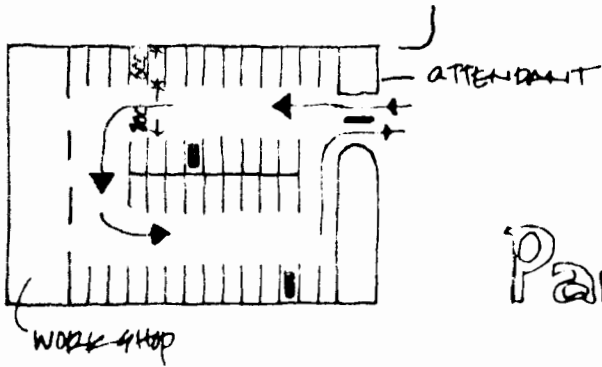


◦ "MODERN" LOOK OF THE MARKET (REGIMENTATION)



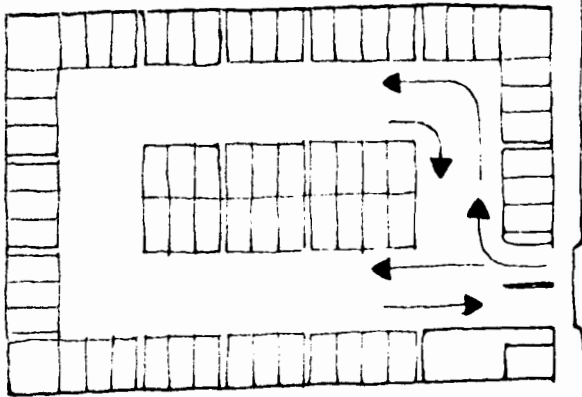
◦ FIXED SEATS THAT TIP-UP  
Multi-Purp.hall

- A VAST ROOM FOR MULT-FUNCTIONS
- EXHIBITION HALL (CRAFTS)
- CEREMONY SPACE



# Parking

- SIMPLE LOOP (SINGLE LANE) PARKING

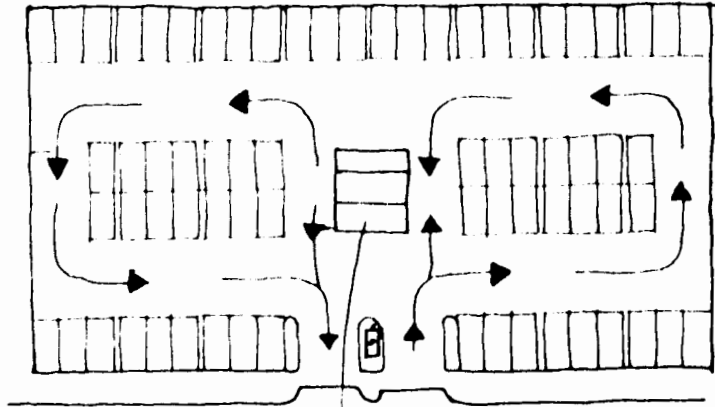


- AREA/CAR = 29 X 99 EXCLUDING CIRCULATION
- DOUBLE LANE LOOP PARKING



- SLOPING FLOOR GARAGE

- DOUBLE LOOP DOUBLE LANE PARKING



REVISION / VERTICAL CIRCULATION

## \* TYPES NEEDED :

- SURFACE PARKING (70 CARS)
- SUB PARKING (200 CARS)
- NEEDS :
  - EASILY ACCESSIBLE FROM MAIN ROAD
  - EASILY EXITED TO MAIN ROAD OR MINOR ROAD



# "souk"

## Space Analysis

### NEEDS:

- FACILITIES
- PRODUCTIVE SPACES
- DISPLAY

### GOALS:

- SPACES THAT CONFORM TO THE OPERATIONAL PROCESSES OF THE VARIOUS FIELDS OF WORK:

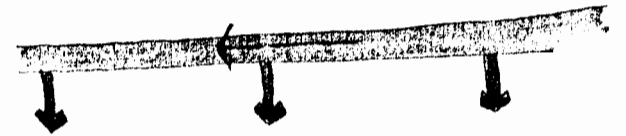
[ HEAVY EQUIPMENT ... WOOD/METAL WORK  
FURNACE HEAT ... POTTERY, GLASS ETC...  
LIGHT EQUIPMENT ... WEAVING

THEY SHOULD ALSO CONFORM TO THE:

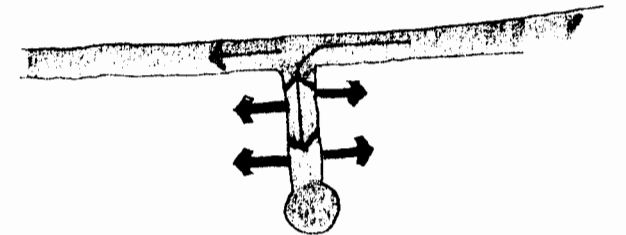
[ ENVIRONMENTAL REQUIREMENT  
DIMENSIONAL REQUIREMENT  
HIERARCHICAL REQUIREMENT  
ACCESSIBILITY  
LIGHT  
VIEW  
VENTILATION  
OUTDOOR SPACES

## Servicing

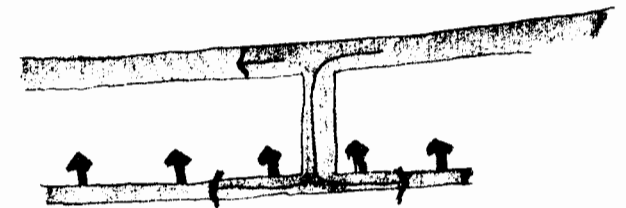
- "FEEDER" OF RAW MATERIALS
- MEANS CAR TRUCK (VAT)
- MAY BE USED FOR COLLECTING?



- EXTERNAL FEEDER



- INTERNAL FEEDER



- SECONDARY FEEDER

## Access

- PROVIDE PARKING SPACE

# "souk"

## Space Analysis

### NEEDS:

- FACILITIES
- PRODUCTIVE SPACES
- DISPLAY

### GOALS:

- SPACES THAT CONFORM TO THE OPERATIONAL PROCESSES OF THE VARIOUS FIELDS OF WORK:

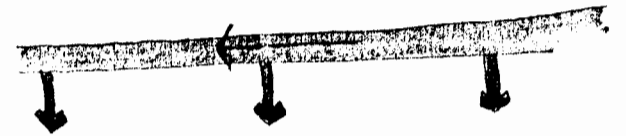
[ HEAVY EQUIPMENT ... WOOD/METAL WORK  
FURNACE HEAT ... POTTERY, GLASS ect...  
LIGHT EQUIPMENT ... WEAVING

THEY SHOULD ALSO CONFORM TO THE:

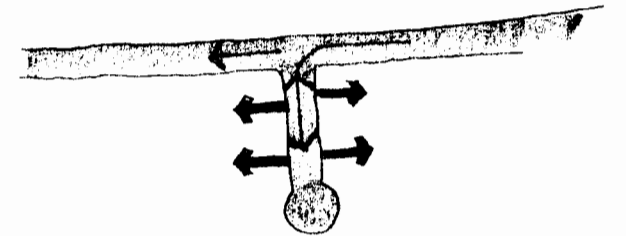
[ ENVIRONMENTAL REQUIREMENT  
DIMENSIONAL REQUIREMENT  
HIERARCHICAL REQUIREMENT  
ACCESSIBILITY  
LIGHT  
VIEW  
VENTILATION  
OUTDOOR SPACES

## Servicing

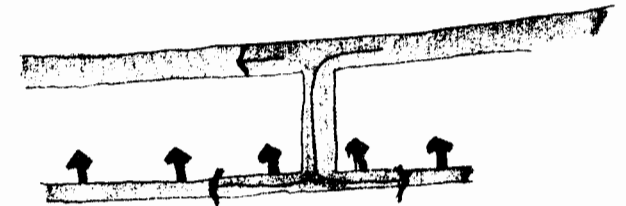
- "FEEDER" OF RAW MATERIALS
- MEANS CAR TRUCK (VAT)
- MAY BE USED FOR COLLECTING?



- EXTERNAL FEEDER



- INTERNAL FEEDER

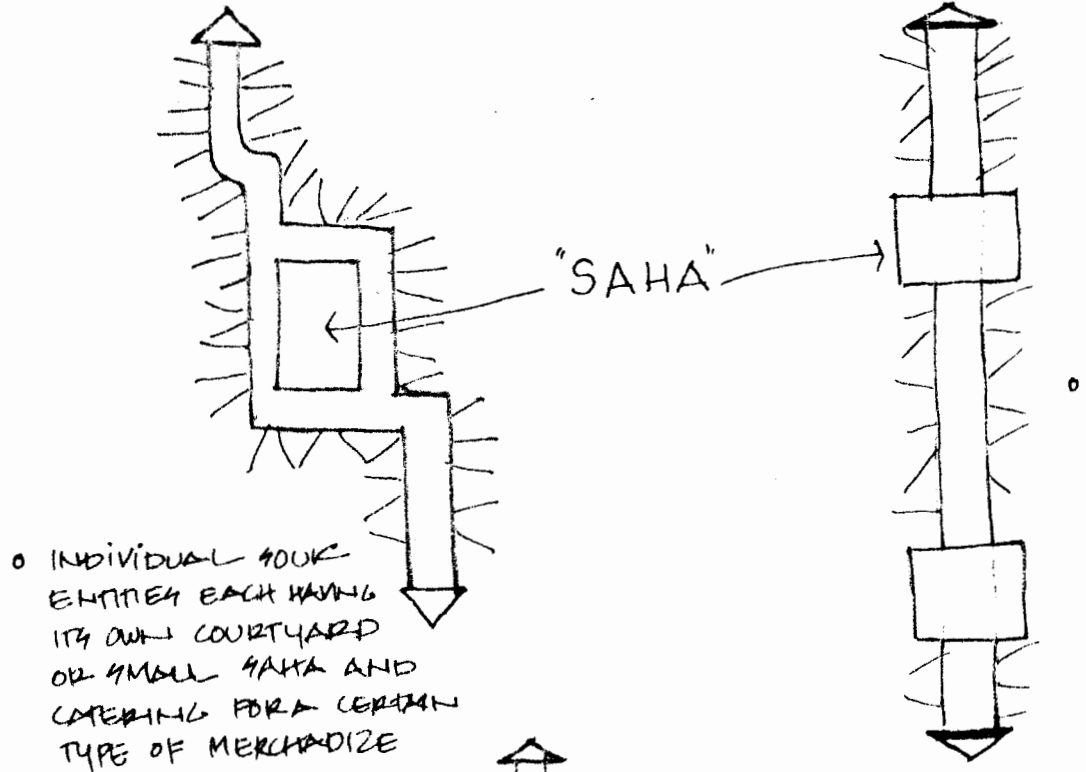


- SECONDARY FEEDER

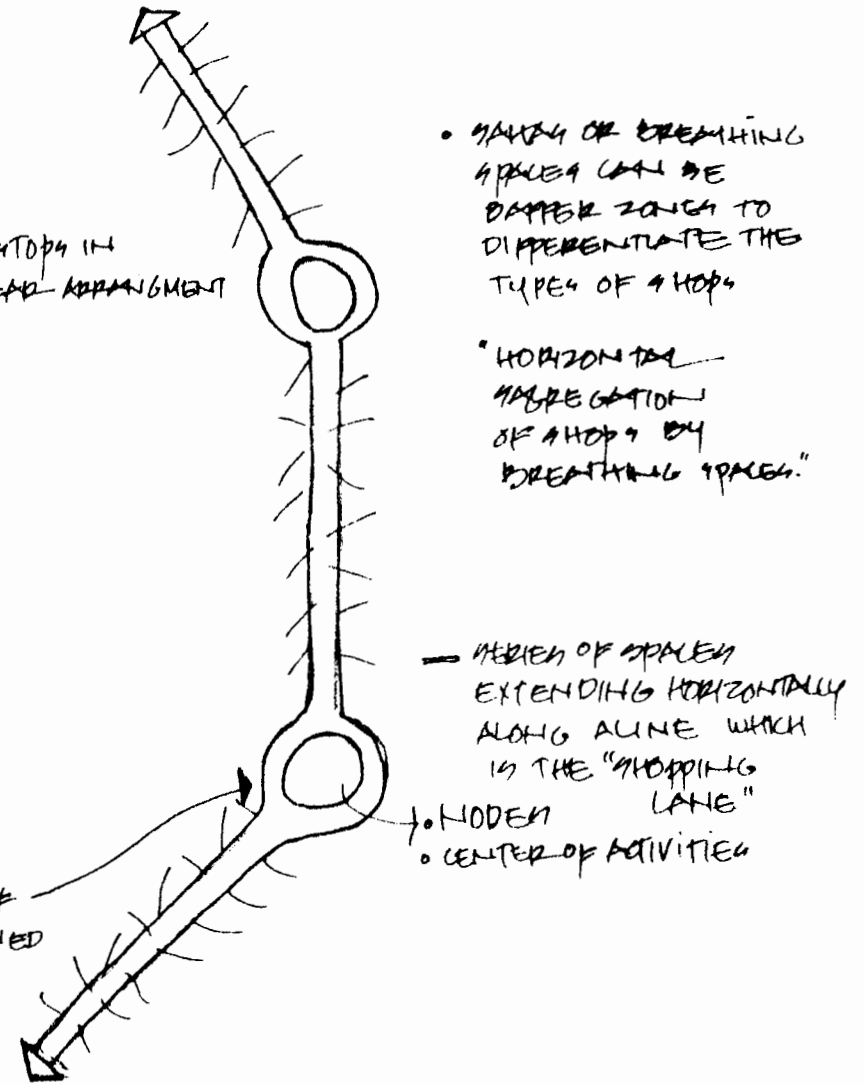
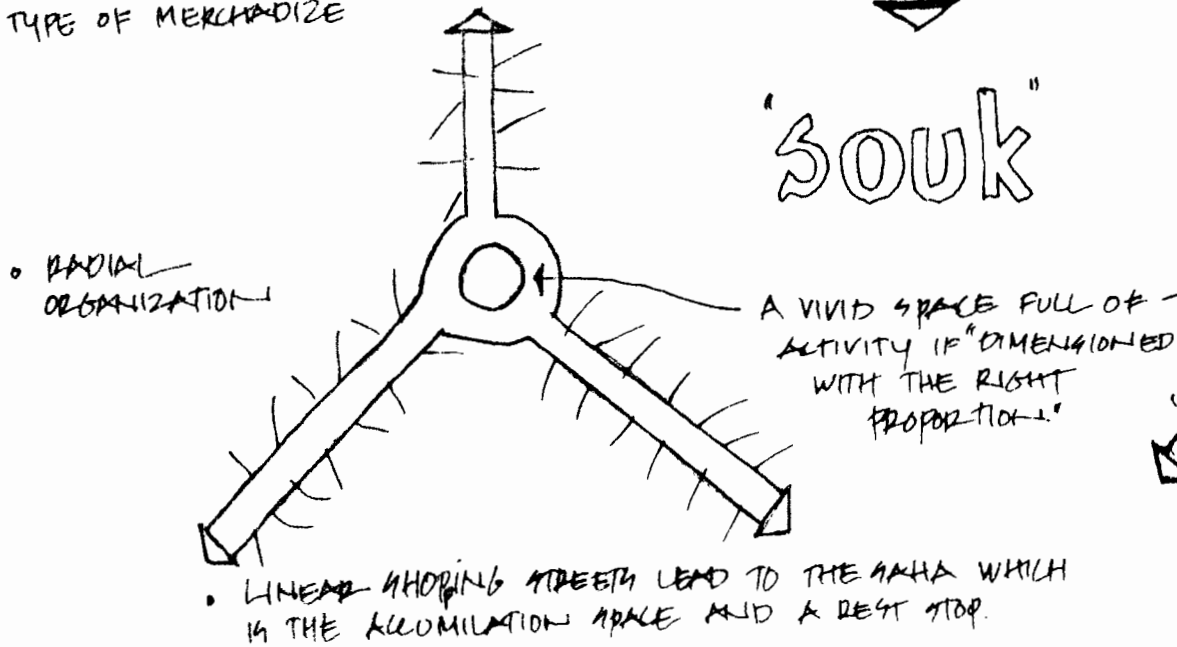
## Access

- PROVIDE PARKING SPACE

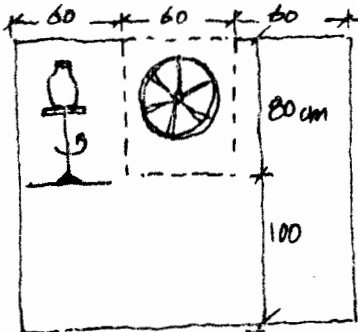
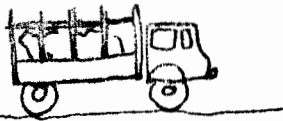
# Organization



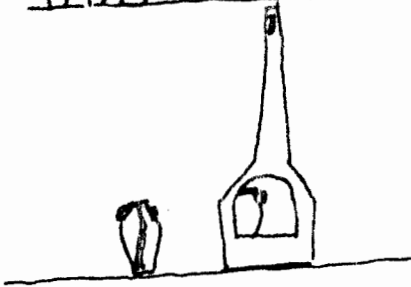
## "Souk"



# Pottery Workshop



UNIT AREA = 7.29 m<sup>2</sup>



- SERVING
- CLAY STORAGE (DULK, DIRT, WET)

## CLAY SHAPING & MOLDING

- MECHANICAL WHEEL
- MUDDY
- WATER SUPPLY

## Process

- VARNISHING & DRYING
- BAKING
- SMELLS
- KILN (WOOD HEATED OR GAS FIRED)

## GLAZING

- SMELLS
- DUST FREE
- HEAT GENERATED

## STORE & DISPLAY

- FRAGILE
- DIFFERENT ITEMS

## NEEDS:

- SERVICE YARD
- EASY ALLEYS FOR DELIVERY
- STORE ROOM
- PROPER HUMIDITY CONDITIONING
- VENTILATION

- POTTERY WORK SPACE
- WHEEL SPACE
- SINK (HOT & COLD WATER)
- NON SLIPPERY FLOOR FINISH
- PREFERABLE NATURAL LIGHTING
- TOILETS

- BAKING STORE
- DRY AIR VENTILATION

- FURNACE AREA (THERMAL INSUL.)
- IF GAS FIRED PROVIDE FOR:
  - CHIMNEY EXHAUST / VENTIL.
- GLAZING SPACE
- VENT. / DUST COLLECTING SYSTEM.

- TRADE & HOPS
- STORE ROOM.

• 20 m<sup>2</sup>

Space Requirement • 9m<sup>2</sup>

• 10m<sup>2</sup>

• 29m<sup>2</sup>

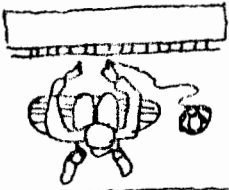
• 90m<sup>2</sup>

TOTAL: 90 m<sup>2</sup>

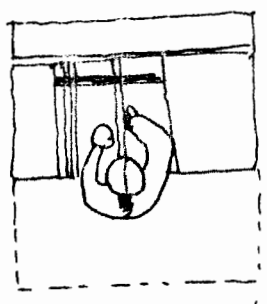
• 16-20 m<sup>2</sup>

NB. OF PERSONS 20

# Newl Workshop



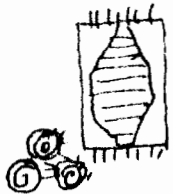
VERTICAL POSITION



HORIZONTAL POSITION

AREA/PERSON

2.6-4 m<sup>2</sup>



- STORAGE OF THREAD & WOOL

BULK  
DUST

- WEAVING WORK

LOOMS OF VARYING SIZES

DUST

## Process

- STORAGE OF BULK & OTHER FINISHED ITEMS

TO BE DISPLAYED  
TO BE EXPORTED

- STORE ROOM (DRY SPACE)  
DUST COLLECTING SYSTEM.
- EASY ACCESS FOR DELIVERY
- TOILETS AND LOCKERS

- WEAVING WORK SHOP

DUST-FREE SURROUNDING  
VENTILATION

## Needs:

- STORE ROOM  
EASY TRUCK ACCESS?  
OR EASY ACCESS TO YARD
- DISPLAY IN TRADE SHOWS

◦ 20-25 m<sup>2</sup>

◦ 10 m<sup>2</sup>

## Space Requirement

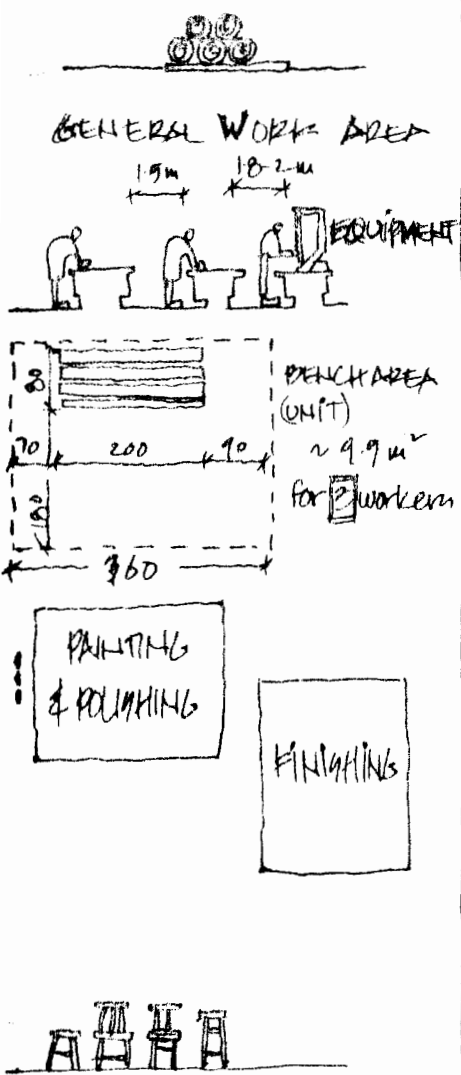
2.6-4 m<sup>2</sup>/PERSON

◦ 25 m<sup>2</sup>

TOTAL: 135 m<sup>2</sup>

NB. OF PERSONS 30

# Wood Workshop



- WOOD STORAGE (PULK, EQUIPMENT & TOOLS)

- WOOD WORK
  - DUSTY
  - NOISY
  - BASIC POWER TOOLS: DRILL, SAW, LATHE, CHISEL WORK

## Process

- PAINTING & POLISHING
  - SMELL / EVAP FREE
- FINISHING
  - DUSTY
  - BASIC POWER TOOLS

- DISPLAY STORE

- STORE ROOM
  - PROPER CONDITIONS OF HUMIDITY
- EASY ALLEYS FOR DELIVERY
- TOILETS & LOCKERS
- WOOD WORK SHOP
  - DUST COLLECTING SYSTEM
  - NOISE CONTROL SYSTEM
  - FLOOR LOADING 2/4 TON/M<sup>2</sup>
  - SAFE PLACEMENT OF MACHINERY, DRILLS ABOVE FOR QUIET CHISEL WORK

## Needs:

- PAINT SHOP
  - VENTILATION / DUST COLLECTING SYS.
- FINISHING SHOP
  - SAME AS PAINT SHOP

- EXPORT (EASY ALLEYS TO YARD)
- TRADE SHOP
- STORE SPACE

PRODUCT: MODIAL WOOD CARVING FURNITURE etc....

- 20-30 m<sup>2</sup>

- 10 m<sup>2</sup>

- 20 m<sup>2</sup>

## Space Requirement

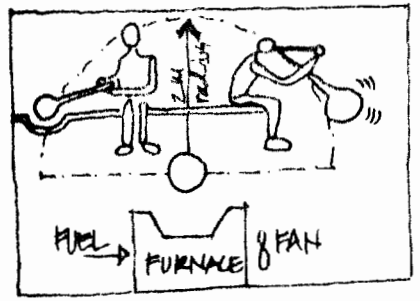
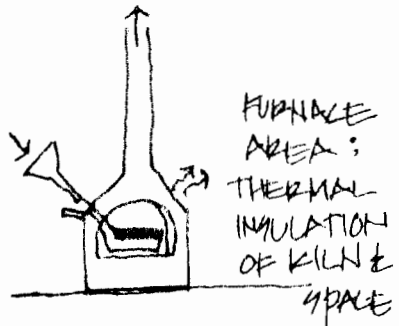
+ 95  
85

TOTAL: 180 m<sup>2</sup>

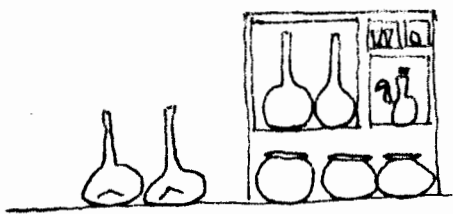
- 29 m<sup>2</sup>

NB. OF PERSONS 30

# Glass Blowing Workshop



WORKING AREA FOR 2 = 10m<sup>2</sup>



◦ STORAGE (BROKEN AND DIRT GLASS)

◦ GLASS MELTING IN KILN CONTINUOUS HEAT TO PREVENT SOLIDIFICATION

◦ WORKING AREA HANDY EQUIPMENT HOT CONDITION

◦ COOLING & STORAGE HEAT DIFFERENT ITEMS FRAGILE ITEMS

◦ DISPLAY (TRADE SHOWS)

## Process

- SERVICE YARD
- TOILETS/LOCKERS
- EASY ALLEYS
- STORE ROOM
- THERMAL INSULATION OF KILN

- EASY ACCESS TO EQUIPMENT & KILN
- VENTILATION
- HIGH CEILING

- STORE ROOM (VENTILATED)
- SHELF TO CEILING

- PUBLIC ACCESS

## Needs:

- 25m<sup>2</sup>
- 10m<sup>2</sup>

## Space Requirement

- 10-15 m<sup>2</sup> for 2 persons

- 20m<sup>2</sup> 30
- 60

TOTAL: 90 m<sup>2</sup>

- 10-20m<sup>2</sup>

NB OF PERSONS 20

# space summary

| FUNCTION   |                | AREA (m <sup>2</sup> ) |
|------------|----------------|------------------------|
| Mosque ... | Court          | 3500                   |
| Shops      | WORKSHOP       | 580                    |
|            | TRADESHOP      | 420                    |
| Facilities | HOUSING        | 1100                   |
|            | CAFFETERIA     | 350                    |
|            | CLINIC         | 100                    |
|            | OTHERS         | 300                    |
| Academic   | CLASSES        | 420                    |
|            | ADMINISTRATION | 80                     |
|            | FACULTY        | 75                     |
|            | OTHERS         | 430                    |
| Parking    |                | 5100                   |

|            |                      |
|------------|----------------------|
| TOTAL AREA | 12455 m <sup>2</sup> |
|------------|----------------------|



concepts...

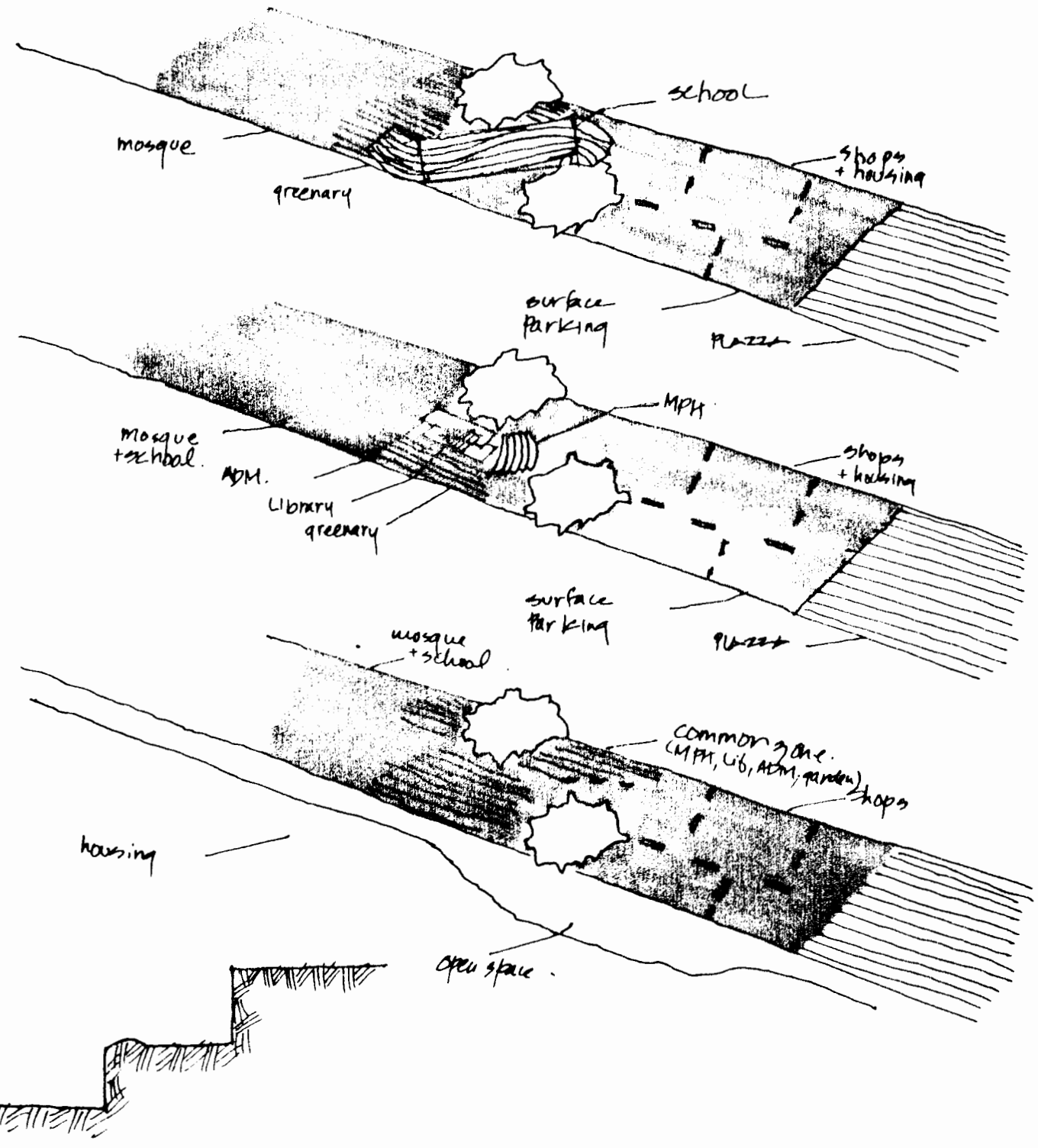
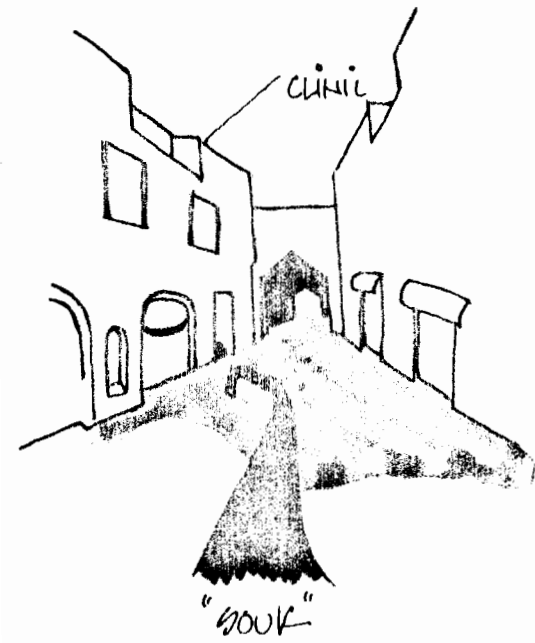
# design concept

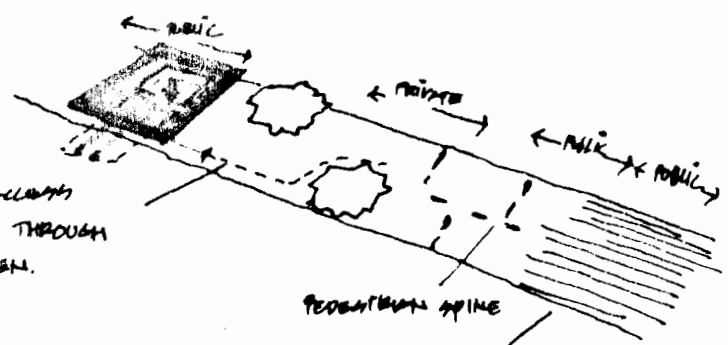
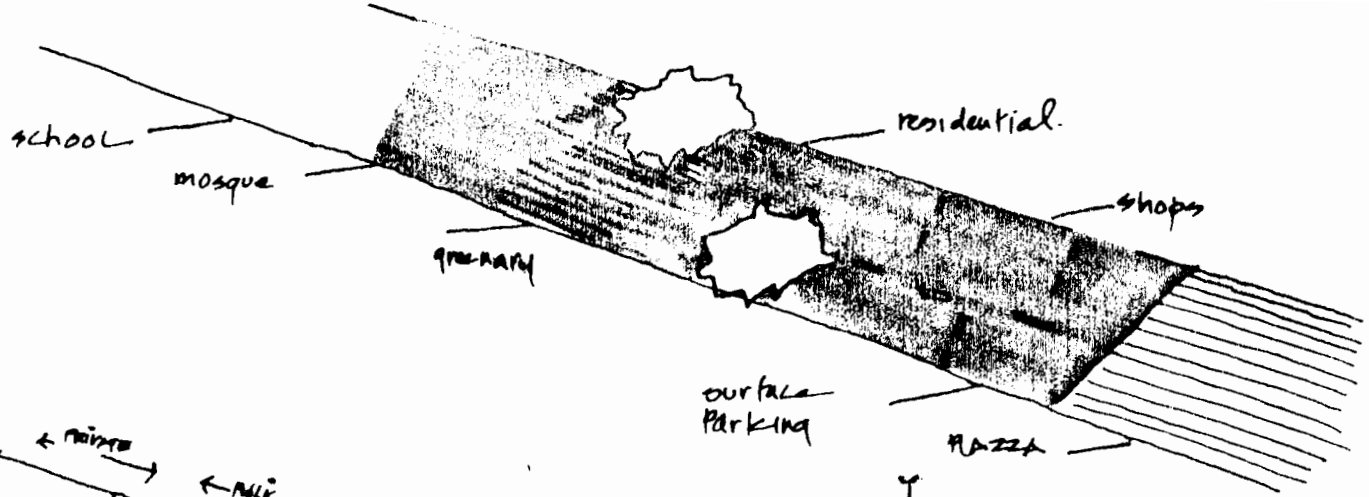
## In brief:

- A modern composition is to be achieved forfilling the social, physical, and functional aspects of the project.
- The translation of the traditional expression( mosque-souk ) to a contemporary context of form and aesthetics.
- The project shouldn't be a passive synthesis of historic elements nor be a work of imitation. It is to be a modern work born from the discovery of the human values and issued from the Islamic tradition. ✓

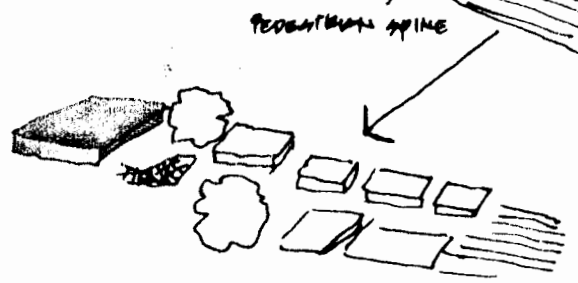
Planning Concept

planning concept

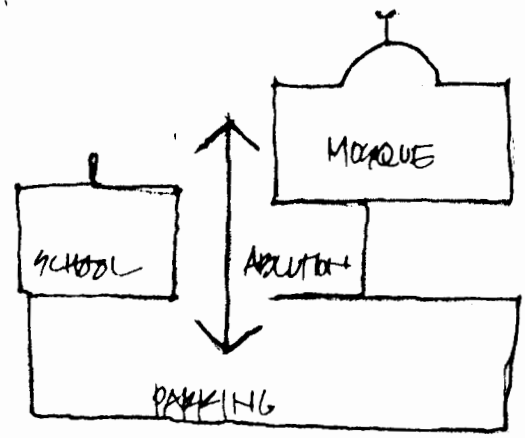




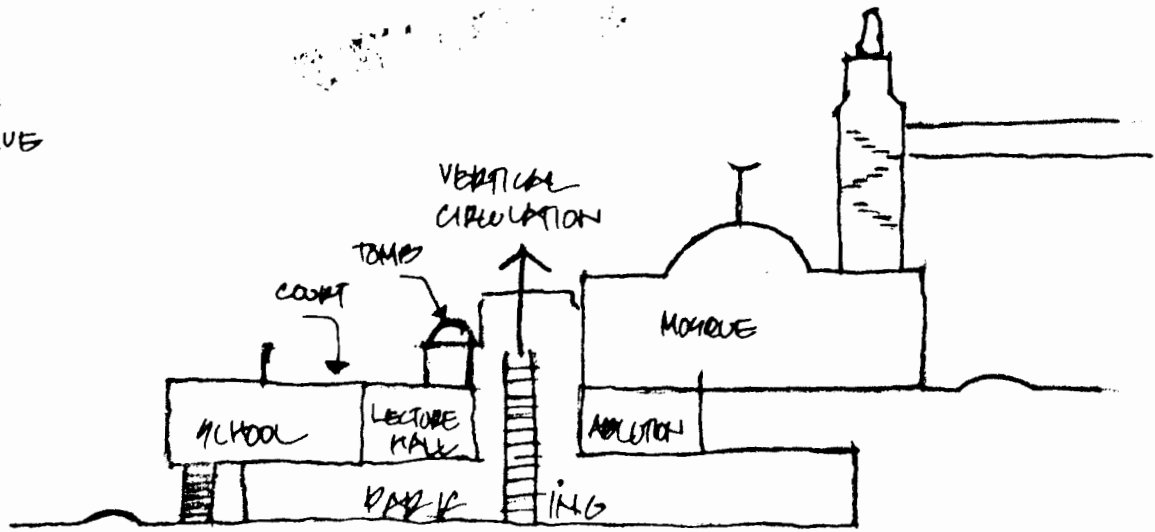
THE SCHOOL ACCOMMODATES  
 A ROUTE THROUGH  
 THE GARDEN.



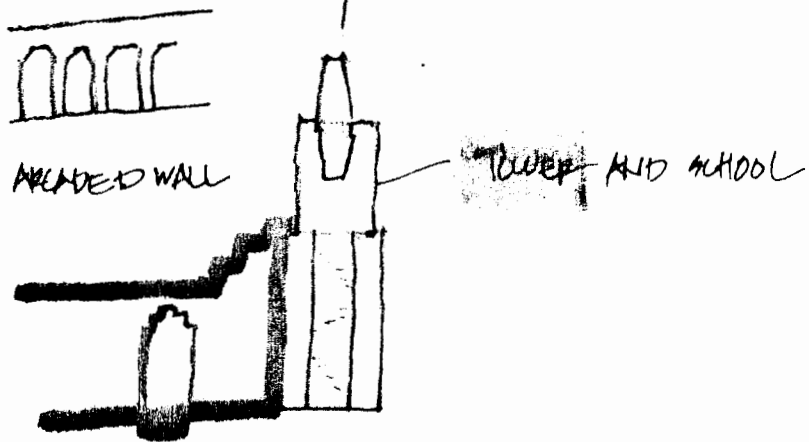
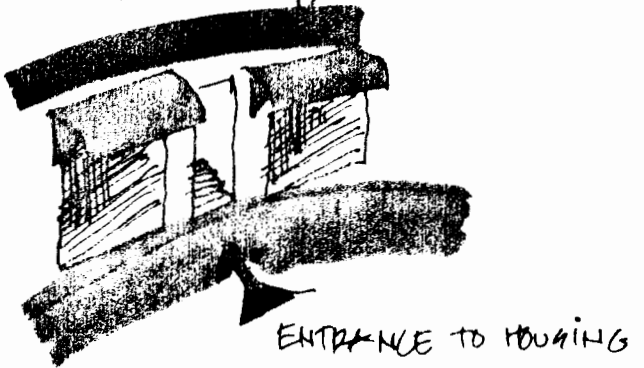
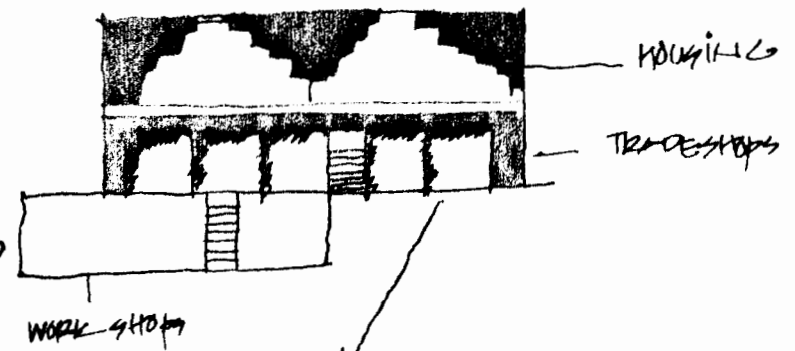
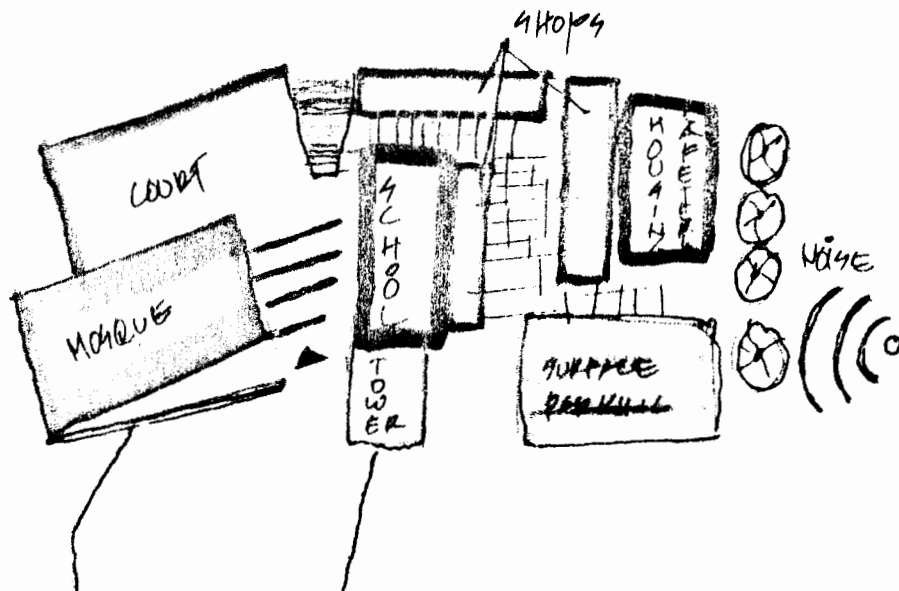
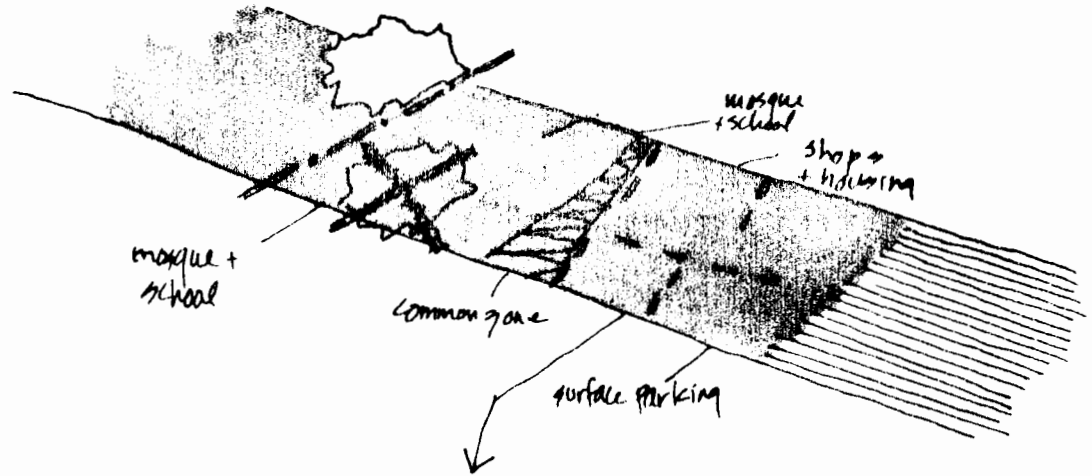
OUTSIDE  
 PARKING PLAZZA



- CLOSE ENTITY OF MOSQUE & MADRASAH
- INTEGRATION OF PARKING AND MOSQUE (VERTICAL LINE)



- EMPHASIZED ENTRANCE
- INTEGRATED MOOR
- POOR SURFACE PARKING ALLEYS



# technological concept

## In brief:

- The use of modern building technics and material such as reinforced concrete and steel construction.
- The application of various systems of construction such as:
  - Two storey construction
  - Large span construction

references...



- "THE EDUCATIONAL AND MULTIFUNCTIONAL BUILDINGS  
IN TRADITIONAL ISLAMIC SOCIETIES" .. RENATA HOLOD

- BIERUT MASS<sup>TOP</sup> PLAN 1977

- A.A FEBRUARY 1981

- A.A SEPTEMBER 1983

- RESEARCHES :

-RAGHDA JABER

-MAHA NASRALLAH

- NGUFERT

- TIME SAVER

- INTERVIEWS:

-SHIEKH ABDULLAH AL-HABASHI

# القراءات الثمانيه للاسكندريه في مصر

دكتور صالح لمي مصطفى

- ISLAMIC ARCHITECTURE ... J.D. HOAG
- LES MOSQUEES DU CAIRE ... GASTON WIET
- CAIRO A LIFE-STORY OF 1000 YEARS 969-1969

MINISTRY OF CULTURE

